FOI#14942

First Name: Edward
Last Name: Fronczkiewicz
Company: Urban Engineers. Inc.
Mailing Address 1: 530 Walnut Street
Mailing Address 2: 7th Floor
City: Philadelphia
State: PA
Zip Code: 19106
Email Address: ecfronczkiewicz@urbanengineers.com
Phone: 2159228080
Required copies of the records: Yes

List of specific record(s):
Please provide copies of all contracts including scope, cost and fee informationfor the following Call In Service Agreements, by firm: CONSTRUCTION MANAGEMENT CALL-IN SERVICES 2011-2014: P41011049 AECOM USA, INC P41011048 GANNETT FLEMING ENGINEERS JOHNSON, MIMIRAN THOMPSON, JV P41011044 GREENMAN-PEDERSEN, INC. P41011045 HAKS ENGINEERS AND LAND SURVEYORS P.C. P41011050 HILL INTERNATIONAL, INC. P41011051 JACOBS FACILITIES, INC. P41011052 LiRO ENGINEERS, INC. P41011053 LOUIS BERGER ASSOC., P.C. P41011046 PARSONS BRINCKERHOFF, INC. P41011047 URS CORPORATION PROJECT MANAGEMENT CALL-IN 2011-2014: PCOO11006 AECOM USA, INC PCOO11007 HNTB NEW YORK ENGINEERING ARCHITECTURE, PC PCOO11008 JACOBS CIVIL CONSULTANTS,INC. PCOO11009 LOUIS BERGER ASSOC., P.C. PCOO11010 PB AMERICAS, INC PCOO11011 STV INCORPORATED PCOO11012 URS CORPORATION - NEW YORK

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
PUBLIC RECORD ACCESS FORM

PRA 14942

Action by (print / type name):

William Shalewitz , Freedom of Information Administrator

Signature: Date:

08/12/2016

On behalf of the Secretary of the Port Authority, as Records Access Officer and Custodian of Government Records of the Port Authority.

☑ The requested records are being made available.

☐ Any responsive records that may exist are currently in storage or archived, and a diligent search is being conducted. The Port Authority will respond by:

☐ A diligent search has been conducted, and no records responsive to your request have been located.

☐ The requested records that have been located are not being made available, as they are exempt from disclosure for the following specific reasons:

☐ Some requested records that have been located are being made available. The remainder are exempt from disclosure for the following specific reasons:

☐ The request does not reasonably describe or identify specific records; therefore, the Port Authority is unable to search for and locate responsive records. Please consider submitting a new request that describes or identifies the specific records requested with particularity and detail.

☑ Other:

Material responsive to your request can be found on the Port Authority's website at http://corpinfo.panynj.gov/documents/14942-C/. Paper copies of the available records are available upon request. Exemptions applied for privacy.

This form is promulgated by the Port Authority pursuant to the Port Authority Public Records Access Policy and is intended to be construed consistent with the New York Freedom of Information Law and the New Jersey Open Public Records Act. It is intended to facilitate requests for Port Authority public records and does not constitute legal advice.

THE PORT AUTHORITY
OF NY & NJ

Request For Proposal For The Performance Of Expert Professional Construction Management And Related Technical Services As Requested On A "Call-In" Basis During 2011 – 2014

RFP Number 22094

August 2010

PREPARED FOR:

The Port Authority of NY & NJ
One Madison Avenue, 7th Floor
New York, NY 10010

PREPARED BY:

Gannett Fleming
Engineers & Architects, PC
Two Penn Plaza, Suite 552
380 Seventh Avenue
New York, NY 10121
TEL: 212-967-9833
FAX: 212-268-6684
www.gannettfleming.com

Gannett Fleming
Your Trusted Advisor Since 1915

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future®

GANNETT FLEMING ENGINEERS, P.C.
Two Penn Plaza
380 Seventh Avenue, Suite 552
New York, NY 10121
Office: (212) 967-9833
Fax: (212) 268-6684
www.gannettfleming.com

August 23, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attention: RFP Custodian

Re: Performance of Expert Professional Construction Management Services and Related Technical Services as Requested on a "Call-In" Basis during 2011 - 2014, RFP # 22094

To Whom It May Concern:

Gannett Fleming Engineers and Architects, P.C. (GF)/ Johnson, Mirmiran & Thompson, Inc. (JMT) Joint Venture is pleased to submit our credentials for this project to provide Construction Management Services for the Port Authority of New York & New Jersey (PANYNJ).

Introduction to GF/JMT Team

GF is a full-service multi-disciplinary engineering and architectural firm with more than 2,000 employees on staff in over 50 offices around the country, with more than 200 employees in the NYC metropolitan area. Since our founding in 1915, Gannett Fleming (GF) has successfully performed more than 25,000 engineering and architectural assignments across the nation. We are listed as **#47** among the Top 500 Design Firms in the Country by *Engineering News Record*. Our projects have received more than 50 awards during the past 10 years.

GF has ***more than 50 years of continuous experience on contracts in and around New York City***. Our clients have renewed existing contracts based on our ability to provide quality architectural, engineering and construction management services and respond promptly and efficiently. Our contracts of the last few years total more than $20 million in fees. Some of our On-Call contracts include:

- Port Authority On-Call Facilities Condition Inspection Contract 1999-2002, 2002-2005, 2005-2007, 2008-2011
- Port Authority On-Call Structural Engineering Contract 1998-2001, 2002-2004
- Port Authority On-Call Vertical Transportation Contract 2002-2004, 2005-2007, 2008-2009
- Port Authority (PATH) On-Call Project Management and Related Services 2010 - 2014
- New Jersey DOT Construction Management Term Agreement 2006-2010
- LIRR Term Agreement 1996-2001, 2001-2004, 2005-2007, 2008-2011
- Metro-North Term Agreement 2001-2004, 2005-2007, 2008-2011
- NYC School Construction Authority A/E Services On-Call Contract 2008-2011

- CUNY- City University of New York 2007-2009; 2009-2011
- United Nations On-Call Structural Services 2009-2011
- NYC Office of Management & Budget 2005-2008, 2009-2011
- TBTA Miscellaneous Design Services 1997-2000, 2000-2003, 2002-2007, 2008-2011
- NYCDCAS A/E Requirements Contract 2003-2006
- NYS Thruway A/E Design Contract 1997-2000, 2000-2003, 2003-2006
- NYCDDC Health and Safety Unit, Various Stadia Projects 2004-2006
- NYCDDC Transportation Unit A/E Services 2003-2006
- NYSDOT Design Services Agreement 1996-1999, 1998-2001, 2001-2007
- NJ Transit A/E On-Call Design Contract 2002-2006, 2010-2013

JMT

Founded in 1971, Johnson, Mirmiran and Thompson (JMT) is a multi-disciplined, consulting engineering firm that offers services to clients throughout the Eastern United States. In 2010, JMT Ranked No. 99 on the Engineering News Record's list of Top 500 Engineering Firms. JMT's resources include but are not limited to design and construction management, construction inspection, structural inspection, constructability reviews, cost estimating, claim analysis, cost estimating, water and wastewater design, survey/SUE services, ROW acquisitions, civil, transportation and aviation engineering services. JMT has seventeen (17) offices throughout the eastern United States.

The Quality Approach

GF/JMT Joint Venture considers Quality Assurance and Quality Control (QA/QC) an integral part of any project. A sound QA/QC approach is vital on every task, and is particularly important because of the many issues that must be resolved as a coordinated effort.

Gannett Fleming is ISO 9001:2008 certified. In keeping with Project Management and Quality Guidelines, a Project Execution Plan (PEP) will be prepared and is available for review. The PEP outlines detailed procedures for executing and completing a project. The PEP is developed to be project-specific where appropriate.

In addition to project management activities, the PEP provides guidelines on the application of quality control procedures. These procedures are utilized for day-to-day project activities, in preparing studies and reports, developing the design, and for construction-phase services. Quality Assurance (QA) reviews are also performed at regular intervals on the project.

Project Management

Our proposed **Project Manager, Ivan Ramirez, P.E.**, has over 37 years of experience, 34 of which was spent with the PANY & NJ. While with PANY & NJ he served in various capacities from Assistant Engineer to Program Manager. As Program Manager he was responsible for the development and execution of inspection programs at Authority airports, tunnels, bridges and track structures, as well as development and implementation of emergency repair contracts. As a result, Mr. Ramirez has a thorough understanding of the Policies and Procedures required

by PANYNJ. He will have full resources available to assemble a project team to address the scope of work and be the single point of contact for PANYNJ. He will develop, initiate and maintain a program to monitor project performance and quality assurance, will provide day-to-day supervision and direction, and will mobilize the Joint Venture's personnel and resources to deal with project issues quickly and efficiently.

If you have any questions or require additional information, please feel free to contact us at (212) 967-9833 extension 5229.

Very truly yours,
GANNETT FLEMING ENGINEERS AND ARCHITECTS, P.C.

James R. Laurita, P.E.
President

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THE PORT AUTHORITY OF NY & NJ

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ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

Gannett Fleming Engineers & Architects, P.C.

(Company)

(Signature)

President

(Title)

08/23/10

(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

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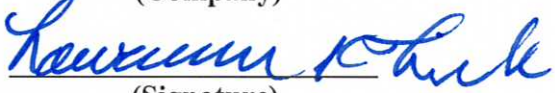
Johnson, Mirmiran and THompson (JMT)
(Company)


(Signature)

Vice President
(Title)

08/20/10
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #22094)

1. Company Name (print or type):

   Gannett Fleming Engineers & Architects, P.C.

2. Business Address (to receive mail for this RFP):

   380 7th Avenue, Two Penn Plaza, Suite 552
   New York, NY 10121

3. Business Telephone Number: 212-967-9833

4. Business Fax Number: 212-268-6684

5. Firm website: www.gannettfleming.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 08 / 13 / 97

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

Gannett Fleming, Inc.	Gannett Fleming Engineers, P.C.
207 Senate Avenue Camp Hill, PA 17011	100 Crossways Park West, Suite 300 Woodbury, NY 11797-2012
25-1613591	52-2151596

9. Officer or Principal of Firm and Title:

   James Laurita, P.E., President

10. Name, telephone number, and email address of contact for questions: [redacted]

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #22094)

1. Company Name (print or type):

   Johnson, Mirmiran and Thompson (JMT)

2. Business Address (to receive mail for this RFP):

   60 Park Place, Suite 2101

   Newark, NJ 07921

3. Business Telephone Number: 973-242-1033

4. Business Fax Number: 973-242-1109

5. Firm website: www.jmt.com

6. Federal Employer Identification Number (EIN) [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 11 / 22 / 74

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   Kupper, LLC (subsidiary) EIN #26-2720315

   1200 Lenox Drive, Suite 101, Trenton, NJ 08648

9. Officer or Principal of Firm and Title:

   Lawrence K. Fink, P.E., Vice President

10. Name, telephone number, and email address of contact for questions:
    Lawrence K. Fink, P.E., Vice President

    [redacted]

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

Section C: Compliance with "Proposer Requirements "

The assembled Gannett Fleming/JMT Team meets and exceeds the prequalification proposal requirements. The following is a detailed staff summary.

CLASSIFICATION	GF	JMT	TECTONIC	ARORA	VN	HALCROW	TOTAL
Project Managers with NY/NJ PE	10	11	20	5		29	75
Other Project Managers	5	1*	13	6		43	68
Construction Managers/ Resident Engineers with NY/NJ PE	6	3	25			4	38
Other Construction Managers/ Resident Engineers	10	7	28	8		10	63
Document Control Specialists				8		1	9
Office Engineers	6	3	12	8		85	114
Cost Estimators	2		2	8		3	15
Schedulers	4		2	6	1	3	16
Quality Control Inspectors							
Inspector – ACI *(including Special Inspectors)*	15	16	69				100
Inspector - ICC			29				29
Inspector - NACE		5	1			1	7
Electrical	2		1	5	1	2	11
Mechanical			7	3	1	2	13
UW Inspectors						24	24
Other Staff							
Chief Inspectors	6	6	8	4			24
Senior Inspectors	5	5	35	2			47
Inspectors	8	5	45	5	2		65
Value Engineering Specialists	2		2	3			7
Material Testing			10				10

* NJ Professional Land Surveyor

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

GANNETT FLEMING ENGINEERS AND ARCHITECTS PC
POST OFFICE BOX 67100
HARRISBURG, PA 17106-7100

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0006074

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
1784

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

State of New Jersey

Division of Consumer Affairs

State Board of Professional Engineers and Land Surveyors

THIS CERTIFIES THAT

JOHNSON, MIRMIRAN & THOMPSON INCORPORATED
1200 LENOX DRIVE, STE.101
Trenton NJ 08648

Has met the requirements of the State Board of Professional Engineers and Land Surveyors and is hereby issued a

CERTIFICATE OF AUTHORIZATION

to offer the following services

Engineering	07/10/2010	08/31/2012

Person in Responsible Charge — Joseph James Zarriello

For the names of other Responsible Charge Licensees, go to: http://www.njconsumeraffairs.com/pels/certrpt.pdf

Date: August 17, 2010
Certificate No. 24GA28125800
Expiration Date: 08/31/2012

Arthur Russo

Executive Director

THE PORT AUTHORITY OF NY & NJ

January 9, 2009

Manik Arora
President
Arora Engineers, Incorporated
One Gateway Center-Suite 1020
Newark, New Jersey 07102

Dear Mr. Arora:

We are pleased to inform you that your company has been found eligible for certification as a Disadvantaged Business Enterprise (DBE) by **The Port Authority of NY & NJ/Office of Business & Job Opportunity** on behalf of the NJ and NY State Unified Certification Programs (NJ UCP and NYS UCP).

Your certification will remain in effect for three years provided that your company continues to meet the eligibility criteria established by Federal Regulation Title 49 CFR Part 26. On an annual basis, you must provide an affidavit and supporting documentation affirming that there have been no changes within your company that would affect your current eligibility as a DBE. It is your responsibility to notify this office in writing within 30 days of any changes. Failure to do so will result in a decertification process. Your company's identification number is **25636.**

The following table lists the North American Industry Classification System (NAICS) code(s) and description(s) that have been assigned to your company in accordance with the service(s) your company render(s).

NAICS CODE	DESCRIPTION
236220	INDUSTRIAL BUILDING CONSTRUCTION
541330	ENGINEERING SERVICES
541490	OTHER SPECIALIZED DESIGN SERVICES
541512	COMPUTER SYSTEMS DESIGN SERVICES
541611	MANAGEMENT, SCIENTIFIC AND TECHNICAL CONSULTING SERVICES

Your firm has been added to the NJ and NY State UCP Directories, which can be accessed at http://www.njucp.net/ for NJ and http://biznet.nysucp.net/ for NY.

On behalf of the NJ and NYS UCP partners, **The Port Authority of NY & NJ/Office of Business & Job Opportunity** welcomes you as a member of our DBE family. If you have any questions or concerns regarding the NJ UCP, NYS UCP or certification issues, please contact Romaine A. Lewis at (212) 435-7807.

Congratulations!

Sincerely,

Lash Green
Director
Office of Business & Job Opportunity

LG/RAL (RAL)
Enclosure

233 Park Avenue South
New York, NY 10003
T: 212 435 7000

PAGE 02/02
PORT AUTHORITY
212-435-7827
07/28/2009 12:06

New Jersey Unified Certification Program NJ UCP

NJTRANSIT The Way To Go.

THE PORT AUTHORITY OF NY & NJ

Certified

DISADVANTAGED BUSINESS ENTERPRISE

Arora Engineers, Incorporated

This certificate acknowledges that the above named firm is certified as a Disadvantaged Business Enterprise as defined in Title 49, Part 26 of the US Code of Federal Regulations. This certification will remain in effect for three years from the certification date and must be updated annually. The Port Authority of New York & New Jersey/Office of Business & Job Opportunity must be notified within 30 days of any changes in the business that may affect ownership and control.

Your firm will be listed in the NJ UCP directory under the following NAICS Code(s).

NAICS CODE	236210	541330	541490	541512	541611

The Port Authority of New York & New Jersey/Office of Business & Job Opportunity certified your firm as a DBE on behalf of all NJ UCP partners.

Signed: Lash Green
Lash Green, Director

Signed: Rosemary Varela
Rosemary Jenkins-Varela, Manager

CERTIFICATION DATE: January 9, 2009

EXPIRATION DATE: January 9, 2012

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Joseph J. Seymour
Executive Director

Certified

by

Business and Job Opportunity

VN Engineers, Inc.

Certificate PA-810

This certificate acknowledges that the above named firm is certified as a **Woman-owned Business Enterprise.** This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a Verification Statement attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions. Please reference the above number on all correspondence directed to this office.

Wilfred Chabrier
General Manager
Certified: August 16, 2004

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: August 17, 2009

Form: 6/10/93 CAW

State of New Jersey

Division of Consumer Affairs

State Board of Professional Engineers and Land Surveyors

THIS CERTIFIES THAT

HALCROW, INC.
22 CORTLAND ST., 33 FLOOR
New York NY 10007

Has met the requirements of the State Board of Professional Engineers and Land Surveyors and is hereby issued a

CERTIFICATE OF AUTHORIZATION

to offer the following services

Engineering	***02/19/2009***	***08/31/2010***

Person in Responsible Charge — Michael Steven DellaRocca

For the names of other Responsible Charge Licensees, go to: http://www.njconsumeraffairs.com/pels/certrpt.pdf

Date: March 6, 2009
Certificate No. 24GA28105000
Expiration: 08/31/2010

Arthur Russo

Executive Director

New Jersey Unified Certification Program

NJ UCP

NJTRANSIT The Way To Go.

New Jersey Department of Transportation

THE PORT AUTHORITY OF NY & NJ

CERTIFIED

DISADVANTAGED BUSINESS ENTERPRISE

VN ENGINEERS, INC

This certificate acknowledges that the above named firm is certified as a Disadvantaged Business Enterprise as defined in Title 49, Part 26 of the US Code of Federal Regulations. This certification will remain in effect for three years from the certification date and must be updated annually. The New Jersey Department of Transportation must be notified within 30 days of any changes in the business that may affect ownership and control.

Your firm will be listed in the NJ UCP directory under the following NAICS Code(s).

NAICS CODE	541330 Engineering Services			

NJ Department of Transportation certified your firm as a DBE on behalf of all NJ UCP partners.

Signed Nelida Valentin

Nelida Valentin, Executive Director

Signed Paul F. Sprewell

Paul F. Sprewell, Manager

CERTIFICATION DATE: January 31, 2009

EXPIRATION DATE: January 30, 2012

Section D: Multiplier

Gannett Fleming

The "multiplier" referred to in the first line of subparagraph 8.A of the Standard Agreement included in the Request for Proposal will be **2.79** for HOME OFFICE and **2.57** for FIELD WORK for Gannett Fleming Engineers and Architects, P.C. (GF). This multiplier will apply to full-time employees for the period to cover 2011-2014.

BREAKDOWN OF PROPOSED MULTIPLIER FOR 2011 - 2014

FOR WORK IN GANNETT FLEMING OFFICES

	2011	2012	2013	2014
Direct Payroll	1.0000	1.0000	1.0000	1.0000
Payroll Burden *	0.5557	0.5641	0.5729	0.5823
General and Administrative Costs *	1.0462	1.0531	1.0602	1.0673
Subtotal	2.6019	2.6172	2.6331	2.6496
10% Profit	0.2602	0.2617	0.2633	0.2650
TOTAL	2.8621	2.8789	2.8964	2.9146

FOUR-YEAR AVERAGE	2.8880
PROPOSED MULTIPLIER**	2.79

***** SEE ATTACHED BREAKDOWN ON FOLLOWING SHEETS

**GF WILL PROVIDE SERVICES AT OUR CURRENT PANYNJ APPROVAL RATE

FOR WORK IN PORT AUTHORITY OFFICES OR CONSTRUCTION MANAGEMENT

	2011	2012	2013	2014
Direct Payroll	1.0000	1.0000	1.0000	1.0000
Payroll Burden *	0.5557	0.5641	0.5729	0.5823
General and Administrative Costs *	0.8659	0.8729	0.8800	0.8871
Subtotal	2.4216	2.4370	2.4529	2.4694
10% Profit	0.2422	0.2437	0.2453	0.2469
TOTAL	2.6638	2.6807	2.6982	2.7163

FOUR-YEAR AVERAGE	2.6897
PROPOSED MULTIPLIER**	2.57

* SEE ATTACHED BREAKDOWN ON FOLLOWING SHEETS

**GF WILL PROVIDE SERVICES AT THIS RATE

Gannett Fleming Engineering Companies
Field Indirect Cost Rate
2011 Projection

10-Aug-10

	Amount	%
DIRECT LABOR	4,691,093	100.00
INDIRECT COSTS		
Payroll Burden		
Salaries		
Holiday	235,906	5.03
Paid Time Off	551,341	11.75
Sick Leave	13,661	0.29
Employee Benefits		
Payroll and Unemployment Taxes	617,604	13.17
Workers' Compensation	38,952	0.83
Group Life Insurance	19,380	0.41
Medical and Dental Insurance	603,869	12.87
Long-Term Disability Insurance	4,950	0.11
Pension Plan	494,813	10.55
Other	26,583	0.56
	2,607,059	55.57
General and Administrative Costs		
Salaries		
Administrative, General Office, Accounting, and Clerical	424,905	9.06
Technical Non-Project	692,274	14.76
Recruitment and Personnel	59,252	1.26
Proposal and Precontract	1,019,088	21.72
Training and Professional Development	154,272	3.29
Systems Development	205,565	4.38
Maintenance and Other	12,607	0.27
Bonuses and Deferred Compensation	474,412	10.11
Insurance	115,645	2.47
Property Rental	193,471	4.12
Equipment Rental	1,016	0.02
Maintenance and Repairs	63,004	1.34
Office Relocation	6,577	0.14
Utilities	6,962	0.15
Depreciation	39,925	0.85
Amortization	0	0.00
Telephone	30,569	0.65
Outside Service Costs		
Computer Services	5,478	0.12
Copying and Reproduction	33,218	0.71
Temporary Office Services	18,216	0.39
Proposal and Precontract	52,933	1.13
Entertainment	0	0.00
Recruitment and Personnel	38,606	0.82
Employee Relocation	7,151	0.15
Professional Registrations, Dues, and Memberships	19,985	0.43
Books and Periodicals	9,524	0.20
Professional Meetings, Seminars, and Conventions	88,958	1.90
Other Business Travel	49,973	1.07
Company Automobile Usage	25,369	0.54
Supplies and Materials	42,615	0.91
Postage , Freight, and Courier Services	5,899	0.13
Advertising and Promotion	0	0.00
Professional and Consultant Services		
Legal	6,322	0.13
Accounting	41,907	0.89
Other	89,314	1.90
Interest	0	0.00
Taxes		
Federal Income	0	0.00
State Income	12,818	0.27
Other	8,585	0.18
Filing Fees, Notary Fees, and Licenses	8,862	0.19
Fines and Penalties	0	0.00
Contributions and Lobbying Costs	0	0.00
Bad Debts	0	0.00
Other	-3,273	-0.07
	4,062,005	86.59
TOTAL INDIRECT COSTS	6,669,064	142.16

*Rate derived using a formula developed and accepted by several state agencies

Gannett Fleming Engineering Companies
Home Office Indirect Cost Rate
2011 Projection

10-Aug-10

	Amount	%
DIRECT LABOR	82,383,279	100.00
INDIRECT COSTS		
Payroll Burden		
Salaries		
Holiday	4,142,864	5.03
Paid Time Off	9,682,384	11.75
Sick Leave	239,903	0.29
Employee Benefits		
Payroll and Unemployment Taxes	10,846,048	13.17
Workers' Compensation	684,049	0.83
Group Life Insurance	340,316	0.41
Medical and Dental Insurance	10,604,825	12.87
Long-Term Disability Insurance	86,925	0.11
Pension Plan	8,689,639	10.55
Other	466,832	0.56
	45,783,785	55.57
General and Administrative Costs		
Salaries		
Administrative, General Office, Accounting, and Clerical	7,461,973	9.06
Technical Non-Project	12,157,355	14.76
Recruitment and Personnel	1,040,548	1.26
Proposal and Precontract	17,896,735	21.72
Training and Professional Development	2,709,245	3.29
Systems Development	3,610,038	4.38
Maintenance and Other	221,391	0.27
Bonuses and Deferred Compensation	8,331,394	10.11
Insurance	2,030,898	2.47
Property Rental	10,068,593	12.22
Equipment Rental	52,833	0.06
Maintenance and Repairs	3,278,888	3.98
Office Relocation	115,510	0.14
Utilities	362,280	0.44
Depreciation	2,077,777	2.52
Amortization	0	0.00
Telephone	1,590,894	1.93
Outside Service Costs		
Computer Services	285,087	0.35
Copying and Reproduction	1,728,761	2.10
Temporary Office Services	319,905	0.39
Proposal and Precontract	929,604	1.13
Entertainment	0	0.00
Recruitment and Personnel	677,993	0.82
Employee Relocation	125,573	0.15
Professional Registrations, Dues, and Memberships	350,959	0.43
Books and Periodicals	167,273	0.20
Professional Meetings, Seminars, and Conventions	1,562,231	1.90
Other Business Travel	877,613	1.07
Company Automobile Usage	445,528	0.54
Supplies and Materials	2,217,790	2.69
Postage , Freight, and Courier Services	307,029	0.37
Advertising and Promotion	0	0.00
Professional and Consultant Services		
Legal	111,027	0.13
Accounting	735,936	0.89
Other	1,568,503	1.90
Interest	0	0.00
Taxes		
Federal Income	0	0.00
State Income	225,101	0.27
Other	446,748	0.54
Filing Fees, Notary Fees, and Licenses	155,635	0.19
Fines and Penalties	0	0.00
Contributions and Lobbying Costs	0	0.00
Bad Debts	0	0.00
Other	-57,478	-0.07
	86,187,169	104.62
TOTAL INDIRECT COSTS	131,970,954	160.19

*Rate derived using a formula developed and accepted by several state agencies

Gannett Fleming Engineering Companies
Field Indirect Cost Rate
2012 Projection

10-Aug-10

	Amount	%
DIRECT LABOR	4,902,192	100.00
INDIRECT COSTS		
Payroll Burden		
Salaries		
Holiday	249,730	5.09
Paid Time Off	583,649	11.91
Sick Leave	13,661	0.28
Employee Benefits		
Payroll and Unemployment Taxes	645,396	13.17
Workers' Compensation	40,705	0.83
Group Life Insurance	20,252	0.41
Medical and Dental Insurance	666,973	13.61
Long-Term Disability Insurance	5,173	0.11
Pension Plan	511,950	10.44
Other	27,779	0.56
	2,765,268	56.41
General and Administrative Costs		
Salaries		
Administrative, General Office, Accounting, and Clerical	449,805	9.18
Technical Non-Project	732,841	14.95
Recruitment and Personnel	62,724	1.28
Proposal and Precontract	1,078,807	22.01
Training and Professional Development	163,312	3.33
Systems Development	217,611	4.44
Maintenance and Other	13,345	0.27
Bonuses and Deferred Compensation	495,761	10.11
Insurance	120,109	2.45
Property Rental	202,177	4.12
Equipment Rental	1,062	0.02
Maintenance and Repairs	65,839	1.34
Office Relocation	6,873	0.14
Utilities	7,275	0.15
Depreciation	41,722	0.85
Amortization	0	0.00
Telephone	31,945	0.65
Outside Service Costs		
Computer Services	5,725	0.12
Copying and Reproduction	34,713	0.71
Temporary Office Services	19,036	0.39
Proposal and Precontract	55,315	1.13
Entertainment	0	0.00
Recruitment and Personnel	40,343	0.82
Employee Relocation	7,473	0.15
Professional Registrations, Dues, and Memberships	20,884	0.43
Books and Periodicals	9,953	0.20
Professional Meetings, Seminars, and Conventions	92,961	1.90
Other Business Travel	52,222	1.07
Company Automobile Usage	26,511	0.54
Supplies and Materials	44,533	0.91
Postage , Freight, and Courier Services	6,164	0.13
Advertising and Promotion	0	0.00
Professional and Consultant Services		
Legal	6,606	0.13
Accounting	43,793	0.89
Other	93,333	1.90
Interest	0	0.00
Taxes		
Federal Income	0	0.00
State Income	13,395	0.27
Other	8,971	0.18
Filing Fees, Notary Fees, and Licenses	9,261	0.19
Fines and Penalties	0	0.00
Contributions and Lobbying Costs	0	0.00
Bad Debts	0	0.00
Other	-3,420	-0.07
	4,278,981	87.29
TOTAL INDIRECT COSTS	7,044,249	143.70

*Rate derived using a formula developed and accepted by several state agencies

Gannett Fleming Engineering Companies
Home Office Indirect Cost Rate
2012 Projection

10-Aug-10

	Amount	%
DIRECT LABOR	86,090,527	100.00
INDIRECT COSTS		
Payroll Burden		
Salaries		
Holiday	4,385,636	5.09
Paid Time Off	10,249,771	11.91
Sick Leave	239,903	0.28
Employee Benefits		
Payroll and Unemployment Taxes	11,334,120	13.17
Workers' Compensation	714,831	0.83
Group Life Insurance	355,630	0.41
Medical and Dental Insurance	11,713,029	13.61
Long-Term Disability Insurance	90,837	0.11
Pension Plan	8,990,588	10.44
Other	487,839	0.56
	48,562,184	56.41
General and Administrative Costs		
Salaries		
Administrative, General Office, Accounting, and Clerical	7,899,245	9.18
Technical Non-Project	12,869,776	14.95
Recruitment and Personnel	1,101,524	1.28
Proposal and Precontract	18,945,484	22.01
Training and Professional Development	2,868,007	3.33
Systems Development	3,821,587	4.44
Maintenance and Other	234,365	0.27
Bonuses and Deferred Compensation	8,706,307	10.11
Insurance	2,109,290	2.45
Property Rental	10,521,680	12.22
Equipment Rental	55,210	0.06
Maintenance and Repairs	3,426,438	3.98
Office Relocation	120,708	0.14
Utilities	378,583	0.44
Depreciation	2,171,277	2.52
Amortization	0	0.00
Telephone	1,662,484	1.93
Outside Service Costs		
Computer Services	297,916	0.35
Copying and Reproduction	1,806,555	2.10
Temporary Office Services	334,301	0.39
Proposal and Precontract	971,436	1.13
Entertainment	0	0.00
Recruitment and Personnel	708,503	0.82
Employee Relocation	131,224	0.15
Professional Registrations, Dues, and Memberships	366,752	0.43
Books and Periodicals	174,800	0.20
Professional Meetings, Seminars, and Conventions	1,632,531	1.90
Other Business Travel	917,106	1.07
Company Automobile Usage	465,577	0.54
Supplies and Materials	2,317,591	2.69
Postage , Freight, and Courier Services	320,845	0.37
Advertising and Promotion	0	0.00
Professional and Consultant Services		
Legal	116,023	0.13
Accounting	769,053	0.89
Other	1,639,086	1.90
Interest	0	0.00
Taxes		
Federal Income	0	0.00
State Income	235,231	0.27
Other	466,852	0.54
Filing Fees, Notary Fees, and Licenses	162,639	0.19
Fines and Penalties	0	0.00
Contributions and Lobbying Costs	0	0.00
Bad Debts	0	0.00
Other	-60,065	-0.07
	90,665,920	105.31
TOTAL INDIRECT COSTS	139,228,104	161.72

*Rate derived using a formula developed and accepted by several state agencies

Gannett Fleming Engineering Companies
Field Indirect Cost Rate
2013 Projection

10-Aug-10

	Amount	%
DIRECT LABOR	5,122,791	100.00
INDIRECT COSTS		
Payroll Burden		
Salaries		
Holiday	264,364	5.16
Paid Time Off	617,851	12.06
Sick Leave	13,661	0.27
Employee Benefits		
Payroll and Unemployment Taxes	674,439	13.17
Workers' Compensation	42,537	0.83
Group Life Insurance	21,163	0.41
Medical and Dental Insurance	736,672	14.38
Long-Term Disability Insurance	5,406	0.11
Pension Plan	529,836	10.34
Other	29,029	0.56
	2,934,958	57.29
General and Administrative Costs		
Salaries		
Administrative, General Office, Accounting, and Clerical	476,163	9.29
Technical Non-Project	775,786	15.14
Recruitment and Personnel	66,400	1.30
Proposal and Precontract	1,142,025	22.29
Training and Professional Development	172,882	3.37
Systems Development	230,363	4.50
Maintenance and Other	14,127	0.28
Bonuses and Deferred Compensation	518,070	10.11
Insurance	124,745	2.44
Property Rental	211,275	4.12
Equipment Rental	1,110	0.02
Maintenance and Repairs	68,802	1.34
Office Relocation	7,182	0.14
Utilities	7,602	0.15
Depreciation	43,599	0.85
Amortization	0	0.00
Telephone	33,383	0.65
Outside Service Costs		
Computer Services	5,983	0.12
Copying and Reproduction	36,275	0.71
Temporary Office Services	19,893	0.39
Proposal and Precontract	57,804	1.13
Entertainment	0	0.00
Recruitment and Personnel	42,158	0.82
Employee Relocation	7,809	0.15
Professional Registrations, Dues, and Memberships	21,824	0.43
Books and Periodicals	10,401	0.20
Professional Meetings, Seminars, and Conventions	97,144	1.90
Other Business Travel	54,572	1.07
Company Automobile Usage	27,704	0.54
Supplies and Materials	46,537	0.91
Postage , Freight, and Courier Services	6,441	0.13
Advertising and Promotion	0	0.00
Professional and Consultant Services		
Legal	6,903	0.13
Accounting	45,764	0.89
Other	97,533	1.90
Interest	0	0.00
Taxes		
Federal Income	0	0.00
State Income	13,998	0.27
Other	9,375	0.18
Filing Fees, Notary Fees, and Licenses	9,678	0.19
Fines and Penalties	0	0.00
Contributions and Lobbying Costs	0	0.00
Bad Debts	0	0.00
Other	-3,574	-0.07
	4,507,737	88.00
TOTAL INDIRECT COSTS	7,442,695	145.29

*Rate derived using a formula developed and accepted by several state agencies

Gannett Fleming Engineering Companies
Home Office Indirect Cost Rate
2013 Projection

10-Aug-10

	Amount	%
DIRECT LABOR	89,964,601	100.00
INDIRECT COSTS		
Payroll Burden		
Salaries		
Holiday	4,642,635	5.16
Paid Time Off	10,850,408	12.06
Sick Leave	239,903	0.27
Employee Benefits		
Payroll and Unemployment Taxes	11,844,155	13.17
Workers' Compensation	746,998	0.83
Group Life Insurance	371,633	0.41
Medical and Dental Insurance	12,937,040	14.38
Long-Term Disability Insurance	94,925	0.11
Pension Plan	9,304,695	10.34
Other	509,792	0.56
	51,542,184	57.29
General and Administrative Costs		
Salaries		
Administrative, General Office, Accounting, and Clerical	8,362,141	9.29
Technical Non-Project	13,623,945	15.14
Recruitment and Personnel	1,166,074	1.30
Proposal and Precontract	20,055,690	22.29
Training and Professional Development	3,036,072	3.37
Systems Development	4,045,532	4.50
Maintenance and Other	248,098	0.28
Bonuses and Deferred Compensation	9,098,091	10.11
Insurance	2,190,709	2.44
Property Rental	10,995,156	12.22
Equipment Rental	57,694	0.06
Maintenance and Repairs	3,580,628	3.98
Office Relocation	126,140	0.14
Utilities	395,619	0.44
Depreciation	2,268,984	2.52
Amortization	0	0.00
Telephone	1,737,296	1.93
Outside Service Costs		
Computer Services	311,322	0.35
Copying and Reproduction	1,887,850	2.10
Temporary Office Services	349,345	0.39
Proposal and Precontract	1,015,151	1.13
Entertainment	0	0.00
Recruitment and Personnel	740,386	0.82
Employee Relocation	137,129	0.15
Professional Registrations, Dues, and Memberships	383,256	0.43
Books and Periodicals	182,666	0.20
Professional Meetings, Seminars, and Conventions	1,705,995	1.90
Other Business Travel	958,376	1.07
Company Automobile Usage	486,528	0.54
Supplies and Materials	2,421,883	2.69
Postage , Freight, and Courier Services	335,283	0.37
Advertising and Promotion	0	0.00
Professional and Consultant Services		
Legal	121,244	0.13
Accounting	803,660	0.89
Other	1,712,845	1.90
Interest	0	0.00
Taxes		
Federal Income	0	0.00
State Income	245,816	0.27
Other	487,860	0.54
Filing Fees, Notary Fees, and Licenses	169,958	0.19
Fines and Penalties	0	0.00
Contributions and Lobbying Costs	0	0.00
Bad Debts	0	0.00
Other	-62,768	-0.07
	95,381,653	106.02
TOTAL INDIRECT COSTS	146,923,837	163.31

*Rate derived using a formula developed and accepted by several state agencies

Gannett Fleming Engineering Companies
Home Office Indirect Cost Rate
2014 Projection

10-Aug-10

	Amount	%
DIRECT LABOR	94,013,008	100.00
INDIRECT COSTS		
Payroll Burden		
Salaries		
Holiday	4,914,694	5.23
Paid Time Off	11,486,242	12.22
Sick Leave	239,903	0.26
Employee Benefits		
Payroll and Unemployment Taxes	12,377,142	13.17
Workers' Compensation	780,613	0.83
Group Life Insurance	388,356	0.41
Medical and Dental Insurance	14,288,961	15.20
Long-Term Disability Insurance	99,197	0.11
Pension Plan	9,632,697	10.25
Other	532,733	0.55
	54,740,538	58.23
General and Administrative Costs		
Salaries		
Administrative, General Office, Accounting, and Clerical	8,852,162	9.42
Technical Non-Project	14,422,309	15.34
Recruitment and Personnel	1,234,406	1.31
Proposal and Precontract	21,230,953	22.58
Training and Professional Development	3,213,986	3.42
Systems Development	4,282,600	4.56
Maintenance and Other	262,636	0.28
Bonuses and Deferred Compensation	9,507,505	10.11
Insurance	2,275,270	2.42
Property Rental	11,489,938	12.22
Equipment Rental	60,290	0.06
Maintenance and Repairs	3,741,756	3.98
Office Relocation	131,816	0.14
Utilities	413,422	0.44
Depreciation	2,371,088	2.52
Amortization	0	0.00
Telephone	1,815,474	1.93
Outside Service Costs		
Computer Services	325,331	0.35
Copying and Reproduction	1,972,803	2.10
Temporary Office Services	365,066	0.39
Proposal and Precontract	1,060,833	1.13
Entertainment	0	0.00
Recruitment and Personnel	773,703	0.82
Employee Relocation	143,300	0.15
Professional Registrations, Dues, and Memberships	400,503	0.43
Books and Periodicals	190,886	0.20
Professional Meetings, Seminars, and Conventions	1,782,765	1.90
Other Business Travel	1,001,503	1.07
Company Automobile Usage	508,422	0.54
Supplies and Materials	2,530,868	2.69
Postage , Freight, and Courier Services	350,371	0.37
Advertising and Promotion	0	0.00
Professional and Consultant Services		
Legal	126,700	0.13
Accounting	839,825	0.89
Other	1,789,923	1.90
Interest	0	0.00
Taxes		
Federal Income	0	0.00
State Income	256,878	0.27
Other	509,814	0.54
Filing Fees, Notary Fees, and Licenses	177,606	0.19
Fines and Penalties	0	0.00
Contributions and Lobbying Costs	0	0.00
Bad Debts	0	0.00
Other	-65,593	-0.07
	100,347,117	106.73
TOTAL INDIRECT COSTS	155,087,655	164.96

*Rate derived using a formula developed and accepted by several state agencies

Johnson, Mirmiran, Thompson's Multiplier

Audited Combined Rate: 134.5 %

Direct: 1.00
Total: 2.345
10% Profit: .235
Overall Multiplier: 2.58

JOHNSON, MIRMIRAN & THOMPSON, INC.

STATEMENT OF DIRECT LABOR,
FRINGE BENEFITS AND GENERAL OVERHEAD

DECEMBER 31, 2009

JOHNSON, MIRMIRAN & THOMPSON, INC.

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MISTER, BURTON, PALMISANO & FRENCH, LLC

Certified Public Accountants

INDEPENDENT AUDITORS' REPORT ON STATEMENT OF DIRECT LABOR, FRINGE BENEFITS AND GENERAL OVERHEAD

The Board of Directors
Johnson, Mirmiran & Thompson, Inc.
Sparks, Maryland

We have audited the statement of direct labor, fringe benefits and general overhead of Johnson, Mirmiran & Thompson, Inc., (the "Company") for the year ended December 31, 2009. This statement is the responsibility of the Company's management. Our responsibility is to express an opinion on this statement based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the statement is free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the statement of direct labor, fringe benefits and general overhead. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As described in Note 2, the Company's policy is to prepare its statement of direct labor, fringe benefits and general overhead on the basis of accounting practices as prescribed by Part 31 of the Federal Acquisition Regulation and certain other federal regulations, which practices differ from accounting principles generally accepted in the United States of America. Accordingly, the accompanying statement is not intended to be a presentation in conformity with accounting principles generally accepted in the United States of America.

In our opinion, the statement referred to above presents fairly, in all material respects, the direct labor, fringe benefits and general overhead of Johnson, Mirmiran & Thompson, Inc., for the year ended December 31, 2009, on the basis of accounting described in Note 2.

In accordance with *Government Auditing Standards*, we have also issued our report dated May 25, 2010, on our consideration of the Company's internal control over financial reporting, and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

This report is intended solely for the information and use of management of the Company and for filing with the appropriate state agencies, and is not intended to be, and should not be used by anyone other than these specified parties.

Mister, Burton, Palmisano & French, LLC

Mister, Burton, Palmisano & French, LLC
Hunt Valley, Maryland
May 25, 2010

MISTER, BURTON, PALMISANO & FRENCH, LLC

Certified Public Accountants

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

The Board of Directors
Johnson, Mirmiran & Thompson, Inc.
Sparks, Maryland

We have audited the statement of direct labor, fringe benefits and general overhead of Johnson, Mirmiran & Thompson, Inc., (the "Company") for the year ended December 31, 2009, and have issued our report thereon dated May 25, 2010. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standard* issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered the Company's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the statement of direct labor, fringe benefits and general overhead, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Company's internal control over financial reporting.

The management of the Company is responsible for establishing and maintaining internal control over financial reporting. In fulfilling this responsibility, estimates and judgments by management are required to assess the expected benefits and related costs of internal controls over financial reporting. The objectives of internal control over financial reporting are to provide management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and that transactions are executed in accordance with Part 31 of the Federal Acquisition Regulation. Because of inherent limitation sin any internal control structure, errors or irregularities may nevertheless occur and not be detected. Also, projection of any evaluation of the structure to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the effectiveness of the design and operation of policies and procedures may deteriorate.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the Company's ability to initiate, authorize, record, process, or report financial data reliably in accordance with Part 31 of the Federal Acquisition Regulation, such that there is more than a remote likelihood that a misstatement of the Company's statement of direct labor, fringe benefits and general overhead that is more than inconsequential, will not be prevented or detected by the Company's internal control.

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A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the statement of direct labor, fringe benefits and general overhead will not be prevented or detected by the Company's internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Company's statement of direct labor, fringe benefits and general overhead is free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements including provisions of the applicable sections of Part 31 of the Federal Acquisitions Regulation, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

This report is intended solely for the use and information of the Company and government agencies or other customers related to contracts employing the cost principles of the Federal Acquisition Regulation. This report should not be used for any other purpose.

Mister, Burton, Palmisano & French, LLC

Mister, Burton, Palmisano & French, LLC
Hunt Valley, Maryland
May 25, 2010

Schedule of Direct Labor and Indirect Overhead Costs For the year ended December 31, 2009	
	Total Costs
Direct Labor	**7,446,872**
Fringe Benefits	
Payroll Taxes	986,403
Paid Leave	1,212,118
Life & Disability Insurance	0
Health Insurance	885,899
Workers Comp Insurance	116,171
Union Welfare/Pension	207,509
Other Employee Benefits	21,111
Total Fringe Benefits	**3,429,211**
Indirect Labor	3,814,188
Bad Debts	0
Business Development	26,687
Computer Expense	90,139
Contributions	0
Depreciation	105,070
Dues & Subscriptions	19,951
Insurance	131,994
Interest	0
Miscellaneous	4,192
Office Equipment Rental	95,321
Postage and Delivery	26,407
Professional Development	41,849
Professional Services	160,415
Recruitment	20,216
Rent & Utilities	350,924
Repairs & Maintenance	87,043
Reproduction	17,821
Supplies Expense	394,008
Taxes & Licenses	25,288
Telephone	284,077
Travel	984,497
Total General Overhead	**6,680,087**
Overhead Rate	1.36
Direct Labor Rate	1.00
Profit	10%
Overhead Multiplier	**2.59**

TECTONIC
Practical Solutions, Exceptional Service

MULTIPLIER

Arora Multiplier Calculation

Direct Labor	1.00
Audited Field OH Rate	1.38
Subtotal	2.38
Fixed Fee/Profit (10%)	0.24
Multiplier	2.62

ARORA ENGINEERS, INC. AND SUBSIDIARY

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Notes to Consolidated Overhead Rate Schedule	3

elko & Associates Ltd

Colleen Cooke-Varallo, CPA
Edward W. Doran, CPA
Albert L. Elko, CPA
Robert G. Morlock, CPA
John J. Nihill, CPA
M. Deborah Pitt, E.A.
Veronica M. Plousis, CPA
Michael Pozielli, CPA
Michael J. Reinking, CPA
Leonard V. Santivasi, CPA
Steven Scaduto, CPA
Marc R. Simmons, CPA
Gregory D. Stratoti, CPA, MST
Richard J. Thomas, CPA, CVA, CFFA

CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITORS' REPORT

Stockholders
Arora Engineers, Inc.
Chadds Ford, Pennsylvania

We have audited the accompanying consolidated overhead rate schedule of Arora Engineers, Inc. and subsidiary for the year ended December 31, 2009. This schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on this schedule based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the overhead rate schedule is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the overhead rate schedule. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall schedule presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the overhead rate schedule referred to above presents fairly, in all material respects, the consolidated overhead rate of Arora Engineers, Inc. and subsidiary for the year ended December 31, 2009, which has been determined in accordance with the Federal Acquisition Regulations Title 48, Part 31 - Contract Cost Principles and Procedures.

This report is intended solely for the information and use of the management of Arora Engineers, Inc. and Government Contracting Agencies and should not be used for any other purpose.

Elko & Associates Ltd

March 3, 2010

2 West Baltimore Avenue, Suite 210 • Media, PA 19063 • 610-565-3930 • FAX: 610-566-1040
521 Plymouth Road, Suite 120 • Plymouth Meeting, PA 19462-1609 • 610-279-9100 • FAX: 610-279-7100

www.elkocpa.com

ARORA ENGINEERS, INC. AND SUBSIDIARY

CONSOLIDATED OVERHEAD RATE SCHEDULE

FOR THE YEAR ENDED DECEMBER 31, 2009

VN ENGINEERS, INC. PROPOSED OVERHEAD AND PROFIT MULTIPLIER
(APPROVED BY THE NYS DOT)

Direct Salaries		1.00
Overhead		1.03
Subtotal		2.03
Profit @	10%	0.203
Total		**2.23**

RECEIVED
JUN 18 2010
VN ENGINEERS, INC.

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
ALBANY, N.Y. 12232
www.nysdot.gov

STANLEY GEE
ACTING COMMISSIONER

DAVID A. PATERSON
GOVERNOR

June 16, 2010

Mr./Ms. Sofia M. Nirshberg
VN ENGINEERS, P.C.
116 Washington Avenue
North Haven, Connecticut 06473

Dear Mr./Ms. Nirshberg,

Re: Overhead Billing Rate - FYE - 12/31/2009

We recently received current overhead information based on a review of the CONR 385 submitted for FYE - 12/31/2009.

Based on that information, provisional overhead rates have been approved. The Combined overhead rate is 103%, the Office overhead rate is 112% and the Field overhead rate is 100%. If these rates are lower than or equal to the "NOT TO EXCEED" overhead rates established in a contract with New York State Department of Transportation, you may use these provisional rates for billing purposes, for the referenced period, and for future periods, until superseded by rates established by preaward audit, post audit or until CONR 385 billing rates are issued for a subsequent period. Please review the overhead rates indicated in the Consultant Selection System (CSS) for the current applicable overhead rates for price forwarding.

These submitted rates have not been audited and no audit assurances are provided. This letter is intended for your use, the use of the department and the prime consultants you may be working with in connection with department agreements.

The provisional overhead billing rates are subject to the post audit prior to final payment for completed work.

Sincerely,

Eileen Barnes

William A. Howe
Director, Office of Contract Management

WH: BPL
CC: Director, Contract Audit Bureau w/CONR385, 1st Floor

D. Multiplier - Halcrow

The multiplier referred to in the first line of subparagraph 9.A of the Authority's Standard Agreement is proposed as **3.0** for design/office-based work and **2.7** for resident engineering services.

Halcrow

HALCROW (USA), INC.

Schedule of Office and Field General and Administrative Allocations
Year Ended December 31, 2009

	Allocable Indirect Costs	Office Allocation %	Field Allocation %	Amount Allocated to Office	Amount Allocated to Field	Allocation Method No.
Paid time off	$ 11,458,753	98.11%	1.89%	$ 11,242,650	$ 216,103	(1)
Employee benefits	258,060	98.11%	1.89%	253,193	4,867	(1)
Indirect labor	14,137,059	99.35%	0.65%	14,044,517	92,542	(2)
Subconsultants	57,073	99.35%	0.65%	56,699	374	(2)
Office Rent & Office Accomodation Costs	3,272,692	99.79%	0.21%	3,265,812	6,880	(2)
Service Charges	1,866	98.11%	1.89%	1,831	35	(1)
Repairs and maintenance	217,286	98.11%	1.89%	213,188	4,098	(1)
Security	2,138	98.11%	1.89%	2,098	40	(1)
Overseas housing allowance	-	98.11%	1.89%	-	-	(1)
Utilities & Other Occupancy Costs	132,618	98.11%	1.89%	130,117	2,501	(1)
Vehicle Expenses	217,269	98.11%	1.89%	213,171	4,098	(1)
Depreciation Expenses	767,803	98.11%	1.89%	753,323	14,480	(1)
Travel- Hotel, Air & Rail Fares, Meals	1,177,896	98.11%	1.89%	1,155,682	22,214	(1)
Prints, Photos & Photocopying	137,548	98.11%	1.89%	134,954	2,594	(1)
Telecommunications	735,829	98.11%	1.89%	721,952	13,877	(1)
Computer & Related Expenses	197,742	99.79%	0.21%	197,326	416	(2)
Software & Related Maintenance	115,111	99.79%	0.21%	114,869	242	(2)
Rental - equipment	325,192	99.79%	0.21%	324,508	684	(2)
Supplies & Equipment	58,890	98.11%	1.89%	57,779	1,111	(1)
Rental - Furniture	16,539	98.11%	1.89%	16,227	312	(1)
Insurance	121,158	98.11%	1.89%	118,873	2,285	(1)
Insurance - Property	465,200	99.79%	0.21%	464,222	978	(2)
Consumable materials	18,499	99.79%	0.21%	18,460	39	(2)
Medical and eye test fees	3,054	99.79%	0.21%	3,048	6	(2)
First aid items	321	98.11%	1.89%	315	6	(1)
Protective clothing and equipment	17,416	98.11%	1.89%	17,088	328	(1)
Stationery	207,218	99.79%	0.21%	206,782	436	(2)
Postage, courier, etc	89,006	99.79%	0.21%	88,819	187	(2)
Microfilming and storage	46,474	99.79%	0.21%	46,376	98	(2)
Computer Service Bureau Costs	43,922	98.11%	1.89%	43,094	828	(1)
Dues, Subscriptions & Technical Publications	200,335	98.11%	1.89%	196,557	3,778	(1)
Advertising (recruitment)	-	99.79%	0.21%	-	-	(2)
Recruitment fees	269,072	98.11%	1.89%	263,998	5,074	(1)
Relocation	26,358	98.11%	1.89%	25,861	497	(1)
Bank charges	17,806	98.11%	1.89%	17,470	336	(1)
Bank guarantees	2,960	98.11%	1.89%	2,904	56	(1)
Tea and coffee, etc.	-	98.11%	1.89%	-	-	(1)
Other staff related costs	10,025	98.11%	1.89%	9,836	189	(1)
Immigration expenses	85,344	98.11%	1.89%	83,734	1,610	(1)
Audit, other	159,650	98.11%	1.89%	156,639	3,011	(1)
Taxation advice	114,095	98.11%	1.89%	111,943	2,152	(1)
Legal fees	74,338	98.11%	1.89%	72,936	1,402	(1)
Other professional fees	56,656	98.11%	1.89%	55,588	1,068	(1)
License fees	41,309	98.11%	1.89%	40,530	779	(1)
Training Courses & Materials	62,721	98.11%	1.89%	61,538	1,183	(1)
Conferences	56,169	98.11%	1.89%	55,110	1,059	(1)
Realized and unrealized exchange gains	- 81,464	98.11%	1.89%	(79,928)	- 1,536	(1)
Home office allocation	1,980,398	98.11%	1.89%	1,943,049	37,349	(1)
Taxation - corporate	61,008	98.11%	1.89%	59,857	1,151	(1)
(Profit) or Loss on Disposal of Equipment	9,528	98.11%	1.89%	9,348	180	(1)
Total Allocable & Allowable Expenses	$ 37,445,944			$ 36,984,599	$ 451,817	

Office Rate = Office allocation / Direct labor (Office) = $ 36,984,599 / $ 18,287,076 = 202.2445%

Field Rate = Field allocation / Direct labor (Field) = $ 451,817 / $ 351,510 = 128.5361%

See accompanying notes to overhead rate schedule.

Performance Of Expert Professional Construction Management
And Related Technical Services As Requested
On A "Call-In" Basis During 2011 – 2014
RFP Number 22094

THE PORT AUTHORITY OF NY & NJ

Quality Control
Edward McMahon, PE
James Gibbons, MSCE

Project Manager
Ivan Ramirez, PE

Principals In Charge
James Laurita, PE
Lawrence Fink, PE

TASK A/TASK B
Constructablity/ Bidability and General Engineering/ Construction Staging

Constructability/
Bidability & Staging Reviews
John Purdy, PE
Charles Norrish, III, PE
Edward McMahon, PE
James Gibbons, MSCE
Brian Dorr, PE
James Roche, PE
Ronald Willis

TASK C
Schedule Development and Monitoring

Scheduling
James Douglas
Prad Maraj, PE
Erich Schiele, PE
Dave Keffer, PE
James Gibbons, MSCE
James Hovey

TASK D
Quality Assurance Inspection

Inspectors with ACI
Marty Lund, N-IV
Tim Brower, N-IV
George White, N-IV
Clay Corjulo, N-III
Tahir Mehmood, N-III
Mike Crocetti, N-IV
George Griffith, N-IV
Clare Larsen, EIT
Brian Vosberg, EIT
Amir Ghorbani, N-IV
***Edward McLean* (VN)**
Brian Walker, N-III
Ray Gorrin, N-IV
James Ossa, N-IV
Gary Splain, N-IV
Thomas Wargo, N-IV
Bessie Hall, N-III
Scott Smigel, N-III
Matt Remchuk, N IV
James Banack, N II
James Sullivan, N III

Inspectors with NACE
Tim Brower, NACE-III
George White, NACE-III
Shakir Ali, NACE-I

Inspectors with ACI Special
Levon Torossian (TEC)
Robert Raz (TEC)
Daril Simon (TEC)
Amin Greiss (TEC)
James Agwai (TEC)
Paul Burnett (TEC)
Mario Cajas (TEC)
Saber Ghazaly (TEC)
William Grooms (TEC)

Inspectors with ICC
SS & Bolting
Albert Agosto (TEC)
Reynaldo Alonso (TEC)
Ibrahim Gaber (TEC)
Alan Yu (TEC)

Building/MEP
Daniel Drumm (ARO)
Sheeba Minhas (ARO)
Jason Shevrin (ARO)

Port/Diver Engineers
Stephan LoPorcaro, PE (HAL)
Brett Sposito, PE (HAL)

TASK E
Contract Administration

Task Project Managers
Charles Norrish, III, PE
Lawrence Fink, PE
Edward McMahon, PE
Raymond Fischlein, PE (TEC)
James Gibbons, MSCE
Judson Goldsborough, PE (ARO)

Construction Managers/
Resident Engineers
Kenneth Cho, PE
Dwain Thomas, PE
Thomas Oliver, PE
Obioma Oti, PE
Philip Grande, PE
***Raymond Cholewka, PE* (TEC)**
***Edward O'Leary, PE* (TEC)**
***Mina Marcos, PE* (TEC)**
Peter Cloudas, PE (VN)
Paul Van Olden, PE
Brian Mahon, PE
Harry Morton, N-IV
Carlo Cesarini, N-IV
Brian MacAllister, PE
Mark Hopkins, PE
Mike North, PE

Office Engineers/
Document Control
Erich Schiele, PE
Joseph Manuelli
Rafael Quinones
James Holbink, PE
Ruth Doucette, N III
Francisco Ribas, N IV

TASK F
Cost Engineering/ Estimating Services

Cost Estimating
John Tomochik
Jack Hayes, PE (HAL)
Dave Keffer, PE

Value Engineering
Charles Norrish, III, PE
Lawrence Fink, PE
Edward McMahon, PE
Brian Dorr, PE

TASK G
Resources

Material Testing

Tectonic Laboratories
Levon Torossian (TEC)
Michael Miller (TEC)

Claims Analysis & Support
Charles Norrish, III, PE
Lawrence Fink, PE
Dave Keffer, PE

SUBCONSULTANT

TEC	-	Tectonic Engineering and Surveying Consultants P.C.
ARO	-	Arora and Associates, P.C.
VN	-	VN Engineers, Inc.
HAL	-	Halcrow

BOLD - Resumes Included

YEARS EXPERIENCE WITH FIRM: 10

YEARS EXPERIENCE WITH OTHER FIRMS: 16

EDUCATION:

B.S.C.E., Civil Engineering, Lafayette College, 1983
M.B.A., Finance, Rutgers University, 1991
Basic Coating Inspector Training, National Association of Corrosion Engineers, 1997

PROFESSIONAL REGISTRATION(S):

P.E.: New Jersey - No. [redacted]
New York - No [redacted]

SUMMARY OF EXPERIENCE:

Bridge Design Projects, Various Locations, NJ and PA, *Various Clients.* Designer/Project Engineer for the following bridge design projects:

- NJ Route 55, Tyler's Run and Reading Branch Culverts, Gloucester County, NJ, *New Jersey Department of Transportation.*
- I-78 bridge over the Delaware River, NJ-PA, *Pennsylvania Department of Transportation.*
- NJ Route 18 Interchange at the Garden State Parkway, Monmouth County, NJ, *New Jersey Department of Transportation.*
- NJ Route 38, Parker's Creek Tributary Culvert, Burlington County, NJ, *New Jersey Department of Transportation.*
- East Street Interchange, Pittsburgh, PA, *Pennsylvania Department of Transportation, District 11*.
- I-664 Hampton Roads Viaduct, Norfolk, VA, *Virginia Department of Transportation.*
- Susquehanna River Bridge, Sunbury, PA, *Pennsylvania Department of Transportation, District 3-0.*
- Susquehanna River Bridge, Lock Haven, PA, *Pennsylvania Department of Transportation, District 2-0.*
- L.R. 420 Primos Avenue/Amtrak, Delaware County, PA, *National Railroad Passenger Corporation (Amtrak).*
- Conrail Jones Branch Loading Loop, Gilboa, WV, *Consolidated Rail Corporation.*

Monmouth County Bridge Management System (BMS) and the Biennial Inspection of 300 Bridges, Monmouth County, NJ, *Monmouth County Engineering Department.* Project Director/Principal for in-depth National Bridge Inspection Standards inspections, evaluation reports, rating computations, and BMS development for 300 less-than-20-foot-long bridges.

Cedar Bridge Avenue/NJ Route 70, Ocean County, NJ, *Ocean County Engineering Department.* Project Principal for the reconstruction of 2.2 miles of Cedar Bridge Avenue in Brick Township. Work involved realignment and geometric designs; construction and grading plan preparation; traffic signal design; survey and topographic mapping; base map preparation, including a three-dimensional digital terrain model; right-of-way engineering; environmental permitting, including a cultural resource study,

wetland permits, a stream encroachment permit, a Coastal Area Facility Review Act permit, and a soil conservation permit; and community involvement.

Westbrook Road Bridge Rehabilitation, Northeastern NJ, *New Jersey Department of Transportation (NJDOT).* Project Principal with overall responsibility for superstructure replacement and substructure rehabilitation for a NJDOT District 2 Local Aid Project.

Orphan Bridge Program, Hunterdon and Passaic Counties, NJ, *New Jersey Department of Transportation.* Project Principal responsible for superstructure/substructure replacement/rehabilitation alternative analyses and final designs for the rehabilitation of three bridges in Hunterdon and Passaic Counties. Final design work included the design of a temporary structure for the Madison Avenue Bridge in Patterson, New Jersey, as well as the final design of a full replacement structure.

Scour Evaluations of 109 Off-System Bridges, Somerset County, NJ, *New Jersey Department of Transportation.* Project Principal for Stage 1 scour evaluations of 109 bridges. Work included data collection, the review and preparation of forms, fieldwork, evaluations and prioritization, and the preparation of bridge scour evaluation reports.

Inspection and Evaluation of 67 Bridges (Morris County)/29 Bridges (Morris County)/39 Bridges (Hunterdon County)/37 Bridges (Somerset County)/and 50 Less-Than-20-Foot-Long Bridges on U.S. Route 206, U.S. Route 202, and NJ Route 57 (Morris, Somerset, and Warren Counties), Various Locations, NJ, *New Jersey Department of Transportation.* Project Director/Principal responsible for in-depth inspections, evaluation reports, and rating computations for these on- and off-system bridges. Monitored inspection procedures and reviewed reports.

Westchester Avenue Bridge Rehabilitation, Relocation of New York City Transit Columns, Bronx, NY, *New York State Department of Transportation.* Project Principal responsible for the oversight of final design services for a bridge rehabilitation. The project involved the analysis and design to relocate several columns supporting the elevated New York City Transit railway over the Sheridan Expressway, including extensive computer modeling considering service loading, column relocation and load transfer, seismic analysis, foundation analysis, construction staging, and cost estimation.

Henry Hudson Toll Plaza, Upper-Level Plaza Replacement, New York, NY, *MTA Bridges and Tunnels.* Project Principal for the replacement of the upper-level deck and toll plaza and the upper-level curb stringer and safety barrier at the Henry Hudson Bridge. The joint-venture project includes designs for the replacement of the upper-level concrete deck; replacement of the upper-level curb stringer and safety barrier, including the rehabilitation of various superstructure elements; replacement of the upper-level toll booths and canopy; power distribution, communications, security, electronic toll collection, and heating, ventilation, and air conditioning (HVAC) systems for the new plaza; civil/drainage design and roadway lighting for the new upper-level roadway; and extensive maintenance and protection of traffic.

Nassau Expressway Rehabilitation, Queens, NY, *New York State Department of Transportation.* Project Principal responsible for the oversight of final design services for a $59 million bridge rehabilitation and pavement reconstruction. The project included the reconstruction and rehabilitation of several miles of the Nassau Expressway, Rockaway Boulevard, the Van Wyck Expressway collector-distributor roadways, the JFK Expressway, and associated ramps. Structural work includes structural steel repairs, superstructure element replacement, and substructure rehabilitation of three bridges, as well as the concrete deck replacement for six additional bridges along the Nassau Expressway corridor. Services include seismic analysis for existing bridges.

LAWRENCE K. FINK, P.E.
Principal-in-Charge

EDUCATION

Bachelor of Science, Civil Engineering; Northeastern University (1971)

CERTIFICATIONS

Professional Engineer: New York (1978/ [redacted] exp. 8/31/06), New Jersey (1996 [redacted] exp. 4/30/06), Connecticut (1988 [redacted] xp. 1/31/07), Massachusetts (1987/Civil Engineerin [redacted] exp. 6/30/06)

EXPERIENCE

Mr. Fink has over 33 years of experience on construction inspection and construction management projects throughout the New York and New Jersey metropolitan areas. He has served in a variety of positions including: Resident Engineer, Project Manager, Principal Inspector, and Design Engineer for clients such as the New York State Thruway Authority, New York State Department of Transportation, New Jersey Turnpike Authority, New Jersey Highway Authority, New Jersey Department of Transportation, New Jersey Transit, the Massachusetts Highway Department, Connecticut Department of Transportation, and a myriad of city and county governments.

NYCDDC Richmond Road REI Services - Project Manager - Managing resident engineering and construction oversight for the installation of new 72" diameter water main and various sizes of combined sewer mains in Richmond Road in Staten Island, NY. The scope of work also includes new roadway alignment, curb, and full pavement restoration (concrete base and asphalt wearing surface). . (11/04 – 6/08)

NYCDDC Mulry Square Rehabilitation Construction Management - Project Manager Responsible for the construction management of the rehabilitation of Mulry Square located in the Historic District of Manhattan. . The project included resident engineering and inspection, recordkeeping per MURK, CPM scheduling review, utility coordination, and community outreach. The project involved the installation of new water main sewer manholes, catch basins, and connectors; new steel-faced and granite curbing; sidewalks; decorative areas containing bluestone and granite pavers and bollards; new street lighting and traffic signalization; utility relocation; demolition of existing roadways and installation of new concrete base and asphalt wearing course; tree plantings; traffic calming systems; and installation of new street signs and pedestrian ramps. Community outreach was vital to this project because St. Vincent's' Hospital is a major resident of the site. . (2001 - 2003)

NYCDOT 14th Street Reconstruction - Project Manager - Responsible for the management of the construction inspection of the $22 million reconstruction of this major crosstown street in lower Manhattan, extending 9,200 linear feet. The project consisted of total sidewalk/roadway (building line to building line) replacement in this densely developed commercial and residential area, plus reconstruction and rehabilitation of utility services, signals, signs, and street lighting. (1992 - 1997)

NYCDOT "When and Where Contract" - Project Manager - Responsible for the various structural flag repairs to bridges throughout the five boroughs of New York. Repairs included but were not limited to structural steel removal and/or replacement, structural concrete removal and/or replacement, deck repairs, new concrete bridge decks, addition of structural steel members to strengthen existing areas with significant section loss; and joint removal and repair and/or replacement. (1994 - 1995)

NYCDOT Bridge Component Rehabilitation - Project Manager - Responsible for this open-end inspection and design project. Structures rehabilitated included the Williamsburg Bridge; three bridges over Metro-North Railroad in Bronx County; one bridge over Conrail in Bronx County; two bridges over Conrail in Kings County; one bridge over the Cross Island Parkway in Queens County; one bridge over the Brooklyn Queens Expressway in Queens County; and one bridge over the Whitestone Expressway in Queens County. The rehabilitation design for the flagged

conditions included structural steel repairs and/or replacement; repair and/or replacement of reinforced-concrete deck slab; replacement of bearings (for seismic capability) including modification to the structural steel to make the bridges 2-span continuous structures as necessary; temporary shoring; replacement and/or repair of reinforced-concrete sidewalks and curbing; repair of substructure elements and joint replacement and/or repair. All designs included the development of maintenance and protection of traffic schemes and construction staging plans. (1992 - 1995)

NYCDOT Riverside Drive Reconstruction - Project Manager - Responsible for the project management of the construction inspection of the reconstruction of Riverside Drive from 135th Street to 153rd Street, Work included the installation of new sewers, catch basins, water mains, asphalt on a new concrete base roadway, concrete sidewalks, ADA compliant pedestrian ramps at all intersections, steel faced/concrete and granite curbs, pavement markings, regulatory traffic signs and posts, street name signs and posts, street lights, and trees. Two-way traffic was maintained at all times during the reconstruction of the roadway.. (1991 -1993)

NYCDOT "When and Where Contract" Bridge Structural Repairs - Project Manager - Responsible for construction inspection and resident engineering for this open-end inspection project involving structural and miscellaneous repairs to bridges throughout New York City. These services were performed on an on-call basis, with construction periods varying depending on the extent of repairs at each site. The key to the success of this project was effective management of field personnel and minimizing staffing levels while meeting contractual requirements for site-specific resident engineering services. (1991 - 1993)

NJDOT 2003 Region Central Term Agreement - Project Manager - Responsible for managing construction inspection & office engineering numerous task orders invlocing both bridge and highway reconstruction and rehabilitation projects including precast concrete rigid frames, cast-in-place concrete, HMA Superpave placement, intersection improvements, bridge deck repairs, spall repairs, etc. (6/04 - 10/04)

NJDOT Central Region Term Agreement for Construction Inspection Services - Project Manager - Responsible for projects involving asphalt and Superpave paving; bridge rehabilitation and replacement; roadway reconstruction scheduling; guide rail upgrades; and line striping. The project included night work and maintenance and protection of traffic with over 10 task orders. (3/02 - 10/04)

NJDOT Northern Region Term Agreement for Construction Inspection Services - Project Manager - Responsible for projects involving asphalt and Superpave paving, concrete bridge rehabilitation and replacement, roadway reconstruction, guide rail upgrades, line striping, etc, including night work and maintenance and protection of traffic. (2001 - 2003)

NJ Transit Paterson Plank Road Grade Separation - Project Manager - Responsible for inspection of construction of two steel girder bridges over Route 1/9 and Conrail/NYW&S in Secaucus, NJ. Work also included associated precast T-walls, 30-inch gas main relocation, as well as relocation and installation of new utilities. The construction cost was $33 million. (2001 - 2002)

NJTA I-95 Signing Improvements - Resident Engineer and Project Manager - Responsible for resident engineering and construction inspection for the removal of existing overhead span signs and cantilever sign support structures from milepost 118.0 to 1122 As RE was responsible for inspecting the erection of 34 new overhead, 14 cantilever, and one butterfly sign support structures; erecting new changeable message sign; and emergency speed warning and speed limit signs. (1999 - 2001)

NJTA On-Call Specialized Services - Project Manager - Responsible for various design and construction inspection assignments throughout the length of the New Jersey Turnpike involving drainage, asphalt, and concrete work. (1999 - 2001)

IVAN RAMIREZ, P.E., B.I.E.
Project Manager

EDUCATION

Bachelor of Engineering in Civil Engineering- New York University
Master of Science in Civil Engineering- New York University

REGISTRATION

Professional Engineer in the States of New Jersey and New York, Certified Building Inspection Engineer.

PROFESSIONAL MEMBERSHIPS

NY Chapter- National Society of Professional Engineers (NSPE)- Past President and current Secretary for over 30 years; Member, American Society of Civil Engineers(ASCE); Member, Structural Engineers Association of New York (SEAoNY)

EXPERIENCE

Project Manager

- Quality Assurance Engineer for some small construction projects
- Responded to RFP's and RFQ's.
- Project Manager on NJDOT and NJT bridge inspection projects

Project Management

- NYSDOT Overhead Sign Structures- Region 11-Managed project, including scheduling, status reporting and project tracking. Supervised field teams, sub-consultants and subcontractors in the inspection of over 780 sign structures. Obtained permits and coordinated with Police, Fire and NYSDOT officials.
- PANYNJ- Condition Survey Inspection of JFK Buildings 81, 83-87, 89 & 91-
  Managed, coordinated and wrote report on the structural integrity inspection of the subject buildings.
- PANYNJ- Biennial Inspection of the JFK Roadway Bridges- Managed the biennial bridge inspection of the 29 roadway and taxiway bridges at J. F. Kennedy International Airport. Due to security concerns project required close coordination with airport, Airtrain and security staff.
- PANYNJ- High Mast Lighting Structures at Port Newark/ Port Elizabeth- Managed, coordinated and wrote report on the inspection of the high mast lighting structures at the port complex. Project required constant coordination with tenants.
- Co-authored quality assurance standards for the firm
- Interviewed prospective staff members and recommended hiring
- Responded to RFP's and RFQ's.

Principal Engineer/ Program Manager of the Structural Integrity Inspection Program at the four regional airports operated by the Port Authority

- Created and managed the structural integrity inspection program at Kennedy International Airport, LaGuardia Airport, Newark Liberty Airport and Teterboro Airport. This work included the cyclical inspection of hundreds of buildings and over 100 bridges.
- Administered and directed in house staff and consultants in over 250 projects including the inspection of airline passenger terminal buildings, cargo buildings, hangar buildings, box sewers, maintenance buildings, facility roadway bridges, taxiway bridges, jetways and piers.
- Reviewed and supervised the preparation of all inspection reports. Reviewed consultant proposals and approved consultant staff assigned to projects
- Worked with Facility and Airline personnel to successfully resolve numerous structural emergencies at the airports over the 17-year period. On call 24/7 to respond to airport emergencies.

- For two years simultaneously managed the PATH inspection program including inspections of tunnels, bridges and track structures which required familiarity with AREMA Standards. Reorganized existing program and worked with PATH staff to resolve structural emergencies.
- Drafted scopes of work and negotiated the costs of inspections of buildings, bridges and rail facilities.
- Supervised the design of emergency repairs and their implementation.
- Co- authored administrative and field inspection procedures for the unit when it was formed in 1985. Co-authored the Authority's Building Inspection Manual and Reviewed the Tunnel Inspection Manual.
- Developed the concept of retainer contracts of General Contractors to perform emergency repairs on an on call basis.
- Recommended the implementation of digital technology in the inspection of structures.
- Participated in the search and rescue operations that resulted from the terrorist act of 9/11.
- Participated in the damage assessment and reconstruction of the World Trade Center following the terrorist attack in 1993.
- Interviewed and approved hiring of interns for the division.
- One of only two individuals in the Engineering Department trained in emergency management.

Staff Services Engineer

As part of the Design Division, participated in the design of airport facilities, lead designer for the Holland Tunnel Sign Structures Project and the Port Authority Bus Terminal Extension (PABT) and numerous projects at the Authority's tunnel and bridge facilities in conformance with AASHTO and local applicable standards.

- Design checker for the PABT Extension Project.
- Chief structural reviewer for the Authority on the proposed Westway Project.
- Chief reviewer of shop drawings for Terminals A, B and C at Newark Airport.
- Team Leader for the structural integrity inspections of the George Washington Bridge, the Goethals Bridge, Outerbridge Crossing, the Port Authority Bus Terminal, the Holland and Lincoln Tunnels.

Associate Engineer

- Construction Engineer of record for the foundations of Terminal C at Newark International Airport. Supervised a small staff in the construction of pile foundations, pile caps and pilasters.

Assistant Engineer

- Performed preliminary design of the Port Authority Bus Terminal Extension building and office tower.

Awards Received

- 2002 New York Consulting Engineers Council Diamond Award- Project Manager for the Trunnion Inspection of the Hackensack River Bridge. Project also received national recognition by ACEC.
- 2001 Service Award for the search and rescue operations at the World Trade Center after September 11th Terrorist act.
- 1997 Port Authority Engineering Excellence Award for outstanding accomplishments.
- 1993 World Trade Center Award for Exceptional Service in the aftermath of the terrorist act.

Additional Skill Sets

- Well versed in the use of the PC and Microsoft software such as Word, Excel, Access, Publisher, Project and Power Point and their utilization in engineering applications and presentations.
- Authored articles for ASCE's Civil Engineering Magazine.
- Worked with the committee that drafted the first "Guideline for Structural Condition Assessment of Existing Buildings" for ASCE.
- Fluent in Spanish.

Charles R. Norrish, III, P.E. Resume

YEARS EXPERIENCE WITH FIRM: 37

YEARS EXPERIENCE WITH OTHER FIRMS: 0

EDUCATION:

B.S., Civil Engineering, University of Pittsburgh, 1973
M.B.A., Business, University of Connecticut, 1992

PROFESSIONAL REGISTRATION(S):

P.E.: Connecticut - No. [redacted] (1985)
New York - N [redacted] (1978)
Massachusetts - No [redacted] 991)
Rhode Island - [redacted]
New Jersey - N [redacted] (1992)

CURRENT RESPONSIBILITIES:

Vice President /Regional Construction Manager providing services in the Northeast. Directs operations throughout the area, has overall project management responsibilities, serves as a liaison with departments of transportation and other agencies .

SUMMARY OF EXPERIENCE:

Construction Inspection, Region Central Term Agreement, NJ, *New Jersey Department of Transportation (NJDOT).* Project Manager responsible for assigning and managing personnel required by NJDOT on various construction projects in Region Central under a three-year term agreement.

Construction Inspection, Route 173, Lakeview Avenue, Clinton, NJ, *New Jersey Department of Transportation (NJDOT).* Project Manager responsible for overseeing intersection improvements and structure work totaling $5 million for the re-alignment of Route 173 Eastbound and Westbound, CR-513, and I-78 Westbound Exit #15 Ramp A.

U.S. Route 7 Reconstruction, Danbury and Ridgefield, CT, *Connecticut Department of Transportation.* Project Manager for a $17 million widening of U.S. Route 7 to address capacity and geometric deficiencies that cause unsafe driving conditions and delays. .

Construction Inspection, I-95, Project 92-533 and 569, New Haven, CT, *Connecticut Department of Transportation.* Project Manager responsible for providing resident engineering and technical inspection on a $70 million reconstruction of I-95 from Stiles Street to the East Haven town line

Park Avenue Viaduct, Brooklyn-Queens Expressway Constructability Review, Kings County, NY, *New York State Department of Transportation.* Project Manager responsible for an engineering team that performed a constructability review of design documents for the reconstruction of the Park Avenue Viaduct from Flushing Avenue to Sands Street

Constructability Review, Brooklyn-Queens Expressway (BQE), New York, NY, *New York State Department of Transportation.* Project Manager for an engineering team that performed constructability reviews of design documents for the reconstruction of the BQE from 61st Street to Broadway.

Replacement of the Belt Parkway Bridge over the Ocean Parkway, Brooklyn, NY, *New York City Department of Transportation (NYCDOT).* Project Manager for the design of the replacement for the existing Belt Parkway bridge over the Ocean Parkway. .

Bus Maintenance and Transportation Facility, Norwalk, CT, *Federal Transit Administration/Norwalk Transit District.* Project Manager for the construction management of a state-of-the-art transportation facility that includes two new structures, a 20,000-square-foot administration and maintenance complex and a 35,000-square-foot service and storage building.

Brooklyn-Queens Expressway (BQE), Queens, NY, *New York State Department of Transportation.* Project Manager on this $200 million project involving the reconstruction and restoration of a very deteriorated portion of the BQE, which is one of the most heavily traveled roads in the entire city of New York and provides access to other major highways and bridges.

Church Street Extension, New Haven, CT, *Connecticut Department of Transportation.* Project Manager for this $35 million new construction project that involved building a viaduct to carry Church Street over the Metro-North/Amtrak railroad yard in New Haven.

I-287 Viaducts, Westchester County, NY, *New York State Department of Transportation.* Project Manager responsible for construction management services on the award-winning $68 million replacement of the Cross Westchester Expressway bridges over the Saw Mill River Parkway and the Bronx River Parkway

Reconstruction of the P. T. Barnum Bridge, Bridgeport, CT, *Connecticut Department of Transportation.* Project Manager for the $53 million reconstruction and partial relocation of the I-95 bridge over Bridgeport Harbor and Metro-North Railroad tracks.

Franklin Avenue Shuttle, Brooklyn, NY, *New York City Department of Transportation (NYCDOT).* Quality Assurance Manager for the rehabilitation design of six bridges over New York City Transit's Franklin Avenue Shuttle.

Donald Ross Road Bridge (S.R. 706) Over the Intracoastal Waterway, Palm Beach County, FL, *Palm Beach County Board of Commissioners.* Project Manager for the construction management of the $27 million project which included 1.5 miles of four-lane divided roadway; 4,000 feet of approach bridges; and two 110-foot-long, single-leaf bascule bridges.

Five-Year Highway Improvement Program, Various Locations, MA, *Massachusetts Turnpike Authority.* Construction Manager for the Massachusetts Turnpike's $500 million Five-Year Capital Improvement Program, which involved approximately 50 construction projects each year along the highway's 135-mile corridor. These projects ranged from building rehabilitation/construction to roadway and bridge rehabilitation.

Marine Parkway, Cross Bay Boulevard, and Verrazano-Narrows Bridges, New York, NY, *MTA Bridges and Tunnels.* Project Manager responsible for technical inspections of construction for complex structures that included a multispan, multigirder, prestressed concrete viaduct; a multispan truss viaduct with a 500-foot lift bridge main span; and a 4,200-foot main span suspension bridge with extensive multispan, multigirder approach roadways.

On-Call Services, Districts 3 and 4, Western CT, *Connecticut Department of Transportation.* Project Manager providing technical services to Districts 3 and 4 on an on-call basis. Services provided included the technical inspection of construction for Projects and assistance to District auditors for project closeouts.

ED McMAHON, P.E., NIV, SAT, TCP
Construction Manager

EDUCATION

1994 / A.A.S., Gloucester County College
2009 / BMdS, West Virginia University

REGISTRATION

PE: Pennsylvania – N [redacted] 2001), Maryland – No[redacted] (2004), Delaware – No. [redacted] 2005)
2010/ NICET Level IV, Transportation Engineering Technician, Highway Construction (Certification No. [redacted] *Expires 8/2011)*
2004 / NJSAT / Asphalt Pavement Construction (SAT) *(Expires 6/30/2015)*
2005 / Rutgers University Traffic Control Coordinator (TCP) *(Refresher 4/2010)*

EXPERIENCE

Project Manager

Intercounty Connector Project Contract A, Rockville, MD - Construction Inspection Project Manager / Construction Quality Control Manager responsible for the overall management, coordination, supervision, inspection and documentation of all construction activities on a $480 million, six-lane, seven-mile-long new toll road facility consisting of two (2) interchanges, fourteen (14) new bridges, four (4) existing bridge widening and eight (8) new culverts.

Duties included the direct supervision of 3 resident engineers, 1 materials manager (material clearance), 1 administrator, 2 office engineers, and 30 inspectors at peak of construction. Project consisted of the rehabilitation / widening of four (4) existing single span steel bridges on spread footings of which one was over the MARC Train line; removal/replacement of one (1) single span bridge with pre-stressed concrete beams (bulb Tees) on pile supported footings, six (6) new single span pre-stressed concrete beam bridges on spread footings, pile supported footing or drilled caisson, five (5) new two-span continuous steel beam bridges pile supported footing, one (1) deck over structure (cut/cover) and one (1) arch bridge. In addition, project consisted of seven mile of new HMA paving, guide rail, underdrain, drainage, landscaping, lighting, traffic signals, ITS and cashless electronic toll collection system. Day to day activities involved determining staffing levels to meet the needs of the project; identifying project activities that require implementation of procedures to document construction activities; overseeing all QC construction inspection, including the documentation of all construction activities to ensure quality records are developed and maintained by project staff and the work was constructed in accordance with the plans and specifications.

Delaware River Joint Toll Bridge Commission (DRJTBC) – Capital Program Management Consultant - Project Manager assigned the Delaware River Joint Toll Bridge Commission's $950 million Capital Improvements Program. Responsible for administering multiple projects with different consulting firms, consisting of various budgets, scope of work and schedules as a part of the Commission's $950 million Capital Improvements Program. Specifically was involved with the planning and management of approximately $50 million of rehabilitation projects consisting of the Riverton-Belvidere Toll-Supported Bridge Rehabilitation ($8 M), I-78 Pavement Rehabilitation ($42 M), and Milford Water Main ($400k) projects from preparation of project scope through the completion of construction. During the construction phase managed the Commission's construction inspection firm overseeing the resident engineer and inspection staff to verify appropriate construction inspection was being performed, while monitoring progress and addressing project issues.

Atlantic County Engineering Dept – Third and Fairview Avenues – Intersection Improvements, Hammonton, NJ - Construction Inspection Project Manager for this $300 Thousand, intersection and traffic signal improvement project. The project included drainage, concrete curb and gutter, concrete sidewalk, subbase, dense graded aggregate, milling, hot-mix asphalt paving, traffic striping/markings, utility relocations, MPT, and traffic signals consisting of control cabinet, junction boxes, conduits, wiring, loop detectors, signals/mast arms/poles/foundations. Duties included being the Owner's on-site representative to the contractor, direct supervision of field inspectors and perform quality assurance oversight on major items of work to ensure the project was constructed in accordance with the plans and specifications for the owner.

Ocean County Engineering Department - Replacement of Allen's Bridge (CR 528) over the Toms River, Jackson Township, Ocean County, NJ - Construction Inspection Project Manager for this multi-disciplinary, $1.5 million bridge replacement project. The project consisted of a detour with a temporary traffic signal system to control traffic around the project area during the demolition of the existing bridge and the construction of the new bridge. Key elements of the new bridge included a cast-in-place concrete deck over prestressed concrete box beams, cast-in-place concrete footings and abutments, and wingwalls supported by concrete-filled pipe piles. Other project elements involved the maintenance and protection of traffic, utility relocations, temporary cofferdam steel sheeting, hot-mix-asphalt paving, guide rail placement, drainage, gabion walls, pavement striping and marking, permit compliance, and landscaping. Duties included being the consultant's direct representative to the Owner, providing appropriate Construction Inspection/Engineering personnel, overseeing the quality of work provided by the firm's construction inspection staff, and directly supervised this project's Resident Engineer.

Ocean County Engineering Department - Whites Bridge (County Rte. 547), Jackson Township, NJ - Construction Inspection Project Manager for this multi-disciplinary, $1.2 million bridge replacement project. The project consists of a single-lane temporary bridge with a mobile temporary traffic signal system to control directional traffic through the project area during the demolition of the existing bridge and construction of the new bridge. Key elements consist of prestressed concrete box beams, timber pile supported abutments, walers, and 4" timber sheeting anchored to a back piling system with galvanized anchor rods. Other elements included maintenance and protection of traffic, utility relocations; deck waterproofing membrane; hot mix asphalt paving; guide rail; drainage; embankment; pavement striping/marking; landscaping. Duties included being the consultant's direct representative to the Owner, providing appropriate Construction Inspection/Engineering personnel, overseeing the quality of work provided by the firm's construction inspection staff, and directly supervised this project's Resident Engineer.

PennDOT - City Avenue Pedestrian Bridge Bala Cynwyd and Philadelphia, Pa - Resident Engineer for the $1.2 million improvements to the City Avenue Pedestrian Bridge between Bala Cynwyd and Philadelphia. The project consisted of the installation of a pre-purchased gateway sign and other improvements to this pedestrian bridge crossing over City Avenue during 4 stages of construction. In additional to mounting of the bridge sign, improvements involved preparing the bridge for painting (Class 1A containment, highest level of containment for abrasive blast-cleaning operations; environmental protection; waste disposal procedures for lead-based paint), bridge painting using a 3-coat system (zinc-rich epoxy primer, epoxy polyamide intermediate coat, and polyurethane finish coat), coating concrete surfaces, replacing fence mesh, and painting the fence and sign supports to match the mesh in accordance with PennDOT specifications. Duties included being the Owner's on-site representative to the contractor and perform quality assurance oversight on major items of work to ensure the project was constructed in accordance with the plans and specifications for the owner.

YEARS EXPERIENCE WITH FIRM: 30

YEARS EXPERIENCE WITH OTHER FIRMS: 6

EDUCATION:

B.S., Civil Engineering, Polytechnic Institute of New York, 1974
M.S., Civil Engineering, New Jersey Institute of Technology, 1984

PROFESSIONAL REGISTRATION(S):

P.E.: New York - N [redacted]980)
New Jersey - N [redacted]984)
Connecticut - No [redacted]1995)
Pennsylvania - N [redacted]000)

CURRENT RESPONSIBILITIES:

Project Manager/Resident Engineer for major transportation projects involving inspections and structural designs for bridges, highways, tunnels, shops and maintenance facilities, and railways. Also responsible for field condition surveys.

SUMMARY OF EXPERIENCE:

Hudson Line Stations Rehabilitation, Phases 2A and 2B, Westchester, NY, *MTA Metro-North Railroad*. Senior Resident Engineer responsible for performing construction supervision and inspection services for the rehabilitation of six stations on the Hudson Line. The $65 million, 54-month construction project includes the replacement of 6,500 LF of high-level platforms, 2,300 LF of canopies, 6 pile-supported elevators, a new pedestrian overpass, rehabilitation of 2 existing overpasses, new heated shelters, electrical upgrades, improved lighting, a variable-message sign system, a public address system, and station amenities at the stations, which include Hastings-on-Hudson, Dobbs Ferry, Irvington, Philipse Manor, Scarborough, and Ossining Stations.

Mid-Hudson Line Station Overpasses, Westchester, NY, *MTA Metro-North Railroad.* Senior Resident Engineer responsible for overseeing the construction for the $36 million staged reconstruction of platform extensions at four rail stations, replacement of three overpasses with Americans with Disabilities Act (ADA) improvements including new elevators, and the reconstruction of a retaining wall.

Hudson Line Stations and the Historic Preservation of the Yonkers Station, Yonkers, NY, *MTA Metro-North Railroad.* Resident Engineer responsible for providing construction management services for a $66 million historic restoration of Yonkers Station, the staged reconstruction of platform extensions at nine stations, replacement of three overpasses with Americans with Disabilities Act (ADA) improvements including construction and rehabilitation of elevators, and the construction of river access for the Department of Environmental Conservation including landscaping.

Journal Square Transportation Buildings, Jersey City, NJ, *The Port Authority of New York and New Jersey*. Project Manager responsible for scheduling, coordination, and structural inspections of transportation buildings, including the building fascia, during two annual inspections. Tasks included researching documents, coordinating with the Port Authority personnel for accessing the office spaces for inspection, and coordinating with equipment vendors for inspection support.

Teterboro Airport, Teterboro, NJ, *The Port Authority of New York and New Jersey*. Project Manager responsible for coordination and structural inspections of 15 hangars and buildings. Responsible for coordinating the researching of documents, organizing an inspection team of four engineers, developing an inspection schedule, and controlling the budget.

Franklin Avenue Shuttle, Brooklyn, NY, *New York City Department of Transportation (NYCDOT).* Resident Engineer for the $15.7 million construction of the bridges over New York City Transit's Franklin Avenue Shuttle. The project involved the reconstruction of the steel frame/concrete jack-arch bridges and prestressed box beam/concrete slab bridges in an urban environment, maintenance and protection of traffic, construction staging, and community involvements.

Saw Mill River Parkway, Westchester County, NY, *New York State Department of Transportation.* Resident Engineer for the replacement of four bridges and associated road work efforts on the parkway. Work included the staged demolition of concrete and prestressed concrete bridges and their associated approach spans, which were replaced in stages with pile-supported integral abutment precast concrete bridges and a box culvert structure over the Saw Mill River, as well as a composite girder bridge over U.S. Route 9A.

Sprain Brook Parkway, Westchester County, NY, *New York State Department of Transportation.* Resident Engineer for the resurfacing and bridge rehabilitation efforts along 3.7 miles of the northbound lanes of the parkway. Work included widening and resurfacing the three-lane highway, relocating and improving the drainage system, providing slope protection, and installing new curbs and guide rail. Structural repairs to six overhead bridges included seismic retrofits, the replacement of bridge bearings and expansion joints, and bridge deck overlays.

Safety Investigation of the New York Metropolitan Transportation Authority, New York, NY, *Federal Transit Administration (FTA).* Team Leader of a field crew responsible for condition inspections of a sampling of stations, bridges and elevated structures, tunnels, and maintenance facility buildings on all New York City Transit (NYCT) lines as part of a safety investigation for the FTA.

Hudson River Tunnel A, New York, NY, and Jersey City, NJ, *The Port Authority of New York and New Jersey.* Team Leader for a condition survey of 125 feet of tunnel ceiling for the Port Authority Trans-Hudson (PATH) Tunnel A under the Hudson River. Mapped out deficiencies and sounded the tunnel for possible delamination in the parging. Inspected both brick and concrete segments of the tunnel.

Lincoln Tunnel Exhaust Duct Inspection, Manhattan, NY, *The Port Authority of New York and New Jersey.* Team Leader for the in-depth inspection of the 200-foot concrete offset exhaust duct in the Lincoln Tunnel. Sounded the concrete surfaces with a hammer and mapped out cracks, hollow-sounding areas, spalls, and the locations of exposed reinforcing bars. Painted deficient areas for ease of repair.

41st Street Access Tunnel Inspection, Manhattan, NY, *The Port Authority of New York and New Jersey.* Team Leader for the in-depth inspection of the 500-foot access tunnel from 41st Street to the Port Authority's Bus Terminal. Sounded the side retaining walls and the top structural slab with a hammer and mapped out cracks, hollow-sounding areas, spalls, and the locations of exposed reinforcing bars.

Bus Maintenance Facility, Howell, NJ, *New Jersey Transit.* Resident Engineer for the construction of a 265,000-square-foot brick and steel frame building for 245 buses. The building accommodates transit, intercity, and high-capacity articulated buses. The structure houses service, maintenance, and mechanical repair facilities, including specialized equipment for body repair, component change-outs, in-chassis maintenance and repair, painting, air conditioner repairs, fueling, and the washing of buses.

DWAIN THOMAS, P.E.
Construction Manager/Resident Engineer

EDUCATION

B.S.C.E., South Dakota State University

LICENSES

Licensed Professional Engineer: AZ, FL, GA, IN, NJ, PA, TN (Active)
Certified Construction Manager by CMAA via CMCI

EXPERIENCE

Mr. Thomas has 35 years of experience in construction-related experience in buildings/infrastructure, contractor experience including environmental projects and buildings, design experience for architects, engineers and transportation agencies, inspection and construction management experience, and estimating and scheduling experience. Relevant projects include:

April 2009 – Present: Project Manager / Resident Engineer - Resident Engineer (Subconsultant) for this $3.8 million construction project that involves a structural steel Signature Bridge (Delaware River Turnpike Bridge) that is 6,571 feet long, 80 feet wide, and crosses 135 feet over the 400 foot wide shipping channel of the Delaware River. The bridge also spans US Route 13, the AMTRAK Northeast Corridor, and several local streets. The project involves the retrofit of more than 20 different gusset plate types (108 locations) for strengthening of the main span arch and approach spans, as well as repairs to corrosion or tears in various steel stringer supports. The gusset retrofit work consists of the removal of high tensile strength hot rivets used in the 1950's construction era in both factory and field applications, and replacement with high-strength bolts. Includes environmental aspects of lead-based paint removal, and repainting. Also included accommodations of endangered species during construction.

May 2002 – Feb 2009: Construction Manager - Project Manager for Corps of Engineers IDIQ contracts; oversight construction manager on freeway rehabilitation (asphalt & concrete pavements), concrete bridge deck rehabilitation, school, and wastewater treatment plant construction projects. Responsibilities include environmental concerns, permit compliance, safety, demolition, structures, concrete, quality workmanship, problem solving, change order & force account estimate verification, drainage, utilities, infrastructure, asphalt, traffic control, erosion control, landscaping, pay measurements / submittals, change order / force account recommendations, estimates, diaries, inspector supervision, schedule monitoring, personnel, surveying, as-builts, permit coordination, staff supervision, etc

Construction phase services related to the $64 million upgrade and expansion of the Coatesville Wastewater Treatment Plant, Construction Manager: currently a 3.85 mgd facility that will utilize oxidation ditches to meet new discharge criteria at an increased flow of 7 mgd. Administration, inspection, quality assurance, to assist Owner in demolition & construction of wastewater treatment plant upgrade and expansion. Included RFI's, meetings, documentation, schedule analysis & tracking, applications for payment, change orders, claims analysis, shop drawings, etc.

Site Engineer (Subconsultant) for this $22 million new school construction project that involved a new school, gym, cafeteria, etc. for East Stroudsburg Area School District. Replaced the previous site engineer for the last six months of the project, including chairing monthly meetings, evaluating schedule and payment reports, inspecting the site (drainage, detention, utilities, pavement, curb/sidewalk), structure (steel frame, brick – masonry walls), and electrical/mechanical/architectural features (boilers, freezers, air conditioners, chillers, kitchen equipment, lighting & heating systems, communications & security systems, etc.).

Swamp Creek Bridge – Senior Transportation Construction Manager – On-site responsibility representing the owner as oversight construction manager on highway (including NJ Turnpike Authority),

school and wastewater treatment plant construction projects to ensure quality construction by contractors in accordance with the plans, specifications, permits and Construction Manuals. Responsibilities include environmental concerns, permit compliance, demolition, structures, concrete, drainage, infrastructure, asphalt, traffic control, erosion control, landscaping, traffic signals, pay measurements/submittals, change order/force account recommendations, estimates, diaries, inspector supervision, chairing meetings, schedule monitoring, personnel, surveying, as-builts, permit coordination, owner coordination and staff supervision. Also performed plans review for constructability, value engineering, consistency /errors, assumed means & methods, construction schedule. Included client primary contact, contract administration, project management, manpower planning and subconsultant coordination. (01/08-02/09)

Construction Manager (Subconsultant) for this $220 million toll-freeway widening construction project that involved complete demolition and replacement of 7 miles of freeway, and 9 bridges from King of Prussia to Norristown, PA. Project was divided into 4 separate projects, of which 3 ran concurrently. Three new bridges spanned the Pennsylvania Turnpike, and six were mainline structures…both steel and concrete girder bridges. These bridges spanned cross streets, streams, and railroads. The work involved environmental waste sites and related work, numerous detention basins, railroad, utility, and local government coordination, lead-based paint demolition, asphalt and concrete pavement, construction traffic control, coordination with emergency response teams, ITS (Intelligent Transportation Systems), fiber optic, cantilever signs, noisewalls, storm drains and culverts, sheet piling, painting, etc. Responsibilities included setting and enforcing standardization of approach between concurrent projects, Resident Engineer and staffing coordination, staff and project meetings, schedule evaluations, personnel, schedule and progress payments, permit conformance and coordination, surveying, correspondence, claims evaluation, independent estimates, force accounts and change orders, etc. Preliminary work involved shoulder widening, deck repairs, median barrier removal and paving, utility relocation, local street detours and signalization, etc. Personally monitored and updated website for project.

Resident Engineer/Inspector (Subconsultant) for this $17 million I-40 freeway bridge replacement project through wetlands. Construction project involved complete demolition and replacement of twin 1000' foot freeway bridges spanning a swamp. Bridges were driven hollow steel piles with concrete girders, concrete deck. The work involved environmental-related work, utilities, asphalt and concrete pavement, construction traffic control, coordination with emergency response teams, ITS (Intelligent Transportation Systems), fiber optic, sheet piling, etc. Responsibilities included enforcing construction standards and specifications, schedule confirmation, force account and change order records, staffing coordination, progress payments, permit conformance, painting, etc.

Oct 2000 – Feb 2002 Sempra Energy Solutions - Construction Manager for New Central Utility Plant Construction at University of Colorado Health Sciences Center in Aurora, Colorado. Responsible for control (including P&L & EPMC) of the $27 million University of Colorado Health Science Center Fitzsimons Campus Central Utility Plant construction as Prime Contractor in a design / build situation. New plant with some new equipment and some moved from old utility plant. Some tenant finish. Infrastructure consisted of municipal demolition & reconstruction, manholes, catch basin, storm, sanitary, water, asphalt street reconstruction, asphalt parking lots, landscape, fuel tanks, boilers, chillers, MEP, seismic elements, controls, utilities, etc. Handle all facets as Owner's representative, included subcontracts, permitting, payment applications, vendor invoicing, quality control, schedule of values verification, purchase orders, subcontracts, change orders / force accounts, submittals, some design team direction, quality assurance, scheduling, safety, chaired meeting, dispute resolution, coordination, negotiation (partial with Corporate), mediation, coordinated project scope of work, construction estimates, surveying, traffic control, claims issues, controls, commissioning, temporary facilities, community issues, etc. Crew often exceeded 100; both union and nonunion.

Thomas C. Oliver, P.E. Resume

YEARS EXPERIENCE WITH FIRM: 41

YEARS EXPERIENCE WITH OTHER FIRMS: 0

EDUCATION:

A.A.S., Civil Engineering Technology, Broome Community College, 1966
B.S., Civil Engineering, Michigan Technological University, 1968

PROFESSIONAL REGISTRATION(S):

P.E.: Pennsylvania - No. [redacted] (1977), Exp. 09/30/2011

CURRENT RESPONSIBILITIES:

Resident Engineer/Construction Manager responsible for project contract administration, facilities commissioning, construction observation and record keeping, utility management, progress payment estimate preparation, claims analysis and resolution, change order preparation, plan review and interpretation, construction material field testing, correspondence development, equipment and controls initial test conduction, job progress meetings.

SUMMARY OF EXPERIENCE:

WP-283, Newtown Creek Wastewater Pollution Control Plant (WPCP) Central Residuals Building, Brooklyn, NY, *New York City Department of Environmental Protection (NYCDEP), Bureau of Engineering, Design and Construction.* [10/29/09-present] Assistant Resident Engineer representing the NYCDEP for the construction of an approximately $400 million new Central Residuals Building including structures and equipment, HVAC, plumbing, and electrical work.

New Bus Operations and Maintenance Facility, Richmond, VA, *Greater Richmond Transit Company (GRTC).* Construction Manager representing the not-for-profit public service transportation provider for the City of Richmond and Chesterfield and Henrico Counties on the construction of a new $36 million bus operations and maintenance facility. The project consists of outdoor bus and employee parking facilities; a three-story, 16,700-square-foot administration and operations facility and 21-bay maintenance facility.

Grand Avenue Bus Depot and Central Maintenance Facility Design and Construction, Queens, NY, *MTA New York City Transit (NYCT).* Facility Commissioning Agent responsible for the commissioning of building systems contained in the facility according to the design intent, in agreement with accepted final design documents and NYCT's operational needs.

Edgegrove Force Main and Trunk Sewer Upgrade, Additions and Alterations to Edgegrove Pumping Station, York County, PA, *Borough of Hanover.* Resident Engineer representing the Borough for construction management and observation services for the additions and alterations to the existing Edgegrove Pumping Station, new 12-inch ductile iron (DI) force main and upgraded trunk sewer.

Pine Run Collection Sewers Phase II, Cumberland County, PA, *Hampden Township Sewer Authority.* Resident Engineer representing the Authority for construction management and observation services for new sanitary sewer systems. The new gravity sewers consisted of 16,004 LF of 8-inch-diameter polyvinyl chloride (PVC) piping. The project also included the installation of 125 residential service

connections totaling approximately 3,100 LF of 6-inch PVC pipe, roadway paving restoration, and right-of way restoration.

Construction of Swamp Creek and Minister Creek Interceptors and Swamp Creek Pumping Station, Montgomery County, PA, *New Hanover Township Sewer Authority.* Resident Engineer representing the Authority for construction management and observation of two new sanitary sewer interceptor systems, a new pumping station, abandonment of the existing pumping station, and installation of a new force main.

Sanitary Sewer Upgrade, Berks County, PA, *Municipal Authority of the Township of Spring.* [2005] Resident Engineer representing the Township for construction management and observation for upgrading approximately 6,350 LF of existing reinforced-concrete pipe and 1,925 LF of 6-inch vitrified clay (VC) service connection piping.

Pine Run Collection Sewers Bid and Construction Phases, Cumberland County, PA, *Hampden Township Sewer Authority.* Resident Engineer representing the Township for construction management for the construction of a new sanitary sewer system. The 8,200 LF gravity interceptor consisted of 8-, 10-, and 12-inch-diameter pipe and a new 10-inch-diameter force main, a distance of approximately 7,600 LF, to an existing wastewater treatment plant. center.

Pine Run Interceptor, Pump Station and Force Main, Cumberland County, PA, *Hampden Township Sewer Authority.* Resident Engineer representing the Authority for construction management observation, including in the preparation of contract progress payments estimates and change orders for three contracts, record-keeping, field design changes, and as-built record drawings. The project consisted of approximately 8,200 LF of gravity sewer pipe, 7,600 LF of force main, 360 LF of service connections, and the rehabilitation of an existing four-story belowgrade sewage pumping station and a separate wet well with a new sewage grinding system. before discharge. A new electrical control system, heating, and ventilation system were also installed.

Sanitary Sewer System Rehabilitation, Cumberland County, PA, *Hampden Township Sewer Authority.* Resident Engineer representing the Township for the installation of approximately 2,100 LF of fold-and-formed sewer pipe liner, 1,500 LF of 18-inch to 24-inch cured-in-place sewer pipe, and approximately 50 vertical feet of manhole rehabilitation, including cured-in-place and epoxy lining of manholes.

Dairy Road Pumping Station Improvements, Lebanon County, PA, *North Cornwall Township Authority.* Resident Engineer representing the Authority for construction management observation, including the preparation of contract payment estimates and change orders, record-keeping, field design changes, and as-built record drawings for two contracts. The improvements included the removal of two existing raw sewage pumps and controls and subsequent installation of two new increased-capacity replacement pumps and motors, adjustable-frequency drives, and new pump controls.

Mahoning Creek Intercepting Sewer Upgrade, Montour County, PA, *Borough of Danville.* Resident Engineer representing the Borough for construction management observation, including the preparation of contract management process payment estimates and change orders, record-keeping, field design changes, and as-built record drawings. The project involved replacing a 24-inch-diameter, reinforced-concrete interceptor sewer pipe with a new 36-inch-diameter, Vylon polyvinyl chloride (PVC) interceptor sewer pipe.

OBI OMA OTI, P.E.
Resident Engineer

EDUCATION

BSCE, Lamar University, Beaumont, Texas, 1985

CERTIFICATIONS

Registered Professional Engineer, New York
NHI Cert of Training, Safety Inspection of In-Service Bridges
NYSDOT Cert of Completion Methods of Bridge Inspection

EXPERIENCE

NYCDOT, HBK1021, RECONSTRUCTION OF CONEY ISLAND AVE. BRIDGE OVER BELT PARKWAY, BROOKLYN, NY - $7 M

Resident Engineer responsible for supervision of construction of this project consisting of demolition and removal of an existing four- span concrete encased, multi-stringer bridge and construction of multi-stringer replacement bridge with seismic upgrade. The inspection included construction of new abutments, superstructure, deck and approach slabs, bituminous concrete pavement, concrete sidewalk and curbs and relocation and installation of utilities. Construction work and maintenance of office records are in conformance with the NYSDOT Standard (MURK) and Contract Supplementary Specifications. Duties also include extensive maintenance and protection of traffic using concrete barriers, safety fencing and VMS on a limited access highway, inspection and structural evaluation of existing structures, supervision of construction inspection crew, including quality control including coordination with testing laboratory and verifying work was completed in accordance with the Contract plan and Specifications. The office work consists of coordination with other Agencies, Bureaus of the NYCDOT, and engineers, as well as maintenance of extensive project records, preparation of daily, weekly and monthly progress reports, monthly estimates, extension of contract time requests and change orders. (01/00-05/03) *Reference: Ohene Duodu, P.E., 212/839-4931*

NYCDOT, HBX636, RECONSTRUCTION OF GRAND CONCOURSE BRIDGE OVER EAST TREMONT AVENUE, BRONX, NY - $6.5 M

Resident Engineer responsible for supervision of this project consisting of demolition and removal of an existing two-span concrete encased, multi-stringer bridge and construction of new single-span multi-stringer replacement bridge. This project was slated for an eighteen (18) month schedule, to be completed in four (4) stages thus allowing continuous flow of traffic during construction. The inspection included construction of new concrete abutments, steel superstructure, reinforced concrete deck and approach slabs, bituminous concrete pavement, concrete sidewalk and curbs and relocation of utilities. The construction work and maintenance of office records are in conformance with the NYSDOT Standard (MURK) and Contract Supplementary Specifications. Duties also include extensive maintenance and protection of traffic, inspection in a congested urban area using concrete barriers and safety fencing, structural evaluation of existing structures, supervision of construction inspection crew, including quality control, coordination with a testing laboratory and verifying that work was completed in accordance with the Contract plan and Specifications. The office work consists of coordination with other NYC Agencies and Bureaus of the NYCDOT, as well as maintenance of extensive project records, preparation of daily, weekly and monthly progress reports, monthly estimates, extension of contract time requests and change orders. (07/97-01/00) *Reference: Ohene Duodu, P.E., 212/839-4931*

NJDOT, NBIS INSPECTION OF 34 bridges along Route I-280- $0.5 M

Senior Bridge Engineer (Assistant Team Leader) responsible for NBIS inspection including inventory, assessment and rating of 34 in-service highway bridges along I-280. (07/96-07/97) *NJDOT Reference: Inam Qadeer 609/530-3572*

NYCTA, CM-951, FACILITIES INSPECTION - $5.0 M

Bridge Inspection Team Leader responsible for special structural inspection of NYC Transit facilities for the purpose of identifying, developing and prioritizing rehabilitation projects that would be included in future capital programs. Performed evaluation and structural condition of 55,000 linear feet of open cut retaining walls. (06/95-07/96) *Reference: Dr. Chen (deceased)*

NYCDOT, HWQ274C, RECONSTRUCTION OF BROOKVILLE BOULEVARD AREA, QUEENS, NY - $2.5 M

Resident Engineer responsible for roadway reconstruction with concrete base and asphalt overlay in a 49 city block area, water main and sewer systems including modifications to catch basins and manholes, reconstruction of concrete curbs and sidewalks, utilities, landscaping, installation of traffic and street lighting, and maintaining pedestrian and traffic safety with the use or steel pedestrian gates and fencing. Responsible for overall management of the project including monitoring strict compliance to project specifications, managing and recording construction activities in accordance with MURK format, preparation of payments, change orders, monthly progress reports and reviewing contractors submittals for conformance with the contractual requirements, revision of grades as is necessary, inspection of concrete placement, sampling of concrete for testing, slump and air-entertainment tests, supervision of concrete coring, and close monitoring of contractor's site housekeeping and MPT. (04/94-06/95) *Guy Damas, P.E.(Retired)*

NYCDOT, HBCY083, REHABILITATION OF VARIOUS BRIDGE BEARINGS - $1.5 M

Resident Engineer responsible for rehabilitation of various bridge bearing/replacement at Fort Totten Road under the Cross Island Parkway and replacement of reinforced concrete culvert at Ledyard Place, Staten Island. Work included removal and repair of spalled and deteriorated concrete from bridge abutment walls, installation of expanded metal sheets and construction of protective shield under bridges. In addition to the inspection, verified and checked contractor's claims for payment for Time and Material work, preparation of project files and other required reports, and monitoring maintenance and protection of traffic. Duties also included supervision and coordination of five inspectors, liaison between the NYCDOT Bureau of Bridges, Flags Division, and the contractor. (03/93-04/94) *Reference: Dan Faria (212-839-4900)*

YEARS EXPERIENCE WITH FIRM: 9

YEARS EXPERIENCE WITH OTHER FIRMS: 32

EDUCATION:

B.S.C.E., Civil Engineering, City College of New York, 1969

PROFESSIONAL REGISTRATION(S):

P.E.: New York - No. [redacted] (1976)

CURRENT RESPONSIBILITIES:

Resident Engineer/Resident Project Representative responsible for performing extensive on-site observations of work in progress, field-checking materials and equipment installations, and rejecting defective work. Conducts conferences and meetings, reviews schedules, and serves as a liaison with contractors, owners, and clients. Maintains project documentation and controls, prepares periodic reports, and reviews progress payments.

SUMMARY OF EXPERIENCE:

Newtown Creek Water Pollution Control Plant, Brooklyn, NY, *New York City Department of Environmental Protection.* Assistant Resident Engineer responsible for providing construction management services for the reconstruction of sedimentation tanks and equipment, aeration tanks and equipment, and grit-handling facilities. Activities include daily construction inspection and services to the team's resident engineer and construction manager.

Grass Island Wastewater Treatment Plant, Disinfection System, Greenwich, CT, *Town of Greenwich Department of Public Works.* Resident Engineer responsible for on-site construction management, including extensive on-site observations of work in progress. Conducted field checks of material and equipment installations, rejected defective work on a new ultraviolet disinfection system, and supervised the decommissioning of the existing chlorination system. Also accountable for conducting conferences and meetings, reviewing schedules, serving as a liaison between contractors and the owner/client, maintaining project documentation and controls, preparing periodic reports, and reviewing progress payments.

Meadowmere-Warnerville Pumping Station, Force Main, Sewers, and Associated Facilities, Queens, NY, *New York City Department of Environmental Protection.* Assistant Resident Engineer responsible for providing construction-management services for the construction of a new pumping station force main, sewers, and related facilities. Activities included daily construction inspection and services to the prime consultant's resident engineer and project director.

Pumping Stations Reconstruction, Brooklyn and Queens, NY, *New York City Department of Environmental Protection.* Technical Advisor for the evaluation, facility planning, and design of four wastewater pumping stations: Bush Street, BQE, Nevins Street, and St. Albans. The evaluation included assessing the existing conditions, and identifying and developing the slope for the upgrade of mechanical, electrical equipment, structural, architectural, and other related disciplines. Also included was a study to determine the feasibility of eliminating the pumping station by using gravity sewer.

Sanitary and Storm Sewer Repairs, West Point, NY, *U.S. Military Academy*. Engineer responsible for coordinating the investigation resulting from a 10-item scope of work from the many recommendations for repair from the 2003 Sanitary Sewer System Evaluation Survey. Conducted field investigations to locate and remediate sources of wet-weather inflow to the installation's sanitary and storm sewer system.

Wastewater Treatment Plant Modifications, Northport, NY, *Village of Northport.* Resident Engineer responsible for on-site construction-management services, including extensive on-site observations of work in progress, field checks of material and equipment installations, and the rejection of defective work. Also responsible for conducting conferences and meetings, reviewing schedules, serving as a liaison with contractors and the owner/client, maintaining project documentation and controls, preparing periodic reports, and reviewing progress payments.

Reconstruction of Delaware Aqueduct Shafts 9, 10, and 17, New York City Watershed Area, Valhalla, NY, *New York City Department of Environmental Protection.* Project Manager responsible for providing quality assurance/quality control for daily electrical inspection during construction at three watershed shaft sites. Supervises the activities of electrical inspection, provides administrative control, and serves as Construction Liaison for design services during construction.

Sewage Treatment Plant and Pump Station Upgrades, Selden, NY, *Suffolk County Community College.* Technical Advisor responsible for preparing preconstruction job conference agendas, hosting job conference meetings, and providing construction management and constructibility review services on a project involving construction oversight and engineering support for the renovation of a sewage treatment plant and pump station upgrades.

Grass Island Wastewater Treatment Plant Phase II Upgrade, Greenwich, CT, *Town of Greenwich Department of Public Works.* Resident Engineer responsible for on-site construction management, including extensive on-site observations of work in progress, field checks of material and equipment installations, and the rejection of defective work. Also responsible for conducting conferences and meetings, reviewing schedules, serving as a liaison with contractors and the owner/client, maintaining project documentation and controls, preparing periodic reports, and reviewing progress payments.

CAT 232- Drewville Road and Maple Avenue Stormwater Detention Facilities, New York, NY, *New York City Department of Environmental Protection.* Resident Engineer responsible for performing constructibility reviews of projects in various phases of design. Consults with and assists the project manager responsible for wastewater design on constructibility. Conducts specification and plan reviews for constructibility.

CAT 211 Catskill Dams, Schoharie County, NY, *New York City Department of Environmental Protection.* Resident Engineer responsible for conducting constructibility reviews of projects in various phases of design. Consults with and assists the project manager responsible for wastewater design on constructibility. Conducts specification and plan reviews for constructibility.

Stormwater Pumping Stations Upgrades, Nassau County, NY, *Nassau County Department of Public Works.* Resident Engineer responsible for performing constructibility reviews of projects in various phases of design. Consults with and assists the project managers responsible for wastewater design on specification and plan reviews for constructibility. Serves as Construction Liaison for design services during construction.

EDWARD G. O'LEARY, P.E.

Resident Engineer

TECTONIC
Practical Solutions, Exceptional Service

Education:

B.E., Civil Engineering, Cooper Union (1974)

M.S., Transportation Planning and Engineering, Polytechnic Institute of New York (1977)

Years of Experience: 31

Years with firm: 1

Licenses/Certifications:
Registered Professional Engineer, New York

Sterling Institute: NY State Careers in Management Program

NYSDOT Construction Work Zone Safety Course

RELEVANT EXPERIENCE:

New York State Department of Transportation
Construction Division, Poughkeepsie, NY 5/00 –10/08

As a **Construction Supervisor**, I was responsible for the management and contract administration and coordination of over fifty construction projects in Westchester County. Duties included assignment, supervision, and monitoring and evaluating the performance of six to eight engineers – in charge, ten to twelve state inspectors and forty to fifty consultant project engineers and construction inspectors assigned to the various contracts.

I was additionally responsible for the oversight of the regional geotechnical group, whose tasks included the design and materials testing and approvals related to earthwork throughout the region.

D260081- Cross-Westchester Expressway (I-287) Reconstruction Stage 3

This **$141 million** project included the staged construction of ten new bridges, the removal of ten existing bridges, the reconstruction of fifteen lane-miles of existing pavement, and the construction of three lane miles of new pavement. This contract also included over two miles of retaining wall and noise wall construction. In addition, this project involved the construction of temporary vehicle and pedestrian bridges, sign structures, guide rail, traffic signals, ITS facilities, rock blasting, drainage facilities, waterlines, gas lines, electrical lines and the demolition of two buildings. Extensive coordination was required with the New York State Thruway Authority, the City of White Plains, Town of West Harrison, Westchester County, the Tennessee Gas Pipeline, Verizon and Con Edison. (2006-2008)

D259801- Replacement of Memorial Highway and Division Street Bridges over I-95 and the Metro-North Railroad

This **$23 million** project included the staged demolition of three existing bridges, the replacement of two two-span continuous type bridges and one simple-span bridge and the rehabilitation of one bridge. Also included in this contract was the reconstruction of adjacent roadways, and a considerable amount of private and public utility relocations and replacements. Extensive coordination was required with the Metro-North Railroad, the New York State Thruway Authority, the City of New Rochelle, United Water, Verizon and Con Edison. (2005-2008)

D258972- Cross-Westchester Expressway (I-287) Reconstruction Stage 2

This **$81 million** project included the staged construction of four new bridges, the rehabilitation of three existing bridges, the rehabilitation of twenty-four lane-miles of pavement and the construction of eight miles of new pavement. This contract also included over three miles of retaining wall and noise wall construction. In addition, this project involved the construction of sign structures, guide rail, traffic signals, ITS facilities, drainage facilities, waterlines, gas lines and electrical lines. Extensive coordination was required with the New York State Thruway Authority, Town of Elmsford, Town of Greenburgh, Westchester County, Tennessee Gas Pipeline, Verizon and Con Edison. (2002-2005)

D258924- Taconic State Parkway Reconstruction Stage 2

This **$62 million** project encompassed the expansion of the TSP from four lanes to six lanes in the Town of Yorktown. The project included the construction of fourteen lane-miles of new pavement and extensive earthwork to raise the elevation of the Parkway. In addition, the construction of four new vehicular bridges and a

pedestrian bridge was accomplished. Also included were retaining walls and noise walls, drainage work, temporary waterway diversions, sign structures, ITS facilities traffic signals, guiderail, curb, and the establishment of wetlands and hiking trails. This project is located within the NYC watershed area, and so had to incorporate considerable erosion and sediment control measures throughout the course of the project. Coordination was required with the Town of Yorktown, Con Edison, Verizon and the Algonquin Gas Pipeline. (2003-2007)

D259569- I-684 Rehabilitation of Five Bridges and Pavement Reconstruction

This **$16 million** project provided for twenty-four lane miles of pavement reconstruction via the use of cracking and seating and the placement of asphaltic concrete base, binder and top courses. The bridge rehabilitation work consisted of monolithic deck replacement, bridge rail replacement, bearing replacement, joint replacement and painting structural steel .Also included were sign structures, guide rail, drainage facilities and ITS facilities. (2004-2006)

D259978- Ramp X Bridge Construction-Route 9A/100 to Taconic State Parkway

This **$14 million** project involved the construction of a curved girder bridge to connect southbound Route 9A/100 to the southbound Taconic State Parkway in Mount Pleasant. The work also included the construction of retaining walls, new pavement on either side of the bridge, rehabilitation of the route 9A/100 bridge over the Pocantico River, the staged relocation of an existing bikeway, extensive drainage work, sign structures, guide rail, and the relocation of electrical lines and gas lines. In addition, extensive wetland mitigation was done, which included the removal of invasive plant species. Coordination was required with the Town of Mount Pleasant, Pace University and Con Edison. (2006-2008)

D258528- Route 22 Bridge over Rye Lake Rehabilitation

This **$9.4 million** project replaced the existing bearings and transverse steel stringers and installed an Exothermic deck system and micro silica overlay. The work was done at night by utilizing a temporary bridge that was removed and re-installed on a daily basis to keep the bridge in service during the day. Additional work included concrete repairs on the substructure, the installation of an oil-water separator, bridge rail, guide rail, traffic signs, drainage work and resurfacing of the bridge approaches. Extensive coordination was required with the New York City Department of Environmental Protection and the Town of North Castle. (2002-2004)

D259972- Bridge Rehabilitation- 43 Bridges

This **$8.8 million** project included the reconstruction of monolithic decks, concrete substructure and superstructure repairs, bridge bearings, bridge rail, painting of structural steel, guide rail, bridge joint systems, sidewalk, and curb. This contract included work on bridges that span Metro North Railroad facilities and therefore required coordination with MNRR. (2006-2008)

D260157- Asphaltic Concrete Resurfacing and Rehabilitation

This **$7.9 million** project involved the milling and resurfacing of various roadways in Westchester County. A total of approximately twenty-five thousand tons of asphaltic concrete was placed. This contract also included restoring and widening roadway shoulders and drainage improvements. (2006)

D260380- Bridge Rehabilitation- 16 Bridges

This **$5.3 million** project included the reconstruction of monolithic decks, concrete substructure and superstructure repairs, bridge bearings, bridge rail, guide rail, bridge joint systems, sidewalk and curb. The work was done in various locations throughout Westchester County. (2007-2008)

MINA MARCOS, P.E.
Resident Engineer

TECTONIC
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Education:
BS in Civil Engineering, Alexandria University, Egypt, 1986

Licenses/Certifications:
Professional Engineer:
- New York #0[redacted] (Exp. 12/31/2012)
- Vermont [redacted]

NJ DOT Asphalt Plant Technician (Level 1) – 6 Day Training Course – Stockpile Gradations to a Complete Marshall Mix Design, Rutgers Asphalt Pavement Laboratory - June 2009

OSHA Construction Safety & Health Certification – 2008 & 2003

Primavera Project Planning P3 – May 2001

Concrete Inspection Certification from DDC - August, 2000

Years of Experience: 17
Years with Firm: 8

Highlights:
Excellence Awards from the New York Association of Consulting Engineers:
- 149th Street from Exterior Street to AJ Griffin Place, Bronx – 2010 Gold Award
- Liberty Avenue Water Main, Queens – 2007 Silver Award
- Bronx River Water Tunnel, Bronx – 2003 Silver Award

SUMMARY:

Mr. Marcos has over 16 years of experience in design and construction inspection on transportation projects. His experience on NYCDDC/DOT projects consist of 11 years of roadway design and construction inspection. For the past 8 years he performed as Resident Engineer, Office Engineer and Senior Inspector on 8 NYCDDC projects. As Resident Engineer, he successfully completed 5 NYCDDC construction projects in various Boroughs. He has experience in the installation of distribution water mains, trunk water mains, sewers, pipe jacking and the design and construction of highway projects, as well as design work associated with buildings, foundations and retaining walls.

Mr. Marcos was also responsible for evaluating the impact of Williams – Transco 26" gas main interference on the NYCDDC Harold Street project in Staten Island. He evaluated 39 crossings and parallel runs of 900 feet total, estimated construction cost for interference work and prepared documents for arbitration hearings.

RELEVANT EXPERIENCE:

NYC DDC Contract # HWX733BW Reconstruction of 149th Street - Senior Resident Engineer
Project scope includes: Roadway reconstruction project consisting of: installation of storm and sanitary sewers on concrete cradle and new trunk and distribution water mains; replacement of curbs and sidewalks; planting of trees; installation of traffic lights and signals, and placement of concrete road base and asphalt wearing course. ($7.0 Million) (4/2008 to Present)

NYCDDC Reconstruction of Havemeyer Avenue, Bronx, NY, Contract # HWX969A – Senior Resident Engineer
The $17 million roadway reconstruction project calls for the installation of storm and combined sewers on piles and concrete cradle; installation of new distribution water mains; replacement of curbs and sidewalks; planting of trees; installation of traffic lights, signals and street lights; concrete road base and asphalt wearing course. (2006 - 2008)

NYCDDC Replacement of Water Main at Liberty Avenue, Queens, NY – Resident Engineer
Responsibilities on the $5.4 million Replacement of Water Main at Liberty Avenue include coordination with LIRR and NYCDEP as well as monitoring Contractor's work to ensure compliance with requirements for excavation and disposal of contaminated material. Monitor construction activity and review all daily reports and Contractor payments for the installation of water main and drainage and final roadway reconstruction. (2005)

NYCDDC 47th Avenue Reconstruction, HWQ730W, Queens, NY - Resident Engineer
This $7.5 million contract involves the restoration of storm sewers, sanitary sewers, 8" and 12" water mains, catch basins, sidewalks and pavement. Responsibilities include coordination with city agencies, monitoring Contractors work to ensure compliance with specifications, review of all Contractor and Sub-Contractor payments, coordination of progress meetings with involved parties, and review of daily reports, Inspector reports, submittals and shop drawings. (2004)

NYCDDC Contract #HED 502 Installation and Testing of 48" Water Main and Appurtenances Across the Bronx River at Watson Avenue, Bronx, NY - Resident Engineer

Scope of work for the $5.8 million contract consisted of installing 285 linear feet of 48 inch diameter water main under the Bronx River through a 72 inch steel sleeve. The steel sleeve was jacked using the Herrenknecht micro-tunneling technique. Work also included blasting to excavate the jacking and receiving pits, constructing 48 inch valve chambers, 48 inch butterfly valves, connections to the existing water mains on both sides of the river and cathodic protection to the new main. Responsibilities included contract administration, quality assurance on all construction activities, coordination of the work with all affected city agencies, review and approval of shop drawings, monitoring the project schedule and all office engineering work (including processing change orders and monthly estimates, writing the project diary, reviewing all daily inspector reports, handling all project correspondence and chairing the monthly progress meetings). (2002-2004)

Previous Experience:

NYCDDC Contract #RED 358 City-Wide Annual Water Main, Urbitran Associates, Inc. – Resident Engineer

Scope of work for the $7 million contract consisted of installing various sized distribution water mains and appurtenances at various locations in the five boroughs of New York City. Responsibilities included contract administration, quality assurance for all construction activities including safety and maintenance and protection of traffic, coordination of the work with all affected agencies including utilities and new development, review and approval of all shop drawings, processing change orders and monthly estimates, writing the project diary and reviewing inspectors daily reports, handling all project correspondence and chairing the monthly progress meetings. (10/2001-1/2002)

NYCDDC Contract #BED 766 Trunk Water Main Connection to Shaft 21B/Kent Avenue, Brooklyn, NY - Senior Field Inspector

Scope of work consisted of installing 72", 60" and 48" water mains and appurtenances at the third water tunnel shaft (#21B). Work also included 12" and 20" low pressure water mains, sewer work, drainage work, curb, sidewalk and pavement repairs. Inspection responsibilities for the $8.9 million contract included trench excavations, sheeting (H-pile and lagging for water main and vertical sheeting for sewer trenches), temporary bridges for crossing trenches, water main installations including house connections, hydrants and backfill operations, main protection including coating, lining, testing and corrosion protection, sewer main installations, daily reports on all work and monitoring the schedule using the Primavera Project Planner program. (9/2000-10/2001)

NYCDDC Contract #MHW 780 Reconstruction of Chatham Square - Installation 36" Trunk Water Main - Senior Field Inspector

The $18.2 million reconstruction of Chatham Square area (along Bowery St. from Canal St. to E. Broadway; St. James Place, E. Broadway, Worth St. and Mott St.). The project consisted of rebuilding the streets and sidewalks and installing new drainage, traffic signals and streetlights, 36" trunk water mains and appurtenances. A major part of the project involved a revised traffic pattern, establishing park areas within the square, landscaping and refurbishing of the Lin Ze Xu and Confucius Statues. Supervised excavation, compaction of sub-grade, form preparation and concrete placement for curbs and sidewalks. Supervised adjustment and modification of the existing utilities structures and paving of new asphalt concrete-wearing coarse. Supervised strict Maintenance and Protection of Traffic (MPT) during construction and the installation for new 36", 20", 12" and 6" water mains, house connections and hydrants. Prepared as-built drawings for catch basins, water mains (water cards, in-service sheets, tap cards and fixed asset summary) and pedestrian ramps. (7/1999-10/2000)

NYCDDC Contract #MHW 1149 Installation of New Guide Rail/Henry Hudson Parkway, Manhattan, NY - Office Engineer/Inspector

The $5.5 million contract involved Installation of new guide rails over the center median and removal of turn out areas on both sides of the South and North traffic lanes along the Henry Hudson Parkway between West 79th Street and 125th Street. Reviewed Inspector daily reports and updated pay quantities on daily basis for monthly and final payment. Maintained all project documents, correspondences, date sheets and permits according to NYC.

RAYMOND W. CHOLEWKA, P.E.

Resident Engineer

TECTONIC
Practical Solutions, Exceptional Service

Education:

Graduate Studies, Carnegie-Mellon University

B.S. in Civil Engineering,
Cooper Union

Years of Experience: 35+
Years with Firm: 2

Licenses/Certifications:

PROFESSIONAL ENGINEER – NY, CT

Highlights:

- National Society of Professional Engineers
- American Society of Civil Engineers
- Former Vice Chairman of ASCE MET Section – Structures Group
- Chi Epsilon – Civil Engineering National Honor Society
- NASA Scholarship – Carnegie Mellon University
- Four-Year Full Tuition Scholarship – Cooper Union
- SSPC Lead Paint Removal and Abatement Tutorial
- OSHA Instructor Course #500 – Construction Outreach Trainer
- Metro-North, Amtrak & NYCTA Track Safety Seminars
- 40 Hour Hazwoper Training Course with Annual 8 Hour Refresher Courses

Summary

Mr. Cholewka offers over 35 years of experience as Resident Engineer supervising Roadway and Bridge Reconstruction contracts throughout New York. He is a member of the National Society of Professional Engineers, American Society of Civil Engineers and Former Vice Chairman of the ASCE MET Section in the Structures Group. He was bestowed the NASA Scholarship at Carnegie Mellon University. Mr. Cholewka continued his training throughout his career: SSPC Lead Paint Removal and Abatement Tutorial; OSHA Instructor Course #500; Metro-North, Amtrak and NYCTA Track Safety Seminars; and 40 Hour Hazwoper Training Course with Annual 8 Hour Refresher Courses.

Relevant Experience

NYSDOT D030549 I-86 Upgrade of Route 17, Exits 116-121 – Resident Engineer (On-Going) Supervising construction inspection services for the $55 million I-86 upgrade of Route 17 in Orange County as part of the NYSDOT's on-going plan to meet interstate standards and convert the highway into the designated I-86. The 8.8 mile stretch of highway from Exit 116, at the border of Orange and Sullivan Counties, to Exit 121 in the Town of Wallkill is undergoing milling and resurfacing; including a 3.6 mile section requiring full depth reconstruction and an interchange ramp. Six bridges along Route 17 require various repairs and upgrades as well, including the rehabilitation of the Scotchtown Road Bridge and the construction of a new bridge carrying Route 17 over a town road between I-84 and Route 211.

NYCDEP Bowery Bay Water Pollution Control Plant, Metcalf & Eddy, Inc.- Resident Engineer (2006 - 2007)
Supervised construction for upgrade which included construction of new process air headers for aeration tanks, replacement of sluice gates and actuators for the final settling tanks and installation of influent bar screens.

NYCDEP Final Upgrade at Newtown Creek WPCP Metcalf & Eddy, Inc. - Change Order Manager (2005 - 2006) Coordinating change order negotiations with 5 multi-million dollar contracts with a combined total of over $250 billion for the Final Upgrade at Newtown Creek WPCP for the NYC-DEP. Upgrade includes construction of new batteries of aeration and final settling tanks, reconstruction of the existing batteries of tanks as well as new sludge handling facilities and associated mechanical and electrical equipment renovations. Federal mandated Consent Decree deadlines affect and add to the complexity of the scheduling for this extensive upgrade work, while maintaining daily sewerage flow treatment at this facility. Managing a team of 12 Change Order Negotiators to expedite necessary field condition modifications and added design improvements to the contract work to insure the successful and timely completion of over 2 billion dollars worth of upgrade work at this 310 mgd capacity(dry weather flow) water pollution control plant. This project is located on 53 acres in the Greenpoint section of Brooklyn, New York. This work is scheduled to allow new secondary treatment standards to go into effect by Dec. 31, 2007. However, the completion of all Final Upgrade work is not anticipated until 2013.

ConnDOT I-95 Rehabilitation, Bridgeport, CT, DMJM + HARRIS INC. - Resident Engineer (1998 – 2005) Coordinated and managed over 18 inspectors and office staff involved in the supervision of construction for 7 replacement bridges along a mile long section of Interstate I-95 in southern Connecticut. Work included temporary sheet piling with tie-back anchor installations, reinforced-earth retaining walls, 8' diameter drilled shaft caissons, post-tensioned pier cap beams as well as curved steel girder erection, and placement of concrete for new abutments, wingwalls and bridge decks. This $122 million, 6 year Conn DOT project required management of hazardous waste materials and other environmental concerns encountered along this heavily traveled transportation corridor. Work involved extensive coordination with Metro-North Railroad flagmen and power division personnel for 4 track outages necessary for existing bridge removal and new steel girder erection.

HAKS Engineers, P.C. – Business Manager/Project Manager (1996-1998)

Initiated proposals and participated in successful presentations for client projects including the following:

- Concrete Consultant for MTA-NYCTA Infrastructure Reconstruction Projects including 72nd Street Station Platform, Staten Island Surface Transit Maintenance Yard and new Bus Facility at Tremont Avenue, Bronx, NY.
- South West Queens Street Rehabilitation Project for NYC-DDC.
- Rehabilitation of NYSTA Maintenance Facility in Nyack, NY.
- Sewer Facility upgrade of several NYSTA Travel Plazas
- Reconstruction of local bridges in Region 8, NYS DOT.
- Rehabilitation of OTB facilities in NYC for NYS Racing Association.

East 177th Street Bridge, Bronx, NY: Coordinated paint removal and protective coating of this 3-span structure over Amtrak and Conrail railroad tracks utilizing track outages with conductor flagmen and power division personnel for NYC-DOT.

Bear Mountain Bridge Tower Painting: Project Manager for the repainting of this New York State Bridge Authority landmark structure. Project included Class A containment structures and lead paint waste removal procedures following OSHA guidelines. Coordinated West Tower containment construction with Conrail personnel.

Queens Midtown Tunnel, New York City: Project Manager for the rehabilitation of the Manhattan and Queens Ventilation Buildings for this MTA - Bridges and Tunnels facility. Project included roof replacement and masonry repairs with special emphasis on scheduling and cost control efforts.

Region 8 - NYSDOT Biennial Bridge Inspection Program: Project Manager for bridge inspection teams conducting inspections of multi-span structures in seven upstate counties for the New York State Department of Transportation.

Berger, Lehman Associates, P.C. - Resident Engineer (1990 – 1995)

Kosciuszko Bridge, New York City: Resident Engineer in charge of the interim rehabilitation of this mile long, 103 span structure carrying the Brooklyn-Queens Expressway (Interstate I-278) over Newtown Creek. This $18 million NYSDOT project involved the placement of a thin polymer concrete overlay on the bridge roadway as well as extensive repairs of the steel truss spans and supporting concrete piers. Coordinated rehabilitation work over main spans on Queens side with LIRR personnel.

Main Street Bridge, White Plains, NY: Resident Engineer in charge of the rehabilitation of this landmark two span structure consisting of one true stone arch span and one concrete rigid frame span. Project work included the installation of a hidden structural slab over the stone arch to relieve the traffic loading on this Westchester County DPW structure.

I-84/I-91 Interchange, Hartford, CT: Developed CPM schedule for construction of Phase B of this $100 million highway modernization project. This project included major reconstruction of the Founders Bridge over the Connecticut River, realignment, widening and reconstruction of Interstate 91 and construction of a pedestrian plaza over this interstate highway for Connecticut Department of Transportation.

Hazen & Sawyer - Project Manager (1986 – 1990)

Red Hook Water Pollution Control Project, Brooklyn Navy Yard, Brooklyn, NY: In charge of over 30 inspectors and field office personnel for the construction and start-up of Secondary Treatment Facilities as well as the completion of Primary Treatment Facilities at this 120 mgd capacity sewer plant. Work included the construction of four Aeration Tanks and eight Final Settling Tanks with over one million gallon capacity each along with connecting reinforced concrete channels.

This $200 million NYC Department of Environmental Protection Project involved the placement of over 60,000 cubic yards of concrete as well as HVAC, electrical and plumbing contracts with eight prime contractors. Duties included initiating change order proposals, estimating and negotiating final C.O. costs, preparing time extension reports and analyzing delay and extra work claims. Federally mandated milestone deadlines of May 1, 1987 for Primary Treatment and May 1, 1989 for Secondary Treatment were met by the NYCDEP at this Water Pollution Control Facility due to effective project management efforts.

Storch Engineers - Resident Engineer (1985 – 1986)

New England Thruway, I-95, Bronx, NY: Led ten inspectors in supervising the reconstruction and upgrading of a section of Interstate I-95 at Co-op City in the Bronx. This $14 million project for the New York State Thruway Authority included the rehabilitation of three over-pass ramp bridges with bearing and expansion joint replacements. The program for bridge deck improvement involved the placement of latex modified concrete overlays for these bridges.

MARTIN M. LUND, JR., ACI
Resident Engineer Sr. Inspector

EDUCATION

A.A.S. / 1975 / Mechanical Engineering Technology

Advanced training certificates in Wastewater Treatment and Conveyance, Water Treatment and Distribution, Industrial Wastewater Treatment, Primavera Critical Path Software and Internet Services Construction Management Software, Advanced Internet Services and Traffic Control Coordination & Safety.

LICENSURE

New Jersey

- Operator Licenses
  - T-2 - Water Treatment Systems
  - W-2 - Water Distribution Systems
  - N-4 - Industrial Wastewater Treatment Systems
  - S-3 - Public Wastewater Treatment Systems
  - C-4 - Wastewater Conveyance Systems
- Public Weighmaster

CERTIFICATION

National Institute for Certification in Engineering Technologies (NICET)
Engineering Technician - Level IV – Mech. Engineering Tech./ Level III - Transportation Engineering Tech.
Rutgers/CAIT - Traffic Control Coordinator
NJSAT, Certified Asphalt Pavement Construction Technologist
NJACI, Certified Concrete Field Testing Technician

EXPERIENCE

General Qualifications

Thirty-nine (39) years of design engineering, facility operations, and environmental and construction management experience in the wastewater, water, industrial pretreatment, residuals management, cogeneration and solid waste management industries. Mr. Lund is a twenty-six (26) year employee of JMT/Kupper. Mr. Lund's experience includes the following:

Construction Management and Field Supervision

- NYC Department of Design and Construction, MED-584B, Water Main Lining on Madison Avenue in Manhattan, NY – Chief Inspector for a $14.0 M high-profile water main lining project on Madison Avenue from 37th Street to 78th Street in Manhattan using trenchless technology.
- Atlantic County Improvement Authority, Improvements to 18 Roadways – Resident Engineer/Inspector for all aspects of construction contract administration and inspection for the $2.4 million milling and/or resurfacing of portions of 27 (actual) roadways in various municipalities throughout Atlantic County.
- City of Camden, Rehabilitation of 36", 30" & 24" Water Transmission Main - Resident Engineer for the rehabilitation of a major portions of the main which is typically cast iron and over 100 years old. The project consisted of the cleaning and cement lining of approximately 71,000 linear feet of 36", 30" & 24" main and the replacement of thirty (30) 36", 30" & 24" in-line valves and systems hydrants. The work included the installation of temporary bypass lines to maintain hydraulic capacity; installation of temporary line stops; internal sealing of leaking joints and reinforcing of deteriorated segments; and, TV inspection/flow pressure testing.
- Camden County Municipal Utilities Authority – City of Camden/Campbell Soup Permanent Bypass – Resident Engineer for Construction inspection of the Kupper designed re-routing of an existing 36" diameter sewer around the headquarters of the Campbell Soup Company as part of the Gateway Project. The project involved the installation of 1,500 LF of 36" diameter polycrete pipe using microtunneling. The microtunneling process required the construction of 2 drive shafts and 3 receiving shafts. A total of 4 drives between 300 LF and 400 LF were done to complete the installation of the pipe. The sewer is approximately 25 feet deep.
- Camden County Municipal Utilities Authority – Contract 504, Expansion and Modification of Winslow Township Wastewater Treatment Facility – Resident Engineer for construction, startup and testing of a new process train for the facility. Work included installation and construction of new oxidation ditch, re-aeration tank, secondary clarifiers, effluent pumping station, chlorine contact tank modification, new sodium hypochlorite facility, new maintenance building, expansion of off-site recharge basins system, new off-site equipment storage building, and environmental conservancy public park.

- Camden County Municipal Utilities Authority – Contract 223A, Baldwin's Run Force Main Rehabilitation – Resident Engineer for the emergency repair of the 36" PCCP Baldwin's Run Force Main and for the rehabilitation of the Baldwin's Run Force Main. The rehabilitation project involved the insertion of approximately 3,780 LF of 32" HDPE pipe in the existing force main. A winch cable was inserted through the existing line and then attached to the front of the new liner. The liner was then pulled into the existing pipe. The void between the new and old pipe was filled by grouting. The HDPE pipe was butt fused together in the field using a fusion welder.
- Camden County Municipal Utilities Authority – Contract 371A, 32nd Street CSO and Diversion Chamber Modification – Resident Engineer for upgrade and modification of the Baldwin's Run/32nd Street CSO and Diversion Chamber. Work included installation of emergency generator and prefab building, additional screening baskets, new sluice gates, duck bill check valves, and automatic level control. All work done while maintaining flow through diversion chamber and CSO.
- Landis Sewerage Authority (LSA), Contract 11, Fisher Gardens Sanitary Sewer and Pump Station - Resident Engineer for a $1.2 M gravity sewer, force main and pump station system. The work consisted of constructing and testing approximately 6,400 lf of sewer, 1,600 lf of force main, 75 service connections, 22 manholes, one pump station, site clearing and restoration, pavement restoration and necessary appurtenances.
- Landis Sewerage Authority, Contract 12, Vineland Regional Hospital Pump Station and Sanitary Sewer System - Resident Engineer for the installation of a new sanitary sewer system, pump station and force main to connect the south Jersey Regional Medical Center and the outlying area to the Authority's system. Major items of work included the construction and testing of approximately 1,650 lf of various diameter gravity sewers; 6,300 lf of 8" diameter force main; a 0.5 MGD pump station; together with all associated appurtenances and necessary pavement and other restoration.
- NJ Department of Transportation (NJDOT), Longlife Pavement Marking Term Agreement, Region South 2007 and Region Central 2006 – Senior Inspector for the removal of existing pavement markings and two-way plowable mono-directional and bi-directional pavement reflectors and castings, cleaning and preparing Portland cement concrete and bituminous surfaces, installation of epoxy resin traffic stripes and thermoplastic traffic markings, cleaning and cutting of road surfaces and installation of new reflectors and castings and the maintenance and protection of traffic. Assisted the Resident Engineer in closeout and preparing as-builts for Region South 2007. *[Night Work]*
- NJDOT, Region South Term Agreement 2006-5, Task #3, Maintenance Road Repair Contract #328 – Inspector for the $2.3 million milling and resurfacing of portions of Routes 40 and 56 in Gloucester, Salem and Cumberland Counties. Major items of work included stabilization of the bridge on Route 56 damaged in heavy rains; variable depth milling; Superpave surface course; pavement stripes, markings and raised reflectors and miscellaneous other items.
- Princeton Sewer Operating Committee, Moore Street Cleaning and Lining - Resident Engineer for the cleaning and cured-in-place lining of 4 runs of sanitary sewers.

Engineering Design

Performed a wide variety of preliminary and final design engineering services, construction management, operational services for wastewater, water, transportation, solid/hazardous waste, and environmental projects for clients throughout New Jersey, New York and Pennsylvania.

Wastewater Treatment and Collection System Engineering Projects

- Ocean County Utilities Authority's 28 mgd Northern Wastewater Treatment Facility, Interceptor System and Pump Stations.
- Camden County Municipal Utilities Authority's Cooper River Basin Interceptor and Pumping Station System.
- Middlesex County Utilities Authority's relief sewers and the Green Brook and Sayreville Relief Pumping Station (Engineering Services During Construction).
- Monroe Township Municipal Utilities Authority's collection sewers, pumping stations and force mains expansion program.
- Dover Township Municipal Utilities Authority's sanitary sewerage facilities expansion program.

Water Treatment and Distribution System Engineering Projects

- Monroe Township Municipal Utilities Authority's water supply and distribution master plan for water supply system.
- Brick Township Municipal Utilities Authority's 8 mgd treatment and distribution system.

Wastewater Treatment Facility Operations

- NJ Division of Buildings and Construction at various State-owned wastewater treatment facility expansion project.

TIMOTHY E. BROWER, CET, SAT, ACI, CCTC, NACE, SSPC C-3, TCP, NICET Level IV

Inspector

EDUCATION

Brick Township High School, Diploma, 1975
Ocean County College, Special Courses in Construction Methods & Reporting and Cost Estimating & Bidding, 1990

CERTIFICATIONS

1990, NICET Level IV, Highway Construction
1993, Society of Asphalt Technologists, Asphalt Pavement Construction Technician
1999, Structural Painting Council, C-3 Certification
2001, American Concrete Institute (ACI), Concrete Field Testing Technician
2002, ACI, Concrete Construction Technologist
2001, NACE Level III Coating Inspector
2001, Rutgers Traffic Control Coordinator

EXPERIENCE

Mr. Brower has 30 years of relevant experience as a Resident Engineer and Inspector on projects for the NJ Turnpike Authority-Turnpike and Parkway Divisions, NJ Department of Transportation, Delaware River Port Authority, NY State Department of Transportation and various municipalities and authorities.
Mr. Brower has inspected bridge deck and structural concrete repairs for the NJ Turnpike Authority-Turnpike and Parkway Divisions, NJ Department of Transportation and the Delaware River Port Authority; construction, rehabilitation or replacement of 5 bridges for the County of Somerset and the widening and rehabilitation of 5 Interstate bridges for the NJ Department of Transportation. Bridge paint inspection experience includes the Betsy Ross bridge where Mr. Brower was the Resident Engineer, and over 100 local, State, Interstate, Parkway and Turnpike bridges for the NJDOT, NJ Tpk-Pkwy and Tpk Div., NYSDOT and County governments. Relevant project experience includes:

- Somerset County - Lyman/Nevius Street Bridge Construction/Reconstruction; Woodfern Road Bridge Rehabilitation/ Replacement; and Opie/River Road Bridge Replacement - Responsible for the inspection of 3 concurrent bridge projects with a constructed cost of approximately $15 million. The projects included the construction of a new 2-span girder bridge, the rehabilitation, reconstruction and painting of 3 historic truss bridges, the replacement of another bridge with a precast concrete arch bridge, the realignment and reconstruction of approach roadways and the widening and improvement of several intersections. (08/05-01/06)
- NJ Turnpike Authority-Parkway Division, OPS No. 3012, Construction Contract 84-1284, Northern Bridge Repairs, MP 104.2 to MP 171.6 - Responsible for the delineation of areas of deterioration requiring repair and for the inspection of concrete repair of bridge deck slabs and substructures, epoxy waterproof coating, deck joint replacement and repairs, bridge deck waterproofing and repaving of decks and approach roadways, repairs to bearings, temporary stringer support, jacking and concrete pedestal replacement, cleaning and painting of steel repairs to existing steel members and miscellaneous related work. (07/05)
- Delaware River Port Authority, Contract BR-03-01, Betsy Ross Bridge Roadway (Route 90) Rehabilitation and Traffic Enhancements - Responsible for assistance to the Resident Engineer and for the inspection and supervision of inspection of a $7.2 million roadway and bridge rehabilitation contract on Route 90; the New Jersey approach to the Betsy Ross Bridge. Work included traffic control, rehabilitation of highway bridges including milling and resurfacing of bridge decks and approach/transition slabs, replacement of deck wearing surfaces with a membrane/asphalt system, superstructure and substructure repairs, replacement of all expansion joints, bridge deck and header repairs and reconstruction, safety walk, curb and parapet construction including electrical and conduit installation and fencing. *[Night Work]* (09/01-05/03)

NJDOT, Route 287, Section 6N & 7H - Responsible for supervision of consultant and subconsultant inspection staff under a State RE and for the inspection of a $31 million HOV bridge and lane widening project. Responsibilities included

assistance to the NJDOT Resident Engineer, inspection duties and MPT inspection responsibilities. Project was Primavera CPM scheduled. Work included 9 lane miles of new construction; 18 lane and 9 shoulder miles of milling, reprofiling and resurfacing; pavement striping/marking, guide rail upgrades; 8 miles of noise barriers; interchange improvements; drainage; landscaping; concrete repairs to, and widening and painting of 5 bridges including superstructure and substructure repairs. The Kupper staff assigned to this project received a letter of appreciation from NJDOT's former Assistant Commissioner/Chief Engineer for achieving substantial completion 14 months ahead of schedule. Kupper received a letter from NJDOT's Commissioner of Transportation thanking Kupper for their efforts in improving the State's transportation network. The project was a 1999 CECNJ award winner for Engineering Excellence. ***[Night Work]*** (03/97-12/97)

OTHER EXPERIENCE

Bridge Painting
- NJTA-PD, Engineering Contract 84-801S
- NYSDOT, D015256, WSE & KWVH, StatenIsland
- DRPA, BR-8-99, Betsy Ross Bridge
- NYSDOT, D010165, Henry Hudson Parkway
- NJDOT, Bridge Painting Nos. 95-3, 96-4, 96-1, 91-5 & 91-2

Resurfacing
- NJDOT, Maintenance Roadway Repair #143
- Atlantic City, Leipzig Avenue Resurfacing
- NJDOT, Maintenance Roadway Repair #311
- NJDOT, Maintenance Roadway Resurfacing #219
- NJDOT, Route 47, Section 4C & 5C Resurfacing

Miscellaneous
- NJDOT, I-676, Section 3N & I-295, Section 2X Noise Walls
- NJTA-TD, Contract R-1190, Molly Pitcher Service Area
- NJTA-TD, Contract R-1235B & R-1243 Noise Walls
- NJDOT, I-78 Section 5CE Noise Walls

Roadway/Infrastructure Construction/Reconstruction
- NYCDDC, SE-749 Sprague Avenue Area Reconstruction
- NJDOT, Route 30, Section 76A & 5E Widening
- Borough of Princeton, Moore Street Reconstruction
- NJDOT, Route 202 & 206 Reconstruction

Utilities
- PSOC, Moore Street Cleaning & Lining
- NJDBC, Ancora Hospital Lagoon Project
- Berkeley Township Sewerage Authority
- Old Bridge Township Sewerage Authority
- Keansburg Municipal Utilities Authority
- Monroe Township Municipal Utilities Authority
- Township of Warren Sewerage Authority
- Middlesex County Utilities Authority
- Borough of Point Pleasant
- Dover Township Sewerage Authority

GEORGE R. WHITE, L.S., P.P., N IV, SAT, ACI, TCP, NACE 1, 2, 3 and Peer Review, SSPC C-3, OSHA 1910.119 Inspector

EDUCATION

AAS / 1972 / Civil Engineering Technology & B.S. / 1975 / Science
Federal Highway Administration / 1993 Work Zone Safety Management
Valspar / SSPC Steel Preparation and Paint Application
MAB / Paint Application and Ameron Painting Seminar / 1998
2001 / AMTRAK Safety Training

LICENSES

1988 / Licensed Land Surveyor - 1992 / Professional Planner
1992 / NICET Level IV, Highway Construction
1999 / NACE Coating Inspector Level III, Peer Review
1998 / OSHA 1910.119 Certification and SSPC C-3 Certification
2001 / Rutgers Traffic Control Coordinator
2002 / ACI Concrete Field Testing Technician

EXPERIENCE

Mr. White has 37 years of experience including over 7 years of experience as a Resident Engineer. He holds numerous certificates and registrations and has worked for numerous clients including the New Jersey Turnpike Authority, NJDOT, TBTA, TVA, refineries, authorities and contractors. He has extensive experience as a Resident Engineer and Inspector on projects involving cleaning and painting and/or lining of structural steel.

RELEVANT EXPERIENCE

Mr. White is certified by NACE at Peer Review; the highest coating inspector level. He has inspected the cleaning and painting of 143 bridges under 16 contracts for the NJ Turnpike Authority or NJDOT. He has been the Resident Engineer on 6 of those contracts involving over 50 bridges and for the cleaning and coating of 11 petroleum tanks. Relevant projects include:

- NJDOT Bridge Painting Projects [Night Work] - Inspection of abrasive blast cleaning including bearings and appurtenances; application of an organic zinc coating system; containment system construction; implementation of dust collection and recycling of steel grit abrasive; handling, storage, transport and disposal of hazardous waste; implementation of a Lead Health and Safety Plan; repair of concrete structures and application of epoxy waterproofing seal coat; and MPT implementation.
  - Region North Paint Term Agreement 2005-1, Bridge Painting Contract 2005-2, Resident Engineer, 7 bridges on Route 17 (09/06-Present).
  - Bridge Painting Contract 2001-5, Resident Engineer, 7 bridges on I-78 and a RR bridge over Route 24 (06/03-08/06).
  - Bridge Painting Contract 2001-6, Resident Engineer, 5 bridges on I-280 (12/02-05/03)
  - Bridge Painting Contract 2000-3, Resident Engineer, 4 bridges on I-78 (09/01-12/01)
  - Bridge Panting Contract 98-5, Night Shift Resident Engineer, 5 bridges on I-78 (09/98)
  - Interstate I-287, Sections 5V, 6Q & 7J – Inspector, 4 bridges on I-287 (06/97-05/98)
  - Bridge Painting Contract 91-4, Inspector, 16 bridges in Camden and Gloucester Counties (1995-03/96 & 1993-03/94)
  - Bridge Painting Contract 91-1, Inspector, 10 bridges on I-80 or I-280 (11/94-1995)
  - Bridge Painting Contract 90-3, Inspector, 7 bridges on I-676 and I-76 (1993)
  - Bridge Painting Contract 90-2, Inspector, 11 bridges on Route 30 (1992)
  - Bridge Painting Contract 89-5, Inspector, 15 bridges on Route 55 or 47 (04/91-1992)

- New Jersey Turnpike Authority, Bridge Painting Projects [Night Work] - In addition to the work described for the NJDOT Bridge Painting Contracts above, the Turnpike contracts included both power washing with turbo-tips and overcoating as well as conventional abrasive blast cleaning and application of a 3-coat system. Contract R-1279 included evaluation of the existing paint system and adhesion pull-off testing. R-1279 also included an experimental coating system of metalizing and either Noxyide or 3 coat carboline coating of weathering steel structures. Recent resinspections appear to confirm the success of this product. Mr. White received a written compliment from the contractor for his knowledge and experience with metalizing and Noxyide coatings which were instrumental in achieving satisfactory results. The R-1279 project was completed substantially under the Consultant Inspection budget which allowed for an additional bridge to be added to the contract.
  - Bridge Painting contract R-1424, Acting Resident Engineer (04/02-06/02) and Inspector, 12 Turnpike bridges (04/02-11/02)
  - Bridge Painting Contract R-1399, Inspectr, 11 Turnpike bridges (04/01-08/01)
  - Bridge Painting Contract R-1363, Inspector, 14 Turnpike bridges (05/00-12/00)
  - Bridge Painting Contract R-1339, Inspector, 5 Turnpike bridges (07/99-12/99)
  - Bridge Painting Contract R-1295, Inspector, 2 I-95 bridges (03/99-06/99)
  - Bridge Painting Contract R-1279, Inspector, 14 Turnpike bridges (04/96-10/96)
- Petroleum Industry Coating or Lining Projects - Inspection of high build epoxy, solvent based epoxy phenolic (Novalac) and high build urethane systems to interiors and/or exteriors and appurtenances and condition inspection and polyester laminate glass tank lining and bridge clearing and coating
- Sun Company Girard Paint Refinery, Resident Engineer, 7 tanks (06/98-08/98)
  - TOSCO Refinery, Resident Engineer, 4 tanks and 1 bridge (10/98-11/98)

OTHER EXPERIENCE

Surveyor: Kupper Associates (01/02-03/02 & 01/00-04/00); NJDOT, Route 22; Various residential and commercial projects; Daniel Construction Co., US Army; FR&W (between 04/94-10/94 or 1970-1991)

Construction Inspector: TBTA, Contract BBM-324 (09/00-12/00); Landis Sewerage Authority (12/98-02/99); NJDOT Region North Maintenance Term Agreement (1996); Relamping (01/96-11/96); Atlantic County DPW, Hammonton Sewer Project (05/97-12/97)

Public Safety Officer and Traffic Coordinator: Tennessee Valley Authority (between 04/94-10/95 or 1970-03/91).

YEARS EXPERIENCE WITH FIRM: 7

YEARS EXPERIENCE WITH OTHER FIRMS: 9

EDUCATION:

B.A., Geology, Hartwick College, 1986
DOT Hazardous Materials Transportation, National Environmental Trainers, 2007

PROFESSIONAL REGISTRATION(S):

NICET Level III - Highway Construction - No. [redacted] 1995)
ACI Concrete Field Testing Technician - Grade I - No. [redacted](2001)
Troxler Nuclear Testing Equipment Certification - No. [redacted] 1993)
ATSSA Traffic Control Technician - No [redacted](1999)
NETTCP Soils and Aggregate Inspector - No. [redacted](2010)

CURRENT RESPONSIBILITIES:

Senior Inspector responsible for inspecting bridge construction, as well as highway, sewer, and water main construction projects.

SUMMARY OF EXPERIENCE:

NY Routes 17 and 84 Interchange Reconstruction, Middletown, NY, *New York State Department of Transportation, Region 8.* Senior Inspector for an $80 million project that includes 3 new bridge structures and 16 miles of reconstruction and paving on NY Route 17. Responsibilities include inspection of structures and paving, recordkeeping, testing, and field inspection.

Route 6 Bridge Replacement, Brewster and Carmel, NY, *New York State Department of Transportation.* Senior Inspector for a $4 million bridge replacement over a future Putnam County bikeway. The replacement required staged construction for the removal and replacement of a bi-directional, two-lane bridge on Route 6, which is the primary access route to Carmel. Responsibilities include recordkeeping, testing, field inspection, and item payments. Also prepares monthly estimates, project correspondence, and meeting minutes.

Widening of U.S. Route 7, Danbury and Ridgefield, CT, *Connecticut Department of Transportation.* Senior Inspector for a $17 million, 2.1-mile-long highway widening of US Rte 7. Improvements included widening the highway from two lanes to four lanes and adding left-turn lanes at three realigned intersections. A three-cell box culvert was constructed on one of the side streets as part of the intersection realignment, and an existing box culvert under the highway was improved. The project entailed extensive earthmoving activities, including rock blasting operations.

Resurfacing and Safety Improvements on I-91, East Windsor and Enfield, CT, *Connecticut Department of Transportation.* Senior Inspector for a $12 million rehabilitation of I-91. The project is 7.5 miles long and involves removing an existing bituminous surface, repairing the concrete base, and resurfacing with Superpave. The project also included rehabilitating six bridge decks, replacing the metal beam guide rail, and adjusting drainage structures.

I-95 Reconstruction, Stamford, CT, *Connecticut Department of Transportation.* Senior Inspector responsible for overseeing bridge and roadway construction for a $28 million bridge and highway reconstruction project.

S.R. 3/I-91 Interchange, Wethersfield, CT, *Connecticut Department of Transportation.* Senior Inspector responsible for overseeing an $18 million bridge and roadway construction project. Tasks included the inspection of many roadway and bridge-related activities.

U.S. Route 17 Reconstruction, Alamo, NV, *Nevada Department of Transportation.* Senior Inspector responsible for assisting in the oversight of 17 miles of state highway reconstruction for an $11 million project.

URS Consultants, Middletown, CT

U.S. Route 66 Widening and Railroad Bridge Replacement, Middletown, CT, *Connecticut Department of Transportation.* Senior Inspector responsible for overseeing roadway and bridge construction. Tasks included inspecting railroad bridge and track construction, coordinating the installation of public utilities, and overseeing the placement of drainage structures and bituminous concrete paving.

J. J. Kassner Engineering, Lake Success, NY

S.R. 9/I-91 Interchange, Cromwell/Berlin, CT, *Connecticut Department of Transportation.* Inspector involved in the oversight of bridge-related activities on a $45 million project.

YEARS EXPERIENCE WITH FIRM: 5

YEARS EXPERIENCE WITH OTHER FIRMS: 15

EDUCATION:

A.S., Civil Engineering, Government Technical College, 1981
Supervisor Course (Lead Paint Removal Operations), New York City Department of Transportation, 2001

PROFESSIONAL REGISTRATION(S):

NICET Level III (Highway Construction) - No. [redacted] (2005)
ACI Concrete Field Testing Technician Certification - Grade I - No. [redacted] (2003)
ACI Concrete Construction Technologist (2003)

CURRENT RESPONSIBILITIES:

Senior Inspector responsible for inspecting bridge construction, as well as highway, sewer, and water main construction projects.

SUMMARY OF EXPERIENCE:

Construction Inspection Services for GSP Interchange 142 and I-78, Union, NJ, *New Jersey Department of Transportation*. Senior Road Inspector for the $120 million interchange in Union NJ. The project entails the construction of missing ramp movements between the Garden State Parkway and I-78, roadway widening and bridge widening and rehabilitation. Responsible for inspecting operations that include full-depth road reconstruction, noise barrier walls, bridge deck construction and paving.

Construction Inspection Services for Mill and Fill Operations, Routes 25A, 27, and 110, Suffolk County, NY, *New York State Department of Transportation, Region 10.* Senior Inspector for the $5 million mill and fill pavement operations at multiple sites in Region 10. These sites are heavily traveled urban arterials, and maintenance and protection of traffic was a significant aspect.

Reconstruction of Steinway Street Bridges Over Grand Central Parkway, Queens, NY, *New York City Department of Transportation.* Road/Bridge Construction Inspector for a multi-disciplinary, $16 million reconstruction of the eastbound and westbound Steinway Street bridges over the Grand Central Parkway. Steinway Street is a heavily traveled urban arterial that parallels the depressed section of the Grand Central Parkway (GCP). Bridge construction inspection duties included on-site inspection of the contractor's means and methods for new reinforced-concrete deck, approach slabs, railings, framing and bracing systems, and new stem walls.

Construction Inspection Services for Route 21 Widening and Reconstruction, Newark, NJ, *New Jersey Department of Transportation*. Senior Road Inspector for the $30 million reconstruction, widening, and structure rehabilitation of a highway in downtown Newark. The roadway is a heavily traveled urban arterial, and maintenance and protection of traffic was a significant aspect of the project. Responsible for inspecting operations that include widening the existing roadway with full-depth road reconstruction; construction of sidewalks, stony creek granite curbs, colored concrete sidewalks, brick pavers, and other miscellaneous structures; building/dwelling demolition;

Reconstruction of Queens Boulevard Bridge Over Sunnyside Yard, Queens, NY, *New York City Department of Transportation (NYCDOT).* Senior Inspector for a $50 million bridge reconstruction

involving the demolition and removal of 19 spans of concrete bridge deck, concrete sidewalks, abutments, and structural steel. The reconstruction involved placing new reinforced concrete abutments, concrete deck slabs, and concrete crash walls and sidewalk using stay-in-place forms and steel grid deck, and erecting new structural steel. The project also included new concrete approach slabs, concrete base roadway and asphalt pavement, a new street lighting system, a new closed-circuit television (CCTV) system, and intelligent transportation systems (ITS).

Reconstruction of Honeywell Street Bridge Over Sunnyside Yard, Queens, NY, *New York City Department of Transportation (NYCDOT).* Senior Inspector for a $35 million bridge reconstruction involving the demolition and removal of 22 spans of concrete bridge deck, concrete sidewalk, an abutment, and structural steel. The reconstruction involved placing a new reinforced concrete abutment, concrete deck slab, concrete crash wall, stay-in-place forms and steel grid deck, new structural steel using weathering steel, a new approach slab, concrete base roadway, and asphalt pavement.

Reconstruction of Bedford Park Boulevard and West 2nd Street Over New York City Transit (NYCT) Yard, Bronx, NY, *New York City Department of Transportation.* Senior Inspector for a $21 million reconstruction involving the demolition of existing bridges and the construction of a new concrete substructure. Inspected the work performed at both bridges, which was highly complex, as it was located between 27 train tracks and various NYCT utilities, and involved steel superstructure and the installation of water mains, gas mains, telephone conduits, and electric conduit. Inspected the removal of asbestos electrical ducts and lead-based paint from existing structural steel. Also inspected the contractor's work, such as concrete testing (slump, air content, concrete cylinders, and curing), prepared daily reports.

Resurfacing and Bridge Deck Repair of Route 280 West, Orange to Livingston, NJ, *New Jersey Department of Transportation.* Senior Inspector responsible for inspecting and supervising various operations of the contractor and subcontractor, including the modification of a viaduct parapet and retaining wall, traffic light pole foundation bracket, asphalt concrete 8-inch base course, 4-inch surface course, and maintenance and protection of highway traffic. Activities included deck surface replacement, reinforcement, and placement of type A and latex-modified concrete.

Reconstruction of Bronx Boulevard, Bronx, NY, *New York City Department of Transportation.* Senior Inspector for a highway reconstruction involving the removal and construction of new sewer using 18-, 21-, and 36-inch-diameter concrete pipe, a new drainage system, new roadway, concrete curb, sidewalk, street lighting, traffic signals, and permanent striping. Work involved the supervision and inspection of the contractor, preparation of daily reports.

Reconstruction of Long Island Expressway, New York, NY, *New York State Department of Transportation.* Senior Inspector for a highway reconstruction, involving the addition of one lane, demolition of existing and reconstruction of a new retaining wall, a new drainage system, a median concrete barrier, and a new pedestrian bridge. Duties included the supervision and inspection of demolition work, concrete testing (slump, air content, concrete cylinders, curing, and compaction tests), and backfilling.

Various New Construction and Rehabilitation Projects, New York, NY. Supervisor responsible for overseeing various projects involving the reconstruction of commercial buildings and residential houses in all five boroughs of New York City. Work involved steel piling, excavation, shoring, concrete block and brick work, sewers, siding, roofing, and electrical work.

MICHAEL CROCETTI, C.E.T., S.A.T., A.C.I.
Inspector

EDUCATION

Boonton High School, Diploma, 1974
Morris County College, Special Courses in Engineering
Ocean County College, Special Courses in Construction Methods and Reporting
Special Training Course for Nuclear Testing Equipment Use

CERTIFICATIONS

1985, NJDOT Maintenance and Protection of Traffic
1993, NICET Level IV, Highway Construction
1995, Society of Asphalt Technologists, Asphalt Pavement Construction Technician
1995, American Concrete Institute (ACI), Concrete Field Testing Technician
1997, NJDOT/CIAP Night Lighting for Paving Operations
2000, ACI Concrete Construction Technologist
2005, Rutgers, Traffic Control Coordinator

EXPERIENCE

Mr. Crocetti has 33 years of relevant experience. Mr. Crocetti has spent over 15 years inspecting highway and bridge construction, reconstruction and/or repair projects for the NJDOT and the NJ Turnpike Authority. Relevant projects include:

NJ Turnpike Authority (NJTpk)

- OPS T3079, Contract T200.015, Resurfacing MP 74 to MP 122 – Inspector for the $3.3 M milling and resurfacing of approximately 30 turnpike mainline lane miles (09/06-10/06)
- OPS P3012, Contract 84-1284, Northern Bridge Repairs – Inspector responsible for the delineation of areas of deterioration requiring repair and for the inspection of concrete repair of bridge deck slabs and substructures. (02/06-08/06)
- OPS 30-827S, Contract 30-1293 Removal of the Union Southbound Toll Plaza - Inspector for the demolition of the Southbound Toll Plaza, widening and realignment of approach roadways and ramps and associated work items. (03/05-11/05)
- Contract R-1382, Resurfacing MP 70 to MP 122 – Inspector for the $3.4 M milling and resurfacing of approximately 57 mainline lane and shoulder miles and pavement rehabilitation at several ramps and surface areas. The project included 60,000 tons of SuperPave. (11/00-12/00)
- Contracts R-1235B and R-1243 - Inspector for the $6.2 M fabrication and erection of approximately 8,150 LF of ground mounted and 168 LF of bridge mounted sound barriers requiring deck replacement. (08/00-10/00)

NJ Department of Transportation (NJDOT)

- Three Interstate Highway Resurfacing Projects (Rte. 440, I-95 and Rte. 195) – Asst. Resident Engineer for 3 resurfacing projects in Middlesex and Monmouth Counties. (05/07-Present)
- Maintenance Median Crossover Protection Contracts 5 & 6 – Inspector for 2 partially concurrent construction contracts for safety improvements at interstate highway median crossovers. (09/06-04/07)
- Route 31, Section 6D - Inspector for a $17.9 M road and bridge widening and intersection improvement contract. (01/01-02/05)
- I-287 Edison/Metuchen Sound Barriers – Asst. Resident Engineer/Chief Inspector for a $3.4 M project for installation of 3.5 miles of sound barriers installed in drilled shaft caisson foundations, curb, sidewalks, clearing, drainage, landscaping and MPT. (09/98-12/99)

- Route I-287, Section 5V, 6Q & 7J - Inspector for the $32.0 M widening of the highway and bridges on a 10-mile stretch of I-287 SB. The project was a 1999 CECNJ award winner for Engineering Excellence and the staff received a letter of appreciation from the NJDOT Commissioner for their efforts in achieving substantial completion 14 months ahead of schedule. (08/96-05/98)
- Route 28, Sec. 4D, 5D & 6C – Inspector for 12 lane miles of curb-to-curb roadway reconstruction. Work included 2 miles of drainage installation; removal and/or repair of concrete base course; staged construction, milling and resurfacing and MPT. (04/96-07/96)
- Route I-78, Section 5CE - Inspector for a $17.6 M noise wall project on I-78. The project included 3-1/2 miles of 12 ft. to 24 ft. high noise barrier wall installed in drilled shaft caisson foundations as well as poured-in-place and bridge mounted wall, 24 lane and shoulder miles of milling and HMAC resurfacing, bridge widening, Class A, B and C bridge deck repairs, safety, roadway lighting and electrical improvements and MPT. (02/95-02/96)
- Maintenance Resurfacing Contract No. 219 – Inspector for the milling and resurfacing of approximately 45 lane miles of Routes 23 and 46. Project also included removal and replacement of reinforced concrete base and surface courses; concrete joint repair; bridge deck repair; membrane waterproofing; accel/decel lane realignment; drainage, curb and sidewalk installation; inlet relocation; and traffic control. (10/94-01/95)
- Routes 87 and 187 Reconstruction – Inspector for the $14.6 M widening, resurfacing and reconstruction of sections of Routes 87 and 187 in Atlantic City. Widening was constructed through an abandoned landfill requiring environmental control of the removal of 27,000 cy of regulated industrial waste and inspection of the Health and Safety Plan. (02/91-08/92)
- Route 28, Section 7E – Inspector for intersection improvements including relocation, revision and signalization of 8 ramps at 2 locations at Exit 137 of the Garden State Parkway at the interchange with State Route 28. (05/90-02/92)
- Five Intersections Improvements, Secaucus – Inspector for intersection improvements in downtown Secaucus. Project included architectural enhancements; utility relocation; new drainage, curbs, sidewalks and roadway lighting, signs and signalization; concrete base repair; curb-to-curb milling HMAC resurfacing and MPT. (03/89-04/90)

NYC Department of Design and Construction (NYCDDC)

- SEQ-2578 - Inspector for $6.3 million replacement of large diameter (up to 78") sewers in the 162nd Street area of Queens.
- SE-609/715 - Inspector and Office Engineer for $13 million pile supported sewer in the Borden Avenue area of Queens. (01/00-04/00, 06/98-08/98 & 03/96)
- SE-666-07 et al. - Inspector for sewer replacement and reconstruction of 14 streets in Brooklyn. (06/88-09/88)

TBTA, Contract BBM-324 - Inspector for concrete and masonry crack and spall repairs, miscellaneous structural repairs and other repairs at the Brooklyn Battery Tunnel Ventilation Buildings. (05/00-07/00)

OTHER EXPERIENCE

Utility Installation / Roadway Restoration
- ACUA, Coastal Alternative Interceptor
- NJDWSC, 102" Aqueduct
- Somerset-Raritan Valley Sewerage Authority
- Keansburg Municipal Utilities Authority
- Township of Warren Sewerage Authority
- Old Bridge Township Sewerage Authority
- Camden County Municipal Utilities Authority
- Middlesex County Utilities Authority
  Borough of Point Pleasant

Facility Construction / Reconstruction
- Essex County Transfer Stations
- NJSEA, Giants Stadium

GEORGE A. GRIFFITH, SAT, ACI, TCP
Assistant Resident Engineer

EDUCATION

2000 / B.S. Civil Engineering, Stamford University, England
1998 / AAS Mechanical Engineering / AAS Civil Engineering, UCC

LICENSES

2008, NICET Level III, Highway Construction
NJ Society of Asphalt Technologists, Asphalt Pavement Construction Technologist
NJ American Concrete Institute, Concrete Field Testing Technician
Rutgers, Traffic Control Coordinator

EXPERIENCE

Mr. Griffith is a graduate Civil Engineer with 22 years of relevant experience primarily on bridge construction / reconstruction, highway and infrastructure projects for various agencies. Relevant project experience includes:

- Somerset County – As-Needed Construction Services – Washington Avenue Bridge Repair, Green Brook – Inspector for a bridge deck repair project consisting of precast concrete beams, new deck, with 4 deck pours being performed in 2 stages. (03/09-Present) (Ref: John Kendzulak, Jr., Somerset County, [redacted]
- NJ Turnpike Authority (NJTpk) – OPS P3165 , Contract P200.084, Pavement Restoration, MP 139 to 142 and Misc. Ramps – Inspector for a $2.1 million resurfacing project consisting of resurfacing various work areas between MP 74 and 122 on the NJ Turnpike. The project involved SuperPave surface coat; pavement striping, pavement removal; milled rumble strip; inlet repairs, traffic protection and miscellaneous other items. (09/08-01/09) (Ref: John Ernst, NJ Turnpike, [redacted]
- NYSDOT, Scotland Hill Road Bridge Contract – Inspector of bridge deck repairs, removal and replacement of diaphragms, bridge rails and the repair of cap beams. Prepared daily reports and quantity takeoffs. (04/07-07/07) (Ref: RBA Group, [redacted])
- Edison Township, Oak Tree Road Rehabilitation Contract, Edison, NJ – Inspector of milling, paving and striping; installation of storm sewers, catch basins, curbs, sidewalks, traffic signals and wiring. Prepared quantity takeoffs and monthly estimates for payment to the contractor. (04/05-10/06) (Ref: John Medina, Twp. Engineer [redacted]
- NJDOT, Route 206 - Inspector for milling and paving, installation of storm sewers, preparation of quantity takeoffs, installation of guide rail and non-vegetative surface, installation of catch basins, curbs and roadway striping. (04/05-10/06) (Frank Realini, NJDOT, 973/770-5033)
- NYCDDC, Reconstruction of 10th Avenue, New York – Inspector for installation of 36" dia. DIP water main, water sampling and site safety. Prepared daily reports. (10/05-04/06) (Ref: Chris Onechi, NYCDDC, [redacted]
- NYCDDC, SE763, Storm and Sanitary Sewers and Water Mains – Inspector for installation of 8" and 12" water main, taps for new house service, fire hydrants, and water main offsets. The installation of 10" ESVP and 12" DIP sanitary sewer, spurs with connecting 6" DIP to be connected from the spur to within 2' past the curb and a cover of not less than 8' for new house service. The installation of 18" ESVP, 24", 30" and 36" RCP, 53"W x 34"H RCP-CL-HE 111, 5'Wx3'-6"H double barrel FTRC, 60"W x 38"H FTRC, 3'Wx3'-6"H double barrel storm sewer, catch basins, using 12" DIP to connect from the catch basin to the manhole, to include proper sheeting and bedding of excavated trenches. Also curbs, aprons, pedestrian and handicap ramps, preparation of roadway for paving, subgrade and DGA compaction, roadway paving, pile driving. Assisted RE with preparation of change orders. (08/04-09/05) (Ref: Phil Levine, NYCDDC,7[redacted]

- NJ Transit, Rehabilitation of Train Stations – Inspector for the construction of a concession stand, building and resurfacing of stations platforms, building of pedestrian and handicap ramps, train line extension, installation of electrical panels, running conduits for electrical wiring, plumbing, installation of pavers on panels, running conduits for the roadway, platforms and walkways to include tactile pavers for handicap purposes, canopy construction, construction of elevator shaft, welding done on railings, installation of directional signs and the overall maintenance of site. Construction was at the Paterson, Franklin and Washington Street Stations and Plainfield Train Station. (06/01-12/01) (Ref: Ian Finn, NJ Transit, [redacted]
- NJTpk – Contract R-1335A & B, Contract Signing Improvements –Inspector for construction of new concrete foundations, sign structures, sign panels and electrical work. (01/99-02/99)
- NJDOT, Route 133, Hightstown Bypass – Inspector on all facets of highway/bridge construction, including roadway paving, earthwork and landscaping. (09/98-12/98) (Ref: Bruce Kulthau, NJDOT Retired)
- NJDOT, Contracts 95-5, 95-6 and I-267 Bridge Painting – Office Engineer/Inspector of the near white bridge sand blasting and paint. Duties included using ACES11, NJ State computer program to enter daily, weekly and monthly reports and estimates for payments. Also prepared changes orders. (1995-1998) (Ref: Ralph Baliunas, NJDOT Retired, [redacted])
- NJTpk, Interchange 11 to 14 Widening – Inspector of asphalt paving for adding one lane in each direction in the vicinity of 13A and drilling of caissons for sound barrier posts. (1994-1995) (Ref: Norman Stegman, RBA, [redacted]
- NJDOT, Route 31, Section 7C, Clinton – Inspector for the installation of electrical junction boxes, traffic lights and wiring, cast-in-place barrier curb, sign installation, swales, dynamite blasting along with other types of roadway construction. (08/93-11/93) (Ref: Ernie Nolan, RBA, [redacted])
- NJDOT, Park and Bloomfield Avenues, Newark and Bloomfield Roadway Improvement – Inspector for running conduits for electric wires to traffic lights and junction boxes, construction of cast-in-place electric junction boxes and foundations for light posts and traffic lights, curb and sidewalk construction, building of manholes using blocks and cement, and various types of roadway construction. (04/89-12/89)
- Various Bridge Painting Contracts for NJDOT and NJ Turnpike Authority – In Bergen and Passaic Counties (DOT Rte. I-78, 1990; NJTA R-1111, 1991; DOT 93-3, 93-4, 93-5, Rte. 3, 1994-1996; DOT 97-2, 1997-98) and in Morris County (DOT 98-1, 1999). Duties included inspection and reporting of SSPC near-white blasting, complying with OSHA Lead, Health and Safety Standards, utilized recyclable steel shot. Involved in the paint application process using the specified 3-coat process. (Ref: Ralph Baliunas, NJDOT Retired, 732/740-7093 and Mark Bernard, NJ Turnpike, [redacted]
- NYCDOT, Energy Conservation Contract – Inspector on the installation of thermostatic control valves and short-cycle inhibitors on radiators and boilers. Work was performed on all senior and junior high schools located in Brooklyn, Queens, Staten Island and Long Island City. (1986-1987)
- United States Testing Company – Technician responsible for testing of all building materials, performed batch plant inspection on concrete and asphalt plants, equipment calibration, concrete mix designs and compaction tests in the field using a Troxler. (1985-1986)

EDUCATION

B.S. – Civil Engineering, Temple University, Philadelphia, PA, 2009
AA, Science, Bucks County Community College, Newtown, PA

CERTIFICATIONS

2010 NJSAT, Asphalt Pavement Construction Technologist
2010 ACI, Concrete Field Testing Technician

PROFESSIONAL TRAINING

- AutoCAD 2004, Surveying, Soil Mechanics, Probability and Statistics, Structural Analysis, Thermodynamics, Environmental Engineering, Materials Science, Mechanics of Fluids, Transportation Engineering, Steel & Concrete Design, Behavior & Design of Masonry Structures and Construction Engineering.

EXPERIENCE

Ms. Larson has two years of experience in the highway designing field. She has been an Inspector in the field for the last two months on a drainage project. Relevant projects include:

- NJDOT, RCTA TO #11, Route 29 West Amwell Drainage Project – Inspector for this project involving the placement of 24"and 36" diameter reinforced concrete pipe on the East side of Route 29 in Lambertville. The pipe will be connected to eight (8) spillways via cross drains crossing below Route 29 and emptying into the Delaware River canal. Prior to the beginning of any pipe installation, silt fence was installed along the entire length of the West side of the project at the top of the bank of the Delaware River canal and immediately behind the existing guide rail. The outfalls will be constructed from local stone and dried laid to patterns as detailed on the plans and as approved by the local historic commission. The project area is located in a significantly historic and environmentally sensitive area with numerous constraints on what can be constructed and from what particular material. The project is being progressed during both day and night operations. Since Route 29 is a two (2) lane road and detours through the local roads are not permitted, alternating traffic is maintained during construction by the use of flashing arrow boards, cones, signs and uniformed police traffic directors. Subsequent to the installation of the drainage pipe, the pipe trench will be repaved and new pavement markings will be placed. New guide rail may be placed as directed and minor repairs will be made to the existing rock retaining running most of the length of the project on the East side of Route 29 immediately behind the proposed drainage pipe.
- NJDOT, Design of Traffic Control for Railroad Crossings at Various Statewide Locations – As a Highway Designer, designed traffic detours or staged construction of the railroad crossing rehabilitation work at various locations throughout New Jersey. This is a 3-year term agreement and includes approximately 20 crossings per year.
- Conrail Bridge 11.44 over Meeker Avenue, Newark, NJ – As a Highway Designer, designed the traffic detour for the contractor for this accelerated bridge replacement project.
- DelDOT, Elkton Road Proposed Culvert, New Castle County, Delaware – Supported the Structural Engineer with calculations, quantities and CADD drawings.
- City of Philadelphia, Streetscape Project – Incorporated the client's comments in CADD drawings.
- Engineering Internship, McMahon Transportation Engineering Co., Fort Washington, PA – Responsibilities included: drafting using Autocad Land Desktop; quantity calculations and cost estimates using Excel; and highway occupancy permit and ROW plans for various projects including Aramingo Ave., Haverford Reserve, Cheltenham Square, Virginia Drive, Troxel Road, Montgomery Square and SR 422.

ALBERT AGOSTO

Construction Inspector III/Structural Steel Inspector

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Education:

Lincoln College
Bloomington, IL 1983-1985
Evening Courses: Liberal Arts

Apex Technical School
New York, NY 1980-1980
Completed 625 Hrs in Welding Tech.

Kean College of New Jersey
City, State 1979-1980
Completed Courses in
Non-Destructive Testing
(PT, MT, RT, UT)

Licenses/Certifications:

CWI - American Welding Society
ID#. [redacted]
Exp. Date: 12/1/2011

ICC Structural Steel & Bolting Special Inspector
ID [redacted]
Exp. Date: 11/9/2012

ACI Associate Concrete Construction Special Inspector
ID#. [redacted]
Exp. Date: 12/30/2013

ACI Concrete Field Testing Technician Grade I
ID# . [redacted]
Exp. Date: 09/11/2013

NYC DOB 4hr Supported Scaffold User Certificate
ID [redacted]
Exp. Date: 12/21/2013

OSHA 10 hour Construction Safety Training

Level II -Welding/Mechanical/Elec./I&C (ANSI N45, 2, 6)

Level II - VT-PT/VT 1,2,3,4 (ANST/ASME XI)

Years of Experience: **35**

Years with Firm: **<1**

Summary:

Mr. Agosto has 35 years of experience in testing, welding, mechanical and civil work. He was responsible for inspecting and training inspectors in proper protocol for welding inspections. During his career, Mr. Agosto has inspected numerous items, such as concrete, welds, bolts, curtain walls, piles, structural steel, shop work, high-pressure pipes, fire stopping, and bore piping.

Previous Experience:

CIVIL ENGINEERING TECHNICIAN/INSPECTOR
2007-2009
Duties and Responsibilities:
Various Projects
Controlled inspections on foundation and superstructure reinforcement steel placement in pile caps, footings, mats, walls, columns, sheer walls, beams, slab, formwork and concrete placement. Visual inspection on structural steel weldments.

DIRECTOR/STRUCTURAL STEEL DEPARTMENT
NY 2002-2006
Duties and Responsibilities:
Various Projects
Developed and trained a staff of quality techs for structural steel and bridge inspections, welding procedure and welder qualifications. Attended projects/sales meetings. Performed inspections in welding, bolting, decking/studs, fire stopping and curtain wall assembly/erection according to codes and project specifications.

MANAGER/STRUCTURAL STEEL DEPARTMENT
1998-2002
Duties and Responsibilities:
Various Projects
Responsible for supervision of structural steel inspectors, training new personnel, conducting seminars, fabrication shop site visits. Performed inspections in welding, bolting, decking/studs. Inspection of curtain walls sealants/gaskets, high pressure and building services piping.

LEVEL II INSPECTOR
1994-1998
Duties and Responsibilities:

- Project – Grand Gulf Nuclear Station: Energy of small/large bore piping, restraints/snubbers, supports/hangers and structural assemblies.
- Project – Energy/Waterford III: Responsible for performance of quality control inspections, mechanical equipment, small/large bore piping, structural assemblies and instrumentation tubing.
- Project – Grand Gulf Nuclear Station: Responsible for the performance of quality control inspections to support

maintenance and modification activities during refueling outage, consisting of weldments on structural assemblies, piping, pumps, valves and supports/hangers.

- Project – Consolidated Edison Co.: Review and rewriting of construction quality control procedures. Performed inspections associated with welding, mechanical equipment, instrumentation, piping, supports/hangers, structural steel, expansion anchors, grout, cable and terminations.

LEVEL II INSPECTOR
1997-1997
Duties and Responsibilities:

- Project – VEPCO/Surry II: Inspection of Vital Bus-cross tie breaker installations. Inspection of small/large bore piping, valves, pumps and supports/hangers.
- Project – New York Power Authority: Inspection performed on small/large bore piping, supports/hangers, and structural assemblies. Inspection of anchor bolts, beam/column and base plate installations.

LEVEL II MECH/ELEC/WELDING/I&C/PT
1993-1993
Duties and Responsibilities:
Project – Consolidated Edison Co. (Modifications/Refueling Outage)
Over Inspection performed on site contractors during welding of support/hangers, small/large bore piping. Electrical equipment installations, wire pulls/terminations. Inspections of reactor coolant pump replacement, fire header installations. Material data verification for intermat program.

STRUCTURAL STEEL INSPECTOR
1991-1992
Duties and Responsibilities:
Project – Dormitory Authority State of New York
Inspection of material preparations, weld inspection of roof trusses, columns and beams. Inspection of completed assemblies including coordination of testing laboratories on all full penetration welds. Steel fabrication shop site visits.

CONTRACT COORDINATOR
1990-1990
Duties and Responsibilities:
Project - Long Island Lighting Co. (Contract Management Division)
Responsibilities entail inspection, coordination and evaluation of work performed by contractors executing capital construction on case boring operation. Excavation, shoring/sheeting of jacking/receiving pits.

CORROSION INSPECTOR
1990-1990
Duties and Responsibilities:
Project – Exxon Company USA (Maintenance Shutdown)
Integrity testing of tanks, piping/pressure vessels (hydrostatic and pneumatic). Corrosion/erosion monitoring analysis utilizing ultrasonic. Visual weld inspection of tank, vessels, small/large bore piping.

FIELD COORDINATOR
1989-1990
Duties and Responsibilities:
Project – Long Island Lighting Co. (Project Management)
Inspection coordination and evaluation of work performed by contractors executing capital construction alteration and demolition on fire protection/detection system. Record changes impacting the project scope, cost or schedule.

REYNALDO C. ALONSO

Construction Inspector III

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Education:

University of Texas–Pan American
Edinburg, Texas
Master of Science in Engineering – Quality Systems Concentration

Technological Inst. of the Philippines
Manila, Philippines
Bachelor of Science – Mechanical Engineering

Licenses/Certifications:

CWI - AWS - Certified Welding Inspector – ID# [redacted]
Exp Date: 7/1/2011

ACI– Concrete Field Testing Technician- Grade I
ID# [redacted]
Exp. Date: 12/1/2012

ICC Structural Steel and Bolting Special Inspector –
ID# [redacted]
Exp Date: 2/14/2012

ICC Spray-Applied Fireproofing Special Inspector – ID# [redacted]
Exp Date: 7/15/2011

Attended In-House Training for NDT – UT Level I & II

OSHA 10hr Safety Course
ID# 002107995

NYC DOB 4hr Supported Scaffold User Certificate
ID#: SS09-8442R
Exp. Date: 7/28/2013

Eligible for Certification in Structural Welding (ICC) and Visual Testing (VT) Level II ASNT

MTA NYC Transit Track Safety Certification – ID# [redacted]
Exp. Date: 7/15/2011

Years of Experience: **7**

Years with Firm: **1**

Summary:

Responsibilities include performing technical inspections and plant/equipment evaluation services for concrete plants and related materials; Check for quality assurance conditions of concrete mixing trucks, moisture content (ASTM-94) scale calibration and perform field sieve analysis. Also performed inspections involving structural steel, concrete work, masonry, and fire stopping.

Relevant Experience:

Contract C-000010237/10601, Consultant Services for Controlled Inspection,
NYC SCHOOL CONSTRUCTION AUTHORITY, Bronx/Manhattan
Responsibilities include performing Controlled Inspection and testing inspections of on-going masonry, steel and fire proofing work. Various project locations. Reporting circumstances of field activity to NYC SCA Project Officers. Maintaining supportive documentation of field activities and Contractor operations. (2009-Present)

NYCDDC – Various Sites, NYC-Inspector
Performed inspections for steel and welding work under citywide *Controlled Inspection and Testing Laboratory Services* contract. (2009-Present)

DASNY – Term Agreement for Construction Inspection and Materials Testing Services – Inspector
Performed steel inspections at LaGuardia Community College. Reported findings to client to ensure compliance to specifications. (2009-Present)

Silverstein Properties – World Trade Center – Tower 4 –Inspector
Responsible for inspecting steel at Ground Zero to ensure specification compliance. Constantly in communication with the client and the Project Managers to notify all parties of any issues. Working together with various trades to create a productive work environment. (2009-Present)

OGS – NY Psychiatric Institute, Fordham University – TSS
Conducting steel inspections; bolting inspection including Skidmore Testing. Responsible for all steel inspections including partial and full penetration welds, bolting, Skidmore Testing, shear connections, decking and shear studs. Verified that all welding laborers had the proper certification. (2009-Present)

Empire Development – Jacob K. Javits Convention Center
Provided inspection services for the expansion and renovation of the Jacob K. Javits Center. Mainly involved with structural steel inspections. Reported daily activities, created and followed up on deficiencies, and worked with the contractor/client. (2009-Present)

Previous Experience:

FIELD INSPECTOR/QUALITY ENGINEER
Testwell Laboratories Inc., NJ 2007-2009
Duties and Responsibilities:
Performed inspections on structural steel (shear stud and metal deck, and shop and field inspection of bolting and welding), shop inspections in the states of New Jersey, Delaware, Pennsylvania, and Connecticut. Also performed inspections on structural masonry, reinforced concrete, fire stopping, levelness testing, and impact echo thickness testing. HVAC and piping inspections (air duct leak testing, pipe leak, and pressure testing). Developed testing procedures, trained inspectors, and calibrated tools. I
represented the company in meetings with clients and contractors along with submitting daily reports.

FIELD INSPECTOR
U.S. Laboratories Inc., NJ 2005-2006
Duties and Responsibilities:
Performed inspections on reinforced concrete and structural masonry on the quality of materials and workmanship; based on specifications, codes and referenced drawings. Created a process improving the team along with submitting daily reports.

QUALITY SYSTEMS WORKS AND EXPERIENCES
UTPA, TX 2002-2004
Duties and Responsibilities:
Worked on documentation and implementation of Quality Systems (ANSI & ISO) and used management tools like CPM, Gantt Charts, Flowchart, Fish Bone Diagram, Control Charts, Relationship diagrams, Benchmarking and other quality tools.

IBRAHIM GABER
Construction Inspector

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Education:

Faculty of Engineering
Alexandria, Egypt 1987
Bachelor of Mechanical Engineering

Licenses/Certifications:

ACI Concrete Field Testing Tech. Grade I
ID# [redacted]
Exp. Date: 9/6/2013

ICC Spray-Applied Fireproofing Special Inspector
License No. [redacted]
Exp. Date: 4/5/2011

ICC Structural Steel & Bolting Special Inspector
ID# [redacted]
Exp. Date: 4/10/2013

AWS Certified Welding Inspector
License No [redacted]
Exp. Date: 4/1/2012

NYC DOB 4hr Supported Scaffold User Certificate
ID# [redacted]
Exp. Date: 12/21/2013

OSHA 10hr Safety Course
ID# 002069124

Years of Experience: **22**
Years with Firm: **.5**

Summary:

Mr. Gaber has over 22 years of experience in all aspects of construction and mechanical workings. His responsibilities included maintaining material, conducting inspections, reporting to clients and managing the jobs. Mr. Gaber performed welding, mechanical, concrete, fire proofing, and plant inspections.

Relevant Experience:

NYCSCA Contracts C-10237 & 00045R, Consultant Services for Controlled Inspection, Five Boroughs of NYC
Responsible for controlled inspection of structural steel, concrete placed on-site, fire stopping and fire proofing at various project locations throughout the five boroughs of NYC. Report circumstances of field activity to Project officers. Maintain supportive documentation of field activities. (On-Going)

Previous Experience:

FIELD INSPECTOR (2009)
Duties and Responsibilities:
- Site supervision and managing the man power.
- Maintaining the quality of work, as per the municipality regulations.
- Completing work as per the drawings and specifications.
- Controlling and applying MPT plans.
- Daily reports for agreeable quantity of work done.

FIELD INSPECTOR (2008-2009)
Duties and Responsibilities:
- Performed field inspection for major construction projects within the metropolitan area.
- Performed field tests including concrete and asphalt placement, soil density, fire proofing and bond test.
- Reviewed fabrication drawings and verified compliance with codes and specifications.
- Performed welding and integrity field inspection for structural steel frames.
- Carrying out steel fabrication drawings from provided blueprints.

PROJECT MANAGER (2003-2008)
Duties and Responsibilities:
- Monitored schedules and took appropriate actions to ensure project completion on schedule and within approved cost limitations, successfully completing all projects on time and under budget.
- Performed inspection for roadway construction, sewer and water main installations.
- Inspected structures for structural safety and prepared daily reports for professional engineer review.
- Performed drawings take-offs from contract drawings and developed a spreadsheet for material and labor cost estimates.
- Utilizes Primavera Project Planner to schedule critical project activities.

MECHANICAL ENGINEER (TRAINER)
Ministry of Scientific Research, Egypt 1997-1998
Duties and Responsibilities:

- Training in machining and forming processes.
- Practical training using the computer in design and manufacturing.
- Calibration and instrumentation.

MAINTENANCE ENGINEER
The Engineering Co. for Manufacturing, Egypt 1995-1997
Duties and Responsibilities:

- Machinery erection and installation.
- Trained all new hires in policies and procedures.
- Planned strategies to reduce costs, improve quality, and meet future requirements.
- Scheduled and performed preventative maintenance of auxiliary equipment.
- Expanded capability of factory production by 10%.

ENGINEER IN CHARGE
Zahran Co., Egypt 1992-1995
Duties and Responsibilities:

- Made technical and process recommendations to project management.
- Skilled in troubleshooting and problem solving.
- Reviewed and prepared weekly project status reports for management.
- Provided on-site and in-house training and service.
- Consulted with engineering personnel to resolve unusual problems in system operation and maintenance.

SHIFT ENGINEER
COLLOID Co., Egypt 1992-1992
Duties and Responsibilities:

- Production planning and control.
- Material control.
- Maintenance and periodical repair schedule.
- Maintained all engineering documents and schematic updates for field repairs.
- Demonstrated record of high performance standards, including attention to schedules, deadlines, budgets, and quality work.
- Fire safety.

MAINTENANCE ENGINEER
Egyptian Fishing Company, Egypt 1991-1992
Duties and Responsibilities:

- Material control.
- Machining processes for various types of material.
- Production processes and standards.
- Planned and organized production and maintenance activities.
- Motivated warehouse staff to increase employee productivity and team cohesiveness, successfully completing all projects on time and under budget.

ALAN ZHENPING YU
Welding Inspector

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Education:
Master's Degree in Materials Engineering – 2000/2001
Master's Degree in Materials Engineering – 1985/1988
Bachelor's Degree in Materials Engineering – 1981/1985

Licenses/Certifications:
NY Professional Engineer License [redacted]

American Welding Society-CWI
ID# [redacted]
Expires: 8/1/2012

ICC Structural Steel and Bolting Special Inspector [redacted]
Exp. Date: 4/10/2012

ASNT NDT Level III
-Ultrasonic Testing
-Magnetic Particle Testing
-Liquid Penetrant Testing

OSHA 10hr Safety Course
ID# 1411145

NYC DOB 4hr Supported Scaffold User Certificate
Exp. Date: 4/216/2011

Training Hellier Nantic, CT.

Supplementary training on Resistance Spot Welding in SLV-Duisburg, Germany

Training on European Welding in SLV-Duisburg, Germany – Certificate European Welding Engineer

Certified Welding Inspector (CWI) from American Welding Federation (EWF)

Years of Experience: **20**
Years with Firm: **2**

Summary:
Responsible for structural steel control inspections, including welding inspections, fireproofing inspection and fire-stopping inspection.

RELEVANT EXPERIENCE:

NYCSCA Contract C-00045R, Citywide Laboratory Testing and Controlled Inspection Services – Construction Inspector
Leading controlled inspection and testing for the construction of school buildings. Components include: structural steel, fireproofing, and firestopping, and structural stability, HVAC, and window leak testing. All work is being performed in compliance to NYC Fire Prevention and Building Codes. Also responsible for maintaining supportive documentation of field activities and Contractor operations. To date, 360 projects varying from small maintenance type projects to new schools have been completed or currently underway. (2010)

NYCSCA Term Contract #10237 – Construction Inspector
Performing inspections to ensure compliance with construction plans, specifications and building code requirements for various schools across the boroughs of Manhattan, Queens and Brooklyn. To date, 550 projects with assignments involving the demolition of existing school buildings and construction of new buildings replete with classrooms, auditoriums, gymnasiums, cafeterias, administration offices, cellars, etc. have been completed or currently underway. (2009)

DASNY – Term Agreement for Construction Inspection and Materials Testing Services – Field Engineer
Supervising construction inspection and materials testing for soils, concrete, masonry, asphalt and structural steel materials for multiple projects ranging from the construction of new buildings or additions to rehabilitations of State-owned facilities. (2010)

NYCDDC, Controlled Inspections and Testing Laboratories #8502004RQ0001C, Citywide, NYC – Field Engineer
Leading controlled inspections and associated documentation for pilings, sub grade, controlled fill, welding, aluminum, laminated wood, cable fittings, smoke test, fire stops, refrigeration systems, fuel burning and storage units, noise control tests, high pressure steam, soil percolation test, curtain and panel walls, shoring, structural stability, asphalt, masonry, and concrete. (On-Going)

Previous Experience:

Material Testing Lab Inc., Farmingdale, New York - Structural Steel Inspector
Structural steel control inspections, including welding inspection; high strength bolts inspection; decking, stud welding inspection,

fireproofing inspection; fire-stopping inspection and curtain wall inspection. Projects include NYC School Construction Authority projects; Con Edison Mott Haven Plant; LIJ hospital; MTA projects, etc.

UAD Group Inc. Brooklyn, New York - Quality Manager
Managed quality assurance system for shop production and field installation. Responsibilities include: reviewing shop drawings, fabrication drawings and installation plans. Found root cause of failures that occurred in engineering production and installation. Conducted daily product inspection.

Harbin Welding Training Institute, Harbin, China - Chief Engineer/ Welding Engineer
Responsible for the Quality Management System of welding training and researching. Conducted training of Welding Engineer, Welding Specialist and welder according to European and Chinese specifications. Supervised Welding Engineering, welding of steel structures and pipelines.

Hazardous Waste Section - Engineer 2
Supervised contractors in the assessment and remediation of EPA/NPL sites; coordinated said activities with State and Federal Environmental representatives; prepared cases for court trial; wrote grant requisitions; prepared reports, and reviewed analytical data to determine proper disposal of contaminated materials and hazardous waste.

Hazardous Waste Section Airport Program - Pollution Inspector II
Supervised inspection of fuel lines and installation of monitoring wells; inspected aircraft maintenance, fuel storage and fuel transmission facilities; monitored underground fuel spills and recovery systems, supervised groundwater evaluation program.

Pollution Inspector I
Performed inspections of waste treatment plants and industrial & commercial facilities, provided guidance to regulated waste sources on best management practices and documented violations and verified compliance with Chapter 24, Pollution Control Ordinance, MDCC.

SHAKIR M. ALI, ACI, SAT, C.E.T., NACE I
Inspector

EDUCATION

1978, M.S., Karnataka University, India
1998, Diploma in Client Server Programming, Business Training Institute, NJ
1990, A.A.S. in Civil Engineering Technology

REGISTRATION

NICET Level I & II (Registered & Approved for Test in June 2007)
NACE CIP Level I (Registered for Training May 14-19, 2997
OSHA 510 Occupational Safety & Health Standards for Construction Industry, 30-Hour Course
SSPC C-3 Supervisor/Competent Person Training for De-leading of Industrial Structures

EXPERIENCE

- NJDOT, Route 93 Drainage Contract, Leonia – Inspector for $7.3 M project involving the replacement of existing drainage and associated pavement restoration in Leonia Borough, Bergen County. (05/08-Present)
- Technocrats, Inc., Yonkers, NY - Building Construction Supervisor responsible for projects that involved repair and renovation of independent houses and buildings including plumbing system and sheetrock work; insulation of floors and walls; laying the asphalt shingles; utility connections, etc. Duties included supervising construction operations, preparing estimates, bids and relative documents and planning and scheduling of the work operations. (2006-Present)
- Reed Drive Construction Corp., Long Island City, NY – Project Manager/Supervisor for projects that involved repairs and reconstruction of sewers at NY Hospital, Queens, NY including installation of ConEdison vault in Manhattan, NY; repair and reconstruction of sewers and driveways at several individual buildings and houses. Duties included coordination with foremen of all trades to execute construction operations; supervision and management of construction operations; preparing of bids and relative documents; ensuring contractor compliance of bid and contract specifications and Code 753 ("Call before you dig" rule of NYC); planning and scheduling of the operations; obtaining excavation and lane closure permits; transmitting concrete and asphalt core samples to materials testing labs and obtaining all necessary lab results as per contract specifications; coordination with the utility companies to resolve the right-of-way issues and processing of work orders; processing of all paperwork pertaining to insurance and bonding of contracts; purchasing all required materials; initiation and negotiation of change orders; establishment of a full functioning office for the company – including computer system, accounting procedures, filing system and did the work of accounts payable & receivable . (2005-2006)
- Perfetto Engerprises Co., Inc., Staten Island, NY – Project Manager/Supervisor for two NYCDDC projects ($3.6 M) involving the reconstruction and construction of catch basin in various locations in Staten Island. (2004-2005). Duties as above. (2004-2005)
- Audax Construction Corp., Long Island City, NY – Project Manager/Supervisor for responsible for the following projects. Duties as above. (1999-2004):
  NYC DDC 1999-2001 and 2008)
  - Contract HWX211T5B, Step Steet at 183rd Street, Bronx, $5.2 M
  - Replacement of Sanitary & Vitrified Clay Pipe Sewers in Sutphin Blvd, Queens, $3.8 M
  - Installation of Pedestrian Ramps in various locations, Brooklyn, $7.6 M
  - Improvement to Continental Ave from Queens Blvd. to Burns Street, Queens, $0.5 M
  - Replacement and Reconstruction of Sewers at Elbertson Ave & Whitney Ave, Queens, $0.8 M
  - Replacement of Sanitary and Combined Vitrified Clay Pipe Sewers at Various Locations, including E. Williston Ave in Queens, $3.6 M
  - Replacement of Existing Sanitary & Clay Pipe Sewers at Various Locations in the Bronx, $3.4 M
  - Reconstruction of Collapsed or Otherwise Defective Storm & Sanitary Sewers at Various Locations, Brooklyn, $2.3 M

NYCDDC / NYCDEP (2000-2004)

- Construction of Catch Basins No.11 in various locations, Brooklyn, $0.5 M
- Reconstruction & Replacement of Broken Water Mains on Emergency Basis, City Wide, $10.0 M
- Reconstruction of Collapsed or Otherwise Defective Storm, Sanitary and Combined Vitrified Clay Pipe Sewers in various locations, Brooklyn, $3.4 M
- Reconstruction of Collapsed Cement Pipe Combined Sewers in various locations, Queens, $1.9 M
- Reconstruction of Collapsed or Otherwise Defective Storm, Sanitary or Combined Vitrified Clay Pipe Sewers in Various Locations, Queens, $3.0 M
- Reconstruction of Collapsed or Otherwise Defective Storm, Sanitary Sewers and Appurtenances in various locations, Brooklyn, $3.4 M

The Downtown Alliance, Manhattan - O'Brien Krietzberg and The Liro Group, Beautification of Broadway from Chambers Street to State Street, $2.0 M (2003-2004)

Bank of New York - Installation of Security Bollards for Bank of New York, Manhattan, $0.5 M (2003)

The Grand Central Partnership, NYC - Replacement of Sewers for Rehabilitation of 53rd Street Subway Station, Manhattan, $1.2 M (2002-2003)

RAYMOND D. FISCHLEIN, P.E.

Resident Engineer

TECTONIC
Practical Solutions, Exceptional Service

Education:
B.S. Civil Engineering, Lowell Technological Institute, Lowell, Massachusetts

Licenses/Certifications:

Professional Engineer,
License [redacted] New York

Years of Experience: 38
Years with Firm: 5

Highlights:

Over 33 years experience working at the New York State Department of Transportation on a variety of transportation inspection projects.

Summary:

As Project Manager, responsibilities include technical supervision of staff, assignment of personnel, budget control, proposal preparation and client liaison, quality assurance oversight of highway and bridge projects for various State, County and local governments. Duties include contract administration, monitoring employee performance, and oversight of construction activities.

Relevant Project Experience:

D030549 Construction Inspection on the Rte 17 upgrade to I-86 in the Town of Wallkill, Orange County - $63M (2008 to 2011)
Project consists of upgrading State Rte 17 to Interstate standards between Exit 116 and Exit 121. When completed the project will include 3.6 miles of full depth pavement replacement, 3.1 miles of mill and fill, 3.3 miles of crack and seat with mill and fill work on the various ramps. It will also include rehabilitating Scotchtown Road bridge over Rte 17, the Rte 17 bridge over Rte 17K, the Rte17 bridge over Rte 211, the Rte 17 bridge over the Norfolk Southern RR anf the Rte 17 bridge over I-84. A new bridge will be constructed to carry Rte 17 over a new Town Road just north of I-84. Construction to begin in January 2009.

D030574 Term Agreement for Construction Inspection Services for NYSDOT, Region 8, Project Manager
Work consists of providing construction inspection services on a wide variety of highway and bridge type projects in Region 8. Inspection work to include paving, earthwork, new bridge construction, bridge maintenance, guide rail, crack sealing, signs signals, graffiti removal, SPEDES work, soil borings, bridge painting, drainage work, curb, sidewalks, etc. Peak staff anticipated to be 25 to 30 on 18 projects. Work started in December 2008. Estimated Construction costs at $35M. (2008 to 2011)

D015696 Term Agreement for Construction Inspection Services for NYSDOT, Region 8, Project Manager
Work consists of providing construction inspection services on a wide variety of highway and bridge projects. Inspection work consisted of paving, bridge maintenance, guide rail, crack sealing, signs, signals, graffiti removal, SPEDES, soil borings, bridge painting, drainage, retaining walls, new bridge construction, etc. Peak staff for 2007 was 28 on approximately 15 projects. Work started in March 2008. Highway and Bridge Construction Costs estimated at $25M. (2008 – 2011)

D015649 Term Agreement for Construction Inspection Services for the NYSDOT, Region 8, Project Manager
Work consists of providing construction inspection services on a wide variety of highway and bridge projects under a term agreement with NYSDOT. Services to include providing inspection as follows: paving, bridge maintenance, guide rail, crack sealing, signs, signals, graffiti, SPEDES, soil borings, bridge painting, etc. Peak staff for 2007 was 27 inspectors on approximately 18 projects. Highway and Bridge Construction Costs estimated at $30M. (2007 – 2010)

Project Manager, NYSDOT Project Construction of Ramp X on SB Taconic State Parkway and Route 9A/100 - $14M
Project involves constructing a ramp to carry SB Route 9A/100 traffic up and over Route 9A/100 and onto SB Taconic State Parkway. Project includes a new bridge to carry the ramp over Route 9A 100; construction of the ramp; relocation of an existing bikeway; extensive drainage work; rehabilitation of a bridge on Route 9A/100 over the Pocantico River; overhead sign work and extensive wetland mitigation work including removal of invasive species. The bridge has a pile foundation and a curved girder deck, single span with spliced steel. (2006 to 2007)

Project Manager under the NYSTA Term Agreement on NYSTA TANY 07-21B/D213680- Painting of Two Bridges on the New York Division –($1.3 million) Responsible for providing inspection and field office support services for the painting of the Cross County Parkway Bridge over the NYS Thruway and the NYS Thruway Bridge Mile Square Road in Yonkers. (2007)

Project Manager under the NYSTA Term Agreement on NYSTA TANY 05-37/D213542-
Installation of Epoxy and other Pavement Markings at various locations in the New York Division- $0.7M. Responsible for providing inspection support services for this pavement marking contract. (2007)

Project Manager under the NYSTA Term Agreement on TANY 04-71/D231394
Installation of Variable Message Signs (VMS) and Closed Circuit Television (CCTV) Cameras at various locations in Ulster, Rockland and Westchester County ($1.8M). The project involved installation of variable message signs, television cameras and all related equipment necessary to install, operate and protect this equipment. Responsible for providing inspection support services on this ITS contract. (2006)

TANY 06-12B Steel Repairs to Damaged and Deteriorated Bridges in the New York Division ($1.4M)
Project Manager under the NYSTA Term Agreement on TANY 06-12B/D213562 Steel Repairs to Damaged and Deteriorated Bridges in the NY division. Project involved heat straightening damaged girders at various locations within the division. Responsible for providing inspection supports services for this damaged steel repair contract. (2006)

NYSTA TANY 06-43 Roadway Resurfacing with Safety Improvements and Miscellaneous Work from MP 29.5 to MP 38.7 on the NYS Thruway ($14M)
Project Manager responsible for inspection oversight. Project involves cold milling the existing asphalt concrete pavement and replacing it with 50 series superpave asphalt concrete pavement. Also included will be the installation of traffic monitoring devices, shoulder treatment (STARS, pavement markings, removing and upgrading the guide rail and bridge joint work at four (4) bridges and some sign work. This project had mandatory night work and strict milestone completion dates. (2007 to 2008)

Replacement of Bridge C-7, Replacement of Bridge RH-5 & Replacement of Drainage Structures R-20, S-18 and S-19; Dutchess County Department of Public Works; Project Manager
Project Manager responsible for contract administration and staff supervision for all construction activity associated with the replacement of $1.5 million project which included 2 Bridges and 3 culverts in Dutchess County. Project bridge work consisted of bridge demolition, new abutments on spread footings, new abutments on piles, backwalls, bearings, concrete beams with a concrete deck overlay, bridge rail, new concrete approach slabs and paving work on the approaches. Both bridges are over streams necessitating cofferdams and stream diversions. Culvert work includes removing the existing culverts and replacing same with pre-cast concrete box culverts. Other work at the culvert sites included the realignment of the approach roadways, bridge rail, guide rail, T-walls construction, cofferdam work and paving. Total project cost was $1.5 M. (2006)

D259569 Asphalt Concrete Reconstruction/Rehabilitation of Five Bridges on I-684 Project Manager
This $16 million project involved crack and seating and subsequently resurfacing 5.4 km of I-684 (6 lanes wide plus shoulders) with asphalt concrete base, binder and top. Also included was the rehabilitation of five bridges, guide rail, drainage, ITS, signs and pavement markings. Bridge rehabilitation work consisted of deck work, bearings, bridge rail, joints and painting the structural steel. (2005 to 2006)

D213322 Term Agreement for Construction Inspection Services for the NYSTA, NY Division, Project Manager
Work consisted of providing construction inspection and material testing services on various projects under a term agreement with the NYSTA. Services included providing inspection personnel on road and bridge type projects for on-site inspection of the work including soils, concrete, asphalt, environmental and material testing. Responsibilities included contract administration and construction management. (2006)

Registrations
1988 / PE / PA,
1991 / PE / DE,
2003 / PE / NJ,
1990 / PE / MD,
1983 / PE / VA,

Education
BS, Civil Engineering, Drexel University, 1978

Professional Affiliations
American Society of Civil Engineers (2008 President, Delaware Section)

Construction Management Association of America

National Society of Professional Engineers

Technical Expertise
- Project Management
- Construction Management
- Construction
- Field Supervision
- Hazardous Waste Remediation
- CPM Scheduling
- Permitting
- Governmental Liaison
- Construction Contracts

Judson Goldsborough, PMP, LEED AP

Project Manager

Professional Profile

Mr. Horenburger has more than 29 years of construction and project management and civil engineering experience in environmental remediation, highway construction, public works, and construction administration for governmental and commercial clients. His expertise includes: design and construction project management; public presentations; quality control management; permitting; work plan preparation; review of multi-discipline drawings (including land development drawings); preparing specifications and cost estimates; preparation of subcontractor bid specifications; constructability reviews; construction claims analysis; bid proposal evaluation and contractor selection; CPM scheduling; supervision and coordination of field projects; contract negotiations; and subcontractor management. Mr. Horenburger has worked as a Construction Manager with several nationally recognized firms, such as URS, Pennoni Associates, Edwards and Kelcey, Schoor DePalma, and Urban Engineers.

Project Experience

Arora Engineers, Inc., Project Executive – CM: Construction Manager for several projects at the Atlantic City International Airport for the South Jersey Transportation Authority. Projects include: Facility Upgrade and Interior Renovation Project, a $2.5 million renovation of the main terminal including new terrazzo floors and carpeting, new ceiling and programmable lighting systems, HVAC improvements, and restroom renovations; a $325,000 Security Camera Upgrade installation including the installation of more than 80 digital PTZ and fixed cameras throughout the airport complex, plus integration of an existing CCTV system of over 80 analog cameras in a parking garage into a single video management system with the capability of recording all cameras on DVR for over 60 days; CUSS and MUFIDS Project – Installation of a new state-of-the-art Flight Information Data System with flight information displays throughout the airport, all tied into a central database system.

URS Corporation, Town Engineer, Centreville, MD: Served as the Town Engineer for the design and construction of several municipal projects. Served as Town Engineer for the Town of Centreville, Maryland. Projects managed include:

- Little Kidwell Avenue Road and Utility Reconstruction Project - Project Manager for design and RPR services; project completed December 2007; cost is $1.9 million. Project includes replacement of 1,400 LF of sanitary sewer and manholes, new water main and laterals, and complete reconstruction of arterial street.
- Design and construction of the Chesterfield Avenue Road and Utility Reconstruction Project – Provided design and RPR services; construction cost was estimated at $2.3 million. Project includes full reconstruction of the former SR 304 through the town 0.6 miles. Features included: new curb and sidewalks, replacement of some sanitary sewer lines, and traffic calming features such as bump-outs and texturized cross-walks.
- Sanitary Sewer Investigations - Project Manager for various sanitary sewer investigation, testing and sealing projects. Design and field services, valued at over $500,000.

URS Corporation (continued):

- Constructed Wetlands - Project Manager for the design of a pilot program constructed wetlands. Project was selected and funded by a grant from the Maryland State Highway Administration (SHA) to collect and treat stormwater runoff from Route 213 in a constructed wetlands on municipally-owned property. Cost estimated at $240,000.

- Waterfront Park Design - Project Manager for the design of a waterfront park. Features included environmentally sensitive landscaping, new bulkheads, and a boardwalk for public access. Project was partially funded by a grant from the Maryland Department of the Environment. Construction cost: $95,000.

- Elwood W. Crossan Memorial Park, Multi-Purpose Field, Franklin Township, PA: Project Manager for the design and construction of a multi-purpose field. Grading of a sloped hillside was done to create a soccer/football field, as well as environmentally-friendly drainage features. Construction cost: $250,000.

Schoor DePalma, Inc., Municipal Department Project Manager, Voorhees, NJ: Municipal Department Project Manager servicing clients in New Jersey and Pennsylvania. Projects included:

- Woolwich Township, Gloucester County, NJ - Township Engineer. Duties entailed: reviewing subdivision plans, coordinating inspection services for subdivisions, general consulting to mayor and council.
- Adventure Aquarium - Project Manager for design of new roads and parking areas serving aquarium and other waterfront facilities as part of urban renewal project in Camden, NJ
- Recchino Sports Complex in Haddon Township, NJ - Project Manager for design and construction of a sports complex. SOW included upgrading the existing sports field to synthetic turf. Significant grading and drainage work was involved.
- New Middle School, Vineland, NJ - Project Manager for civil/site design on state-funded project.
- Streetscape Project, Haddon Avenue, Westmont, NJ - Project Manager for design/construction of a streetscape project on Haddon Avenue (Route 561).

JCA Associates, Inc., Various Projects, Moorestown, NJ: Chief Civil Engineer responsible for managing a group of 14 design engineers. Provided general civil, structural and environmental designs primarily for numerous municipal and public agency clients in New Jersey. Group projects include site design, wastewater treatment plants, sanitary landfills, bridge designs, roadway improvements, site feasibility evaluations for school construction, etc.

Registrations
Microsoft Certified System Engineer

Education
AS, Sylvania Technical Institute, 1976

Technical Expertise
- Anti Backflow Systems
- Optical Exit Portals
- CCTV Systems
- Digital Recording
- Fiber Optic Cabling
- Twisted Pair Transmission
- Security Access Systems
- Badging Systems
- Perimeter Control
- Door Security
- Baggage Handling Systems
- Terminal Announcement Control Systems
- Automated Toll Collection Systems

Daniel J. Drumm, MCSE

Project Specialist

Professional Profile

Mr. Drumm has over 33 years of construction management and special systems experience, including CCTV, access control, intrusion, fire systems, baggage handling, and explosive detection. He also possesses proficient computer skills as Microsoft Certified Systems Engineer.

Project Experience

City of Philadelphia, Division of Aviation, Terminal D/E Expansion, Special Systems Inspection, Philadelphia International Airport, Philadelphia, PA: Technical Specialist on Arora's onsite construction management team providing support for the installation and startup of all electronic systems. Assured quality control of CCTV, security access, UCDS, fiber optic cabling, baggage handling and A/V systems. Assisted install and startup of Optical Portals and Anti-Backflow Systems.

City of Philadelphia, Division of Aviation, Special Systems Design, Philadelphia International Airport, Philadelphia, PA: Provided technical support for all security and system installations and upgrades. Systems included baggage handling, fire, CCTV, MUFIDS, security access, and explosive detection. Assured that all systems were installed and operating according to DOA standards. Responsible for coordination with the DOA, airlines, vendors, and construction groups. Daily management activities include scheduling, coordination, quality assurance, code consulting, and document control.

City of Philadelphia, Division of Aviation, Terminal F Commuter Construction, Philadelphia International Airport, Philadelphia, PA: Onsite security specialist providing installation, coordination, testing, and start-up of CCTV, security access, telephone and MUFIDS systems. Interfaced with construction managers and contractors to insure timely completion of the terminal. Responsible for security surveillance, multi-user flight information displays, security access, fire alarm, terminal announcement control systems, and universal cabling and distribution systems. Coordinated startup testing and training so that proper operation and standards were met according to specifications and design criteria.

New Jersey Turnpike and Garden State Parkway, NJ: Field Manager for the installation and startup of automated toll collection equipment (EZ Pass). Performed training on toll collection and CCTV systems. Interfaced with roadway officials and union and non-union personnel.

Sheeba Minhas

Field Engineer/Inspector

Education
BS, Electrical Engineering, Drexel University, 2005

Technical Expertise
- MUFIDS
- Universal Cable Distribution Systems
- Networks and Infrastructure
- Field Assessment
- Airfield Lighting and Control Systems
- Security Access and Surveillance Systems
- Construction Management
- Project Management

Professional Organizations
Women in Transportation Seminar (WTS)

Professional Profile

Having worked on several major capital construction projects, Ms. Minhas has developed specialized engineering expertise in aviation design and management. She has worked on project experience from conceptual phase through design and construction. Ms. Minhas is a key member of Arora's onsite Construction Management Team stationed at Philadelphia International Airport. As such, she has the opportunity to interact with clients, contractors, airport management, and other architectural and engineering design firms.

Project Experience

City of Philadelphia, Division of Aviation, Marketplace Philadelphia Management (MPPM), Philadelphia International Airport, Philadelphia, PA (2006 – Present): As a Project Engineer, duties include review of project drawings to confirm that the design meets code and airport standards, field assessment, resolution of onsite construction issues, project coordination with DOA departments and organizations, such as the Communication Center, Facilities/Job Control, Police, Fire Department, Security, airlines, and various tenants. MPPM projects involve the construction of retail stores and restaurants – Jet Rock Bar & Grill, Sunglass Hut, Johnston & Murphy, Jack Duggan's Pub and Restaurant, CNBC News, Au Bon Pain, Dunkin Donuts, Chickie's & Pete's, Vino Volo, Brookstone, Wilsons Leather, Swarovski, Taxco Sterling, Philly Steak & Gyro, and International Shoppes - throughout the airport.

City of Philadelphia, Division of Aviation, Southwest Airlines 5 - Gate Expansion, Terminal E, Philadelphia International Airport, Philadelphia, PA (2008): Served as Project Engineer. Project consisted of relocation of three gates including their passenger boarding bridges, two new gates, new customer service office, holdroom renovations and upgrades to announcement control system, fire protection, access control and CCTV surveillance system. Approximate cost: $2.5 million.

City of Philadelphia, Division of Aviation, Southwest Airlines T- Point Expansion, Terminal E, Philadelphia International Airport, Philadelphia, PA (2007 – 2008): Worked as Project Engineer. Project was comprised of a new building (Sprung structure), baggage handling system, fire Alarm and fire protection system and upgrades to an existing baggage handling room. Approximate cost: $2.7 million.

City of Philadelphia, Division of Aviation, Southwest Airlines/Delta Airlines Relocation, Terminal A-East, Philadelphia International Airport, Philadelphia, PA (2007 – 2008): Acted as Project Engineer. In order for Southwest to expand their number of gates, Delta was relocated from Terminal E to Terminal A-East. Project consisted of new Delta baggage service office, ticket office and lobby, Skycap canopy, baggage make-up area, offices, and Crown Room Club. Special systems included a baggage handling system, access control system, and CCTV surveillance system. Provided field assessment, construction management, resolution of construction issues, and project coordination. Approximate cost: $2.8 million.

City of Philadelphia, Division of Aviation, Multi-User Flight Information Display System Upgrade Phase II, Philadelphia International Airport, Philadelphia, PA (2005 – 2006): Served as Electrical/Telecommunication Designer and Project Manager. An existing outdated MUFIDS was upgraded and standardized to increase revenue, maximize operational efficiencies, and improve customer service by displaying the most accurate flight information throughout the airport complex. An integrated, ADA-compliant visual paging system was introduced to the airport for the first time under this project to benefit the general public and passengers who are deaf or hearing-challenged. Approximate cost: $15 million.

City of Philadelphia, Division of Aviation, Universal Cable Distribution System, Philadelphia International Airport, Philadelphia, PA (2004): Worked as Engineering Intern. Performed survey and assessment of all the structured cabling (twisted pair copper and fiber optic) located throughout the airport complex. Generated extensive documentation and drawings detailing layout and interconnections.

City of Philadelphia, Division of Aviation, Multi-User Flight Information Display System Upgrade Phase I, Terminal F, Philadelphia International Airport, Philadelphia, PA (2003): Performed construction management and inspection. Oversaw construction to assure that installation of materials is in compliance with contract drawings, specifications, and applicable industry code. She also prepared daily reports to record progress.

City of Philadelphia, Division of Aviation, Terminal 'A' West, Philadelphia International Airport, Philadelphia, PA (2002): Worked as Engineering Intern. Performed field inspection and testing for security access and CCTV surveillance system. Duties involved interaction with technicians, contractors, and airport systems staff to meet the deadlines of the project's goals.

Jason T. Shevrin

Project Manager, Senior Electrical Designer

Education
BS, Electrical Engineering, Drexel University, 2005

Technical Expertise

- Approach Lighting Systems
- Navigational Aids
- Taxi Guidance Signage
- Airfield Lighting Control Systems (ALCS)
- Field Lighting Vaults/Switchhouses
- Runway/Taxiway Lighting Criteria
- FAA policies and advisory circulars
- MUFIDS
- CUSS/CUTE
- VoIP
- Fire Alarm Systems
- UCD Systems
- CA/CCTV
- Telecommunications Design
- Low Voltage Power

Professional Profile

Mr. Shevrin's expertise includes project management, electrical aeronautical systems design, fire alarm design, low voltage service and distribution, UCDS design, CA/CCTV design and telecommunication device layouts. He is directly involved with schematic design, design development and final design documentation. He is familiar with the processes of codes, such as NEC, NFPA and FAA.

Project Experience

South Jersey Transportation Authority, Atlantic City International Airport MUFIDS and Common Use, Egg Harbor Township, NJ: Special systems designer for the airport-wide systems infrastructure/MUFIDS upgrade, common use self-service/common use terminal equipment/VoIP implementation, project specifications, and creation of a technical RFP. Design responsibilities included: network core and distribution system design; network backbone expansion; station cabling distribution for CUSS/CUTE/VoIP equipment; new IDF room configurations; existing IDF and MDF room equipment expansions; network architecture and functional diagrams; and writing the technical RFP. RFP included the basis of design/construction and function for the Atlantic City International Airport Operations Information Management System (AOIMS), which entailed the requirements for the following AOIMS subsystems: database/middleware; MUFIDS; gate/counter management system; common use systems; revenue and billing systems; servers and workstations; installation, commissioning, service, and maintenance requirements; and project closeout.

Southwest Airlines, Terminal E - 5 Gates Expansion Project, Philadelphia International Airport, Philadelphia, PA: Project Manager/Special Systems Designer for the 5 gates expansion project. Responsibilities included: project management (design and construction administration); meeting attendance; and interdisciplinary and consultant coordination. Special Systems design responsibilities included: the demolition of existing Delta Airlines hold room equipment; addition of five new security doors; new interior and exterior CCTV cameras; terminal announcement control system expansion and modifications; security doors and system diagrams/details; CCTV point-to-point diagrams; hold room microphone; programming matrices; station cabling distribution to support new Southwest Airlines hold room equipment and gate podium equipment and project specifications.

City of Philadelphia, Division of Aviation, Philadelphia International Airport, International Terminal A West, Gate Expansion Project: Project Manager and Special Systems Designer for the gate expansion project at International Terminal A WEST. Responsibilities included project management for the design and construction administration phases of the project, attended design coordination meetings, held internal coordination meetings and was responsible for interdisciplinary and consultant coordination. Special Systems design responsibilities included the addition of new security doors, addition of new security cameras, modification of the Joint Authority Command Center international gate control panel and master lockout panels, access control functional diagrams, CCTV point to point diagrams, additional fire alarm devices and UCDS and TACS system expansion to support new gate podiums and doors.

City of Philadelphia, Division of Aviation, Ground Transportation Management System - Automatic Vehicle Identification, Phases I and II, Philadelphia International Airport, Philadelphia, PA: Infrastructure design and upgrade for the Automatic Vehicle Identification (AVI). Design included low voltage power distribution; universal cable distribution system upgrades; HVAC; underground electrical and communications distribution; outdoor equipment enclosures. Coordinated the design task with client, managers of the proposed AVI system, and the equipment manufacturer.

City of Philadelphia, Division of Aviation, Runway 17-35 Extension, Philadelphia International Airport, Philadelphia, PA: Project Engineer/Designer for design of electrical portion of new Runway 17-35 Extension. Existing runway was extended approximately 1,040 ft. (640 ft. on R/W 17 end / 400 ft. on R/W 35 end). Design responsibilities consisted of: new MALSR system (R/W 17); relocated glide slope (R/W 17); relocated RVR (R/W 17); localizer (R/W 17); new PAPI systems (both R/Ws 17 & 35); new pavement surface sensor system; new runway and taxiway edge lights; new taxiway centerline lights; new runway and taxiway signage, new runway threshold lights; REIL lights; revisions to field lighting vault and equipment room; new CCRs; power and control wiring for associated systems; parking lot lighting; electrical, mechanical, and plumbing systems for new toll plaza and building; MV distribution system; relocation of existing utilities; and new underground power and communications distribution services. Coordinated electrical and mechanical disciplines with prime consultant. Assisted in preparation of construction cost estimates, preparation of project specifications, coordination with utilities/FAA/client. Work was designed in strict accordance with the latest FAA Advisory Circulars.

City of Philadelphia, Division of Aviation, Automatic Temperature Control (ATC) System Upgrade, Philadelphia International Airport, Philadelphia, PA: Project involved replacement of existing HVAC Automatic Temperature Control System for Terminals/Concourses A East through D. Designed cable backbone infrastructure (fiber optic/copper) connecting ATC head end server with remote devices (which in turn communicates with air handling units, valves, pumps, VFDs, etc.), replacement of duct smoke detectors. Responsible for packaging of project plans and specifications in accordance with DOA requirements.

South Jersey Transportation Authority, Cargo Apron Expansion, Atlantic City International Airport, Egg Harbor Township, NJ: Design phase services included LED taxiway edge and centerline lighting, new Taxiway/Taxi lane and Apron construction, apron lighting, airfield lighting control system modifications, series circuit distribution, airfield signage upgrades and underground infrastructure. Additional design tasks included engineering design and calculations, preparation of drawings, technical specifications, construction cost estimates, and bid review.

City of Philadelphia, Division of Aviation, Taxiway J Reconstruction, Philadelphia International Airport, Philadelphia, PA: Project Designer for new taxiway centerline lighting on Taxiway J, approximately 2500 LF. Responsible for the design of new in pavement (both asphalt and concrete) centerline lights including the addition of base cans for a future SMGS lighting system. Additional design responsibilities included CCR work, taxiway lighting circuit diagrams and coordination between consultants.

City of Philadelphia, Division of Aviation, Philadelphia International Airport, Apron Reconstruction, Philadelphia International Airport, Philadelphia, PA: Project Manager for two apron replacements - between Terminals D and E, and at Cargo City. Responsibilities included: attendance at project coordination and design meetings; electrical design for new taxiway centerline and edge lighting for affected areas of pavement; phasing; taxiway lighting circuit diagrams; field lighting vault work; and consultant coordination.

City of Philadelphia, Division of Aviation, Universal Cable Distribution System (UCDS) Survey, Philadelphia International Airport, Philadelphia, PA: Project Engineer responsible for surveying cabling (copper twisted pair and fiber optic) located throughout airport complex. Generated extensive documentation and drawings detailing layout and interconnections.

City of Philadelphia, Division of Aviation, Terminal A West, Philadelphia International Airport, Philadelphia, PA: Construction management for Fire Alarm System. Overseeing construction to assure that installation of materials are in compliance with contract drawings, specifications, and applicable industry codes. Involvement of on-site testing and approval for the fire alarm system with 2 years experience interacting with technicians, project contractors and airport systems staff to accomplish the goals of the project on schedule.

City of Philadelphia, Division of Aviation, Terminal F, Philadelphia International Airport, Philadelphia, PA: Served as Project Engineer for all electrical packages. Responsibilities included analyzing authorize-to-proceeds (ATP's) and change orders, Help evaluate contractors quotes for new projects, Assist reviewing design and contracts documents and Reviewing submittal/specification for technical issues for the project.

School District of Philadelphia, Central-East Middle School Annex Expansion and New Samuel Fels High School, Philadelphia, PA: Designed power, lighting, telecommunication, fire alarm and other various systems in conjunction with both the Central-East Middle School Annex Expansion and construction of the New Samuel Fels High School. These electrical services included, but were not limited to, device layouts, distribution, circuiting and mechanical coordination.

City of Philadelphia, Division of Aviation, Philadelphia International Airport, Terminal B/C Checkpoint Modifications, Philadelphia, PA: Project Manager for security checkpoint modifications Terminals B and C. Design responsibilities consisted of low voltage power distribution for new x-ray machines, metal detectors and trace detection machines, CCTV system expansion to cover all checkpoint lanes, TSA data network modifications, and duress system design. Coordinated electrical and special systems disciplines with subconsultants. Prepared specifications, detailed materials lists and cost estimates.

City of Philadelphia, Division of Aviation, Philadelphia International Airport, Terminal Announcement Control System Upgrade: Project Manager for airport-wide terminal announcement control system upgrade. Responsibilities included: management for the design and construction administration phases; internal and subconsultant team coordination; strategic phasing of the removal of existing terminal announcement control system components, and the addition of new, in Terminals B through E; and upgrade of existing announcement control system head end equipment in terminals A West, A East, B/C, D/E, and Terminal F. New announcement zones were designed, including ambient noise sensing and digital microphone station upgrades in Terminals B through E (in baggage claims, ticketing lobbies, SEPTA train platforms and curbside areas). Design was performed with the intentions of making it possible for the airport to use the announcement control system for emergency evacuation and notification, as well as to tie the new system into newly installed flight information display and fire alarm systems.

Halcrow

Jack Hayes
Chief Cost Estimator

Specialization
Cost estimating

Registration/ Certifications
PE: NY [redacted]
(1988 [redacted] # [redacted]
([redacted]

Year Joined
2005

Years with other Firms
[redacted]10

Education
MS, 2004, Construction Management, New York University

BE, 1991, Engineering (Naval Architecture), State University of New York Maritime College

Professional Affiliations
None

Publications
None

Key Qualifications

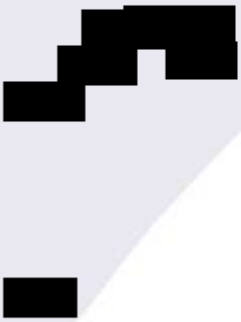
Jack Hayes has more than ten years of diversified domestic experience in construction and engineering. For the past five years he has specialized in cost estimating, planning, scheduling and project management. He has extensive experience in the field working as a project manager and brings a proven ability to accurately measure costs as they apply to construction. His project experience in estimating, planning, and scheduling includes marine facilities, residential developments, and high rise building construction. His focus of expertise includes scheduling, cost estimating, construction management, project management, cost engineering and permit acquisition. Jack is also proficient at using Microsoft Project or Primavera to perform project scheduling.

Prior to joining Halcrow, Jack developed the estimating and scheduling department for a multi-million dollar general contractor located in the Northeastern US specializing in high-end residential development. He also was responsible for the implementation of an advanced internal document production and control system capable of receiving and producing large volumes of documentation for all aspects of the construction industry.

Relevant Experience

Craney Island Fuel Pier D Replacement, US Navy, Norfolk, VA
Estimator/scheduler who provided an update to the DD 1391. The scope of work included review of existing drawings and the facility operation, followed by the development of conceptual arrangement and structural drawings. Engineering calculations were developed to validate the concept drawings and provide further data to develop the cost estimate. A Basis of Design document was drafted to document the assumptions and conceptual design. Upon completion of these steps, Jack developed a cost estimate that accounted for the sequence of construction and followed the conceptual plan. Percentages for various overhead costs were included, plus escalation for the year 2010, profit, contingency and other fees were included as directed by NAVFAC. On-going

Naval Weapons Station Earle Pier Complex Replacement/ Upgrade, US Navy, Colts Neck, NJ
Estimator/scheduler who prepared a detailed construction cost estimate, construction and monthly cash flow schedules, and constructability methodology for a new ammunitions pier replacement, including pier demolition, berth dredging, railroad trackage, and mechanical and electrical home porting facilities. The awarded bid price was within 2% of the estimated cost. $130M, On-going



Dry Dock 8 Extension, Norfolk Naval Shipyard, US Navy, Portsmouth, VA

Estimator/scheduler who prepared the conceptual construction cost estimate and CPM schedule for the extension of an existing dry dock to service future generation aircraft carriers. This project included site dewatering, 75-ft deep braced excavation, demolition and reconstruction of 25,000 cu yd of concrete slabs and walls, replacement of crane rails, railroads, and extensive underground utilities. $45M, On-going

Roberto Clemente State Park, New York, NY

Estimator/scheduler for evaluation and rehabilitation design of the existing bulkhead and shoreline. The scope of work included an above and underwater inspection of 2,095 linear feet of steel bulkhead, approximately 275 linear feet south of the bulkhead, and approximately 2,000 linear feet to the north of the bulkhead. The inspection included all structural elements of the bulkhead from the deck level to the mud line, a hydrographic survey of the Harlem River along the park, and a "swim by" inspection of the waterfront. 2007

Distrigas LNG Import Terminal, Everett MA

Estimator/scheduler who prepared a cost estimate and schedule. The project consisted of installing a new uploading platform and new arms. 2007

Downeast LNG, LNG Receiving Terminal, Robbinston, ME

Estimator/scheduler who created cost estimates and the associated project schedule for a new LNG receiving terminal located off the coast of Maine in the Northeastern US. The Project explored three design and construction options with varied ship terminal locations and LNG transfer systems. Cost estimates and construction schedules were developed for all potential schemes for feasibility purposes. The final design option selected consisted of 10 ft diameter monopile dolphins. On-going

Freeport Container Terminal Expansion Phase V, Bahamas

Estimator/scheduler who created cost estimates and schedules for an expansion comprising 500m of additional quay deck, yard and electrical services for 6 additional Super-Post Panamax cranes. $250M, 2008

Dubai LNG Import Terminal, UAE

Estimator/scheduler who created a conceptual cost estimate and associated project schedule for front end engineering and design for a LNG import terminal. The jetty was designed to accommodate a 126,000m^3 floating storage regasification unit (FSRU) permanently moored to the jetty with an LNG carrier intermittently moored alongside. 2007

Rabaska LNG Terminal, Quebec, Canada

Estimator/scheduler who created a conceptual cost and associated project schedule. 2008

Halcrow

Stephen LoPorcaro, PE

Project Manager, Senior Engineer Diver

Specialization

Underwater inspection

Registration/ Certifications

PE: FL [redacted]2), NY # [redacted] (2[redacted]), NJ # [redacted] (2002)

Registered OUPV Captain, Inland Waters

Registered ADC Surface-Supplied Air Diver # [redacted]

Safety Inspection of In-Service Bridges, FHWA National Highway Institute Training

Open Water SCUBA Certification

OSHA training: Confined Space Entry, 10-Hour Construction Safety, CPR/First Aid and O_2 Provider

Year Joined Halcrow

2002

Years with other Firms

8

Education

BSs, Civil/Environmental Engineering, SUNY College of Environmental Science and Forestry at Syracuse University

ESI International, 2005, Managing Projects, New York.

Key Qualifications

Stephen LoPorcaro has more than 13 years of experience as an engineer-diver, hydrographic surveyor, project manager, and design engineer performing inspection and rehabilitation design, construction supervision, and hydrographic surveys at marine terminals, various waterfront facilities, and bridges. Specific areas of expertise are structural condition evaluation and rehabilitation, non-destructive and destructive underwater testing, and technical report preparation. He has experience with DGPS and Range-Azimuth hydrographic survey equipment and is proficient in Autodesk Civil and Land Desktop 2009 and HydroPro.

Relevant Experience

"Call-In" Engineering Services for Condition Surveys of Waterfront Facilities, Port Authority of NY & NJ (PANYNJ), NY and NJ

Project manager/senior engineer-diver for the provision of services under this contract. From 1999 to 2003, served as engineer-diver/team leader for various projects under previous contracts of this type. Tasks included cyclical inspection work and emergency response inspections for waterfront facilities of various types and constructions. Typical work scope for these projects included one hundred percent visual inspection of all structural elements and ten percent detailed inspection of select elements. Detailed inspections consisted of destructive or non-destructive testing of the structural elements including timber, steel or concrete core sampling, ultrasonic thickness measurements of steel, sounding of concrete, and evaluation of timber elements with regard to the presence of marine borers. 2005

Cyclical Condition Survey for Port Elizabeth Marine Terminal Berths 50 through 86, PANYNJ, Elizabeth, NJ

Project engineer/senior engineer-diver for the inspection of more than 2 mi. of wharf structure supported by over 17,000 steel and timber piles, concrete pile extensions and pile caps, concrete seawall, and timber and steel sheet pile wall. 2004

Bulkheads at Pier 5 and between Piers 5 & 6, New York Marine Terminal, PANYNJ, Brooklyn, NY

Project manager/team leader for a cyclical condition survey of approximately 700 LF of pile supported wharf structures over two (2) NYC subway tunnels. Inspected elements included timber and steel pipe piles, concrete pile extensions, prestressed concrete girders and steel sheet pile bulkhead. 2005

Professional Affiliations

Professional Association of Diving Instructors

Publications

None

Downtown Manhattan Heliport Condition Survey, PANYNJ, Manhattan, NY

Project manager/team leader for this condition survey. The work included inspection of a steel pipe pile supported aircraft landing platform and the interior and exterior of a steel spud barge used as a parking platform. 2001

New York Marine Terminal Pier 12 Emergency Inspection, PANYNJ, Brooklyn, NY

Project engineer/team leader for an emergency inspection performed to delineate a crack in the pier foundation. Deliverables included repair recommendations. 2005

Red Hook and New York Marine Container Terminals, PANYNJ, Brooklyn, NY

Project engineer/team leader for this cyclical condition survey. Inspected elements included three (3) separate wharves supported by timber and steel pipe piles with concrete pile extensions, prestressed concrete girders and deck panels, and steel sheet pile bulkhead. 2003

LaGuardia Airport, PANYNJ, Queens, NY

Project engineer/team leader for a cyclical condition survey of substructural elements supporting the runways. Inspected elements included 3,500 steel pipe piles equipped with cathodic protection. The inspection involved bathycorrometer measurements of the piles to determine electrical potentials. 2003

New York Marine Terminal Pier 1 through Pier 9B, PANYNJ, Brooklyn, NY

Engineer/diver for various construction inspection projects between 1999 and 2002. The projects included construction quality control for concrete encasements, pile wraps, and steel bulkhead repairs. 2002

Port Newark Berths 2 through 36, PANYNJ, Newark, NJ

Engineer/diver for a cyclical condition survey. Inspected elements include steel, timber, and concrete sheet pile bulkheads, steel, concrete, and timber piles supporting concrete and timber pile caps and decking. The condition survey included non-destructive testing of all structural elements. 2002

New York Marine Terminal Pile Wrapping Studies, PANYNJ, Brooklyn, NY

Engineer/diver for various projects associated with pile wrap studies. The projects consisted of destructive and non-destructive testing by means of pile wrap removal, timber coring, and dissolved oxygen testing. 2002

Halcrow

Brett Sposito, PE

Senior Engineer/Diver

Specialization

Project management, maritime development design and planning

Registration/ Certifications

PE: N[redacted]

C[redacted]rcial Diver Certification, Entry Level Tender/Diver, Association of Diving Contractors

N[redacted]l Oceanic and Atmospheric Administration (NOAA) Divemaster (2004), Contaminated Water Diving Seminar

Professional Scuba Inspectors, Visual High Pressure Cylinder Inspector (2004)

Advanced Open Water SCUBA Certification (1999), Professional Association of Diving Instructors,

High Pressure-related HAZMAT Training

CPR/First Aid and DAN Oxygen First Aid Training

Bridge Inspection Refresher Training (2009), Safety Inspection of In-Service Bridges (2003), Federal Highway Administration (FHWA) National Highway Institute Training

Key Qualifications

Brett Sposito has more than 13 years of experience as an engineer/diver performing approximately 920 underwater structure inspections over 650 days for Halcrow and the Oregon Department of Transportation. He has three years of experience as a fathometer surveyor performing 60 fathometer surveys of bridges over major waterways. In addition, he has one year of experience as a bridge designer performing design and providing construction support, concurrent with underwater bridge inspection experience. His projects have included bridges, piers, wharves, bulkheads, dams, culverts, tidegates, and fender/pier protection systems. Specific areas of expertise include underwater inspection, structural condition evaluation of bridges, non-destructive and destructive underwater testing, underwater repair, underwater still photography, technical report preparation, and fathometer surveying.

Relevant Experience

Inspection of Greenville Yards, Port Authority of NY & NJ, Bayonne, NJ

Team leader and project engineer/diver for the above and underwater inspection of 880 feet by 120 feet of a timber pile supported, timber deck, high level platform pier; 1,030 feet by 200 feet of an earth filled pier buttressed by timber relieving platforms; 1,335 feet of steel sheet pile bulkhead constructed immediately offshore of a timber crib bulkhead; and, 900 feet of a collapsed timber crib bulkhead, currently consisting of a sloped shore. 2007

Port Newark Marine Terminal Inspection, Port Authority of NY & NJ, Newark, NJ

Team leader and project engineer/diver for the underwater and above water condition survey of the odd-numbered Berths 3 through 25, to include the bulkheads at Berth 19 and east of Berth 25. The purpose of the inspection was to determine the overall condition of the structures and to identify structural and non-structural deficiencies. The project included inspection of timber, concrete, and steel pile supported wharves, and timber and steel sheet pile bulkheads. 2009

Inspection of Pier 26, Hudson River Park Trust, Manhattan, NY

Team leader and project engineer/diver for the above water and underwater inspection of the pier. The purpose of the construction inspection was to determine if there were any typical items of non-conformance with design documents and perform an underwater debris survey. This project included the inspection of 841 ft by 120 ft of precast prestressed concrete deck plank pier, 29 concrete pile caps, and 94 precast prestressed concrete piles. 2008

Pier 60 Inspection, Hudson River Park Trust, Manhattan, NY

Team leader and project engineer/diver for the above water inspection. The purpose of the repair inspection was to determine if there were items of

Year Joined Halcrow
2007

Years with other Firms
10

[redacted]

Education
BS, Civil Engineering, University of Washington

Professional Affiliations
Chi Epsilon, National Civil Engineering Honor Society (1991)

non-conformance with repair design documents. This project included the inspection of 85 posted timber piles. 2008

74th Street Station Intake Tunnel Inspection, Consolidated Edison, Manhattan, NY

Team leader and project engineer/diver for the underwater condition survey of the intake tunnel. The inspection provided a condition assessment, to identified and quantified existing defects, analyzed and evaluated the defects, and produced recommended repair actions with associated cost estimates. The project included inspection of 100 feet of reinforced concrete tunnel. 2010

Inspection from Battery Maritime Building to Pier 16, New York City Economic Development Corporation, Manhattan, NY

Team leader and project engineer/diver for the underwater and above water investigation of the gravity wall bulkhead from the Battery Maritime Building to the south side of Pier 16. The routine level investigation assessed the general overall condition of the structure, estimated the remaining useful life, and determined recommended actions with associated costs. The inspection also identified potential sources of fill loss to address historical problems with settlement in the area. Ground Penetrating Radar (GPR) was employed upland to identify voided areas due to fill migration. The project included evaluation of over 2,500 LF of gravity wall bulkhead, a timber pile supported low level relieving platform, manholes, and concrete and asphalt surface up to 35 ft behind the offshore face. 2009

Fort Mifflin Inspection, US Army Corps of Engineers, Philadelphia, PA

Team leader and project engineer/diver for the underwater inspection of repairs to the eastern approximately 60 ft of the South Pier. The purpose of the quality assurance inspection was to ensure that repairs to the timber piles and installation of new steel pipe piles for the breasting dolphins were completed in accordance with the contract drawings and specifications and to evaluate the quality and completeness of the repair work. Repairs included installation of timber shims, nails and bolts, steel bands, steel angles, new timber wale segments, and steel pipe piles. 2008

DESC Fuel Pier Design Level Investigation, US Navy, Naval Air Station Patuxent River, MD

Team leader and project engineer/diver for above and underwater design level condition assessment and asset inventory of all structural, electrical, and mechanical systems of a timber fuel pier and six berthing dolphins. 2009

YEARS EXPERIENCE WITH FIRM: 1

YEARS EXPERIENCE WITH OTHER FIRMS: 32

EDUCATION:

A.A.S., Civil Engineering Technology, Staten Island Community College, 1976
B.S., Engineering Technology, New Jersey Institute of Technology, 1979
M.B.A., Finance, St. John's University, 1988

PROFESSIONAL REGISTRATION(S):

P.E.: New Jersey - No. [redacted] 1991)

CURRENT RESPONSIBILITIES:

Project Controls Engineer responsible for construction management planning and scheduling functions for water pollution control projects.

SUMMARY OF EXPERIENCE:

Newtown Creek Water Pollution Control Plant, Brooklyn, NY, *New York City Department of Environmental Protection.* Project Controls Engineer responsible for construction management planning and scheduling functions for the largest water pollution control plant in New York City, processing 310 mgd of wastewater. The $700 million upgrade will add a new battery consisting of eight grit tanks, four aeration tanks, and eight final sedimentation tanks.

South Ferry Terminal Station, Manhattan, NY, *Federal Transit Administration (FTA).* Senior Project Controls Engineer serving as Project Management Oversight Contractor for the FTA for a $495 million New York Metropolitan Transportation Authority capital construction project. Responsibilities included reviewing the grantee and contractor construction schedules to verify compliance with the construction agreement and FTA construction management guidelines, reviewing the grantee project management plan and determining if its implementation was in compliance with FTA guidelines, attending progress and schedule update meetings, and preparing opinion reports for the FTA.

World Trade Center Transportation Hub, New York, NY, *The Port Authority of New York and New Jersey.* Senior Program Scheduling Engineer serving on the Program Management Team overseeing the construction of the new $2.2 billion World Trade Center (WTC) Transportation Hub. Responsibilities included the development of construction phasing options for new construction without disruption of Port Authority Trans-Hudson (PATH) operations in the existing WTC temporary PATH station; identification and resolution of constructability and logistics issues; preparation and maintenance of the contract packaging plan that supports the constructability, phasing, and scheduling challenges inherent to the project; the preparation, maintenance, and analysis of the project design and construction schedule; identification and incorporation of schedule interface points with the Freedom Tower, WTC Memorial, WTC Vehicular Security Center, Route 9A restoration, Towers 2, 3, 4 and 5, Performing Arts Center, Fulton Street Transportation Hub, and South Ferry Station projects.

American Airlines Terminal, New York, NY, *American Airlines.* Senior Program Scheduling Engineer serving on the Program Management Team overseeing the construction of American Airlines new $1.2 billion terminal at JFK International Airport. Responsibilities included the preparation and monitoring of the master program schedule, integration of owner's, designer's and contractor's schedules;

application of the earned value assessment of construction progress and productivity; identification, analysis, and documentation of schedule delays and associated costs; negotiation of delay-caused time extensions and costs; analysis of field change orders with respect to validity, cost, and schedule impacts; recommendations for the mitigation of schedule slippages.

Continental Airlines Terminal, Newark, NJ, *Continental Airlines.* Senior Program Scheduling Engineer serving on the program management team overseeing the construction of Continental Airlines' Global Gateway airport expansion. Responsibilities included the oversight and integration of three construction managers' scheduling efforts in support of the program, preparation of monthly schedule analysis reports for presentation to Continental Airlines management, preparation of a detailed critical path method (CPM) network supporting the construction of the new 325,000-square-foot concourse.

Chemical and Pharmaceutical Projects, Various Locations, *American Cyanamid, BASF, Merck, and Hoffman LaRoche.* Home Office/Field Project Controls Engineer and Project Manager for industrial and pharmaceutical projects ranging from $10 to $120 million in value. Responsibilities included the preparation and maintenance of resource-loaded critical path method schedules for engineering and construction, preparation of progress measurement and trend analyses using earned value techniques, preparation of capital cost estimates, and the preparation of project cost reports for engineering and construction phases, including the updating and analysis of cost and man-hour expenditures, wage rate analysis, and trends relative to performance.

amuel Gompers High School, Bronx, NY, *New York City School Construction Authority.* Project Engineer for the renovation of a high school. Responsibilities included scheduling and cost control; preparation and administration of requests for information; review and administration of potential, proposed, and approved change orders; reconciliation of the engineer's and contractor's cost estimates; inspection of installed work; verification of design and construction conformance to building codes; review of contractors invoices

7 World Trade Center, Manhattan, NY, *Salomon Brothers.* Senior Planning and Scheduling Engineer on a $250 million high-tech building involving base building renovation and tenant. Responsibilities included the development and maintenance of a critical test method network that coordinated the subcontractors' work to verify compliance with the overall project schedule objectives; preparation of electrical and mechanical systems testing fragnets; and assistance to the owner with move-in plan and schedule.

Indian Point 3 Nuclear Power Plant and J.A. Fitzpatrick Nuclear Power Plant, NY. Senior Planning/Scheduling Engineer assigned to the Authority's nuclear power plants. Responsibilities included the review and analysis of contractor construction schedules, preparation of procedures for the Project Management Department addressing construction scheduling, progress measurement, and use of project management software.

Petrochemical and Industrial Projects, OH, NJ, and TX, *SOHIO, BASF, Exxon, and UPS.* Senior Planning/Scheduling Engineer on various petrochemical and industrial projects. Responsibilities included preparing and maintaining cost-integrated critical test method schedules, work breakdown structures, and subcontract/material coordination plans, and planning and scheduling seminar leaders for in-house project controls training.

Petrochemical Facility Expansion, Perth Amboy, NJ, *Chevron.* Construction Scheduling Engineer on a $50 million petrochemical facility. Responsibilities included quantity take-offs, including concrete, steel, piping, electrical, instrumentation, insulation, and paint; preparation of man-hour budgets, construction progress curves, and manloading curves.

YEARS EXPERIENCE WITH FIRM: 9

YEARS EXPERIENCE WITH OTHER FIRMS: 35

EDUCATION:

B.S., Civil Engineering, Drexel Institute of Technology, 1966
M.S., Civil Engineering, Drexel University, 1972
Primavera Project Planner 2.0, Planning and Scheduling with P3, Primavera, 1998
Primavera Project Planner 2.0, Managing Project Data, Primavera, 1998
Primavera Project Planner 2.0, Resource and Cost Analysis, Primavera, 1998

CURRENT RESPONSIBILITIES:

Senior Scheduler responsible for developing and monitoring construction schedules using Primavera P3 and P5 critical path method (CPM) scheduling software. Tasks include identifying construction activities; developing activity duration, sequencing, and staging; identifying project constraints and their scheduling impacts; developing schedule coding methodologies; preparing project progress reports; and developing crew and resource loadings.

SUMMARY OF EXPERIENCE:

Region Central Construction, Various Locations, NJ, *New Jersey Department of Transportation (NJDOT).* Senior Scheduler responsible for reviewing contractor preliminary and baseline construction schedules, schedule updates, and fragnets (time impact evaluation statements) for construction projects in central New Jersey. This work involves reviewing schedule logic, sequencing, format, and updates to determine compliance with NJDOT's *Construction Scheduling Standard Coding and Procedures for Designers and Contractors Manual* and the special provisions section of contract specifications. Tasks include reviewing a contractor's schedule narrative, as well as requests for extensions of time, and making recommendations to the resident engineer concerning the approval or rejection of a progress schedule submission.

Port Authority Trans-Hudson (PATH) Tunnels E and F Reconstruction, Various Locations, NY and NJ, *Port Authority of New York and New Jersey.* Senior Scheduler responsible for developing an accelerated schedule for a scope study to reconstruct/refurbish two commuter train tunnels that were shutdown as a result of the World Trade Center incident.

Port Authority Trans-Hudson (PATH) Duct Bank Replacement, Various Locations, PA, NY, and NJ, *Port Authority of New York and New Jersey.* Senior Scheduler responsible for developing alternative schedules for a scope study to replace 143,000 LF of duct bank in nine train tunnel sections providing commuter rail service between New Jersey and New York's Pennsylvania Station and the World Trade Center Station. The duration of the project is expected to range from 6.5 years to 10 years and cost $200 million to $335 million depending on work-hour restrictions needed to maintain rush-hour commuter train service.

Electronic Toll Collection (ETC) System (E-ZPass), Various Locations, NJ and DE, *Regional Consortium.* Principal Project Scheduler responsible for providing project control and scheduling support to program managers on a $500 million project to install state-of-the-art fiber optics on three major toll roads. The project included the design and development of hardware and software, the testing of prototype systems, the installation of equipment, final system integration, and acceptance testing.

Port Authority Transit Corporation (PATCO) Bridge Painting and Structural Repairs Project, Camden County, NJ, *Delaware River Port Authority.* Cost Estimator for a detailed preliminary design report, which included inspection and repair recommendations and contract documents for 36 rail, motor vehicle, and pedestrian bridges carrying or crossing over the PATCO High-Speed Line in Camden County.

Interchange 142 Improvements, Garden State Parkway, Union and Essex Counties, NJ, *New Jersey Turnpike Authority, Garden State Parkway Division.* Project Scheduler responsible for developing a four-stage initial and final design construction schedule for the reconstruction of the interchange connecting I-78 and the Garden State Parkway. The project involved the implementation of new ramp connections from the Garden State Parkway southbound to I-78 eastbound and from the Garden State Parkway northbound to I-78 westbound and included the full-depth reconstruction of one mile of I-78, the construction of two 9-span flyover ramps, the construction of three new bridges for ramp realignments, and the widening of seven existing bridges on I-78 to accommodate the final interchange configuration. The project had an estimated construction cost of $110 million.

U.S. Routes 1 and 9 Reconstruction/Widening (Contract 2), Middlesex and Union Counties, NJ, *New Jersey Department of Transportation.* Project Scheduler responsible for developing a four-stage initial and final design construction schedule for the reconstruction and widening of 1.8 miles of roadway. The project involved making extensive utility relocations; completing approaches to a new 1,100-foot bridge over the Rahway River, which had been previously constructed; and reconstructing an existing bridge to act as a ramp for the new bridge.

NJ Route 18 Extension, Sections 2F, 7E, and 11H, Middlesex County, NJ, *New Jersey Department of Transportation.* Project Scheduler responsible for developing an eight-stage initial and final design construction schedule for the reconstruction of NJ Route 18 from U.S. Route 1 to the Amtrak Northeast Corridor railroad bridge. The project included 2.8 kilometers of limited-access freeway with four grade-separated interchanges and one at-grade intersection improvement. The project also included 20 retaining walls, 7 sound walls, 4 bridges, 1 culvert reconstruction, 5 pedestrian bridges with associated ramp structures, signal/sign structures, and 1 bikeway tunnel/path design.

NJ Route 18 Extension, Section 2A, Middlesex County, NJ, *New Jersey Department of Transportation.* Senior Scheduler responsible for developing a six-stage final design construction schedule for the extension of NJ Route 18 from the John Lynch Bridge to I-287 in Piscataway Township. The project included 2.4 kilometers of limited-access freeway with three grade-separated interchanges and 4 kilometers of land surface highway with at-grade intersection improvements. Work also included culverts, signals, sign structures, bikeway design, 6 bridges, and 12 retaining walls.

U.S. Routes 1 and 9 (Contract 1), Rahway River Bridge Replacement, Middlesex and Union Counties, NJ, *New Jersey Department of Transportation.* Project Scheduler for the initial and final design construction schedules for a 1,100-meter, six-lane replacement bridge over the Rahway River. The project involves river pier construction, environmental stream restrictions, utility relocations, and stone column soil stabilization and preload coordinated to interface with future Contact 2 work involving roadway and ramp reconstruction.

Secaucus Interchange Section 2 Final Design, Hudson County, NJ, *New Jersey Turnpike Authority.* Project Scheduler for the initial and final design construction schedules for a new nine-lane toll plaza to connect the New Jersey Turnpike to the new Secaucus Transfer Station and office complex. The project involved 0.5 miles of roadway on wetland fill, one bridge, a toll plaza, an administration building, and the associated infrastructure for electronic toll collection.

David M. Keffer, PE, CCM
Claims Analysis

Education

MS / Construction Science and Management / 2002
Dale Carnegie Management Training / 2001
BS / Civil Engineering / 1983
AS / Drafting and Design Technology / 1981

Registrations

2001 / Registered Professional Engineer / MD #[redacted]
2006 / CMAA Certified Construction Manager / MD #[redacted]
MDE Safety Radiation Officer/HMA (Hot Mix Asphalt - MARTCP)

Experience

Mr. Keffer has over 26 years of experience in construction project management and engineering for many transportation projects throughout Maryland. He manages JMT's Maryland Transportation Construction Management Division and is responsible for providing a variety of construction management services to both State and local government agencies. He will serve as our Maryland Registered Professional Engineer for this contract and overall project manager with expertise in highway and bridge construction. As manager of JMT's SHA Office of Construction claims contracts and our District 4 Supplemental Engineering and Claims contracts, he has gained extensive experience and expertise in SHA's highway and bridge construction procedures and practices. In the past 10 years, he has assisted the OOC's staff with numerous tasks such as researching and evaluating SHA's design build project delivery process, developing a construction management manual for design build projects, reviewing and analyzing construction change orders statewide, evaluating construction pay estimates, revising the CPM schedule specification for design build projects, reviewing construction claims and conducting training on CPM scheduling and claims avoidance techniques. Prior to his 12 years as a Maryland agency owner representative, he has 14 years experience with Maryland construction contractors. He is also a Certified Construction Manager (CCM) by the Construction Manager Certification Institute (CMCI).

He has performed claims analysis, change order review, cost estimating, constructability reviews and preparation of visual aids/graphics for presenting claims. He currently manages multiple claims contracts for SHA that are used for CPM schedule review so he is familiar with MDOT procedures. In addition to actually working on contract tasks, he has provided the leadership for coordinating the various CPM schedule reviews, delay claims and constructability tasks for similar contracts. He is currently managing JMT's multiple Maryland SHA Claims Contracts and is keenly aware of our staffs capabilities and strengths to effectively assign each task. . Relevant project experience includes:

Open-End Construction Contract Claims Reviews, Statewide, MD (BCS 99-09 A) - *Project Manager*. SHA District 4 utilizes JMT's CPM scheduling services for claim avoidance by assigning the CPM scheduling for most of their highway projects. Mr. Keffer manages JMT's staff in providing claims analysis and CPM scheduling that has avoided and resolved numerous delays and disputes for more than fifteen District 4 projects.

CI/CM for Cromwell Maintenance Facility, Baltimore, MD - *Senior Claims Analyst, Project Engineer*. Performed a constructability review of the 95% complete documents for this Maryland Transit Administration project. The project's estimated construction cost is $15 to $20 million and includes demolition of existing rail facilities, installation of new track, drainage structures and utilities. Further a new maintenance and wash facility is included with structural, architectural, mechanical, plumbing, HVAC and electrical work. The contract documents were studied from a contractor's perspective, as if JMT had to estimate and build the project. Mr. Keffer noted areas of incompleteness and reduced the MTA's exposure to change orders and claims by identifying ambiguities and discrepancies in the documents.

Supplemental Engineering Support Services, SHA Multiple Districts, MD (BCS 2002-24) - *Project Manager*. Mr. Keffer provided management oversight for the JMT team personnel performing office support for the District. The services provided under our contract included staff support for constructability reviews, claims and CPM schedule analysis, traffic engineering services, checking of MOT plans, CADD/drafting services, field reviews of project records on active construction contracts, staff support for community liaison, utility coordination, permit review/inspections, and other related District Office administrative functions. He was responsible for the invoicing and administrative duties involved in managing these types of contracts.

Open-End Construction Contract Claims Review, Statewide, MD (BCS 94-06 B) - *Claims Analyst*. Services included analyzing a $500,000 earth work quantities claim involving class 1 excavation and construction phasing sequences for a segment of I-97 and interchange totaling $500,000. Recommendations included a settlement using existing contingent pay items. Mr. Keffer also provided the review and analysis of CPM schedules for an interchange and bridge project involving a tight schedule and over 300 construction activities, and a bridge replacement and roadway realignment project with an incentive clause. Reviews included analysis of the initial CPM and review of monthly updates throughout the contract duration. His analysis disclosed several issues with logic and duration deficiencies exposing the SHA to possible delays or claims, which were corrected in later updates, thus avoiding possible delay claims.

Open-End Construction Claims Review, Statewide, MD (BCS 97-27 A) - *Project Manager*. Manages the tasks assignments for this repeat construction claims analysis contract that includes numerous transportation projects statewide. His responsibilities include defining task scopes, assigning the appropriate staff to assignment and reviewing all reports analysis under our quality control procedures. Assignments consist of construction claims either on the District level as requests for equitable adjustments or disputes raised to the level of the director of construction. Mr. Keffer reviews each task assignment and communicates with the JMT staff and assigns the appropriate individuals to analyze the various claim issues such as cost estimates, labor and equipment analysis and CPM scheduling.

Construction Contract Claims Review, Districts 4 (Baltimore and Harford Counties, MD) (BCS 2004-01) - *Project Manager*. Mr. Keffer is managing the staff assignments for claims analysis and CPM scheduling services under multiple contracts. The services have avoided and resolved numerous delays and disputeson more than 45 of the District's bridge and highway projects. Tasks include ICPM schedule review and monthly CPM schedule updates, recommending recover schedules, schedule delay analysis, forensic scheduling, and attending scheduling meetings. Claims analysis includes defense strategy, calculating damages, preparing presentations to District personnel and attending negotiation meetings. He also provides technical assistance to the District Engineer to prepare for presentations to SHA Office of Construction and Office of Council. JMT provides change order and requests for equitable adjustment reviews, cost estimating and CPM schedule training for the District's staff.

Construction Contract Claims Review & Analysis Services, Statewide, MD (BCS 2003-12) - *Project Manager*. *Project Manager / Senior Scheduler*. Mr. Keffer manages the tasks assignments for this CPM scheduling / claims analysis contract that has involved more than 35 construction claims assignments for numerous highway projects statewide. He defines task scopes, assigns the appropriate staff to various tasks and reviews all analysis reports under our quality control procedures. Mr. Keffer communicates with the JMT staff and coordinates each assignment with the appropriate individuals to analyze the various construction claims issues such as contract interpretation, site investigation, CPM scheduling analysis, personnel interviews, cost analysis, labor and equipment analysis and prior board and court decisions. He was also assigned to draft revisions to the CPM schedule specification for the SHA Office of Construction (OOC) for use in design build contract documents. He is also working with SHA OOC to develop a construction manual for design build projects.

Construction Project Management Services, Baltimore, MD (Project 890) - *Claims Analyst*. Hopkins Plaza Renovation Project. This $7 million project consists of the complete demolition and reconstruction of the existing 110,000 square foot plaza, which is located over 3 operating underground parking garages and bounded by downtown buildings. Work consists of demolition of existing concrete, replacement and relocation of utilities, new drainage systems, concrete deck repair, sheet membrane waterproofing, new lightweight concrete stair structures, numerous granite and concrete paving systems, granite wall restoration, plaza fountain reconstruction, electrical improvements and extensive landscaping. Mr. Keffer is providing project management services monitoring and coordinating efforts between owner, architect, and contractor. His role involves monitoring progress schedule, evaluating and resolving issues on design changes and differing site conditions, including change order research and preparation, specification research and interpretation, evaluation of cost estimates and negotiation with contractor for final change order pricing.

PRADUMAN MARAJ, PE, PSP, CCM
Scheduler

Education

BS / Civil Engineering / 1982
Professional Certificate / Planning and Scheduling / 2007

Registrations

Planning & Scheduling Professional [redacted]
2008 / CMAA Certified Construction Manager [redacted]
2002 / Registered Professional Engineer / MD #[redacted]

Experience

Mr. Maraj has over 25 years of construction management experience, including 15 years of experience working with an international construction contractor and seven years with JMT as an agency owner representative. He is proficient in CPM scheduling and construction claims analysis. He has been called as an expert witness for CPM scheduling to testify before the Maryland State Board of Contract Appeals during construction claims hearings and before the Maryland Attorney General's Office's Contract Litigation Unit for case preparation. He is currently performing CPM scheduling and claims analysis services for the SHA, MDTA, MTA and MPA on numerous projects worth nearly $200M. He currently takes the lead on each task assignment and together with other staff he evaluates claims to establish defense strategy; calculates contractor's damages and identifies client's exposure to delay; prepares charts; graphs and exhibits for the client and the Office of Counsel; attends meetings with the contractor and provides technical assistance to Counsel for case preparation. He manages JMT's CPM scheduling services including ICPM review, monthly schedule update monitoring and analysis, delay analysis, forensic scheduling and claims support. Mr. Maraj has also developed and conducted training courses on CPM scheduling, claims analysis and prevention for various Maryland public agencies.

He is computer proficient with all versions of Primavera® scheduling software, Claims Digger, Microsoft Project, Visio, Excel, PowerPoint, Word and Microsoft Project.

Mr. Maraj manages the Project Controls Office and has managed a team of full time schedulers and claims analysts. He is responsible for making presentations on findings and recommendations to clients (owners) regarding the settlement of construction claims from contractors. As the team leader Mr. Maraj also ensures that subordinates are kept up to date on relevant case law and recommended practices in time impact analysis.

As a Project Manager with an international contractor, Mr. Maraj developed estimates for cost proposals and managed projects through the construction phase. He prepared project schedules and worked within the constraints of budget, scope and time. This "hands on" experience is a tremendous asset when reviewing schedules for determining reasonableness of durations, sequence and logic ties for construction activities, and is critical when evaluating the "time impacts" of additional work and delay claims. During previous employment Mr Maraj supervised a team of subcontractors, performing trades related to construction of a 52 bed hospital, the coordination and planning of sub-trades were critical to on time project completion.

Open-End Construction Claims Review and Analysis, SHA District 4 (Baltimore and Harford Counties), MD (BCS 97-18) - *Scheduler*. Tasks include attending initial pre-construction meetings, review and analysis of the initial CPM and monthly updates, attending monthly progress meetings to discuss the CPM, and providing detailed reports presenting findings and recommendations. Sample projects under this contract include the reconstruction of a Diamond Interchange bridge at MD 140 and I-695. The CPM Schedules for this dual span two-phased project serve as the basis for delay assessment and avoidance. Mr. Maraj analyzed the contractor's Value Engineering Change Proposal submission in his monthly schedule analysis, providing the owner and contractor documentation for responsibility of delays, with the proposed reduction from 3 to 2 phases of construction.

Open-End Construction Contract Claims Reviews, Statewide, MD (BCS 99-09 A) - In the past eight years, he has monitored CPM schedules for more than 25 SHA projects and analyzed nearly 40 claims.

He attends initial pre-construction meetings, reviews and analyzes the ICPM and monthly updates for specification compliance, attends monthly progress meetings to discuss the CPM, and provides detailed reports presenting findings and recommendations. He closely monitors the monthly CPM schedules for critical projects and uses the schedules as a tool for anticipating and avoiding delays and recommends logic changes and recovery schedules as necessary to keep the projects on schedule. He analyzed numerous delay claims using the schedules to defend the SHA and minimize cost to the SHA projects. Major projects include reconstruction of a diamond interchange at MD 140 over I-695, I-695 outer loop widening at I-95 and MD 43 extended at US 40.

Miscellaneous Engineering Services (Claims Analysis), Port of Baltimore, MD (599916) - *Scheduler*. Reviewed, analyzed and commented on the Initial Critical Path Method Schedule. Analysis included procurement activity durations, predecessor/ successor relationships and overall schedule logic. Mr. Maraj also analyzed CPM schedule updates.

Administration Building Annex, Baltimore, MD - Scheduler. Monitor construction activities, maintains documentation, reviews the CPM schedule, chairs progress meetings, responds to RFI's, resolves field construction issues and analyzes and negotiates change orders and claims. JMT's schedulers are also supporting our project manager by review the baseline CPM schedule and monitoring each monthly schedule update including a report that summarizes the schedule status, delay analysis and accountability for schedule delays for this $4.3 million, 12,000 sf, two story office building annex for the Authority's administration office complex.

Sr. CPM Scheduler. –He has monitored the CPM schedules for 22 projects and analyzed six claims under this contract. Mr. Maraj supported our onsite project managers by reviewing the baseline CPM schedule and monitoring each monthly schedule update including a report that summarized the schedule status, delay analysis and accountability for schedule. He also monitored construction activities, maintained documentation, reviewed impacted CPM schedules, chaired progress meetings, responded to RFI's, resolved field construction issues and analyzed and negotiated change orders and claims.

On-Call Construction Management for Scheduling, Claims Analysis and Constructability Reviews for Various Projects (MTA-0934 A) - *Scheduler*. Reviewed, analyzed and commented on the Initial Critical Path Method Schedule for the construction of a pedestrian bridge over WMATA tracks as part of the Silver Spring station relocation. Attended site meetings and accounted for time spent on the project, assigning responsibilities for delays. Project involved fabrication and erection of structural steel pedestrian bridge.

Silver Spring Transit Center, Montgomery County, MD - *Scheduler*. Mr. Maraj reviewed, analyzed and commented on the Initial Critical Path Method Schedule for the construction of a pedestrian bridge over WMATA tracks. Attended site meetings and accounted for time spent on the project, assigning responsibilities for delays. Project involved fabrication and erection of structural steel pedestrian bridge.

Miscellaneous Engineering Services, Port of Baltimore (MPA 503916) - *Scheduler*. Reviewed, analyzed and commented on the Initial Critical Path Method (ICPM) Schedule for several assignments:

- Elevator Modernization, World Trade Center in Baltimore - Analysis included procurement activity durations, predecessor/ successor relationships and overall schedule logic. He is currently analyzing CPM schedule updates.
- South Locust Point Marine Terminal - involved the construction of a 100,000 sf cargo shed in 180 working days.

During the review of the ICPM, Mr. Maraj discovered that the submittal from the contractor was based on an incorrect calendar for completion. At the joint review conference, the contractor was made aware of the terms of the contract and asked to review the schedule to comply with the specification. JMT continues to track the project's progress and report on delays through monthly update reports.

John D. Purdy, P.E. Resume

YEARS EXPERIENCE WITH FIRM: 30

YEARS EXPERIENCE WITH OTHER FIRMS: 0

EDUCATION:

B.S., Structural Design and Construction Engineering Technology, The Pennsylvania State University, 1979

PROFESSIONAL REGISTRATION(S):

P.E.: Pennsylvania - No. [redacted] (1984)
Connecticut - No. [redacted] (1987)
New York - No. [redacted] (1992)
New Jersey - No. [redacted] (1996)
Standard First Aid: American Red Cross (2010)
CPR/AED - Adult: American Red Cross (2010)

CURRENT RESPONSIBILITIES:

Facilities Group Manager responsible for managing and directing the multidiscipline design of buildings, other facilities, and bridges and the complete development of plans and specifications for conceptual, preliminary, and final phases of projects. Also responsible for contract compliance, budgets, schedules, and the coordination of project disciplines and subconsultants.

SUMMARY OF EXPERIENCE:

Bronx General Post Office, Bronx, NY, *City of New York.* Project Manager responsible for the inspection, analysis, and preparation of contract documents for the historic restoration of the landmark Bronx General Post Office. The building is a three-story, steel-framed structure with mass masonry walls that comprise the facade, complete with ornate sculptures and marble trim. The project included a seismic review of the existing structure and the addition of new structures to make the building compliant with the Americans with Disabilities Act (ADA). The masonry facades were reconstructed to address extensive cracking through the facade.

Miscellaneous As-Needed Designs, New York, NY, *MTA Bridges and Tunnels.* Project Manager for a multidisciplinary architectural and engineering contract for three consecutive, three-year, call-in agreements. In addition, our firm provided staff at the Authority's offices to supplement their staff for a variety of services. Tasks included:

- Historic Restoration of Robert Moses Building Façade

Holland Tunnel Ventilation Buildings, New York, NY, and Jersey City, NJ, *The Port Authority of New York and New Jersey.* Deputy Project Manager/Project Engineer responsible for the rehabilitation of four landmark structures built circa 1927, which are part of the first ventilated motor vehicle tunnels in the United States. The project included restoring the masonry and concrete facades and replacing in kind the copper evase stacks and roofs. Responsible for performing an inspection, a feasibility study, and preliminary and final designs for the rehabilitation contract documents to maintain and restore the unique architectural character. Rehabilitation included seismic upgrades, as well as asbestos and lead paint abatement.

Hudson Line Station Improvements, Scarborough, Ossining, and Philipse Manor Stations, NY, *MTA Metro-North Railroad.* Facilities Manager responsible for the redesign, bid-phase services, and construction-phase services at three rail stations. The improvements include platform and canopy replacement and the addition of Americans with Disabilities Act (ADA)-compliant overpasses between island platforms. Tasks included the resolution of requests for information, shop drawings reviews and logs, drawing and specification updates, and plan modifications due to field conditions.

Hudson Line Station Improvements, Tarrytown, NY, *MTA Metro-North Railroad.* Facilities Manager responsible for design upgrades and bid documents for the historic Tarrytown Station. The improvements include platform and canopy replacement and the addition of Americans with Disabilities Act (ADA)-compliant overpasses between island platforms.

Parkside Avenue Aqueduct Rehabilitation, Trenton, NJ, *New Jersey Water Supply Authority.* Project Structural Engineer responsible for the structural rehabilitation of this landmark aqueduct. The structure is a four-span concrete-encased, steel structure that was built in 1909 and was designed to carry the Feeder Canal and the Belvedere-Delaware Railroad over Parkside Avenue.

Lower Harlem Station Improvements, Bronx and Westchester, NY, *MTA Metro-North Railroad.* Project Manager responsible for a multidisciplinary architectural and engineering contract to construct improvements to six Metro-North Railroad stations on the Harlem Line. Improvements included new platforms, stairs, canopies, new station entrances, retaining wall rehabilitation, improved access, historic restoration (Tuckahoe), customer improvement amenities, weatherproofing, pigeon-proofing, and various architectural upgrades to improve the appearance of stations.

Renovation of Gowanus Pump Station Facilities, Brooklyn, NY, *New York City Department of Environmental Protection.* Structural Project Manager responsible for the design of three additional floors of interior space at a former powerhouse, modifications to the 14-foot-diameter underground water tunnel and valve pits beneath the historic powerhouse and service building, modifications to the existing service building to install four Con Edison transformer vaults and network-protection rooms, and the relocation of the existing valve house. The structure was designated a historic facility, and great care was taken to preserve its exterior architectural features.

Renovation of Various Facilities, New York, NY, *New York City Department of Environmental Protection.* Structural Project Manager responsible for the rehabilitation designs for various industrial facilities. Projects involved structural strengthening, the repair of impact and corrosion damage, and upgrades for equipment supports at existing facilities, which are of steel frame and mass masonry construction.

Transit Viaduct Rehabilitation, South Orange and East Orange, NJ, *New Jersey Transit.* Bridge Engineering Manager responsible for inspections, analyses, and designs for the rehabilitation of the South Orange and East Orange Viaducts, involving historic restoration of elevated stations on each viaduct. The reinforced-concrete structures were constructed in the 1920s, and the failure of their waterproofing led to deterioration requiring rehabilitation. Work included line structures (retaining walls) between the stations.

Renovation of Train Storage Yard, Croton-on-Hudson, NY, *MTA Metro-North Railroad.* Structural Project Manager responsible for the design of fixed facilities in service areas in the 20s Yard. These facilities included service and fueling pits, sanding towers, high-mast lighting foundations, a pedestrian bridge, and other miscellaneous structures. In addition, the historic HM Tower was restored.

UNOMA JAMES AGWAI
Construction Inspector

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Licenses/Certifications:

ACI Concrete Construction Special Inspector
ID# [redacted]
Exp. Date: 11/21/2014

ACI – Concrete Field Testing Technician Grade I
ID [redacted]
Exp. Date: 7/19/2010

NYC DOB 4hr. Supported Scaffold Safety Certificate

10hr. OSHA Occupational Safety Training
ID# 001897392

30hr. OSHA in Construction (CFR 1926)

40hr. NYC Site Safety Manager Course

Years of Experience: 8
Years with Firm: 1.5

Summary:

Responsibilities include performing technical inspection and plant/equipment evaluation services for concrete/ballast/ plants and related materials; Check for quality assurance conditions of concrete mixing trucks, moisture content (ASTM-94) scale calibration and perform field sieve analysis. Performed reinforcement concrete and fire proofing inspections.

Relevant Experience:

Contract C-34590, Concrete Batch Plant Inspections, NYC TRANSIT AUTHORITY, Various Locations
Responsibilities include performing technical inspection and plant/equipment evaluation services for concrete/ballast/asphalt plants and related materials; Check for quality assurance conditions of concrete mixing trucks, moisture content (ASTM-94) scale calibration and perform field sieve analysis.

Contract C-000010237/10601, Consultant Services for Controlled Inspection, NYC SCHOOL CONSTRUCTION AUTHORITY, Various Boroughs – 2007-Present
Responsibilities include performing Controlled Inspection and testing inspections of Concrete placed on-site and of batch plant operations; Various project locations. Reporting circumstances of field activity to Project officers. Maintaining supportive documentation of field activities and Contractor operations.

NYCDDC, Queens, NY–Inspector – 2007 - Present
Performed reinforcement concrete, masonry, fire stopping, formwork and fire proofing inspections under citywide *Controlled Inspection and Testing Laboratory Services* contract.

Previous Experience:

Construction Materials Inspector – Future Tech Consultants
Perform physical and controlled inspections of coarse and fine aggregates, concrete, and fire proofing. Determined moisture contents, enforce standards and tolerance levels, help insure quality control and quality assurance. Compiled and produced written reports for clients. (2003-2007)

Amir Ghorbani

YEARS EXPERIENCE WITH FIRM: 1

YEARS EXPERIENCE WITH OTHER FIRMS: 10

EDUCATION:
B.S. - Civil Engineering, NJIT, 1999

PROFESSIONAL REGISTRATION(S):
NICET IV Highway Construction-Issued February 2010
NJSAT-Asphalt Paving Technologist - issued January 2005, expires July 2010
Traffic Control Coordinator, Rutgers University, June 2006
ACI Concrete Field Testing Technician Grade 1 – issued February 2003, expires September 2011
ACI Concrete Construction Technology, issued February 2008, expires February 2013
OSHA HAZWOPER Health & Safety

CURRENT RESPONSIBILITIES:
Chief/Resident Inspector responsible for inspecting contractor operations, supervising inspection personnel, and overseeing work zone safety. Also responsible for project records, estimates, change orders, as-built records, and utility coordination. Work includes night time operations.

SUMMARY OF EXPERIENCE:

Supervision of Construction Services, Contract No. P100.079, Bridge Deck Repairs and Resurfacing, MP 0 to MP 126, *New Jersey Turnpike Authority.* Assistant Resident Engineer responsible for the supervision of construction including contract administration Bridge Deck Repairs and Resurfacing Project. This Contract involves extensive repairs at twenty-six bridge structures. Additional scope of work included administering five Change of Plans providing for work at three additional bridge structures as well as the installation of a cantilevered Sign Structure at MP 0.2SB. Major items of contract work consists of concrete deck panel replacements including bridge barrier parapet, spall repairs of the various types, deck joint repair and replacement, membrane waterproofing, milling, HMA paving and Maintenance and Protection of Traffic.

Benjamin Franklin Bridge Salt Dome Rehabilitation, *Delaware River Port Authority (DRPA).* Assistant Resident Inspector responsible for this $2.5M project designed to stop the extension of existing concrete cracks by sealing cracks, spall repairs, using approved Sika products, stopping leakage (waterproofing) on surface by using Clay Liner, Water Repellent products and repairing rusted/damaged designated steel columns base on plans/spec. Administration files for reports, shop drawings, pictures were updated daily. Coordinating daily operations with prime contractor and subs were part of daily routine and representing progress and on job meetings were held also.

SBL-101 - New Jersey Turnpike Authority Southern Bridge Lengthening Project, Mile Post 3.72 to 26.98, Various Locations, NJ, *New Jersey Turnpike Authority.* Bridge and Road Construction Inspector for this complex, $16.2M Interstate Highway bridge reconstruction project. Project scope included the staged demolition and replacement of 4 bridge structures over the mainline New Jersey Turnpike, at MP 3.72, 20.23, 26.13 and 26.98, in order to accommodate the future widening of the southern portion of the Turnpike. Two of the new bridges consisted of multi-span continuous steel girders, and the two were precast/prestressed concrete box beam girders. Duties included supervision of lane and road closures and all other related Maintenance and Protection of Traffic, environmental and erosion control measures, and inspection of the following items; structural foundation excavation, forming/reinforcing/concrete placement for footings, abutments and piers, laminated elastomeric bearing installation, erection of steel and concrete girders, stay-in-place forming, placement of reinforcing steel and construction of bridge decks with HPC concrete, parapets, and approach slabs. Also inspected various retaining walls,

temporary/stay in place sheeting, anchor installations/tests, damp proofing/water proofing of structures. Also inspected various related roadway items such as excavation, embankment, pavement milling, various drainage pipe and structures, DGABC, Superpave HMA base, intermediate and surface course placement, traffic line striping, median barrier and beam guide rail, highway lighting, and all erosion/sedimentation control monitoring. Work was required during both day and night shifts.

Interstate Route 195 Westbound from West of Route 537 to Mingamahome Brook – Resurfacing and Guiderail Upgrades, Howell and Jackson Townships, Monmouth and Ocean Counties, NJ, *New Jersey Department of Transportation.* Road Construction Inspector responsible for this $8.7M interstate highway resurfacing and guiderail upgrade project. Project consisted of resurfacing 15 miles Westbound from Route 537 to Mingamahome Brook. Responsibilities included inspection of all items including; traffic control and safety, 300,000-SY milling of existing pavement, over 110,000-Tons of Superpave HMA intermediate and surface course paving, striping, reflective pavement markers, rumble strips and over 2 miles of beam guiderail. All work conducted using night time operations.

Route 70 & Massachusetts Ave Intersection Improvements, Toms River, Ocean County, NJ, *New Jersey Department of Transportation. R*oad Construction Inspector responsible for this $6.7M Federal Aid, State Highway reconstruction project. Project scope includes the reconfiguration of the intersection of State Route 70 and Massachusetts Avenue (CR 637), and widening and safety improvements to over 1 mile of the roadways. Responsibilities included the direct field supervision of the contractors' operations including; earthwork, and roadway excavation, select demolition of existing 9" thick concrete roadway slabs, new storm drainage including various size RCP, inlets/manholes/catch basins, ditches and detention basin, and cleaning of existing pipe and structures, overhead & underground utility relocations, concrete slab joint stabilization, milling various depth pavement, Superpave HMA paving of base, intermediate and surface courses, temporary and permanent line striping, and all related Maintenance and Protection of Traffic, and environmental and erosion control measures. The project also includes new traffic signalization including foundations, structures, conduit/wire, and signals and controllers. The project also includes offsite disposal of regulated concrete/ asphalt debris and acid soil, and dewatering of storm water runoff.

Maintenance Roadway Repair Contract # 267, Central, Route 33, Monmouth County, NJ, *New Jersey Department of Transportation.* Road Construction Inspector for this $3.1M, 4.5 mile state highway reconstruction project. Scope of work included milling, paving and various safety improvements, and all related coordination and Maintenance and Protection of Traffic (M&PT). Responsibilities included the direct field supervision of the contractor's operations including; removal of existing pavement markers/ existing striping, raising frames/grates, reconstruction of inlets/manholes, cleaning of existing pipe/structures, depth pavement milling, Superpave HMA paving of intermediate and surface courses, temporary and permanent line striping, restoration of traffic signal loop detectors/circuits, and all related M&PT. Project included night time operations.

Commodore Barry Bridge Deck Repairs, Chester Township, Delaware County, PA, *Delaware River Port Authority.* Bridge Construction Inspector for the partial/full depth repair project on the concrete bridge deck in 3 stages using infrared graphs and chain method to delineate deteriorated concrete, mark out removal areas and place fast curing epoxy concrete materials. Responsibilities included inspecting safety/traffic control, lane/shoulder closures, deck repair preparations, reinforcing steel placement, concrete mixing/placement/finishing, curing.

PAUL BURNETT
Senior Construction Inspector

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Certifications:
ACI Concrete Construction Special Inspector
ID# [redacted]
Exp. Date: 12/23/2014

ACI Concrete Field Testing Technician – Grade I
ID [redacted]
Exp. Date: 11/18/2011

OSHA 10hr Safety Course

Troxler Certified

NYC DOB 4 Hr Supported Scaffold User Certificate
ID# SS09-8237 Exp. Date: 7/14/2013

RSO and Operator's Course

Years of Experience: 9
Years with Firm: 8

Highlights:
Review of Concrete Mix Design and Use of Additives (11/2000)

SUMMARY:

As an Inspector, responsible for inspections on: concrete (casting of cylinders, slump testing), earthwork construction (density testing of compaction, verification and construction of backfill placement), roadway construction (asphalt paving and installation of underground utilities), and masonry (sampling of mortar and grout). Also performed concrete compressive tests, proctor tests gradations, Atterberg limits and moisture content of soil samples.

RELEVANT EXPERIENCE:

Relevant Experience:

DASNY – Term Agreement for Construction Inspection and Materials Testing Services – Construction Inspector
Performed construction inspections and materials testing for concrete, fire stopping and fireproofing. Reported back to the Project Managers, and communicated with on-site personnel to ensure compliance. (2008-Present)

Contract C-000009245/10237/10601, Consultant Services for Controlled Inspection, NYC SCHOOL CONSTRUCTION AUTHORITY, Various Boroughs
Responsibilities include performing controlled and testing inspections of concrete placed on-site and of batch plant operations; masonry, curtain walls, and fire stopping and fire proofing. Various project locations. Reporting circumstances of field activity to Project Officers. Maintaining supportive documentation of field activities and Contractor operations. As lead inspector Paul supervised up to four inspectors on multiple projects. (2006-Present)

NYCSCA #04-00023R – I.S. 93, Washington Heights, NY – Inspector
Conducted inspections for the construction of a new school facility in Washington Heights under NYCSCA *Testing Laboratory and Controlled Inspection Services* contract. Inspections for concrete, masonry, soils, rebar and steel. (2005-2006)

NYCDDC Various Locations, NY–Inspector
Performed inspections for soil compaction, all concrete and masonry units and fire proofing under citywide *Controlled Inspection And Testing Laboratory Services* contract. (2006-Present)

South Nassau Community Hospital, South Nassau, Long Island - Inspector
Provided concrete inspection, soil compaction, rebar inspection, and steel erection for the new five-story addition to the South Nassau Community Hospital. (2003-2005)

Various Projects, NYC Department of Environmental Protection – Inspector
Concrete pour inspections at Bowery Bay Treatment Plant, Newtown Creek Water Treatment Plant, North River Water Pollution Control Plant, Hunts Point Sewage Treatment Plant, Peadgate Basin, Flushing Bay, and Shafts 20B, 21B and 19B in Brooklyn and Queens. (2002-Present)

Triborough Bridge, Throgs Neck Bridge, Whitestone Bridge, Verrazano Bridge, Queens Mid-Town Tunnel, Battery Park Tunnel and the New England Thruway, NY, MTA Triborough Bridge and Tunnel Authority – Inspector
Conducted inspections on soil and asphalt compaction as well as rebar and concrete placement. (2002-2003)

Briarwood Apartments and Rheingold Gardens Partnership Homes, Banta Home Construction – Inspector
Inspected rebar, concrete and concrete coring, masonry and fire stopping. (2002-Present)

Fresh Meadows Country Club, NY – Inspector
Concrete batch and concrete test inspection, masonry and soil compaction test. (2002-2003)

Henry Hudson Bridge in the Bronx and Cross Bay Bridge in Far Rockaway, NY, MTA Triborough Bridge and Tunnel Authority – Inspector
Coring & concrete inspection. (2000-2003) (2008-2009)

St. Thomas Moore Church, St. John's University – Inspector
Performed soil compaction, rebar and concrete inspections. (2003)

PS 58R in Staten Island, NY, NYC School Construction Authority, NY - Inspector
Concrete inspection, concrete batch inspection, masonry inspection, steel erection, rebar inspection, fire stopping and fire proofing, and soil compaction test. (2001-2003)

Various Schools Throughout NYC, NYC School Construction Authority – Inspector
Masonry, welding, fire proofing, concrete and soil compaction test for: PS 178M, PS 62M, PS 2M, PS 166M, IS 66M, IS 180M, PS 60M, PS 61M, Park West High, Park East High, Julia Richman, Phillip Randolph High, Manhattan Math & Science, Curtis High, PS 63M, PS 192M, Louis Brandies High, PS 11M, PS 9M, Forsythe Auxiliary High, PS 29 R, PS 29Y, PS 25R, PS 13R, PS 1R, PS 15R, PS 39R, and PS 99M. (2001-2002)

Various Projects, NYC Housing Authority - Inspector
Concrete pour inspections at Hamilton Houses, Soundview, Park Houses, Patterson Houses and Mary Park Houses in the Bronx as well as Vladeck Houses in Manhattan. (2000-2001)

Previous Experience:

RNF Auto, Mt. Vernon, NY – Partner/Mechanic/Welder
Responsibilities included procuring parts, customer service, mechanical work and welding parts as necessary. (1997-2001)

Bench Mark Construction, Charlotte, NC & Mt. Vernon, NY - Supervisor
As Supervisor/Tradesman, responsibilities included welding, plumbing, roofing, painting, installing dry wall, frame work and carpet installation. (1992-1996)

MARIO CAJAS
Construction Inspector

TECTONIC
Practical Solutions, Exceptional Service

Education:

Bachelors in Accounting in Sciences of Commerce and Administration, Institute Technical Superior "Luis Napoleon Dillon", Ecuador

Licenses/Certifications:

ACI Concrete Construction Special Inspector
ID# [redacted]
Exp. Date: 11/21/2014

ACI Concrete Field Testing Technician – Grade I
I [redacted]
Exp. Date: 9/30/2011

NYC DOB 4hr Supported Scaffold User Certificate Exp: Date: 7/23/2012
ID# SS08-2324

Troxler Certification
ID [redacted]

OSHA 10hr Safety Course
ID# 002269587

Years of Experience: 10
Years with Firm: 2

SUMMARY:

Responsibilities include performing technical inspection and plant/equipment evaluation services for concrete/ballast/ plants and related materials; Check for quality assurance conditions of concrete mixing trucks, moisture content (ASTM-94) scale calibration and perform field sieve analysis. Performed fire stopping and masonry inspections.

RELEVANT EXPERIENCE:

Contract C-0000010237/10601, Consultant Services for Controlled Inspection, NYC SCHOOL CONSTRUCTION AUTHORITY, Various Boroughs
Responsibilities include performing Controlled Inspection and testing inspections of Concrete placed on-site and of batch plant operations and fire stopping. Various project locations. Reporting circumstances of field activity to Project officers. Maintaining supportive documentation of field activities and Contractor operations. (2008-Present)

DASNY – Term Agreement for Construction Inspection and Materials Testing Services – Construction Inspector
Performed construction inspections and materials testing for concrete at various sites. Reported back to the Project Managers, and communicated with on-site personnel to ensure compliance. (2008-Present)

Previous Experience:

Materials Testing Lab Inc. Testing Technician, NY, NY
Lead and participated in the sampling, testing and analysis of construction soils and asphalt, masonry, rebar, fire stopping, and concrete as part of the construction quality control process. Also trained less experienced technicians and made work assignments. Calculated asphalt concrete and soil cement mix designs ratios by conducting asphalt, aggregate, stability, flow and strength retention analyses. Also performed density and nuclear density tests to determine if construction materials meet density requirements and made recommendations as to how to achieve proper density levels. In addition coordinated materials testing schedules with other divisions and contactors involved in construction, prepared and submitted daily analysis reports to the supervisor. Also contributed to the service to important companies such as: B.U.G., N.Y.C. D.O.T., N.Y.C. D.O.T. – S.A.M., Port Authority, A.B.C., Judlau Contracting Inc., Granite Holmar, American Airlines, Real Works, North Shore Hebrew Academy, Conti and many more. (2005 - Present)

Stealth Plumbing Supply, Senior Sales Associate, Corona, NY
Assisted clients with finding the right tools for the specific jobs they were working on. Also administrated the store's inventory supplies and trained new associates. (2002-2004)

Fernando Urina Inc., Engineer Assistant, Madrid, Spain
Supervised the infrastructure for communication networks. (1998-2002)

YEARS EXPERIENCE WITH FIRM: 18

YEARS EXPERIENCE WITH OTHER FIRMS: 0

EDUCATION:

B.S., Structural Design and Construction Engineering, The Pennsylvania State University, 1990

PROFESSIONAL REGISTRATION(S):

P.E.: New Jersey [redacted] 1999)

CURRENT RESPONSIBILITIES:

Project Manager responsible for all facets of highway and interchange construction projects, as well as site development projects. Experience includes geometric designs, traffic control and staging, utility relocations, construction cost estimates, signing, permitting, earthwork calculations, soil erosion, right-of-way engineering, and construction support.

SUMMARY OF EXPERIENCE:

Secaucus Interchange Project, Section No. 1, Hudson County, NJ. Project Engineer responsible for a utility impact report and utility relocation recommendations, including the relocation of NJTA's fiber-optic cables. The project was segmented into three sections, and our firm was responsible for the preliminary design of the $60 million Section No. 1 portion. Due to existing wetlands, the majority of the ramps were located on structures (retaining walls or bridges). Work involved geometrics/roadway design, the analysis of alternatives, structure/foundation designs, the complex maintenance and protection of traffic, drainage design, lighting design, utility relocations, right-of-way, constructibility reviews, and an evaluation of the use of an 85-foot-wide jack tunnel section under the turnpike mainline roadway to minimize disruptions to the traveling public.

NJ Route 23, Section 2P/I-80, Section 4BF Flyover, Passaic County, NJ. Project Engineer for improvements to NJ Route 23 from the NJ Route 23/I-80/U.S. Route 46 "spaghetti bowl" interchange to the West Belt Road interchange. The project included a flyover ramp between I-80 westbound and NJ Route 23 northbound (NB) and the realignment of NJ Route 23 NB and the collector-distributor roadway. Responsible for traffic control and staging plans and interchange signing. Coordinated schemes of accommodation with local municipal agencies and utility companies. Developed utility agreements plans, construction plans, specifications, and checklists for utility relocations.

U.S. Route 1, Section 6T/U.S. Route 130, Section 16E/NJ Route 171, Section 1B, Middlesex County, NJ. Project Engineer for improvements to the U.S. Route 1/U.S. Route 130/NJ Route 171 at-grade intersection. This design of a three-level interchange with substantial grade changes included direct connector ramps, loop ramps, and frontage road construction. Responsible for horizontal and vertical geometry, traffic control and staging, utility coordination, right-of-way plan preparation, sign structure design, and the preparation and coordination of construction documents. Complex traffic control plans permitted three lanes of U.S. Route 1 to be operational at all times and maintained access to adjoining properties and roads during interchange construction. This project also required extensive utility relocations.

NJ Route 18, Section 2A, Middlesex County, NJ. Project Engineer for the final design of the extension of NJ Route 18 from the John Lynch Bridge to I-287 in Piscataway Township. The project included 2.4

kilometers of limited-access freeway with three grade-separated interchanges plus 2 kilometers of land surface highway with extensive at-grade intersection improvements. Responsibilities included the design of extensive utility relocations to remove all utilities from the proposed corridor. Coordinated schemes of accommodation with local municipalities; utility companies; and Rutgers, The State University of New Jersey. Coordinated the entire relocation process for NJDOT from the development of preliminary relocation schemes through the preparation of final design plans and utility agreements for $11 million of utility relocations. Relocations included a 1,676-millimeter sanitary sewage trunk main, a 610-millimeter water main, two 406-millimeter gas mains, and 4 kilometers of aerial utility facilities. Coordinated the development of complex maintenance of traffic and staging plans. Work was performed in accordance with the NJDOT Procedures Manual.

NJ Route 18, Section 2F, New Brunswick, Middlesex County, NJ. Project Engineer for the final scope development and initial/final design work. The project involved the design of limited-access freeway sections combined with local collector-distributor roadways, including four grade-separated interchanges. The project also included a section of land surface highway with extensive at-grade improvements. Responsible for utility design services, including the development of schemes of accommodation from preliminary relocation schemes through utility agreement plans and checklists. Relocations included replacing the main water and sewer facilities serving the city of New Brunswick. Widening impacts called for the relocation of two miles of aerial facilities, including backfeeding the 13 kV distribution lines powering the city of New Brunswick and constructing underground duct bank for the 26 kV subtransmission cable to PSE&G's substation within the project limits.

Design Services for Condition Assessment and Prioritization of Repair for Authority Maintenance Facilities, NJ. Deputy Project Manager responsible for condition assessment, prioritization reports with costs to return facilities to a state of good repair, development of a prototype design of a new maintenance facility and final design of a of a new 18,000 s.f. replacement maintenance facility.

Herbertsville Inspection Facility: Final Improvements, Ocean County, NJ. Project Manager for design improvements to the bus/truck inspection facility at MP 94.65 southbound on the GSP. Project includes construction of 10,000 SF+/- building and a 4-bay inspection garage attached to a waiting/restroom area with a state police control center. Site improvements include clearing, grading, drainage and pavement of 4 acre site. Site utility work includes construction of new water, sewer/gas services and upgraded electrical and telephone services. Water service requires construction of 5,000 LF of water main. Sanitary sewer work includes design of a sanitary sewer pump station and force main. Also, design of advanced signing for the new facility with two variable-message signs, guide rail, curbing, and pavement repairs. Responsible for coordination between disciplines and design development of plans, specifications, and cost estimates. Responsible for coordination of all permits including NJDEP Reforestation, NJDEP Freshwater Wetlands, Soil Erosion, Stormwater Management and DCA. Maintain project design schedules and budgets. The construction cost is $12 million.

I-78 and Garden State Parkway Interchange 142 Improvements, Essex and Union Counties, NJ. Project Manager for construction support services program for this interchange improvement project, involving the implementation of new ramp connections from the GSP southbound to I-78 eastbound and from the GSP northbound to I-78 westbound. Project includes a new toll facility building and pedestrian access tunnel at the Union Ramp plaza. Responsible for the day to day construction support operations including overseeing construction inspection services for the Toll building, attending bi-weekly progress meetings, responses to RFI’s, overseeing shop drawing review efforts, developing Change-of-Plans and reviewing VE proposals. Managed RFI and shop drawing submittal process using ProjectMates software. Provided daily on-call support to the project RE and Asst. RE to resolve field issues in an accelerated manner. The construction cost is $125 million.

SABER R. GHAZALY
Construction Inspector

TECTONIC
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Education:

Bachelor of Science
Civil Engineering
Zagazig University, Egypt

Licenses/Certifications:

ICC Structural Masonry Special Inspector – ID [redacted]
Exp. Date: 4/21/2012

ACI Concrete Construction Special Inspector
ID [redacted]
Exp. Date: 7/14/2014

ACI Concrete Field Testing Technician-Grade I
ID [redacted]
Exp. Date: 7/19/2013

NYC DOB 4hr Supported Scaffold User Certificate
Card # 08-2986

OSHA 10hr Safety Course
ID# 002269561

Troxler Certificate
ID [redacted]

Years of Experience: 4
Years with Firm: 2

Summary:
Responsibilities include inspecting various construction activities, and ensuring compliance to specifications and the Building Code. Reported all findings to Project Managers and clients. Alerted the appropriate parties about any deficiencies, and worked with the client to correct the problems. Inspected fire stopping, fire proofing, masonry, soils and foundation work.

RELEVANT EXPERIENCE:

Contract C-000010237/10601, Consultant Services for Controlled Inspection,
NYC SCHOOL CONSTRUCTION AUTHORITY, Bronx/Manhattan
Responsibilities include performing Controlled Inspection and testing inspections of on-going masonry work, fire stopping and fire proofing. Various project locations. Reporting circumstances of field activity to NYC SCA Project Officers. Maintaining supportive documentation of field activities and Contractor operations. (2009-Present)

NYCDDC – Various Sites, NYC-Inspector
Performed inspections for soil compaction, masonry and fire proofing under citywide *Controlled Inspection and Testing Laboratory Services* contract. (2009-Present)

DASNY – Term Agreement for Construction Inspection and Materials Testing Services – Inspector
Performed masonry inspections at Queens College. Reported findings to client to ensure compliance to specifications. (2009-Present)

STV/Bovis – NYCHA – Johnson Houses – Phase II, Bethune Gardens
Performed masonry inspections at Johnson Houses and Bethune Gardens to ensure compliance with the specifications. Reported all findings to the Project Managers and clients. (2009-Present)

Previous Experience:

Sarna Misr, Site Manager, Cairo, Egypt
Finished a two-floor hospital; inspected and handled the plumbing, masonry, fire stopping and proofing, plastering, painting, marbling and ceramics, ensured the building of the project scope in conformance with the plans, schedule and cost limits, supervised and hired an engineering team of 20 members. Also established a petrol station as well as surrounding roads, inspected and handled the drainage system, installment of water supply, and road improvement. Inspected pile driving and foundation work at this site. Also established a transport warehouse of 230,000 square feet fore the army force, comprising 140,000 square feet of roads, 5,000 feet of water pipelines, and a 3,300 foot drainage system. In addition managed construction of an Equestrian Club, monitored schedule and ensured that materials and field equipments were available on time to ensure timely completion of project. Also managed all phases of construction of a $2 million winter cinema and summer cinema, prepared documentation files and managed hiring and agenda of subcontractors. In addition established a two story television building and four villas, performed quantity surveying on site. (2005-2008)

Trust Group, Surveying Engineer, Cairo, Egypt
Supervised and determined the points of excavation on site of the gated city for the establishment of multi-story buildings using total station equipment. Also determined the excavation levels for the drainage system and water supply as well as the manhole points on site. In addition established all roads in the city as well as the landscape. (2005)

YEARS EXPERIENCE WITH FIRM: 1

YEARS EXPERIENCE WITH OTHER FIRMS: 22

EDUCATION:

B.S., Civil Engineering, University of Massachusetts Dartmouth, 1989
M.S., Civil Engineering, Columbia University, 1999
Primavera Project Planner Training, Robert Andrews Association, 1999
SSPC C-3: Competent Person Training for the Deleading of Industrial Structures, Society for Protective Coatings, 2003

CURRENT RESPONSIBILITIES:

Manager of Construction Services for the firm in New Jersey and New York. Directs operations throughout the area; provides overall project management services; serves as a liaison with state, bistate, and local transportation agencies; and recruits, assigns, and manages department personnel.

SUMMARY OF EXPERIENCE:

NJDOT Central Region 2006-2009 Construction Inspection Term Agreement, *New Jersey Department of Transportation.* Project Director for this 3-Year Call-In type construction inspection contract in the NJDOT Central Region. The project provided a variety of staff for 20 separate Task Orders over the 3 year period including providing Assistant Resident Engineers, Inspectors, Office engineers, CPM Schedulers and overall project management. Projects ranged from Interstate resurfacing projects to concrete bridge deck repairs, bridge replacements and reconstruction of interstate interchanges. Also responsible for coordinating maintenance and protection of traffic operations, and assisting NJDOT Resident Engineer in the processing of pay estimates, change orders and other project correspondence.

NJDOT Central Region 2005-2008 Construction Inspection Term Agreement, *New Jersey Department of Transportation.* Project Manager for this 3-Year Call-In type construction inspection contract in the NJDOT Central Region. The project provided a variety of staff for 20 separate Task Orders over the 3 year period including providing Assistant Resident Engineers, Inspectors, Office engineers, CPM Schedulers and overall project management. Projects ranged from Interstate resurfacing projects to concrete bridge deck repairs, bridge replacements and reconstruction of interstate interchanges. Also responsible for coordinating maintenance and protection of traffic operations, and assisting NJDOT Resident Engineer in the processing of pay estimates, change orders and other project correspondence.

Contract 30-1281, Express E-ZPass Improvements at the Toms River Toll Plaza on the Garden State Parkway, Toms River, NJ, *New Jersey Turnpike Authority.* Project Director and Quality Assurance/Quality Control Manager for this 12-month-long, fast-track project. Construction included the partial demolition and modification of the existing toll plaza lanes, islands, booths, and canopy; the complete removal of the existing southbound branch lanes; the construction of a tunnel between the northbound and southbound lanes; the widening and realignment of the toll plaza's approach roadways and ramps; the excavation required for the construction of new pavement; the milling and resurfacing of existing pavement; the construction of concrete foundations and drilled shafts for sign support structures and space frames; the installation of drainage structures; the erection of overhead sign support structures; the implementation of median barrier and guide rail improvements; the installation of highway lighting and the completion of related electrical work; the installation of electrical equipment; the preparation of an intricate maintenance and protection of traffic plan; and the completion of other related work.

Rehabilitation of the New Hope-Lambertville Toll-Supported Bridge, New Hope, PA, and Lambertville, NJ, *Delaware River Joint Toll Bridge Commission.* Project Manager/Coatings Specialist for a project that involved the complete removal and replacement of the existing open-grate decking and flooring system on this 1,000-foot-long, six-span truss structure. In addition, the project required the complete deleading of the structure by means of abrasive blasting in accordance with Society for Protective Coatings (SSPC)-SP 10 Near White Metal Blast standards within an SSPC Class 1A containment system and its repainting with a three-coat, moisture-cured urethane coating system. All of this work was staged under heavy traffic conditions and required that extensive maintenance and protection of traffic measures be employed throughout the project. Responsibilities included providing field inspection services for coatings and reviewing containment shop drawings, the lead health and safety plan, and environmental plans.

Miscellaneous Structural Repairs from Mile 0 to Mile 122 on the New Jersey Turnpike Main Line, the Newark Bay-Hudson County Extension, and the Pearl Harbor Memorial Extension, Various Locations, NJ, *New Jersey Turnpike Authority.* Project Director for the construction supervision of structural steel repairs, substructure spall repairs, pier cap reconstruction on Structure No. 105.18, overhead sign structure foundation repairs and foundation reconstruction, and bridge jacking and bearing replacement operations and repairs.

MTA Bridges and Tunnels (B&T), New York, NY

TB-13, Triborough Bridge Queens Approach Deck and Roadway Replacement, Queens, NY. Construction Project Manager responsible handling the budget and the project schedule (with Primavera software) and providing overall supervision of this $17 million project. Work included the removal of concrete sidewalks, parapets, median barrier, curtain walls, cap beams, and superstructure and approach slabs; the replacement of the existing drainage system; the installation of new cast-in-place cap beams and column encasement; the installation of new underdeck lighting and the reinstallation of bridge lighting and communications systems; and the installation of new approach slabs, precast pedestals, bearings, precast superstructure units, and precast/prestressed curtain walls. The existing superstructure and a portion of the substructure were removed in panels using circular and wire concrete cutting saws for demolition. The new Inverset deck slab/superstructure units were installed in a similar panelized fashion.

TB-64A, Deck Replacement on the Suspended Spans of the Triborough Bridge and the Queens Viaduct, Queens, NY. Construction Project Manager responsible for all aspects of project management, including handling the budget and the scheduling, using with Primavera software, for this $150 million project. The project included the complete replacement of the existing deck on the bridge's half-mile-long suspended span, which is over an active waterway, as well as on a quarter-mile-long elevated viaduct. Structural steel work included the repair or replacement of steel girders, floor beams, diaphragms, splice plates, and bearings and the construction of a steel orthotropic deck on the suspended span. The project also included the complete repainting of the structural steel superstructure members with a three-coat system under full containment conditions. In addition, the project included the removal under special containment, the replacement, and the painting of all 184 suspender rope assemblies.

TB-17, Rehabilitation of the Main Cables on the Triborough Bridge, Queens, Bronx, and Manhattan, NY. Project Manager for this $10 million construction project that entailed the complete rehabilitation of the bridge's main cables. This work included the removal of the existing wire wrapping; the cleaning and repair of the main cable wires; the rewrapping of the cable wires; and the complete repainting of the cables with a three-coat, flexible paint system.

WILLIAM S. GROOMS
Construction Inspector III

TECTONIC
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Education:

SUNY Farmingdale
Farmingdale, NY 1998
Associates in Applied Science –
Architecture/Construction Technology

Licenses/Certifications:

ACI Concrete Construction
Special Inspector
License No [redacted]
Exp. Date: 4/16/2013

ACI Concrete
Field Testing Technician
Grade I
License N [redacted]
Exp. Date: 6/30/2010

NICET Level II
Highway Construction
License No [redacted]

Certified Mold Inspector
License No. [redacted]

Structural Steel Inspection
Steel Structures Technology Center, Inc.

ACI/PCA 318-05
Building Code Seminar

Masonry Training Courses
NYC Brickwork Design Center

OSHA HAZWOPER
40 Hour Certified

OSHA HAZWOPER
Supervisor Certified

OSHA
Confined Space Entry
License N [redacted]

MTA NYCTA
Track Safety Certified

HILTI Firestop
License No [redacted]

NYC Building Code Course
New York University

Summary:

Mr. Grooms has over 25 years of experience in construction management and inspections. His assignments included inspections dealing with buildings, environmental projects as well as highway construction. He is an experienced project manager and inspector of public works projects, and is capable of reviewing NYC Building and Zoning Codes, NYS Building Codes, NYSDOT Specifications, ASTM and ACI codes, and is able to work with MURK record keeping.

RELEVANT EXPERIENCE:

DASNY – Term Agreement for Construction Inspection and Materials Testing Services – Construction Inspector
Performed construction inspections and materials testing for concrete, rebar, fireproofing and fire stopping. Leading several projects to completion. Reported finding to appropriate parties, communicated with on-site personnel to ensure compliance, and worked together with various trades. (2009-Present)

Contract C-000009245/10237/10601, Consultant Services for Controlled Inspection, NYC SCHOOL CONSTRUCTION AUTHORITY, Various Boroughs
Responsibilities include performing Controlled Inspection and testing inspections of Concrete placed on-site, rebar, masonry, curtain walls, fire proofing and fire stopping. Various project locations. Reporting circumstances of field activity to Project officers. Maintaining supportive documentation of field activities and Contractor operations. (2009-Present)

Previous Experience:

DIRECTOR OF TECHNICAL SERVICES, Domani Consulting, Inc., NY 2005-2009
Duties and Responsibilities:
Provided technical assistance to all divisions of CRSG, Inc. Conducted special inspections of various buildings during construction, reviewed all construction inspection reports for conformance to plans, specifications and NYC Building Department requirements. Provided interpretation of NYC Building and Zoning codes as required. Started vibration monitoring programs for subway tunnels and landmark buildings per NYCTA requirements; NYC regulation 10/88 for landmark buildings. Designed and recommended various training programs for technical staff. Also created a technical division with 12 inspectors, on 46 projects in various stages of construction and implemented a full record keeping system in place.

NYC Zoning Course
New York University

NYSDEC
Landfill Operator

AB Block Retaining Wall
Designer/Installer

Member of The American Society of Certified Engineering Technicians

Years of Experience: 2
Years with Firm: <1

ASSISTANT CIVIL ENGINEER, Town of Smithtown, NY 1992-2005
Duties and Responsibilities: Public works construction project management and inspection (concrete, rebar, fire stops, fire proofing, masonry, soils, curtain walls), project design from inception through construction; prepared specifications and bid documents, building inspections, material testing, estimating, environmental projects and waste management (ground water monitoring, methane monitoring/recovery, and landfill construction). Designed and implemented storm water runoff control projects to protect local rivers and Long Island Sound. Was clerk of the works on landfill capping project and clerk of works for the reconstruction of town swimming pool complex at Smithtown Landing Country Club. Instrumental in redesigning landfill gas flare to provide continuous operation; started maintenance program for methane recovery systems to decrease costs and time.

TRAFFIC TECHNICIAN II, Suffolk County Department of Public Works, NY 1990-1992
Duties and Responsibilities: Conducted complex traffic studies - In charge of construction for traffic signal requirement programs and construction at high accident locations. Completed turning movement studies on traffic signal systems for all county roads in western Suffolk County for Federal Highway Project. Managed traffic signal installations by 5 contractors at any given time.

TRAFFIC TECHNICIAN I, Suffolk County Department of Public Works, NY 1988-1990
Duties and Responsibilities: Traffic sign layout, traffic studies, and inspection of traffic department construction projects.

ENGINEERING AIDE, Suffolk County Department of Public Works, NY 1983-1988
Duties and Responsibilities: Surveying for various highway projects, project design, construction inspection (asphalt, concrete, sub grade, rebar, electrical, drainage, landscaping and material testing). Chief construction inspector on all highway construction projects.

.

John G. Tomochik Resume

YEARS EXPERIENCE WITH FIRM: 46

YEARS EXPERIENCE WITH OTHER FIRMS: 0

EDUCATION:

Continuing Education Courses in Cost Estimation at The Pennsylvania State University
Designing Precast Concrete School Buildings Seminar, Tindall Corporation, April 2009

PROFESSIONAL REGISTRATION(S):

NICET Level III - Engineering Technician: Cert. No. [redacted] 1973) Exp. 11/01/2011

CURRENT RESPONSIBILITIES:

Cost Estimator for highway, bridge, rail, rail transit, tunnel, and rail and bus facility projects. Uses R.S. Means ASTRO, WinEst ProPlus, or Excel software as required, all in the Construction Specifications Institute (CSI) format or modified to the client's format. Integrates the cost estimate with the project schedule to make sure that the estimate accurately reflects the cost of construction. Estimates account for project location, accessibility, available work and staging areas, work-hour restrictions, maintenance of rail and/or vehicular operations, phasing requirements, local wage rates, mobilization costs, perceived liability, similar construction volume in the area, subcontracted work, and Disadvantaged Business Enterprise participation.

SUMMARY OF EXPERIENCE:

Hillside Yard and Shop, Jamaica, NY, *MTA Long Island Rail Road.* Project Technician and Capital Cost Estimator for communications and signalization work. Coordinated design work with subconsultants and ongoing construction contracts. Also developed capital cost estimates associated with the contract and related change orders involved with current construction contracts.

Stormwater and Sanitary Collection Systems, Jamaica, NY, *MTA Long Island Rail Road (LIRR).* Project Technician responsible for preparing stormwater reports, related applications, and final design of stormwater and sanitary collection systems, along with associated costs for various improvement projects associated with the LIRR.

General Engineering Consultant, New York, NY, *MTA Bridges and Tunnels (B&T).* [1998-2005] Cost Estimator responsible for preliminary and final cost estimates for the following projects in the New York Metropolitan Area:

- Relocation of Internal Security Department equipment and renovation of Bronx Service Building at the Triborough Bridge.
- Installation of variable message sign and sign bridge on the southbound Hutchinson River Parkway at the Bronx-Whitestone Bridge.
- Relocation of the Bronx-Whitestone Bridge entrance ramp at Schley Avenue.
- Safety improvements at Fleet Operations Central Garage on Randalls Island.
- Parapet wall and roofing repairs at the Queens Midtown Tunnel Service Building.
- HVAC upgrades at the Throg's Neck Bridge Service Building in Queens.

- Installation of rotating prism signs at the Triborough Bridge Manhattan Toll Plaza.

Jenkintown-Wyncote Station Platforms and Parking Garage Project, Jenkintown, PA, *Southeastern Pennsylvania Transportation Authority.* Capital Cost Estimator responsible for developing construction cost estimates to replace the existing station building with extended station platforms, a new 700-vehicle parking garage, highway/bridge access improvements, site lighting, and associated site utilities. The project includes civil, structural, architectural, mechanical, and electrical work under three separate design construction packages with accompanying individual cost estimates.

Preliminary Engineering for CORRIDOR*two*, Harrisburg, PA, *Capital Area Transit.* [2008-2009] Lead Cost Estimator responsible for preliminary cost estimating and coordination of discipline costs for a proposed regional rail line between Harrisburg, Hershey, and Lebanon, consisting of a proposed 26.8 mile rail corridor; 6 new passenger stations, including associated parking; and all affected existing bridge structures and proposed new bridges and retaining walls. Station design included platforms, canopies, overpasses, and stair structures.

Duct Bank Replacement in Tunnels A and B, Newark, NJ, *Port Authority Trans-Hudson (PATH) Corporation.* [2008] Capital Cost Estimator responsible for developing a construction cost estimate to replace the existing duct banks and manholes in Tunnels A and B between Caisson 1 and the Christopher Street substation, located under the Hudson River between New Jersey and New York City. Tunnels A and B are single-track, third-rail tunnels, with duct banks on both sides. Cable replacement consisted of 27 kV, 15 kV, DC traction cables and DC control cables. PATH train operations required work to be performed during scheduled outages between 1:00 a.m. and 5:00 a.m., Monday through Friday or weekends, 12:01 a.m. Saturday through 5:00 a.m. Monday.

Upper Occoquan Dam Facilities Upgrades, Occoquan, VA, *Fairfax Water.* [2008] Project Cost Estimator responsible for developing unit price cost estimates for the facility upgrades. Estimated quantities and provided unit costs for repairs to address severe structural cracking, seepage, and concrete aesthetics issues at the existing intake and powerhouse structures that form part of the existing 740-foot-long concrete gravity dam constructed in 1955. A new control tower replaces an existing portion of the Powerhouse Building. Under normal conditions, the dam will have up to 60 feet of reservoir head. The Federal Energy Regulatory Commission-regulated facility impounds the 10 Bgal Occoquan Reservoir, which is primarily used for municipal water supply.

Bucks County Intermodal Improvements, Levittown Station, Levittown, PA, *Southeastern Pennsylvania Transportation Authority*. [2007-present] Capital Cost Estimator responsible for developing construction cost estimates to replace the existing station building, station platforms, parking facilities, pedestrian tunnel, site lighting, and associated site utilities, and to improve highway access. The project includes civil, structural, architectural, mechanical, and electrical work under three separate design construction packages with accompanying individual cost estimates.

Fairmount Traction Power Substation and 30th Street Switching Station, Philadelphia, PA, *Southeastern Pennsylvania Transportation Authority.* [2007] Capital Cost Estimator responsible for development of the construction cost estimates to replace the existing Reading Terminal (Callowhill) Substation and existing Amtrak Switching Station 1A (30th Street), respectively. The project included civil, structural, architectural, mechanical, and electrical work under three separate design construction packages with accompanying individual cost estimates. Design work is currently ongoing at the 30th Street location.

Brian Vosberg, EIT

Years Experience: 10

EDUCATION:

B.S., Civil Engineering (Construction), Purdue University, 2000

PROFESSIONAL REGISTRATION(S):

Engineer-in-Training, IN #[redacted]
NICET I
NICET II
ACI Certified
ACI-CCTC
SAT Certified
TCP Certified (Rutgers)

CURRENT RESPONSIBILITIES:

Construction Inspector responsible for inspecting contractor operations, supervising inspection personnel, and verifying work zone safety. Also responsible for keeping project records; preparing cost estimates, change orders, and as-built records; and coordinating utility construction activities.

SUMMARY OF EXPERIENCE:

Supervision of Construction Services, Contract No. P100.079, Bridge Deck Repairs and Resurfacing, MP 0 to MP 126, *New Jersey Turnpike Authority.* Assistant Resident Engineer responsible for the supervision of construction including contract administration Bridge Deck Repairs and Resurfacing Project. This Contract involves extensive repairs at twenty-six bridge structures. Additional scope of work included administering five Change of Plans providing for work at three additional bridge structures as well as the installation of a cantilevered Sign Structure at MP 0.2SB. Major items of contract work consists of concrete deck panel replacements including bridge barrier parapet, spall repairs of the various types, deck joint repair and replacement, membrane waterproofing, milling, HMA paving and Maintenance and Protection of Traffic.

Route I-78 Resurfacing and Guide Rail Upgrades, *NJDOT*. Construction Inspector: Project involves resurfacing and guide rail work from East of Tunnel Rd to Beaver Brook. Responsibilities include providing full-time inspection and supervision services to assure compliance with the contract plans and specifications for milling and repaving asphalt roadways, installation of guide rail, end treatments and bridge barrier, and installation of non vegetative surface. Additional responsibilities include quantity measurements, preparation of daily reports, and coordination with DOT personnel throughout the duration of the project, and monitoring of Contractor's M&PT.

New Jersey Turnpike Miscellaneous Structure Repairs (Contract R-1500), *New Jersey Turnpike Authority.* Construction Inspector: Project involves miscellaneous structure repair work for 23 structures on New Jersey Turnpike Mile 0 to Mile 122, Pearl Harbor Memorial Turnpike Extension and Newark Bay-Hudson County Extension. Responsibilities include providing full time inspection and supervision services to assure compliance with the contract plans and specifications for deck and joint repairs, substructure repairs, installation of guide rail, end treatments and bridge barrier. Additional responsibilities include quantity measurements, preparation of daily reports, monitoring of Contractor's M&PT, and coordination with NJTA personnel throughout the duration of the project.

Garden State Parkway Southern Bridge Repairs,. *New Jersey Turnpike Authority*. Construction Inspector: Project involves construction supervision along the Garden State Parkway between MP 20.0 and MP 126.3, encompassing repairs to 38 structures. Responsibilities include providing full time inspection and supervision services to assure compliance with the contract plans and specifications for deck and joint repairs, substructure repairs, installation of guide rail and bridge barrier. Additional responsibilities include quantity measurements, preparation of daily reports, monitoring of Contractor's M&PT, and coordination with NJTA personnel throughout the duration of the project.

UNOMA JAMES AGWAI
Construction Inspector

TECTONIC
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Licenses/Certifications:

ACI Concrete Construction Special Inspector
ID# [redacted]
Exp. Date: 11/21/2014

ACI – Concrete Field Testing Technician Grade I
ID# [redacted]
Exp. Date: 7/19/2010

NYC DOB 4hr. Supported Scaffold Safety Certificate

10hr. OSHA Occupational Safety Training
ID# 001897392

30hr. OSHA in Construction (CFR 1926)

40hr. NYC Site Safety Manager Course

Years of Experience: 8
Years with Firm: 1.5

Summary:

Responsibilities include performing technical inspection and plant/equipment evaluation services for concrete/ballast/ plants and related materials; Check for quality assurance conditions of concrete mixing trucks, moisture content (ASTM-94) scale calibration and perform field sieve analysis. Performed reinforcement concrete and fire proofing inspections.

Relevant Experience:

Contract C-34590, Concrete Batch Plant Inspections, NYC TRANSIT AUTHORITY, Various Locations
Responsibilities include performing technical inspection and plant/equipment evaluation services for concrete/ballast/asphalt plants and related materials; Check for quality assurance conditions of concrete mixing trucks, moisture content (ASTM-94) scale calibration and perform field sieve analysis.

Contract C-000010237/10601, Consultant Services for Controlled Inspection, NYC SCHOOL CONSTRUCTION AUTHORITY, Various Boroughs – 2007-Present
Responsibilities include performing Controlled Inspection and testing inspections of Concrete placed on-site and of batch plant operations; Various project locations. Reporting circumstances of field activity to Project officers. Maintaining supportive documentation of field activities and Contractor operations.

NYCDDC, Queens, NY–Inspector – 2007 - Present
Performed reinforcement concrete, masonry, fire stopping, formwork and fire proofing inspections under citywide *Controlled Inspection and Testing Laboratory Services* contract.

Previous Experience:

Construction Materials Inspector – Future Tech Consultants
Perform physical and controlled inspections of coarse and fine aggregates, concrete, and fire proofing. Determined moisture contents, enforce standards and tolerance levels, help insure quality control and quality assurance. Compiled and produced written reports for clients. (2003-2007)

PAUL BURNETT
Senior Construction Inspector

TECTONIC
Practical Solutions, Exceptional Service

Certifications:
ACI Concrete Construction Special Inspector
ID [redacted]
Exp. Date: 12/23/2014

ACI Concrete Field Testing Technician – Grade I
ID [redacted]
Exp. Date: 11/18/2011

OSHA 10hr Safety Course

Troxler Certified

NYC DOB 4 Hr Supported Scaffold User Certificate
ID# SS09-8237 Exp. Date: 7/14/2013

RSO and Operator's Course

Years of Experience: **9**
Years with Firm: **8**

Highlights:
Review of Concrete Mix Design and Use of Additives (11/2000)

SUMMARY:

As an Inspector, responsible for inspections on: concrete (casting of cylinders, slump testing), earthwork construction (density testing of compaction, verification and construction of backfill placement), roadway construction (asphalt paving and installation of underground utilities), and masonry (sampling of mortar and grout). Also performed concrete compressive tests, proctor tests gradations, Atterberg limits and moisture content of soil samples.

RELEVANT EXPERIENCE:

Relevant Experience:

DASNY – Term Agreement for Construction Inspection and Materials Testing Services – Construction Inspector
Performed construction inspections and materials testing for concrete, fire stopping and fireproofing. Reported back to the Project Managers, and communicated with on-site personnel to ensure compliance. (2008-Present)

Contract C-000009245/10237/10601, Consultant Services for Controlled Inspection, NYC SCHOOL CONSTRUCTION AUTHORITY, Various Boroughs
Responsibilities include performing controlled and testing inspections of concrete placed on-site and of batch plant operations; masonry, curtain walls, and fire stopping and fire proofing. Various project locations. Reporting circumstances of field activity to Project Officers. Maintaining supportive documentation of field activities and Contractor operations. As lead inspector Paul supervised up to four inspectors on multiple projects. (2006-Present)

NYCSCA #04-00023R – I.S. 93, Washington Heights, NY – Inspector
Conducted inspections for the construction of a new school facility in Washington Heights under NYCSCA *Testing Laboratory and Controlled Inspection Services* contract. Inspections for concrete, masonry, soils, rebar and steel. (2005-2006)

NYCDDC Various Locations, NY–Inspector
Performed inspections for soil compaction, all concrete and masonry units and fire proofing under citywide *Controlled Inspection And Testing Laboratory Services* contract. (2006-Present)

South Nassau Community Hospital, South Nassau, Long Island - Inspector
Provided concrete inspection, soil compaction, rebar inspection, and steel erection for the new five-story addition to the South Nassau Community Hospital. (2003-2005)

Various Projects, NYC Department of Environmental Protection – Inspector
Concrete pour inspections at Bowery Bay Treatment Plant, Newtown Creek Water Treatment Plant, North River Water Pollution Control Plant, Hunts Point Sewage Treatment Plant, Peadgate Basin, Flushing Bay, and Shafts 20B, 21B and 19B in Brooklyn and Queens. (2002-Present)

Triborough Bridge, Throgs Neck Bridge, Whitestone Bridge, Verrazano Bridge, Queens Mid-Town Tunnel, Battery Park Tunnel and the New England Thruway, NY, MTA Triborough Bridge and Tunnel Authority – Inspector
Conducted inspections on soil and asphalt compaction as well as rebar and concrete placement. (2002-2003)

Briarwood Apartments and Rheingold Gardens Partnership Homes, Banta Home Construction – Inspector
Inspected rebar, concrete and concrete coring, masonry and fire stopping. (2002-Present)

Fresh Meadows Country Club, NY – Inspector
Concrete batch and concrete test inspection, masonry and soil compaction test. (2002-2003)

Henry Hudson Bridge in the Bronx and Cross Bay Bridge in Far Rockaway, NY, MTA Triborough Bridge and Tunnel Authority – Inspector
Coring & concrete inspection. (2000-2003) (2008-2009)

St. Thomas Moore Church, St. John's University – Inspector
Performed soil compaction, rebar and concrete inspections. (2003)

PS 58R in Staten Island, NY, NYC School Construction Authority, NY - Inspector
Concrete inspection, concrete batch inspection, masonry inspection, steel erection, rebar inspection, fire stopping and fire proofing, and soil compaction test. (2001-2003)

Various Schools Throughout NYC, NYC School Construction Authority – Inspector
Masonry, welding, fire proofing, concrete and soil compaction test for: PS 178M, PS 62M, PS 2M, PS 166M, IS 66M, IS 180M, PS 60M, PS 61M, Park West High, Park East High, Julia Richman, Phillip Randolph High, Manhattan Math & Science, Curtis High, PS 63M, PS 192M, Louis Brandies High, PS 11M, PS 9M, Forsythe Auxiliary High, PS 29 R, PS 29Y, PS 25R, PS 13R, PS 1R, PS 15R, PS 39R, and PS 99M. (2001-2002)

Various Projects, NYC Housing Authority - Inspector
Concrete pour inspections at Hamilton Houses, Soundview, Park Houses, Patterson Houses and Mary Park Houses in the Bronx as well as Vladeck Houses in Manhattan. (2000-2001)

Previous Experience:

RNF Auto, Mt. Vernon, NY – Partner/Mechanic/Welder
Responsibilities included procuring parts, customer service, mechanical work and welding parts as necessary. (1997-2001)

Bench Mark Construction, Charlotte, NC & Mt. Vernon, NY - Supervisor
As Supervisor/Tradesman, responsibilities included welding, plumbing, roofing, painting, installing dry wall, frame work and carpet installation. (1992-1996)

MARIO CAJAS
Construction Inspector

TECTONIC
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Education:

Bachelors in Accounting in Sciences of Commerce and Administration, Institute Technical Superior "Luis Napoleon Dillon", Ecuador

Licenses/Certifications:

ACI Concrete Construction Special Ins
ID# [redacted]
Exp. Date: 11/21/2014

ACI Concrete Field Testing Technician – Grade I
ID [redacted]
Exp. Date: 9/30/2011

NYC DOB 4hr Supported Scaffold User Certificate Exp: Date: 7/23/2012
ID# SS08-2324

Tr [redacted]fication
ID [redacted]

OSHA 10hr Safety Course
ID# 002269587

Years of Experience: 10
Years with Firm: 2

SUMMARY:

Responsibilities include performing technical inspection and plant/equipment evaluation services for concrete/ballast/ plants and related materials; Check for quality assurance conditions of concrete mixing trucks, moisture content (ASTM-94) scale calibration and perform field sieve analysis. Performed fire stopping and masonry inspections.

RELEVANT EXPERIENCE:

Contract C-0000010237/10601, Consultant Services for Controlled Inspection, NYC SCHOOL CONSTRUCTION AUTHORITY, Various Boroughs
Responsibilities include performing Controlled Inspection and testing inspections of Concrete placed on-site and of batch plant operations and fire stopping. Various project locations. Reporting circumstances of field activity to Project officers. Maintaining supportive documentation of field activities and Contractor operations. (2008-Present)

DASNY – Term Agreement for Construction Inspection and Materials Testing Services – Construction Inspector
Performed construction inspections and materials testing for concrete at various sites. Reported back to the Project Managers, and communicated with on-site personnel to ensure compliance. (2008-Present)

Previous Experience:

Materials Testing Lab Inc. Testing Technician, NY, NY
Lead and participated in the sampling, testing and analysis of construction soils and asphalt, masonry, rebar, fire stopping, and concrete as part of the construction quality control process. Also trained less experienced technicians and made work assignments. Calculated asphalt concrete and soil cement mix designs ratios by conducting asphalt, aggregate, stability, flow and strength retention analyses. Also performed density and nuclear density tests to determine if construction materials meet density requirements and made recommendations as to how to achieve proper density levels. In addition coordinated materials testing schedules with other divisions and contactors involved in construction, prepared and submitted daily analysis reports to the supervisor. Also contributed to the service to important companies such as: B.U.G., N.Y.C. D.O.T., N.Y.C. D.O.T. – S.A.M., Port Authority, A.B.C., Judlau Contracting Inc., Granite Holmar, American Airlines, Real Works, North Shore Hebrew Academy, Conti and many more. (2005 - Present)

Stealth Plumbing Supply, Senior Sales Associate, Corona, NY
Assisted clients with finding the right tools for the specific jobs they were working on. Also administrated the store's inventory supplies and trained new associates. (2002-2004)

Fernando Urina Inc., Engineer Assistant, Madrid, Spain
Supervised the infrastructure for communication networks. (1998-2002)

SABER R. GHAZALY
Construction Inspector

TECTONIC
Practical Solutions, Exceptional Service

Education:

Bachelor of Science
Civil Engineering
Zagazig University, Egypt

Licenses/Certifications:

ICC Structural Masonry Special Inspector – ID [redacted]
Exp. Date: 4/21/2012

ACI Concrete Construction Special In
ID [redacted]
Exp. Date: 7/14/2014

ACI Concrete Field Testing Technician-Grade I
ID [redacted]
Exp. Date: 7/19/2013

NYC DOB 4hr Supported Scaffold User Certificate
Card # 08-2986

OSHA 10hr Safety Course
ID# 002269561

Troxler Certificate
ID [redacted]

Years of Experience: 4
Years with Firm: 2

Summary:
Responsibilities include inspecting various construction activities, and ensuring compliance to specifications and the Building Code. Reported all findings to Project Managers and clients. Alerted the appropriate parties about any deficiencies, and worked with the client to correct the problems. Inspected fire stopping, fire proofing, masonry, soils and foundation work.

RELEVANT EXPERIENCE:

Contract C-000010237/10601, Consultant Services for Controlled Inspection,
NYC SCHOOL CONSTRUCTION AUTHORITY, Bronx/Manhattan
Responsibilities include performing Controlled Inspection and testing inspections of on-going masonry work, fire stopping and fire proofing. Various project locations. Reporting circumstances of field activity to NYC SCA Project Officers. Maintaining supportive documentation of field activities and Contractor operations. (2009-Present)

NYCDDC – Various Sites, NYC-Inspector
Performed inspections for soil compaction, masonry and fire proofing under citywide *Controlled Inspection and Testing Laboratory Services* contract. (2009-Present)

DASNY – Term Agreement for Construction Inspection and Materials Testing Services – Inspector
Performed masonry inspections at Queens College. Reported findings to client to ensure compliance to specifications. (2009-Present)

STV/Bovis – NYCHA – Johnson Houses – Phase II, Bethune Gardens
Performed masonry inspections at Johnson Houses and Bethune Gardens to ensure compliance with the specifications. Reported all findings to the Project Managers and clients. (2009-Present)

Previous Experience:

Sarna Misr, Site Manager, Cairo, Egypt
Finished a two-floor hospital; inspected and handled the plumbing, masonry, fire stopping and proofing, plastering, painting, marbling and ceramics, ensured the building of the project scope in conformance with the plans, schedule and cost limits, supervised and hired an engineering team of 20 members. Also established a petrol station as well as surrounding roads, inspected and handled the drainage system, installment of water supply, and road improvement. Inspected pile driving and foundation work at this site. Also established a transport warehouse of 230,000 square feet fore the army force, comprising 140,000 square feet of roads, 5,000 feet of water pipelines, and a 3,300 foot drainage system. In addition managed construction of an Equestrian Club, monitored schedule and ensured that materials and field equipments were available on time to ensure timely completion of project. Also managed all phases of construction of a $2 million winter cinema and summer cinema, prepared documentation files and managed hiring and agenda of subcontractors. In addition established a two story television building and four villas, performed quantity surveying on site. (2005-2008)

Trust Group, Surveying Engineer, Cairo, Egypt
Supervised and determined the points of excavation on site of the gated city for the establishment of multi-story buildings using total station equipment. Also determined the excavation levels for the drainage system and water supply as well as the manhole points on site. In addition established all roads in the city as well as the landscape. (2005)

WILLIAM S. GROOMS
Construction Inspector III

TECTONIC
Practical Solutions, Exceptional Service

Education:

SUNY Farmingdale
Farmingdale, NY 1998
Associates in Applied Science –
Architecture/Construction Technology

Licenses/Certifications:

ACI Concrete Construction
Special Inspector
License No [redacted]
Exp. Date: 4/16/2013

ACI Concrete
Field Testing Technician
Grade I
License No [redacted]
Exp. Date: 6/30/2010

NICET Level II
Highway Construction
License No. [redacted]

Certified Mold Inspector
License N [redacted]

Structural Steel Inspection
Steel Structures Technology Center, Inc.

ACI/PCA 318-05
Building Code Seminar

Masonry Training Courses
NYC Brickwork Design Center

OSHA HAZWOPER
40 Hour Certified

OSHA HAZWOPER
Supervisor Certified

OSHA
Confined Space Entry
License N [redacted]

MTA NYCTA
Track Safety Certified

HILTI Firestop
License N [redacted]

NYC Building Code Course
New York University

Summary:

Mr. Grooms has over 25 years of experience in construction management and inspections. His assignments included inspections dealing with buildings, environmental projects as well as highway construction. He is an experienced project manager and inspector of public works projects, and is capable of reviewing NYC Building and Zoning Codes, NYS Building Codes, NYSDOT Specifications, ASTM and ACI codes, and is able to work with MURK record keeping.

RELEVANT EXPERIENCE:

DASNY – Term Agreement for Construction Inspection and Materials Testing Services – Construction Inspector
Performed construction inspections and materials testing for concrete, rebar, fireproofing and fire stopping. Leading several projects to completion. Reported finding to appropriate parties, communicated with on-site personnel to ensure compliance, and worked together with various trades. (2009-Present)

Contract C-000009245/10237/10601, Consultant Services for Controlled Inspection, NYC SCHOOL CONSTRUCTION AUTHORITY, Various Boroughs
Responsibilities include performing Controlled Inspection and testing inspections of Concrete placed on-site, rebar, masonry, curtain walls, fire proofing and fire stopping. Various project locations. Reporting circumstances of field activity to Project officers. Maintaining supportive documentation of field activities and Contractor operations. (2009-Present)

Previous Experience:

DIRECTOR OF TECHNICAL SERVICES, Domani Consulting, Inc., NY 2005-2009
Duties and Responsibilities:
Provided technical assistance to all divisions of CRSG, Inc. Conducted special inspections of various buildings during construction, reviewed all construction inspection reports for conformance to plans, specifications and NYC Building Department requirements. Provided interpretation of NYC Building and Zoning codes as required. Started vibration monitoring programs for subway tunnels and landmark buildings per NYCTA requirements; NYC regulation 10/88 for landmark buildings. Designed and recommended various training programs for technical staff. Also created a technical division with 12 inspectors, on 46 projects in various stages of construction and implemented a full record keeping system in place.

NYC Zoning Course
New York University

NYSDEC
Landfill Operator

AB Block Retaining Wall
Designer/Installer

Member of The American Society of Certified Engineering Technicians

Years of Experience: 2
Years with Firm: <1

ASSISTANT CIVIL ENGINEER, Town of Smithtown, NY 1992-2005
Duties and Responsibilities: Public works construction project management and inspection (concrete, rebar, fire stops, fire proofing, masonry, soils, curtain walls), project design from inception through construction; prepared specifications and bid documents, building inspections, material testing, estimating, environmental projects and waste management (ground water monitoring, methane monitoring/recovery, and landfill construction). Designed and implemented storm water runoff control projects to protect local rivers and Long Island Sound. Was clerk of the works on landfill capping project and clerk of works for the reconstruction of town swimming pool complex at Smithtown Landing Country Club. Instrumental in redesigning landfill gas flare to provide continuous operation; started maintenance program for methane recovery systems to decrease costs and time.

TRAFFIC TECHNICIAN II, Suffolk County Department of Public Works, NY 1990-1992
Duties and Responsibilities: Conducted complex traffic studies - In charge of construction for traffic signal requirement programs and construction at high accident locations. Completed turning movement studies on traffic signal systems for all county roads in western Suffolk County for Federal Highway Project. Managed traffic signal installations by 5 contractors at any given time.

TRAFFIC TECHNICIAN I, Suffolk County Department of Public Works, NY 1988-1990
Duties and Responsibilities: Traffic sign layout, traffic studies, and inspection of traffic department construction projects.

ENGINEERING AIDE, Suffolk County Department of Public Works, NY 1983-1988
Duties and Responsibilities: Surveying for various highway projects, project design, construction inspection (asphalt, concrete, sub grade, rebar, electrical, drainage, landscaping and material testing). Chief construction inspector on all highway construction projects.

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Section F: Names, Titles, Hourly Rates

Gannett Fleming Engineers & Architects, P.C.

Name	Title	Hourly Rate
James Laurita, P.E.	Principal-In-Charge	$200.00*
John Purdy, P.E.	Task Project Manager	$78.00
Charles Norrish, P.E.	Task Project Manager	$82.50
James Gibbons, MSCE	Quality Control	$72.00
Kenneth Cho, P.E.	Construction Managers/ Resident Engineers	$71.50
Thomas Oliver, P.E.	Construction Managers/ Resident Engineers	$65.00
Philip Grande, P.E.	Construction Managers/ Resident Engineers	$52.50
Paul Van Olden, PE	Construction Managers/ Resident Engineers	$62.80
Brian Mahon, PE	Construction Managers/ Resident Engineers	$43.60
Harry Morton, N-IV	Construction Managers/ Resident Engineers	$40.70
Carlo Cesarini, N-IV	Construction Managers/ Resident Engineers	$40.90
Brian MacAllister, P.E.	Construction Managers/ Resident Engineers	$44.60
Mark Hopkins, P.E.	Construction Managers/ Resident Engineers	$50.00
Mike North, P.E.	Construction Managers/ Resident Engineers	$40.20
Erich Schiele, PE	Office Engineers	$62.00
James Holbink, P.E.	Office Engineers	$40.00
Ruth Doucette, N III	Office Engineers	$39.40
Francisco Ribas, N IV	Office Engineers	$41.20
Brian Dorr, P.E.	Value Engineering	$59.50
James Ossa, N-IV	Inspector	$36.90
Gary Splain, N-IV	Inspector	$41.80
Thomas Wargo, N-IV	Inspector	$39.10
Bessie Hall, N-III	Inspector	$34.00
Scott Smigel, N-III	Inspector	$36.50
Matt Remchuk, N IV	Inspector	$39.00
James Banack, N II	Inspector	$32.00

James Sullivan, N III	Inspector	$33.10
Mike Knarr, N III	Inspector	$32.00
Mike Landry, EIT	Inspector	$29.50
James Douglass	Scheduling	$41.70
Erich Schiele	Scheduling	$62.00
John Tomochick	Estimating	$41.80

*Billing Rate

Johnson, Mirmiran, Thompson

Name	Title	Hourly Rate
Lawrence Fink, PE	Principal-In-Charge	$200.00*
Ivan Ramirez, PE	Project Manager	$50.00
Edward McMahon, PE	Quality Control	$57.00
Richard Geida, PE	Constructibility	$39.75
James Roche, PE	Constructibility	$43.50
Ronald Willis	Constructibility	$31.40
Prad Maraj, PE	Scheduling	$57.00
Dave Keffer, PE	Scheduling	$67.00
James Hovey	Scheduling	$45.00
Marty Lund, N-IV	Inspector	$ 43.00
Tim Brower, N-IV	Inspector	$ 45.00
George White, N-IV	Inspector	$ 48.00
Mike Crocetti, N-IV	Inspector	$ 39.15
George Griffith, N-IV	Inspector	$ 35.00
Clare Larsen, EIT	Inspector	$ 27.00
Dwain Thomas, PE	Construction Managers/ Resident Engineers	$57.75
Obioma Oti, PE	Construction Managers/ Resident Engineers	$57.70
Joseph Manuelli	Office Engineers	$ 34.00
Rafael Quinones	Office Engineers	$ 37.00

*Billing Rate

VN Engineers, Inc.

Name	Title	Hourly Rate
Robert Gomez, P.E.	Project Manager	$65.00
Peter J. Cloudas, P.E.	Construction Managers/ Resident Engineers	$34.45
Michael Dion, P.E.	Construction Managers/ Resident Engineers	$39.15
Edward McLean	Inspector	$31.00
Lawrence Van Deusen	Inspector	$36.00

Arora and Associates, P.C.

Name	Title	Hourly Rate
Manik Arora, PE	Principal-in-Charge	$205.80*
Rajeev Arora, PE	Principal-in-Charge	$205.48*
Joseph Comero, PE	Chief Engineer	$58.50
Kalpesh Trivedi	Construction Manager	$42.50
Thomas Cook	Construction Manager	$45.00
Robert Olsen	Construction Manager	$27.00
Daniel Drumm	Field Engineer/Inspector	$40.50
Jason Shevrin	Field Engineer/Inspector	$33.50
Bincy John	Field Engineer/Inspector	$31.00
Samuel Donelson	Project Manager/Scheduler	$39.50
Judson Goldsborough, PMP, LEED AP	Project Manager/Scheduler	$38.00
Sheeba Minhas	Field Engineer/Inspector	$28.75
Thomas Corley	Construction Safety Engineer	$49.17
Steven Blatz, NICET II	Designer	$31.50
Earl Carter	CAD Manager	$35.50
Heather Webster	Project Specialist	$29.00
Shania Ortiz	Engineering Specialist	$19.25

*Billing Rate

Tectonic Engineering and Surveying Consultants P.C.

Name	Title	Hourly Rate
Judson Goldsborough, PE	Task Project Manager	$200.00*
Raymond Fischlein, PE	Task Project Manager	$200.00*
Robert Raz	Inspector	$21.80
Daril Simon	Inspector	$20.26
Amin Greiss	Inspector	$35.00
Albert Agosto	Inspector	$36.06
Reynaldo Alonso	Inspector	$34.50
Ibrahim Gaber	Inspector	$34.00
Alan Yu	Inspector	$56.00
Shafiqul Hamid	Inspector	$29.15
Raymond Cholewka, PE	Construction Managers/ Resident Engineers	$67.47
Edward O'Leary, PE	Construction Managers/ Resident Engineers	$64.20
Mina Marcos, PE	Construction Managers/ Resident Engineers	$60.00
Edward Torossian	Material Testing	$38.50
Michael Miller	Material Testing	$27.00

Billing Rate*

Halcrow

Name	Title	Hourly Rate
Acosta, Joe*	Technician Diver	$53.11
Esola, Bill*	Technician Diver	$48.52
Friend, Douglas*	P.E.-Diver	$54.71
Garisto, John*	Technician Diver	$34.35
Hayes, John	Senior Engineer	$63.04
Kaminski, Louis	Engineer	$33.79
Lew, Kenneth	Engineer	$47.74
LoPorcaro, Stephen*	P.E.-Diver	$53.81
Sposito, Brett*	P.E.-Diver	$50.08
Waddicor, Chris*	Technician Diver	$47.08
Waller, Al	Principal Engineer	$88.39

* Note:These rates are non-diving (office) rates. As per NY State labor law, all diving and tending work is performed at the prevailing wage field rates provided in the table below, which include all applicable supplemental benefits. The diver rate applies to the member of the inspection team that actually performs the diving work for the day that work is performed. The tender rate applies to the member of the team that tends the diver for the day that work is performed.

	Prevailing Wage (Diver)	Prevailing Wage (Tender)
Acosta, Joe	$196.37	$147.43
Esola, Bill	$196.95	$148.02
Friend, Douglas	$198.49	$149.55
Garisto, John	$198.75	$149.82
LoPorcaro, Stephen	$199.63	$150.70
Sposito, Brett	$198.68	$149.74
Waddicor, Chris	$188.80	$143.22

Section G: Relevant Experience

GANNETT FLEMING ENGINEERS & ARCHITECTS, P.C.

❖ **NEWTOWN CREEK WASTEWATER POLLUTION CONTROL PLANT – CONSTRUCTION MANAGEMENT SERVICES, Brooklyn, New York**

New York City Department of Environmental Protection

Gannett Fleming is performing construction management services for 14 construction contracts to upgrade the Newtown Creek Wastewater Pollution Control Plant (WPCP). The contracts include upgrades to the central residuals building and the Newtown Creek sludge barging facilities, modifications to the main building's northwest wing, and reconstruction of Kingsland Avenue, South Battery, and South Control buildings. The upgrade of the New York City Department of Environmental Protection's (NYCDEP) Newtown Creek WPCP is under a consent order from the U.S. Environmental Protection Agency (U.S. EPA) and the New York State Department of Environmental Conservation (NYSDEC). There are several construction and operational consent order deadlines that must be met during the term of this contract. The Newtown Creek WPCP is located in the Greenpoint section of Brooklyn, New York, and serves a population of approximately 1.06 million. It has a drainage area of 15,656 acres including the south and east midtown sections of Manhattan, the northeast section of Brooklyn, and the western section of Queens. NYCDEP's Newtown Creek WPCP is presently undergoing a major, long-term upgrade that began in 1999. The construction management services to be provided by our firm are for Phase 3 of the plant upgrade program, scheduled to be completed in 2018.

Services Provided

- Project administration and construction management services
- Permits and regulatory compliance review
- Community and public participation
- Scheduling
- Fixed assets survey
- Final shop and working drawings review
- As-built drawings review
- Constructability review
- Resident engineering and inspection services
- Health and safety enforcement
- Project operations services
- Natural resources monitoring
- Air monitoring
- Change order control and management

Reference:
Michael Borsykowsky
[redacted]
(2008 – Present)

❖ **REPLACEMENT OF BELT PARKWAY BRIDGE, Brooklyn, New York**

New York City Department of Transportation

Gannett Fleming is providing design and construction support services for a $50 million design/build project to replace an existing two-span bridge carrying Belt Parkway over Ocean Parkway with a wider three-span structure. The work also involves reconstruction of the interchange ramps. The existing cloverleaf interchange will be replaced with tight diamond slip ramps. The construction will be performed on a fast-track schedule to minimize lane closures and noise disruption to the adjacent community. Bridge architecture and site landscaping are an important part of the work, including coordination with the New York City Parks Department and the Art Commission. The Belt and Ocean Parkways are both historic, as they were designed by two of the city's greatest planners – Robert Moses and Frederick Law Olmsted. The goal of this project is to provide added capacity and a long life while maintaining the integrity of the original intent of a parkway – to move traffic but project a park-like image. Unique technical features of the project include the use of a precast (Inverset) superstructure with stainless steel reinforcement, precast pier cap beams, and low headroom minipiles. The bridge is being designed using the semi-integral abutment concept. A two-level seismic analysis was performed, in accordance with NYCDOT guidelines.

Services Provided

- Geotechnical inspection and reports
- Horizontal and vertical alignment of main line and approach ramps
- Utility relocations
- Preliminary design of concrete substructure elements
- Final design and analysis of bridge substructures

Special Features

- Precast (Inverset) superstructure
- Precast pier columns
- Low-headroom minipiles
- Fast-track design and construction

Reference:

Beatriz Duran, Manager, Design Build
NYCDOT
[redacted]
(2001 – 2005)

❖ **CONSTRUCTION INSPECTION SERVICES – CROSS WESTCHESTER EXPRESSWAY (I-287), Elmsford, Greenburgh, and White Plains, Westchester County, New York**

New York State Department of Transportation

Gannett Fleming was responsible for monitoring extensive maintenance and protection of traffic, demolition, and construction activities of two long viaducts (1000 feet and 1300 feet) carrying six lanes of I-287. The highway carries 120,000 vehicles daily and connects I-87 (New York State Thruway) to I-95, passing through White Plains, the business hub and county seat of Westchester County, and passes over the Saw Mill River Parkway, Bronx River Parkway, Metro-North Railroad's Harlem Division, and two rivers.

Construction Operations Features

- Demolition of existing viaducts
- Construction of new replacement viaducts composed of composite, precast, post-tensioned piers with continuous steel-beam and precast concrete deck composite superstructures
- Staged demolition and new construction to maintain existing six lanes of traffic
- New asphalt concrete approach roadways, raised to new bridges' profiles
- New precast concrete noise barrier and retaining wall
- Widening of existing rock cut Construction of rock catchment fences
- Asbestos and lead paint remediations during structure demolition
- Staged drainage installation in approaches (three construction stages)
- Intelligent transportation system, interval superstructure lighting (in beams), and ductwork and junction boxes in bridge parapet walls for roadway lighting
- Geosynthetic reinforced earth system embankment construction
- Excavation and embankment (approximately 60,000 cubic yards)

Reference:

Hans Priebe, Supervising Engineer, NYSDOT

[redacted]

(1997 – 2001)

❖ **CONSTRUCTION MANAGEMENT FOR YONKERS STATION AND HUDSON LINE STATIONS, Hudson Line, NY**

Metro-North Commuter Railroad

Gannett Fleming is performing construction management services for the restoration of historic Yonkers station and for several Hudson Line stations. This assignment entails providing Construction Management on a series of 5 construction contracts whose construction value totals over $200 million.

Work at Yonkers includes major improvements such as include restoration of the station building, rehabilitation of three overpasses, reparation of retaining walls, and installation of new 10-car island platforms. Yonkers is a Beaux Arts style station built in 1911 by the New York Central Railroad. It was designed by the noted architectural firm of Warren and Wetmore and is eligible for listing on the State and National Register of Historic Places.

Hudson Line station improvements include new overpasses and canopies, extensive platform work, stairs, elevators, railings, and lighting. Stations on the Hudson Line include Ossining, Scarborough, Philipse Manor, Irvington, Ardsley-on-Hudson, Dobbs Ferry, Greystone, Glenwood, Ludlow, Riverdale, Spuyten Duyvil, University Heights, Marble Hill and Morris Heights.

Some of the items for the Yonkers Station Restoration include:

- New platforms
- Repair of intricate terracotta cornice, oak benches, domed ceiling, and single remaining chandelier.
- Replacement of all exterior doors and windows
- Repair of all exterior masonry
- New tuck pointing
- Replace all roofing, including fascia, leaders and gutters
- Replication and installation of four missing chandeliers in their original locations.
- Replication and installation of historic clock above the ticket windows.
- Creation of a portal on the west wall opening onto a new riverfront esplanade.

Reference:

Geoffrey Dopsch Project Manager, Metro North Railroad

[redacted]

(2001 to Present)

❖ **CONSTRUCTION INSPECTION SERVICES FOR THE BROOKLYN-QUEENS EXPRESSWAY, 25TH AVENUE TO BROADWAY, Brooklyn, NY**

New York State Department of Transportation.

$200 million project involving the reconstruction and restoration of a very deteriorated portion of the BQE, which is one of the most heavily traveled roads in the entire city of New York and provides access to other major highways and bridges. Major project features involve replacing or rehabilitating seriously deteriorated pavement, bridges (including a railroad bridge), retaining walls, utility lines, and drainage structures; reducing or eliminating safety deficiencies, including limited sight distances; and improving other non-standard features, such as updating lane merges to current standards.

Reference:
Philip Salerno, Director of Construction, NYSDOT
[redacted]
(2000 – 2005)

❖ **CONSTRUCTABILITY REVIEW, PARK AVENUE VIADUCT, Kings County, NY**

New York State Department of Transportation.

Gannett Fleming performed constructability reviews of design documents for the reconstruction of the Park Avenue Viaduct from Flushing Avenue to Sands Street. The review included maintenance and protection of traffic, construction schedule, utility impacts, permits and the required coordination with other agencies, site survey, right-of-way issues, specifications, and special materials and conditions. Prepared a technical report describing the findings and making recommendations

Reference:
Philip Salerno, Director of Construction, NYSDOT
[redacted]
(2005)

❖ **CONSTRUCTION INSPECTION SERVICES, I-278 RECONSTRUCTION, Queens, New York**

New York State Department of Transportation.

Gannett Fleming provided construction inspection services for a $150 million reconstruction and restoration project on a deteriorated section of the BQE, which is one of the most heavily traveled roads in the New York City area, as it provides access to other major highways and

bridges. Major project features involved replacing or rehabilitating seriously deteriorated pavement, bridges (including a railroad bridge), retaining walls, utility lines, and drainage structures; reducing or eliminating safety deficiencies, including limited sight distances; and improving other nonstandard features, such as updating lane merges to current standards.

Reference:
Philip Salerno, Director of Construction, NYSDOT
[redacted]
(2005 – 2009)

- **RECONSTRUCTION OF I-95 – CONSTRUCTION MANAGEMENT SERVICES,** New Haven, Connecticut

Connecticut Department of Transportation
Gannett Fleming provided construction engineering and inspection services for the widening and realignment of I-95 in New Haven from Stiles Street to the New Haven – East Haven town line. One of the major components of this reconstruction project was widening I-95 between the frontage roads in East Haven and the east approach of the Pearl Harbor Memorial Bridge, known as the Q Bridge, in New Haven. The widened road includes four lanes with full inside and outside shoulders in each direction. This project also included the replacement of the four bridges over I-95 and the construction of a new interchange, accessible from a new connector roadway, servicing the New Haven harbor port area. Work on the interchange included constructing new ramp structures over both directions of I-95. The replacement and widening of the mainline I-95 bridges over Fulton Terrace were also required. The use of architectural form liners for cast-in-place construction of bridges and more than 1,500 meters of retaining walls was part of the reconstruction work. This project is one of several major contracts that are part of an overall, coordinated I-95 corridor improvement program being implemented in the New Haven area. Multiple contracts have been underway at the same time.

Project Features

- Maintained average daily traffic of more than 140,000 vehicles on I-95
- Architectural concrete form liners used
- More than 225,000 cubic meters of excavation 200,000 cubic meters of embankment construction
- Total reconstruction and realignment of I-95
- Staged construction of eight bridges
- Precast retaining walls

Services Provided

- Resident engineering and inspection
- Project schedule reviews Internet collaboration for document management and control Superpave inspection
- Drilled shaft inspection
- Inspection of highway drainage installations

Reference:
Mark Rolfe, District Engineer, ConnDOT
[redacted]
(2005 – 2009)

❖ **CONSTRUCTION INSPECTION, REGION CENTRAL TERM AGREEMENT, NJ (47828)**
New Jersey Department of Transportation (NJDOT).
Gannett Fleming is responsible for assigning and managing personnel required by NJDOT on various construction projects in Region Central under a three-year $3 Million term agreement. The Term Agreement entailed providing construction inspection personnel and scheduling resources on 20 distinct Task Orders.

The construction projects include maintenance repair and resurfacing, road reconstruction, bridge rehabilitation and safety improvements in New Jersey Department of Transportation Regions Central and South. The projects also entailed maintenance and protection of traffic operations on local, state and limited access highways.

Reference:
George Carroll, Supervising Engineer, NJDOT
[redacted]
(2006 – Present)

Section I: Firm's Affiliates

Gannett Fleming Engineers & Architects, P.C.'s Affiliates:

- Gannett Fleming, Inc.
  207 Senate Avenue
  Camp Hill, PA 17011
  25-1613591

- Gannett Fleming Engineers, P.C.
  Suite 300
  100 Crossways Park West
  Woodbury, NY 11797-2012
  52-2151596

Johnson, Mirmiran, Thompson's Affiliates:

- Kupper, LLC
  1200 Lenox Drive, Suite 101
  Trenton, NJ 08648-2329
  26-2720315

- The Spectra Group
  563 Central Drive
  Virginia Beach, VA 23454
  20-8551171

- R. Kenneth Weeks Engineers, LLC
  272 Bendix Road, Suite 260
  Virginia Beach, VA 23452
  54-1177995

- Kupper Engineering, PLLC
  60 Park Place, Suite 2101
  Newark, NJ 07102
  22-3558512

Section J: Conflict of Interest

The Gannett Fleming/JMT Team has no Conflict of Interest.

Section K: Terms and Condition

As requested in the RFP, Gannett Fleming's review of the term agreement can be found in the sleeve of this proposal in a separate sealed envelope.

GANNETT FLEMING ENGINEERS, P.C.
Two Penn Plaza
380 Seventh Avenue, Suite 552
New York, NY 10121
Office: (212) 967-9833
Fax: (212) 268-6684
www.gannettfleming.com

August 23, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attention: RFP Custodian

Re: Performance of Expert Professional Construction Management Services and Related Technical Services as Requested on a "Call-In" Basis during 2011 - 2014, RFP # 22094

To Whom It May Concern:

Gannett Fleming Engineers & Architects, P.C. has reviewed the agreement and terms and conditions and request you consider the following:

In subpart A.1: (i) Our professional liability policy is claims based so this needs to read "per claim" rather than per occurrence". (ii) We do not have a 3 year discovery period available, but we can agree to maintain the policy for 3 years after completion.

If you have any questions or require additional information, please feel free to contact us at (212) 967-9833 extension 5229.

Very truly yours,
GANNETT FLEMING ENGINEERS AND ARCHITECTS, P.C.

James R. Laurita, P.E.
President

TECHNICAL PROPOSAL FOR

The Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011 - 2014

RFP Number 22094

Submitted to

THE PORT AUTHORITY OF NY & NJ

Submitted by

Greenman-Pedersen, Inc.

Engineering and Construction Services

In association with:

LPE Enterprises, Ltd.

Maitra Associates, PC

PACO Group, Inc.

August 23, 2010

GPI **Greenman - Pedersen, Inc.**

Engineering and Construction Services

August 23, 2010

Mr. Tim Volonakis, Manager
Professional, Technical & Advisory Services Division - Procurement Department
The Port Authority of New York & New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

RE: Performance of Expert Professional Construction Management and Related Technical Services on a "Call-in" Basis During 2011-2014
RFP #22094

Dear Mr. Volonakis:

Greenman-Pedersen, Inc. (GPI) is pleased to submit our proposal to perform the construction management and related services required by the Port Authority of New York & New Jersey for the above referenced project.

The GPI team consists of a group of experienced, dedicated and highly regarded professionals with an incomparable combination of expertise in providing construction management and inspection services for rehabilitation/reconstruction projects for the Port Authority and other New York metropolitan area clients. Also joining our team are **LPE Enterprises, Ltd., Maitra Associates, P.C., and PACO Group, Inc.** Each firm on this team will bring their specialized experience to this project that matches the unique nature of this project's varied tasks.

The attached proposal outlines our team's qualifications, understanding and technical approach, and staffing for this project. We are confident that the GPI team is the most qualified consultant team for this project and can offer the Port Authority the following advantages:

- ***With more than 250 New York/New Jersey construction management personnel available for assignment team-wide,*** we assure the Port Authority that we have the civil, structural, mechanical/ electrical, and cost estimating/scheduling staff to address the needs of the required tasks as each task is identified.
- ***GPI has unparallel construction management and inspection experience throughout the New York/New Jersey area on multi-disciplined projects*** such as the George Washington Bridge, Goethals Bridge, Bayonne Bridge, Outerbridge Crossing, Holland and Lincoln Tunnels, and Port Authority Bus Terminal for the Port Authority of NY & NJ; the RFK (Triborough), Bronx-Whitestone, Throgs Neck, Marine Parkway, and Verrazano-Narrows Bridges for the TBTA; the Manhattan, Williamsburg, Brooklyn and Macombs Dam Bridges for NYCDOT; and the LIE/Cross Island Parkway Interchange and Queens Midtown Viaduct projects for NYSDOT – acquiring vast knowledge of the intricacies of the structures. Work on these facilities encompassed structural steel demolition, access platform/shield system installation, structural steel repairs, orthotropic deck installation, structural steel erection, bearing replacement, new drainage, safety and security monitoring, coatings removal and application, various structural and roadway repairs, removal and installation of bridge lighting, HVAC upgrade, CCTV installation, fire alarm system installation, security systems, and extensive MPT.
- Our team's proposed project manager for this project is **Greg Zenk, P.E.,** a highly qualified professional engineer with extensive experience in bridge, tunnel and highway rehabilitation, building restoration, and site development projects. In his current position, Greg is responsible for construction management and inspection services undertaken by GPI's Metro NY office. ***Greg has been working closely with the Port Authority's Engineer of Construction for TB&T during the last four years,*** assisting in staffing and providing other critical resources needed for construction management of rehabilitation work totaling more than $350 million.

- Our well-qualified inspectors are NICET certified and many also have specialty certifications from ACI, NACE, SSPC, AWS and NYSMPT, and ***we have a firm commitment to the continuous training or our inspection staff.***
- GPI has had a good working relationship with the Port Authority of NY & NJ for over 15 years. Over this time, GPI has consistently provided the Authority with competent and reliable technical personnel on short- and long-term assignments, including projects under our Port Authority Construction Management, Traffic Engineering, and Structural Engineering Services "Call-In" Contracts. ***We have become accustomed to the rapid response and quick turn-around required on Port Authority Call-In contracts.***

GPI appreciates the opportunity to submit our proposal for this contract. We hope it clearly reflects our Team's ability and enthusiasm to perform this work for the Port Authority of New York & New Jersey. Thank you for your consideration.

Sincerely,

GPI / Greenman-Pedersen, Inc.

M. Denise Carter, P.E.
Senior Vice President/Branch Manager

Proposal for:

Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014 – RFP No. 22094

Presented to:
The Port Authority of New York & New Jersey

Presented by:
Greenman-Pedersen, Inc.

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F. Hourly Rate Schedule

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- GPI Certificates of Authorization to Provide Engineering Services in New York State/New Jersey
- MBE / WBE Certifications

H. Proposed Management Approach

I. Firm Affiliates and Subsidiaries

J. No Conflict of Interest Statement

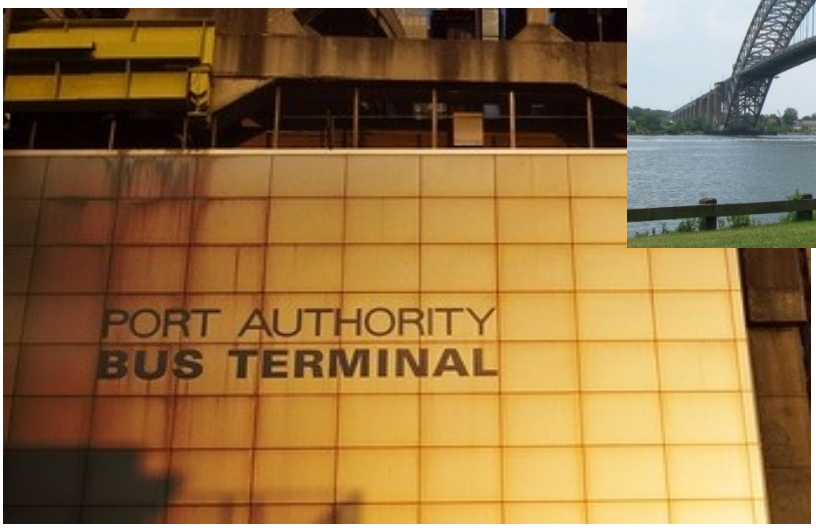
K. Statement on Agreement and Terms and Conditions

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

Proposal for the Performance of Expert Professional
Construction Management and Related Technical Services
As Requested on a "Call-In" Basis During 2011 - 2014 – RFP No. 22094

SECTION A

Attachment B – Agreement on Terms of Discussion



GPI Greenman-Pedersen, Inc.
Engineering and Construction Services

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf,* not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

Greenman-Pedersen, Inc.
(Company)

(Signature)

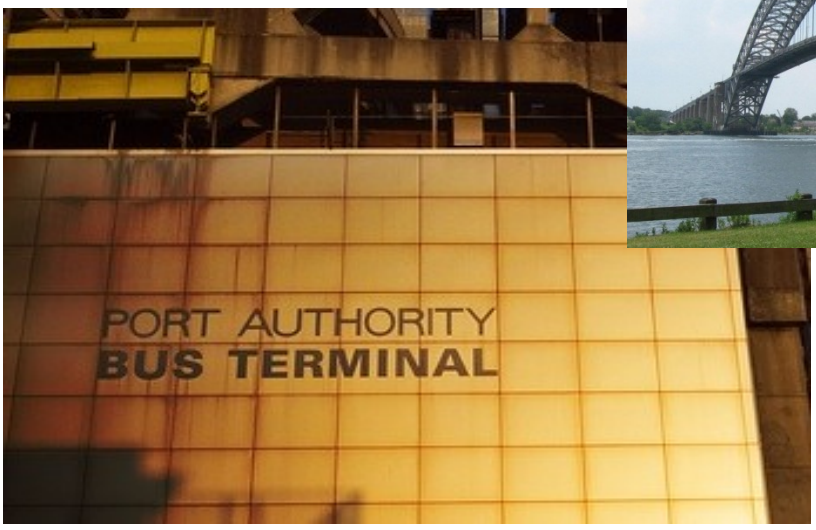
Senior Vice President/Branch Manager
(Title)

August 20, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

SECTION B

Attachment C – Company Profile



ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #22094)

1. Company Name (print or type):

   GREENMAN-PEDERSEN, INC.

2. Business Address (to receive mail for this RFP):

   325 WEST MAIN STREET

   BABYLON, NY 11702

3. Business Telephone Number: 631-587-5060

4. Business Fax Number: 631-422-3479

5. Firm website: www.gpinet.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 10/01/1966

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   SEE ATTACHED

9. Officer or Principal of Firm and Title:

   M. Denise Carter, P.E., Senior Vice President/Branch Manager

10. Name, telephone number, and email address of contact for questions:

    M. Denise Carter, P.E, 6[redacted]

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/DoingBusinessWith/economic/html/objo.html to receive information and apply for certification.

B. Company Profile – List of Affiliates and Subsidiaries

The following are subsidiaries of the Greenman-Pedersen, Inc. organization. There are no affiliates.

Underwater Engineering Services, Inc.
3306 Enterprise Road, Suite 103, Fort Pierce, FL 34982 (EIN: [redacted]

Instrument Sales, Inc.
3306 Enterprise Road, Suite 203, Fort Pierce, FL 34982 (EIN: [redacted]

Aerial Cartographics of America, Inc.
1722 W. Oak Ridge Road, Orlando, FL 32809 (EIN: [redacted]

GPI Southeast, Inc.
3555 Timberlane School Road, Tallahassee, FL 32312 (EIN [redacted]
1414 S.W. Martin Luther King Jr. Avenue, Ocala, FL 34474 (EIN [redacted]
13097 Telecom Parkway North, Temple Terrace, FL 33637 (EIN [redacted]
1010 East Adams Street, Suite 17, Jacksonville, FL 32202 (EIN: [redacted]

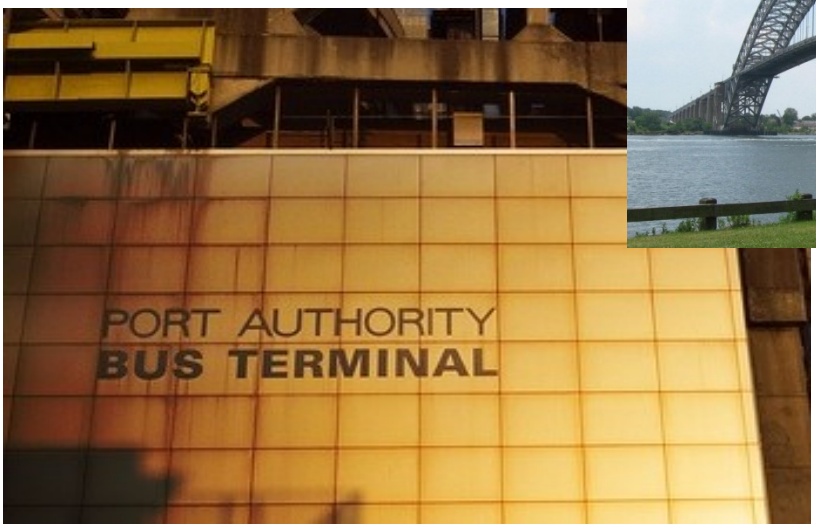
Keller & Kirkpatrick, Inc.
301 Gibraltar Drive, Ste. 2A, Morris Plains, NJ 07950 (EIN [redacted]

Corrosion Control Consultants & Labs, Inc.
4403 Donker Court, SE, Kentwood, MI 49512 (EIN [redacted]

Strategic Environmental & Ecological Services, Inc.
653 McCorkle Blvd., Suite G, Westerville, OH 43082 (EIN: [redacted]

SECTION C

Letter of Compliance to "Proposer Requirements"



GPI Greenman - Pedersen, Inc.

Engineering and Construction Services

August 23, 2010

Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

ATTN: Ms. Mary Lou Rivera, Principal Contract Specialist

RE: Performance of Expert Professional Services for the Construction Management and Related Technical Services As Requested On A "Call-In" Basis During 2011 through 2014 – RFP No. 22094

Dear Ms. Rivera:

This letter is to certify that Greenman-Pedersen, Inc. has read Section I. Proposer Requirements as noted in the Request for Proposals and is in complete compliance with each item listed, as follows.

A. **Must have an office in the New York/New Jersey Metropolitan Area and must have at least 50 individuals on staff experienced in performing construction management and/or construction inspection services in the New York/New Jersey Metropolitan Area.**

Greenman-Pedersen, Inc. has offices in New York and New Jersey, staffed with 159 construction managers and inspectors. .Similar to previous Port Authority of NY & NJ On-Call contracts, this contract will be managed from GPI headquarters located at 325 West Main Street, Babylon, NY. This office has a total of 174 professionals on staff, 69 of which are experienced in performing construction management and/or inspection. GPI also has the ability to call upon personnel from its New Jersey office, staffed with 84 inspectors, if needed.

B. **Firms must have a Certificate of Authorization to practice Professional Engineering in the states of New York and/or New Jersey.**

Greenman-Pedersen, Inc. has Certificates of Authorization to practice professional engineering services in both New York and New Jersey. Copies of these certificates are included in Section G of this proposal.

C. **Construction Inspection staff shall be experienced in performing construction inspection services in at least one of the following disciplines: Civil, Structural, Electrical and Mechanical Engineering; and shall include the following:**

RFP CRITERIA	NUMBER OF STAFF* THAT MEETS THIS CRITERIA	NAMES FOR REFERENCING ON RESUMES
At least 10 engineers/ architects licensed in the states of New York and/or New Jersey	**21**	G. Zenk, J. Valenti, B. Scahill, M. Rabkin, P. Trapani, D. Chasse, N. Neophytou, R. Capilupi, J. Brugge, J. Shah, M. Matalon, W. Ferdinandsen, T. Gibbons, C. Sanchez, R. Csogi, T. Napolitano, J. Tarpey, A. Grosso, P. Smykal, R. Leo, A. Belov

RFP CRITERIA	NUMBER OF STAFF* THAT MEETS THIS CRITERIA	NAMES FOR REFERENCING ON RESUMES
At least 10 must be ACI Concrete Construction Special Inspectors	**11**	D. Cunningham, P. Moschides, R. Saba, D. Mann, D. Chasse, J. Petekiewisz, R. Lancey, T. Shepherd, K. Sachdev, J. Rodriquez; M. Quesenberry
At least 3 must be ICC Certified as Structural Steel and Bolting Inspectors	**6**	R. Saba, G. Vainblat, J. Petekiewisz, K. Sachdev, W. McMahon, R. Lancey
At least one must be NACE 1 coatings certified	**6**	G. Zenk, S. Rodrigue, T. Gibbons, E. Steele, E. Strika, P. Trapani

** This information is included on the resumes of our proposed staff members in Section E of this document.*

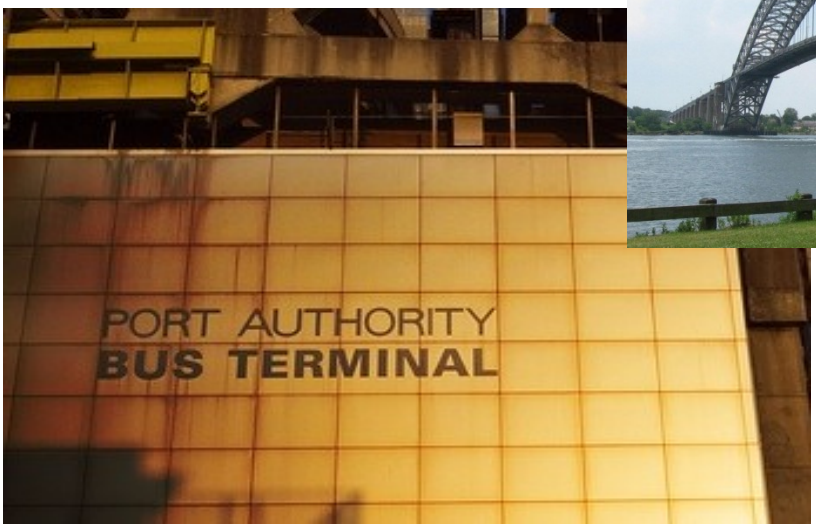
Thank you for your consideration.

Sincerely,

GREENMAN-PEDERSEN, INC.

M. Denise Carter, P.E.
Senior Vice President/Branch Manager

SECTION D
Multiplier and Multiplier Breakdown
Attachment D – Staffing Analysis Sheet



GPI Greenman-Pedersen, Inc.
Engineering and Construction Services

Multiplier and Multiplier Breakdown

The proposed multiplier referred to in the first line of subparagraph 9.A of the Standard Agreement is 2.106.

Overhead (See attached Audit for components)	195.0
Profit	8.0%
	2.106

LPE Enterprises, Ltd.

Detatils for Fringe Benefits and Overhead

Fringe Benefits

Payroll Taxes	11%
Vacation, Holidays, Sick Leave	14%
Group Insurance	12%
Profit Sharing/Retirement Plan	4%
	41%

General Overhead

Technical Salaries - Non Productive	12%
G & A Salaries	11%
Business Taxes	1%
Legal & Accounting	6%
Rent, Office Expense & Maintenance	10%
Telephone, Telegraph & Utilities	1%
Auto, Truck & Airplane Exp.	2%
Business Insurance	1%
Civic Contributions	0%
Meals & Entertainment	0%
	44%

Total (Overheads as a Percentage)	85%
Total (Overheads as a Multiplier)	1.85
Total Multiplier Including Profit @ 10%	2.03

Maitra Associates, P.C.

Multiplier

Multiplier for Salaries (FIRST LINE OF PARAGRAPH 9A)

The "multiplier" referred to in the first line of Subparagraph 9.A of the Port Authority's Standard Agreement will be 2.19 and applied to the hourly rates listed in the Salary Schedule.

The factors that comprise the multiplier include actual hourly wage paid to Employee, profit at 8 percent, and current construction overhead at 103 percent which consists of the following:

- Company-paid employee coverage for medical & dental insurance
- Company-paid time-off including sick-leave, vacations, paid personal days, holidays, etc.
- Company-paid portion of FICA taxes in behalf of employee
- Business costs such as rent, utilities, insurance, advertising, etc.
- Depreciation of fixed-assets such as surveying equipment, survey vehicles, computers, plotters, CAD stations, software, etc.

Billable Direct Labor	1.0	
Overhead at 103 percent	1.03	
Subtotal	2.03	
Profit at 8 percent	.162	
Total Multiplier	2.192	SAY 2.19

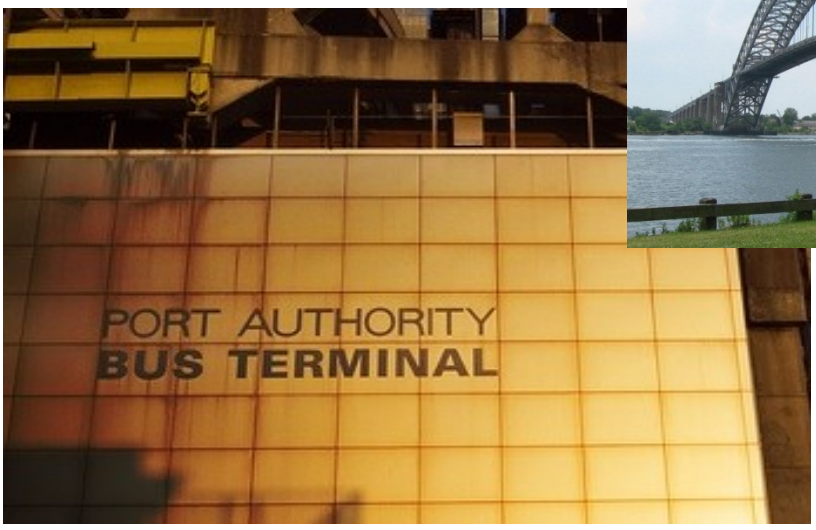
PROPOSED MULTIPLIER 2.19

PACO Group, Inc.
General Overhead Rate Statement
Year Ended December 31, 2009

	Unadjusted Total	Adjusted or Disallowed Item per FAR	FAR Ref.	Allowed G&A Item per FAR	General OH Rate per FAR
Direct Labor	$2,488,596	$7,431	31.201-6	$2,481,165	100.00%
Payroll fringes					
Paid time Off (vacation, holiday, sick)	422,123			422,123	
Payroll taxes	352,029			352,029	
Health insurance	363,598			363,598	
Group life insurance	21,636			21,636	
Pension plan	15,812			15,812	
Other employee benefits	95,553			95,553	
Total Payroll fringes	1,270,751			1,270,751	51.2159%
General and Administrative					
Payroll-administrative	1,318,543			1,318,543	
Licenses and permits	61,526			61,526	
Rent	273,592			273,592	
Automobile expenses	3,535			3,535	
Travel and lodging	160,293	67,228	31.205-46	93,065	
Telephone	33,220			33,220	
Postage and delivery	16,782			16,782	
Computer expense	11,076			11,076	
Office supplies and expense	34,885			34,885	
Business development	12,565			12,565	
Professional development	44,673			44,673	
Bank charges	26,613			26,613	
Business insurance (fire/liability/professional)	42,998			42,998	
Equipment rental	24,881			24,881	
Professional fees	226,849			226,849	
Repair & maintenance	18,461			18,461	
Entertainment - meals	7,158	7,158	31.205-14	-	
Contribution	8,193	8,193	31.205-8	-	
Utilities	24,647			24,647	
Depreciation expense	80,616			80,616	
Recruitment	29,972			29,972	
Printing and reproduction	9,681			9,681	
Income taxes (federal, state and local)	111,033	74,611	31.205-41	36,422	
Other business expenses	23,598			23,598	
Bad debt expense	38,835	38,835	31.205-3	-	
Interest expense	73,823	73,823	31.205-20	-	
Total General and Administrative	$2,718,048	$269,848		$2,448,200	98.6714%
					149.8873%

SECTION E

Staff Qualifications and Experience



GPI Greenman-Pedersen, Inc.
Engineering and Construction Services

PROPOSED PROJECT ORGANIZATION CHART

Performance of Expert Professional
Construction Management Services on a
"Call-in" Basis During 2011-2014

RFP #22094

THE PORT AUTHORITY OF NY & NJ

GPI Greenman-Pedersen, Inc.
Engineering and Construction Services

In association with:
LPE Enterprises, Ltd.
Maitra Associates, P.C.
PACO Group, Inc.

Principal In Charge
Denise Carter, P.E. (GPI)

Quality Assurance / Quality Control
James Valenti, P.E. (GPI)

PROJECT MANAGER
Gregory Zenk, P.E. (GPI)

RESIDENT / ASSISTANT RESIDENT ENGINEERS

Brendan Scahill, P.E. (GPI)
Michael Rabkin, P.E. (GPI)
Philip Trapani, P.E. (GPI)
Ralph Capilupi, P.E. (GPI)
Jeffrey Brugge, P.E. (GPI)
Jayendra Shah, P.E. (GPI)
Daniel Chasse, P.E. (GPI)
Neophytos Neophytou, P.E. (GPI)
Marc Matalon, P.E. (GPI)
William Ferdinandsen, P.E. (GPI)
Guerman Vainblat, P.E. (GPI)
Alonzo Bryson (LPE)

OFFICE ENGINEERS

Richard Khoury (GPI)
James Weber (GPI)
Lorraine Finfrock (GPI)
Edgar Rafol (GPI)
Vitaliy Khinchin (GPI)
Zhong Wen Pan (GPI)
Nancy Martinez (GPI)
Elaine Dean, EIT (GPI)
Gopesh Pandya (GPI)
Gina Caceres (GPI)
Ewa Szulc (LPE)

CONSTRUCTION ASSISTANTS

Adelaida Sanabria (LPE)
Elaine Reid (LPE)
Cynthia Ronald (LPE)

INSPECTION PERSONNEL – CIVIL

Robert (Tim) Trapani (GPI)
William Godfrey (GPI)
Thomas Shepherd (GPI)
Albert Perez (GPI)
Mhed Charles (GPI)
Steven Jones (GPI)
Joseph Greenman, EIT (GPI)
Terrance Somersall (GPI)
William Leong (GPI)
Natanael Vasquez (GPI)
Anthony Delio (GPI)
David Mann (GPI)
John O'Har (GPI)
Matthew Quesenberry (GPI)
John Petekiewicz (MA)
Jose Rodriguez (MA)
Kuldip Sachdev (MA)
Joseph Henry (PACO)
Tamara Skeeter (PACO)

INSPECTION PERSONNEL – STRUCTURAL

Robert Leo, P.E. (GPI)
Thomas Moen, EIT (GPI)
Gary Crozier (GPI)
Darryl Kemp (GPI)
Ronald Takla (GPI)
Garfield Cardinez (GPI)
Reza Saba (GPI)
Jeffrey Mando (GPI)
Gabriel Lageyre (GPI)
Plato Moschides (GPI)
Ken Leo (GPI)
David Cunningham (GPI)
Fernando Flores (GPI)
Nicholas Russo (LPE)
Len Espinar (MA)
Wayne McMahon (MA)
Rochelle Lancy (MA)
Victor Clark (PACO)
Ajay Ohore (PACO)

INSPECTION PERSONNEL – MECHANICAL / ELECTRICAL

Jose Catarino (GPI)
Phenol Zamor (GPI)
John Goon (GPI)
Ignacio Ortega (GPI)
Guy Toussaint (GPI)
Gregory Lau (GPI)
Robert Zayas (LPE)
Bala Balakrishnan(LPE)
Metin Bessim (MA)
Aleksandr Belov, P.E. (MA)
Benjamin Ferrante (PACO)
Deena Jain (PACO)

INSPECTION PERSONNEL – COATINGS

Evan Steele (GPI)
Omar Soriano (GPI)
Richard Procaccio (GPI)
David Bradham (GPI)
John Marcel (GPI)
Sylvain Rodrigue (GPI)
Elliot Strika (GPI)
Marcus Olivo (GPI)
Garry Pettriess (GPI)

ESTIMATORS / SCHEDULERS

Michael Rabkin, P.E. (GPI)
Tom Gibbons, P.E. (GPI)
Leonard Holland (GPI)
James Weber (GPI)
Carlos Sanchez, P.E. (PACO)
Boris Lenderman (PACO)
Mizanur Rahman, PMP(PACO)
Felmin Earle (PACO)
Stan Michalowski (PACO)
Ermin Avdagic (PACO)

CONSTRUCTIBILITY/BIDABILITY/ GENERAL ENGINEERING REVIEW/ CONSTRUCTION STAGING

Ralph Csogi, P.E. (GPI)
Thomas Napolitano, P.E. (GPI)
James Tarpey, P.E. (GPI)
Anthony Grosso, P.E. (GPI)
Philip Smykal, P.E. (GPI)
Michael Rabkin, P.E. (GPI)
Brendan Scahill, P.E. (GPI)

Key

GPI	Greenman-Pedersen, Inc.
LPE	LPE Enterprises, Ltd.. (WBE)
MA	Maitra Associates, P.C. (MBE)
PACO	PACO Group, Inc. (M/SBE)

Gregory Zenk, P.E.

Vice President/Director of Construction Services

Professional Profile

Mr. Zenk is the director of construction services who has spent the majority of his career managing various construction projects. These projects include major bridge and highway rehabilitation; historic building restoration; water treatment plants; park design and rehabilitation; and pier and bulkhead installation, among others.

As project manager, Mr. Zenk is the direct contact with the client and the resident engineers on the project. Working closely with project personnel, Mr. Zenk determines the manpower resources necessary to complete projects successfully and collaborates with clients to produce and approve candidates to fill staffing needs. Also, when required, Mr. Zenk acts as a technical specialist related to structural steel fabrication and erection and coatings activities. Mr. Zenk has displayed the leadership necessary to manage staffing to meet the clients' needs and organizational objectives.

Proposed Project Assignment
Project Manager

Registration/Certifications
Professional Engineer/NY
NACE Certified Coatings Inspector
AWS Certified Welding Inspector
ACI Concrete Field Technician - Level I

Education
BS/1985/Civil Engineering

Total Years Experience 25

Project Experience

Projects on which Mr. Zenk has served as project manager, from 12/02 to present, include:

- Port Authority of NY and NJ "On-Call" Construction Management Services for Terminals, Bridges and Tunnels, for both the New York, and New Jersey facilities
- Bronx-Whitestone Bridge, Miscellaneous Painting, Suspended Rope Collar Replacement and Flag Repairs, and Pin Replacement, Projects WBM 319X and BW 87A & C, New York, NY
- Throgs Neck Bridge Orthotropic Deck Rehabilitation, Phase A, TN-82, New York, NY
- Robert F. Kennedy (Triborough) Bridge Deck Replacement, TB-64A, New York, NY
- Robert F. Kennedy (Triborough) Bridge Deck Replacement, TB-63, New York, NY
- Marine Parkway Bridge Reconstruction, MP-01, New York, NY
- Bronx-Whitestone Bridge Deck Replacement, BW-82, New York, NY
- Rehabilitation of the 2nd Ave. and 36th St. Overpass Bridges at the Queens Midtown Tunnel, QM-82, Queens, NY
- Bronx-Whitestone Bridge Bronx/Queens Approach, BW-89/WBM-342, Bronx, NY
- Bronx-Whitestone Bridge Cable/Suspender Rope Rehabilitation, BW-85/86, Bronx, NY

Prior to his project manager assignments, Mr. Zenk worked extensively in the field on projects throughout the New York metropolitan area. These projects include:

Bronx-Whitestone Bridge, Projects WBM 319X and BW 87A & C, Miscellaneous Painting and Suspended Rope Collar Replacement & Flag Repairs and Pin Replacement, New York, NY; 10/00-12/02. Resident Engineer. The two concurrent projects totaling $4 million involved the cleaning and painting of several thousand feet of bridge median barrier, several thousand sq ft of tower interior, and critical sections of the bridge suspender cables, the installation of specialized elastomeric collars at the suspender penetrations through the main fascia girders. Also, over 1,000 critical structural steel flag repairs were completed by the contractor. Included in the repairs were the removal and replacement of several steel rocker bearings and pin removal and replacement. The repairs required the installation of complex jacking systems for lifting of the structure during rehabilitation. Mr. Zenk's responsibilities included the supervision of five inspectors and coordination with facility administrative personnel and the contractor. Client: TBTA

Bronx-Whitestone Bridge Cable Rehabilitation and Painting, BW-10, New York, NY; 4/95-4/99.Resident Engineer. Construction inspection services for the rehabilitation of the suspended spans and complete repainting of over 1.3 million sq ft of the superstructure, which involved lead abatement and 100% containment;

approximately 30% of the Queens/Bronx towers; complete painting of the suspenders and main cables; and maintenance painting of the interior of the tower. Additional major tasks associated with this project included erection of a temporary footwalk along the main cable; main cable unwrapping and rewrapping; main cable oiling and compacting; cable wire splicing; repair of concrete deck at anchorages; and cleaning and painting of superstructure. The footwalk installation required the review and careful planning of the contractor's means and methods to avoid problems with its erection that was in close proximity to the deck travel-way. As resident engineer, Mr. Zenk was responsible to manage the day-to-day inspection operations. This included maintenance of the resident's daily diary, review of inspector's daily reports, daily walk through site visits, checking of the contractor's maintenance and protection of traffic (MPT), daily coordination with the contractors, staffing assignments, problem identification, non-conformance reporting and the review and analysis of the validity and the need for change orders. Client: Triborough Bridge and Tunnel Authority

Williamsburg Bridge Main Cable Rehabilitation, Contract 4, BRC253A, New York, NY; 4/94-12/94. Senior Inspector. This $88-million construction and resident engineering inspection project involved the rehabilitation of the suspension system for the Williamsburg Bridge. Mr. Zenk's responsibilities included overseeing several operations involved with the rehabilitation of the bridge's main cables. Operations included removal of existing cable bands, wedging and oiling of cable, recompaction of cable and installation of new cable bands. The project also included overseeing the eight-part neoprene wrapping system. The system was used to protect the newly rehabilitated cable from atmospheric conditions that cause deterioration from corrosion. The project also included the placement of concrete on the approaches. This work included site testing of concrete (air entrainment, slump, and sampling for compressive testing). Client: NYCDOT

Williamsburg Bridge, BMT Structure Rehabilitation, Contract 6, BRC253BBA, New York, NY; 4/99-10/00. Assistant Resident Engineer. This $176-million project involved construction inspection for the replacement of the entire mid-section of the bridge that supports the New York City transit tracks (BMT Line). Work included replacement of approaches and abutments, BMT tracks, structures and stringers, repairs to BMT floorbeams, construction of a new signal instrument room, installation and testing of signal, communications and traction-power systems, replacement of stringers on main bridge main span and painting of overhead truss, north transit hanger and anchorage steel. Also, added to the contract was the removal of the existing pins and links and replacement with four helical roller bearings at Panel Point 20 east and west. Mr. Zenk was responsible for coordination of all technical meetings convened to discuss and review the contractor's submitted means and methods. He also coordinated the third party inspection of the fabrication of the new bearings as well as the quality assurance procedures for the field installation of the new bearings. Included in these procedures were checks on the existing position of the structure prior to lifting, checks on the loads induced by the jacking equipment and checks on the geometry of the installed bearings to ensure that they functioned as designed. Mr. Zenk's responsibilities included the supervision of a staff of 16 inspectors, and coordination with administrative personnel and the contractor. Client: NYCDOT

Williamsburg Bridge South Roadways Reconstruction, Contract 5, BRC253A, New York, NY; 12/94-4/95. Senior Inspector. Mr. Zenk participated in the creation of relational databases to be used for tracking all aspects of the job. Mr. Zenk was responsible for setting up the material acceptance database, all input forms and output reports used to generate MURK forms. Client: NYCDOT

Boynes Canal Bulkhead Reconstruction, Babylon, NY; 1/94-4/94. Resident Engineer. Responsible for overseeing all work associated with the installation of 505 lin ft of smooth-face timber bulkhead and 400 lin ft of timber guiderail. The project also involved 1,600 sq yds of asphalt paving, miscellaneous drainage improvements, site lighting, and concrete curb and sidewalk improvements. Client: Village of Babylon

M. Denise Carter, P.E.

Senior Vice President/Branch Manager

Professional Profile

Ms. Carter is a professional engineer with many years of experience in the management of transportation design and construction inspection projects throughout the New York metropolitan area. In her current position as branch manager, Ms. Carter is responsible for overseeing scheduling, staffing, invoicing, quality assurance, constructibility, compliance to contractual obligations, and that the clients' needs and requirements were satisfied for all design and construction engineering inspection projects conducted from GPI's Babylon Branch office. In this position, she is directly involved with all project personnel in all phases of the project. She is responsible for overall quality control of GPI's construction management and inspection program and that project schedule and budget are monitored and reported. Ms. Carter has the authority to commit the resources from within the GPI organization to meet schedules and provide specialized services to all branch clients.

Proposed Project Assignment
Principal In Charge

Registration/Certifications
Professional Engineer/NY, CT, NJ

Education
MS/1994/Civil Engineering
BS/1983/Civil Engineering

Total Years Experience 28

Project Experience

Projects on which Ms. Carter has served or is serving as principal-in-charge include:

Resident Engineering/Inspection Projects

- 2006-2010 Port Authority On-Call Construction Management Services, PANY/NJ
- 2002-2006 Port Authority On-Call Construction Management Services, PANY/NJ
- Staten Island Bridges, PANY/NJ
- Battery Park City Ferry Terminal at the 39th Street Pier, PANY/NJ
- John F. Kennedy International Airport – Jet Blue Parking Structure, PANY/NJ
- John F. Kennedy International Airport, PANY/NJ
- EWR Newark Airport, PANY/NJ
- Port Authority Bus Terminal – Structural Modifications, PANY/NJ
- Port Authority Technical Center, PANY/NJ
- LaGuardia Airport, PANY/NJ
- Jamaica Station, PANY/NJ
- George Washington Bridge Painting, PANY/NJ
- Reconstruction of Willis Avenue Bridge, NYCDOT
- Williamsburg Bridge North Roadways Reconstruction, Contract 7, NYCDOT
- Williamsburg Bridge Reconstruction of Misc. Rehab. of the Main Bridge, Contract 8, NYCDOT
- Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, NYCDOT
- Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, NYCDOT
- Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, NYCDOT
- Belt Parkway Bridges Program Management Services, NYCDOT
- Macombs Dam Bridge over the Harlem River Rehabilitation, NYCDOT
- Replacement of Brooklyn Bridge Travelers, NYCDOT
- Church and Caton Avenue Bridges – Reconstruction over NYC Transit, NYCDOT
- Protective Coating of Grand Central Parkway over BQE Bridges, NYCDOT
- Queensboro Bridge Lead Paint Removal and Protective Coating, NYCDOT
- Reconstruction of Houston Street from West Street to Bowery, NYCDDC
- Throgs Neck Bridge Orthotropic Deck, TN-82, TBTA
- Bronx-Whitestone Bridge Cable/Suspender Rope Rehabilitation – TB-85/86, TBTA

M. Denise Carter, P.E.

Senior Vice President/Branch Manager

- Bronx-Whitestone Bridge Approach, BW-89, TBTA
- Bronx-Whitestone Bridge Deck Replacement - BW-82, TBTA
- Bronx-Whitestone Bridge Replacement of the Bronx Approach/Misc. Repairs to the Queens Approach, TBTA
- Robert F. Kennedy (Triborough) Bridge Main Cable Rehabilitation - TB-17, TBTA
- Robert F. Kennedy (Triborough) Bridge Deck Replacement - TB-63, TBTA
- Marine Parkway Bridge Resident Engineering and Inspection, MP-01, TBTA
- Cross Bay Boulevard Bridge, CB 08/09, TBTA
- Verrazano-Narrows Bridge Rehabilitation of Structural Steel Repairs, VN-32, TBTA
- Verrazano-Narrows Bridge Rehabilitation of the Lower Level Approaches, VN-17A, TBTA
- Long Island Expressway/Cross Island Parkway Interchange, Exits 29-32, NYSDOT
- Rehabilitation of the Brooklyn-Queens Expressway (I-278), Park Avenue Viaduct, NYSDOT
- Nassau County On-Call Improvement of Lido Boulevard, NCDPW
- Lido Boulevard Inspection, NCDPW
- Round Swamp Road Inspection, NCDPW
- Suffolk County Water Authority Water Tank Inspections, SCWA
- The Ross School Construction Management, The Ross School

Professional Affiliations

American Council of Engineering Companies, Long Island Board Secretary (ACEC)
American Society of Civil Engineers (ASCE) (formerly President, Long Island Branch)
National Society of Professional Engineers (NSPE)
Construction Management Association of America

James Valenti, P.E.
Resident Engineer

Professional Profile
Mr. Valenti provides comprehensive resident engineering services and project management for bridge rehabilitation/reconstruction projects. In addition, he has extensive experience in environmental compliance enforcement and environmental investigations.

Proposed Project Assignment
Quality Assurance / Quality Control

Registration/Certifications
Professional Engineer/NY
NACE Coatings Inspector Level 1/NY
AWS Certified Welding Inspector/NY
SSPC C3 Supervisor/Competent Person
SSPC C5 Supervisor/Lead Competent Person
NYS DOH Project Monitor Refresher Asbestos Handling

Education
BE/1985/Mechanical Engineering

Total Years Experience 23

Project Experience

Rehabilitation of Bridge No. 02295, Route 136, Norwalk, CT; 3/08-5/10. Resident Engineer. Project involved the rehabilitation of a lift bridge crossing the Norwalk River. Rehabilitation included abrasive blast cleaning, surface preparation and application of new paint coatings for entire bridge structure, structural steel repairs, relocation of bridge weights and interim/final balancing of bridge, removal and replacement of lock bars and live load shoes, removal of existing bridge drainage system, concrete surface variable depth patch repair, masonry repointing and repair of slope paving (embankment) grade, upgrade of bridge electrical and control system, removal and replacement of traffic signals, refurbishment of electric drive motors (prime and auxiliary), miscellaneous control house renovations and maintenance and protection of traffic implementation. Mr. Valenti's responsibilities on this $5.7-million project included coordination and oversight during all field and office activities, planning and coordination of progress meetings with the Contractor and ConnDOT, review and processing of project submittals, schedules and payments, negotiation of change orders and coordination of time and material work items, and day-to-day project management duties. Client: Connecticut Dept. of Transportation

Bronx-Whitestone Bridge Cable/Suspender Rope Rehabilitation, BW-85/86, Bronx, NY; 1/08-3/08. Resident Engineer. Construction management and inspection services for coating removal and application and cable/suspender rehabilitation for Project BW-85/86, Select Cable Panel Opening/ Suspender Rope Removal and Replacement and Painting at the Bronx-Whitestone Bridge. Mr. Valenti provided comprehensive resident engineer services during the start-up period of Project BW-85-86/WBM-339, including establishing the consultant field office: development of all project related inspection protocols and work plans (QMSM, HASP, Field Inspection Program); establishment of a project-specific filing system; processing of project submittals, schedules and payments; coordination of start-up activities, progress meetings and security controls with the Contractor and the TBTA; and day-to-day project management duties. Client: Triborough Bridge and Tunnel Authority

Rehabilitation of the 2nd Avenue and 36th Street Overpass Bridges at the Queens Midtown Tunnel, QM-82, Queens, NY; 11/05-1/08. Resident Engineer. This project involved providing professional construction management services for the rehabilitation of the 2nd Avenue and 36th Street Overpasses. Work included a variety of different tasks including concrete repairs, cleaning and painting of structural steel, installing new underdeck lighting, new netting, and asbestos abatement. Responsibilities included on-site project management and oversight during concrete repair, rehabilitation and forming; removal of column concrete encasements and installation of curtain walls; repointing of masonry facades; lead-based paint and asbestos removal; installation of vertical access staircase and relocation of electrical components at D Post; and coordination of maintenance and protection of traffic operations at the Manhattan approach spans to the tunnel. Developed Quality Assurance Plan and Health and Safety Plan for consultant staff and will supervise a staff of five inspectors during this $2.7-million project. Client: Triborough Bridge and Tunnel Authority

James Valenti, P.E.
Resident Engineer

Bridge Component Rehabilitation, Contract #HBCREPL95D, Bronx, NY; 3/00-7/00. Resident Engineer. Responsibilities included on-site project management during joint replacement at the Willis Avenue Bridge (1,000 ft truss - Manhattan-Bronx) and bearing replacement, removal and replacement of concrete approaches, crack repair/sealing of the bridge deck at the Walton Avenue Bridge (200 ft, simple span - Bronx). Supervised the inspection staff (two inspectors), coordinated schedule and work efforts with Metro-North Railroad and NYCDOT, reviewed contract submittals and shop drawings and payments for this time and materials project. Client: New York City Dept. of Transportation

Williamsburg Bridge Contract #4, Rehabilitation of Cable Suspension System, Contract #BRC253A, New York, NY; 9/92-1/95. Project Engineer. Responsible for on-site project management for all phases of work for compliance with environmental regulations and contract specifications for this $88-million rehabilitation project. Supervised inspection staff to provide environmental oversight and compliance inspections during replacement and maintenance of the main and suspender cables. Designed and implemented engineering control methods for effective lead paint removal and containment systems during main cable wrapping wire and suspender rope removal operations, developed Hazardous Waste Management Plan to manage waste streams from cradle to grave. Provided air monitoring and data evaluation, compliance with asbestos abatement regulations, hazardous waste reporting requirements. Managed budget, staffing and invoice preparation. Client: New York City Dept. of Transportation

Bronx-Whitestone Bridge Cable Rehabilitation, Bronx, NY; 1996-1997. Environmental Project Manager/ Assistant Project Manager. Construction inspection services for the rehabilitation of suspended spans on this $12.6-million project. Provided technical assistance during rehabilitation. Developed raw materials and hazardous waste management plan to address project conditions. Client: Triborough Bridge and Tunnel Authority

The Robert F. Kennedy (Triborough) Bridge, TB-17, Rehabilitation of Suspended Cables, Queens, NY; 8/97-5/00. Resident Engineer. Responsibilities included on-site project management for all phases of work for compliance with contract specifications and environmental regulations during this $9.5-million project including installation, relocation and removal of temporary footwalk platforms (2,800 lf) for main cable access; removal and replacement of main cable wire wrapping; cleaning, lubrication and corrosion study of main cable inner wires; tagging and splicing (using threaded and crimped wire ferrules) of broken main cable wires; re-compaction of main cable inner wires; replacement and painting of protective outer cable wrapping, installation of circumferential caulking and re-tensioning of cable band bolts at all cable band locations; replacement of anchorage penetration concrete foundations; conceptualization of design, installation coordination, and inspection of containment systems and environmental controls for removal of main cable lead paint coatings and rehabilitation byproducts (contaminated linseed oil); maintenance and protection of traffic; and structural steel repairs for this 1,380-ft-long, two-cable suspension bridge spanning the East River. Supervised inspection staff (four inspectors) providing construction management services, reviewed contract submittals and shop drawings, negotiated change orders, and provided ISO9000 reporting. Client: Triborough Bridge and Tunnel Authority

Throgs Neck Bridge, Orthotropic Deck Rehabilitation, TN-82 Phase A, Bronx, NY; 1/04-11/05. Resident Engineer. This project involved the testing of the constructibility, serviceability and performance of the design consultant's solution to the chronic structural problems that have plagued the retrofitted spans since 1989. Mr. Valenti was responsible for project management during this $5.4-million project. Specific construction activities included installation of longitudinal shear connectors; removal of and replacement of end and intermediate sub-floorbeams; structural steel repairs; dye penetrant testing and crack arrest hole drilling; shimming of orthotropic deck spans; installation and removal of 60,000 sq ft of suspended work platform system; welding procedure and welder qualification demonstration phase; day- and night-time maintenance and protection of traffic (MPT) coordination. Reviewed contract submittals and shop drawings; negotiated change orders; developed the Quality Assurance Plan and Health and Safety Plan for consultant staff, prepared Constructibility Review Report for project. Supervised staff of five inspectors. Client: Triborough Bridge and Tunnel Authority

RESIDENT /ASSISTANT RESIDENT ENGINEERS

Brendan Scahill, P.E.
Resident Engineer

Professional Profile
Mr. Scahill is professional engineer with many years of diversified design and inspection experience. During his career, Mr. Scahill has worked extensively on East River Bridge Crossings, including the Brooklyn, Williamsburg, Queensboro and Robert F. Kennedy (Triborough) Bridges. His experience includes orthotropic deck installation, cable rehabilitation, and bridge coating applications.

Proposed Project Assignment
Resident Engineer

Registration/Certifications
Professional Engineer/NY
AWS Certified Welding Inspector/NY

Education
BS/1984/Civil Engineering

Course Work
10-Hour OSHA Training Course
Traffic Work Zone Safety Training Course - GPI
Night Time Bridge Work Safety - Institute of Safety & Health

Total Years Experience 26

Project Experience

Bronx-Whitestone Bridge Bronx/Queens Approach, BW-89/WBM-342, Bronx, NY; 11/08-Present. Assistant Resident Engineer. This $192-million project involves the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work will include the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure there will be massive concrete placements for concrete footings and piers. For the duration of the project, traffic on the bridge must be maintained with five lanes open to traffic. During the staged construction work will be staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting. Other work items on the project include new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure. Mr. Scahill's responsibilities on the project include construction management and inspection of the major steel components on the jobsite. He will provide quality assurance for the Authority during the fabrication of steel girders and other steel components. He will oversee the fabrication and installation of the temporary steel support systems for the existing roadway structure. Mr. Scahill will supervise field inspectors during the structure demolition and steel erection stages of the construction. Providing oversight to ensure that all work is being performed in accordance to the Contract Documents. Client: Triborough Bridge and Tunnel Authority

Bronx-Whitestone Bridge Deck Replacement - BW-82, Bronx, NY; 1/05-11/08. Assistant Resident Engineer. This $136-million project involved replacing the roadway deck at the suspended spans of this major suspension bridge with orthotropic deck panels installed in a lane-by-lane sequence. Daily realignment of temporary moveable barriers allowed an additional lane to be utilized for north bound or south bound traffic during morning and evening rush hours, as appropriate. The work included replacement of median and side barriers, deck finger joints, stiffening girder pins, lateral bracing, and roadway, tower and navigation lights. Also included in the project scope is painting of structural steel, construction of a new underdeck moveable traveler system, replacement of electrical feeders and substations, and installation of a new fiber optic control and communication system. All of these operations were carried on while maintaining traffic on this high-volume toll facility. Mr. Scahill's responsibilities included the performance of constructibility reviews, cost estimates and claim evaluations; supervision of all field inspection work for the installation of new orthotropic deck panels; and monitoring the Contractor's performance and compliance for work performed in accordance to the Contract Documents. Client: Triborough Bridge and Tunnel Authority

The Robert F. Kennedy (Triborough) Bridge Deck Replacement, TB-64A, New York NY; 1/01-12/04. Resident Engineer. This $144-million project involves replacing the existing concrete deck roadway (eight traffic lanes) with a new orthotropic deck system (252,000 sq ft) while maintaining seven traffic lanes in

an urban environment. REI services include the replace the Queens approach span deck with pre-cast panels, replace the suspension bridge suspender ropes and installation of a new roadway lighting system on the bridge structure. As resident engineer, Mr. Scahill was responsible for the field inspection effort and also involve in the fabrication process of the 392 orthotropic deck panels which require coordination between all parties. Client: Triborough Bridge and Tunnel Authority

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 2000. Assistant Resident Engineer. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included the inspection of the north wind chord repairs; north truss bottom chord repairs; demolition of north roadway floorbeams, stringers, railing and grating; the fit-up of orthotropic deck; submerged arc welding of orthotropic deck, floorbeam, lateral brace and orthotropic deck installation, barrier installation, north footwalk demolition and shear connector installation; inspection of rock and soil piles with the Tubex method on the Manhattan and Brooklyn approach; abrasive blast paint removal and painting of existing floorbeams and bottom chords on main span; inspecting existing floorbeam and lateral brace repairs; monitoring shrinkage and warpage at submerged arc welded orthotropic deck joints; inspection of north outer roadway orthotropic deck shot blasting; and Sterling Lloyd waterproofing membrane application and Trinidad asphalt paving. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 1/99-1/00. Assistant Resident Engineer. This $176-million project involved the construction engineering and inspection for the reconstruction of the BMT structure. Mr. Scahill's responsibilities included the supervision of the demolition of the existing structure and the steel erection of the new structure. Client: New York City Dept. of Transportation

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 2/96-1/99. Assistant Resident Engineer. This $310-million project involved the construction engineering and inspection for the reconstruction of the south inner and outer roadways. Mr. Scahill's responsibilities included the supervision of the placement of the orthotropic deck on the main bridge. Mr. Scahill was in charge of field supervision for the $9-million emergency repair work to the north roadways. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable Rehabilitation, Contract 4, #BRC253A, New York, NY; 10/95-2/96. Assistant Resident Engineer. For this $88-million project, Mr. Scahill was responsible for coordinating strand removal and replacement of Main Cable A at the Manhattan Anchorage. Supervised field personnel in the completion of the remaining cable work including wire wrapping, neoprene wrapping and footwalk erection. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable, Contract 4, #BRC253A, New York, NY; 5/92-10/95. Senior Inspector. Instruction of contractor personnel in the procedures of the wire rope suspender removal and replacement. Monitored the application of linseed oil and compaction to the main cables. Client: New York City Dept. of Transportation

Park Avenue Viaduct and New York State Thruway, New York, NY; 9/91-5/92. Design Engineer. Performed structural analysis on structural steel and concrete structures. Reviewed design calculations and prepared contract plans. Client: New York City Thruway Authority/ New York State Thruway Authority

Brooklyn Bridge, Contract #D500721, New York, NY; 1991. Office Engineer. Responsible for the removal and replacement of a structural concrete deck - exit ramp E on the Brooklyn Bridge. Responsibilities included maintaining inspector's daily reports, engineer's daily diary, material acceptance records and monthly estimates using NYSDOT CEES. He also supervised inspectors' work performed to conformance to the Contract Plans, NYSDOT Standard Specification and MURK. Client: New York State Dept. of Transportation, Reg. 11

Michael Rabkin, P.E., AVS
Senior Engineer

Professional Profile
Mr. Rabkin is a professional engineer with many years of management experience on construction projects in the New York Metropolitan area. He also has extensive experience in inspection, design and analysis of steel, concrete and timber structures, offshore platforms, railroad facilities and underground structures, as well as project engineering and management, conceptual engineering, proposals and studies, field testing and report writing.

Mr. Rabkin provides supervision of engineers, technicians and subconsultants, establishes procedures and scope for design and inspection of various critical projects, and performs quality assurance/quality control (QA/QC) review of work utilizing the latest technological advances on many of these projects. Mr. Rabkin also recommends money saving strategies to reduce the overall cost of construction.

Proposed Project Assignment
Resident Engineer

Registration/Certifications
Professional Engineer/NY
Professional Engineer/FL
Professional Engineer/PA
NACE Coatings Inspector Level 1
AWS Certified Welding Inspector
Associate Value Specialist

Education
BS/1980/Civil Engineering

Course Work
10-Hour OSHA Training Course
VE Workshop I, 40 hours
Practicing Institute of Engineering, Inc.-PS#000035 Work Zone Safety, 8 hours
Primavera P3e/c for Construction, 22.5 hours

Total Years Experience: 30

Project Experience
On-Call Construction Management Services for Terminals, Bridges and Tunnels, Various Locations, New York, New Jersey; 4/03-11/07. Scheduler/Estimator/ Technical Specialist. For the Port Authority's rehabilitation program at various bridges, tunnels and terminals, GPI is providing construction inspection, scheduling and estimating services. Mr. Rabkin's responsibilities involve schedule review / biddability and constructability reviews . Projects include the review of the contractor's schedules of several construction contracts on the George Washington Bridge , PA Bus Terminal and the ramp from the Palisades Interstate Parkway to the lower level of the George Washington Bridge using Primavera Project Planner.

- **George Washington Bridge**. Mr. Rabkin was responsible for investigation of the time impact on the painting contract for the agency with all possible remedies.
- **Port Authority Bus Terminal.** Mr. Rabkin was responsible for biddability review and analysis for the duration of the bus terminal seismic retrofit reconstruction project. The purpose of this study/analysis was to determine the approximate duration of each stage and provide an estimated duration for the entire contract. As a result of this analysis, the model of the construction schedule for the entire contract was generated.
- **Palisades Interstate Parkway Ramp**. The Port Authority also requested that GPI determine the adequate contract duration for the construction of the ramp from the Palisades Interstate Parkway to the lower level of the George Washington Bridge. Mr. Rabkin was responsible for review and revision of the proposed construction sequence in order to provide better constructability and to minimize impact to the bridge traffic. He analyzed six conceptual schedules to define all possible complications and remedies to the future contract. Performing schedule review, Mr. Rabkin checked the initial schedule submission to assure the appropriate logic relationship, if the schedule met the contract milestones, and if the proposed activity durations were reasonable. During schedule updates, he identified changes to constraints, float calculations and other options found in Primavera scheduling software.

Client: Port Authority of NY & NJ

Michael Rabkin, P.E., AVS
Senior Engineer

Rehabilitation of Bridge No. 02295, Route 136, Norwalk, CT; 8/09-Present. Scheduler. Construction engineering and inspection for the rehabilitation of Bridge No. 02295, Route 136 Norwalk. State Project No. 102-300, FAP No. BHM-2974(010). The bridge is a lift bridge crossing the Norwalk River in the town of Norwalk, CT. Responsible for schedule updates and time extension reviews. Client: Connecticut Dept. of Transportation

Contract C-502A Capital Program Management Consultant and I-95 Scudder Falls Design Management Consultant; 12/08–Present. Project Control/ Scheduling Manager. This program is a continuation of support for Delaware River Joint Toll Bridge Commission and their Engineering Department in its delivering of the Capital Program and I-95 Scudder Falls Replacement Project. Responsibilities include developing and maintaining master schedule, participation in monthly and bi-weekly CPMC/DMC staff meetings, review and monitor individual project schedules for compliance with master schedule. Client: Delaware River Joint Toll Bridge Commission

Replacement of County Road 67, Motor Parkway Bridge at the LIE, Exit 55, Town of Islip, NY; 5/10-Present. Resident Engineer. This project is a four-stage replacement of the existing 50+ year four-span bridge with the new structure. The scope of work includes installation of the new free-standing abutments and wingwalls, steel elastomeric bearings, steel framing and concrete deck with integral wearing surface. The project also includes the reconstruction of the Motor Parkway. Responsible for review and approval of construction submissions; overall supervision of field personnel; payment review and processing; QA/QC; safety and health; and schedule control and remedies. Client: Suffolk County Dept. of Public Works

NJTA 6-9 Widening Constructability - Constructability Reviews, NJ; 08/08-Present. Technical Specialist. The responsibilities include review and comments on various construction contracts for $3 billion Widening Dualization Program for the New Jersey Turnpike Authority. Current reviews include the Contracts T869.201, T869.501 and T869.701. Client NJTA

Design/Build of Nine Bridges, Contract HBCREPL 98A, Various Locations, NY; 11/00-7/03. Chief Design Engineer. Project involved repair, rehabilitation and maintenance of various bridge components in order to update the overall bridge rating. Responsibilities included the preparation of final design documents, development of maintenance and protection of traffic (MPT) schemes, signage, obtaining of environmental permits, coordination with various City agencies, public and private utility companies, estimating and scheduling. During the bidding process, Mr. Rabkin actively participated in construction cost estimate for the general contractor. Fee: $900,000. Client: NYCDOT

Bridge Component Rehabilitation and Reconstruction Projects, New York, NY; 11/96-8/02. Project Manager. Responsibilities included in-depth inspection of six bridges, development of scope of work and cost estimates for rehabilitation, design, construction inspection and construction support services. Overall project management, work coordination with subconsultants, solicitation processes and budgeting. Client: NYCDOT

Constructibility Review of 145th Street over the Harlem River, New York, NY; 5/01-1/02. Chief Engineer/Project Manager. Responsibilities included the constructibility review of civil, structural and architectural parts of the project. Client: NYCDOT

CSS for Rehabilitation of Forest Park Drive Bridges over LIRR, Contracts HBQ655 and HBQC030, Queens, NY; 12/99-3/01. Project Manager. Responsibilities included review and approval of shop drawings, shielding, demolition and jacking procedures. Specialized services consisted of additional repairs of structural steel and stabilization of slopes by regrading. Client: NYCDOT

CSS, Rehabilitation of 4th Avenue Bridge at 38th Street over NYCTA, Contract HBK549R, Sea Beach Line, Brooklyn, NY; 11/98-6/01. Project Manager. Responsibilities included review and approval of shop drawings, shielding and demolition procedures. Specialized services consisted of redesign of MPT to accommodate pedestrian needs, review of Verizon and KeySpan submissions for utility attachments to the NYCDOT structure, guide rail redesign to improve overall safety. Client: NYCDOT

Philip Trapani, P.E.
Resident Engineer

Professional Profile
Mr. Trapani is a resident engineer knowledgeable in both the office procedures and field inspection aspects of construction. He has considerable experience in managing inspection projects involving large suspension bridge rehabilitation and highway construction throughout the New York metropolitan area.

Proposed Project Assignment
Resident Engineer

Registration/Certifications
Professional Engineer/NY, VT, CT
NYSDOT Maintenance & Protection of Traffic Cert.
NACE Level III Certified Coatings Inspector/NY

Education
BS/1995/Civil Engineering Technology

Course Work
10-Hour OSHA Training Course
NACE - Special Bridge Course for Coatings Inspectors

Total Years Experience 25

Project Experience

Brooklyn Bridge Rehabilitation of the Approach Spans and Ramps and Painting of the Entire Bridge, Contract 6, New York, NY; 2/10-Present. Resident Engineer. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Mr. Trapani's responsibilities include project start-up coordination meetings; the direct supervision of day-to-day operations conducted by the contractor; managing inspection personnel; review of the Contractor's CPM and work zone health, site security plan and maintenance and protection of traffic (MPT) submissions; creating databases used to track shop drawings, Engineering Clarification Memos, site security, and correspondence. Client: New York City Dept. of Transportation

Replacement of Brooklyn Bridge Travelers, Contract #BRC270TA, Boroughs of Manhattan and Brooklyn, NY; 11/06-2/10. Resident Engineer. This project involves the replacement of four movable maintenance platforms (travelers) with a state-of-the-art mechanical driven traveler system, the replacement of the traveler rails, hangers and connections, localized lead paint removal, and the replacement of the electrical system. Responsibilities included the direct supervision of day-to-day operations conducted by the contractor and managing inspection personnel and subconsultants. Review the Contractor's CPM and work zone health, site security plan and maintenance and protection of traffic (MPT) practices to ensure a safe environment for the traveling public and contractor's personnel. Client: New York City Dept. of Transportation

Marine Parkway Bridge MP-01 Resident Engineering and Inspection, New York, NY; 1997-3/03. Assistant Resident Engineer/Office Engineer. This $90-million project involved the reconstruction of one of the largest vertical lift span bridge in New York. The project included the redecking of the entire structure. The approaches were replaced with a precast concrete deck and the through trusses and lift span with an open steel grid deck. Also included in the work was substantial structural steel repairs, the deleading of the structure using Class 1A containment, painting the entire structure, a new drainage system and a new bridge decorative lighting system. Mr. Trapani was also involved with the creation of a computerized document control system using Expedition, by Primavera. This document control system computerized all the correspondence, submittals, and transmittals, kept track of quantities and created monthly payments. Client: Triborough Bridge and Tunnel Authority

Philip Trapani, P.E.
Resident Engineer

Long Island Expressway/Cross Island Parkway, Exits 29-32, Contract #D258437, Queens, NY; 3/03-Present. Resident Engineer. Construction inspection services for the rehabilitation of the Long Island Expressway/Cross Island Parkway (LIE/CIP) interchange. The major elements of the project included flyover ramps constructed of structural steel curved tube girders, the widening of the Long Island Expressway (LIE) between Cloverdale Boulevard (exit 29) and the NYC/Nassau County line, semi-direct connection ramps and other associated ramp connections to the Cross Island Parkway which eliminated traffic weaving patterns. The LIE and CIP pavement was milled and overlaid with a new asphalt overlay. The project involved 14 structures including four new structures, the replacement of the LIE bridge over the CIP, three replacement structures over the LIE at Easthampton Boulevard, Douglaston Parkway and Marathon Parkway, widening/rehabilitation of the LIE bridge over Little Neck Parkway, and a new pedestrian bridge over the LIE at Cloverdale Boulevard. Also included were new pedestrian bridges at four locations. Maintenance and protection of traffic included staged construction on the bridges over the LIE and required a temporary bridge for the reconstruction of the main line LIE/CIP Bridge. Mr. Trapani's responsibilities included the direct supervision of day-to-day operations conducted by the contractor. He managed inspection personnel and subconsultants. Ensured that the contractor's work, cost management, and project progress were consistent with the Baseline Schedule. Conducted monthly CPM review meetings to analyze and validate project impacts. Reviewed work zone health and safety measures and MPT practices to ensure a safe environment for the traveling public and contractor's personnel. Processed monthly payments to the contractor. Resolved and negotiated agreements on disputed items of work. Reviewed and analyzed contractor's claims of extra compensation due to delay based on the CPM schedule, contract documents and NYSDOT Standard Specifications. Coordinated daily activities with various city agencies, utility companies, and contractor to achieve desirable solutions in timely fashion for the project progress. Conducted monthly task force meeting to update all concerned community attendees about the progress of the project. Project Cost: $160 million. Client: New York State Dept. of Transportation, Reg. 11

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 1994-1997. Senior Office Engineer. This was a $310-million project where Mr. Trapani was in charge of the material quality assurance program and the contractor's monthly payments. His responsibilities included shop drawing tracking and distribution, preparing RFP packages and writing material testing quality assurance programs. On this project, both agencies, NYCDOT and NYSDOT, had declined to perform their normal shop inspection and testing programs. Mr. Trapani was in charge of obtaining quotes and contracting different private agencies to perform these tasks. He wrote the procedures for the agencies to follow, requested proposals and analyzed the bids. Mr. Trapani also prepared the contractor's monthly payment package (averaging $3.5 million per month), which included checking all of the inspector's daily reports and payment calculations. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable Rehabilitation, Contract 4, #BRC253A, New York, NY; 7/91-10/94. Assistant Office Engineer. This $88-million construction inspection and resident engineering project for the rehabilitation of the suspension system for this bridge involved unwrapping, treating, and rewrapping the main suspension cables, replacement of all suspender cables with change to a redundant system, rehabilitation of the anchorages, replacement of necklace lighting, rehabilitation of tower tops, wire splicing, replacement of Transit Authority structures, and removal of cable enclosures inside anchorage structures. Mr. Trapani's specific responsibilities included reviewing materials acceptance certification documentation; checking of IDRs and payment calculations; checking contractor's monthly estimate; reviewing, recording, and tracking of shop drawings; preparing letters, memos, and transmittals for general office correspondence; supervision and organization of the materials testing program; record keeping; and obtaining price proposals from vendors and testing laboratories. Client: New York City Dept. of Transportation

Ralph Capilupi, P.E.
Resident Engineer

Professional Profile
Mr. Capilupi has been involved in bridge projects throughout the New York Metropolitan area.

Proposed Project Assignment
Resident Engineer

Registration/Certifications
Professional Engineer/NY
AWS Certified Welding Inspector
NACE Coatings Inspector Level 1

Education
BS/1987/Civil Engineering

Course Work
10-Hour OSHA Training Course
Traffic Work Zone Safety Training Course - GPI
NYS Bridge Inspection Course

Total Years Experience 22

Project Experience

Manhattan Bridge Rehabilitation of Cables and Suspenders, Contract 14, #BRC156R, New York, NY; 12/09-Present. Assistant Resident Engineer. This $149-million project involves the unwrapping and rewrapping of cables; replacement of suspenders; replacement of necklace lighting messenger cables and cable hand ropes; installation of new access platforms to existing tower platforms; reversal of lower roadway and operation of HOV lane and replacement of multi-rotational bearings at the Towers; replacement of light poles and luminaries on South upper roadway; replacement of lane control radar on South upper roadway; and retrofit of track stringers and diaphragm connections and other miscellaneous work. Responsible for overseeing inspection staff on work associated with the cable and suspender rehabilitation; preparing for and attending all project related meetings; performing cost estimates; writing and/or reviewing construction reports, letters and memos; creating and managing of construction production data bases; reviewing contractor payments and schedule; Quality Assurance oversight for the fabrication and production of the wire rope suspenders and the main cable rehabilitation components. Client: New York City Dept. of Transportation

Bronx-Whitestone Bridge Cable/Suspender Rope Rehabilitation, BW-85/86, Bronx, NY; 3/08-11/09. Resident Engineer. Construction management and inspection services for the coating removal and application at the towers and suspension system and cable/suspender rehabilitation for Project BW-85/86, Select Cable Panel Opening/Suspender Rope Removal and Replacement and Painting of the Suspension System and Towers at the Bronx-Whitestone Bridge. Mr. Capilupi was responsible for the coordination, scheduling and quality assurance of the project. His duties involved writing summary reports, creating construction estimates, schedule reviews, construction performance presentations, constructability and value engineer reviews, review of construction plans to verify conformance with the specifications, holding project meetings, participating in problem solving and decision making, and overseeing the office records and files. Client: Triborough Bridge and Tunnel Authority

Bronx-Whitestone Bridge Deck Replacement - BW-82, Bronx, NY; 10/03-3/08. Chief Inspector. This $136-million project involves the reconstruction of the suspended spans deck with an orthotropic steel deck. The project also involves the installation of new maintenance travelers, electrical and communications systems, fire protection system and inspection platforms. A temporary movable barrier is also being utilized to provide for efficient traffic flow during the eight reconstruction stages scheduled for this project. Mr. Capilupi's responsibilities included acting as chief inspector for all fieldwork and team leader for the installation and welding of the new orthotropic deck system. Additionally, Mr. Capilupi prepared orders on contract, special reports, inspection programs; and he participated in the constructability and pre-construction services for this project. Client: Triborough Bridge and Tunnel Authority

Bronx-Whitestone Biennial Inspection, Whitestone, NY; 5/03-9/03. Team leader for biennial inspection of the Bronx-Whitestone suspension bridge. Served as principal team leader and liaison for all the teams with the TBTA Facility Engineer. Work included visual inspection of all structural members of the bridge, record keeping in accordance with the NYSDOT Bridge Inspection Manual and FHWA Inspection Manual for Fracture Critical Bridge Members. Responsibilities also included enforcement of

safety codes for the team, review for consistency of rating assessments among the team and coordination with other teams, subcontractors and facility personnel. Client: Triborough Bridge and Tunnel Authority

Robert F. Kennedy (Triborough) Bridge Deck Replacement, TB-63, Queens, NY; 7/98-5/03. Assistant Resident Engineer. This $138-million project was actually comprised of two major reconstruction efforts: the complete replacement of the Randall's Island Junction Structure and the redecking of the Bronx Approach. Work included upgrading bridge electrical systems, a new de-icing/salt storage facility and reconstruction work at various shops within the Junction Structure. Mr. Capilupi's responsibilities included working up quantities for monthly estimates, and preparing order on contracts, force accounts, EEO and training special provisions reports. He was also responsible for overseeing the routing of all shop drawings, correspondence and daily inspection reports, maintaining as-built drawings, identifying and maintaining required material acceptance reports and certifications, and processing the necessary documents for the final estimate. Client: Triborough Bridge and Tunnel Authority

Robert F. Kennedy (Triborough) BridgeMain Cable Rehabilitation, TB-17, New York, NY; 3/98-1/99. Assistant Resident Engineer/Office Engineer. The Robert F. Kennedy (Triborough) Bridge is a two-cable suspension bridge, which spans the East River from Astoria, Queens to Wards Island. The bridge provides motorists, pedestrians, and bicyclists access from Queens to Manhattan and the Bronx. The side spans measure 700 ft from anchorage to the towers and a 1,380 ft main span from tower to tower. The Robert F. Kennedy (Triborough) Bridge TB-17 project involved CEI services for complete rehabilitation of the main suspension cables. Responsibilities included acting as chief inspector in the field and acting as the backup to the resident engineer when the resident is not on site. Responsible for acting as lead inspector for all cable rehabilitation activities; providing support and assistance to the civil inspectors on an as-needed basis; and project record keeping including contractor payments, correspondence, progress reports and shop drawing tracking. Client: Triborough Bridge and Tunnel Authority

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 4/96-3/98. Chief Inspector. Provided supervision of construction inspectors and support services for NYCDOT. Mr. Capilupi's additional responsibilities included maintaining office files and attending weekly technical and progress meetings. Supervised the inspection of reconstruction of the south roadways and pedestrian walkway. This work consisted of the installation of temporary bracing of the north roadways and relocation of sewer and water lines before structural demolition could begin; demolition of the approach and suspended spans; demolition of the suspended span decking and structural supports and replacing it with an orthotropic roadway deck and orthotropic deck pedestrian walkway; and placement of the orthotropic deck's waterproofing membrane, asphalt overlay and pedestrian walkway overlay. Mr. Capilupi supervised the field engineers and inspectors on welding of the orthotropic deck, and based on his engineering and technical background in structural steel construction, was able to successfully verify the proper installation of an orthotropic deck, which was designed to tight erection tolerances. Further duties included inspection of maintenance and protection of traffic (MPT), and bridge lane and street closures. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable Rehabilitation, Contract 4, #BRC253A, New York, NY; 5/92-4/96. Senior inspector for the suspender rope replacement and main cable rehabilitation, Mr. Capilupi's responsibilities involved the inspection of the removal and replacement of the suspender ropes and main cable bands, main cable cleaning, repairing, oiling, compacting, wire and the installation of neoprene wrapping. The cable rehabilitation included the construction of a temporary footwalk, its maintenance and removal. Supervised the inspection of structural steel flag repairs on existing girders, floorbeams and stringers throughout the structure. Detailed the extent of the flag repairs based on corrosion limits. Further duties included inspection of MPT, bridge lane closures and lane reversals. Client: New York City Dept. of Transportation

Jeffrey Brugge, P.E.

Assistant Resident Engineer

Professional Profile
Mr. Brugge has served as an assistant resident engineer, office engineer, and construction inspector on the Whitestone, Manhattan and Williamsburg Bridges for the past 12 years.

Proposed Project Assignment
Assistant Resident Engineer

Registration/Certifications
Professional Engineer/NY
ACI Concrete Field Technician - Grade I
NACE Coatings Inspector Level 1

Education
BS/2000/Civil Engineer

Course Work
10-Hour OSHA Training Course
Keys to Durable Concrete Course - Exterior Flatwork
NYCDOT Supervisor's Course, NYCDOT 99-153

Total Years Experience 13

Project Experience

Bronx-Whitestone Bridge Bronx/Queens Approach, BW-89/WBM-342, Bronx, NY; 9/09-Present. Assistant Resident Engineer. This $192-million project involves the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work will include the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure there will be massive concrete placements for concrete footings and piers. For the duration of the project, traffic on the bridge must be maintained with five lanes open to traffic. During the staged construction work will be staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting. Other work items on the project include new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure. Mr. Brugge's responsibilities on the project include providing inspection supervision for the emergency underdeck concrete repairs on the Bronx Approach. Mr. Brugge also develops Engineer's Estimate for the negotiation of extra work items on the project. Client: Triborough Bridge and Tunnel Authority

Bronx-Whitestone Bridge Cable/Suspender Rope Rehabilitation, BW-85/86, Bronx, NY; 3/08-9/09. Assistant Resident Engineer/Office Engineer. Providing construction management and inspection services for coating removal and application and cable/suspender rehabilitation for Project BW-85/86, Select Cable Panel Opening/Suspender Rope Removal and Replacement and Painting at the Bronx-Whitestone Bridge. Mr. Brugge's responsibilities included supervising a team of inspectors ensuring proper inspection and documentation of suspender rope replacement, unwrapping/wedging/rewrapping of the Main Cable, removal and replacement of select main cable wires for sampling purposes as per the BTC method and the NCHRP, tensioning of cable band bolts, testing and documentation of the surface preparation and painting of all suspender ropes, main cables, the exteriors of the Bronx and Queens towers, and select area inside the Towers. The work included various types of containments, methods of surface preparation, and paint application. Mr. Brugge maintained all documents related to the project using a filing system and method approved by the client, created and maintained various correspondence logs using database programs and reviewed scheduling updates via Primavera Project Planner. Mr. Brugge coordinated lane closures and construction with various Contractors working within the Facility. Mr. Brugge attended project meetings where he recorded and issued minutes. Client: Triborough Bridge and Tunnel Authority

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 2/05-3/08. Senior inspector on this $150-million project involving the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in approaches and suspended spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; and repair

of flagged conditions. Responsible for inspection of removal/replacement of lower roadway including deck, stringers and floorbeams and Maintenance and Protection of Traffic (MPT). Inspection of anchorage rehabilitation including replacement of 7 in., 9 in. and 18 in. thick floors. Vertical and overhead concrete spall repairs to walls and ceiling. Crack sealing by epoxy injection and chemical grouting. Re-routing of output ducts for the dehumidification system. Security upgrades to the anchorage including the installation of new windows and gratings; Rehabilitation of the Brooklyn Bridge Plaza Park including planting of new trees, placement of architectural concrete (lithocrete), installation of new drainage system and lighting. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; NY; 7/01-2/05. Senior inspector for this $175-million project involving rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Inspected the removal/replacement of north upper roadway including deck, stringers and floorbeams, MPT, rehabilitation of the colonnade arch which included complete renovation of the five floors of interior, new stairs, walls, elevator, HVAC, fire and intrusion alarms. Client: New York City Dept. of Transportation

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, #BRC1568C, New York, NY; 2/01-7/01. Inspector. This $124-million project involved the rehabilitation of the Manhattan plaza area, Manhattan Arch and Colonnade; replacement of the structural steel stringer and floorbeam support system for the west side subway tracks; replacement of truss bearings on top of the piers of both approach spans; rehabilitation of eyebars anchoring one of the main suspension cables; and removal of existing paint from the entire west side, both towers and two main cables, and replacing with new coating. Responsibilities included inspection of the erection of structural steel and MPT. Client: New York City Dept. of Transportation

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 5/00-2/01. Construction Inspector. Responsibilities included preparation for demolition and removal of bridge deck, and installation of orthotropic bridge deck. Also verified measurement and force accounts. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BB, New York, NY; 6/99-8/99. Construction Inspector. Operations covered included modification of bracing struts at the Manhattan/Brooklyn towers, repair of south truss bottom chord, and removal and replacement of bearing grease pan covers at various locations on the main bridge. Responsibilities involved inspections at Manhattan/Brooklyn approach pier caps; preload Manhattan/Brooklyn pier cap anchor bolts; lateral brace and web reinforcement repairs main span; demolition of Manhattan/Brooklyn approach BMT structure; pre-assembly of TA track girders; at Brooklyn approach TA track girders; and installation of Brooklyn approach debris shield. Construction cost: $176-million. Client: New York City Dept. of Transportation

Manhattan Bridge, Project #BRC-1568C, New York, NY; 6/98-8/98. Inspector's Assistant. Participated in all operations of large urban reconstruction and rehabilitation on this 100-year-old bridge. Project included major repairs and restoration of transit facilities, structural restorations of approaches and spans, lead paint removal from steel members. Responsibilities also included verifying field measurements and materials at direction of resident engineer and reviewing force account reports and requirements. Inspected numerous high lifts utilizing assortment of cranes and heavy equipment and cooperated with sub-contractors and DOT inspectors in aspects of safety and progress. Client: New York City Dept. of Transportation

Jayendra Shah, P.E.
Assistant Resident Engineer

Professional Profile
Mr. Shah has many years of experience as a civil engineer in the design and construction inspection of bridges and highways. Mr. Shah has been part of the Williamsburg Bridge Project Team since the first major rehabilitation project of its series. Mr. Shah has served as an inspector, office engineer, chief inspector and assistant resident engineer on some of the largest projects in the New York Metropolitan area.

Proposed Project Assignment
Assistant Resident Engineer

Registration/Certifications
Professional Engineer/NY
ACI Grade I

Education
BE/1982/Civil Engineering
ME/1988/Civil Engineering

Course Work:
10-Hour OSHA Training Course, #001872359
PW(EEO) Training for PMs & RE's
NYCTA Track Safety Course
Expedition 8.5 Software
Computer Operations

Total Years Experience 27

Project Experience
Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 8/03-Present. Assistant Resident Engineer. This $280-million project involves the construction engineering and inspection for the Rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Responsibilities include supervising and training inspection engineering staff of 12 for the steel reinforcement of main towers and trusses, abrasive blasting and recoating of the north and south trusses and interiors of the main tower legs, rehabilitation of anchorages, seismic retrofit steel and concrete work at the intermediate towers, bearing replacement at PPO, PP30, PP10, PP15, resolving field operation issues, technical field issues with designer, attending project monthly progress meeting, reviewing cost proposal and preparing construction and REI change orders. Client: New York City Dept. of Transportation

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 1/01-8/03. Senior Engineer. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included managing an engineering staff of five, monthly estimate preparation, quantity take-offs and cost estimates, review of contract documents and contractor's proposal, evaluation of overruns and underruns, draft and prepare action letters to contractor, memos, flag close out notifications and engineering cost estimates for change order preparation. Also responsible for reviewing, checking and paying T & M work payments using E-Z Murk software and monitoring the finalization of contract, change order items, reviewing finalized IDRS and preparing final payment package. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 7/99-1/01. Office Engineer. Responsibilities on this $176-million project included managing five engineering staff, monthly estimate preparation, quantity take-offs and cost estimates, review of contract documents and contractor's proposal, evaluation of overruns and underruns, draft and prepare action letters to contractor, memos, transmittals, status reports and general correspondence for all structural steel

flag repairs work, and other office work and preparation of engineering cost estimates for change order work. Client: New York City Dept. of Transportation

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 2/96-7/99. Senior Office Engineer. Responsibilities included the management and administration of time and material work of approximately $310 million for a staff of eight, monthly change order payments review and preparation per NYCDOT requirements, wage rate analysis, labor union regulation verification, checking of scope of work and payment guidelines under contract change requests. Also responsible for contract proposal and agreement compliance, change order preparation for extra work and field changes, price negotiation with contractor, flag condition report check, review and track fabrication sketches and shop drawings, completed flag notification submittal to NYCDOT, create, design and modify computer database (ALPHA5) for computerized force account record keeping, conduct training sessions of MURK guidelines and T and M work procedures for contractor and inspectors, timely preparation of budget analysis, cost projection and final payment package. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable Rehabilitation, Contract 4, #BRC253A, New York, NY; 2/92-2/96. Office Engineer. Responsibilities on this $88-million project included managing a staff of three, monthly estimate preparation, quantity take-offs and cost estimates, review of contract documents and contractor's proposal, evaluation of overruns and underruns, draft and prepare action letters to contractor, memos, transmittals, status reports and general correspondence for all structural steel flag repairs work and other office work, preparation of engineering cost estimates for change order work, finalization of final payment package and project closeout. Client: New York City Dept. of Transportation

Interborough Parkway Rehabilitation, New York, NY; 4/90-2/92. Assistant Office Engineer. Responsibilities on this $48-million project included the inspection of highway reconstruction, bridge rehabilitation, steel and structural concrete work, major drainage system and water mains, electrical work, highway signs, median barrier, retaining walls, concrete pavement and asphalt work. MURK and NYSDOT specification follow up, order-on-contract and monthly estimate preparation, estimate and quantity take-off, IDR's compliance with specifications, proposal, contract drawings and shop drawings, evaluation of overrun and underrun, updating records of all drainage work and related items. Also responsible for project closeout and final payment package. Client: NYS Dept. of Transportation

Eastchester Creek (Bascule) Bridge Rehabilitation, Westchester, NY; 10/89-4/90. Construction Inspector. Responsibilities included the inspection of asphalt pavement, field-testing of concrete an asphalt, pavement, field-testing of concrete and aluminum median barrier. The beam and guide rail installation, construction joints and grating repairs, balancing of bascule bridge (Drift Test), anchor bolt pull-test for stress evaluation, maintenance and protection of traffic (MPT) on highway and underneath the bridge, welding and painting work on the bridge, lighting on the bridge, signal and heavy duty electrical cable (FA) installation for bridge operation, "I" beam installation under the bridge deck, as-built drawing, final payment and close-out of the job. Client: New York State Thruway Authority

Holiday Inn Plaza Hotel, New York City, NY; 5/88-5/89. Inspector. Responsible for the documentation and inspection of fire stopping and fire proofing work, bolts, weldments, rivets and steel fatigue engineering services.

Professional Affiliations: American Society of Civil Engineers (ASCE), American Engineering Alliance (AEA)

Daniel Chasse, P.E.
Resident Engineer

Professional Profile
Mr. Chasse is a qualified construction inspector with experience in the inspection of major suspension bridge rehabilitation projects in the New York City Area.

Proposed Project Assignment
Resident Engineer

Registration/Certifications
Professional Engineer/NY
American Concrete Institute/NY
Certified Welding Inspector
NYSDOT Maintenance & Protection of Traffic Cert.
NACE Coatings Inspector Level 1/NY

Education
BS/1994/Civil Engineering

Course Work
10-Hour OSHA Training Course

Total Years Experience 16

Project Experience

Manhattan Bridge Rehabilitation of Cables and Suspenders, Contract 14, #BRC156R, New York, NY; 3/10-Present. Assistant Resident Engineer. This $149-million project involves the unwrapping and rewrapping of cables; replacement of suspenders; replacement of necklace lighting messenger cables and cable hand ropes; installation of new access platforms to existing tower platforms; reversal of lower roadway and operation of HOV lane and replacement of multi-rotational bearings at the Towers; replacement of light poles and luminaries on South upper roadway; replacement of lane control radar on South upper roadway; and retrofit of track stringers and diaphragm connections and other miscellaneous work. Responsible for supervision of daily work activities out on the job site which includes rehabilitation to the suspended spans main cable, installation of new access platforms at towers, retro-fit of subway track stringers, replacement of tower bearings, replacement of south upper roadway lighting system, daily MPT operations and seeing that the Contractor is adhering to their Health and Safety Plan. Office duties include reviewing Inspectors daily reports, preparing Engineers daily diary, reviewing Contractors monthly pay estimates, Time and Material work, preparing and reviewing Contractors change orders, reviewing Transit Authority monthly payments and communicating with the Client and other agencies on a daily basis as needed. Client: New York City Dept. of Transportation

Verrazano-Narrows Bridge Rehabilitation of Structural Steel Repairs, VN-32, New York, NY; 1/09-3/10. Resident Engineer. Project involves construction administration, on-site inspection, and testing and support services. Includes repair of deteriorated subfloorbeams, stringers, stiffener/ connection plates, cracked/broken missing welded connection plates, reinforce deteriorated stringer top flange and remove and replace deteriorated bolts, rivets, and drainage piping. Mr. Chasse's responsibilities included preparing Engineer's daily project diary and monthly progress reports; preparing agenda, conducting job meetings and distributing minutes from job meetings; ensuring that contract administration, quality control, schedule control and safety are properly adhered to; holding weekly safety meetings with field staff; answering questions directed by TBTA and contractor; touring jobsite on a daily basis to inspect work activities; reviewing contractor's submittals such as Health and Safety Plan, QA Plan, RFI's along with others and providing comments to TBTA and contractor; visiting off site fabrication plants to witness fabrication of steel, coating applications and shop assembly; reviewing and commenting on contractor's test reports; reviewing inspectors daily reports (IDR'S); and communicating and working with outside agencies such as United States Coast Guard and with other consultants at the facility where there is interference between jobs. Client: Triborough Bridge and Tunnel Authority

Verrazano-Narrows Bridge Rehabilitation of the Lower Level Approaches, VN-17A, New York, NY; 4/07-1/09. Assistant Resident Engineer. Project involves the administration and quality assurance inspection of all work associated with the rehabilitation of the lower level approaches of the Verrazano-Narrows Bridge. Responsibilities included assigning inspectors their daily work operations, overseeing inspectors out in the field and providing any assistance they might need regarding field inspection, performing field inspections for removal and installation of new approach span deck, attending progress meetings along with other various

type meetings and providing assistance to the resident engineer on a daily basis. Client: Triborough Bridge and Tunnel Authority

Bronx-Whitestone Bridge Deck Replacement - BW-82, Bronx, NY; 7/04-4/07. Senior Inspector. This $136-million project involves the reconstruction of the suspended spans deck with an orthotropic steel deck. The project also involves the installation of new maintenance travelers, electrical and communications systems, fire protection system and inspection platforms. A temporary movable barrier is also being utilized to provide for efficient traffic flow during the eight reconstruction stages scheduled for this project. As a senior inspector, Mr. Chasse's responsibilities included inspection of demolition of existing deck elements and installation of 260,000 sq ft of orthotropic deck. Client: Triborough Bridge and Tunnel Authority

Robert F. Kennedy (Triborough) Bridge Deck Replacement, TB-63, Queens, NY; 11/00-11/03. Senior Inspector. The $125-million project is actually comprised of two major reconstruction efforts: the complete replacement of the Randall's Island Junction Structure, and the redecking of the Bronx Approach. Because of the 65 million vehicles that use this facility annually, the Junction Structure will be replaced within its own "footprint" by building the substructure between and below the existing structure. Then, through a sequential series of single lane closures, the deck areas will be replaced. Responsibilities included structural steel erection; concrete placement of footings, columns and piers; and installation of multi-rotational seismic bearings. Client: Triborough Bridge and Tunnel Authority

Verrazano-Narrows Bridge Inspection, Painting and Structural Repairs, VN29, Brooklyn/Staten Island, NY; 4/97-9/97. Construction Inspector. This $16-million project included performing over 500 structural steel flag repairs and painting of over one million sq ft under the lower roadway of the longest suspension bridge in North America. Mr. Chasse's responsibilities included inspection of abrasive blasting of lead paint meeting Steel Structures Painting Council's surface preparation specification No. 10 (Near White Blasting Cleaning); checking dry film thickness and ambient conditions for three part coating system (primer, intermediate and final); inspection of steel for surface contaminants (scat test); surface profile (replica tape); and monitoring maintenance and protection of traffic for contractor's daily lane closures. Client: Triborough Bridge and Tunnel Authority

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; NY; 12/03-7/04. Senior Inspector. This $175-million project involves rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Responsibilities included reviewing contract records and analysis of time and material reports for possible claim by contractor. Meeting with the resident engineer and contractor staff to verify MURK forms. Client: New York City Dept. of Transportation

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, #BRC1568C, New York, NY; 9/97-10/00. Senior inspector on this $124-million construction project, which involved the rehabilitation of the historical Manhattan plaza, arch and colonnade; replacement of the structural steel stringer and floorbeam support system for the south side subway tracks; replacement of the truss bearings on the piers of the approach spans; and recoating of the south side of bridge including both towers and two main cables. Responsibilities included inspection of subway floorbeams, stringers and track removal, lead paint containment, bridge jacking, and concrete testing. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 4/99-5/99. Inspector. This $176-million project consisted of the demolition and reconstruction of the entire BMT transit structure on the Williamsburg Bridge. Mr. Chasse was responsible for organizing and leading the quality assurance inspections and quantity reporting for all structural steel and reinforced concrete demolition and construction on this project. Client: New York City Dept. of Transportation

Neophytos Neophytou, P.E.
Assistant Resident Engineer

Professional Profile
Mr. Neophytou is an assistant resident engineer with diverse experience on the rehabilitation of transportation facilities. He has been involved with asphalt placement operations, structural rehabilitation, earthwork (cut/fill), surveying, bridge painting and drainage installation. Previously, he has performed the duties of office engineer on several projects, handling the preparation of payments to the contractor, preparing change orders, and maintaining all job files including correspondence, certifications, as-builts, RFIs and ECMs.

Proposed Project Assignment
Assistant Resident Engineer

Registration/Certifications
Professional Engineer/NY

Education
BE/1992/Civil Engineering

Total Years Experience 20

Project Experience

Reconstruction of Willis Avenue Bridge, New York, NY; 3/08-Present. Chief Inspector. Project involves replacement of the existing movable bridge and approaches with a new structure, built offline from the existing structure. Mr. Neophytou's responsibilities include the supervision of senior inspectors; overseeing the operations at the river spans which include installation of drill shaft caissons; installation of a new swing span structure; building new piers including a center pivot pier; excavating the existing river bed; and demolishing the existing structures over the water. Client: New York City Dept. of Transportation

Macombs Dam Bridge over the Harlem River Rehabilitation, Contract #BRX287R, New York, NY; 8/99-3/08. Acting Resident Engineer. This $145-million rehabilitation project includes structural steel replacement and reinforcement for ±3,000 ft total length of viaducts, a camelback, a swing span, ramps over Metro-North Railroad, structures over Harlem River Drive and Major Deegan Expressway. He was in responsible charge of 12 senior structural steel inspectors overseeing operations such as the following:

- Structural steel welding of concrete filled steel grid (±100,000 sq ft section of ±10 ft x 8 ft) ensuring proper welding procedures and requirements
- Complex jacking operations for bearing replacement
- Concrete deck replacement (±200,000 sq ft) ensuring proper mix designs, preparatory work and requirements
- Asphalt overlays on the approaches
- Lead abatement and painting
- Electrical work
- Heat straightening of existing eye bars
- Installation of new eye bars at swing span and camelback
- ±1 million lbs of new structural steel joist system
- Installation of new cross and longitudinal trusses (+0.5 million lbs)
- Submarine cables installation and extensive MPT on Major Deegan Expressway and Harlem River Drive for full deck replacement with framing
- Mechanical installations of machinery

Mr. Neophytou prepared reports and computations for the monthly estimates for payments to the contractor, compiling all necessary information for preparation of change orders; he reviewed records of material certifications and prepared as-built drawings for submission. The replacement of the decks was executed within three time limited/restricted milestones of six winter months each and was completed on time and under budget. From November 2006 to March 2008, Mr. Neophytou filled the position of resident engineer and has been in responsible charge of overseeing all operations related to the mechanical and electrical operations at the swing span until its final acceptance by the city; project close out process

which includes quantities closeouts, final submissions for as-builts and shop drawings, finalization reviews of monthly estimates and extra work payments; and has acted as liaison to daily activities and arrangements until the final inspection from all participating agencies. Client: NYCDOT

Roslyn Viaduct Underdeck Netting, Route 25A, Contract #D-257251, Roslyn, NY; 1/99-7/99. Office engineer/senior inspector for the construction inspection of this $1.4-million bridge joint repair painting and underdeck safety netting installation project. Project included commercial blast cleaning for 16 expansion joints and installation of approximately 1,000 galvanized wire safety nets utilizing various scaffolding systems. Client: New York State Dept. of Transportation, Reg. 10

Nassau County Paving Inspection, Nassau County, NY; 7/97-11/97 and 7/98-1/99. Inspector. Provided daily inspection of asphalt milling and placement for the resurfacing of various Nassau County area roads. Other duties included oversight of the contractor's daily maintenance and protection of traffic (MPT), and consult with the County's resident engineer on payment quantities. Client: Nassau County Dept. of Public Works

Rehabilitation of Various Parks (Newbridge, Oceanside Park), Bellmore/Oceanside, NY; 11/97-7/98. Resident engineer/inspector on this project involved in demolition and reconstruction of existing basketball courts, tennis courts, roller hockey rink (cut/fill, paving, accessories); rehabilitation of existing handball walls; demolition and reconstruction of playground areas; installation of new insurance safety playground structures; installation of safety surface; gazebo structures; curbs; paving; planting of trees and shrubs; landscaping; and drainage improvements including installation of new drainage and modifications of existing drainage. Client: Town of Hempstead, Dept. of Parks and Rec.

Contract Closeout for NYCDOT Bureau of Bridges, Engineering Service Agreement, New York, NY; 4/97-7/97. Office Engineer. Performed contract finalization and closeout of approximately 40 NYC Bureau of Bridges contracts, with and without federal and state aid. Work included review of project records to determine which documents were required for closeout procedure. Missing documents were obtained or generated in order to process a final estimate package. These packages were monitored throughout the processing route to its completion point. Client: New York City Dept. of Transportation, Bureau of Bridges

Woodfield Road Inspection, West Hempstead, NY; 9/96-4/97. Chief Inspector/Office Engineer. Construction inspection services for this roadway rehabilitation project consisting of street reconstruction, curb and sidewalk replacement, modification of the existing drainage system, traffic intersection and street lighting modifications. Client: Nassau County Dept. of Public Works

Doxey Brook Improvement, Project #H60130M, Lynbrook, NY; 11/94-8/96. Engineer of construction for construction inspection of drainage improvements to Doxey Brook located in a residential section of Lynbrook, NY. The $9.5-million project entailed installation of 3,800 ft of pre-cast concrete box culvert up to 8 ft x 14 ft, weighing 20 tons each, placed in excavations up to 11 ft in depth utilizing vibratory steel sheet piling and well point systems. Large and complex turning chambers and headwalls were poured in place. Reinforced concrete pipe 5 ft in diameter was jacked under heavily traveled Peninsula Boulevard. The project also required major utility relocations including 138 kv oil-o-static electric lines and 2 ft x 60 ft welded water main offsets. Traffic signals, street lighting and related conduit, sidewalk, curb, driveway, sanitary sewers, and highway drainage were installed. Asphalt pavement and shoulder reconstruction was also performed. Client: Nassau County Dept. of Public Works

Reconstruction of Broadway, Project DRH90/5445 91/5495, Town of Oyster Bay, Massapequa, NY; 2/94-11/94. Inspector for this project involving one-half mile of shoulder reconstruction, pavement milling, curb, sidewalk and gutter replacement, installation of RCP drainage facilities, and traffic signal replacement. Client: Town of Oyster Bay Dept. of Public Works

Marc Matalon, P.E.
Assistant Resident Engineer

Professional Profile
Mr. Matalon is an experienced engineer in all areas of bridge, highway, and site construction and rehabilitation. He has been in charge of engineering duties on large bridge and tunnel rehabilitation projects, and has been commended by clients for his exceptional organization skills.

Proposed Project Assignment
Assistant Resident Engineer

Registration/Certifications
Professional Engineer/NY
SSPC-C3
OSHA Scaffold Competent Person

Education
BS/1987/Civil Engineering

Course Work:
10-Hour OSHA Training Course, Maintenance & Protection of Traffic Work Zone Safety, NYC Transit - Track Safety Course, #2093, Scaffolding Hazard Awareness Training

Total Years Experience 23

Project Experience:

Replacement of Belt Parkway Bridge over Rockaway Parkway, Contract #HBK1091, Brooklyn, NY; 9/09-Present. Resident Engineer. Responsible for the resident engineering inspection of all aspects of this $60-million project. The project involves the demolition of the entire existing, four-span, multi-stringer bridge superstructure with existing steel cap beams, and substructures, including the abutments, wingwalls, and pier columns and footings; installation of a new single span replacement bridge consisting of a steel multi-stringer superstructure with reinforced concrete deck and substructures, including reinforced concrete abutments and wingwalls on new piled footings, and mechanically stabilized earth retaining walls; reconstruction of approach roadways and four entrance and exit ramps within the project limits; and installation of new concrete barrier, new bridge and guide railing, new lighting standards, new drainage systems including catch basins and drainage pipes, new overhead sign structures, and new swale BMP grading, drainage and planting. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 2/05-8/09. Assistant Resident Engineer. This $150-million project involves the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge in suspended and approach spans; and repair of flagged conditions. Responsible for the maintenance of the project records in conformance with the Manual of Uniform Record Keeping (MURK) and for processing contractor monthly payments. Also responsible for monitoring contractor EEO compliance and office staff. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York, NY; 2/01-2/05. Assistant Resident Engineer/Office Administrator. This $175-million project involved rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Responsible for supervision of office staff and assistant to resident engineer for all daily activities. Also responsible for change orders and processing daily time and material records in conformance with NYSDOT Manual of Uniform Record Keeping (MURK). Client: New York City Dept. of Transportation

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, #BRC1568C, New York, NY; 1997-10/01. Assistant Resident Engineer/Office Administrator. This $124-million project involved the rehabilitation of the Manhattan plaza area, Manhattan Arch and Colonnade; replacement of the structural steel stringer and floorbeam support system for the west side subway tracks; replacement of truss bearings on top of the piers of both approach spans; rehabilitation of eyebars anchoring one of the

main suspension cables; and removal of existing paint from the entire west side, both towers and two main cables, and replacing with new coating. Responsible for supervising an office staff of six, including an office engineer and assistant office engineer in the performance of all field office administrative duties for this construction project. Client: New York City Dept. of Transportation

Rehabilitation of Ventilation, Mechanical, Electrical and Drainage of Three Vehicular Tunnels, Battery Park Underpass, First Avenue Tunnel, Park Avenue Tunnel, Contract #HBMC023, New York, NY; 1999. Resident Engineer. Responsible for the supervision of all aspects of this $17-million project, including coordination with various agencies affected by this work such as NYSDOT, NYC Parks Dept., United Nations, and local community associations. A vital part of the interaction with these agencies involved coordinating the maintenance and protection of traffic (MPT) for the three tunnels as they are all located in heavily populated areas of Manhattan with high traffic volumes that can be directly affected by the installation of motorized fan motors and rehabilitation of fan housings bearings, fan supports and dampers at Battery Park Underpass; installation of new CO monitoring systems at all three tunnels; installation of new electrical systems in all three tunnels including new motor control centers and programmable logic controllers; installation of new lighting controls, new traffic controls and signals for all three tunnels; complete replacement of the roadway lighting systems at Park Avenue Tunnel and refurbishing the existing roadway lighting at First Avenue Tunnel and Battery Park Underpass; cleaning, repairing and relining the existing drainage systems in all three tunnels and installation of a new standpipe system in the Battery Park Underpass. Client: New York City Dept. of Transportation

Manhattan Bridge West Side Approach and Suspended Spans Rehabilitation, #BRC156E, New York, NY; 1992-1997. Assistant Resident Engineer. Responsible for supervising an office staff of five, in the performance of all construction field office administrative duties for this $96-million rehabilitation project. This project involved the replacement of reinforced concrete-filled grid deck and structural steel stringers and diaphragms, installation of new steel expansion joints and replacement of downspout drainage system for the two west side approach spans, installation of a truss stiffening system for both west side spans and completion of the stiffening system for the east side spans, and completion of rehabilitation of pedestrian west walkway including new extension ramp in Manhattan. Client: New York City Dept. of Transportation

Manhattan Bridge Traveler System and Lower Level Interim Rehabilitation, #D253248, New York, NY; 1990-1992. Office Engineer. Mr. Matalon was responsible for analyzing contractor's cost proposals and derived independent engineer's cost estimates for extra work, field inspected change order requests, drafted order-on-contracts, wrote contract specifications, created and maintained automated filing system using microcomputers for shop drawings, correspondence, change orders, etc. Acted as liaison between contractor, Engineer-in-Charge and Resident Engineer. Worked directly with the EIC and NYSDOT Region 11 personnel on contract termination, including the review of claims, negotiation of legitimate payment to the contractor, and finalization of the D500040 contract. Client: New York State Dept. of Transportation, Reg. 11

Manhattan Bridge New Maintenance - Reconstruction of Westerly Walkway, #D500040, New York, NY; 1987-1990. Assistant Office Engineer. Mr. Matalon was responsible for computation of the monthly estimate for payment to the contractor, review and log of inspector's daily reports and shop drawings, performed independent cost estimates for extra work, performed field inspection for quality control, assisted Office Engineer and Resident Engineer with all administrative duties. Client: New York State Dept. of Transportation, Reg. 11

Professional Affiliations: American Society of Civil Engineers (ASCE), National Association of Corrosion Engineers (NACE)

William G. Ferdinandsen Jr., P.E.
Assistant Program Manager

Professional Profile
Mr. Ferdinandsen is an engineer with extensive experience in the management and inspection of highway and bridge reconstruction projects.

Proposed Project Assignment
Assistant Resident Engineer

Registration/Certifications
Professional Engineer/NY
NCEES Certified/NY
NYSDOT Maintenance & Protection of Traffic Certified
NYSDOT Traffic Control Seminar/NY

Education
MS/1995/Transportation Management
BS/1989/Civil Engineering

Course Work
Region 2 Advanced Institute for Transportation Education, Polytechnic University

Total Years Experience 22

Project Experience

Belt Parkway Bridges Program Management Services, Brooklyn, NY; 8/06-Present. Assistant Program Manager. Program management and resident engineering and inspection services for the rehabilitation/replacement of seven bridges along a 7.5-mile section of the Belt Parkway. Responsibilities include coordination and resolution of all pre-construction and construction related issues, review and management of overall master corridor reconstruction schedule, coordination of prime and subconsultant reviews of traffic engineering and maintenance and protection of traffic (MPT) concerns, landscape architecture requirements, environmental permitting requirements and enforcement, and community relations presentations and distributions. Mr. Ferdinandsen conducts extensive constructibility reviews of all seven bridges to determine the most efficient means of progressing the reconstruction through the combination of individual bridge contracts. He performs extensive life cycle cost analyses to highlight potential cost savings and ensure the specification of the most cost effective materials into the construction contracts. He expedites the completion of the design documents by actively meeting with the individual project designers to ensure that the documents are accurate and comprehensive thereby avoiding costly delays during construction. Client: New York City Dept. of Transportation

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 5/03-6/07. Assistant Resident Engineer. This $280-million project involves the construction engineering and inspection for the miscellaneous rehabilitation of the bridge structure. Responsibilities included the supervision of the steel reinforcement of the main tower columns, the replacement of steel and bearings on the main and intermediate towers and trusses, the abrasive blasting and recoating of the north and south trusses and the interiors of the main tower column legs, the replacement and installation of CCTV cameras and other ITS equipment, and the rehabilitation of the anchorages, suspension system, cables and cable saddles. Client: New York City Dept. of Transportation

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 12/00-5/03. Assistant Resident Engineer. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included the supervision of the placement of the orthotropic roadway and walkway decks on the main bridge, the demolition of existing steel and concrete roadways and walkways, and the erection of new support steel. Client: New York City Dept. of Transportation, Division of Bridges

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 3/98-12/00. Office Engineer. This $176-million project involved the construction engineering and inspection for the reconstruction of the BMT structure. Mr. Ferdinandsen's responsibilities on this project included establishment of an extensive computer database system for the tracking of all project correspondence, submittals and approval requests. Mr. Ferdinandsen also reviewed and logged all

correspondence and contractor's submittals, and aided in the resolution of project technical issues in concert with the resident engineer. Client: New York City Dept. of Transportation, Division of Bridges

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 1996-2/98. Senior Inspector. This $310-million project involved the construction engineering and inspection for the reconstruction of the south inner and outer roadways. Mr. Ferdinandsen's responsibilities included resolution of project technical issues in concert with the resident engineer, preparation of construction change orders, and as-built drawing coordination. As this project was funded and administered by the NYCDOT, Mr. Ferdinandsen was able to draw significantly from his considerable experience working for NYCDOT in several divisions and capacities. Client: New York City Dept. of Transportation

New York City Dept. of Transportation - Traffic Engineering & Safety; 1995-1996. Technical Assistant to First Assistant Commissioner/Chief Traffic Officer. Responsibilities included aiding in the executive direction of all policy development and operations in the following offices of NYCDOT: Street Lighting; Traffic Signals; Central Traffic Engineering; Geometric Design and Construction; Maspeth Central Sign Shop; and Office of Safety Programs; developing transportation engineering policies and programs governing all roadway networks in New York City.

New York City Dept. of Transportation - Division of Bridges/Roadways; 1992-1995. Assistant Civil Engineer - Flags Repair Unit. Borough engineer for Manhattan and Staten Island responsible for reviewing, routing, and tracking all hazardous and potentially hazardous safety and structural bridge conditions ("flags"), as identified by State and City bridge inspectors and weekly field investigations.

Williamsburg Bridge, New York, NY; 1993-1995. Project manager for all flag conditions on the main span of this bridge. Worked extensively on flag conditions on the Brooklyn, Manhattan and Queensboro Bridges as well as in the Boroughs of Queens and Brooklyn.

Created and coordinated a $36-million (annual) Capital Painting Program for a ten-year period that insured full lead abatement as well as complete protective coating on all of the larger steel bridges in the NYCDOT bridge inventory. Successfully bid nine capital painting contracts in Fiscal Year 1995.

While working as a design engineer, Mr. Ferdinandsen was responsible for complete design and review of residential, commercial and industrial subdivision and land development plans. Duties included land title work, land planning and lot layout, vertical and horizontal alignment of existing and proposed streets, complete storm water management design, erosion control design and site grading. 1990-1992

As an engineering associate; Mr. Ferdinandsen provided inspection and supervisory services for the repair and rehabilitation work on several buildings throughout New York City. He prepared periodic progress reports and aided in the approval of progress payments; insured strict adherence to job specifications and safety precautions. 1989-1990

As an engineering intern; Mr. Ferdinandsen aided professionals in the inspection of bridges and the design of on-site sewer systems and served as the member of a survey team. 6/1988

Professional Affiliation
Institute of Transportation Engineers (ITE)
American Society of Civil Engineers (ASCE)
American Society of Highway Engineers (ASHE)

Guerman Vainblat, P.E.
Resident Engineer

Professional Profile
Mr. Vainblat has 28 years of experience in construction and engineering. His experience includes project management, field supervision, quality control, testing and inspection, and report writing. Mr. Vainblat has extensive knowledge of the structural design of reinforced concrete, masonry, steel and wood structures. As a resident engineer, assistant resident engineer and chief inspector, Mr. Vainblat has performed review of drawings and specifications, and verified compliance of construction work with codes, drawings and contract documents, and processed payments. Monitored and inspected construction activities, including MPT, excavation, and demolition, the repair and new construction of bridges, roadways, sidewalks, pavements, steel reinforcement, structural steel, concrete placement and testing.

Proposed Project Assignment
Assistant Resident Engineer

Registration/Certifications
Professional Engineer/NY
NACE Level III Coating Inspector/NY
ICC Structural Steel Bolting Specialist Inspector/NY

Education
MA/1981/Civil Engineering

Course Work
10-Hour OSHA Training Course

Total Years Experience 29

Project Experience

2006-2010 Port Authority On-Call Construction Management Services - Jet Blue Parking Structure at John F. Kennedy International Airport, Queens, NY; 8/07-7/08. Civil/Structural Inspector. As part of this on-call construction management services project, Mr. Vainblat was assigned to perform inspection services of the new, five-story parking structure at JFK International Airport's Jet Blue Terminal. This structure is pre-cast concrete on a structural steel frame. Client: Port Authority of New York/New Jersey

Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 4/10-Present. Assistant Resident Engineer. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Responsible for inspection of painting operation including total coating systems replacement and coating of new steel; supervision of paint inspectors and chief inspectors; and working as resident engineer office team member. Client: New York City Dept. of Transportation

Protective Coating of Grand Central Parkway over BQE Bridges, Queens, NY; 7/08-5/10. Resident Engineer. Involves resident engineering inspection, environmental monitoring/hazardous waste management and construction support services for the protective coating of five Grand Central Parkway/BQE Bridges. Responsible for the day-to-day operation, supervising chief inspector, paint inspector and environmental inspection, operation of field office, community notification and environmental monitoring. Client: New York City Dept. of Transportation

Reconstruction of Roadways and Bulkheads located in the Gerritsen Beach, Contract #HWK1152-R, Brooklyn, NY; 4/07-7/07. Resident engineer for this project involving the installation of new bulkheads and outfalls, street restoration including new storm and sanitary sewer, new water main, sidewalks and pedestrian ramps. Responsibilities included review of permits, submittals and approvals, and inspection of outfall items. Client: New York City Dept. of Design and Construction. Employer: Ammann & Whitney, Inc.

Guerman Vainblat, P.E.
Resident Engineer

Installation of Sidewalks and Pedestrian Ramps, Contract #HWS2006Q1, Queens, NY; 6/06-5/07. Resident engineer for this project involving the installation of new sidewalks and pedestrian ramps. Responsibilities included review of permits, submittals and approvals and inspection. Client: New York City Dept. of Design and Construction

Combined Sewer Replacement and New Water Main Installation at Various Locations, SEQ2590, Flushing, Queens, NY; 10/5-4/06. Resident engineer for this project involving street restoration including new storm and sanitary sewer, new water main, sidewalks and pedestrian ramps. Responsibilities included review of permits, submittals and approvals and inspection. Client: New York City Dept. of Design and Construction

Restoration of 72nd Street, Contract # HWQP180, Woodside, NY; 7/05-10/05. Chief inspector for this project involving replacement of existing sewer, installation of new water main and street restoration, and installation of new light poles, retaining walls, parapets, sidewalks and pedestrian ramps. Client: New York City Dept. of Design and Construction. Employer: Ammann & Whitney, Inc.

Throgs Neck Bridge Structural Steel Repair and Drainage System Improvement, TN-81, Bronx, NY; 12/02-7/05. Assistant resident engineer for this project involving removal of existing steel, structural steel repairs, finger joint repairs, new drainage installation, suspender cables rehabilitation, cleaning, preparing and painting of the structural steel, staged construction and MPT. Client: Triborough Bridge and Tunnel Authority. Employer: Ammann & Whitney, Inc.

Component Rehabilitation of Nine Bridges, New York, NY; 4/06-6/06. Chief inspector/resident engineer for this project, which included demolition of two arch bridges over Jackie Robinson Parkway, demolition and removal of concrete deck and structural steel, new structural steel, concrete overlay, deck, parapet walls on various bridges, pedestrian ramps, sidewalks, abutment walls repair, water main repairs, culverts rehabilitation, staged construction and MPT on bridges, highways and local streets. Client: New York City Dept. of Transportation. Employer: Ammann & Whitney, Inc.

New 33rd Precinct Station House, New York, NY; 2000-2001. Inspected steel fabrication and erection (including structural welding, bolting, and metal decking), reinforced masonry, and performed non-destructive testing (Magnetic Particle) of the welds. Client: New York City Dept. of Design and Construction

New Power Generator House at Rikers Island, New York, NY. As senior inspector, inspected structural steel, reinforced masonry and precise concrete. Client: New York City Dept. of Design and Construction

Multi-Story Steel Framing Building, Manhattan, NY Senior inspector responsible for inspection of structural steel erection, welding (visual inspection and non-destructive testing), bolting and metal decking. Supervised up to seven inspectors, scheduled and coordinated inspections and testing. Client: New York City Dept. of Design and Construction

Grand Central Terminal Renovation. Monitored structural stability and integrity of existing structures during demolition and new construction. Performed visual welding inspection and non-destructive testing. As Senior Inspector, supervised up to ten inspectors, scheduled and coordinated inspections and testing. Client: Port Authority of New York/New Jersey

Redevelopment of Building 14 for Japan Airlines at JFK Airport. Inspected steel erection, welding, bolting and metal decking. Client: Port Authority of New York/New Jersey

Battery Park Pedestrian Overpass (Tribeca Bridge) Senior Inspector. Performed visual inspection, welding inspection and non-destructive testing of bridge trusses and elevator tower construction.

LPE

Alonzo R. Bryson

PROFESSIONAL EXPERIENCE

Project Inspector , Resident Engineer's Office, Stewart Airport, NY ***06/ 2010 - Present***
LPE Enterprises / Port Authority of NY/NJ
Responsible for monitoring all contractor work activities as related to the following projects including, but not limited to, including installation of precast concrete manholes and handholes, placement of concrete for electrical ductbak construction, installation of galvanized and pvc conduit for electrical services, installation of electrical power and communications cables, replacement of in pavement runway approach and flasher lights.

- SWF 164.019 - Rehabilitation of runway 9 Approach Lighting and Cable

Project Inspector, Resident Engineer's Office, LaGuardia Airport, NY ***02/99 – 06/2010***
LPE Enterprises / Port Authority of NY & NJ
Responsible for the monitoring of all contractor work activities as related to the following projects including, but not limited to, demolition of existing concrete deck slabs, structural decks, and pile caps; Preparation and placement of concrete for pile cap rehabilitation, girder joints, pile in fill and deck slab rehabilitation; Installation of conduit for T/W lighting and garage lighting; Setting of precast concrete girders and pile caps. Installation of water and sewer mains; Removal, replacement and installation of electrical conduit, wire, cable and related equipment; Installation of runway and taxiway lights and lighting systems, signs, signage and pavement markings; Asphalt placement, asphalt for rehabilitation, repair and resurfacing of runways, taxiways and adjacent areas; Concrete placement for reconstruction of terminal floor slabs; Placement of concrete for repair of deck girders and patching of deck undersides; Erection of Jersey barriers and chain linked fencing for AOA and perimeter security enhancements; Erection and installation of bollards for Terminal security upgrades.

- LGA 700 - Runway Deck FAA Conduit Externalization
- LGA 124.021 - Runway 4-22 Pavement Rehabilitation & Electrical Upgrades
- LGA 124.027 - Rehabilitation of Taxiway "B" From T/W "G" to "V"
- LGA 124.147 - Rehabilitation Of Hangar 4 Apron & Taxiways
- LGA 705 - Rehabilitation Of CTB Concourse Slabs
- LGA 715 - Pile Supported Strucrture Rehabilitation
- LGA 124.140 - Rehabilitation Of Runway 13-31 & Associated Taxiways
- MF 100.506 w.o. #13 - LGA Fencing at AOA Perimeter
- MF 100.507 w.o. #9 - MAT Frontage Protection
- MF 100.507 w.o. #18 - Perimeter Strengthening
- MF 100.509 w.o. #15 - CTB Bollard Protection
- MFA 200 w.o. # 2-18 - Repair Of Passenger Loading Bridge
- MFA 930.909A - West End Delta Shuttle Barrier & Fence
- LGA 124.071 – Airport Central Terminal Parking Garage Lighting and Painting
- LGA 609 – Rehabilitation Of Pile Caps
- LGA 124.068 – Pile Caps & Girders Installation,
- LGA 900.409A – Realignment of T/W “R”,
- LGA 990.310- Runway Expansion Joint Replacement at Bulkhead,
- LGA 669 - Pile cap, Bulkhead and Girder Rehabilitation.
- LGA 650 - Castellated Beam replacement
- LGA 686 - Utilities Rehabilitation. Along Runway Drive
- LGA 697- Replacement of Sanitary Force Main Hangar 7 to NYC CS

Senior Inspector, Promatech Inc., North Brunswick, NJ ***10/98 – 01/99***
NYCDDC: Rehabilitation of Shore Blvd. Bulkhead ,½ mile pier replacement
Responsible for supervision of all contractor work activities including timber sheeting removal, steel sheeting installation, tie rod removal and re-installation, placement of structural concrete.

LPE

Project Officer, NYC School Construction Authority, Long Island City, NY 02/98 – 09/98
Responsible for the simultaneous management of multiple projects including but not limited to prescope investigation and design review, bid preparation, bid review and analysis, budget management, scheduling, site supervision, cost estimating, change order evaluation and preparation, payment requisition review and processing.

Assistant Project Manager, TDX/Becom Joint Venture, Long Island City, NY 10/95 – 01/98
NYC School Construction Authority: Modernization of PS 175K/HS Redirection 5-Story Modernization and 2-Story Addition. Duties included review of contract work schedule, supervision of contractor and subcontractor work activities, cost estimating, change order review, analysis and evaluation, monthly report preparation and job meeting coordination.

Office Engineer, Leroy Callender, PC, New York, NY 02/94 – 09/95
NYC Department of Transportation: Reconstruction of Malcolm X Blvd. Duties included preparation and maintenance of project records such as inspectors daily reports, material acceptance record book, monthly payment requisitions, EEO reports and wage rate interviews, subcontractor approvals, safety and project meeting minutes.

Assistant Project Manager NYC School Construction Authority, NY 12/87 – 01/94
Construction of PS 6K and Modernization of Various Public Schools – Borough of Queens.
Progressed from Project Supervisor through Assistant Project Manager responsible for the review of contractors' work schedule, daily site supervision, coordination of contractor and subcontractor work activities, cost estimating, change order review and evaluation.

Senior Inspector, NYS Department of Transportation, NY 08/81 – 11/87
Demolition of Miller Avenue Viaduct Over Rte 9A, West Side Highway 42nd St – 57th St., Long Island Expressway Widening 69th St – 90th, Construction of 150th St. Bridge Over Nassau Expressway.

CERTIFICATION

National Institute Of Certification In Engineering Technologies, NICET Level III Certified

OFFICE ENGINEERS

Richard G. Khoury
Resident/Office Engineer

Professional Profile
Mr. Khoury is a field engineer with many years of diversified experience in the area of construction engineering. He is responsible for supervision and assignment of the various inspection tasks to the field staff. His responsibilities also include processing monthly estimates, change orders, force accounts, overseeing all project logs, and processing the final estimate.

Proposed Project Assignment
Office Engineer

Registration/Certifications
NICET IV
NACE Coatings Inspector Level 1
ACI Concrete Field Testing Technician - Grade I
NYSDOT MPT Certified

Education
BS/1985/Civil and Construction Engineering Tech. (CCET)

Course Work
40-Hour OSHA Training Course
Expedition Course, 9.0
GPI Traffic Work Zone Safety Training Course

Total Years Experience 26

Project Experience

Bronx-Whitestone Bridge Replacement of the Bronx Approach and Miscellaneous Repairs to the Queens Approach, BW-89, Bronx, NY; 1/09-Present. Senior Office Engineer. This $192-million project involves the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work will include the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure there will be massive concrete placements for concrete footings and piers. For the duration of the project, traffic on the bridge must be maintained with five lanes open to traffic. During the staged construction work will be staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting. Other work items on the project include new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure. Responsibilities include working up quantities and processing monthly estimates; tracking and logging of all documentation utilizing Expedition as a project-control system; overseeing the routing of all shop drawings, submittals, correspondence, daily reports; maintaining as-built drawings; and processing of material acceptance records and certificates, change orders and preparation of the necessary documents for the final estimate. Client: Triborough Bridge and Tunnel Authority

Cross Bay Boulevard Bridge, Contract CB-08/09, Howard Beach, NY; 9/07-5/08. Office Engineer. Construction management and inspection services for this $60-million project, which completely replaced the existing concrete deck using a staged demolition and reconstruction approach. Mr. Khoury's responsibilities included working up quantities and processing monthly estimates, tracking and logging of all documentation utilizing Expedition as a project-control system, overseeing the routing of all shop drawings, submittals, correspondence, daily reports, maintaining as-built drawings, processing of material acceptance records and certificates, change orders and preparation of the necessary documents for the final estimate. Client: TBTA

Bronx-Whitestone Bridge Deck Replacement - BW-82, Bronx, NY; 11/03-9/07. Office Engineer. This $136-million project involved the removal of existing roadway deck and installation of an orthotropic deck with bonded aggregate wearing surface at anchorages and suspended spans removal of existing stiffening truss and modification of anchorage chambers, installation of new expansion finger joints, work platforms at towers maintenance platforms at anchorages, floorbeams, light poles, decorative lighting, and fire protection system. Also included was replacement of existing laterals, girder pins at anchorages, electrical facilities in the suspended span, and existing barriers with new steel barriers, providing and installing track beams for the maintenance traveler, maintenance traveler and access platforms to the maintenance traveler; and utilizing temporary moveable barriers to accommodate traffic during rush hours. Mr. Khoury's responsibilities as the office engineer included working up quantities and processing monthly estimates, tracking and logging of all

documentation utilizing Expedition as a project-control system. Oversaw the routing of all shop drawings, submittals, correspondence, daily reports, maintaining as-built drawings, processing of material acceptance records and certificates, change orders and preparation of the necessary documents for the final estimate. Client: TBTA

The Robert F. Kennedy (Triborough) Bridge - Rehabilitation of the Main Suspension Cables, Contract #TB-17, Astoria, NY; 1999. Senior inspector for this $9.5-million rehabilitation of the main suspension cables. Project included installation of temporary suspended footwalk, removal of existing wire wrapping, cleaning, wedging, applying corrosion inhibitor, wire repair splicing and compaction of main cables, coating main cables with red lead paste, cable rewrapping and paint application along with cable band bolt tightening and replacement. Responsibilities included inspection of all cable maintenance operations including unwrapping, cleaning, wedging, oiling, recompaction, wire splicing, rewrapping and bolt tensioning. Also inspected application of new coating system, structural steel and concrete flag repairs, MPT and concrete removal and replacement. Also performed record keeping duties. Client: TBTA

The Robert F. Kennedy (Triborough) Bridge Deck Replacement, TB-63, Queens, NY; 7/98-11/03. Office Engineer. This $138-million project was comprised of two major reconstruction efforts: the complete replacement of the Randall's Island Junction Structure and the redecking of the Bronx Approach. Work included upgrading bridge electrical systems, a new de-icing/salt storage facility and reconstruction work at various shops within the Junction Structure. Mr. Khoury's responsibilities included working up quantities for monthly estimates, and preparing order on contracts, force accounts, EEO and training special provisions reports. He was also responsible for overseeing the routing of all shop drawings, correspondence and daily inspection reports, maintaining as-built drawings, identifying and maintaining required material acceptance reports and certifications, and processing the necessary documents for the final estimate. Client: TBTA

The Robert F. Kennedy (Triborough) Bridge, TB-13, Queens, NY; 1996-1999. Assistant Resident Engineer/Office Engineer. This project involved construction inspection and support services for the Queens approach concrete structure deck replacement at the Robert F. Kennedy (Triborough) Bridge. Mr. Khoury's responsibilities included supervising the field staff, assisting in resolution of field problems, documenting and implementing our quality assurance/quality control (QA/QC) plan, reviewing and routing shop drawings, maintaining field records, checking daily inspection reports and processing monthly estimates. Client: TBTA

Queens-Midtown Viaduct Inspection, Contract #D253037, Queens, NY; 1990-1996. Office Engineer. This $115-million project involved the reconstruction of the six-lane LIE viaduct entrance to the Midtown Tunnel. The reconstruction of this heavily traveled viaduct, which spans navigable waterways at an exceptional height, involved structural steel and concrete deck replacement, removal of existing rocker expansion and sliding steel bearings and replacement with multi-rotational seismic bearings. The construction was accomplished in five work stages, which provided for the uninterrupted use of a dedicated bus lane and four traffic lanes. Mr. Khoury's responsibilities as the office engineer included working up quantities for monthly estimates, and preparing order on contracts, force accounts, EEO and training special provisions reports. He also was responsible for overseeing the routing of all shop drawings, correspondence and daily inspection reports, maintaining as-built drawings, identifying and maintaining required material acceptance reports and certifications, and processing the necessary documents for the final estimate. Client: NYS Dept. of Transportation, Reg. 11

CR3 Wellwood Avenue Final Design, Babylon, NY; 6/08-1/09. Resident Engineer. Project involved providing resident engineering, construction inspection and construction support services for bridge construction and interchange widening of Wellwood Avenue Bridge over Southern State Parkway. Project features included steel sheeting, structural excavation, structural concrete placement (footings, wingwalls and parapets), installation of pre-cast, post-tensioned concrete arches, PCC and asphalt, concrete pavement, major MPT required to shut down Southern State Parkway, and installation of NYSDOT INFORM fiber optic communication cable. Mr. Khoury oversaw inspection staff and conducted quality assurance reviews of work associated with this project. Client: Suffolk County Dept. of Public Works

James F. Weber
Senior Office Engineer

Professional Profile
Mr. Weber possesses many years of construction inspection experience relating to the rehabilitation of major bridge and highway structures in the metropolitan area, with a progression towards more complex assignments and challenging responsibilities. Mr. Weber has been part of the GPI Williamsburg Bridge team for the past 17 years.

Proposed Project Assignment
Office Engineer

Registration/Certifications
NICET IV
NICET Certified Engineering Technologist
NYSDOT Maintenance & Protection of Traffic Cert.

Education
MS/1991/Civil Engineering
BS/1983/Civil Engineering
AS/1980/Civil Engineering Technology

Course Work
10-Hour OSHA Training Course
Primavera Expedition Training Course
NYCT Track Safety Course
Primavera Project Planner P3, CPM Training Course

Total Years Experience 28

Project Experience

Belt Parkway Bridges Program Management Services, Brooklyn, NY; 5/06-Present. Senior Office Engineer. Program management and resident engineering and inspection services for the rehabilitation/replacement of seven bridges along a 7.5-mile section of the Belt Parkway. Responsibilities include management of all office engineering functions for the entire Belt Parkway Program. Mr. Weber will draw on his extensive experience from the Williamsburg Bridge Program, which had a construction program value exceeding $1 billion. Mr. Weber manages all office engineers on each of the individual six Belt Parkway Bridges and ensures a cohesive methodology for all office engineering standards, all in accordance with NYSDOT MURK. Mr. Weber works closely with and advises both the program manager and assistant program managers on many technical issues on this project and prepares the majority of correspondences which require action. Mr. Weber also maintains all information databases and scheduling programs in use on this project to track all project submittals including the use a web based field information management system. Client: New York City Dept. of Transportation

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 8/03-9/07. Office Administrator. This $280-million project involved the construction engineering and inspection for the rehabilitation of the Williamsburg Bridge. Responsibilities included overseeing an engineering staff of seven people, managing all office engineering responsibilities and directly negotiating all contract change orders on this project. Mr. Weber worked closely with and advised the resident engineer on many technical issues on this project and prepared the majority of correspondences which required action. Mr. Weber also maintained all information databases in use on this project to track all project submittals. Because Mr. Weber has worked on the Williamsburg Bridge rehabilitation program since its inception, his experience and technical expertise were an invaluable resources to NYCDOT and his methodology in organizing and managing a complex construction engineers field office has become the model for which other NYCDOT projects have emulated. Client: New York City Dept. of Transportation

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 12/00-8/03. Office Administrator. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included overseeing an engineering staff of ten people, managing all office engineering responsibilities and directly negotiating all contract change orders on this complex project. Mr. Weber also advised the resident engineer on many technical issues and draws from his experiences from Contracts 4, 5 and 6 to solve many of the project's issues. Responsibilities also included the establishment and maintenance of an extensive computer database system for the tracking and coordination of all project correspondence, submittals and payments. Client: New York City Dept. of Transportation

James F. Weber
Senior Office Engineer

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 7/98-12/00.As office administrator, Mr. Weber was directly responsible for the office administration of this $176-million reconstruction program of the Williamsburg Bridge. Mr. Weber oversees an office staff of ten people. Due to the critical scheduling of this project and the extreme importance of project communications, Mr. Weber spent the majority of his time coordinating the resolution of project technical issues and overall schedule management for the project. This involved daily contact with the numerous subconsultants who were involved in specific areas of this project, and reviewing all issues prior to communicating a formal response back to the contractor, reviewing and approving contractor submitted schedules and analysis of contractor claims. Client: New York City Dept. of Transportation

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 1994-7/98.As office administrator, Mr. Weber was directly responsible for the office administration of this $310-million reconstruction program of the Williamsburg Bridge. Mr. Weber oversaw an office staff of 14 people. Due to the critical scheduling of this project and the extreme importance of project communications, Mr. Weber spent the majority of his time coordinating the resolution of project technical issues and overall schedule management for the project. This involved daily contact with the numerous subconsultants who were involved in specific areas of this project, and reviewing all issues prior to communicating a formal response back to the contractor, reviewing and approving contractor submitted schedules and analysis of contractor claims. Mr. Weber also worked directly with the NYCDOT Bureau of Bridges to assist in the establishment of a uniform construction field office administration policy. This included being the Bureau of Bridge's representative in the development of a state-of-the-art computerized construction payment system. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable Rehabilitation, Contract 4, #BRC253A, New York, NY; 1991-1994. As office engineer for this $88-million cable rehabilitation project, Mr. Weber's specific responsibilities involved the supervision of all field office operations in accordance with NYSDOT MURK and NYCDOT. At the request of NYCDOT, Mr. Weber lectured at training sessions for EEO Utilization and Disadvantaged Business Enterprises on federally funded construction projects. In addition, Mr. Weber prepared and negotiated all contract change orders and to date has prepared over $17.1-million in extra work. Mr. Weber has also written procedures and guidelines for the Bureau of Bridges/Bridge Construction Group on the following topics: Preparation of Construction Change Orders, Contractor Progress payment requirements, Record Keeping on a Time and Material Basis, High Strength Bolt Sampling, Testing and Inspection, Construction EEO Goal Requirements and Monitoring, and Field Office Record Keeping Procedures. Client: New York City Dept. of Transportation

Interborough Parkway Inspection, #D252310, Glendale, NY; 1988-1991. As office engineer on this $48-million highway and bridge reconstruction project, Mr. Weber was in charge of all field office operations, in accordance with NYSDOT MURK requirements. He used state-of-the-art computerized project management software to monitor the construction schedule. He also utilized microcomputers in the field office to track submittals, correspondence, and shop drawings utilizing one master database. He processed the contractor's estimates using the NYSDOT CEES program (Computerized Engineers Estimate System), and wrote status reports for the owner, tracking progress, work performed, and the forecasting of all potential problems. Client: New York State Dept. of Transportation, Reg. 11

While previously employed prepared plans and construction estimate for the rehabilitation of the **Henderson Yard** for the NY/NJ Port Authority.

While previously employed prepared plans for **Holland Tunnel** truck clearance system for NY/NJ Port Authority.

Lorraine A. Finfrock
Office Engineer

Professional Profile
Ms. Finfrock is an office engineer with over 25 years of office experience on large, complicated structural rehabilitation projects. She has served as EEO site representative and has trained entry-level inspectors. Ms. Finfrock has also performed inspections of painting of structural steel, installation of structural steel, basic maintenance and protection of traffic, asphalt paving and concrete.

Proposed Project Assignment
Office Engineer

Registration/Certifications
NICET IV
NYSDOT Maintenance & Protection of Traffic Certified

Course Work
Maintenance & Protection of Traffic Design and Operation - FHWA
Contract Administration Training - FHWA, NYSDOT and NYCDOT
Contractor Compliance Monitoring Seminar - FHWA, NYSDOT and NYCDOT
NYCDOT Supervisor Course - Certificate No. NYCDOT 01-312
Civil Engineering Technology, 56 credits, Nassau Community College

Total Years Experience 26

Project Experience

Manhattan Bridge Rehabilitation of Cables and Suspenders, Contract 14, #BRC156R, New York, NY; 12/09-Present. Office engineer on this $149-million project which involves the unwrapping and rewrapping of cables; replacement of suspenders; replacement of necklace lighting messenger cables and cable hand ropes; installation of new access platforms to existing tower platforms; reversal of lower roadway and operation of HOV lane and replacement of multi-rotational bearings at the Towers; replacement f light poles and luminaries on South upper roadway; replacement of lane control radar on South upper roadway; and retrofit of track stringers and diaphragm connections and other miscellaneous work. Responsible for the maintenance of the project records in conformance with the Manual of Uniform Record Keeping (MURK) and for processing contractor monthly payments. Also responsible for monitoring contractor EEO compliance and office staff. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 1/05-12/09. Office engineer on this $150-million project involved the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge in suspended and approach spans; and repair of flagged conditions. Ms. Finfrock was responsible for the maintenance of the project records in conformance with the Manual of Uniform Record Keeping (MURK) and for processing contractor monthly payments. Also monitored contractor EEO compliance and office staff. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; 2/01-2/05. Office engineer for this $175-million project involving the rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Ms. Finfrock was responsible for the maintenance of the project records in conformance with the Manual of Uniform Record Keeping (MURK) and for processing contractor monthly payments. She also monitored contractor EEO compliance and office staff. Client: New York City Dept. of Transportation

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, #BRC1568C, New York, NY; 1997-10/01. Office Engineer. This $124-million project involved the rehabilitation of the Manhattan plaza area, Manhattan Arch and Colonnade; replacement of the structural steel stringer and floorbeam support system for the west side subway tracks; replacement of truss bearings on top of the piers of both

approach spans; rehabilitation of eyebars anchoring one of the main suspension cables; and removal of existing paint from the entire west side, both towers and two main cables, and replacing with new coating. Ms. Finfrock was responsible for supervising the office staff in the performance of all construction field office administrative duties for this reconstruction project. These tasks included processing of multi-million-dollar monthly payments, negotiating and preparing change orders for additional work, identifying material acceptance criteria and collecting all required documentation for over 700 contract items, and maintaining an integrated computerized database system for a myriad of project documents. In addition, Ms. Finfrock was a liaison between contractor, Engineer-in-Charge and Resident Engineer. Client: New York City Dept. of Transportation

Manhattan Bridge West Side Approach and Suspended Spans Rehabilitation, #BRC156E, New York, NY; 1992-1997. Office Engineer. Ms. Finfrock was responsible for supervision of the office staff in the performance of all construction field office administrative duties for this $96-million rehabilitation project. This project involved the replacement of reinforced concrete-filled grid deck and structural steel stringers and diaphragms, installation of new steel expansion joints and replacement of downspout drainage system for the two west side approach spans, installation of a truss stiffening system for both west side spans and completion of the stiffening system for the east side spans, and completion of rehabilitation of pedestrian west walkway including new extension ramp in Manhattan. Ms. Finfrock's responsibilities included structural inspections, safety shields and shop drawing review, as well as creating and maintaining an automated filing system, compiling all information for implementation of force accounts, maintenance and updating of material certification records and project files; compiling necessary information for the preparation of change orders; preparation of job records for final submission to the client. In addition, she performed inspections of painting of structural steel, installation of structural steel, basic maintenance and protection of traffic (MPT), asphalt paving and concrete placement. Client: New York City Dept. of Transportation

Manhattan Bridge Traveler System and Lower Level Interim Rehabilitation, #D253248, New York, NY; 1990-1992. Office Engineer. On this $21-million project, Ms. Finfrock was responsible for creating and maintaining an automated filing system using microcomputers for shop drawings, correspondence, order on contracts, etc., and acted as a liaison between contractor, engineer-in-charge and resident engineer. Ms. Finfrock was also the EEO site representative and responsible for writing and implementation of training programs. Client: New York State Dept. of Transportation, Reg. 11

Manhattan Bridge Reconstruction of Westerly Walkway, Truss Hangers, Upper Roadways and Stiffening of the Side Spans, #D500040, New York, NY; 1988-1990. Assistant Office Engineer. Ms. Finfrock was responsible for computation of the monthly estimate for payment to the contractor, review and log of inspector's daily reports and shop drawings, and maintenance of material certification records. Assisted office engineer and resident engineer with all administrative duties. Ms. Finfrock also worked on the preparation and final submission of all job records to the regional office. Client: New York State Dept. of Transportation, Reg. 11

Long Island Expressway Collector-Distributor, East and West, Queens, NY; 1985-1988. Office Engineer. Responsible for initial set-up of office, maintenance of accurate files for all job related materials and correspondence, compiling all necessary information for preparation of orders-on-contracts, maintenance of material certification records, examination of inspector's daily reports, EEO site representative, hiring and implementation of training programs, preparation of as-builts as well as all job records for final submission to the New York State Dept. of Transportation Regional Office. In addition to the office responsibilities, Ms. Finfrock also acted in the capacity of a field inspector on many site operations including painting, steel installation, electrical installations, and the maintenance of traffic, concrete and asphalt placement. Client: New York State Dept. of Transportation, Reg. 11

Edgar Rafol
Office Engineer

Professional Profile
Mr. Rafol is an office engineer/construction inspector with several years of experience working with New York City Dept. of Transportation's major bridge and highway reconstruction projects.

Proposed Project Assignment
Office Engineer

Registration/Certifications
NICET III/NY

Education
BS/1978/Civil Engineering

Course Work
10-Hour OSHA Training Course
Track Safety Course - NYCTA
Traffic Work Zone Safety Training Course - GPI

Total Years Experience 33

Project Experience

Belt Parkway Bridges REI Services - Rockaway Parkway Bridge, New York, NY; 9/09-Present. Assistant Office Engineer. Resident engineering inspection for the demolition of the entire existing, four-span, multi-stringer bridge superstructure with existing steel cap beams and substructures, including the abutments, wingwalls, and pier columns and footings. Responsible for maintaining a consistent project record system; preparing monthly contract estimate; learning and implementing City endorsed "FACS" computer system; submitting and keeping track of project submittals such as catalog cuts, rfi, product samples; assisting NYCDOT personnel in their inquiries and other project needs; preparing construction reports as required; and attending meetings called for by the contract. Client: New York City Dept. of Transportation

Replacement of Brooklyn Bridge Travelers, Contract #BRC270TA, Boroughs of Manhattan and Brooklyn, NY; 3/07-9/09. Office Engineer.This project includes the replacement of four movable maintenance platforms (travelers) with a state-of-the-art mechanical driven traveler system, the replacement of the traveler rails, hangers and connections, localized lead paint removal, and the replacement of the electrical system. Responsibilities included preparation of monthly contractor's construction progress payment, idr quantity checking which includes contract/shop drawings requirement checking, specification checking as to standards, certificates, tests and approvals; daily administration of project office communication including preparation of both incoming and outgoing project transmittals which includes shop drawings, contract drawings, safety manuals, catalog cuts, cpm and other similar items, telephone and radio communication, faxing, emailing or hand delivering letters and communications as required; responding to the monthly project progress meeting issues trying to resolve issues discussed during the monthly progress meeting thru the supervision of the resident engineer and the engineer-in-charge; complying to the daily needs of the client by performing tasks as needed and/or instructed by the client; attending to the daily upkeep of the project office by vigilantly manning the office ready to respond to client call and public inquiry related to the project, maintaining a running condition of printers, fax machine, copiers, etc. As the project progressed, he was responsible to an office of two to three inspectors, maintaining a steady supply of construction items such as vests, hardhats, gloves, respirators and the like and maintaining an updated supply of office forms such as idr's, wage rate checks, accident reports, engineer's daily diary, and other similar forms; maintaining computer logs of all project documents, keeping updated information about all project documents for current use and the final turn over to the city at project closeout. Client: New York City Dept. of Transportation

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 4/04-3/07. Office Engineer. This $280-million project involved construction engineering and inspection of tower bearings, the truss system, the steel towers, adjustment of the cable suspenders, maintenance and replacement of travelers among others. Responsibilities included the maintenance of project contract drawing database. The work specifically included receiving the shop drawings from the contractor, transmitting it to concerned agencies for approval, returning it back to contractor and concerned agencies until it is approved for construction use, change order approval follow up, project forms preparation, field supply control works and office maintenance works. Also responsible for preparing contractor's monthly payment. Client: New York City Dept. of Transportation

Edgar Rafol
Office Engineer

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 3/01-4/04. Office Engineer. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included flag repair closure letters; projected communication management; change order approval follow up; project forms preparation; field supply control works; bolts certification record keeping; and office maintenance works. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 8/99-3/01. Assistant office engineer on this $176-million project involving the reconstruction of the track structure on the bridge. Responsibilities included office engineering and management of project change order. Maintained and operated a working file for the project's flag repair work. Assisted the senior office engineer in the supervision of a three office personnel in maintaining a reliable change order record system. Tracked and coordinated approval of all project change orders. Managed and maintained project radio communication network. Client: New York City Dept. of Transportation

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 9/95-7/99. Office engineer on this $310-million project involving the reconstruction of the south roadway and removal of the maintenance travelers. Mr. Rafol's responsibilities included office engineering/ management of project change order; maintained a workable and reliable change order record keeping system; assisted the senior office engineer in the supervision of five office personnel in running and keeping the project change order record system; checked MURK-11 for accuracy and correctness for labor, materials, and equipment on a daily basis; checked labor, materials and equipment quantities for payment purposes; tracked and followed up on all project change orders for approval; and advised people concerned for problems and questions in its approval path. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable Rehabilitation, Contract 4, #BRC253A, New York, NY; 2/92-8/95. Assistant office engineer on this $88-million construction and resident engineering inspection project involving the rehabilitation of the suspension system. The project involved unwrapping, treating, and rewrapping the main suspension cables, replacement of all suspender cables with change to a redundant system, rehabilitation of the anchorages, replacement of necklace lighting, rehabilitation of tower tops, wire splicing, replacement of Transit Authority structures, and removal of cable enclosures inside anchorage structures and painting involving 100% containment. Mr. Rafol's specific responsibilities on this project included maintaining files and monitoring a $14-million force account flag repair including other contract force accounts, processing of payments for Transit Authority accommodation services. Performed labor wage check as needed; monthly progress photographs; monthly cable rehabilitation progress pictorial; daily weather board; weekly traffic reversal schedule; mid and end of month flag repair accomplishment report; assistance in construction material sampling and laboratory submission; control inspectors field supply; assisted in engineer-in-charge record keeping; maintained ready supply of project forms and other office supplies; prepared miscellaneous project sketches as required; delivered vital project documents to key personnel and agencies; and assisted in contractor's payment. Closed-out project according to NYCDOT procedure. Client: New York City Dept. of Transportation

FDR Drive Rehabilitation, E. 42nd to E. 54th Streets, and E. 56th to E. 58th Streets, Manhattan, NY, Stillwell Avenue Bridge, Brooklyn, NY; 3/87-1/92. As assistant resident engineer, Mr. Rafol worked as part of inspection team overseeing construction of the major New York artery in compliance with NYCDOT plans, standards and specifications. Work contribution and accomplishments as follows: Mr. Rafol's excellent attention to details led to numerous time and money saving ideas. His expertise with project paper work was of great assistance in mobilization, peak and demobilization stages of project. As a team player, he managed self-direction, possessing skill in producing construction sketches that facilitated remedial measures of on-site construction problems, and performed material quantity takeoffs for payment purposes. Client: New York City Dept. of Transportation

Vitaliy Khinchin
Office Engineer

Professional Profile
Mr. Khinchin has many years of extensive experience in construction of residential, commercial and industrial buildings, highways and bridges. His experience includes organization of site activities, safety survey and supervision of construction teams. He was also responsible for construction supervision and inspection of welding, laboratory testing and sampling, air monitoring and soil remediation, money saving strategies for overall cost of construction, scheduling and cost estimate, field modifications of proposed construction methods and details.

Proposed Project Assignment
Office Engineer

Registration/Certifications
NICET IV
Certified Associate Welding Inspector

Education
BS/1978/Civil Engineering

Course Work
10-Hour OSHA Training Course, #000130873
OSHA Lead Awareness Training, #067-82-0261

Total Years Experience 32

Project Experience

Belt Parkway Bridges REI Services - Paerdegat Bridge, New York, NY; 9/09-Present. Office Engineer. Project involves the demolition of the entire 13-span, multi-stringer bridge superstructure and substructure including abutments, wingwalls, and the piers consisting of concrete pile columns to a minimum of 600 mm below the mud line. The replacement structures are new three-span and five-span bridges consisting of a Class HP reinforced concrete superstructure slab supported by high performance steel box girders and substructures including reinforced concrete abutments, wingwalls, and multi column piers on new pile foundation. Responsible for maintaining all project required logs (shop drawings, permits, RFI's, change orders), filing all correspondence, transmittals and submittals; preparing agendas and minutes of the meetings; review and preparation of all contractors' partial and change order payments; verifying all estimates for payments, computations, as well as field measurements and sketches necessary for payment purposes; and reviewing all requested change order proposals and prepare packages for approval. Client: New York City Dept. of Transportation

Reconstruction of East and West Houston Street, #HWM738, New York, NY; 9/05-9/09. Office Engineer. Project involves resident engineering and inspection services for the installation of sewer, watermain, street lighting, curb and sidewalk, tree pruning and planting, and traffic work. Duties included processing of partial payments, change order payments, preparing change orders and overruns, material acceptance and estimate books, filing all correspondence, contract and shop drawings, preparing submittals, project forms and logs, review Inspector's reports and quantities computation. Also responsible for preparing agendas and minutes of the meetings, as-built drawings, field cards, in-service sheets and closeout package for the final payment. Client: New York City Dept. of Design & Construction

Cleaning and Surveying of Existing 48-in. Water Main, Madison Avenue between East 39th and East 78th Street, #MED-584A, New York, NY; 1/03-9/05. Office Engineer.Scope of work for "trenchless technology" to rehabilitate the existing 48-in. trunk water main included excavation of insertion pits for installation of new 48-in. steel pipe with Baker coupling system, installation of four new 36-in. and 48-in. Butterfly Valves, cleaning and surveying the existing water main utilizing robots to determine both the advisability of lining the pipe, as well as the proper lining to employ. Work included construction of new water distribution mains, sewer, new chambers and manholes, relocation of Con Edison and Empire City subway utilities, and restoration of roadway and sidewalk. Duties included processing of partial payments, change order payments, change orders and overruns, material acceptance and estimate books, filing all correspondence, contract and shop drawings, preparing submittals, project forms and logs, and record keeping. Prepared agendas and minutes of the meetings, as-built drawings, field cards, insertion sheets and closeout package for the Final Payment. Client: NYC City Dept. of Design and Construction

Vitaliy Khinchin
Office Engineer

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, New York, NY; 2001-1/03. Inspector. This project involves REI services for the reconstruction on the north side of the structure on the approach and suspended spans over East River and maintenance painting inspection. Responsibilities included inspection of contractor's work, control of the contaminated waste removal, field measurements and quantity computations, preparation of inspector's reports. Client: New York City Dept. of Transportation

Rehabilitation of Shore Road (Pelham Parkway) Bridge over the Hutchinson River, Contract HBX 1148R, Bronx, NY; 6/01-1/03. Office Engineer/Sr. Inspector. This project involved rehabilitation of a bascule span movable bridge including grid deck replacement, structural steel repair and replacement, lead paint abatement, bridge drive motors replacement, bridge machinery rehabilitation, repair of existing piers, abutments and control houses including underwater repair, bridge balancing tests, electrical work and MPT. Duties included inspection of contractor's work, field measurement and quantity computation, preparation of inspector's reports, concrete and asphalt testing preparation and processing of partial payments, change orders, and material acceptance and estimate books. Client: NYCDOT

Northern Boulevard/Cross Island Parkway Interchange, Queens, NY;2/01-6/01. Office Engineer. Duties included the preparation and processing of partial, substantial and final payments, change orders, material acceptance and estimate books, as well as the preparation of closeout packages for all three bridges. Client: New York City Dept. of Transportation

Bridge Component Rehabilitation, #HBCREPL95D, New York, NY; 8/00-2/01. Senior Inspector.

Willis Avenue Bridge over Harlem River, New York, NY. Project involved maintenance and protection of traffic in nine stages at Manhattan, the Bronx sides and bridge itself. Partial replacement of existing deck joint at West abutment using armored joint system with compression seal. Replaced existing deck joint at Pier 14 and East abutment with Steelflex Strip Seal Expansion Joint System. Replaced existing deck joint at Bent 1 with Silicoflex Joint Sealing System. Replaced existing deck joint at Pier 17 and South abutment with Transflex 200 Joint System. Replaced existing concrete headers at all joints and repair concrete recesses at Piers 11, 12, 13, 15, 16 and Bent 23 using Polymer Concrete (Watson-Bowmen). Repaired spalls in deck slab. Also included removal and disposal of asbestos contaminated materials.

Walton Avenue over Metro North, New York, NY; 8/00-2/01. Senior Inspector. Project involved the replacement of existing approach slab at East and West sides with new reinforcing concrete slabs and asphalt pavement. The replacement of 1 1/2 in. of worn sidewalk with 1 1/2 in. Microsilca concrete overlay, and replacement of existing concrete pedestals and bearing using jacking procedure (jacking towers). Sealing joints between steel girders and concrete deck.

Boston Road Bridge over Hutchinson River; New York, NY; 8/00-2/01. Senior inspector. Project involved epoxy coating wingwalls (S-E, N-E, S-W, N-W), also filling the deck joint with sealant at Pier 7. Responsibilities included the inspection of MPT every night before shift began, inspection of all types of construction operations and coordination with contractor. Also, inspection of welding during installation of armored joint system and steel beam fabrication for jacking towers, coordination with Metro North track outages, performed field measurement and calculations for quantity of work, performed asphalt and concrete field tests, and prepared daily inspectors concrete and asphalt reports.

Client: New York City Dept. of Transportation

Reconstruction of the 11th Avenue Bridge over LIRR and the NYCTA, Contract #HBK537R; 2000. Inspector. Project involved construction of three-span concrete bridge, steel girders and reinforced concrete deck, new abutments, concrete and steel piers and cap beams, crash walls, sidewalks, parapets, reconstruction of roadway approaches, construction of new water main, gas mains and sewers. Responsibilities included inspection of contractor's work, preparation of field measurement and quantity computation, preparation of inspectors' reports, concrete and asphalt testing. Client: New York City Dept. of Transportation

Zhong Wen Pan

Assistant Office Engineer

Professional Profile
Mr. Pan possesses the following experience.

Proposed Project Assignment
Office Engineer

Education
BS/2006/Civil Engineering

Total Years Experience 6

Project Experience

Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 2/10-Present. Assistant Office Engineer. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Mr. Pan's responsibilities include the establishment and implementation of the office procedures to the administration of construction contract. Duties will also include implementing project controls for distribution and record keeping of construction drawings, construction contract correspondence, technical records, and other projects documents. Additionally, he will review and process the contractor's pay applications, review the project schedule, process RFI's, prepare change orders, and manage claim and change order records. Mr. Pan will also assist the resident engineer on different tasks throughout the project. Client: New York City Dept. of Transportation

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 9/09-2/10. Assistant Office Engineer. This $280-million project involves the construction engineering and inspection for the Rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Responsibilities included assisting resident engineer on different tasks of the project including handling project documents, contractor payment, RFIs, shop drawings, change order and schedule review and drawings. Also provided coordination of inspection team and contractors. Client: New York City Dept. of Transportation

SIMBuilding Systems, LLC, New York, NY; 6/08-9/09. Structural Engineer. Mr. Pan has assisted project managers in the production of engineering design for mid-rise residential buildings; participated in structural components design (light gauge panelized walls, Vescom joists, Vescom composite floor system, shear wall, and other structural members); performed load calculations such as wind and seismic analysis; prepared design and engineering plans as well as shop drawings; developed structural models (developed in RISA 3D) and evaluated the designs to meet the current building code requirement; provided construction coordination to the construction team and fabrication shop; and prepared engineering and construction estimates for a variety of projects.

Zhong Wen Pan

Assistant Office Engineer

Westchester County Sign Inventory, Westchester County, NY; 8/06-5/08. Junior Engineer. Project involves field inventory of all County owned traffic signs, developing a Sign Management System, and preparing design documents to replace signs as required. In addition, assisted in the bid process, provided design support during construction, inspected the work and provided all necessary construction administration to complete the sign replacements. Responsibilities included reviewing signs for conformance to State and Federal requirements and developing construction drawings to replace signs that do not meet minimum requirements. Client: Westchester County Dept. of Public Works

Nassau County Pavement Marking Plans, Westbury, NY; 1/07-5/08. Junior Engineer. Project involved inventory of all existing pavement markings along 11 segments of roadway deemed as priorities by NCDPW. Responsible for field data collection and developing construction drawings for new pavement markings. Client: Nassau County Dept. of Public Works

Nassau County Traffic Calming - Post Avenue, Westbury, NY; 12/06-5/08. Junior Engineer.Project involved performing a traffic calming study along Post Avenue in the Village of Westbury to identify appropriate traffic calming measures and safety measures that can be applied along the corridor. Responsible for field data collection and developing drawings using AutoCAD. Client: Nassau County Dept. of Public Works

Shinnecock Tribe Traffic and Environmental Analysis, Southampton, NY; 12/06-5/08. Junior Engineer.Professional engineering services to develop and prepare EIS-type documents that will be used in the Attorney General Office's litigation of the Shinnecock Indian Tribe's application to build a casino and gaming resort in the Town of Southampton on Long Island. Responsibilities include field data collection and assisting engineers with the project. Client: New York State Office of General Services

Weaver Street Reconstruction, New Rochelle, NY; 6/06-8/06. Junior Engineer. Under this locally administered federal aid project, preliminary design services were provided including development of the Design Approval Document (Phases I through IV) for the rehabilitation of Weaver Street within the project limits and improvements at the Griffin Avenue and Quaker Ridge Road intersections. Responsibilities include performing accident analysis by using the HAS software using the traffic counts to establish balanced traffic volumes, no build, and project volume for the ETC and ETC+10. Also using the HSC and SYNCHRO software to conduct capacity analyses for the existing and future conditions and providing investigation measures. Client: Westchester County Dept. of Public Works

Professional Affiliations: American Society of Civil Engineers (ASCE), Institute of Transportation Engineers (ITE)

Software: AutoCAD, MicroStation, STAAD, ETABS, Revit Structure, HCS, MS Word, MS Excel, MS PowerPoint, MS Project

Systems: MS Windows 95/98/NT/2000/XP, UNIX Solaris

Languages: C, C++, Java

Nancy Martinez
Office Engineer

Professional Profile
Ms. Martinez has experience in the construction management field. She has experience utilizing AutoCADD and drafting and CPM. She possesses great leadership skills and is bilingual in Spanish.

Proposed Project Assignment
Office Engineer

Registration/Certifications
ACI Concrete Field Technician - Grade I/NY

Education
BS/1998/Construction Management Engineering
AS/1996/Construction Architectural Engineering

Course Work
10-Hour OSHA Training Course

Total Years Experience 13

Project Experience

2006-2010 Port Authority On-Call Construction Management Services - Port Authority Bus Terminal, Contract #LT-525, New York, NY; 4/10-Present. Office Engineer. This $640,593 project consists of installing pavement markings, signage, drop-in-delineators and Dura-curb at the New York Galvin Plaza Entrance, New Jersey Toll Plaza Approach and Departure Roadway and New Jersey Westbound Helix and Exit ramps. Ms. Martinez serves as office engineer responsible for all office records. Includes process of payments to the contractor by using WinTrak Program; preparation of Post Award Contract Changes (PACC) and processing of Change Orders (Order on Contract), Time and Material records, desk audits (review and approval of contractor's T&M packages), contract monthly reports, request for information and response to submittals by using Expedition, correspondence, attending Facility Impact and Progress meetings, minutes of meeting, as builts, etc. Client: Port Authority of NY/NJ

2006-2010 Port Authority On-Call Construction Management Services - Port Authority Bus Terminal, Contract #LT-234.054, New York, NY; 10/09-Present. Office Engineer. This $1,313,920 project consists of replacement of the existing concrete sump ceiling slab with pre-cast concrete panels, replacement of adjacent pavement, catch basin and man hole structures and patching in the adjacent pump room at the Lincoln Tunnel Center Tube. Ms. Martinez serves as office engineer responsible for all office records. Includes process of payments to the contractor by using WinTrak Program; preparation of Post Award Contract Changes (PACC) and processing of Change Orders (Order on Contract), Time and Material records, desk audits (review and approval of contractor's T&M packages), contract monthly reports, request for information and response to submittals by using Expedition, correspondence, attending Facility Impact and Progress meetings, minutes of meeting, as builts, etc. Client: Port Authority of NY/NJ

2006-2010 Port Authority On-Call Construction Management Services - Port Authority Bus Terminal, Contract #LT-521, New York, NY; 6/09-Present. Office Engineer. This $947,000 project consists of consists of providing for rehabilitation of concrete and steel elements at the LT Bus Ramps (including replacement of unsound concrete at columns, beams, deck slabs and bearing pedestals), replacement of deteriorated anchor bolts and nuts, installation of steel plates, angles and bolts to reinforce steel bearing pedestals and girders and installation of wire mesh safety netting. Ms. Martinez serves as office engineer responsible for all office records. Includes process of payments to the contractor by using WinTrak Program; preparation of Post Award Contract Changes (PACC) and processing of Change Orders (Order on Contract), Time and Material records, desk audits (review and approval of contractor's T&M packages), contract monthly reports, request for information and response to submittals by using Expedition, correspondence, attending Facility Impact and Progress meetings, minutes of meeting, as builts, etc. Client: Port Authority of NY/NJ

2006-2010 Port Authority On-Call Construction Management Services - Port Authority Bus Terminal, Contract #BT-254.220, New York, NY; 12/05-Present. Office Engineer. This $50-million project consists of providing the required strengthening of maintain structural integrity of the Port Authority Bus Terminal (PABT) in New York City during a seismic event. The structural modifications (seismic retrofit) consists of shear walls, bracing and truss members to resist seismic loads and expansion joint

bracing. It also requires relocation of existing electrical, electronic communication, HVAC, plumbing and fire protection systems. Ms. Martinez serves as office engineer responsible for all office records. Includes process of payments to the contractor by using WinTrak Program; preparation of Post Award Contract Changes (PACC) and processing of Change Orders (Order on Contract), Time and Material records, desk audits (review and approval of contractor's T&M packages), contract monthly reports, request for information and response to submittals by using Expedition, correspondence, attending Facility Impact and Progress meetings, minutes of meeting, as builts, etc. Client: Port Authority of NY/NJ

2006-2010 Port Authority On-Call Construction Management Services - Port Authority Bus Terminal Ramps Reconstruction, Contract #LT-234-080, New York, NY; 11/03-3/09. Office Engineer. This $60-million project focuses on the rebuilding and rehabilitation of the ramps connecting the Lincoln Tunnel with the Port Authority Bus Terminal. Ms. Martinez worked on the Lincoln Tunnel Bus Ramp and Triple Bridges Rehabilitation. The project involved the replacement of the bridge decking on the ramps to the Lincoln Tunnel by using precast concrete panels, bridge lifting, seismic bearing installations, removal and replacement of the savaloid system (mechanical snow melting system), demolition and installation of sign structures, removal of lead paint and repainting, installation of the Port Authority Bus Terminal 9th Avenue seismic bracing retrofit and rebuilding of the Bus Terminal 9th Avenue Facade. Ms. Martinez served as office engineer responsible for all office records. Included process of payments to the contractor by using WinTrak Program. Preparation of Post Award Contract Changes (PACC) and processing of Change Orders (Order on Contract), Time and Material records, desk audits (review and approval of contractor's T&M packages), contract monthly reports, request for information and response to submittals by using Expedition, correspondence, attending Facility Impact and Progress meetings, minutes of meeting, as builts, etc. Client: Port Authority of NY/NJ

Port Authority Bus Ramps Signs and Signals Upgrade, Contract #LT-234.051, New York, NY; 4/04-9/08. Office Engineer. This $6-million project consists of integrating new signs and signals with the planned Intelligent Transportation System (ITS) in order to provide for the real-time communication of accurate information regarding traffic conditions and directions to the bus drivers utilizing the bus ramps which connect the Port Authority Bus Terminal (PABT) to the Lincoln Tunnel. The project provides installation and testing of static signs and LED variable message signs, new sign structures, associated electrical conduit, cables and control boxes and remote control operation of variable message signs. Ms. Martinez served as office engineer responsible for all office records. Includes process of payments to the contractor by using WinTrak Program. Preparation of Post Award Contract Changes (PACC) and processing of Change Orders (Order on Contract), Time and Material records, desk audits (review and approval of contractor's T&M packages), contract monthly reports, request for information and response to submittals by using Expedition, correspondence, attending Facility Impact and Progress meetings, minutes of meeting, as builts, etc. Client: Port Authority of NY/NJ

LIE - GCP to Van Dam Street Reconstruction Management, Contract #D257842, Queens County, NY; 10/99-10/03. Assistant Office Engineer. This $221-million project begins at the Queens Midtown Viaduct and continues east approximately six miles to College Point Blvd. The project consisted of the removal and replacement of the asphalt roadway, installation of an intelligent transportation system, installation of retaining walls, noise barriers, reconstruction of bridge decking, painting of the ramps and bridge structures, landscaping, and maintenance and protection of traffic (MPT). Responsibilities included preparing contractor payments and orders on contract using CEES program, monthly summary reports, job correspondence, inspector's reports, maintaining material acceptance records, project diary, photo logs, minutes of meetings, and status reports for consultant and contractor trainees. The ITS system required the installation and testing of the following ITS System equipment and other components: LED VMS Signs, Portable VMS Signs, Dynamic Trailblazers, Radar Detectors, Video Image Detector Stations, Fiber Optic Minihubs & Multiplexers, Camera Assemblies, and Spread Spectrum Radio Assemblies. In addition, various types of fiber optic cables, splices and conduits were utilized in the field. Client: NYSDOT

Elaine Dean, E.I.T.
Office Engineer

Professional Profile
Ms. Dean has several years of experience in the engineering field working as an office engineer.

Proposed Project Assignment
Office Engineer

Registration/Certifications
Engineer-in-Training/NY

Education
BS/1998/Civil Engineering

Course Work
40-Hour OSHA Training Course

Total Years Experience 12

Project Experience

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 1/10-Present. Office Engineer. This $280-million project involves the construction engineering and inspection for the Rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Responsibilities include managing all office engineering responsibilities and overseeing the work of office staff; preparation and assisting in negotiations of the contract change orders remaining on this project; working closely with the resident engineer on many project issues; preparation of correspondence which requires action, maintaining all information databases in use on this project to track all project submittals; and preparation and distribution of progress and technical meeting minutes. Client: New York City Dept. of Transportation

Verrazano-Narrows Bridge Rehabilitation of the Lower Level Approaches, VN-17A, New York, NY; 1/07-12/09. Office Engineer. Project involves the administration and quality assurance inspection of all work associated with the rehabilitation of the lower level approaches of the Verrazano-Narrows Bridge. Ms. Dean's responsibilities included assisting the resident engineer with document research, control and recall; providing conformance with TBTA requirements for maintaining job files which include all incoming and outgoing correspondence; utilizing Microsoft Access and Excel to maintain and track all submittals (shop drawings, catalog cuts, requests for information, etc.); organizing inspector's daily reports and checking quantities; compiling and finalizing monthly quantities for contractor's monthly payments; preparing monthly progress reports; compiling and entering daily progress, manpower and equipment information from inspector's daily reports for engineer's diary; tracking and logging all material acceptance submittals; recording, preparing and distributing progress meeting minutes; researching overrun quantities; organizing revised contract drawings, as-built and punch list information; and providing submittal information to inspectors. Client: Triborough Bridge and Tunnel Authority

Bronx-Whitestone Bridge Deck Replacement - BW-82, Bronx, NY; 2/04-1/07. Assistant Office Engineer. This $136-million project involves the reconstruction of the suspended spans deck with an orthotropic steel deck. The project also involves the installation of new maintenance travelers, electrical and communications systems, fire protection system and inspection platforms. A temporary movable barrier is also being utilized to provide for efficient traffic flow during the eight reconstruction stages scheduled for this project. As an office engineer, Ms. Dean's responsibilities included assisting the resident

engineer with document research, control and recall; providing conformance with TBTA requirements for maintaining job files which include all incoming and outgoing correspondence; utilizing Expedition to maintain and track all submittals (shop drawings, catalog cuts, requests for information, etc.); preparing weekly and monthly progress reports; compiling and entering information from inspector's daily report for engineer's diary; recording, preparing and distributing progress meeting minutes; assisting in researching overrun quantities; organizing revised contract drawings, as-built and punch list information; and providing submittal information to inspectors. Client: Triborough Bridge and Tunnel Authority

Robert F. Kennedy (Triborough) BridgeDeck Replacement, Phase I, Project TB-63; 7/98-2/04. Assistant Office Engineer.Responsibilities included maintaining office files including incoming/outgoing correspondence; organizing, developing and maintaining database for correspondence, shop drawings, catalog cuts, samples and requests for information, organizing and logging job progress photos, reviewing inspector's reports and compiling quantities for contractor's monthly payment, performing take-offs of material and researching overruns of items, preparing weekly progress report, providing data to main office for preparation of monthly progress report, distributing shop drawings and construction procedures to inspectors, recording and preparing progress meeting minutes and distributing to all attendees, assisting resident engineer with document research, control and recall, preparing responses to routine correspondence, organizing and keeping track of as-built information and changes to contract drawings, organizing and tracking punch list work. Project work included $140-million project for the TBTA involving demolition of existing substructure and superstructure of the junction structure, Bronx kills truss spans and Bronx approach. Placement of new footings, columns and pier caps for the mainline, four mainline ramps and Bronx approach. Placement of inverset deck and cast-in-place concrete deck for the junction structure. Placement of precast deck units for the Bronx approach. Deck replacement on the Bronx kills truss span includes demolition of reinforced concrete deck and steel battledeck and installation of new precast deck units and steel orthotropic deck panels. Client: Triborough Bridge and Tunnel Authority

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 6/97-7/98. Assistant Office Engineer.Responsibilities included handling various construction documents, transmitting, tracking, logging, and filing of shop drawing submittals for approval, organizing and logging job progress photos. Also handled the recording of concrete material certification and delivery tickets and coordinated processing of contractor's payment quantities, reviewing and compiling pile, bearing, bolt and rebar certification reports, updating cylinder break results spreadsheet. Project work included$310-million project for NYCDOT involving the complete replacement of the south roadways for the Brooklyn and Manhattan approach viaducts in the existing bridge footprint, bracing of remaining portions of the approaches, installation of VMS system and interim New York City Transit signals. Client: New York City Dept. of Transportation

Computer Skills
IBM and PC Compatibles
Software includes:
Microsoft Office, Word, Excel, WordPerfect, Microsoft Access, AutoCAD, Expedition

Course Work
2005 - 40-Hour OSHA Training Course

Gopesh Pandya
Office Engineer

Professional Profile
Mr. Pandya is an office engineer with the following experience.

Project Experience
Bronx-Whitestone Bridge Bronx/Queens Approach, BW-89/WBM-342, Bronx, NY; 2/09-Present. Office Engineer. This $192-million project involves the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work will include the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure there will be massive concrete placements for concrete footings and piers. For the duration of the project, traffic on the bridge must be maintained with five lanes open to traffic. During the staged construction work will be staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting. Other work items on the project include new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure. Mr. Pandya's responsibilities include assisting the resident engineer with document research, control and recall; providing conformance with TBTA requirements for maintaining job files which include utilizing Expedition to maintain and track all submittals (shop drawings, catalog cuts, requests for information, etc.); preparing weekly progress reports; compiling and entering information from inspector's daily report for engineer's diary; assisting in researching overrun quantities; organizing revised contract drawings, as-built and punch list information; providing submittal information to inspectors; collecting and numbering check and routing all Inspector's Daily Reports (IDRs); checking quantities listed on IDRs and processing monthly estimate; processing of material acceptance and certificates; and posting IDR quantities to monthly estimate book. Client: Triborough Bridge and Tunnel Authority

Brooklyn-Queens Expressway (I-278), From Flushing Avenue to Sand Street, NY; 7/07-2/09. As an assistant office engineer Mr. Pandya participated extensively in activities such as reviewing and approving inspector's reports as per plan, proposal and specification using ShareChive system; estimated closing using NYSDOT CEES system; co-coordinated with inspectors for IDR issues and contractor/NYSDOT and ShareChive personals for estimate issues, material certification reviews, contractor and subcontractor's payrolls and work history; and wage rate table, submittals, asphalt/fuel/steel price adjustments work.

Bronx-Whitestone Bridge, Replacement of Roadway Deck on Suspended Span, BW-82, NY; 8/05-7/07. As construction inspection engineer Mr. pandya participated in different construction activities such as removal and replacement of existing deck; replacement of bridge joint system; bonded aggregate surfacing placement; and painting and miscellaneous structural repair on Bronx-Whitestone Bridge. He also participated in office engineering work which included material certifications, review, and estimation of quantity and project close-out work.

Throgs Neck Bridge Deck Rehabilitation, TN-82A, NY; 11/04-8/05. Construction Inspection Engineer. Participated in different construction activities such as replacement of sub-floor beams;

Proposed Project Assignment
Office Engineer

Registration/Certifications
NICET III
Traffic Control Coordinator
SAT - Asphalt Paving Construction Technologist

Education
BE/1990/Civil Engineering

Course Work
1-Hour Lead Awareness Training Class
NYSDOT Methods of Bridge Inspection

Total Years Experience 19

retrofitting existing orthotropic deck; dye penetrant testing for crack evaluation on structural steel; and structural steel repair work and miscellaneous structural repair.

The Robert F. Kennedy (Triborough) Bridge Deck Replacement, TB-64A, NY; 10/01-10/04. Construction Inspection Engineer. Participated in different construction activities such as replacement of suspender rope; replacement of bridge joint system; removal and replacement of existing deck; bonded aggregate surfacing; and miscellaneous structural repair.

Williamsburg Bridge Reconstruction, Contract #7, NY; 1/01-10/01. Construction Inspection Engineer. Participated in different construction activities such as removal and replacement of existing roadway; concrete retaining wall and abutment construction; drainage line installation; backfilling; and saw cutting on Manhattan Approach North Roadways.

Manhattan Boro Biennial Bridge Inspection, NY; 6/00-1/01. Assistant Team Leader. Participated in several bridge inspections and prepared BRPR.

George Washington Bridge, NY; 6/00. Biennial inspection of the George Washington Bridge Sign Structures and flag hoisting system for the Port Authority of NY/NJ.

East 3rd Street and 52nd Street Bridge, NY; 3/00-6/00. Designed utility relocations for the two bridges. Included coordination with utility companies.

Metropolitan Avenue Bridge, NY; 2/00-3/00. Structural Engineer. Participated in the preparation of final plans for the rehabilitation of approach retaining walls, new wing walls and fendering system.

Arthur Kill Road Bridge Project, NY; 1/00-3/00. Structural Engineer. Prepared preliminary plans for the replacement bridge.

Hudson Bergen Light Rail Transit System, NJ; 9/97-12/99. Quality Assurance and Construction Inspection Engineer. Worked as quality assurance and construction inspection engineer for this DBOM project. Inspected excavation, formwork, reinforcement and concrete operation and architectural finishes to ensure adherence to drawing and specifications; inspected cement concrete and asphalt concrete at plant site; certified mix design; checked thickness of asphalt pavement for street work; and inspected excavation and embankments for specified, line level and compaction.

Worked on the following bridges:

- Newport Access Road Bridge
- Newport Viaduct
- Pedestrian Bridge
- Ocean Avenue Bridge
- Garfield Avenue Bridge
- West Side Avenue

Worked on the following station and station plazas:

- 34th Street
- Jersey Avenue
- Newport
- 45th Street
- Liberty Harbor North
- West Side Avenue
- Richard Street
- Exchange Place
- Garfield Avenue
- Danforth Avenue
- Harbourside
- MLK Drive
- Harsimus Cove
- Liberty State Park

Project Consultant; 1/90-8/97. Assisted in planning and designing of building construction project; provided estimating and costing data of project; implemented and finished construction activity within time frame and cost effectively; provided quality control for all construction activity including utility and services and finishing project; and coordinated with project architect and structural engineer.

Gina Caceres
Assistant Office Administrator

Professional Profile
Ms. Caceres is an assistant office administrator with the following experience.

Proposed Project Assignment
Office Engineer

Registration/Certifications
NICET III/NY

Course Work
10-Hour OSHA Training Course, #001872368
MTA NYCT Track Safety

Total Years Experience 7

Project Experience
Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 2/10-Present. Assistant Office Administrator. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Ms. Caceres' responsibilities include assisting the resident engineers with document research; creating and maintaining office filing and sub-filing system; reviewing, logging and coordinating the distribution of all correspondence and contractor's submittals (shop drawings, catalog cuts, Engineering Clarification Memos, construction procedures) utilizing the current office database and excel; submitting and tracking of material testing (bolts/concrete); organizing the inspectors daily reports and engineer's diary; recording, preparing and distributing progress meeting minutes; organizing and tracking revised contract drawings and field change sheets; procurement of office supplies; forwarding of monthly office invoices for payment; basic human resource work within the field office and all secretarial work for the office engineers. Client: New York City Dept. of Transportation

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 5/03-2/10. Assistant Office Administrator. This $280-million project involves the construction engineering and inspection for the Rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system.

Ms. Caceres' responsibilities included the review, logging and distribution of all correspondence and contractor's submittals; procurement of office supplies; organizing and tracking of shop drawings and computerizing for quick access; maintenance and recording of all Inspectors Daily Reports and Engineer's Diaries; review of subcontractors monthly invoices before forwarding for payment; basic human resource work within the field office; and secretarial work for all office engineers. Client: New York City Dept. of Transportation

LPE

Ewa Szulc

SUMMARY OF QUALIFICATIONS

- Project documentation, financial spreadsheets, data entry, payroll, accounts payable, and accounts receivable
- Experienced in contractor, subcontractor, and vendor billing issues and correspondence
- Coordinated and organized office personnel, and responsible for group productivity
- Skilled with Microsoft Office Excel and Word and familiar with Windows 95, 98, 2000

PROFESSIONAL EXPERIENCE

Office Engineer, Resident Engineer's Office, LaGuardia Airport, NY ***2003 – Present***
LPE Enterprises / Port Authority of NY & NJ

- Process all Contractors Payment Applications for Resident Engineer's Office
- Verify all Contractors Payments vs. Memorandum of Justification and of Authorization
- Confirm all PANYNJ Charge Codes vs. Contractors Payments
- Maintain financial database and entry in SAP R/3 Business Enterprise software and PANYNJ Wintrak, a proprietary, cost-monitoring database
- Compile Monthly LGA Construction Division Summary Report in PANYNJ Wintrak
- Update Classified Items entries in PANYNJ Wintrak
- Perform Desk Audit Assessment on time & material billings for work orders, extra work, net cost work, and emergency delays
- Record all contractors payment data in SAP R/3 and PANYNJ Wintrak
- Compose all documentation regarding increases and decreases of monetary funds for extra work, net cost, classified items, and unclassified items
- Handle all documentation regarding contract changes against Memorandum of Justification and against original contract drawings – letter agreements
- Organize all documentation and required forms for contract closeout process
- Prepare and process Pending Item Notifications (PINs), Post Award Contract Change (PACCs) and Contract Change Orders (COs) within PANYNJ Wintrak

Bookkeeper, Newtown Creek Water Pollution Control Plant, NY ***2003 – 2003***
LPE Enterprises

Bookkeeper, AP Gas Station Developers, Inc ***1998 – 2002***
50 Division Place, Brooklyn, NY 11222

Office Administrator, Project Development Group, Inc ***1992 – 1998***
759 Hicks Street, Brooklyn, NY 11231

EDUCATION

Bachelors of Science Degree in Textile and Polymer Engineering, evaluated diploma 1993
Textile Engineer-Polytechnic of Lodz, Poland
The Faculty of Textile Engineering and Marketing
Politechnika Łódzka – Technical University of Lodz, Poland

ADDITIONAL SKILLS

- Bilingual – Read, Write, and Speak Polish fluently and English
- Detail oriented, Highly Motivated, Creative, Energetic, Problem Solver
- Teamwork, Quality and Goal-oriented, Attentive, Strong Interpersonal Skills
- Punctual, Responsible, Productive, Quick Learner
- Clean Driver License, Very Dependable and Flexible working hours

INSPECTION PERSONNEL – CIVIL

Robert T. Trapani
Senior Inspector

Professional Profile
Mr. Trapani is an experienced construction inspector who has worked on construction projects for many years for both public transportation agencies and private consulting firms. He has been involved on large complicated bridge projects as well as on major highway rehabilitation, and airport construction projects.

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
NICET IV
NACE Coatings Inspector Level 1
NYSDOT Maintenance & Protection of Traffic Certified

Total Years Experience 31

Project Experience
Belt Parkway Bridges REI Services - Paerdegat Bridge, New York, NY; 1/10-Present. Chief Inspector. Project involves the demolition of the entire 13-span, multi-stringer bridge superstructure and substructure including abutments, wingwalls, and the piers consisting of concrete pile columns to a minimum of 600 mm below the mud line. The replacement structures are new three-span and five-span bridges consisting of a Class HP reinforced concrete superstructure slab supported by high performance steel box girders and substructures including reinforced concrete abutments, wingwalls, and multi column piers on new pile foundation. Mr. Trapani is responsible for installation of temporary roadway lighting. Client: New York City Dept. of Transportation

Reconstruction of Willis Avenue Bridge, New York, NY; 2/09-12/09. Senior Inspector. Project involves replacement of the existing movable bridge and approaches with a new structure, built offline from the existing structure. Mr. Trapani's responsibilities included inspection of installation of drilled and driven piles, drainage and earthwork, and structural concrete work. Client: New York City Dept. of Transportation

Queensboro Bridge Lead Paint Removal and Protective Coating, Contract BRC231P, New York, NY; 3/06-2/09. Structural Inspector. This $170-million project involved the erection of containment structures, abrasive blasting and lead paint removal for the entire East River Bridge and the application of a three-coat painting system. Mr. Trapani's responsibilities included cataloging of shop drawings for scaffold and containment erection, field inspection and documentation of erection of scaffolding and containment structures. Mr. Trapani verified that all materials, including pipes, clamps, beams, cables and decking, were in accordance with approved structural drawings. Client: New York City Dept. of Transportation

Office Administration; 11/05-3/06. Mr. Trapani organized and cataloged construction photographs from various CEI projects. He aided in preparing a comprehensive inspector's training manual and also surveyed and photographed various structures.

Burlington-Bolton, I-89 Resurfacing. Burlington, VT;9/05-11/05. Chief Inspector. Mr. Trapani provided construction inspection services for the resurfacing of I-89 between Burlington and South Bolton, VT. The project involved milling and resurfacing 350,000 sq yds of existing asphalt pavement with Superpave Asphalt. The work also included widening entrance and exit ramps, installation and upgrading drainage, and installation of new guide rail systems. Client: Vermont Agency of Transportation

Throgs Neck Bridge, Orthotropic Deck Rehabilitation, TN-82 Phase A, New York, NY; 1/04-9/05. Chief Inspector/Assistant Resident Engineer. From 1983-1986, 6,487 ft of Queens and Bronx viaduct was retrofitted with closed rib orthotropic deck to replace the original non-composite concrete deck. The retrofit project successfully completed installation of approximately 440,000 sq ft of orthotropic deck during night shift construction. However, within three years of service, due to redistribution of stresses, several supporting elements in the main girder to floor beam connection area began showing signs of overstress. The $5-million TN-82, Phase A, project involved the testing of the constructibility, serviceability and

performance of the design consultant's solution to the chronic structural problems that have plagued the retrofitted spans since 1989. Mr. Trapani was responsible for inspectors covering contract specific items of field work including shear connector installation, steel reinforcement, end sub-floor beam replacement, asphalt wearing surfaces, epoxy bonding compound application, and deck stringer shimming operations. Client: Triborough Bridge and Tunnel Authority

Long Island Expressway/Cross Island Parkway, Exits 29-32, #D258437, Queens, NY; 8/00-12/03. Assistant Resident Engineer. The project involved construction inspection services for the multiple award winning $147-million rehabilitation of the Long Island Expressway/Cross Island Parkway (LIE/CIP) interchange. The major elements of the project include widening of the Long Island Expressway (LIE) between Cloverdale Boulevard and the NYC/Nassau County line. Also involves interchange improvement, modernization of semi-direct connection ramps and other associated ramp connections to the Cross Island Parkway. Maintenance and Protection of Traffic included staged construction on the bridges over the LIE and required a major temporary bridge for the reconstruction of the LIE/CIP Bridge. Mr. Trapani supervised an inspection staff of 18 comprised of senior inspectors, inspectors, specialists, and trainees. The scope of work included coordination and supervision of inspection of 14 new structures, including four pre-cast structures, one pre-cast post-tensioned structure, four "tub girder" structures; reconstruction and widening of a rigid frame structure, and four steel frame bridges. Provided supervision and coordination of numerous detours and traffic shifts and staged construction, shift construction, etc. Client: New York State Dept. of Transportation, Reg. 11

Marine Parkway Bridge, #MP-01, Resident Engineering and Inspection, New York, NY; 7/98-4/03. Assistant Resident Engineer. This $90-million project involved the reconstruction of the largest vertical lift span bridge in New York. Mr. Trapani's responsibilities included supervision of a large inspection staff, including trainees, and specialist inspectors. Coordinated staged construction for removal of the existing deck, replacement with lightweight pre-cast and open steel deck systems, truss reinforcement, and flag repairs. Supervised inspection of de-leading and painting the entire structure. The project also included post-tensioning trunnions, seismic bearing retrofit, and final balancing of the lift span. Client: Triborough Bridge and Tunnel Authority

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 1996-1998. Team Leader. This $310-million project involved the construction engineering and inspection for the reconstruction of the south inner and outer roadways. Mr. Trapani inspected and supervised inspection of orthotropic deck, floorbeam and flag repairs on the main span, and micropile footing systems on the approaches. Supervised inspection and installation of grid deck, armored, and modular joints, and bridge bearings. As team leader, Mr. Trapani oversaw the installation of approximately 50,000 sq ft of steel grating, including welding of the panels, welded shear stud installation, erection of structural steel, armored joints and bridge bearing installations. He was involved with all aspects of the removal of structural steel and concrete deck removal. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable Rehabilitation, Contract 4, #BRC253A, New York, NY; 1991-1996. Senior Inspector. This $88-million construction and resident engineering inspection project involved the rehabilitation of the suspension system for the Williamsburg Bridge. Mr. Trapani's specific responsibilities included inspection of structural steel for anchorages, approaches, and back spans, and the installation of modular and armored joints, open steel floor, curbs, barriers, transitions and impact attenuators. He was also responsible for ensuring the safety of construction personnel and has attended the NYSDOT Traffic Safety Seminar and NYCTA Track Safety Course. Mr. Trapani has knowledge of contents and application of NYS Steel Construction Manual. Other duties included hazardous material management and proper training of the construction forces. Client: New York City Dept. of Transportation

William Godfrey
Senior Inspector

Professional Profile

Mr. Godfrey is a highly-competent construction inspector/office engineer with in-depth experience in bridge and highway construction and rehabilitation, drainage improvements, paving, utility relocation, and site development. He has in-depth knowledge of various drainage features and their construction. During various field assignments, he has obtained significant experience in the locating and collection of various data of drainage and other infrastructure appurtenances in the field.

Mr. Godfrey served as the office engineer for the municipal department in GPI's Babylon office for various inspection projects undertaken for towns and counties throughout Long Island. His responsibilities included computing the monthly estimate for payment to the contractor; reviewing and logging inspectors' daily reports; analyzing and performing independent cost estimates for extra work; field inspection of change order requests; drafting order-on-contracts; and writing contract specifications. He also acted as liaison between contractors, clients, and other agencies.

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
NICET III
SSPC - C3
AWS Certified Welding Inspector
ACI Concrete Field Technician - Grade I

Education
BS/1975/Biology

Course Work
10-Hour OSHA Training Course
1-Hour Lead Awareness Training
Construction Inspector's Traffic Work Zone Safety Course

Total Years Experience 32

Project Experience

Belt Parkway Bridges REI Services - Paerdegat Bridge, New York, NY; 5/10-Present. Senior Inspector. Project involves the demolition of the entire 13-span, multi-stringer bridge superstructure and substructure including abutments, wingwalls, and the piers consisting of concrete pile columns to a minimum of 600 mm below the mud line. The replacement structures are new three-span and five-span bridges consisting of a Class HP reinforced concrete superstructure slab supported by high performance steel box girders and substructures including reinforced concrete abutments, wingwalls, and multi column piers on new pile foundation. Client: New York City Dept. of Transportation

CI/CSS Harbor Boulevard/Tiana Street, Phase I, Seaford, NY; 10/09-2/10. Senior Inspector. This project involves the evaluation and mitigation of tidal flooding occurring on project roadways adjacent to canals discharging into the Great South Bay, located in Seaford, NY. Involves construction of new concrete curb, curb and gutter, driveway aprons and sidewalk; installation of new precast drainage structures and piping and rehabilitation of existing structures and the mixed-in-place treatment of the existing roadway and asphalt paving. Responsible for the daily inspection of all contractor operations; preparation of daily reports and submittal of quantities for monthly estimate and is available to answer any and all questions and/or address complaints from the residents of the area. Client: Town of Hempstead

Rehabilitation of the Brooklyn-Queens Expressway (I-278), Park Avenue Viaduct, D259766, Kings County, NY; 9/05-9/09. Senior Inspector for this $138-million project involving construction engineering and inspection for the widening, redecking and repainting of this viaduct with complex MPT on and below this heavily traveled structure. Rehabilitation of this high-volume major interstate urban highway/bridge includes replacement of more than 400 bearings and 1,500 meters of bridge expansion joints. Also included is extensive coordination with agencies and local communities. Responsibilities included inspection of demolition of reinforced concrete bridge decks and structural steel; installation of temporary deck supports; and installation of a temporary highway lighting system including poles, supports and wiring. Mr. Godfrey inspected steel work including removal and replacement of fascia girders, removal and replacement of expansion bearings, structural lifting operations, seismic retrofitting repairs and installation of the downspout system. Client: New York State Dept. of Transportation

William Godfrey
Senior Inspector

Long Island Truck-Rail Intermodal Facility, Brentwood, NY; 2004 Inspector. Collected field data for determining pavement distress on four miles of Town, County, and State Roads in and around Pilgrim State Hospital in the Town of Islip. Client: New York State Dept. of Transportation

Sebonack Neck Private Golf Course Property, Southampton, NY; 2005. Surveyor. This project involved an environmental inventory of this property including scope analysis, wetlands, endangered species, Audubon certification assistance, and irrigation analysis and coordination. Mr. Godfrey's responsibilities included laying out roadways, drainage structures, work limits, and building locations for the golf course. Also responsible for collecting as-built data for Town of Brookhaven Park. Client: Sebonack Properties LLC

Infirmary Renovations, CP 1771, Yaphank, NY; 5/04-2/05. Construction Inspector. This two-story steel and masonry structure has 94,000 sq ft of floor space. During the course of the project, the building underwent a $13.5-million renovation including demolition of interior and exterior spaces and asbestos abatement. Responsibilities included inspection of erection, bolting and welding of new structural steel members and inspection of all repairs to existing structural steel components. Client: Suffolk County Dept. of Public Works

Reconstruction of Parking Field 0-7, Oceanside, NY; 11/03-1/04. Inspector. This project involved new curbing, sidewalks, asphalt pavement, striping, planting and lighting. Client: Town of Hempstead

Construction of Storm Water Drains and Road Improvements for Fieldmere Area Roads, Phase II,Elmont, NY; 11/02-11/03. Resident Inspector/Office Engineer. This project involved new drainage structures and piping, rehabilitation of an existing recharge basin, new curbing, complete reconstruction of roadways, asphalt paving and new street lighting. Mr. Godfrey was responsible for all day-to-day inspection, recordkeeping and he prepared monthly estimates. Client: Town of Hempstead

Long Island Expressway - Grand Central Parkway to Van Dam Street Reconstruction Management, Contract #D257842, Queens County, NY; 10/01-11/02. Inspector for this $221-million project which involved construction engineering and inspection services for the rehabilitation of the Long Island Expressway, from the Grand Central Parkway to the Queens-Midtown Viaduct, involving approximately seven miles of highway and 25 bridges. The project consisted of the removal and replacement of the asphalt roadway, installation of an Intelligent Transportation System, installation of retaining walls, noise barriers, reconstruction of bridge decking, painting of the ramps and bridge structures, landscaping, and MPT. Mr. Godfrey's responsibilities included inspection of: asphalt paving; demolition and construction of bridge abutments; bridge deck installation (rebar and concrete placement); new steel for bridges; installation of pre-cast and cast-in-place median barrier; bridge deck joint repairs; sign structure footings; concrete pavement repairs; installation of downspouts for scuppers; retaining wall construction; and concrete pavement placement on grade and on structure. Client: New York State Dept. of Transportation

Region 10 On-Call Construction Inspection, Contract #258107, Nassau and Suffolk Counties, NY; 1/00-4/00. Inspector for drainage structure repair and maintenance project. Responsibilities included inspection of contract operations, quantity recording and compliance with maintenance and protection of traffic (MPT). Fee: $1.5 million. Client: New York State Dept. of Transportation, Reg. 10

Parking and Site Improvements at LIRR Babylon Yard Employee Facility, Contract #BP00530, Babylon, NY; 5/00-9/00. As office engineer/inspector for this project, Mr. Godfrey was on-site for documentation of field activities, development and review of contractor payment requests, quality assurance, and contractor conformance to safety and contractual requirements. The project improvements included asphalt pavement construction, grading, new drainage, curb, sidewalk, and lighting. Client: Long Island Rail Road (MK Centennial)

Thomas Shepherd
Chief Inspector

Professional Profile
Mr. Shepherd has been involved on several of GPI's major urban construction inspection projects for many years. He has become one of the firm's top concrete testing and placement inspectors. He also has extensive structural steel installation and repair experience, and has provided maintenance and protection of traffic (MPT) coordination, utility relocation, and office engineering.

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
NICET IV/NY
NACE Coatings Inspector Level 1
NYSDOT Maintenance & Protection of Traffic Cert.
ACI Concrete Field Technician - Grade I
ACI Concrete Construction Special Inspector (Pending)
SSPC-C3 Supervisor/Competent Person Certification
Certified Associate Welding Inspector/NY
OSHA Scaffold Competent Person
SSPC-C5 Supervisor/Competent Person Certification
ICC Reinforced Concrete Special Inspector/NY

Education
AAS/1996/Construction Technology

Course Work
1-Hour Lead Awareness Training
10-Hour OSHA Training Course, #000598445
Traffic Work Zone Safety Training Course - GPI

Total Years Experience 25

Project Experience

Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 5/10-Present. Chief Inspector. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Responsibilities include daily review of the contractor's proposed work schedule and MPT operations in order to assign the proper inspection staff; overseeing field operations including training and supervising the inspectors in testing of structural concrete, asphalt placement and steel erection; review of inspector's daily reports for accuracy and conformance with MURK and field verification of the proper placement of steel and wood forms, rebars and structural deck concrete, seismic retainers and reinforcement plates at top of columns and column base, retrofit for seismic design. Also includes drilling of Micro piles and column base plate retrofit then encasement in reinforced concrete, seismic retrofitting of the main bridge and ramps. Client: New York City Dept. of Transportation

Rehabilitation of the Brooklyn-Queens Expressway (I-278), Park Avenue Viaduct, D259766, Kings County, NY; 9/05-5/10. Chief Inspector. This $138-million project involves construction engineering and inspection for the widening, redecking and repainting of this viaduct with complex MPT on and below this heavily traveled structure. Rehabilitation of this high-volume major interstate urban highway/bridge includes replacement of more than 400 bearings and 1500 meters of bridge expansion joints. Also included is extensive coordination with agencies and local communities. Responsibilities included daily review of the contractor's proposed work schedule and MPT operations in order to assign the proper inspection staff; overseeing field operations including training and supervising the inspectors in testing of structural concrete, asphalt placement and steel erection. He reviewed inspector's daily reports for accuracy and conformance with MURK and he did field verification of the proper placement of steel forms, rebars and structural deck concrete, seismic retainers and reinforcement plates at top of columns and column base, retrofit for seismic design. Includes drilling of column base plate retrofit then encasement in reinforced concrete. Client: New York State Dept. of Transportation

Thomas Shepherd
Chief Inspector

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 8/04-9/05. Senior inspector for this $280-million resident engineering and inspection project for reconstruction of miscellaneous rehabilitation on the main bridge. As a senior inspector, Mr. Shepherd was responsible for structural steel inspection for the strengthening of the main tower framing and the installation of the new "5th Leg". Also inspection for the installation of new multi-directional rotation bearing. Client: New York City Dept. of Transportation

LIE/CIP, Exits 29-32, Contract #D258437, Queens, NY; 3/01-8/04. Senior Inspector. Provided construction inspection services for the $147-million rehabilitation of the LIE/CIP interchange. The major elements of the project included widening of the LIE on both sides between Cloverdale Boulevard and the NYC/Nassau County line, LIE/CIP interchange improvement, semi-direct connection ramps and other associated ramp connections to the Cross Island Parkway. The LIE and CIP pavement were milled and overlaid with new asphalt overlay. The project involved 14 structures including four new structures with the CIP interchange, replacement of the LIE bridge over the CIP, three replacement structures over the LIE at Easthampton Boulevard, Douglaston Parkway and Marathon Parkway, widening/rehabilitation of the LIE bridge over Little Neck Parkway, and a new pedestrian bridge over the LIE at Cloverdale Boulevard. Also included were new pedestrian bridges at four locations within the LIE/CIP interchange. Maintenance and protection of traffic included staged construction on the bridges over the LIE and required a temporary bridge for the reconstruction of the LIE/CIP Bridge. Alley Pond Park mitigation work included park path extensions, new detention ponds, restoration of Alley Pond and heavy landscaping. The project included traffic management strategies such as construction phasing, lane closure restrictions, night and weekend work, A+B bidding, critical path method scheduling provisions, etc. Mr. Shepherd's responsibilities included the direct oversight of the reconstruction of a local bridge over the LIE (East Hampton Blvd. Bridge), a pedestrian bridge over the LIE (Cloverdale Blvd. Bridge), a local bridge over the Cross Island Parkway (West Alley Road Bridge), and two permanent H-Pile Retaining Walls at West Alley Road. He was responsible for the inspection of all supportive excavation H-Pile wall installations, substructure forming and concreting operations, superstructure steel and pre-cast box girder erection, deck construction and all other ancillary tasks such as parapet construction, fencing, etc. Mr. Shepherd also served as the Team Leader for the majority of all concrete placement operations throughout the project, providing Quality Control measures for these operations and assistance to the inspection staff. He also performed inspection duties for drainage and utility relocation operations, as well as the construction of temporary and permanent geo-reinforced earth system (GRES) walls. He was responsible for work associated with landscaping operations for the Interchange areas and NYC Parks Dept. land throughout the project limits. This included installation of all trees, shrubs, ground cover and turf in conformance with both the NYSDOT and NYC Parks Dept. specifications. Client: New York State Dept. of Transportation, Reg. 11

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 6/00-3/01. Senior Inspector. The $176-million project consisted of the demolition and reconstruction of the entire BMT transit structure on the Williamsburg Bridge. His responsibilities included the inspection of the installation end span, inspection of platform and demolition of existing structure, and truss bearing replacement at panel point 20. Client: New York City Dept. of Transportation

LIE - GCP to Van Dam Street Reconstruction, Contract #D257842, Queens County, NY; 6/99-6/00. Senior Inspector. This $221-million project begins at the Queens Midtown Viaduct and continues east approximately six miles to College Point Boulevard. The project consisted of the removal and replacement of the asphalt roadway, installation of an intelligent transportation system, installation of retaining walls, noise barriers, reconstruction of bridge decking, painting of the ramps and bridge structures, landscaping, and MPT. Responsibilities included setting up inspectors for contractor's field operations, milling, deck partial-depth repair and full-depth repair, widening of Queens Boulevard Bridges, preparing contractor payments, inspector's reports, photo logs, and minutes of meetings. A computer filing system was maintained according to MURK. Client: New York State Dept. of Transportation

Albert Perez
Chief Inspector

Professional Profile
Mr. Perez has many years of experience as a chief inspector and as an assistant engineer/superintendent.

Project Experience
Bronx-Whitestone Bridge Bronx/Queens Approach, BW-89/WBM-342, Bronx, NY; 6/09-Present. Chief Inspector. This $192-million project involves the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work will include the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure there will be massive concrete placements for concrete footings and piers. For the duration of the project, traffic on the bridge must be maintained with five lanes open to traffic. During the staged construction work will be staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting. Other work items on the project include new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure. Mr. Perez' responsibilities on the project include inspection of steel flag repairs, welding, pile installation, reinforcement installation, concrete placement and curing. Client: Triborough Bridge and Tunnel Authority

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
NICET IV
NACE Coatings Inspector Level 1/NY
ACI Concrete Field Technician - Grade I
AWS Certified Welding Inspector/NY
OSHA Scaffold Competent Person

Education
BPS/1990/Construction Management
AAS/1987/Building Construction Technology
Diploma/1985/Technical

Course Work
10-Hour OSHA Training Course
Keys to Durable Concrete Course - Exterior Flatwork
MTA NYCT Track Safety

Total Years Experience 23

Bronx-Whitestone Bridge Cable/Suspender Rope Rehabilitation, BW-85/86, Bronx, NY; 8/08-6/09. Chief Inspector. Construction management and inspection services for coating removal and application and cable/suspender rehabilitation for Project BW-85/86, Select Cable Panel Opening/ Suspender Rope Removal and Replacement and Painting at the Bronx-Whitestone Bridge. Mr. Perez was responsible for the inspection and documentation of suspender rope replacement, unwrapping/ wedging/rewrapping of the Main Cable at select areas, the removal and replacement of select main cable wires for sampling purposes as per the BTC method and the NCHRP, and the tensioning of cable band bolts. The work includes the erection of various work platforms, utilizing cranes and pulleys within a specified MPT pattern. Client: Triborough Bridge and Tunnel Authority

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 2/05-8/08. Chief inspector on this $150-million project involved the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge in suspended and approach spans; and repair of flagged conditions. Responsible for supervision of inspectors assigned to all concrete and asphalt operations, deck installation, masonry cleaning, pointing, stone replacement, microsurfacing, earthwork, dutchman repairs, structural steel, and welding inspection. Client: New York City Dept. of Transportation

Albert Perez
Chief Inspector

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; NY; 2/01-2/05. Chief inspector for this $175-million project involved the rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Responsible for supervision of Inspectors assigned to all concrete operations and deck and bikeway installation and for rehabilitation of the interior of the colonnade. Client: New York City Dept. of Transportation

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, #BRC1568C, New York, NY; 9/97-10/01. Senior inspector on this $124-million construction project, involved the rehabilitation of the Manhattan Plaza, Arch and Colonnade; replacement of the structural steel stringer and floorbeam support system for the south side subway tracks; replacement of the truss bearings on the piers of the approach spans; and recoating of the south side of bridge including both towers and two main cables. Responsibilities included inspection of subway floorbeams, stringers and track removal, installation and lead paint containment and removal, bridge jacking, concrete testing, and multirotational truss bearing replacement, weld inspection, granite acid cleaning and JOS system cleaning, dutchman repairs, tooling, colored concrete, granite block installation, rubber roof, window and door installation, utilities, drainage, painting, asphalt, and hex pavers. Client: New York City Dept. of Transportation

Rehabilitation of the Manhattan Bridge, West Side Approach and Suspended Spans, Contract #BRC156E, New York, NY; 5/92-9/97. Senior inspector on this $96-million project involved the replacement of reinforced concrete-filled grid deck and structural steel stringers and diaphragms, installation of new steel expansion joints and replacement of downspout drainage system for the two west side approach spans, installation of a truss stiffening system for both west side spans and completion of the stiffening system for the east side spans, completion of rehabilitation of pedestrian west walkway including new extension ramp in Manhattan. Responsibilities included inspection of structural steel removal and installation; concrete deck removal; grid deck installation; studs; concrete and asphalt placement; microsurfacing; concrete and steel barrier; earthwork; deck waterproofing; jacking and chemical stripping. Client: New York City Dept. of Transportation

Interchange with I-87, Contract #D253854, I-287, Suffern, NY; 1992. Inspector. Duties included inspection of utilities installation; drainage; precast crib walls; roadway excavation and grading; item 4; asphalt paving; concrete paving; concrete barrier; guide railing; industrial waste excavation and transportation; rock blasting; pipe jacking and water main installation. Client: New York State Dept. of Transportation, Reg. 8

E.J. Excavating Co., Inc., White Plains, NY; 8/87-5/92. Assistant Engineer/Superintendent for Heavy Highway Construction. Duties included field inspection; job meetings; job costing; estimating; material purchasing and scheduling; supervising and coordinating subcontractors; scheduling labor and equipment; requisitions; shop drawings; daily reports and hazard communication program.

Mhed Charles
Senior Inspector

Professional Profile
Mr. Charles is a senior inspector who is familiar with bridge design, biennial and construction inspections using Structural Steel Construction Manual and AAHSTO, in conformance with specification guidelines and contract plans. He is also familiar with concrete and asphalt placement over bridges and roadways and their testing, before placement. He has experience in cable bridges/removal of existing wire wrapping, re-wrapping with new wire, painting and removal and replacement of suspenders and stays assemblies.

Project Experience:
Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 4/05-Present. MPT Officer. This $280-million project involves the construction engineering and inspection for the rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Since 2007, Mr. Charles has acted as the MPT officer responsible for interrelating with NYCDOT, NYSDOT, TRANSCOM, NYPD and all supervisors and consultants and subconsultants doing research or biennial inspection on the structure. His responsibilities include sending out a weekly Speed Memo to all MPT agencies as required in order to keep them informed; figuring out taper length using speed and lane closures using MUTCD; making sure all work locations are safe on a daily basis; checking clearances and potholes and having any deficiencies repaired; and checking roadway lights, navigation lights and aviation lights on the bridge also on a daily basis. He also worked on the restoration of the north comfort stations providing new spiral ladders outside and also worked on the floor system. He worked on the seismic retrofit repairs of Piers 10, 15 and 20, second stage, that consisted of concrete and stone which is about to be completed.

Prior to that assignment, Mr. Charles was a senior inspector responsible for adjustment of all suspenders, retightening of cable band bolts, and neoprene wrapping of main cables. Responsibilities also included installing new end span platforms at the Manhattan and Brooklyn end spans under the MTA tracks and placing floor beams permanent access platforms at the end spans to provide easy access for future in-depth and visual inspections; modifications of expansion joints of bridge foot walks to provide smooth riding for the public that meets ADA (American Disability Act) acceptance; removal and replacement of diagonal trusses cross bracings, stairs, railings and gratings at the Brooklyn and Manhattan towers; and in-depth inspection of existing steel at the Manhattan end span and the Brooklyn end span. He has started the installation of track beams for the new travelers at the main span. He has also installed new platforms to support aviation lights at

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
NICET IV
ACI Concrete Field Testing Technician - Grade 1
NACE Coatings Inspector Level 1/NY
Certified Associate Welding Inspector
OSHA Scaffold Competent Person

Education
BS/1979/Engineering
MS/2005/Transportation Planning & Engineering

Course Work
10-Hour OSHA Training Course, #001872367
Confined Space Awareness
NYCDOT Supervisor Course
MTA NYCT Track Safety
KTA-Tator Coating & Lining Inspection
Bridges Safety and Ratings

Total Years Experience 38

tower tops; removed and replaced CCTV cameras at the tower tops and lower roadways and has modified necklace bridge lighting on cables A and D. He installed new gantries, sign structures and VMS signs with photocells along the outer roadways and the Brooklyn and Manhattan plazas. He installed new conduits, new junction boxes and pulled cables to feed new traveler systems to be installed under the bridge main span. He watched technicians performing arc fusion splicing of fiber optic cables, installing pigtail connections to patch panels for ITS systems, CCTV and VVDS and testing for continuity from Brooklyn anchorage panel board to NYCDOT TMC in Queens Plaza. He was responsible for reinforcing stone roofing of the Manhattan and Brooklyn comfort stations. Also responsible for coordinating maintenance and protection of traffic with contractor, NYC Police and NYCDOT officials, checking lane closures and construction signs survey. Also worked with the plumbing contractor on the modification of standpipe system of the bridge. He tested and replaced check valves, siamese twins; drain system to make them meet NYC Fire Dept. code. Also worked with electricians on the location of foundation for new electroliers at the Manhattan plaza. Also removed and replaced bracings and gusset plates at the Brooklyn and Manhattan main towers and replaced main bearings at Brooklyn and Manhattan towers. He completed the removal and replacement of asphalt concrete pavement system on the south outer roadway. He prepared the installation of new retrofit seismic systems at the intermediate towers of the bridge at Brooklyn and Manhattan approaches. Mr. Charles also worked on the seismic steel retrofit repairs of the intermediate towers at the Brooklyn and Manhattan approaches. The work at the Brooklyn end is complete. The geotechnical phase of this operation has already begun. At the Manhattan end, the steel work is underway and he has made visual and in-depth inspection of these intermediate towers that resulted in additional work. He inspected cleaning and painting operation of the Brooklyn Tower. He is also overseeing the modifications of dry standpipe at the main towers. At the same time, he is responsible for the plumbers doing the improvements of the drainage system at the north and south footwalks. He is installing permanent signs on the bridge and the streets in Brooklyn and Manhattan. He is working on the installation of the new contra-flow barrier system at Brooklyn and Manhattan approaches. They include contra-flow signs; guide and regulatory. Mr. Charles worked with subcontractors on soil sampling for the new garage location to store the movable barrier machine. He had also installed new bird screens at the Manhattan portal. He worked on the removal of old bearings and installation of new bearings at the intermediate towers in Brooklyn and Manhattan end spans. He worked on the modifications of the north comfort stations. This work is of steel framing, concrete walls and decks. He is working on the removal and installation of wing tongues at main towers. He is in charge of traffic operation on this project. He coordinates with contractors and official agencies. He schedules the contractor‘s lane closure requests every week in a bi-weekly speed memo that respects the work permit. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 2/04-4/05. Senior inspector for this $150-million project which involved the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge at suspended and approach spans; and repair of flagged conditions. Responsible for truss repairs and replacement of truss bearings on the approaches. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; NY; 2/01-2/05. Senior inspector for this $148-million project which involved rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Responsible for truss repairs and replacement of truss bearings on the approaches. Client: NYCDOT

Steven Jones
Assistant Resident/Office Engineer

Professional Profile
Mr. Jones is a senior construction inspector with experience on bridge projects throughout the New York metropolitan area. His experience also includes establishing office engineering operations.

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
NICET IV/NY
ACI Concrete Field Technician - Grade I/NY
NYSDOT Maintenance & Protection of Traffic Certified

Education
AS/1996/Civil Engineering Technology

Course Work
30-Hour OSHA Training Course, #600090077

Total Years Experience 25

Project Experience

Verrazano-Narrows Bridge Rehabilitation of Structural Steel Repairs, VN-32, New York, NY; 1/09-Present. Assistant Resident/Office Engineer. Project involves construction administration, on-site inspection, and testing and support services. Includes repair of deteriorated subfloorbeams, stringers, stiffener/connection plates, cracked/broken missing welded connection plates, reinforce deteriorated stringer top flange and remove and replace deteriorated bolts, rivets, and drainage piping. As assistant resident engineer, Mr. Jones' responsibilities include overseeing field operations; assigning field operations to inspectors; IDR's; review of submission of shop drawings and daily inspection reports; performing field inspections of structural steel repairs; attending various types of meetings with the resident engineer; and providing assistance to the resident engineer on a daily basis. Responsibilities as office engineer include setting up and maintaining the TBTA office filling system; creating and maintaining correspondence logs, submittal logs, shop drawing logs, RFI logs using Microsoft Excel; reviewing all IDR's, submittals, plans and shop drawings; providing meeting minutes, organizing monthly payments, compiling and finalizing monthly estimates, compiling and entering daily progress, manpower and equipment information from IDR's for engineer's dairy, establishing and maintaining material acceptance logs, research quantities for change orders, maintain as-built set of shop drawings, & close out contract quantities. Client: Triborough Bridge and Tunnel Authority

Replacement of Brooklyn Bridge Travelers, Contract #BRC270TA, Boroughs of Manhattan and Brooklyn, NY; 9/07-1/09. Chief Inspector. This project includes the replacement of four movable maintenance platforms (travelers) with a state-of-the-art mechanical driven traveler system, the replacement of the traveler rails, hangers and connections, localized lead paint removal, and the replacement of the electrical system. Responsible for the daily coordination of the contractor's activities on the bridge with NYCDOT and the coordination of GPI personnel inspecting work to install temporary access platform, demolish and remove the existing travelers, install new traveler guide rail, conductor rail and four new travelers. Client: New York City Dept. of Transportation

Rehabilitation of the 2nd Avenue and 36th Street Overpass Bridges at the Queens Midtown Tunnel, QM-82, New York, NY; 7/06-9/07. Chief Inspector/Office Engineer. This project involves providing professional construction management services for the rehabilitation of the 2nd Avenue and 36th Street Overpasses. Work will include a variety of different tasks including concrete repairs, cleaning and painting of structural steel, installing new underdeck lighting, new netting, and asbestos abatement. Responsibilities included coordinating all field activities and assigning inspection staff responsibilities, reviewing contractor submittals and shop drawings, participating in progress meetings, monitoring work progress and estimating contract quantities, and assisting with office documentation - including preparing Meeting Minutes, developing and updating correspondence and submittal logs, and reviewing Inspector Daily Reports (IDRS). In addition, Steve coordinated all field activities and provided inspection oversight for Contract GFM-435 Work Order 41 - Vertical Access at the Queens Midtown Tunnel from D Post to C Post - including

relocation of the TBTA Police booth and associated electrical services, and installation of a new access staircase. Client: Triborough Bridge and Tunnel Authority

Long Island Expressway/Cross Island Parkway, Exits 29-32, Queens, NY; 8/00-12/04. Construction Inspector/Team Leader. Provided construction inspection services for the $147-million rehabilitation of the LIE/CIP interchange. The major elements of the project included widening of the LIE on both sides between Cloverdale Boulevard and the NYC/Nassau County line, LIE/CIP interchange improvement, semi-direct connection ramps and other associated ramp connections to the Cross Island Parkway. The LIE and CIP pavement were milled and overlaid with new asphalt overlay. The project involved 14 structures including four new structures with the CIP interchange, replacement of the LIE bridge over the CIP, three replacement structures over the LIE at Easthampton Boulevard, Douglaston Parkway and Marathon Parkway, widening/ rehabilitation of the LIE bridge over Little Neck Parkway, and a new pedestrian bridge over the LIE at Cloverdale Boulevard. Also included were new pedestrian bridges at four locations within the LIE/CIP interchange. Maintenance and protection of traffic included staged construction on the bridges over the LIE and required a temporary bridge for the reconstruction of the LIE/CIP Bridge. Alley Pond Park mitigation work included park path extensions, new detention ponds, restoration of Alley Pond and heavy landscaping. The project included traffic management strategies such as construction phasing, lane closure restrictions, night and weekend work, A + B bidding, critical path method scheduling provisions, etc. Mr. Jones' responsibilities included the direct oversight of the reconstruction of two local bridges over the LIE (Marathon and Douglaston Parkway Bridges), and one LIE mainline bridge over Little Neck Parkway. He was responsible for the inspection of all foundation piling, substructure forming and concreting operations, superstructure steel erection, deck construction and all other ancillary tasks such as parapet construction, fencing, etc. Mr. Jones also served as the Team Leader for all night work operations including extensive oversight of all nighttime MPT operations. He also was the lead inspector for the night work asphalt paving on the LIE and Cross Island Parkway. This included the inspection oversight of the milling and removal of the existing asphalt overlays, concrete pavement repairs, and placement of SuperPave asphalt paving. Mr. Jones was responsible for the work associated with the dredging of Alley Pond and the landscaping work for the pond. This included the installation of all aquatic and wetland plant material, and ensuring compliance with the NYSDEC water quality requirements during these construction efforts. Client: New York State Dept. of Transportation, Reg. 11

Bronx-Whitestone Bridge Deck Replacement - BW-82, Bronx, NY; 1/05-7/06. Senior Inspector. This $137-million project involves the reconstruction of the suspended spans deck with an orthotropic steel deck. The project also involves the installation of new maintenance travelers, electrical and communications systems, fire protection system and inspection platforms. A temporary movable barrier is also being utilized to provide for efficient traffic flow during the eight reconstruction stages scheduled for this project. Mr. Jones' responsibilities included the inspection of the following:

- Maintenance and protection of traffic
- Demolition of bridge deck and existing steel truss
- Welding for the installation of a new orthotropic deck
- Installation of new bridge drainage system
- Surface preparation and painting of structural steel
- Erection of overhead sign gantries
- Installation of finger dam expansion joints
- Removal and installation of new steel divider barriers
- Replacement of girder pins at the anchorages
- Erection of steel framing at the towers

Client: Triborough Bridge and Tunnel Authority

Joseph Greenman, E.I.T.
Project Manager

Professional Profile
Mr. Greenman has been actively involved in the construction industry for many years and has a broad base of knowledge and experience of the business as both contractor and consultant manager. He worked for contractors earlier in his career, provided construction management for large construction firms, and served as a vice president/project manager for a construction company. His responsibilities have included estimating, coordination of subcontractors, maintenance of safety programs, maintaining cost records and progress reports.

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
NICET III
Engineer-in-Training
NACE Coatings Inspector Level 2/NY
ATSSA Traffic Control Flagger/Technician/NY
ATSSA Certified Traffic Control Supervisor/NY

Education
BS/1980/Construction Management
AS/1978/Civil Engineering

Course Work
10-Hour OSHA Training Course

Total Years Experience 35

Project Experience
Port Authority of New York and New Jersey, Office Space Services Division; 3/06-Present. Project Manager. Construction management services for several office facilities in New York City and at the Port Authority's Jersey City Tech Center (PATC), which now houses many of the offices that were in the World Trade Center. The latest projects involve the build out of the vacant 8th and 9th floors at 115 Broadway in New York City, each floor is approximately 13,500 sq ft and the 2nd floor at 116 Nassau Street which is approximately 8,500 sq ft. Also involved on the new World Trade Center, Site Logistics Coordination Center where he is monitoring all delivery men, material and equipment entering the World Trade Center Construction site. Work at each building includes the construction management of various trades which includes demolition, general construction, HVAC, plumbing, electrical, furniture, telecommunications, and relocation of personnel upon completion. Client: Port Authority of New York/New Jersey

Port Authority of New York and New Jersey, Public Safety Department, Police Academy; 11/04-2/06. Project Manager. Construction of approximately 13,400 sq ft of office space into the new Port Authority Police Academy and construction of various office improvements within the PATC. Various aspects of construction included metal stud and drywall construction, suspended acoustical ceiling panel construction, HVAC, fire sprinkler system, plumbing, audio visual and telecommunications, locker rooms with shower facilities, and training rooms. Responsibilities included recordkeeping/management and review of contractors' schedule of operations, minor inspection on daily construction, meeting minutes and distribution. Client: Port Authority of NY/NJ

Port Authority of New York and New Jersey, Public Safety Department, Central Police Desk and Emergency Operations Center; 5/03-10/04. Project Manager. Project involves construction of approximately 10,000 sq ft of office space to house new state-of-the-art audiovisual and radio dispatch equipment which was installed for these three new offices. Elements of the project also included HVAC, fire/sprinkler system, plumbing, finish carpentry, metal stud and drywall construction, suspended metal pan and acoustical ceiling panel construction, glass partitions, telecommunications, audio visual, and kitchen units for break rooms. Client: Port Authority of NY/NJ

Long Island Expressway - Grand Central Parkway to Van Dam Street Reconstruction Management, Queens County, NY; 10/02-5/03. Senior Inspector. This $221-million project begins at the Queens Midtown Viaduct and continues east approximately six miles to College Point Boulevard. This project consisted of the removal and replacement of the asphalt roadway, installation of an Intelligent Transportation System (ITS), installation of retaining walls, noise barriers, reconstruction of bridge decking,

painting of the ramps and bridge structures, landscaping, and maintenance and protection of traffic (MPT). Responsibilities included the inspection and supervision of bridge reconstruction, daily reporting, payment quantities and materials testing. Client: New York State Dept. of Transportation, Reg. 11

Macombs Dam Bridge over the Harlem River Rehabilitation, Contract #BRX287R, New York, NY; 4/99-10/02. Senior Inspector/MPT Safety Officer. This $145-million project involves highly-complex MPT, phasing and detour routing to completely redeck and reconstruct all portions of the Macombs Dam Bridge and its interchanges, approaches, and ramps (which are elevated viaduct sections). Project also involves total lead abatement painting of bridge and approach structures, replacement of the historic swing bridge mechanism, and installing additional structural steel trusses. Duties involved daily inspection of MPT and full safety compliance in accordance with OSHA regulations. Also included an overview of all safeguards for the protection of persons and property, and any special precautionary and protective measures in compliance to plans and specifications. Also involved with procurement of permits, maintenance of variable message signs and closed circuit TV system within and beyond the project limits during the life of the contract. Oversaw tow trucks, which provided rapid response to vehicular breakdowns. Client: New York City Dept. of Transportation

Harbor Links Golf Course Facility, North Hempstead, NY; 2/98-3/99. Senior inspector on this fast-track project, which involved providing construction inspection services for a 1/2-mile-long asphalt concrete road and three parking lots including stormwater drainage, pavement marking, and street lighting. Duties involved inspection of the temporary clubhouse, parking lot facility and associated site work, which included asphalt cart paths, concrete driving range tee, landscaping, pond construction, waterfall construction, drainage, and underground utility construction. Client: Town of North Hempstead

Road Improvement Program, Hempstead, NY; 5/94-7/97. Resident engineer on various road improvement contracts for the Town of Hempstead. Construction consisted of complete curb and roadway removal and replacement, either by conventional construction methods of roadway base replacement, or an in-place stabilized recycled base course with asphalt overlay and redesign of the existing drainage system. Daily records were taken in accordance with MURK for each consecutive day on various construction projects within the Town of Hempstead. Quality Assurance and Control was maintained each day through the management of the various inspection forces on each project. Client: Town of Hempstead

Brookhaven Calabro Municipal Airport, Shirley, NY; 10/93-5/94. Project Manager. This is a five-year rehabilitation project. The project consisted of construction of three new exit taxiways, extension of existing taxiway E, construction of one new parallel taxiway M, new helipad, new parallel taxiway Z Phase I, rehabilitation of lighting circuit on taxiway L, rehabilitation of a portland cement concrete runway 15/33, rehabilitation of an asphalt concrete runway 6/24 and taxiways, construction of a new 17-plane asphalt tie-down aircraft parking apron, installation of new high voltage primary electric service, and upgrading of all signage and pavement markings to current FAA standards. Mr. Greenman was responsible for checking the project's conformance with NYSDOT Manual for Uniform Record Keeping (MURK), and FAA and NYSDOT grant reimbursements to the owner. Client: Town of Brookhaven

Boynes Canal Bulkhead Reconstruction, Babylon, NY; 10/93-5/94. Project Manager. Responsible for monitoring all work associated with the installation of 505 lin ft of smooth-face timber bulkhead and 400 lin ft of timber guide rail. The project also involved 1,600 sq yds of asphalt paving, miscellaneous drainage improvements, site lighting, and concrete curb and sidewalk improvements. Client: Village of Babylon

Terrance Somersall
Senior Inspector

Professional Profile
Mr. Somersall possesses the following experience.

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
NICET IV
ACI Concrete Field Testing Technician - Grade 1/NY

Education
BS/2008/Legal Assistant Studies
AAS/1986/Civil Engineering
Diploma/1976/Construction

Course Work
10-Hour OSHA Training Course, #001872363

Total Years Experience 30

Project Experience
Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 4/01-Present. Senior Inspector. This $280-million project involves the construction engineering and inspection for the Rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Responsibilities include structural inspection of demolition and replacement of approaches to Williamsburg Bridge as well as replacement of steel members at intermediate and main towers. Client: New York City Dept. of Transportation

While with another firm, 5/98-4/01, Mr. Somersall's responsibilities included:

Structural inspector responsible for inspection of reinforcing steel and concrete for shear walls, columns and slabs for 45-floor residential building.

Assistant team leader responsible for structural condition inspection of 14 bridges on Henry Hudson Parkway and Van Wyck Expressway. Client: New York State Dept. of Transportation

Team leader responsible for inspection of drainage structures for Long Island Expressway improvement project. Client: New York State Dept. of Transportation

I-95 New England Thruway Highway Improvement between Exits 16 and 18, NY; 5/95-5/98. Senior Inspector responsible for inspection of removal and replacement of two bridges and related concrete roadway and drainage systems. Client: New York State Thruway Authority

Harlem River Drive Viaduct Improvement between Exits 145th and 155th Streets, New York, NY; 5/95-5/98. Senior Inspector. Inspected replacement of structural steel members of viaduct and new concrete slab. Client: New York State Dept. of Transportation

Owls Head Wastewater Pollution Control Plant; 5/83-4/95. Senior Inspector. Inspected reinforced steel and concrete for construction of complicated tanks. New York City Dept. of Environmental Protection

Terrance Somersall
Senior Inspector

Queensboro Bridge Rehabilitation, NY; 5/83-4/95. Senior Inspector. Inspected replacement of structural steel members. Client: New York State Dept. of Transportation

Long Island Expressway (I-495) Improvement, NY; 5/83-4/95. Senior Inspector. Inspected reinforcing steel and concrete for the addition of a connection distributor and retaining wall. Client: New York State Dept. of Transportation

York College, Jamaica, NY; 10/82-5/83. Inspector. Inspected steel members and reinforced concrete for superstructure.

With another firm, 6/79-10/82, Mr. Somersall was an inspector working on the following projects:

- Neponsit Sewer Project (NYCDEP)
- Avenue O Improvement (NYCDOT)
- Ocean Parkway Reconstruction (NYSDOT)
- BQE Reconstruction of sunken roadway at Kane Street (NYSDOT)

William Leong
Inspector

Professional Profile
Mr. Leong is an inspector with the following experience.

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
NICET III/NY

Education
AAS/1998/Business Management

Course Work
10-Hour OSHA Training Course, #001872366
MTA-NYCT, Track Safety

Total Years Experience 3

Project Experience
Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 8/07-Present. Inspector. This $280-million project involves the construction engineering and inspection for the Rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Responsibilities include calibration of torque wrench; torque tested miscellaneous steel connections; surface preparation and painting of miscellaneous steel connections; checking for proper humidity, dew point, surface temperatures and ambient conditions prior to painting; assisting with seismic retrofit concrete testing such as slump tests and casting of test cylinders; checking for proper consolidation of seismic pier walls and caps; checking rebar layout for seismic pier walls/caps; and repointing of comfort station granite joints.

Also ensured all construction signs and traffic control devices were in place per plans; coordinated lane closures with traffic agents; ensured pavement markings were applied properly; ensured damaged attenuators and sand drums were replaced properly; steel inspection of floorbeam web repairs truss diagonal repairs, wind chord lateral brace repairs and intermediate tower plate repairs. Client: New York City Dept. of Transportation

Commercial and Residential Renovation Projects, Various Locations; NY; 1/03-8/07. Office/Field Assistant. Assisted with estimating commercial and residential renovation projects; determined and provided daily material/equipment needs; scheduled manpower on a daily basis; ensured projects were completed as scheduled; provided hands-on construction experience.

As an information technology intern, 5/02-10/02, he managed and monitored networking essentials NT Server, NT Workstations, Microsoft Windows 95/98/2000/ME/XP MS DOS; software and hardware configuration, maintenance, troubleshooting and support.

Computer Skills
Hardware: IBM PC
Software: Microsoft Office, Paint Shop Pro, NEMIS Database, Basic HTML, PhotoshopOperating Systems DOS, Microsoft Windows/95/98/2000/ME/XP/VISTA

Natanael Vasquez
Inspector

Professional Profile
Mr. Vasquez is an inspector with the following experience.

Project Experience
Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 2/10-Present. Inspector. This $280-million project involves the construction engineering and inspection for the Rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Responsible for the inspection of rehabilitation and strengthening of the Brooklyn and Manhattan intermediate main towers; the installation of the seismic shear key; wind tongue and wind chord repairs; the intermediate tower bearing installation, and torquing according to specs all newly installed connection; the re-installation of the lower level inspection platform; the lateral brace installations; truss top and bottom chord stiffeners; and new permagrout placement on the Brooklyn and Manhattan tower leg bases. Client: New York City Dept. of Transportation

Cross Bay Boulevard Bridge, Contract CB-08/09, Howard Beach, NY; 3/09-2/10. Inspector. This project involves providing construction management and inspection services for the $60-million CB08/09 project, which will completely replace the existing concrete deck using a staged demolition and reconstruction approach. Mr. Vasquez' responsibilities included the supervision and inspection of Stages 3 and 4 by affirming that the demolition of the closure pour and concrete removal on the bridge main deck was performed correctly; inspecting for the proper placement of the galvanized steel strips for the web strengthening on the main bridge girder web repair at span 3-4 and 6-7; assuring that the laborer's provided the correct demolition for the partial depth repairs on Ramps B, C, D, E, and the main bridge below the deck surface; assisting with class A, HP, lightweight, rapid set concrete placement for the closure pour, main barrier and diaphragms; assisting with the patching using speed Crete mortar for the partial depth repairs assuring that all the girders were completed according to specs. He also assisted with painting of the sign structure going southbound on ramp d; inspecting the trench excavation by which electrical conduits were installed for new light and camera fixtures; assured that the carpenters provided

Proposed Project Assignment
Construction Inspection - Civil

Registration/Certifications
ACI - Certified Concrete Technician/NY
NICET I/NY
Electrical Technician
Security Guard

Education
AAS/2007/Construction Management

Course Work
10-Hour OSHA Training Course, #001872360 Construction Drawing, Materials and Methods of Construction I & II, Statics & Strength of Materials I & II, Construction Management I, II and III, Building Service System, Surveying, Construction Estimating Materials Testing Laboratory, Computer Applications in Civil Engineering, Elements of Structural Design – Steel, Civil Engineering Drawing, Structural Concrete

Total Years Experience 7

the correct form work for the closure pour and diaphragms concrete placement; made the necessary field measurements and payments for the trench excavation, closure pour, diaphragm repairs, partial depth repairs and concrete materials; surveyed the downspout and scupper system for their replacement for the next contract; assisted with the water proofing placement in preparation for the tack coat and asphalt placement; supervised and measured the final pavement markings for the completion of ramp D, after the asphalt was placed. Client: Triborough Bridge and Tunnel Authority

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 5/06-2/09. Inspector. This $267-million project involves the construction engineering and inspection for the rehabilitation of the Williamsburg Bridge. Responsibilities included inspection of removal and replacement of existing asphalt overlay system and water proofing membrane system on orthotropic bridge deck. Work consisted of removal by roto-milling, water blasting and mechanical tools, shot blasting steel substrate, application of coatings, tack coat and paving with polyester modified asphalt mix. Removal of existing work platforms and bridge shield system following site-specific safety procedures.

Other responsibilities included:
Concrete Testing: Performed concrete test on column bearing, sidewalk and street roads. Testing involved performing air, slump, test cylinders and temperature test to satisfy the required standards for class a, c and d concrete. When trucks arrived, he reviewed and checked tickets.

Miscellaneous Steel Inspection: Ensured that steel members were installed as per contract plans and specification for inspection platforms, diagonal/lateral bracing, column/beam connection, struts, batten plate, splice plate, and lacing bars. Torqued tested all connections per NYSSCM. Calibrated the torque wrench on a daily basis.

Miscellaneous Laborer Inspection: Ensured that PP10W/E bearing rollers were cleaned as per contract plans and specification. Ensured that proper length of miscellaneous anchor bolts were installed. Ensured that footwalk transpo T48 was placed properly as per manufacturer's instruction. Ensured miscellaneous cleaning work performed by laborers were acceptable.

Progress Payments: Made necessary structural steel and concrete payments. Made necessary field measurements and calculations.

Client: New York City Dept. of Transportation

Cole Consulting Corporation, Brooklyn, NY; 6/05-3/06. Field Inspector Grade I. Inspected the concrete that was brought in for the slabs, walls and foundations; inspected the structural beams or steel for a demolition/renovation construction project; inspected the mortar for the basement and subbasement walls; performed reports through the day based on the different inspections that were performed; and performed cohesive and adhesive test and checked for rebar's under slabs with a certain device. Assured that the proper amount of fireproofing was placed on structural beams, columns and girders; reviews specifications for the monokote fireproofing material; obtained samples for lab analysis; performed concrete testing according to specification for air, slump and temperature test; prepared concrete test cylinders; inspected concrete placement.

Cofire Paving Corporation, Brooklyn, NY; 6/05-11/05. Field Technician/Inspector. Field measured/calculated asphalt and truck coat quantities. Performed asphalt yield calculations; scheduled/ordered required asphalt daily; ensured proper payments were received after completion of asphalt placement; coordinated daily activities with subcontractor and DOT inspectors; ensured proper asphalt thickness and slopes were achieved; ensured asphalt temperatures were within acceptable specification range; and ensured proper rollers required by specification were available and used.

Anthony Delio
Senior Inspector

Professional Profile
Mr. Delio has many years of construction inspection experience on projects with the New York State Dept. of Transportation, New York City Dept. of Transportation and Nassau and Suffolk County Dept. of Public Works. His experience includes extensive background in paving, drainage and concrete.

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
NICET III/NY
NYSDOT - Lead Awareness Certification

Course Work
10-Hour OSHA Training Course

Total Years Experience 23

Project Experience
Belt Parkway Bridges REI Services - Paerdegat Bridge, New York, NY; 2/10-Present. Senior Inspector. Project involves the demolition of the entire 13-span, multi-stringer bridge superstructure and substructure including abutments, wingwalls, and the piers consisting of concrete pile columns to a minimum of 600 mm below the mud line. The replacement structures are new three-span and five-span bridges consisting of a Class HP reinforced concrete superstructure slab supported by high performance steel box girders and substructures including reinforced concrete abutments, wingwalls, and multi column piers on new pile foundation. Responsible for asphalt placement for temporary bicycle path; chain link fence installation for temporary barrier; inspection of test piles; preparation for bridge foundation work; turbidity curtain installation for shoreline erosion control; and installation of sludge force main pipe. Client: New York City Dept. of Transportation

Replacement of Brooklyn Bridge Travelers, Contract #BRC270TA, Boroughs of Manhattan and Brooklyn, NY; 1/07-2/07. Senior Inspector. This project included the replacement of four movable maintenance platforms (travelers) with a state-of-the-art mechanical driven traveler system, the replacement of the traveler rails, hangers and connections, localized lead paint removal, and the replacement of the electrical system. Mr. Delio was on site with the contractor and surveyors to record bridge survey and reference at all four span locations. Details included vertical and horizontal distances taken between bridge under deck and transverse truss beams. The horizontal distance was taken between the bridge truss beams out to the traveler rail and track beams. He was also involved in minor MPT detail and bridge travel lane location during traveler access. Client: New York City Dept. of Transportation

Queensboro Bridge Lead Paint Removal and Protective Coating, Contract BRC231P, New York, NY; 8/06-12/06. Senior Inspector. This $170-million project involved the erection of containment structures, abrasive blasting and lead paint removal for the entire East River Bridge and the application of a three-coat painting system. Responsibilities included inspection of Class 1A containment system erection and removal in preparation and completion of abrasive blast operation featuring installation of corrugated steel decking, vinyl containment tarps and vertical and horizontal outriggers. Job site safety of containment enclosure including temporary hand rail system, proper tie off of ladders, pick board and grate scaffolds for worker access. Client: New York City Dept. of Transportation

Rehabilitation of the Brooklyn-Queens Expressway (I-278), Park Avenue Viaduct, D259766, Kings County, NY; 2/07-4/07. Senior Inspector for this $138-million project involved construction engineering and inspection for the widening, redecking and repainting of this viaduct with complex MPT on and below this heavily traveled structure. Rehabilitation of this high-volume, major interstate urban highway/bridge included replacement of more than 400 bearings and 1,500 meters of bridge expansion joints. Also involved is extensive coordination with agencies and local communities. Responsibilities included inspection of installation of ductile iron pipe for viaduct drainage system, installation of temporary concrete barrier and asphalt placement for necessary traffic switch for contract stage operations, and subbase placement and grade work for west approach slab at Nassau-Concord Viaduct. Client: NYS Dept. of Transportation

Anthony Delio
Senior Inspector

CI/CSS Harbor Boulevard/Tiana Street, Phase I, Seaford, NY; 10/09-2/10. Senior Inspector. This project involves the evaluation and mitigation of tidal flooding occurring on project roadways adjacent to canals discharging into the Great South Bay, located in Seaford, NY. Involves construction of new concrete curb, curb and gutter, driveway aprons and sidewalk; installation of new precast drainage structures and piping and rehabilitation of existing structures and the mixed-in-place treatment of the existing roadway and asphalt paving. Responsible for the daily inspection of new curb, gutter, driveway aprons and sidewalk; mixed-in-place treatment and compaction of existing roadway for viable subbase material and placement of binder and top courses of asphalt for new roadway surface; and form work and placement of concrete for new deck slabs for existing drainage structures. Client: Town of Hempstead

Nassau County On-Call Contract for CEI Services to Resurface County Roads, Nassau County, NY; 6/09-8/09. Senior Inspector. Project involved providing construction inspection services for daytime resurfacing of Nassau County roads. Work included milling and asphalt paving of roadways and necessary adjustment of drainage castings for this $2.85-million project. Responsibilities included inspection of milling asphalt surface of existing roads, placement of new top course of asphalt, concrete placement, adjusting existing utility castings, roadway joint repair, and pavement striping. Client: Nassau County Dept. of Public Works

Nassau County On-Call Improvement of Lido Boulevard, Lido Beach, NY; 3/09-6/09. Senior Inspector. Construction inspection services to construct a raised median along Lido Boulevard, for a total length of 1.13 miles. This $3.6-million project involves saw cut excavation of the existing center turn lane and installing mountable concrete curbs for the new raised median; full depth asphalt repair around new medians; installation of colored and imprinted sidewalk in median islands; installation of new traffic signal conduit under roadway; and replacing existing handicap ramps inclusive of 'detectable warning surface. Resurfacing of existing roadway including milling and placement of asphalt overlay. Mr. Delio was responsible for documentation of daily work performed, processing detailed payment quantities, and training junior staff assigned to the project. Client: Nassau County Dept. of Public Works

Nassau County On-Call Resurfacing Inspection of County Roads, Nassau County, NY; 10/08-1/09. Senior Inspector. Project involved providing construction inspection services for both nighttime and daytime resurfacing of Nassau County roads. Work included milling and asphalt paving of roadways and necessary adjustment of drainage castings for this $3.2-million project. Responsibilities included inspection of milling asphalt surface of existing roads, placement of new top course of asphalt, concrete placement, adjusting existing utility castings, roadway joint repair, and pavement striping. Client: Nassau County Dept. of Public Works

CR3 Wellwood Avenue Bridge Widening over Southern State Parkway, Babylon, NY; 4/07-10/08. Senior Inspector. Project involved providing resident engineering, construction inspection and construction support services for bridge construction and interchange widening of Wellwood Avenue Bridge over Southern State Parkway. Project features included steel sheeting, structural excavation, structural concrete placement (footings, wingwalls and parapets), installation of pre-cast, post-tensioned concrete arches, PCC and asphalt, concrete pavement, major MPT required to shut down Southern State Parkway, and installation of NYSDOT INFORM fiber optic communication cable. Responsible for inspection of rebar installation, concrete placement, excavation and backfilling of additional bridge features including abutments, wingwalls, and footings. Resurfacing of existing roadway including milling of existing surface and placement of top course asphalt overlay. Applications of thermoplastic and preformed tape pavement markings. Installation of new drainage structures including reinforced concrete pipe and modifications to existing drainage. Traffic signal replacement on C.R.3 at S.S.P. entrance/exit ramps and traffic sign installation. Topsoil placement and hydroseeding. Client: Suffolk County Dept. of Public Works

David Mann
Inspector

Proposed Project Assignment
Construction Inspector – Civil

Registration/Certifications
ACI CERTIFICATION:
Level 1 AGG & Level 2 AGG.
Level 1 ASPHALT

Total Years Experience 31

Professional Profile
Mr. Mann is an inspector with over 30 years of in-depth experience in transportation related construction projects. For 20 of years he was employed by the Ohio Department of Transportation, responsible for multimillion dollar construction projects that involved street reconstruction, bridge rehabilitation, total bridge reconstruction, concrete and asphalt pavement, guardrail and pavement marking projects.

Project Experience
Montgomery County, Patterson Bridge Rehabilitation, Montgomery County, Ohio. (2009-2010). Construction inspector for this bridge rehabilitation project. The project includes the total replacement of the abutments and expansion joints, and painting of the barring and end beams. out 10 feet. Repair of concrete deck and approach slabs.

Ohio Department of Transportation, District 7, OH. (2007- 2009), Mr. Mann has been assigned to this project as project inspector for two ODOT street reconstruction projects. Items of work inspected were removal of existing roadway, placement of storm water sewer system, catch basins, manholes, relocated fire hydrants, placing 304 sub-base, slipforming curb and gutter, placing asphalt, pavement markings, seeding and mulching.

Rehabilitation of Six Bridges, Miami County, OH (2003-2007). Senior inspector for six bridge rehabilitation projects. Items of work included: removal of existing bridge decks, abutments and wing walls, drive piling, testing concrete for substructure and bridge deck, verifying reinforcing steel, guardrail placement and seeding and mulching.

I-75 Design/Build Contract, Miami County, OH (1999-2003) Inspector for the $50 million design/build project on 1-75. Project consisted of six miles of six lane concrete pavement. Reconstructed eight bridges, erected noise walls, noise barrier walls and median concrete barrier.

While with the Ohio Department of Transportation, assignments included:

- **District 7 Resurfacing Projects**(1989-1999) Inspected multiple two lane resurfacing projects throughtout District 7.
- **ODOT Equipment Operator** (1979-1989)

John O'Har
Inspector

Professional Profile
Mr. O'Har has over 40 years of construction experience completing numerous successful projects in the New York and New Jersey metropolitan area ranging from developments, gut rehabilitation, retrofitting, tenant construction and site work. He also has experience in heavy construction including foundations, utilities, drainage and road construction.

Proposed Project Assignment
Construction Inspector - Civil

Registration/Certifications
ACI Concrete Field Testing Technician - Grade 1
ACI Concrete Construction Special Inspector (Pending)

Course Work
10-Hour OSHA Training Course
OSHA Training Course

Total Years Experience 42

Project Experience
2006-2010 Port Authority On-Call Construction Management Services - Staten Island Bridges Rehabilitation, Staten Island, NY; 2/07-Present. Inspector. The project involves construction inspection for structural, civil, mechanical, electrical, and bridge painting services for the three Staten Island Bridges operated by the Port Authority of New York/New Jersey. Mr. O'Har's responsibilities at the Bayonne Bridge include structural steel repair on the underside of the roadway at the New York and New Jersey viaducts and approaches; miscellaneous repairs at suspender cables; arch chord protection at roadway lower arch interface; steel plating (hardening) of chord box; and replacement of air handler and associated piping and ductwork at toll house. Client: Port Authority of New York/New Jersey

George Washington Bridge Rehabilitation, Fort Lee, NJ; 10/02-2/07. Inspector. This $100-million contract involves Class 1A containment of both towers of this structure over the Hudson River involving the removal of existing lead paint and the application of a new three-coat system to approximately 2.1 million sq ft of steel. Projects Mr. O'Har has been involved on include New York and New Jersey anchorage dehumidification; installation of structural steel, catwalks and stairs, wire rope enclosure profile, and tension membrane fabric. Also included installation of dehumidifiers, controls, and power supply including 4160 KV switchgear. Facility priority improvements involving the rehabilitation at the George Washington Bridge Bus Station. Various contracts included installation of new elevator and escalators, main entry doors, bus shelters, ventilation fans and controls, and tenant space rehabilitation. Was involved with paving of bridge span and departure roadways. Installation of drainage and catch basins. Mr. O'Har acted as liaison between the Port Authority, contractor representatives, and subcontractors. He is involved with the inspection and testing of work installed and ensures contracts are fulfilled. A portion of this project involves the seismic retrofit of New York approach structures involving shoring and jacking of columns for removing and replacing bearings; installation of restrainer brackets and cables; and jacketing of concrete columns supporting approach ramps. Mr. O'Har worked on the rehabilitation of Hudson Terrace and Ramps TR2/TR3 which included installation of structural cantilever parapet over eastbound lower level lanes; paving; milling and application of waterproofing; bridge deck membrane over lower level approach lanes to bridge span. Also included site work, installation of steel faced curbs and sidewalks. Client: Port Authority of NY & NJ

While with other firms, 1977-1993, Mr. O'Har obtained the following experience.

Construction inspection services for the **Port Authority of New York/New Jersey (PA NY/NJ)** at PATH, their commuter rail system, The Journal Square Transportation Center and at the George Washington Bridge.

Construction inspection services for the rehabilitation of The Journal Square Transportation Center's parking facility and rigging the removal and installation of new cooling towers on the facility's roof.

John O'Har
Inspector

Acted as lead night-time inspector for over six years at the George Washington Bridge, coordinating roadway closures and overseeing various contracts including, but not limited to, paving of the bridge span and its approaches, installation of sign foundations and new sign structures, new electrical feeds to expressway lighting, structural steel repair, rebuilding of the Lemoine Avenue overpass and various rehabilitation projects at the **George Washington Bridge Bus Station.**

Installation of up to 30-in. diameter steam and dual temperature water lines from a self-supporting generating plant at Roachdale Village, a 32-building cooperative complex in Queens.

Rehabilitation of DEP pump stations in Queens and Manhattan. The scope of work consisted of major excavation and shoring, dewatering, installing pipes, manholes, valves, and wiring a leak detection system.

Various rehabilitation projects for NYCDOT, TBTA and the PA NY/NJ. He worked at various bridges, tunnels, ports and airports in the New York City metropolitan area. He is experienced in environmental projects involving specialty products (Geotechnical Materials, erosion Control Liners) and coordination with state and federal environmental agencies.

Construction of three warehouse buildings in Queens.

Layout and construction of a field house and two baseball fields on Gun Hill Road for the New York City MTA, built to Parks Dept. Specifications.

Rehabilitation of a Rutgers University parking deck including major structural slab shoring, bracing, removal and replacement.

Concrete repair and waterproofing.

Public Works projects for the City of New York, Dept. of Environmental Protection and Dept. of General Services.

Tenant construction of commercial office space in Manhattan.

Supervision of projects from demolition to completion, including layout, coordination of all trades, interacting with sub-contractors, management and clients.

General contracting: underpinning, foundations and concrete construction.

Rehabilitation of two New York brownstones into luxury co-operative apartments. Work included underpinning of existing as well as construction of new foundations. Approximate cost: $5 million

Rehabilitation of two, 12-story rental apartment buildings into luxury co-operative apartments. Approximate Cost: $1 million

Matthew Quesenberry
Inspector

Professional Profile
Mr. Quesenberry serves as a coating and construction inspector on projects involving general construction, transportation, lead abatement, and the painting of steel structures. His principal duties involve general inspection, concrete testing, daily project progress documentation, and quality assurance inspections.

Proposed Project Assignment
Construction Inspector – Civil

Registration/Certifications
ACI Concrete Certification
SSPC C-3 Competent Person for Deleading of Steel Structures
NACE Coatings Inspector Level 1 Certified
SSPC Bridge Coatings Level 1 Inspector (BCI)

Total Years Experience 6

Project Experience
Ohio Department of Transportation, District 6— Columbus, Ohio. (2010). Mr. Quesenberry is providing full-time inspection on the SR 315 project across from the Ohio State Campus. The project include removing all lead-based paint according to lead abatement requirements for ODOT and applying ODOT's (OZEU) paint system. Performed inspections on the field blasting of the beams to ensure they met the SSPC-SP 10 near-white blast condition and applied the proper amount of paint (mils) on each of the three-coat systems. Monitored the work completed each day and completed daily reports. When the painting contractor was not working GPI would perform construction inspection duties. Mr. Quesenberry also assisted with concrete testing on deck pours.

Ohio Department of Transportation, District 8— Cincinnati, Ohio. (2009). Mr. Quesenberry provided full-time inspection on various construction and coating projects throughout the district. The projects include removing all lead-based paint according to lead abatement requirements for ODOT and applying ODOT's (OZEU) paint system. Performed inspections on the field blasting of the beams to ensure they met the SSPC-SP 10 near-white blast condition and applied the proper amount of paint (mils) on each of the three-coat systems. Monitored the work completed each day and completed daily reports. When the painting contractor was not working GPI would perform construction inspection duties. Mr. Quesenberry also assisted with concrete testing on deck pours.

Ohio Department of Transportation, District 7—Dayton, Ohio. (2007 & 2008). Mr. Quesenberry provided full-time inspection on various construction and coating projects throughout the district. The projects include removing all lead-based paint according to lead abatement requirements for ODOT and applying ODOT's (OZEU) paint system. Performed inspections on the field blasting of the beams to ensure they met the SSPC-SP 10 near-white blast condition and applied the proper amount of paint (mils) on each of the three-coat systems. Monitored the work completed each day and completed daily reports. When the painting contractor was not working GPI would perform construction inspection duties. Mr. Quesenberry also assisted with concrete testing on deck pours.

Ohio Department of Transportation, District 12-Main Avenue Bridge. Cleveland, Ohio. (2007). Mr. Quesenberry returned to the Main Avenue Bridge on an as needed basis to provided coatings inspection support. The job includes removing all lead-based paint according to lead abatement requirements for ODOT and applying ODOT's (OZEU) paint system. Perform daily inspections on the field blasting of the beams to ensure they met the SSPC-SP 10 near-white blast condition and applied the proper amount of paint (mils) on each of the three-coat systems. Monitor the work completed each day and complete daily reports to be entered into ODOT's CMS system.

Ohio Department of Transportation – District 6, I-71 Grove City. Ohio (2007). Coatings Inspector. Project overall was to provide coatings inspection for various paint contracts in the district. These contracts ranged from total removal (SP-10) that included existing lead based paint to new construction. Responsibilities included documentation of all aspects of the project. This included ambient conditions,

surface profiles and cleanliness, dry film thicknesses and oversight of containment and the collection, storage and disposal of waste. All eleven quality control points that Ohio requires were documented on ODOT formatted reports. Client Ohio Department of Transportation

City of Middletown – Manchester 1MG Water Tower, Middletown. Ohio (2007). Coatings Inspector. Provided site observation and documentation of the repainting of the 1 MG water tower with a proposed construction cost of $585,000. Observed contractors work, completed daily reports, and advised the Owner of materials and application compliance with the contract specifications. The work involved removing the interior wet lining to a nearwhite blast condition and applying a new three-coat epoxy system. The exterior consisted of a nearwhite blast with a zinc primer, epoxy intermediate coat and a Urethane finish coat. This was treated as lead abatement work site. Reviewed pay estimates and completed a daily report.

Ohio Department of Transportation, District 12-Main Avenue Bridge. Cleveland, Ohio. (2006). Mr. Quesenberry provided coatings inspection on the Main Avenue Bridge in Cleveland Ohio.. The job includes removing all lead-based paint according to lead abatement requirements for ODOT and applying ODOT's (OZEU) paint system. Perform daily inspections on the field blasting of the beams to ensure they met the SSPC-SP 10 near-white blast condition and applied the proper amount of paint (mils) on each of the three-coat systems. Monitor the work completed each day and complete daily reports to be entered into ODOT's CMS system.

Test-Tech and ODOT, District 12. (2005). Mr. Quesenberry provided part time coatings inspection on the Third Street lift bridge rehabilitation project. The job included making repairs to the existing bridge, replacing the deck, removing all lead-based paint according to lead abatement requirements for ODOT and OSHA, and applying ODOT's (OZEU) paint system. Mr. Quesenberry performed daily inspections in conjunction with the lead inspector to ensure that the work was in compliance with ODOT's specifications. Daily inspection included monitoring the field blasting of the beams to ensure they met the SSPC-SP 10 near-white blast condition and applied the proper amount of paint (mils) on each of the three-coat systems. Completed daily reports with photos were entered into ODOT's CMS system.

Ohio Department of Transportation, District 12-Cleveland, Ohio. (2005). In October of 2005, Mr. Quesenberry completed his QA training on the Main Avenue Bridge in Cleveland Ohio.The job included removing all lead-based paint according to lead abatement requirements for ODOT and applying ODOT's (OZEU) paint system. Performed daily inspections on the field blasting of the beams to ensure they met the SSPC-SP 10 near-white blast condition and applied the proper amount of paint (mils) on each of the three-coat systems. Monitored the work completed each day and completed daily reports. Completed daily reports to be entered into ODOT's CMS system.

Repainting of the 1.5-MG Stonehurst Water Standpipe-Huber Heights, Ohio. (2004-2005). Mr. Quesenberry completed his QA training on tank inspection. Assisted the lead inspector with site observation and documentation on the repainting of the 1.5-MG Stonehurst Water Tower Standpipe. The interior system consisted of a SSPC-SP 10 near-white blast for the surface preparation, followed by a NSF zinc primer, which was then top coated with two full coats of epoxy. The exterior was blasted to a SSPC-SP 6 commercial blast condition, followed by a zinc prime coat, an epoxy intermediate coat, and a urethane finish coat. The original paint system contained lead and had to be fully contained during blasting operations. The contract also consisted of bringing the tank up to the new OSHA standards and replacing the roof vent and ladder cables. Assisted the client during the bidding process, change orders, and extra work that were performed. Provided site observation and documentation of work being performed by the contractor. Reviewed contractor work progress and schedule and advised the owner of materials and application compliance with the contract specification and plans. Reviewed work and pay quantities on a daily basis and submitted daily reports with photos.

ASSIGNMENT

Senior Structural/Civil Inspector

EDUCATION

Queensboro Community College, Manhattan College, SUNY Purchase

REGISTRATION

OSHA 10 Hour Certified
ACI Level 1 Certified, ACI Level 2 Concrete Construction Special Inspector Certified
ICC Structural Steel Bolting Certified

REPRESENTATIVE AND PERTINENT EXPERIENCE

Mr. Petekiewicz has over 30 years of diversified engineering, estimating and construction experience with transit, high-rise buildings, tunnels, transportation, and power plant facilities. His experience covers inspection of civil, structural, mechanical, track, and electrical, including lighting, fire alarms, and public address systems. He has performed constructability review, inspected contractor's work and records to insure work complies with plans and specifications, coordinated with Port Authority operations, interfaced and coordinated with government agencies, managed change orders, generated and maintained punch lists and RFI's, and administered contract close out. He has training in Port Authority systems and procedures, Track Safety Awareness, Hazardous Materials Management, and Confined Space Entry.

- **Senior Construction Inspector, Port Authority of NY & NJ, WTC PATH Hub** – Work on this multi-billion dollar project consists of PATH facilities, PATH Terminal Building, underpinning of No. 1 Subway, Pedestrian connections, and LMDC facilities, infrastructure and tenant alterations to Tower No. 7. Performed daily inspections, site visits, prepared daily narratives and performed EIC duties for PATH Harrison yard. (6/06 – Present)

- **Senior Construction Inspector/Construction Coordinator, Port Authority, PATH Projects** - Supervision of construction projects during off peak hours including daily site visits and inspection and prepared daily narratives. Coordinated contractors and PATH Personnel for the following projects:
  Rail replacement at Dock Bridget**,** Newark, NJ: Coordinated with trainmaster to remove tracks from service Oversaw removal of existing track rail and installation of new rail.
  Renovation of Journal Square Station**,** Jersey City, NJ: Inspected erection of structural steel for support of new station ceiling. Supervised installation of new station lighting and sound system. Inspected replacement of new granite flooring for Eastbound and Westbound platforms Monitored installation of stainless steel cladding on station escalators, stairwells and columns as well as installation of lighting, fire alarm, and public address systems.
  Removal of existing turnstile system and installation of new Passenger Turnstile System**:** Supervised installation of new turnstile and Fare collection systems at all Path station locations.
  Installation of New Handicap Elevator at Pavonia/Newport Station**,** Jersey City, NJ: Performed inspection of excavation and installation of new handicap elevator Monitored progress of project until activation of system
  Removal of Existing Boilers at One Path Plaza**,** Jersey City, NJ: Inspected removal of existing building boiler units and installation of new boilers.
  Rock Excavation and Installation of Precast Concrete Storm Drain Trenching at track section H-5**:** Oversaw rock excavation and installation of storm drain trenching. Monitored installation of required concrete retaining walls.
  (1998 – 5/2006)

- **Senior Construction Inspector/Construction Coordinator, Port Authority**, **Reconstruction of World Trade Center Station, Exchange Place Station, and Tunnels "E" and "F"** Work on this $360 million project consisted of PATH, tunnel systems, tunnel structures, and rail and road access to equipment. Inspected various phases of reconstruction post 9/11 of World Trade Center Temporary Station and rehabilitation of Exchange Place station. Monitored reconstruction of tunnels E and F from Exchange Place to the WTC. (4/2002 – 11/2003)

- **Senior Construction Inspector, Port Authority of NY and NJ, Major Holland Tunnel Facility Projects** Performed construction inspection of various Holland Tunnel projects including daily site visits, preparation of daily narratives, coordination of contractors, management of change orders, and generation and maintenance of punch lists and RFI's.
  ***Structural and Architectural Renovation of Ventilation Buildings*:** Construction of both the river and land ventilation buildings, NY side.
  ***Removal of Existing and Installation of New Slab on Grade at Holland Tunnel Maintenance Building*:** Construction of slabs at both the NY and NJ maintenance garages.
  Installation of New Storm Drainage System in Holland Tunnel
  Installation of Steel Grating Security System: Grading installation for Holland Tunnel, NY River Vent Building from dock level to Hudson River bed. (1996-1998)

- **Construction Estimator, Various Projects** – Developed construction cost estimates, performed site visits, prepared change orders, and supporting documentation for various transportation projects including MTA, Long Island Railroad, Triborough Bridge and Tunnel Authority, New York State Department of Transportation, and New Jersey Department of Transportation. (1984 – 1995)

- **Construction Estimator, Tishman Realty and Construction, Various Projects** – Prepared estimates and take offs for renovation and construction of new high rise buildings in New York City. Also worked on the development of Epcot Center at Disney World in Florida. (1980 – 1984)

- **Construction Estimator, Ebasco, Various Power Plants –** Developed cost estimates for nuclear and fossil fuel power plants located in Washington, Florida, and Louisiana. (1976 – 1979)

ASSIGNMENT

Civil/Structural Inspector

EDUCATION

B.S Civil Engineering, The City College of New York, (2004 to Present)

REGISTRATION

ACI Level 1 Certified, ACI Level 2 Concrete Construction Special Inspector Certified
OSHA 10 Hour Certified

REPRESENTATIVE AND PERTINENT EXPERIENCE

Mr. Rodriquez has 6 years of experience in construction, including multi-trade work and electrical. He has performed inspection of various contractor operations, including foundations, concrete, pile driving, steel, paving, and electrical components for compliance with plans and specifications. Mr. Rodriguez has maintained daily logs and prepared daily narratives. He is proficient with computer software and is familiar with Port Authority systems and procedures.

- **Construction Inspector, Port Authority of NY and NJ, PATH –** Inspected various PATH projects including: (2/09 – Present)
  - > Tunnel Interior Strengthening Water Management Control System: This multi-million dollar project involves installation of fiber optic and 480-Volt conduits throughout the tunnel under mid-river, installation of custom made steel plates to strengthen the tunnel walls and the removal and re-installation of bench walls in the tunnels.
  - > Dock Bridge: Supervised the removal and installation of mitar rials, running rails, timber, ties, expansion joints
  - > LIDS: Installation of devices in the track area that will scan the track area and if an unknown object is detected it will notify the train master, including conduit, the pulling of wire and the installation of devices in track area
  - > Fence project along path property between journal square and Harrison station
  - > Tunnel Hardening: Placement of steel plates anchored into tunnel F. Anchored in place by hooking a 'J' hook into the current tunnel bolts, then pouring grout behind the plates to strengthen the tunnel walls
  - > Backus Substation: Erection of a decorative steel structure over the portal opening covering the Backus substation.
  - > Ventilation Doors: Installation of ventilation doors in tunnels to control the direction and speed of wind in the tunnels.
  - > Flood gates in tunnels at Exchange Place.

- **Construction Inspector, Port Authority of NY and NJ, PATH and Port Newark/Elizabeth, Various Projects** – Inspected pile driving for North Street Bridge, driving timber piles for Berth 10, and removal of asbestos in Seaman's Church at Port Newark. At PATH, inspected TEDS (Temporary Evacuation Detection System) in tunnels "E" and "F", flood gates at WTC tunnel portals and conduits

and support brackets for 800 MHZ radio communication system. Also assigned to demolition of concrete in Journal Square Parking lot. Verified construction was according to plans. Prepared daily reports. (06/08 – 09/08)

- **Construction Inspector, Port Authority of NY and NJ, WTC Reconstruction** – Working as an Intern in the West Bathtub, inspected contractors' means and methods including slurry wall tie backs, foundation concrete pours, pile driving including counting blows, and ductbank installation. Also assigned to temporary PATH Station entrance/exit. Maintained daily log and issued daily report. (06/07 – 09/07)

- **Electrical Mechanic, AA Electric, Ozone Park, NY** – Responsible for customer service issues. Managed and directed a crew of 6 men. Authorized electrical wiring of houses and buildings. Installed new electrical services underground and overhead. Repaired and replaced old construction wiring. (9/08 to present; 02/08- 06/08; 05/05 -06/07)

- **Overnight Manager, Abercrombie & Fitch, New York, NY** – Managed and directed a crew of 10-20 employees. Maintained a daily log of duties performed and inventory supply. Conducted daily meeting with management staff. (09/07 – 2/08)

- **Customer Service Representative, Allstate Insurance Company, Brooklyn, New York** –Managed customer service issues. Maintained a cash flow, received payments and prepared deposits for the bank. Advised clients on insurance policies through telemarketing. Managed inventory of supplies. (6/04-1/05)

- **Foreman/Laborer, MBM Contractors, Ozone Park, New York** – Supervised and performed construction work in residential building and repairing homes. Duties included repair and installation of roofs, installation of electrical systems, plumbing work, and paved walkways and driveways. (6/02 – 6/04)

ASSIGNMENT

Senior Civil Inspector

EDUCATION

M.S., Civil Engineering, University of Washington, Seattle, WA, 1970
B.S. Civil Engineering, 1966

REGISTRATION

Licensed Professional Engineer in the State of New York
ACI Level 1 Certified, ACI Level 2 Concrete Construction Inspector (CCSI) Certified
ICC Structural Steel Bolting Certified
OSHA 10 Hour Certified

REPRESENTATIVE AND PERTINENT EXPERIENCE

Mr. Sachdev has over 30 years of engineering and construction inspection experience in transportation and industrial facilities, including over 25 years with New York City Transit. His experience includes construction management, supervision, inspection, design review, auditing, and planning for various New York City Transit Authority, Board of Water Supply, and NYC Department of Environmental Protection projects. He has inspected track, structures, concrete, paving, and ancillary railroad systems, electrical, and mechanical systems for compliance with plans, drawings, and specifications. He is familiar with NYC Transit and Port Authority systems and procedures.

- **Senior Construction Engineer/ Inspector, Port Authority of New York & New Jersey, Port Commerce Facilities** - Inspected contractor's work related to intermodal facility at Port Ivory, Howland Hook and tenant alteration applications at Port Newark/Elizabeth, including modifications to Admin Building, emergency water main and track repair and tenant alterations at Teleport, involving new office space and utilities for various companies. Projects at Brooklyn Piers included fender repairs, pile repairs, dredging, emergency paving repairs, and security guard booth. (4/06 – Present)

- **Senior Construction Inspector, Port Authority of New York & New Jersey, Restoration of PATH Service to Manhattan** - Inspected contractor's work connected with the $360 million project, including temporary PATH station at WTC, rehabilitation and expansion of Exchange Place Station, and rehabilitation of Tunnels "E" and "F". Verified compliance with plans and specifications. Prepared daily narratives and reports. Also responsible for coordination with train master for removal of blast material for new crossover tunnels, inspection of additional PATH projects including CCTV upgrade at South Street Yard, including new light poles, foundation excavation, and concrete placement; additional elevators at Pavonia Station; and chemical grouting at various locations. (4/02 – 10/05)

- **Resident Engineer, New York City Transit**, **Rehabilitation of New Lots Line, Brooklyn, NY** - Construction supervision and coordination of Elevated Subway Line Project. The project involved replacing structural steel girders, seat brackets, column rehabs, track work, stair replacement, and mezzanine hanger repair, replacement of structural concrete and water proofing of thru-spans.

- **Resident Engineer, New York City Transit, Rehabilitation of Various Pump Rooms in Brooklyn and The Bronx, NY.** The work involved providing new electrical service, pumps, discharge lines, valves, new structural slab, new doors and lighting, etc.

- **Resident Engineer, New York City Transit, Handicap Ramps for SIRTOA Stations, Staten Island, NY.** The project consisted of providing over 500 feet of ramps over pile foundations at two elevated stations, Dongan Hills and Great Kills.

- **Resident Engineer, New York City Transit, Rehabilitation of Castleton Avenue and Yukon Avenue Bus Depot, Staten Island, NY.** The projects involved new bus lifts, structural slab, new roll up doors, lighting, electrical service, oil separator tank and discharge pipes, paving, new parking lots and fencing.

- **Resident Engineer, New York City Transit, Structural Rehabilitation of SIRTOA, Right of Way, Staten Island**. The project consisted of providing new retaining walls, crib walls, soil stabilization, riprap and sheet piling along SIRTOA right-of-way at various locations.

- **Resident Engineer, Parking Lots at Two SIRTOA Stations, Staten Island**. Construction of parking lots at Dongan Hills and Annandale Stations including excavation, drainage, paving, and striping.

- **Engineer Auditor, New York City Transit**, Engineering audit of various Transit Authority projects. Auditing of payments, material, and additional work orders.

- **Civil Engineer, New York City Transit**, Planning, scope and property acquisition of various projects.

- **Assistant Civil Engineer, New York City Department of Environmental Protection**. Sewage treatment plants at Ward Island and Port Richmond. Inspection of pile foundation and structural walls for sewage treatment plans.

- **Assistant Civil Engineer, New York City Board of Water Supply, Third Water Supply Tunnel**. Design review and checking working drawing for the third water supply tunnel.

JOSEPH HENRY

Civil Inspector

Mr. Henry has over 20 years of experience in the construction industry. His past experiences include work as a Construction Inspector, Field Engineer and Estimator on projects that have included airports, bridges, roadways, and tunnels.

Key Highlights

- ✓ Over 20 Years Experience as a Construction Inspector and Field Engineer
- ✓ Extensive Agency Experience, Including the PANY&NJ

Education

- **BS, Civil Engineering,** City College of New York, 1990
- **AAS, Civil Engineering,** New York City Technical College, 1985
- **BS, Civil Engineering,** Superieur Technique D'Haiti – Port-au-Prince, 1979

Additional Training

- **Bridge & Highway Design & Rehabilitation**
- **Structure Design**
- **Steel & Reinforced Structural Design for Highways & Bridges**
- **Bridge Inspection**
- **Structural Rating & Rehabilitation Procedures**
- **Stress Analysis for Structures**

Computer Skills

- MS Office

Port Authority of New York & New Jersey (PANY&NJ) – JFK International Airport – New York, NY

Construction Inspector

- Performed quality control inspection services at JFK International Airport Terminal 4 and 7 under the supervision of the Port Authority of NY & NJ.
- Performed inspections that included rebar, concrete placement, wire mesh, backfill, field density, compaction testing for soil, asphalt using nuclear gage, sand cone methods, pile taping, pile driving, vibration monitor, structural steel erection, filed bolting, field & shop welding, metal decking, shear, fire stopping, fire proofing, and grouting.

New York City Department of Transportation (NYCDOT) – Various Projects – New York, NY

Construction Inspector

- Responsible for quality control inspection under the supervision of DOT including: concrete pavement repair & crack sealing, setting new drainage frames on existing drainage structure, resetting existing drainage grates, repairing walls on existing drainage structures, rebuilding existing catch basins, restoring cast-in place concrete curb, cleaning drainage structure & manholes, pavement excavations, saw cutting asphalt concrete, and saw cutting PCC and composite pavement.
- Developed the contractor payment report for construction of roadways & bridges for LIE/CIP interchange improvement project included: New Arch Bridge at West Alley Road, the demolition and rebuilding of new bridges at LIE over CIP, East Hampton over Little Neck Parkway, a shoulder widening at LIP and CIP, exit ramp walls and back walls, abutments, pedestals, center piers, footings, median, and cast-in place concrete barriers.
- Reviewed materials used, manpower, equipment, estimated quantities for ongoing projects, and pending proposals. He also reviewed specifications, drawings, and engineering standard quality control of materials and workmanships.

SAVIN Engineering / GMOA – Pleasantville, NY

Field Engineer

- Supervised the placement including reinforcing steel, excavation, pile driving, sheet piling, electrical, plumbing, mitigation, tie back, tie down, and placement of pre-cast concrete.

PACO Group

Other Experience:

Metropolitan Transportation Authority, New York City Transit (MTA NYCT) – Second Avenue Subway – New York, NY
Cost Estimator

- Provided quantity take-offs and prepared detailed tabulations for construction cost estimates for 86th / 96th Street Subway Stations.
- Communicated with designers, subcontractors, vendors and manufactures to develop cost prices for new items in the estimates.

HNH Consulting Inc. – NY
Estimator

- Calculated the cost of all types of construction, prepared project construction estimates, and bids for each project, and kept active projects within their budgets & schedules in coordination with the company performing the construction.

Queens REBAR Inc. – Queens, NY
Estimator

- Prepared estimates for bidding purposes in the range of $5-30 million.
- Prepared purchase orders, and coordinated all company supplies and materials.
- Responsible for processing payroll (using Peachtree).

CM Construction Corporation – New York, NY
Estimator

- Calculated the cost of various types of construction, prepared project construction estimates, and bids for each project, and kept active projects within their budgets & schedules in coordination with the company performing the construction.

TAMARA SKEETER

Civil Inspector

Ms. Skeeter has over 10 years experience in the construction industry performing engineering duties that include but are not limited to maintaining shop drawing logs, reviewing cost proposals, negotiating prices, writing contract specifications for additions to contracts, as well as processing Order-on-Contracts (OOC's) and Field Change Orders (FCO's). She is a skilled electrical and concrete inspector with experience working on major projects such as the Brooklyn-Queens-Expressway and Stewart International Airport.

Key Highlights

- ✓ Over 10 Years Experience as a Construction Inspector
- ✓ Holds both ACI Level I and NICET Level III Certifications

Education

- **BA, Management & Administration,** City College of New York, 2005
- **Certificate, Construction Inspection,** Joint Urban Manpower, 1999

Computer Skills

- **CEES**
- **MS Office**
- **MS Publisher**
- **Lotus 123**

Certifications

- **National Institute for Certification in Engineering Technologies (NICET) – Level III**
- **American Concrete Institute (ACI) –Level I Technician**

New York State Department of Transportation (NYSDOT) – Reconstruction of Route 9A- West Promenade – New York, NY

Construction Inspector/Office Engineer

- Reviewed the Inspector's Daily Reports for calculation and payment errors.
- Developed spreadsheets to assist inspectors in the payment of various lump sum items including the removal of electrical equipment and temporary traffic signals and reviewed cost proposals submitted by the contractor's Project Manager.
- Responsible for ensuring construction met the requirements of the project plans and New York State Standard Specifications.
- Performed oversight volume of conduit excavation, lighting and traffic conduit installation, ITS equipment installation, maintenance, and unclassified excavation.
- Oversaw on-site concrete testing for slump, air content, and temperature, and field sampling for lab strength tests based on New York State Specifications.
- Inspected delivery of materials to the site to verify required information was visible on the materials and the delivery tickets, such as Job Stamp, Lot Number, Batch Number, and Batch Time.
- Updated materials acceptance book by entering accepted quantities of specific contract items such as based on material certification, delivery tickets, and New York State Material Approved List.
- Processed Order-on-Contracts (OOCs) and Field Change Orders (FCOs) within the CEES program.
- Responsible for corresponding directly with NYSDOT office personnel to correct errors in the CEES program and with contractor's Project Manager to discuss payments and required documentation.
- Led meetings with the contractor regarding closing the project, what contract work remained uncompleted and which documents were, as well as general release of claims and meeting minutes.
- Logged and filed correspondence, prepared final estimate, inspected, reported, and recommended payments for major construction activities.
- Functioned as the primary electrical inspector, inspecting all aspects of electrical work within the scope of the project including the installation of lighting, traffic and ITS systems along Battery Place and Route 9A, the installation of lighting and PLC systems within the Battery Park and West St. Underpasses, and the installation of ITS system within the Manhattan Ventilation Fan Building, the installation of electrical conduits and manhole reconstruction for ConEd.
- Worked as a direct liaison between NYCDOT, Con-Ed and Empire City Subway representatives.

PACO Group

The New York State Specifications included:

- The measuring of length, area, and volume of , unclassified excavation, the placement of subbase material, installation of drainage structures, and the placement of asphalt.
- On-site concrete testing for slump, air content, and temperature, and field sampling for lab strength tests based on New York State Specification considering concrete classification for placement for roadway placement.
- On-site inspection of tile installation including pull tests.
- The inspection of concrete during the placement for including the finishing of the concrete by the contractor using a screed machine.
- The inspection of delivery of materials to the site to make sure that the required information was visible on the materials and the delivery tickets, such as Job Stamp, Lot Number, Batch Number, and Batch Time.
- The inspection of traffic signals, lane closures, signage, and flagging to make sure that vehicular traffic was safely maintained during project duration.

Reconstruction of the BQE, Queens, NY

- Inspected, reported, and recommended payments for major construction activity on the Brooklyn-Queen Expressway from Grand Central Parkway and Roosevelt Boulevard for the purpose of ensuring that the construction met the requirements of the project plans and New York State Standard specifications (as previously mentioned).
- Performed office engineering duties that a included estimating the increase and decrease of various contract quantities based on the original engineer's estimate, quantities used to date, and an estimate of remaining contract work.

New York State Thruway Authority (NYSTA) – Various Projects – New York, NY

Construction Inspector

Ms. Skeeter inspected major construction activity on roads, highways and bridges to insure the construction met the requirements of the project plans and specifications for a regional consulting firm including bridges that run over the New York State Thruway at McLean Avenue, Hall Pl., Clark St., Yonkers Avenue and 2 pedestrian bridges.

- Performed the on-site inspections and testing of materials to insure they met state standards and also reported daily construction activities and payments.
- Responsible for the sample collection of materials, including: steel nuts, bolts and washers, inspection of rebar, steel formwork, retaining walls and steel bearings on bridge seats.
- Updated materials acceptance book, maintained the submittals and shop drawings log and reviewed cost proposal's submitted by the contractor's Project Manager.
- Processed additional work orders, which required research, cost analyzing, price negotiating, and writing detailed explanations to the NYSTA for quantity increases and decreases of specific project items.
- Provided various office assistance including data processing, scheduling of appointments and meetings, correspondence, taking minutes.

Goodkind & O'Dea, Inc. – Various Projects – New York, NY

Construction Inspector

- Performed on-site inspection and testing of materials to insure they met state standards and also reported daily construction activities and payments.
- Processed additional work orders, which required research, cost analyzing, price negotiating, and writing detailed explanations to the NYSDOT for quantity increases and decreases of specific project items.
- Provided various office assistance including data processing, scheduling of appointments and meetings, correspondence, taking minutes, processing payments.

INSPECTION PERSONNEL – STRUCTURAL

Robert Leo, P.E.
Chief Inspector

Professional Profile
Mr. Leo is a chief inspector with the following experience on bridge reconstruction projects.

Project Experience
Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 12/04-3/10 as Chief Inspector; 3/10-Present. Assistant Resident Engineer. This $280-million project involves the construction engineering and inspection for the Rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Responsibilities include supervision and oversight during Manhattan/Brooklyn tower wind tongue system replacement, seismic retrofit of intermediate towers, main cable neoprene wrapping, suspender rope adjustments, removal/replacement of existing traveler system, rehabilitation of existing north Brooklyn/Manhattan anchorage comfort station, replacement of Manhattan/Brooklyn tower bracing members for panel point 30 bearing replacement, and boring for pin installation. Client: New York City Dept. of Transportation

Triborough Bridge Deck Replacement, TB-64A, New York, NY; 5/02-12/04. Team Leader. REI services to replace the Queens Approach span deck with pre-cast panels, and replace the suspension bridge roadway with a new orthotropic deck panel system. Responsibilities on this $165-million project included inspection and oversight during road deck saw-cutting, road deck removal; installation, fit-up and SMAW/SAW welding of new orthotropic deck section; fit-up and electroslag welding of Queens anchorage and Wards Island/Queens tower modular expansion joint separation beams; checking/verifying east and west main cable band bolt tension; the inspection and oversight during replacement of Wards Island anchorage upper/lower truss pins and wind pin; T48 bonded surface aggregate application; stud welding of side barriers and installation; survey of orthotropic panel locations; relocation and re-setting of existing side barriers; inspection of welding procedure and welder qualification test plates for conformance with AWS standards; and quality assurance and documentation of all work operations for compliance with contract specifications and applicable regulations, codes and standards. Client: Triborough Bridge and Tunnel Authority

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
Professional Engineer/NY
NACE Coatings Inspector Level 1/NY
ACI Concrete Field Technician - Grade I/NY
SSPC-C3 Supervisor/Competent Person Certification/NY
AWS Certified Welding Inspector/NY

Education
BS/1995/Civil Engineering
MS/2001/Civil Engineering-Construction Management

Course Work
10-Hour OSHA Training Course, #001872364

Total Years Experience 15

Robert Leo, P.E.
Chief Inspector

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 9/00-5/02. Team Leader. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included the inspection of the north wind chord repairs; north truss bottom chord repairs; demolition of north roadway floorbeams, stringers, railing and grating; the fit-up of orthotropic deck; submerged arc welding of orthotropic deck, floorbeam, lateral brace and orthotropic deck installation, barrier installation, north footwalk demolition and shear connector installation; inspection of rock and soil piles with the Tubex method on the Manhattan and Brooklyn approach; abrasive blast paint removal and painting of existing floorbeams and bottom chords on main span; inspecting existing floorbeam and lateral brace repairs; monitoring shrinkage and warpage at submerged arc welded orthotropic deck joints; inspection of north outer roadway orthotropic deck shot blasting; and Sterling Lloyd waterproofing membrane application and Trinidad asphalt paving. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 7/98-9/00. Inspector. Operations covered included modification of bracing struts at the Manhattan/ Brooklyn towers, repair of south truss bottom chord, and removal and replacement of bearing grease pan covers at various locations on the main bridge, and finalizing structural steel items. Responsibilities on this $176-million project involved inspection of Manhattan/Brooklyn approach pier caps; preload Manhattan/Brooklyn pier cap anchor bolts; lateral brace and web reinforcement repairs main span; demolition of Manhattan/Brooklyn approach BMT structure; pre-assembly of TA track girders; set Brooklyn approach TA track girders; installation of Brooklyn approach debris shield; inspection of abrasive blast paint removal and painting of existing overhead truss above BMT structure on main span; inspection of south inner/outer orthotropic deck shot blasting; Sterling Lloyd waterproofing membrane application and Trinidad asphalt paving. Construction cost: $171 million. Client: New York City Dept. of Transportation

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 9/96-7/98. Inspector/Field Engineer. This $310-million project involved the construction engineering and inspection for the reconstruction of the south inner and outer roadways. Mr. Leo's responsibilities included field measurements, inspection of contractor's conformance to contract plans and specifications, and preparation of inspector's daily reports. Responsible for preparing daily MURK II forms for American Bridge on the Williamsburg Bridge. Client: New York City Dept. of Transportation

Con Edison Substation, Bronx, NY; 6/96-9/96. Office/Field Engineer. Responsible for keeping daily progress reports, field measurements, quantity takeoffs, invoices, change orders, etc. Client: Con Edison

Various Buildings, New York, NY; 2/96-6/96. Assistant to Supervisor. Responsible for performing daily estimates, preparing daily reports, providing daily materials, and relaying progress information to owner. Client: William Gottlieb Real Estates

As a plumber's assistant from 5/95-1/96, Mr. Leo performed various tasks including installation of sprinkler systems, standpipe systems, radiators, pipes, etc.

Thomas Moen, E.I.T.
Senior Inspector

Professional Profile
Mr. Moen is a senior inspector who is responsible for supervising daily on-site steel operations. His experience includes inspecting installation of main bridge track support members including stringers, longitudinal bracing columns for conformance with contract and shop drawings, and monitoring demolition of main span track support steel.

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
Engineer-in-Training/NJ
NACE Coatings Inspector Level 2
NYSDOT Maintenance & Protection of Traffic Certified

Education
BS/1993/Civil Engineering

Course Work
10-Hour OSHA Training Course

Total Years Experience 17

Project Experience
Verrazano-Narrows Bridge Rehabilitation of Structural Steel Repairs, VN-32, New York, NY; 2/10-Present. Senior Inspector. Project involves construction administration, on-site inspection, and testing and support services. Includes repair of deteriorated subfloorbeams, stringers, stiffener/connection plates, cracked/broken missing welded connection plates, reinforce deteriorated stringer top flange and remove and replace deteriorated bolts, rivets, and drainage piping. Mr. Moen's responsibilities include Client: Triborough Bridge and Tunnel Authority

Verrazano-NarrowsBridge Rehabilitation of the Lower Level Approaches, VN-17A, New York, NY; 9/07-2/10. Mr. Moen was the senior inspector for the administration and quality assurance inspection of all work associated with the rehabilitation of the lower level approaches of the Verrazano-Narrows Bridge. He was responsible for monitoring contractor's demolition of existing Brooklyn and Staten Island Approach Span deck slabs and barrier; inspection of rebar and formwork installation and concrete quality (slump and air); monitoring of curing of new cast-in-place barrier, approach span deck slab and bearing pedestals; monitoring placement of new precast barrier, concrete repairs to piers and existing roadways, longitudinal grooving on new deck and line striping placement; inspection of bearing removal and replacement which includes bridge jacking operations and bent plate replacement; monitoring maintenance and protection of traffic set-up. Client: Triborough Bridge and Tunnel Authority

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 3/07-9/07. Senior inspector on this $150-million project involved the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge in suspended and approach spans; and repair of flagged conditions. Responsibilities included monitoring of contractor's demolition of existing lower roadway deck slab at the Brooklyn plaza and anchorage; inspection of backfilling operations, installation of rebar and formwork in preparation for new deck slab, cast-in-place barrier and abutment wall at Brooklyn plaza; inspection of rebar and formwork placement for new deck slabs and cast-in-place barrier, and the installation of the waterproofing system at the Brooklyn and Manhattan Anchorages. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; NY; 2/01-3/04. Senior inspector for this $175-million project which involved rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Mr. Moen's responsibilities included inspection of structural, civil and paint activities on the project. Responsible for

inspection of bikeway including ramps, retaining walls and abutment installation. Also inspected deck installation at the elevated structure and tunnel roof area. Client: New York City Dept. of Transportation

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, #BRC1568C, New York, NY; 8/99-9/01. Senior inspector on this $124-million construction project. Project involved the rehabilitation of the Manhattan Plaza, Arch and Colonnade; replacement of the structural steel stringer and floorbeam support system for the south side subway tracks; replacement of the truss bearings on the piers of the approach spans; and recoating of the south side of bridge including both towers and two main cables. Responsibilities included blast inspections, coatings inspection, and monitoring contractor's compliance with required painting specification. Also monitored construction of scaffolding for paint operations. Client: New York City Dept. of Transportation

Verrazano-Narrows Bridge Rehabilitation of the Lower Level Approaches, VN-17A, New York, NY; 9/07-Present. Mr. Moen is the senior inspector for the administration and quality assurance inspection of all work associated with the rehabilitation of the lower level approaches of the Verrazano-Narrows Bridge. He is responsible for monitoring contractor's demolition of existing Brooklyn and Staten Island Approach Span deck slabs and barrier; inspection of rebar and formwork installation and concrete quality (slump and air); monitoring of curing of new cast-in-place barrier, approach span deck slab and bearing pedestals; monitoring placement of new precast barrier, concrete repairs to piers and existing roadways, longitudinal grooving on new deck and line striping placement; inspection of bearing removal and replacement which includes bridge jacking operations and bent plate replacement; monitoring maintenance and protection of traffic set-up. Client: Triborough Bridge and Tunnel Authority

Staten Island Bridges Rehabilitation, Staten Island, NY; 3/04-3/07. Senior Inspector. The project involved construction management services for structural, civil, mechanical, electrical, and bridge painting services. Responsibilities included inspection of Goethals Bridge including concrete deck repairs, removal of deteriorated concrete and steel, preparation of deck for rapid setting concrete, repairs to structural steel and bridge railing and concrete parapets and inspection of MPT. Client: Port Authority of NY & NJ

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 4/98-8/99. Inspector. Mr. Moen was responsible for assigning tasks that included inspecting and monitoring contractors removal and replacement of south chord elements (lacing bars, batter plates, splice plates, and gusset plates); pre-assembly of TA approach spans track girders; erection of main bridge track elements (longitudinal and internal bracing, stringers, columns); pier cap anchor bolt loading; and demolition of existing track support steel. He was also responsible for inspecting the installation of cable tray support assemblies and placement of temporary work platforms on transit piers. Inventoried and inspected the inspection platform elements moved from Contract #5 to Contract #6. Inspected installation of TA refuge area steel. Construction cost: $176 million. Client: New York City Dept. of Transportation

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 11/95-3/96 and 11/96-4/98. Inspector. Mr. Moen was responsible for coordinating the air sampling and collection and disposal of all hazardous waste including lead-based paint. He was also responsible for ensuring RCRA compliance throughout the project and for observations of emission. He was also assigned tasks including inspection and monitoring contractors' removal of south inner/outer roadway elements, and installation of new floorbeams. Inspected and monitored welding of orthotropic roadway deck and footwalk. Inspected installation of SIR barriers. Client: New York City Dept. of Transportation

Gary Crozier
Senior Inspector

Professional Profile
Mr. Crozier is a chief/senior inspector with many years of experience on urban bridge rehabilitation and railroad construction projects. He has vast experience with steel and concrete rehabilitation, maintenance and protection of traffic (MPT) coordination, foundation work, utility relocation, drainage, and bridge downspout systems.

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
NICET IV/NY
ASE Certified Technician
ACI Concrete Field Technician - Grade I
NACE Coatings Inspector Level 1
Certified Associate Welding Inspector/NY
NYSMPT Traffic Control Training Seminar/NY
ATSSA Certified Traffic Control Supervisor
OSHA Scaffold Competent Person

Education
AAS/1976/Civil Engineering Technology

Course Work
30-Hour OSHA 500 Trainer Course
Confined Space Training
FHWA, Maintenance and Protection of Traffic (MPT) Design and Operation

Total Years Experience 33

Project Experience
Bronx-Whitestone Bridge Bronx/Queens Approach, BW-89/WBM-342, Bronx, NY; 2/09-Present. Senior Inspector. This $192-million project involves the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work will include the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure there will be massive concrete placements for concrete footings and piers. For the duration of the project, traffic on the bridge must be maintained with five lanes open to traffic. During the staged construction work will be staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting. Other work items on the project include new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure. Responsibilities include the oversight of structural excavation, excavation support system (installation of shoring and structural support), vibration and settlement monitoring, installation of mini-piles, mini-pile static load tests, installation of bar-reinforcing and structural concrete for footings and piers. Client: Triborough Bridge and Tunnel Authority

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 3/03-2/09. Senior Inspector. This $267-million project involves REI services for reconstruction of miscellaneous rehabilitation on the main bridge. Responsibilities included overview of the total coating replacement, i.e.: lead paint removal by abrasive blasting, application of a four-coat paint system, erection of Class 1A containment system, replacement of the traveler platform system, and installation of jacking system, new M.R. bearings. Responsibilities also included the overview of the stiffening of the intermediate towers, which support the end span of the bridge and overview of removal and installation of maintenance platforms, rails and hangers. Client: New York City Dept. of Transportation

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 2/00-3/03. Senior Inspector. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included overview of bored-in piles using a duplex drilling method, pressure grouting, post grouting, and tremie

grouting in association and in accordance with all Federal, State and City regulations. Installation of new catch basins, manholes, cut and fill oversight of new approach ramp to the bridge structure. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 7/98-2/00. Chief Inspector (MPT/Safety Engineer). Responsibilities on this $176-million project included an overview of all safeguards for the protection of persons and property, maintenance and protection of traffic (MPT), and any special precautionary and protective measures in compliance to plans and specifications. Also involved with procurement of permits, maintenance of variable message signs and closed circuit TV system within and beyond the project limits during the life of the contract. Oversaw tow trucks, which provided rapid response to vehicular breakdowns. Client: New York City Dept. of Transportation.

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 5/97-7/98. MPT/Safety Engineer. Responsibilities on this $310-million project included an overview of all safeguards for the protection of persons and property, MPT, and any special precautionary and protective measures in compliance to plans and specifications. Also involved with procurement of permits, maintenance of variable message signs and closed circuit TV system within and beyond the project limits during the life of the contract. Oversaw tow trucks, which provided rapid response to vehicular breakdowns. Client: New York City Dept. of Transportation

Manhattan Bridge South Side Approach and Suspended Spans Rehabilitation, BRC156E, New York, NY; 12/92-5/97. As chief inspector for this $96-million project, responsibilities included assignment of field personnel to meet the needs of the contract, ensuring that all work is recorded completely and in a timely fashion. Also responsible for review of all inspector's reports; progress of work; timely testing of materials; and personnel safety. Project elements included construction of new railing, walkway slab, landscaping, barriers, lighting, elevated steel structure, drainage system and playground; new relief joints; replacement of deck slabs with new concrete-filled steel grid deck panels and armored joints; replacement of drainage system and corroded floorbeam; installation of concrete traffic barrier; replacement of finger joints with new expand joints at the anchorages; replacement of pin supported hangers with new hanger system using bearings and slide plates; installation of new upper and lower lateral bracing and bearings; installation of end frames; diagonal stiffening; waterproof anchorage; roof repair corroded and broken cable wires; and new electrical and lighting system. Client: New York City Dept. of Transportation

Manhattan Bridge Traveler System and Lower Level Interim Rehabilitation, D253248, New York, NY; 4/90-12/92. As senior construction inspector for this $21-million project, responsibilities included inspection of major structural steel repairs to stringers and floorbeams; replacement of fixed hangers, expansion hangers and lacing bars; and monitoring of treatment and disposal of paint waste; designated inspector of all phases of MPT; and the inspection of structural concrete placement in conjunction with placing of reinforcing bars and anchor bolts. Client: New York State Dept. of Transportation, Reg. 11

Manhattan Bridge Rehabilitation Project, D500040, New York, NY; 7/82-12/92. As senior construction inspector on two contracts totaling over $54 million, Mr. Crozier's responsibilities included preparation of final project records as per the NYSDOT MURK, supervision of heavy steel construction and problem solving during construction, assuring details fit to finish; installation of 320 tons of steel, 10% of the total project cost; monitoring contractor compliance with plans and specifications to include inspection of basic MPT; monitoring Traffic Control Agents Time and Post Log; documentation of materials received on the job site, reporting all men and equipment each day; and inspection of job safety requirements. As a construction inspector on this project, he was responsible for the inspection of the supervision of structural steel, asphalt, concrete, structural concrete, pavement excavation and utility relocation. Client: New York State Dept. of Transportation, Reg. 11

Darryl Kemp
Senior Inspector

Professional Profile
Mr. Kemp is a construction inspector with many years of experience inspecting major bridge and highway rehabilitation projects throughout the Long Island/New York metropolitan area involving concrete and asphalt placement and testing, as well as structural steel erection.

Proposed Project Assignment
Construction Inspection – Structural

Registration/Certifications
NICET IV/NY
ACI Concrete Field Testing Technician - Grade 1/NY
SSPC C3 Supervisor/Competent Person Training for Deleading

Course Work
10-Hour OSHA Training Course
Joint Urban Manpower Drafters

Total Years Experience 25

Project Experience
The Robert F. Kennedy (Triborough) Bridge - Rehabilitation of the Main Suspension Cables, Contract #TB-17, Astoria, NY; 1/99-12/99. Senior inspector for this $8.9-million rehabilitation of the main suspension cables. Project included installation of temporary suspended footwalk, removal and replacement of main cable wire wrapping, repairing and splicing of individual main cable wires and application of three-coat paint system. Specific responsibilities included inspection of installation and removal of temporary suspended footwalks beneath main cables, removal and replacement of existing main cable wire wrapping, wedging open of main cables for application of corrosion inhibitor oil, splicing and repairing damaged individual main cable wires, compaction of main cables before rewrapping, tensioning of cable band bolts and application of three-coat painting system to main cables. Duties also included inspection of concrete and structural steel flag repairs. Client: Triborough Bridge and Tunnel Authority

Manhattan Bridge Rehabilitation of Cables and Suspenders, Contract 14, #BRC156R, New York, NY; 6/10-Present. Senior inspector on this $149-million project which involves the unwrapping and rewrapping of cables; replacement of suspenders; replacement of necklace lighting messenger cables and cable hand ropes; installation of new access platforms to existing tower platforms; reversal of lower roadway and operation of HOV lane and replacement of multi-rotational bearings at the Towers; replacement f light poles and luminaries on South upper roadway; replacement of lane control radar on South upper roadway; and retrofit of track stringers and diaphragm connections and other miscellaneous work. Client: New York City Dept. of Transportation

Alexander Hamilton Bridge and Highbridge Interchange Ramp Rehabilitation, Contract D260888, New York, NY; 6/09-6/10. Senior Inspector. This $ 475-million project consists of replacement of bridges; replacement and widening of deck slab; elimination and replacement of deck joints; rehabilitation of steel superstructure; rehabilitation and resurfacing on-grade roadways; replacement of lighting system; rehabilitation of drainage systems and overhead sign structures; replacement and installation of new ITS system and steel superstructure painting. Specific duties included inspection of existing superstructure demolition, existing steel removal, structural steel erection, installation of temporary structures, driving of cast in place concrete piles, placement of structural concrete, drainage installation, asphalt placement and structural steel painting. Client: New York State Dept. of Transportation

Queensboro Bridge Lead Paint Removal and Protective Coating, Contract BRC231P, New York, NY; 4/05-5/09. Lead Structural Inspector. This $170-million project involved the erection of containment structures, abrasive blasting and lead paint removal for the entire East River Bridge and the application of a three-coat painting system. Specific responsibilities included inspection of steel repairs to replace existing struts, gusset plates, batten plates and lacing bars, installation of platforms, scaffolding and outriggers for various containment systems, cataloging of shop drawings for various containment systems and monthly

inspections of temporary structures installed. Responsibilities also included maintenance and protection of traffic and electrical repairs. Client: New York City Dept. of Transportation

Barclay Street Reconstruction, Contract HWMWTCA1E, New York, NY; 10/04-4/05. Senior Inspector. This project consisted of removal and replacement of existing concrete roadbase and asphalt wearing course, relocating existing utilities, drainage installations, street lighting removal and replacement and curb removal /replacement . Specific responsibilities included inspection of concrete roadbase placements, inspection of asphalt paving, concrete field testing and sampling, coordination of existing utility relocation with Con Ed, DEP, ECS and other agencies as well as assisting office engineer with processing change orders. Client: New York City Dept. of Design and Construction

Long Island Expressway Capacity Improvements, Exits 37-40, Contract D258873, NY; 2/03-10/04. Senior Inspector. This $122-million project consisted of Replacement and Rehabilitation of five I-495 bridges, widening and resurfacing of EB and WB mainline roadway, construction of retaining walls and noise barrier walls. Specific responsibilities included supervision of nighttime MPT operations for five-mile daily mainline closures, inspection of bridge demolition and reconstruction, concrete placements and testing, concrete pavement repairs, asphalt paving, drainage removals and installations, sign structure installation and noise barrier wall construction. Client: New York State Dept. of Transportation

Long Island Expressway Rehabilitation, Contract #D257842, Queens County, NY; 5/00-11/02. Senior Inspector. This $221-million project began at the Queens Midtown Viaduct and continues east approximately six miles to College Point Boulevard. This project consisted of rehabilitation of 27 bridges including repair or replacement of deck, superstructure, and footings, resurfacing or replacement of asphalt and concrete pavement, upgrade drainage and lighting system, clean and paint existing steel superstructures, installation of new (ITS) Intelligent Transportation System and landscaping. Specific responsibilities included inspection of structural steel removal and erection of new structural steel, demolition and reconstruction of bridge decks, cast in place concrete and H-pile driving, anchor tieback system installation and testing for temporary steel sheet piling, inspection of structural steel painting, monitoring abrasive blasting using a type "A" containment, slip form concrete placement and testing, placement of superpave asphalt, construction of retaining walls and noise walls, overhead sign structure installations and maintenance and protection of traffic. Client: New York State Dept. of Transportation

Roslyn Inspection - Safety Requirements, Contract #D010482, Nassau and Suffolk Counties, NY; 1/00-5/00. Senior inspector for drainage structure repair and maintenance project. Responsibilities included inspection of contract operations, quantity recording and compliance with MPT. Client: New York State Dept. of Transportation, Reg. 10

Brooklyn-Queens Expressway, I-278, Painting and Cleaning of Park Avenue Viaduct, Contract #D, Kings County, NY; 6/98-1/99. Senior Inspector. This $2.5-million project involved Class B containment setup for power washing, power tool cleaning and overcoating of structural steel members. Specific responsibilities included inspections on installation of various containment and air monitoring systems; power washing existing structure, power tool cleaning and overcoating structural steel and coordination of maintenance and protection of traffic. Client: New York State Dept. of Transportation, Reg. 11

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 7/95-7/98. Senior Inspector. This $310-million project involved demolition of existing structures and replacement with concrete columns, piercaps and orthotropic roadway deck. Responsibilities included inspection of installation of galvanized steel inspection platforms, removal of existing structural steel, drilling of bored in piles with seismic casings, demolition of existing DOS buildings beneath approach, removal and resetting of stonework around anchorage enclosures, concrete placement and testing and asphalt paving. Client: New York City Dept. of Transportation

Ronald Takla
Senior Inspector

Professional Profile
Mr. Takla has over 45 years of experience in the engineering field. He has a diverse background in planning and managing various construction contracts, which include Marine Terminals, Tunnels, Bridges, and three major airports in the Metropolitan area which provided him the opportunity to be directly involved in the supervision of personnel from all major engineering disciplines.

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
ACI Concrete Field Technician - Grade I/NY
OSHA 10-Hour Training Course in Construction Safety & Health/NY

Education
BS/1983/Engineering Technology

Course Work
OSHA 10-Hour Occupational Safety and Health Training Course
10-Hour OSHA Construction Industry Outreach Training Course
OSHA Training Course

Total Years Experience 46

Project Experience
2006-2010 Port Authority On-Call Construction Management Services - George Washington Bridge Coatings Services, Fort Lee, NJ; 11/02-Present. Senior Inspector. This $100-million contract involves Class 1A containment of both towers of this structure over the Hudson River involving the removal of existing lead paint and the application of a new three-coat system to approximately 2.1 million sq ft of steel. Working on contract numbers MF-100.509, Work Order #10 ($13M) and Work Order #11 (#12M). Responsibilities include the coordination and inspection of field construction activities on various contracts. Also, manage construction contractors' payments, contract changes, schedules, fieldwork and subcontractors. Also responsible for installation of fender system around the New Jersey tower base at a cost of $9 million. Client: Port Authority of New York/New Jersey

George Washington Bridge, New York, NY; 10/98-10/03. Lead Engineer. Worked on contract numbers GWB-244.005 ($7 million), GWB-983.902 ($7 million), and GWB-244.020 ($26 million). Responsibilities included directing and leading all construction work, change orders and schedules for these contracts. Client: Port Authority of NY & NJ

Port Morris Yard, New Jersey; 5/98-10/98. Construction Inspector. Responsibilities included the inspection of construction work for compliance to contract requirements. Inspections were in the civil and electrical disciplines. Client: New Jersey Transit

Worked with another firm as a project manager. Responsibilities included managing and directing all aspects of construction contracts, including required contract submittals, correspondence, payment applications, construction schedules, purchases of materials, change orders and field supervision. 4/97-5/98

Port Authority of New York and New Jersey; 1977-1996. As resident engineer, Mr. Takla worked on the following projects: He directed and lead all construction contracts at the George Washington Bridge (1992-1996), the Holland Tunnel Toll Plaza redevelopment project (1989-1992), and the Holland Tunnel and Staten Island Bridges (1985-1989). Mr. Takla managed all aspects of construction projects, including staffing, construction schedules, contract submittals, monitoring and approval of progress payments, ordering and negotiation of field changes, monitoring field inspections, evaluating construction claims, updating monthly contract reports, monitoring affirmative action programs. Also provided schedules and construction staging during design development and contract preparation.

Ronald Takla
Senior Inspector

As assistant resident engineer, Mr. Takla directed and led the field inspection forces for all work required for the construction to remove the concrete ceiling of the north and south tubes of the Holland Tunnel (1983-1985).

As construction inspector, Mr. Takla worked on the following projects:

- Replacement of the main toll plaza at the George Washington Bridge (1981-1983).
- The widening of the upper level westbound roadway of the George Washington Bridge (1979 - 1981).
- The removal and replacement of the upper level roadway of the George Washing Bridge Orthotropic Deck (1977-1979). His responsibilities included the inspection of all aspects of construction work for compliance to contract requirements. (Inspections were in the structural, mechanical, civil and electrical disciplines).

Garfield Cardinez
Senior Inspector

Professional Profile
Mr. Cardinez has many years experience in highway and bridge construction inspection, on multi-million dollar projects.

Proposed Project Assignment
Construction Inspector – Structural

Registration/Certifications
NICET IV
ACI Concrete Field Testing Technician - Grade 1

Course Work
NYCTA - Track Safety
NYSDOT - Lead Awareness
Continual Technical Studies, Pratt Institute
NYSDOT - Maintenance and Protection of Traffic

Total Years Experience 34

Project Experience

Reconstruction of Willis Avenue Bridge, New York, NY; 11/07-Present. Senior Inspector. Project involves replacement of the existing movable bridge and approaches with a new structure, built offline from the existing structure. Responsible for drilling for Nx core in preparation for caissons and drilled shaft; bored in piles on FDR in preparation for pier installation; impact repair on Bruckner Boulevard; removal of sidewalk, parapet and concrete deck; removal and installation of structural steel; rehabilitation of Major Deegan northbound and southbound; demolition of on ramp; structural concrete removal, drainage and electrical removal; placing subbase, permeable base and pavement concrete, cast in place and precast barrier installation; drainage removal on Major Deegan northbound and southbound; northbound rehabilitation including removal and disposal of existing concrete deck and subgrade; placing subbase, permeable base, and concrete pavement; flag repairs on river span and Willis Avenue exit and Bruckner Boulevard exit ramp; flag repairs including steel repairs and asphalt paving; repairs on swing span which were done on barge and involved some drilling of Nx coring; and testing, inspection and observation of concrete, compaction of soils and asphalt. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 2/05-11/07. Senior inspector on this $150-million project involving the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; repair of flagged conditions. Responsibilities included inspection of erection of work platforms, removal and replacement of lower roadway deck, floor beams, stringers and bearings; inspection of rehabilitation of both Brooklyn and Manhattan anchorages, including floors, walls, ceiling and crack sealing by epoxy injection. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; NY; 2/01-2/05. Senior inspector for this $175-million project involving rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; rehabilitation of the colonnade and arch; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Responsible for inspection of truss repairs and replacement of north upper roadway elevated structure and tunnel roof areas, inspection of new bikeway construction, masonry cleaning, ITS fiber-optic conduit and pull box placement, and retaining wall and concrete pavements on grade and on structure. Inspection of colonnade/arch restoration including interior work such as new elevator installation, stairs, walls, fire and intrusion alarm. Client: New York City Dept. of Transportation

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, Contract #BRC1568C, New York, NY; 11/00-2/01. Senior Inspector. This $124-million project involved the rehabilitation of the Manhattan plaza area, Manhattan Arch and Colonnade; replacement of the structural steel stringer and

floorbeam support system for the west side subway tracks; replacement of truss bearings on top of the piers of both approach spans; rehabilitation of eyebars anchoring one of the main suspension cables; and removal of existing paint from the entire west side, both towers and two main cables, and replacing with new coating. Responsibilities included inspection of the erection of structural steel, and restoration of the colonnade and arch including masonry repairs and cleaning, concrete curbs and sidewalk areas. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 7/00-6/01. Senior Inspector. This $176-million project consisted of the demolition and reconstruction of the entire BMT transit structure on the Williamsburg Bridge. Responsibilities included inspection and quantity reporting of a new dry standpipe system and downspout system that was installed on the bridge, inspection of the removal of lead based paint containment erection, surface preparation and application of three part paint system. Client: New York City Dept. of Transportation

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 7/00-11/00. Senior Inspector. Responsibilities on this $248-million project included the inspection of the downspout system below SIR and SOR. Inspected punch list of cleaning and painting eyebars in Brooklyn and Manhattan anchorage, also kick plates in debris shield platform in both Brooklyn and Manhattan approaches. Inspected steel of track stringer angles removal/replacement for profile change at Brooklyn and Manhattan anchorage, also of 3/8 in. track stringer angles to 1/2 in. tolerance as specified by designers between east and west main span. Also assisted in the inspection of pp20 bearing installation in both east and west. End span platform inspection punch list in both east and west. Client: New York City Dept. of Transportation, Division of Bridges

Queensboro Bridge, Contract 2 to 5, Queens, NY;1984-2000. Chief inspector on a federal aid project for the rehabilitation of the Queensboro Bridge. Responsibilities included inspection of all field work; structural demolition and replacement, concrete placement for bridge decks, pavement slabs, cast in place and precast, permanent concrete traffic barriers, drainage demolition and replacement, street light installation, painting and maintenance and protection of traffic. Responsibilities also included supervising and coordinating the schedules of a 15-person field inspection team, preparation of daily reports, and compile and compute quantities for payment. Also gave lectures for inspectors on the hazards and requirements of lead paint removal; proper procedures for evaluating class "A" containment, proper procedure for implementing time and material documents.

World Bank; 1976-1984. Assistant Field Engineer. A $110-million World Bank project. Responsibilities included inspection of removal of earthwork, densification of loose sand using compaction piling and vibratory pile hammer. Inspection of cofferdams installation and load bearing piles. Inspection construction of overpass for trains with heavy cargo linking Port Salinas to Maracaibo Bridge. Performed geo-technical inspection, plate bearing and C.B.R. tests. Performed steel inspection and drainage layouts, design concrete/asphalt mixes, and inspected batch plants mixes (concrete/asphalt).

West Side Highway, New York, NY; 1975. Assistant Resident Engineer. Responsibilities included supervising fourteen land and water based soil sampling rigs for proposed NYSDOT highway, also carried out field investigation programs involving diverse soil sampling techniques; performed in site tests and instrumentation installation.

Reza Saba

Senior Inspector

Professional Profile
Mr. Saba has over 25 years of experience in inspection. He has general knowledge of construction management and inspection of highway and bridge construction. He also has experience in engineering calculation and is familiar with the Port Authority of New York/New Jersey, New Jersey Dept. of Transportation and New Jersey Turnpike specifications.

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
ACI Concrete Field Testing Technician - Grade 1/NY
ACI Special Inspector - Grade 2
ICC Structural Steel Bolting Specialist Inspector/NY

Education
AAS/1983/Civil Engineering

Course Work
ACI Level I Course
ACI Level II Course
10-Hour OSHA Training Course
Hazardous Material Certified, Rutgers University
Maintenance and Protection of Traffic Certified
Health and Safety
Asphalt Institute, Super Pave Design Certified

Total Years Experience 27

Project Experience
2006-2010 Port Authority On-Call Construction Management Services - George Washington Bridge Coatings Services, Fort Lee, NJ; 2000-Present. Senior Inspector. This $100-million contract involves Class 1A containment of both towers of this structure over the Hudson River involving the removal of existing lead paint and the application of a new three-coat system to approximately 2.1 million sq ft of steel. Responsible for all night construction operations including contractor oversight, controlled inspections, coordination with facility and PA police for implementation of required maintenance of traffic for contract work on various roadways. Supervision and coordination provided for ongoing George Washington Bridge contracts including the following: GWB244.006, Painting underside of upper level; GWB 244.005, Rehabilitation of PIP/Upper level interchange; GWB 477, Trans Manhattan Expressway lighting; GWB 450, Upper level lighting; GWB 244.110, Fixed sign renovation; GWB 244.108, Painting NY and NJ towers; GWB 244.085, ITS; GWB 244.020, Henry Hudson ramp rehabilitation and various multi-facility contracts. Client: Port Authority of New York/New Jersey

Lincoln Tunnel, New York, NY; 1997-2000. Responsible for the center tube rehabilitation, toll plaza improvement, and rehabilitation of Helix. Client: Port Authority of NY & NJ

Township of Pohatcong; 1994-1997. Resident Engineer. Capital improvement project. Responsibilities included the coordination of the construction activities for overlaying and repair of various roads within the municipality. Project cost: $500,000 Name of Firm: Cherry Weber Associates, Philipsburg, NJ Supervisor: Doug Cherry

Pohatcong Plaza Shopping Center; 1994-1997. Resident Inspector. Responsibilities included inspection of site improvements for the Township of Pohatcong. Also included drainage, sanitary and watermain installation as well as curb and paving. Project cost: $6.0 million Name of Firm: Cherry Weber Associates, Philipsburg, NJ Supervisor: Doug Cherry

Route 46 Bridge and Road Rehabilitation; 1994-1997. Office Engineer/Senior Inspector. Responsibilities included maintenance and protection of traffic for multiple stages of roadway and bridge construction. Bridgework consisted of phase demolition of existing structure and the construction of P/S box beam girders. Also performed daily inspection of all construction activities including excavation, concreting pile driving and paving. Project cost: $2.8 million. Client: New Jersey Dept. of Transportation and County of Morris Road & Bridge Dept. Name of Firm: Cherry Weber Associates, Philipsburg, NJ

Worked as a clerk of works, performed inspection, coordinated daily construction activities for three bridges, and submitted daily reports and monthly pay estimates.

Reza Saba

Senior Inspector

New Jersey Turnpike, Exit 14 Toll Plaza Widening; 1992-1994. Resident Manager. This project included six miles of roadway, widening, night milling, boring, piezometer monitoring, pile driving, sheeting, tunneling and toll plaza construction. The project also included removal and disposal of 16,000 plus cy of contaminated (ID27) and hazardous soil. Responsibilities included the coordinating of daily lane closings, documentation of daily records, initiating and processing items in dispute. Project cost: $13 million Name of Firm: Thacker Engineering Supervisor: John Thacker

The following projects were from 1986-1991: Name of Firm: RBA Group, Morristown, NJ Supervisor: Dick Mayo

Route 24, Madison, NJ. Chief Inspector. Project involved road construction, sound barrier walls and various utility work. Responsibilities included supervision of six inspectors and preparing daily reports and quantities. Project cost: $7.5 million

Church Lane and Dutch Road. Bridge and road construction, water and gas main construction. Responsibilities included managing all aspects of construction on both structures. Prepared daily quantity estimates for items in progress. Project cost: $5.5 million

Davidson Mill and Deans Road. Project involved the inspection of the placement of structural steel, concrete deck placement of the bridges overpassing the New Jersey Turnpike. Responsibilities also included enforcing safety regulations. Project cost: $7.7 million

Hardenburg Bridge. Chief construction inspector in charge of structural steel placement and concrete structures. Prepared item summary sheets and monthly quantity report.

North Branch and Ireland Brook Bridges on Mainline Turnpike over Wetlands. Inspector. Project involved the inspection of the precast concrete beam, piling driving operation and all other aspects of bridge construction. Project cost: $7 million

Finderne Avenue. Senior Inspector. Project involved overseeing the demolition and construction of the bridge over NJ Transit Railway, construction across temporary bridge. Also prepared quantity reports and completed as-built books. Project cost: $4.3 million

Earl Weapon Station, Turnkey Operation, 250 Units, Condominiums; Project involved a 50 unit condominium rehabilitation, turnkey operation. Responsibilities included supervising and coordinating construction activities among different trades, supervised and coordinated between trades, the interior demolition and reconstruction of these units. Project cost: $13 million

Driscoll Bridge, Garden State Parkway, NJ. This project involved substructure rehabilitation of the bridge. Responsibilities included sounding and demolition of spalled concrete, inspecting gunite application and rebar placement. Prepared quantity estimates and as-built drawings.

Garden State Art Center, NJ; This project involved the rehabilitation and construction of atrium buildings and concrete hall, supervised work in progress, coordinated and managed changes between architect, contractor and the client.

Worked with another firm, surveying, estimating, plan review and field inspection of residential single-family units and commercial buildings under construction. 1983-1986 Name of Firm: Township of Old Bridge, Engineering Dept.

Jeffrey Mando
Inspector

Professional Profile
Mr. Mando possesses the following experience.

Project Experience
2006-2010 Port Authority On-Call Construction Management Services - Port Authority Bus Terminal - Structural Modifications, BT 254.220, New York, NY; 8/05-Present. Inspector for this $50-million project that provides the required strengthening to maintain structural integrity of the Port Authority Bus Terminal in New York City during a seismic event. Structural modifications (seismic retrofit) will strengthen the bus terminal building structures with shear walls, bracing, and truss members to resist moderate seismic loads in the north south and the east west directions for the south wing and expansion joint bracing for the north wing of the Port Authority Bus Terminal. It also requires relocation of the existing electrical, electronic communication, HVAC, plumbing and fire protection system in order to perform the work. Mr. Mando's responsibilities include quality assurance inspection of all construction activities including demolition of existing structures, installation of structural steel bracing, and fin trusses; surveys, removal, relocation, and installation of mechanical and electrical utilities; architectural finishes to interior, exterior shear walls, bus gates, concourse areas, and tenant spaces; coordination and scheduling of work between contractor, facility (Port Authority Bus Terminal), and tenant spaces; MPT on the bus ramps, inside the facility roadways, bus gates, and surrounding streets; performing job site safety inspections for work sites and personal protective equipment; generating estimates for extra work being performed by contractor and daily narratives; and administrative work at field office filing, shop drawings, and maintaining all aspects of maintaining an efficient office. Client: Port Authority of New York/New Jersey

2006-2010 Port Authority On-Call Construction Management Services - Port Authority Bus Terminal - Structural Modifications, NY Priority Repairs, LT 521, New York, NY; 9/09-Present. Inspector for this $1-million project which consists of providing for rehabilitation of concrete and steel elements at the LT Bus Ramps (including replacement of unsound concrete at columns, beams, deck slabs and bearing pedestals), replacement of deteriorated anchor bolts and nuts, installation of steel plates, angles and bolts to reinforce steel bearing pedestals and girders and installation of wire mesh safety netting. Mr. Mando's responsibilities include quality assurance inspection of all construction activities including demolition of existing structures; installation of steel; installation of mechanical utilities; coordination and scheduling of work between contractors and the facilities (PABT/LT); Maintenance and Protection of Traffic (MPT) on the bus ramps and city streets; performing job safety inspections and personal protective equipment; generating estimates for extra work being performed by contractor; daily narratives including administrative work filing, shop drawings and maintaining all aspects of an efficient office. Client: Port Authority of New York/New Jersey

Port Authority Bus Terminal Ramps Reconstruction, New York, NY; 6/02-8/05. Inspector. This $50-million project focused on the rebuilding and rehabilitation of the ramps connecting the Lincoln Tunnel with the Port Authority Bus Terminal. Responsibilities include quality assurance inspection of all construction activities including demolition of existing structures, replacement of sub- and superstructure

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
ACI Concrete Field Technician - Grade I/NY
ACI Concrete Construction Special Inspector (Pending)

Education
AA/2005/Liberal Arts

Course Work
10-Hour OSHA Training Course
New York City Dept. of Buildings 4-Hour Scaffold Training under Local Law 52
10-Hour OSHA Training Course
OSHA Training Course
American Welding Society - Fundamentals of Welding Quality Management
NYCTA - Track Safety

Total Years Experience 13

elements. Includes inspection of removal and installation of the savaloid system; demolition of existing roadway bus ramp and installation of pre-cast panels; installation of mechanical snow melting system and roadway insulation; shear stud installation; demolition and replacement of sign gantry's and structure; installation of temporary roadway lighting; guardrail installation; installation of steel column protection; cast-in-place concrete for deck replacement; spall repair for roadway and parapet walls; replacement of parapet walls along roadways; placement and curing of latex modified concrete; installation of structural steel for seismic retrofit bracing inside the bus terminal; coordination of work between contractors and facility; and MPT on the bus ramps and surrounding streets. Client: Port Authority of New York/New Jersey

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 5/01-12/02. Inspector. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included removal and installation of structural steel cantilever floorbeams, lateral bracing, orthotropic steel deck panels, concrete filled steel grid deck, inspection of shielded metal arc welding and submerged arc welding, inspection of neoprene cable wrap maintenance, inspection of Sterling Lloyd waterproofing membrane system, punch list surveys, condition surveys of under deck flexible shield system. Work tasks also included writing inspector's daily reports and measurement and/or calculation of contract item quantities. Client: New York City Dept. of Transportation

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, BRC1568C, New York, NY; 10/97-2/01. Inspector. Responsible for maintaining engineers daily diary and shop drawing file. Also was responsible for assisting the office engineer in all aspects of maintaining accurate office records. In addition, on this $124-million project he has performed inspection of the truss bearing replacement operation, including truss jacking, removal and replacement of structural steel bearing assemblies and concrete pedestals as well as various other structural steel installation operations. He has participated in all phases of concrete testing and placement. Mr. Mando has also assisted in the inspection and quality control of the installation of granite stones and lintels at the Manhattan Colonnade and has assisted in the environmental operations related to monitoring and collection of data from TSP units. Assisted in asphalt testing and placement. Client: New York City Dept. of Transportation

Rehabilitation of Manhattan Bridge West Side Approach and Suspended Spans, BRC156E, New York, NY; 7/97-10/97. Administrative Assistant. Responsibilities included various office activities such as typing, filing, answering phones and assisting in all aspects of maintaining an efficient office. Client: New York City Dept. of Transportation

Gabriel Lageyre
Senior Inspector

Professional Profile
Mr. Lageyre is a senior inspector with the following experience.

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
NICET IV (Highway Construction)/NY
AWS Certified Welding Inspector/NY
ACI Concrete Field Testing Technician - Grade I

Education
MS/1986/Mechanical Engineering

Course Work
10-Hour OSHA Training Course

Total Years Experience 12

Project Experience

Bronx-Whitestone Bridge Bronx/Queens Approach, BW-89/WBM-342, Bronx, NY; 6/09-Present. Senior Inspector. This $192-million project involves the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work will include the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure there will be massive concrete placements for concrete footings and piers. For the duration of the project, traffic on the bridge must be maintained with five lanes open to traffic. During the staged construction work will be staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting.

Other work items on the project include new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure. Mr. Lageyre's responsibilities on the project include inspection of Bronx Approach steel girders and Queens Approach emergency steel repairs which includes erection, installation and welding of new structural steel. Responsibilities include, but are not limited to, visual inspection of new welding productions, bolting connections and testing of field-installed High Strength Bolts, reading and interpretation of blue prints and specifications, payment calculations and interaction with contractor's and consulting engineers in finding solutions to the new field condition changes during the mentioned operations. He observes the on-site safety and submits the daily inspection report and maintains direct contact with the resident engineer and staff. Client: Triborough Bridge and Tunnel Authority

Replacement of Brooklyn Bridge Travelers, Contract #BRC270TA, Boroughs of Manhattan and Brooklyn, NY; 8/07-6/09. Senior Inspector.This project included the replacement of four movable maintenance platforms (travelers) with a state-of-the-art mechanical driven traveler system, the replacement of the traveler rails, hangers and connections, localized lead paint removal, and the replacement of the electrical system. Responsibilities included inspection of temporary platform installation, MPT, lead paint removal, structural steel removal, painting inspection, high strength fastener tensioning tests, and new structural steel erection and installation. Also involved reading and understanding of blue prints and specifications and their application and payment computation of contract work. Client: New York City Dept. of Transportation

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 2003-8/07. Senior Inspector. REI services for reconstruction of miscellaneous rehabilitation on the main bridge. This project is touted as the final major construction contract to rehabilitate this transportation workhorse. Responsibilities on this $260-million project included the overview of the total coating replacement which included lead paint removal by abrasive blasting, application of a four-coat paint system, and erection of a class 1A containment system; the overview of the stiffening of the intermediate towers which support the end span of the bridge; main and intermediate tower steel replacement which includes bracing, stiffeners and new reinforcing steel

erection; bottom chord rehabilitation at end span of main bridge, including the removal of the existing bottom flange of chord steel and replacing with new reinforcement; field testing as well as interpretation and application to the field drawing resolution; rehabilitation of stiffening truss top chord; demolition of existing traveler rail system; tensioning of main cable band bolts; wire rope suspenders replacement and adjustment; removal and replacement of main cable neoprene wrapping system; and structural concrete of column fifth pedestal of Manhattan Main Tower. Mr. Lageyre was also responsible for supporting and supervising the Maintenance and Protection of Traffic (MPT) on the Bridge and local areas during the construction works for the rehabilitation of the main span bridge. Client: New York City Dept. of Transportation

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 2003. Senior Inspector. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Client: New York City Dept. of Transportation

Reconstruction of Williamsburg Bridge, Contract 7, North Outer and Inner Roadways, New York, NY; 2001-2003. Construction Inspector. Project included structural steel and orthotropic deck remodelation including asphalt, sandblasting, painting, welding inspection, field testing as well as interpretation and application to the field of drawings resolution. Client: New York City Dept. of Transportation

Continental Airline Global Gateway Project at Newark International Airport, Terminal C, Newark, NJ; 1998-2001. Construction inspector responsible for extension of landing area; monorail; four new buildings; airside corridor; and roadway to parking lot. Client: Port Authority of NY & NJ

While with another firm, Mr. Lageyre was responsible for visual inspection of weld and stability of structural steel specifying the appropriate non-destructive examination N.D.E. methods; 1998-2001.Other experience includes:

- Fabrication shop for welding restoration of components in power plants (Havana, Cuba)
- Welding engineer - design and operation of welding lines for manufacturing of welded products and repairing of welded parts of power plant
- Welding material control and assurance responsibility according to applicable standards
- Nuclear Power Plant (Cienfuegos, Cuba)
- Design of welded construction of power generation
- Facilities and application of welding facilities that fabricate welded products. This includes ferrous and non-ferrous materials, carbon steel, alloy and stainless steel

Plato Moschides
Inspector

Professional Profile
Mr. Moschides has several years of experience in Transportation Engineering Technology, specializing in structural steel, structural steel painting, composite structures, concrete and asphalt paving, HVAC and repairs and marine applications. He has extensive experience in civil, structural, electrical, electronics, mechanical and architectural disciplines as well as egress and computer-based systems. He works with and interprets contract drawings and specifications; oversees construction and ensures compliance with contract requirements. He routinely prepares net cost estimates, conducts pre-construction and progress meetings and maintains computer-based record-keeping and data retrieval system.

Mr. Moschides possesses additional skills in Computer and Information Sciences include knowledge of software based access control systems, associated hardware and electronics.

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
ACI - Concrete Construction Technology/NY
ACI Special Inspector - Grade 2
NICET IV
MS Certified Prof, Admin Windows 2000 Server
MS Certified Prof, Admin Windows 2000 Prof

Education
BS/2009/Computer Science

Course Work
10-Hour OSHA Training Course
KTA-TATOR, Corrosion Control, Protective Coatings, Deleading
NYSDOT, Earthwork Inspectors School and Traffic Control Training
Confined Spaces Operations

Total Years Experience 23

Project Experience

2006-2010 Port Authority On-Call Construction Management Services - Staten Island Bridges Rehabilitation, Staten Island, NY; 11/02-Present. Inspector. The project involves construction management services for structural, civil, mechanical, electrical, and bridge painting services at various bridges. Mr. Moschides' responsibilities include:

Outerbridge Crossing – Bearing Replacements: Removal of existing truss and girder, steel rocker and slider bearings and replacement with new elastomeric and multi-rotational pot bearings. Completion Date: 2003

Bayonne Bridge – New Jersey Abutment Rehabilitation: Deep demolition of all vertical faces and abutment top, new steel reinforcement and concrete placement. Marine applications (temporary cellular cofferdam construction and dredging), structural lifting operations, deep and shallow spall repairs and crack injection, etc. Completion Date: 2005

Outerbridge Crossing – Highway-Speed EZ-Pass: New plaza traffic reconfiguration; all civil structural and electrical removals and installations to facilitate new highway-speed electronic toll collection system. Completion Date: 2007

Goethals Bridge and Outerbridge Crossing – Rehabilitation of Structural Steel and Pavements: Structural steel and concrete repairs, sidewalk replacement, mill and resurface all approaches and departures, etc.

Staten Island Bridges – Central Access Door Control System: Deployment of *Lenel*™ software based Central Access Door Control Systems at Goethals, Bayonne Bridges and Outerbridge Crossing. Work included installation of (130) new fail-secure doors, new PTZ CCTV/Motion detection systems, new electrical and electronics hardware, uninterruptible power supplies, intra-facility networking of new software based access control systems, proximity badge readers, badge creation software with intra-facility replication of assigned access privileges using the Windows 2000™ operating system, *Legato*™ RAID 5 redundancy. Installation of new electrical conduit and wire runs, access control panels, dual-reader interfaces; integration into PAWANET mesh topology. Review all final documentation: software

manuals, operations & maintenance manuals, etc. Oversee 30-day operational testing. Coordinated weekly progress meetings and conducted final inspection.

Staten Island Bridges – Rehabilitation of Lighting Feeds and CCTV Systems: Goethals and Bayonne Bridges, and Outerbridge Crossing; installation of new bridge lighting power feeds into new raceways, new enclosures, circuitry, and wiring, megohmmeter testing. New aviation lights, navigation lights, radar beacons, foghorns, and associated feeds and raceways.

Staten Island Bridges – Upgrade Emergency Egress Signage and Lighting: Goethals and Bayonne Bridges, and Outerbridge Crossing; all electrical, structural, architectural, and civil elements to upgrade of all emergency egress signage and lighting within Administration Buildings and hollow abutments. Work included construction of three new egress corridors with fireproof ceilings, walls and doors, facade reconstruction, replacement of overhead garage door.

Staten Island Bridges – Door Accessories: Upgrades to 48 hollow-metal doors including all accessories, within Administration Buildings and hollow abutments of Goethals and Bayonne Bridges, and Outerbridge Crossing.

Goethals Bridge – Replacement of Condenser Water Strainers and Modifications to Chemical Feed System: Replace existing strainers with new duplex strainers, including all return and supply piping; modify existing chemical feed supply piping; perform hydrostatic testing.

Bayonne Bridge – Emergency Electrical Repairs: Install new raceway and wiring for destroyed backup power feed at Administration building; megohmmeter testing.

Staten Island Bridges – Light Pole and Light Pole Support Repairs: All electrical, civil, and structural elements required to repair (23) light pole, light pole foundation, and light pole support locations at Goethals and Bayonne Bridges, and Outerbridge Crossing; including asbestos abatement.

***Goethals Bridge – HVAC Rehabilitation and Installation of Fire Alarm and Fire Suppression Systems* – Lead Senior Engineering Technician:** All mechanical, electrical, electronics, computer-based systems, fire-protection, architectural, structural, civil, plumbing, and environmental elements required to replace the existing HVAC, fire alarm, and fire suppression systems throughout the Goethals Bridge Administration and Maintenance buildings.

Client: Port Authority of New York/New Jersey

Outerbridge Crossing, Staten Island, NY, and Perth Amboy, NJ; 2001-2002. Senior Engineering Technician. Performed a senior role in the rehabilitation of the Outerbridge Crossing. Inspection of structural steel removals and replacement, concrete and asphalt repairs and paving, drainage structure repairs and replacement, structural steel painting, etc.

14 Interchange Structures, Various Locations; 1999-2001. Senior Engineering Technician. Performed a senior role in the new construction, reconstruction, rehabilitation and replacement on 14 interchange structures on Interstates 95, 278, 295, and 695. Inspection of structural steel, concrete, asphalt, abatements, painting, etc., throughout all phases. Supervised a staff of inspectors.

12 Bridges and Highway Improvements, Staten Island, NY; 1995-1999. Senior Engineering Technician. Performed inspection on 12 bridges and highway improvements and repairs on Staten Island, NY. Work elements included concrete, asphalt, pier protection, guiderail, median barrier and landscape improvements. Supervised a staff of inspectors.

While with another firm, acted as resident engineer on various NYC Dept. of Parks projects.

12 Bridge Rehabilitation Projects, Various Locations; 1993-1995. Senior Engineering Technician. Inspection of 12 bridge rehabilitations on Interstates 495, 295, and 678. Inspection of structural steel, resurfacing of 15 miles on Interstate 495. Lead abatement and structural steel painting on I-678. Client: New York State Dept. of Transportation

Ken Leo
Inspector

Professional Profile
Mr. Leo is an inspector with experience on New York City roadways and bridge rehabilitation projects.

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
NICET II/NY
ACI Concrete Field Technician - Grade I/NY

Course Work
10-Hour OSHA Training Course
American Welding Society - Fundamentals of Welding Quality Management

Total Years Experience 12

Project Experience
2006-2010 Port Authority On-Call Construction Management Services - Port Authority Bus Terminal - Structural Modifications, New York, NY; 3/09-Present. Inspector. This $50-million project is to provide the required strengthening to maintain structural integrity of the Port Authority Bus Terminal in New York City during a seismic event. Responsible for removal/relocation of domestic water, fire protection, steam and drain systems; air/ hydrostatiac testing of domestic water, fire protection, steam and drain systems; installation of bolsters, transfer connections, cross braces, fir truss, chevron braces for seismic retrofit; removal/relocation of electrical conduits; hydrofreezing existing sprinkler piping and fire stand pipe prior to relocation in preparation of steel modifications; application of shotcrete; placement of terrazzo floor; installation of expansion joints; application of waterproofing membrane; installation of barrier gates; and sounding concrete. Client: Port Authority of New York & New Jersey

2006-2010 Port Authority On-Call Construction Management Services - Port Authority Bus Terminal Ramps Reconstruction, New York, NY; 6/02-3/09. Inspector. This $50-million project focuses on the rebuilding and rehabilitation of the ramps connecting the Lincoln Tunnel with the Port Authority Bus Terminal. Responsibilities included quality assurance inspection of all construction activities including demolition of existing structures, replacement of sub- and superstructure elements. His responsibilities also included removal of roadway deck; installation of pre-cast roadway deck; placement of latex-modified concrete; installation of shear studs; installation of parapet walls and guide rails; replacement and rehabilitation of roadway deck heating system; installation of debris/vertical shielding; installation of concrete masonry unit; application of shotcrete; application of fire proofing membrane; demolition of concrete masonry unit facade; checking alignment and installation of multi rotational bearings; directing x-ray technician to check T.I.G. (Tungsten Inner Gas) weld on stainless steel pipe connection at various locations and submitting results to A.R.E. and directing contractor to repair deficiencies; maintenance of traffic; and installation of conduit and conductors. He also inspected installation of granite facade and titanium/stainless steel hybrid facade; removal/installation of underdeck lighting; removal/relocation of domestic water, fire protection, steam and drain systems; air and hydrostatic testing of domestic water, fire protection, steam and drain systems; installation of bolsters, transfer connections and cross braces for seismic retrofit. Client: Port Authority of New York/New Jersey

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 1/01-6/02. Inspector. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included orthotropic deck fit-up and installation forsaw; maintaining temporary protective shielding system; removal of floorbeam, deck, railing, stringers; installation of vertical protective netting, installation of

barriers, also made steel payments; floorbeam, stringer, and concrete grid deck removal on main span; N.O.R. orthotropic deck shot blasting, Stirling Lloyd waterproofing membrane application, Trinidad asphalt placement, monitoring shrinkage and warpage at orthotropic deck submerged arc welded joints; paint application of new steel connections; existing floorbeam web and lateral brace connections; north truss bottom chord repairs; testing concrete with slump and air tests; and torque wrench calibration and torquing. Client: New York City Dept. of Transportation

Worked with another firm, performed quantity takeoffs for bids, prepared invoices and purchase orders, estimated and provided materials daily, had hands-on experience with plumbing, painting and sheetrock. Also has the ability to read/interpret blueprints. 3/98-1/01.

David Cunningham
Inspector

Professional Profile
Mr. Cunningham is a construction inspector with eight years experience working on bridge and structural rehabilitation/ reconstruction projects.

Project Experience
2005-2010 Port Authority On-Call Construction Management Services - Staten Island Bridges Rehabilitation, Staten Island, NY; 4/05-Present. Inspector. The project involves construction inspection for structural, civil, mechanical, electrical, and bridge painting services for the three Staten Island Bridges operated by the Port Authority of New York/New Jersey. Mr. Cunningham's responsibilities include the inspection services for a range of construction operations (see specific assignments listed below for operation details). Mr. Cunningham assured each operation was supervised and executed in direct conformance to applicable specifications (and approved drawings) and maintained large portions of the office engineering for each contract respectively. Responsibilities also included communicating with all federal, state and local agencies involved during construction operations (PA administrators, Coast Guard, OSHA, Army Core of Engineers, DEP, DEC, PA police, NJ state police, NYPD, FDNY, NJ Turnpike Authority, Conrail, NJ Transit, NYS DOT, NJ DOT, PSE&G, National Grid, local community boards etc.) Specific assignments include:

Fire Hydrant Upgrade, New York Side of Bayonne Bridge, Goethals Bridge and Outerbridge Crossing, Contract #AK-183; 4/09-Present. Project involves performing large amounts of trench construction for new water mains. Mr. Cunningham assisted the Port Authority materials lab with field sampling of soils and aggregates, and field testing materials to determine its properties. Once trench excavated and sub-grades properly compacted, contractor then place ¾" clean stone for pipe bedding. Contractor then properly installed over 2,000 lin ft of new pipe sections performing various connection types (victaulic, mechanical and bell). Once pipes secured in proper fashion, concrete thrust blocks were poured in place for pressure resistance at elbows and hydrant base. This network of trenches required extensive utility crossings in very sensitive areas. All crossings performed using specific details and instruction provided as per specifications (utility mark-outs refreshed on daily basis). Contractor also removed and replaced any roadway pavement, asphalt and sidewalks which were disrupted during water main installation. Landscaping damaged during construction restored to existing condition (hydro seeding).Contractor performed various types of lane closures to execute this work. Responsibilities included all day-to-day inspections of operations being performed (civil and structural); document control of project including payment applications, RFIs, transmittals, and submittals; performing controlled inspection for specified operations; producing change orders; calculating estimates of work; handling all organization and scheduling of work with facility administration; and creating progress meeting agendas and recording minutes.

Homeland Security Project, Contract #MF 100.509; 8/08-Present. This project involves the structural hardening of vital bridge areas (steel). Contractor also removed existing cofferdam from waterway below bridge and constructed a Security barrier around bridge anchorage. This barrier consisted of concrete filled pipe pilings (secured to bedrock) as well as reinforced whaler system to restrict access to Bridge form waterfront. Mr. Cunningham provided inspection services for structural steel operations and water work.

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
NICET III/NY
ACI - Concrete Field Testing Technician - Grade I/NY
ACI Special Inspector - Grade 2
Confined Space Awareness Certification
NETTCP - Soils & Aggregate Inspector Certification/NY
ACI - Concrete Construction Technology/NY

Course Work
10-Hour OSHA Training Course
Q/C Resource Certification-US Nuclear Regulatory Commission and the Agreement States

Total Years Experience 9

David Cunningham
Inspector

On-Call Contract to Remediate Red Flag Repairs for Structural Members, Contract # MF 208.907 W.O. # 1-4; 4/08-Present. This is an on-call contract to remediate red flag repairs for structural members. Contract included structural steel repairs to various locations of Bayonne Bridge. Contractor also performed temporary shoring of bridge and jacking of bridge to replace bridge bearings on NY approach (pier 10N). Contractor replaced deteriorated access ladders and catwalks below bridge on NY approach. This contract required numerous lane closure patterns to properly execute work. Responsibilities included all day-to-day inspections of operations being performed (civil and structural); document control of project including payment applications, RFIs, transmittals, and submittals; performing controlled inspection for specified operations; producing change orders; calculating estimates of work; handling all organization and scheduling of work with facility administration; and creating progress meeting agendas and recording minutes.

Emergency Back-Up Generators, Contract #AK 166A; 4/08-6/09. Contract included installation of emergency power distribution systems at Bayonne Bridge, Goethals Bridge and Outerbridge Crossing. Contractor furnished and installed electrical Switch Gear equipment as well as all conduit and wiring upgrades required for system to function. Contractor also performed installation of concrete pads and logistical connections for stand by emergency generators. Responsibilities included all day-to-day inspections of operations being performed (civil and electrical); document control of project including payment application, RFIs, transmittals, and submittals; performing controlled inspection for specified operations; producing change orders; calculating estimates of work; handling all organization and scheduling of work with facility administration; and creating progress meeting agendas and recording minutes.

Maintenance of Structures – Goethals Bridge, Outerbridge Crossing and Bayonne Bridge, Contract #AK-181; 1/07-1/10. Project involved performing various emergency and non-emergency civil repair operations at all three Port Authority Bridges in Staten Island. Work included concrete deck repair (full-depth and partial depth), concrete slab repair (full-depth and partial-depth), sub-grading remediation's, drainage repairs, asphalt patch repairs, asphalt resurfacing, sidewalk installation, curb repair, barrier wall repair, road striping and spall repairs of vertical members. Responsibilities included all day-to-day inspections of operations being performed (civil and structural); document control of project including payment application, RFIs, transmittals, and submittals; performing controlled inspection for specified operations; producing change orders; calculating estimates of work; handling all organization and scheduling of work with facility administration; and creating progress meeting agendas and recording minutes. Provided detailed surveys of all bridges to create and issue work order for contractor (includes sounding out decks, marking areas for repair and estimating value of work based on agreed item pricing. Performed all day-to-day work inspections throughout the duration of the contract.

Upgrade of Traffic Control Devices, Contract #MF 205.907; 6/07-9/08. Contract included removal and replacement of existing guardrail at various locations of the Goethals Bridge. Contractor removed and replaced various types of rail including deck mounted rail, soil bearing rail, post drive rail, rub rail and barrier mounted transitional rail. Contractor also performed under deck concrete repairs at bridge mounted guard rail locations. Contractor installed new signage at NJ side of bridge. Contract required cooperation between various bordering agencies including New Jersey Turnpike, Contrail and New Jersey Dept. of Transportation. Responsibilities included all day-to-day inspections of operations being performed (civil and structural); document control of project including payment applications, RFIs, transmittals, and submittals; performing controlled inspection for specified operations; producing change orders; calculating estimates of work; handling all organization and scheduling of work with facility administration; and creating progress meeting agendas and recording minutes.

Client: Port Authority of New York/New Jersey

Fernando Flores
Inspector

Professional Profile
Mr. Flores is an inspector with the following experience in the inspection of bridge reconstruction projects.

Proposed Project Assignment
Construction Inspector - Structural

Registration/Certifications
NICET IV/NY
SSPC - C-3 Supervisor/Competent Person
NACE Coatings Inspector Level 1
ACI Concrete Field Technician - Grade I/NY

Course Work
10-Hour OSHA Training Course
Keys to Durable Concrete Course - Exterior Flatwork
NYSDOT - Traffic Control Training Seminar
The Joint Urban Manpower Program - Construction Inspectors

Total Years Experience 12

Project Experience

Manhattan Bridge Rehabilitation of Cables and Suspenders, Contract 14, #BRC156R, New York, NY; 1/10-Present. Inspector. This $149-million project involves the unwrapping and rewrapping of cables; replacement of suspenders; replacement of necklace lighting messenger cables and cable hand ropes; installation of new access platforms to existing tower platforms; reversal of lower roadway and operation of HOV lane and replacement of multi-rotational bearings at the Towers; replacement f light poles and luminaries on South upper roadway; replacement of lane control radar on South upper roadway; and retrofit of track stringers and diaphragm connections and other miscellaneous work. Mr. Flores' responsibilities include the inspection and oversite of wire rope suspender removal and replacement; main cable rehabilitation such as unwrapping, wire repairs, compaction and rewrapping; coordination and communication with the contractor who is performing daily traffic lane changes such as traffic flow reversals and HOV; writing daily reports which includes estimates for completed work; surface preparation and painting of structural connections; tensioning and recording of cable band bolts torque; removal and replacement of main cable handrope and necklace lighting systems; installation of temporary work platforms along the main cables and under the roadways; and reinforcement of track stringers. Client: New York City Dept. of Transportation

Verrazano-Narrows Bridge Rehabilitation of Structural Steel Repairs, VN-32, New York, NY; 4/09-12/09. Inspector. Project involves construction administration, on-site inspection, and testing and support services. Includes repair of deteriorated subfloorbeams, stringers, stiffener/connection plates, cracked/broken missing welded connection plates, reinforce deteriorated stringer top flange and remove and replace deteriorated bolts, rivets, and drainage piping. Mr. Flores' responsibilities included conducting surveys of the contractor's MPT activities, observing proper placement of temporary traffic control devices, channelization equipment and required signage maintained by the contractor. Client: Triborough Bridge and Tunnel Authority

Bronx-Whitestone Bridge Cable/Suspender Rope Rehabilitation, BW-85/86, Bronx, NY; 5/08-4/09. Inspector. Construction management and inspection services for coating removal and application and cable/suspender rehabilitation for Project BW-85/86, Select Cable Panel Opening/ Suspender Rope Removal and Replacement and Painting at the Bronx-Whitestone Bridge. Mr. Flores was responsible for the inspection of the tower temporary scaffold system. Client: Triborough Bridge and Tunnel Authority

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 2/04-5/08. Inspector on this $150-million project involving the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge in suspended and approach spans; and repair of flagged conditions. Responsible for the inspection of

anchorage chamber concrete floor replacement, grout injection for wall crack sealing and vertical and overhead wall patch repairs. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; 2/01-2/05. Inspector for this $175-million project involving rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Responsible for the inspection of and removal/replacement of subway stringers and floorbeams, north upper roadway replacement, truss bearing replacement and truss repairs. Client: New York City Dept. of Transportation

Manhattan Bridge Reconstruction, Painting and Interim Rehabilitation, Contract #BRC1568C, New York, NY; 1/98-10/01. Inspector. This $124-million project involved the rehabilitation of the Manhattan plaza area, Manhattan Arch and Colonnade; replacement of the structural steel stringer and floorbeam support system for the west side subway tracks; replacement of truss bearings on top of the piers of both approach spans; rehabilitation of eyebars anchoring one of the main suspension cables; and removal of existing paint from the entire west side, both towers and two main cables, and replacing with new coating. Responsibilities included the inspection of subway floorbeams, stringers, track removal and installation, lead paint containment and removal, bridge jacking, concrete testing, multirotational truss bearing replacement, grid deck installation, concrete and asphalt placement, concrete and steel barrier. Client: New York City Dept. of Transportation

LPE

Nicholas Russo

PROFESSIONAL SUMMARY:

With over 49 years of experience in multiple aspects of the Construction Industry, and highly developed communication skills, major projects have been successfully completed on or before schedule with award winning results.

NOTABLE QUALIFICATIONS:

- Proven Construction/Management Ability
- Surveyor
- Enhanced Communication Skills
- Extensive Knowledge of all phases of Building Construction and Renovation.

EXPERIENCE:

Manager-Tenant Alteration Projects, Resident Engineer's Office, LaGuardia Airport 10/99- Present
LPE Enterprises / Port Authority of NY & NJ

- Monitor and coordinate all Tenant related work.
- Coordinate and conduct Pre - Construction and Final Inspection meeting's.
- Maintain Progress Reports on Tenant projects.
- Act as Liaison between Tenant and P.A.

Construction Inspector - Resident Engineer's Office, LaGuardia Airport, NY 5/88 - 10/99
Lehrer McGovern Bovis, / Port Authority Of New York/New Jersey,

Aviation

- Inspect and coordinate all renovation and new construction work on fields, runways taxiways, gates, etc.
- Interface with airport operations, control tower, contractors and FAA on all aspects of projects.
- Ensure compliance with PANYNJ specifications and code requirements.

Streetside

- Inspect rehabilitation and construction projects involving roadwork, traffic and parking areas, support buildings, maintenance buildings and areas, renovations to terminals, etc.
- Project manager, coordinate work of Architect, Engineers, FAA inspectors, Airline personnel and all trades.

***Construction Manager Citibank*, 10/85 - 7/87**
450 West 33rd Street, New York, N.Y. 10001

- Managed activities of staff of Project Coordinators who were at all times in the process of coordinating multiple renovations of CITIBANK properties. Performed report fulfillment, time management, budget control, and accountability requirements.
- Provided client interface with planning, development, progress reporting and trouble-shooting.
- Analyzed and created cost breakdown data for ventures valued up to and in excess of $1,000,000.00.
- Implemented Bid Packages and Initiated Bid Awards.

ASSIGNMENT

Senior Civil/Structural Inspector

EDUCATION

BSCE, International Harvardian University, 1980
MSCE, New Jersey Institute of Technology, 1989

REGISTRATION

NICET IV - Certified (Transportation and Highways)
OSHA 10 Hour Certified
ACI Level I Course (March, 2009), Structural Steel and Bolting Course (Jan, 2010)

REPRESENTATIVE AND PERTINENT EXPERIENCE

Mr. Espinar has twenty-five years engineering experience as Senior Inspector, Senior Construction Engineer, Resident Engineer, Contract Administrator and Quality Assurance/Quality Control Auditor utilizing ISO 9000 and Port Authority of New York and New Jersey Quality Assurance Standard. In addition, he has extensive hands on experience in the Construction Management of Highways, Bridges, Tunnels, Railroads, Light Rail, and buildings, including retail malls and high rise offices.

- **Senior Inspector, Port Authority of NY and NJ, Lincoln Tunnel -** Served as inspector for ventilation building modifications including roof repairs, doors, electrical upgrades; replacement of roadway at Toll Plaza, New Jersey Portals and approach ramps for compliance with plans and specifications. Also inspected replacement of tunnel catwalk booth and tunnel grouting and sealing work. (7/05 – Present)

- **Senior Inspector, Port Authority of NY and NJ, Holland Tunnel** - Responsible for inspection of installation of new fire standpipe and associated components through both tubes and vent buildings in the Holland Tunnel during night time operations. The scope of work consisted of 4-inch diameter pipe, siamese connections, reducers to 3-inch diameter pipe, brackets, supports, tile replacement, and connections in the ventilation buildings. Witnessed pressure tests conducted by Port Authority Risk Management and New York City Fire Department. (5/04 – 6/05)

- **Senior Inspector, Port Authority of NY and NJ, Lincoln Tunnel -** Responsible for inspection of contractor's activities, quality of work, and daily reports for rehabilitation of tunnel roadway, deck, and bridge approaches on Manhattan side. Scope of work includes partial deck repair, full deck replacement, and repair of steel and retaining walls. (11/01 – 4/04)

- **Quality Assurance Engineer, Port Authority of NY and NJ, Various Projects.** Responsible for monitoring contractor's work on various capital projects and rehabilitation of existing facilities including Lincoln Tunnel, Holland Tunnel, George Washington Bridge, JFK, LaGuardia, and Newark Airports, and Port Newark.

- **Superintendent/Project Engineer, New Jersey Transit, Kearny Connection Project.** Responsible for civil construction on this $72 million railroad project, including excavation, drainage, bed, and track.

- **Lead Civil Engineer, NYCDEP, Dewatering Facility, Water Pollution Control and Decomposed Building Project at Staten Island, New York**. Lead engineer for design of $82 million facility.

- **Resident Engineer/Construction Administrator, Sear Brown Group, Route 1 & 9 in Freehold, NJ.** Roads and bridges, and Freehold Mall, $113 million construction projects.

- **Project Engineer/Resident Engineer, SGS/United States Testing, Various Projects.** Projects included 17th States Street construction of 62 story office tower structural steel building in New York City. Construction of 24 story condominium reinforced concrete building, and Bellevue Annex Hospital construction and rehabilitation projects.

- **Resident Engineer/Project Engineer, Hi-Tri Development Corp.** Assigned to Philphos/Pasar Projects in Isabel Leyte Philippines. Construction of Philippine Phosphate and Smelting Plant in South East Asia. Administrative work experience includes hiring personnel, preparing consulting engineering contract, resolution to engineering design problem, verification of payments, costing, scheduling, and construction management.

ASSIGNMENT

Senior Civil/Structural Inspector

EDUCATION

Community College of Brooklyn
Mechanics Institute of Technology

REGISTRATION

NICET IV
OSHA 10 Hour Certified
ACI Level 1 Certified, ACI Level 2 Concrete Construction Special Inspector Certified
ICC Structural Steel Bolting Certified

REPRESENTATIVE AND PERTINENT EXPERIENCE

Mr. McMahon has over 30 years of construction inspection experience in marine terminal, railroad, highway, bridge and transit projects. He is proficient at keeping daily records and reports. Mr. McMahon is familiar with Port Authority, New York City DEP, and New Jersey Turnpike systems and procedures.

- **Lead Inspector, Port Authority of NY & NJ:**
  - **Contract PN 354.042A - Berth 8 & 10 Wharf Rehab** - Demolished existing berth, installed new 18" steel pipe piles, precast & cast in place concrete panels. Installed new concrete deck, new 12" water line.
  - **Contract PN 800.219 - Berth 36/63 Reconstruction** - Demolished existing berth, remove unsuitable material, dredge area, installed new 12" steel pipe piles. Installed cast in place concrete panels & deck, new 12" water line.
  - **Contract EP 384.063 - Construction of Expressrail Tracks 9 thru 18 -** Installed (11) new rail tracks, concrete runways, high mast lighting & UG utilities.
  - **Contract EP 384.045 - Design / Construction of Tracks 1 Thru 9 -** Installed (8) new rail tracks, Concrete runways, high mast lighting & UG utilities.
  - **Contract MFP 654. 041 - Disposal of Hazard / Contaminated Material Via Work Order** - Removal of Unsuitable / Contaminated material from various work sites. (11/08 – Present)

- **Senior Inspector, Port Authority of NY and NJ, Marine Terminal Facility- Port Newark/Elizabeth, New Jersey** - Responsible for field inspection, including maintaining records of contract quantities, time and material records, coordinating with utilities and tenant requirements, negotiating invoices and change orders. Projects included new lead track for Expressrail Intermodal Facility, Tracks 9 and 10 to Maher Terminal, installation of security cameras and fencing, Bridge reconstruction involving abutment structures, asphalt pavement and relocating existing water main on bridge over Conrail; Installation of overhead flashing lights, signs and pavement markings at Port Street Railroad crossing; Installation of new 136# rail to service Sealand and Maher Terminal including new concrete crossings and railroad signals; Installation of new fire and domestic water pumping station with 2 new 1 million gallon water storage tanks and metering stations; and Repair of

existing 136# railroad siding and installation of new concrete crossing; Berth 36/63 Wharf repair, Berth 8/10 Wharf repair, North Avenue/McLester Street curve realignment, disposal of hazardous materials, and pavement/utility rehabilitation work. (9/02 – 10/08)

- **Resident Engineer/Project Manager**, **New Jersey Turnpike**, **Utility Installation** - Responsible for jacking and boring of 300 LY, of 72" dia. pipe casting under N. J. Turnpike. Maintained record of contract quantities, material certifications and coordinated all as-built drawings with client.

- **Project Manager, Metro Link -**Responsible for installation of approximately 12 miles of new railroad track between Lancaster and Palmdale, California. Managed and coordinated all construction and field inspection, coordinated construction work schedules with contractors, negotiated change orders and invoices.

- **Resident Engineer/Deputy Construction Manager, NYCDEP -** Responsible for the rehabilitation of the Fresh Kills Landfill site improvements (Final Cover and Closure) and related consent order work.

- **Resident Engineer, NYCDEP**, **Clay Capping of 40 Acres** - Maintained records for clay cap certification, storm, water management including sedimentation basins and associated structures, wetland remediation and passive gas venting systems. All work conformed to NYSDEC regulation part 360.

- **Resident Engineer, New Jersey Highway Authority -** Responsible for $10 million median barrier, guide rail and resurfacing project for Garden State Parkway between M.P. 38 to M.P. 52.

- **Resident Engineer, Garden State Parkway -** Responsible for $13 million site improvement projects at Monmouth, Vaux Hall, Forked River and Montvale service areas. Projects included installation of new service station, fuel tanks with dispensers, expansion of parking areas, drainage, lighting and utilities.

- **Resident Engineer, Garden State Parkway, Widening and Repaving between M.P. 80 to M.P. 81** - Project included replacing existing shoulders with full depth pavement, repaving entire roadway, install new guide rail, lighting and landscaping.

- **Assistant Resident Engineer, Township of Hempstead -** This $2.5 million road and drainage rehabilitation. Project included two miles of pavement reconstruction, drainage, storm sewers, retaining walls and lighting.

- **Construction Inspector/Designer, NYCTA, Bus Depots and Maintenance Shops** - Work included inspection of mechanical and electrical systems, storm sewers, drainage and lighting at eight facilities.

- **Construction Inspector/Field Designer, Shorebani Nuclear Power Plant** - Work included design and inspection of piping systems and pipe supports.

ASSIGNMENT

Senior Inspector

EDUCATION

City College School of Architecture, New York, NY
Hunter College, New York, NY

REGISTRATION

OSHA Certification – 10 Hour Training
ACI Level 1Certified, ACI Level 2 Concrete Construction Special Inspector (CCSI) Certified
ICC Structural Masonry Special Inspector

REPRESENTATIVE AND PERTINENT EXPERIENCE

Ms. Lancey has over 25 years of experience in architecture, project management, and construction of public and private facilities. Her experience includes new construction and renovation of institutional, school, retail, office, transportation, and municipal buildings. Ms. Lancey has hands-on responsibility for cost, schedule, and quality of projects through various delivery systems, including lump sum, unit cost, and time and material, as well as experience gained while working in occupied facilities. She is familiar with New York Building Codes.

- **Senior Inspector, Port Authority of NY & NJ, WTC Reconstruction** – Duties include inspection of Tower 1, Tower 3 and Tower 4. Specific assignments included foundation footings and concrete columns for Tower 1 basement levels 3 and 4 and elevator core, abatement and demolition of Vessey Street. For Towers 3 and 4, monitored blasting operations, excavation to rock, rock anchor, caisson drilling, and concrete and rebar for footings, slabs, and shear walls. (1/2008 – 6/10)

- **Construction Project Manager/Resident Engineer, New York City Department of Design and Construction, Various Projects -** Project Manager for projects through entire design and construction phase, including: firehouses, police stations, schools, community centers, libraries, and museums. Managed projects and budgets ranging from $500K to $15M. Developed project scope and supervised procurement. Reviewed design documents, shop drawings and specifications for accuracy and completion. Supervised and coordinated all work performed by architects, engineers, contractors, surveyors, and testing services. Coordinated and conducted progress meetings, maintained work schedules, reviewed payments, negotiated and authorized change order requests. Liaison between client, consultants, and various government agencies. Ensured deadlines are met and projects are within budget, and generated reports and correspondence to document the progress of the project. Specific projects included NYPD Property Clerk Storehouse-Interior and exterior restoration and security system; NYPD CRS-Rooftop parking replacement, skylights; Maspeth Town Hall-Historic interior and exterior restoration, windows, underground drainage landscaping and playgrounds, new electric, HVAC, sprinkler and security system; and Montessori Learning Center-New roof and rooftop playground, interior upgrade and HVAC. (1996 – 2007)

- **Construction Project Manager, New York City Department of General Services/Bureau of Construction, Various Projects** – Construction Project Manager for projects for a variety of City construction projects in Brooklyn, including: firehouses, libraries, DOT maintenance facility and warehouses. Managed projects and budgets ranging from $500K to $15M. Developed project scope and supervised procurement. Reviewed design documents, shop drawings and specifications for accuracy and completion. Supervised and coordinated all work performed by architects, engineers, contractors, surveyors, and testing services. Coordinated and conducted progress meetings, maintained work schedules, reviewed payments, negotiated and authorized change order requests. Liaison between

client, consultants, and various government agencies. Ensured deadlines are met and projects are within budget, and generated reports and correspondence for project tracking. Specific projects included Grand Army Plaza Library-New Administrative wing; Dept of Transportation Bridge Repair Facility-Demo and rebuild two story occupied structure; DOT Flatbush Ave Yards- Roof replacement; B 53 Warehouse-Roof replacement, windows, exterior restoration and fence; and Several packages of firehouses, which included upgrades to 3-10 building per package. (1986 – 1996)

- **Construction Inspector, New York City Department of Buildings** – Performed inspection for code violations for new construction and renovation of various buildings, including commercial, high rise, office, and residential. Developed reports to document building conditions. Also responsible for inspection of site safety and inspections leading to Certificate of Occupancy. (1981 – 1986)

VICTOR CLARKE

Tunnel Engineer

Victor has over 20 years of civil engineering and construction related experience. Additionally, he has an extensive work background in the areas of construction engineering, environmental remediation, civil engineering, and geo-technical engineering work. He also has significant experience working on infrastructure projects and has specialized in sewer collection systems as a field scientist supervisor performing site management. During his career he has developed a broad range of technical, inspection, supervisory and management skills.

Key Highlights

- ✓ Over 20 Years of Field Inspection Experience.
- ✓ Extensive Hard Rock Tunneling Work.

Education

- **AS, Environmental Science,** Miami-Dade Junior College, Miami, FL, 1988
- **BA, Commercial Advertising,** Florida International University, Miami, FL, 1984
- **Bahamas Naval Defense Force, Officers' Training,** London, England, 1980

Training & Certifications

- Welding Inspector Specialist
- Tunnel Mining Inspector & Blasting Technician
- OSHA HAZ-MAT Supervisor
- Unexploded Ordinance Training – Parsons
- CPR & First Aid Training
- Land Survey Technician – Parsons
- NPD Erosion Specialist

Software

- MS Office

Parsons Engineering Science – Chattahoochee & Nancy Creek Sewer Tunnels – Norcross, GA

Tunnel Mining Inspector

- Responsible for inspecting the construction methods used by the mining contractors at both the Chattahoochee and the Nancy Creek Tunnel mining projects.
- Coordinated daily revision the design plans during the start up development of the tunnel in preparation for the (TBM) Tunnel-Boring Machine.
- Inspected the drilling and blasting methods that were used to sink the tunnel vertical shaft as it was constructed to be fitted with a finished concrete liner, inspected the form mold set up to insure that the contractor met all job specifications and design plans which included the leveling of the form mold for the vertical mining shaft.
- Reviewed and tested the concrete for batch mix design and consistency before placement. Inspected and reviewed the drilling and blasting layout and tie in of explosives and detonation cords, reviewed explosive loading procedures before blasting for the advancement of the starter and tail tunnels for the TBM.
- Prepared and maintained daily shift reports to include photo data of underground conditions. Communicated with the Parsons design team enabling them to make corrective decisions before entering the next stage of the project's underground advancement into the tunnel.
- Met daily with project and design engineers to review the lay out of station to station design plans to meet the schedule demands and mining points while processing through difficult ground conditions.
- Conducted daily site safety meetings, prior to entering underground work site and inspected ground conditions placing straps and wired mesh overhead to ensure proper safety.

Parsons Engineering Science – Norcross, GA

UXO Geophysical Scientist

- Collected geophysical data using the EM61 Ferrous Iron Locator to locate and map buried unexploded military ordinance. Utilized hand held GPS equipment and computer software programs to locate 100" X 100" ground grid screening with ground penetrating radar and mapping systems.
- Administered surveying equipment and topography mapping to complete finds on buried anomalies found in low lying locations.
- Participated in large-scale UXO projects at Camp Bunter, North Carolina and Storm King Mountain in Newburgh, New York.

PACO Group

Gallet & Associates – Marietta, GA
Manager

- Managed daily operations of the civil engineering construction materials testing (CMT) department, writing and reviewing proposals while working with business development personnel, principal engineers, environmental managers and staff engineers.
- Consulted with new clients to secure project accounts, conducted site inspections of large and small commercial construction projects under contract, reviewed all CMT contracts, job specifications, design plans, structural and IBC (International Building Codes).
- Supervised CMT lab operations and upgrades that resulted in achieving AASHTO and CCRL certifications for concrete, soils, coarse, and fine aggregates for the first time in the history of the company.
- Reviewed lab test data, wrote and reviewed lab reports and consulted with project managers on production issues, operating cost, and construction schedules to complete projects on time.
- Managed several large hospital expansion projects in Georgia and North Florida that included multi-level parking decks with shallow to deep foundations.

Law Engineering, Kennesaw, Georgia
Environmental Supervisor

- Provided site supervision on federal environmental remediation project and performed quarterly and semi-annual ground water and soil collection data using the zone sampling test methods as part of the U.S. Government military requirements.
- Installed and developed monitoring test wells on several active military project sites in North and South Georgia.
- Managed and supervised contractors during the collection of geophysical data using the split spoon sampling test methods in the Southern United States, District of Columbia, Puerto Rico and Bermuda.
- Responsible for (CMTS) "concrete and materials testing" for various large construction projects in the City of Atlanta and Tennessee, and trained new technicians and staff geologists and engineers on environmental groundwater and soil testing and collection using EPA training test procedures.

ASI Laboratories, Norcross, Georgia
Assistant Field Services Manager

- Assisted the Field Services Manager with scheduling project assignments and supervising technicians.
- Collected monthly and quarterly ground and wastewater compliance data for clients to meet the EPA and EPD contract guidelines.
- Inspected cell liner applications at several Georgia landfill sites as well as neighboring states.
- Performed monthly and quarterly test monitoring for methane gas at several sites using the bar hole punch method, and delivered soil and monthly wastewater samples to the laboratory for analysis.

Handex Engineering – Norcross, GA
Construction Supervisor

- Supervised UST closures and removals of both British Petroleum and Amoco gas companies.
- Conducted groundwater well abandonment at closed sites, removed several 100,000 gallon USTs while directing heavy equipment operators and contractors at large remedial projects.
- Performed phase I & II site investigations, completed site walks of overgrown properties and collection of soil & ground water for compliance data.
- Oversaw demolition activities during the closure of old facilities.
- Collected quarterly and monthly groundwater at remediation sites, screened soils with an OVA (organic vapor analyzer) as well as using other scientific field equipment (Pid, ph and conductivity meters)

AJAYI E. OHORE

Structural Inspector

Mr. Ohore is an experienced construction and safety inspector who has worked on projects for the New York Metropolitan Transportation Authority (MTA), MTA Bridges and Tunnels, New York State DOT, Town of Hempstead, and Nassau County. He excels at managing contractor staff, supervising construction workers for compliance with health and safety programs, and performing the duties of a site inspector.

Key Highlights

✓ Over 10 Years Experience as a Construction Inspector

Education

- **BS, Engineering Technology,** CUNY School of Engineering, New York, NY, 1992

Certifications

- **30 Hour OSHA Safety Certificate**
- **Certified Earthwork Inspector**

Metropolitan Transportation Authority, Bridges & Tunnels – Various Projects – New York, NY

Construction Inspector

While assigned as an inspector to the Throgs Neck Bridge project responsible for the performed inspection of structural steel modification, inspection of concrete core drilling, inspection of anchorage voids concrete pour, and fiber reinforcement concrete (FRSCC).

On the Whitestone Bridge, Ajayi performed structural steel modification inspections which included; sensor mounted device, splice box, necklace lights, monitoring devices, main cable shielding, electrical relocation in the towers and catwalks underneath the towers, leveling box installation, socket box installation, suspension rope shielding installation, anchorage panel layout 1 & 2, boots, plugs, clamps, spacer keys, tubes, hoods and leg installations.

Safety Inspector

- Inspected safety construction activities that included attending daily job site health and safety meetings.
- Monitored workers for compliance with the project safety plan and enforced strict adherence with regards to the use of safety gear and equipment.
- Responsible for updating the safety plan as required by changes in city, state, OSHA, and other federal regulations.
- Verified the surveillance cameras were properly working, and enforcing that contractor staff on the bridge show their employee identification badges before proceeding to bridge.
- Ensured that construction workers used proper tie-off, respirators, eye goggles, and fire extinguishers present at every work area.
- Conducted follow up inspections of all violations to ensure that corrective action had been taken, and inspected removal of hazardous material from work site.

New York State Department of Transportation (NYSDOT) – Clearview Expressway – NY

Construction Inspector

- Inspected blasting operations, obtained vapor pressure readings, relative humidity, and measured temperature dew point.
- Monitored wet and dry paint thickness, recorded the anchor profile, and the temperature of steel.
- Prepared his reports using the NYSDOT MURK software system.
- Additional duties included supervising contractors performing painting, paint removal/disposal, verifying project site OSHA compliance, and proper traffic control procedures.

PACO Group

Town of Hempstead – Various Projects – Hempstead, NY
Engineering Department Inspector, Jericho, NY

Performed asphalt and concrete inspection work at various roads for the Town of Hempstead, Long Island. His duties included, but were not limited to supervising contractors doing truing and leveling, joint sawing and sealing, milling operations, all aspects of shoulder and trench operations, and bituminous material emulsified asphalt (shooting oil fine grading and tamping).

Hospital for Special Surgery, New York, NY
Site Safety Inspector

Responsible for patrolling the main facility and adjacent buildings from east to west for safety, securing the loading and off-loading garage deck, maintaining the proper parking and traffic flow of the facility through the use of signage, barriers, and the posting of staff, and other security measures that varied depending on the established threat level. He prepared and submitted periodic reports; made recommendations to improve security and mitigate risk.

New York State Department of Transportation (NYSDOT) & Metropolitan Transportation Authority (MTA) – NY
Construction Inspector

As a construction Inspector he worked on projects for both the NYSDOT and NYC MTA. Duties included inspection of building construction, roadway renovation and upgrade work on the Southern State Parkway in Long Island, and subway station renovation projects throughout New York City. The MTA inspection work involved structural, track, paint, and CCTV/security work.

ConEdison – Various Projects – New York, NY
Designer/Inspector

- Identified underground and overhead facilities, read DDC plans, and profile drawings for City Capital Projects.
- Designed overhead street light layouts using AutoCAD, read conduit and ductile occupancies, main and service gas plates, and has knowledge of tabulating gas cost sharing.

New York State Department of Transportation (NYSDOT) – Robert Moses Causeway Bridge – Hauppauge, NY
Construction Inspector

Inspected bridge rails, bearings, structural steel strengthening and replacement, and the refurbished wind tongue. Additional work included supervising painting operations and lead paint removal using the sling psychomotor to determine percentage of relative humidity, wet, and dry bulb temperature readings. He inspected contractor adherence to OSHA requirements including lead abatement, and fall protection compliance.

New York State Department of Transportation (NYSDOT) – Highway 27 – Hauppauge, NY
Construction Inspector

Project duties included inspecting crossing signals, railroad crossings and supervising LIRR signal and track workers. Under his leadership Ajayi supervised several contractors and their operations with regards to the placement of concrete for pavement, bridge piers and abutments. He conducted air content test, slump tests and obtained cylinders for subsequent load tests. He inspected contractor's placement of asphalt pavement, ensured that temperature, thickness and compactions corresponded with construction specifications, wrote daily reports that included project schedule and progress of work to support authorization for contractor payments. Ajayi conducted training for senior and junior technicians on inspection procedures, and how to prepare and document daily reports and payments (IDR).

INSPECTION PERSONNEL – MECHANICAL/ELECTRICAL

Jose Catarino

Senior Chief Electrical Inspector

Professional Profile
Mr. Catarino has over 25 years of highly-diversified experience as an electrical/electronic designer, project manager as well as an electrical chief inspector and supervisor. He is thoroughly familiar with all procedures and methods associated with electrical installations and testing of electrical equipment and assemblies, offering a strong solid platform on CAD/CAM Drafting, Electrical Calculations and Design, enforcing the FPNA 70(N.E.C), 72, NJ Uniform code, NY standard specifications, NY electrical, street lighting and traffic code, computer software, hardware and a backbone ability in Network.

Proposed Project Assignment
Construction Inspector - Electrical

Registration/Certifications
Licensed Electrical Contractor/NJ
Authorized Indigovision Integrator
Electrical Technician/NJ

Coursework
Fiber Optic Association (FOA), CFOT,
[redacted]
TS-LAN-500 (Hands-on Comprehensive Installation Technology Course for Mulitmode and Single-mode Optical Local Area Networks

Total Years Experience 32

Project Experience
Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 2/05-10/08. Senior chief electrical inspector on this $150-million project involving the reconstruction of street lighting on lower roadway, north upper roadway and Brooklyn Plaza parks. Responsibilities included inspection of rehabilitation of new electrical feeders at Manhattan and Brooklyn anchorages; installation of new control lane indicators on lower roadway, including the addition of PLC's at master control cabinet, and the integration of lane indicators with existing ITS to be monitored at Long Island City (T.M.C.) by fiber optical cables; and maintaining seven existing Variable Message Signs, cameras and radars installed on previous ITS contract. He provided technical support by troubleshooting the Intelligent Traffic System to NYCDOT personnel at Traffic Management Center and acted as network administrator for NYCDOT/ GPI Manhattan Bridge field office. Client: New York City Dept. of Transportation

Manhattan Bridge, #BRC1568E, #BRC1568C, #BRC156C, New York, NY; 1999-2005. Electrical Designer Senior Chief Electrical Inspector. Project overview on a $10-million electrical contract. Monitored all electrical installations and electrical work to comply with contract specifications, NY standard specifications, NYC Electrical Code, NYC Street Lighting and Traffic Code, N.E.C (NFPA 70) and NFPA 72. Responsible for all field-engineering changes, Variable Message system programming, monitoring and synchronizing design, fabrication and installation of Lane control Indicators (Traffic signal System), Dehumidification system with monitor alarm panel installed at Anchorages, also oversaw and inspect electrical installation of ITS (Intelligent Transportation System) including installation, calibration of traffic radars, traffic cameras and VMS (Variable Message System); installation testing and acceptance, after manufacture test and stand alone, all connected by fiber optical cable (inspect and test OTDR on all fusion spliced fibers) to a T.M.C (NY Traffic Management center- Inspect and test Monitors, Server and workstations, Fiber patch, transceivers, ports sharable, and video switcher). Also supervised and inspected (including testing, balance), the electrical installation of Burglary, Fire alarms, Elevator, dumbwaiter and ATC (automatic temperature control) with a 7.5 Hp HVAC unit, during the restoration of Manhattan colonnade building, the entrance of Manhattan side of the bridge.

On all the contracts, responsible for payment and acceptance of electrical items when complete and partial payments when work are in progress, detail tracking of items installed and paid. Update contract drawings as build due to field changes. Synchronized electrical work with others trades, and host electrical progress meetings with General Contractor, Electrical Contractor, NYC (Electrical, Traffic inspectors), electrical power company (CON-ED), and Verizon. Dedicated to NYCDOT requirements.

Jose Catarino

Senior Chief Electrical Inspector

Provided technical support to NYPD and NYDOT electricians with the installation of Security panels (burglary, camera and magnetic card reader) installed on anchorages of Manhattan, Brooklyn and Williamsburg Bridges.

During the reconstruction of the Manhattan Bridge, on both contracts BRC1568C and BRC156C, oversaw and supervised the reinstallation of Transit Authority (TA) traffic train signalization and emergency stop.

The finalization of last contract, BRC156C, was performed by inspecting and supervising the electrical work of 50 electricians, on site and four inspectors, respectively.

Teterboro Airport, NJ. Senior Electrical Inspector. Inspected facilities (five buildings) and registered all electrical discrepancies, creating reports with all violations to be update with National Electrical Code, and N.J uniform code.

Manhattan Psychiatric Center, NY. Electrical Designer. Inspected facilities, calculated feeder circuits, conduit, over current protection device, voltage drop, to feed street light poles. Created drawing (AutoCAD V.14), cost estimate with labor and material, contract specifications and panel's schedules to meet customer spec.

Brooklyn Children's Center, NY. Designed and implemented two-transfer switch, one with a 1200KW generator supplying main building and the second 400 KW generator feeding three facilities. Calculated feeder conductors, conduit fill, and over current protection devices, build drawings and specifications with detail cost estimation in labor and material.

Network Electrical Communications Corp., Hillside, NJ; 1995-1999. Electrical Supervisor, Electrical Designer & Estimator, Network Administrator. Responsibilities included electrical estimates; customer specifications or biding estimates; enforcement of NFPA 70 (N.E.C), 72 Fire Alarm systems, NJ uniform code, NYC electrical code, NYC Street lighting and traffic code, NYC standard specifications; Troubleshooting and programming field machinery. (CNC, PLC's); Networking design, consulting and estimates; communications design and programming (Toshiba-DK14, DK40, DK424, Lucent Technologies- Partner II, Partner Plus, Partner Mail Vs); PLC's - Design, Programming, and installations; contact of OEM Microsoft. (Reseller and Support); contact of Cisco systems. (Reseller and Support); NOVEL installations dedicated server, Workstations and with Boot PROM; Microsoft windows NT V 4.xx dedicated server, Workstations; manager (Supervisor, Project Manager) field installations and employees; coordinate all the field installations with scheduling.

Nesor Alloy, W. Caldwell, NJ; 1990-1991. Industrial Electrician and Maintenance Electrical Inspector. Responsible for all aspects of plant and maintenance electrical work. Including upkeep on all machinery, (AC/DC motors, Temperature Controls, Calibration of Instruments, PLC's- GE series one, one plus, series three, series Five), program new errors codes, upgrade and programming internal operating systems (IOS) with new modifications required by new methods of production. Troubleshooting with routines going up to component level. Oversaw installation and testing of all new equipment and associated power supplies including off-site electrical feeds, metering devices and conduit banks. Also oversaw installation of communications and fire protection systems and assumed responsibilities for it after installation.

Fein Container, Saddle Brook, NJ; 1989-1990. Industrial Electrician. Responsible for electrical and communications of plant maintenance; troubleshooting diverse types of machinery; program PLC's, GE Series One Junior, Series one, Series one plus.

Eacara, Hillside, NJ; 1989. Consultant Electrical Coordinator. Responsible for accuracy and compatibility of electrical design drawings with installation requirements on Metro North catenary or third rail driven locomotives. Synchronized the pre-existing electrical design with new electrical Modifications.

Phenol Zamor
Electrical Inspector

Professional Profile
Mr. Zamor has many years of experience as an electrical inspector and in the field of design.

Proposed Project Assignment
Construction Inspector - Electrical

Education
MS/1993/Electrical Engineering
BS/1992/Electrical Engineering

Course Work
40-Hour OSHA Training Course
Pre-Engineering/Computer Science, Medgar Evers College

Total Years Experience 16

Project Experience

Bronx-Whitestone Bridge Bronx/Queens Approach, BW-89/WBM-342, Bronx, NY; 11/08-Present. Electrical Inspector. This $192-million project involves the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work will include the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure there will be massive concrete placements for concrete footings and piers. For the duration of the project, traffic on the bridge must be maintained with five lanes open to traffic. During the staged construction work will be staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting. Other work items on the project include new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure. Mr. Zamor's responsibilities include inspection of protective shield on or around switchgear equipment during demolition and construction; installation of all temporary and new electrical equipment such as transformers, lighting and power panels, variable message signs and variable speed limit signs; conduit and pullboxes placement; pulling and splicing of conductors; erection of temporary and permanent roadway luminaires; removal and reinstallation of Con Edison transformer and associated feeders; and removal of existing 5-kV feeders and installation of new 5-kV feeders. Client: Triborough Bridge and Tunnel Authority

Bronx-Whitestone Bridge Deck Replacement - BW-82, Bronx, NY; 7/04-11/08. Electrical Inspector. This $136-million project involved the reconstruction of the suspended spans deck with an orthotropic steel deck. The project also involved the installation of new maintenance travelers, electrical and communications systems, fire protection system and inspection platforms. A temporary movable barrier was also being utilized to provide for efficient traffic flow during the eight reconstruction stages scheduled for this project. Responsibilities included inspection of electrical conduit placement, installation of conductors, field splicing of wires, placement of pull boxes, erection of roadway lighting fixtures, installation of tower flood lighting, and connections to power feed transformers from Con Edison. Client: Triborough Bridge and Tunnel Authority

Roosevelt Island Bridge over East River Channel, Queens, NY; 10/02-5/04. Electrical Inspector. Responsibilities included the preparation of plans, specifications and cost estimates for complete electrical control system rehabilitation of the bridge. Client: New York City Dept. of Transportation

Route 5 Bridge over Chickahominy River, Richmond, VA; 10/00-5/04. Electrical Inspector. Project involves the design and layout of incoming power cables, conduits and submarine cables with terminal boxes. Client: VTrans

Hamilton Avenue Bridge over the Gowanus Canal, Brooklyn, NY; 10/99-5/04. Electrical Inspector. Project involves the complete electrical control system rehabilitation of bridge including roadway lighting auxiliary equipment, cost estimates and specifications. Client: New York City Dept. of Transportation

Phenol Zamor
Electrical Inspector

Atlantic Beach Bascule Bridge, Lawrence, NY; 8/96-8/00. Electrical Inspector. Project involves the design and layout of conduit routing for bridge incoming power and auxiliary equipment, cost estimates and specifications. Staging construction phases, shop drawings review and construction support. Client: New York City Dept. of Transportation

Shore Road Bridge over Hutchinson River, Bronx, NY; 2/02-9/02. Electrical Inspector. Project involved the inspection of electrical equipment during construction. Client: New York City Dept. of Transportation

Carlton Vertical Lift Bridge, Bath, ME; 10/99-2/01. Electrical Inspector. Project involved the complete electrical rehabilitation of bridge including auxiliary estimates, specifications and construction support. Client: Maine Dept. of Transportation

Memorial Bridge, Portsmouth, NH; 11/99-3/01. Electrical Inspector. Project involved the design and installation of closed circuit television (CCTV) and specifications. Also provided shop drawings review and cost estimates. Client: New Hampshire Dept. of Transportation

Danis Beach Bridge, Miami. Fl; 5/98-3/99. Electrical Inspector. Project involved the design and installation of new variable frequency drive to control movable bascule leaves, including cost estimates and specifications. Client: Florida Dept. of Transportation

Marine Parkway Lift Bridge, Brooklyn, NY;10/96-6/04. Electrical Inspector. Project involved the design and layout of traffic control devices and roadway lighting. Also shop drawings review, construction support, design and layout of decorative lighting system. Client: Triborough Bridge and Tunnel Authority

Cedar Creek Bridge, Georgetown, DE; 7/95-7/96. Electrical Inspector. Responsible for the design and inspection of the electrical control for warning gates and traffic signals including cost estimates, specifications and shop drawings review. Client: Delaware Dept. of Transportation

East Washington Avenue Single Bascule Leaf Bridge, Bridgeport, CT; 9/95-8/99. Electrical Inspector. Responsibilities included the complete electrical control system design, construction cost estimates and specifications, including associated lighting and traffic auxiliaries. Also provided shop drawing review and construction supports. Client: Connecticut Dept. of Transportation

US Route 136 Swing Bridge, Westport, CT; 6/94-9/94. Electrical Inspector. Responsible for shop drawing review and design modifications. Client: Connecticut Dept. of Transportation

The following is a list of projects which involved troubleshooting restorations:

- South Front Street Bascule Bridge, Elizabeth, NJ
- Benjamin Harrison Lift Bridge, Hopewell, VA
- Harlem River Lift Bridge, New York, NY
- Route 36 over Shrewsbury River, Double Bascule Bridge, NJ; 12/94-12/96

John Goon
Electrical Inspector

Professional Profile
Mr. Goon is an electrical inspector with diversified experience in the electrical, mechanical, civil and architectural fields. He possesses the following experience.

Proposed Project Assignment
Construction Inspector - Electrical

Registration/Certifications
NICET Level II/NY

Education
BS/1988/Electrical Engineering

Course Work
10-Hour OSHA Training Course

Total Years Experience 24

Project Experience
2006-2010 Port Authority On-Call Construction Management Services - John F. Kennedy International Airport, Queens, NY; 10/06-Present. Electrical Inspector. As part of this on-call construction management services project, Mr. Goon is assigned to projects at JFK Airport. The Port Authority supplements their own staff with consultant-provided personnel to manage and administer construction contracts at their owned and operated facilities. Responsibilities include inspecting installation of new electrical equipment for compliance with contract, Port Authority standards and NYC codes; documenting and maintaining daily narratives on contract projects; reviewing plans, specifications and shop drawings, processing and reviewing contractor submittals, change orders and estimates; interacting with architects, engineers, contractors and Port Authority officials; and coordinating scheduled electrical shutdowns with Port Authority Electrical Shop and various departments. Projects he has been assigned to include:

- Jet Blue Terminal
- Hangar 17 Parking Facility
- JFK Expressway
- Bulk Fuel Farm and Satellite Fuel Farm
- JFK Red Garage
- AOA Guard Post Security Posts
- Rehabilitation of Traffic Signal System
- Rehabilitation of Cargo Service Road and North Service Road
- Central Taxi Hold Improvements
- JFK Expressway Outbound Widening
- JFK Airport 800 Mhz Trunked Radio In-Building Coverage Expansion Phase 1 & 2
- JFK Airport Perimeter Strengthening

Client: Port Authority of New York/New Jersey

Port Authority of New York/New Jersey, New York, NY; 1998-2006. Senior Electrical Inspector, Construction Management Division. Responsibilities include management of various capital construction projects at WTC site. Projects at JFK, and LGA included oversight of contractors performing mechanical, plumbing, electrical, civil, and architectural installations; performing building condition assessment surveys, controlled inspections and quality checks to insure compliance with contract specifications. He reviewed drawings, applicable codes and OSHA safety standards; resolving construction issues and contractor conflicts amicably; rehabilitation and renovation of existing building facilities, commercial office spaces and industrial complexes; analyzed and responded to contractors' "Request For Information"(RFI's) on all electrical, mechanical and architectural issues on the project; prepared Post Award Contract Changes (PACC's) for any extra work due to field conditions or change to scope of work on construction and renovation projects. Mr. Goon reviewed and provided comments on design submittals for the various construction projects emphasizing all NYC Building Code requirements and compliance with Port

Authority standards and specifications. Served as liaison for tenant construction projects and facilitated communication between the architect, consultant engineers, contractors, and the resident engineer; coordinated with Port Authority facilities: electrical and mechanical; PA operations and police; risk management, and quality assurance; monitored and reviewed schedule of construction projects; hosted progress meetings and prepared meeting minutes; supervised Time and Material (T/M) projects to insure that project goals are achieved within forecasted budget and time constraints; conducted desk audits of contractor's extra work billings: change order, net cost, T/M, emergency delays and claims to verify for quantity, time and material accuracy; reported the progress of daily construction activities, completed daily reports, and any work scope changes to the resident engineer; negotiated with the contractors using cost effective strategies; supervised and mentored new engineering and construction interns. Client: Port Authority of New York/New Jersey

DVL Consulting Engineers, Inc., Teaneck, NJ; 1996-1998. Project Management Officer/Engineering. Responsibilities included directing planning of rehabilitation projects for prisons, churches, post offices, hospitals, and SCA schools; streamlining scope of work, budget, and cost estimates; administering and overseeing ongoing renovation of SCA schools and related commercial office spaces; designating responsibilities and tasks to design and field survey group; reviewing and approving site plans and incoming support services; evaluating and verifying specifications and engineering progress reports; heading meetings with Engineers (various disciplines) and Architects.

STV, Inc., New York, NY; 1994-1995. Electrical Engineer. Responsibilities included planning lighting and power distribution systems for hospitals, industrial facilities and SCA schools for electrical design group; lead engineer for team during design phase of single line and riser diagrams, motor control centers, and panel schedules; proposed feeder sizing and branch circuits for overcurrent protection; oversaw conversion of logic diagrams into schematic emergency power, grounding systems and calculation of voltage drops; reviewed and finalized site plans and lighting protection systems; handled project issues with Architects, Engineers and Vendors.

Henry Hudson Bridge Rehabilitation, New York, NY; 1993-1994. Construction Management, Field Inspector. Responsibilities included supervising electrical, mech., civil, architectural, and structural work; actively oversaw construction crews of multiple trades; maintaining and managing daily records of pay quantity items; tracking and evaluating the performance of the contractor to assure that the work is being performed in accordance with the plans and specifications. Managed and compiled daily logs on crews; reviewing and revising plans, shop drawings, and writing specifications; conducting meetings with Engineers, Contractors, and MTA officials.

Canary Warf Financial Center, United Kingdom; 1988-1992. Electrical Engineer

Ignacio Ortega
Senior Electrical Inspector

Professional Profile
Mr. Ortega has been a senior field engineer for over 16 years. His experience in heavy electrical construction includes experience in 34.5 KV, 27KV, 15KV, and 480V. His skills include Electrical Power Systems, Lighting, Traction Power, Signaling SCADA, UPS Systems, Cathodic Protection, Grounding Systems, Fiber Optic, CCTV, HVAC Controls, Fire Alarms, Building Management Systems and Access Control Systems.

Proposed Project Assignment
Construction Inspector - Electrical

Education
BS/0/Civil Construction Technology
AA/0/Electrical Engineering Technology

Course Work
10-Hour OS HA Training Course
Substation Engineering
Power Distribution Service, Public Service Energy & Gas
Medium Voltage Splicing & Terminations
High Voltage Safety
Fiber Optic-Splicing, Installation and Testing
Design, Installation and Trouble Shooting of Emergency & Standby Generation Systems
Certified Electrical Estimators, Commercial/Industrial Construction
On-Track Safety for Contractors, Amtrak Railways
EWER Monorail Safety, PA
30-Hour OS HA Training Course

Total Years Experience 21

Project Experience
2006-2010 Port Authority On-Call Construction Management Services - Security Capital Program, Various Locations, NY; 9/06-Present. Assistant Resident Engineer. As part of this on-call construction management services project, Mr. Ortega is involved with the Port Authority Capital Security Program which involves the hardening of all Port Authority facilities throughout the multi-facility Port Authority district. Mr. Ortega is responsible coordinating contractor's supervisory personnel regarding schedule, sequence and method of work; reviewing contractor's inspection surveying and testing request and subsequent completed reports; monitoring conformance with the contractor's schedule; field inspections of the work in progress in consultation with both resident engineer's and contractor's supervisory staff; preparing written and oral reports to the resident engineer n contractual and procedural matters; reviewing and approving all payment applications; and reviewing the contractor's shop drawings as delegated by the resident engineer. Client: Port Authority of New York/New Jersey

Port Authority Bus Terminal Construction Program, New York, NY; 7/04-9/06. Senior Electrical Inspector. Project involves the replacement of three of the original chillers, chillers 1, 2 and 4, at the bus terminal. The chillers are being replaced with state-of-the-art 900-ton chillers with peripheral subsystems to include new 5KV starters, new 5KV feeders, four 100 hp motors, a building management system for automation and a new firm alarm system. Work was being installed and commissioned without any disruption to the facility. Mr. Ortega was responsible for the installation, commissioning and integration of the 5KV System and ancillary electrical/communication subsystems for three new 900 ton chillers; resolving all field conflict issues; analyzing and evaluating omissions in technical construction documents and providing possible solutions to design group; reviewing and approving subcontractors payment applications; constructability review of all 90% electrical drawings; contractor compliance with federal and state construction safety requirements; and coordinating all electrical work with Port Authority Bus Terminal Facility and Operations Staff. Client: Port Authority of NY & NJ

PATH Restoration, WTC Site, New York, NY; 2002-2004. Senior Electrical Inspector. Responsibilities included the installation and integration of the 27KV, 15KV, 480V, DC Traction Power, SCADA and multiple communication systems at the temporary PATH station at the WTC Site. Also responsible for contractor compliance with contractual obligations, pertinent specifications and codes, contractor compliance with quality control plan, analyzed and evaluated omissions in technical construction documents and provided solutions to the resident engineer's office. Responsible for system startup on

various electrical/communication sub-systems, contractor compliance with federal and state construction safety requirements. Provided technical assistance and coordinated work activities for four junior members of the electrical inspection/engineering team and reviewed and approved subcontractor's payment applications. Client: Port Authority of NY & NJ

Airlink Station, Newark Airport, Newark, NJ; 2001-2002. Senior Field Engineer. This project involved the installation and integration of the communication system at the Airlink Station. Responsibilities included resolving all field conflict issues, analyzed and evaluated omissions in technical construction documents and provided solutions to design group. Represented the Port Authority at project meetings with various federal agencies, state agencies, contractors, design professionals and utility companies. Also responsible for system startup on various electrical/communication sub-systems, contractor compliance with federal and state construction safety requirements and represented the "construction team" at Port Authority senior management meetings. Client: Port Authority of NY & NJ

North East Corridor Extension Project, Newark, NJ; 1998-2001. Field Inspection Engineer. Responsibilities included contractor compliance with contractual obligations, pertinent specifications and codes, reviewed and approved subcontractors' payment applications. Represented company at project meetings with various federal agencies, state agencies, contractors, design professionals and utility companies, analyzed and evaluated construction documents to ascertain changes to the original scope of work. Provided the timely flow of technical information to the field. Also responsible for contractor compliance with federal and state construction safety requirements and coordinated deliveries of construction equipment to job site.

Base EWR Monorail, Newark, NJ; 1994-1997. Contract Administrator. Responsibilities included verifying contractor compliance of contractual obligations and pertinent specifications and codes. Reviewed and approved subcontractor's payment applications, identified "close out" requirements to expedite contract completion. Also worked with quality assurance department to prepare and conduct QA audits. Prepared in the selection of subcontractors.

Worked with another firm as a project management, coordinated field operations of various projects; 1988-1994.

Guy Toussaint
Senior Inspector

Professional Profile
Mr. Toussaint has 25 years of highway/roadway bridge construction inspection and office engineer experience in urban infrastructure construction projects involving structural, civil and utility work on, over and adjacent to operating rail lines, rivers and roadways. He is highly knowledgeable in bridge reconstruction/rehabilitation work, electrical inspection, roadway and sidewalk reconstruction, sewer main and sewer installation work. He is also knowledgeable in construction documentation filing and processing by maintaining project documents in accordance to QA requirements, MURK and project procedures. In addition, he has assisted in the close out of various projects by submitting all required documentation in accordance with the direction of authorized representatives.

Proposed Project Assignment
Construction Inspection - Electrical

Registration/Certifications
NICET IV

Education
Certificate/1983/Electrical Technology

Course Work
10-Hour OSHA Training Course
Work Zone Safety Training Course - GPI
4-Hour Lead Awareness Course
NYC Dept. of Transportation Training Course
Confined Space Training

Total Years Experience 25

Project Experience

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 4/10-Present. Senior Inspector. This $280-million project involves the construction engineering and inspection for the rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Responsible for daily inspection supervision of all electrical work, which consisted of new electrical system for traveler; new 480-volt electrical service for anchorage loads; additional lighting and power source in anchorages; removal and relocation of bridge necklace lighting; traffic signal modification work on Delancy Street; the removal of existing and installation of closed circuit television; video vehicle detection; aviation navigation obstruction lights; lane control signal; variable message signs, all with optical fiber cable connections on the Williamsburg Bridge and multiplex transfer of data to ports at the Traffic Management Center (TMC); the installation of electrical conduits feed including conductor rails for the traveling maintenance platforms; water main installation work on Delancy Street; and structural steel work on main bridge truss bottom and top chord repair, main span diagonal repairs. Client: New York City Dept. of Transportation

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, New York, NY; 2004-2007. Senior Inspector. Project work consisted of the demolition and reconstruction of four northern roadway lanes on the bridge approaches and main span. The pre-assembled foot walk was transported via barge up the East River and then lifted to the bridge level through the East River and then lifted to the bridge level through the East River Park, across the FDR Drive. It was erected over active subway tracts. Also included new sidewalks and paving of areas below the bridge; containment system for paint removal from structural steel; maintenance painting; rehabilitation of floor beams; lateral bracing; and wind chord. Responsible for daily inspection supervision of all electrical work, which consisted

of new electrical system for traveler; new 480-volt electrical service for anchorage loads; additional lighting and power source in anchorages; removal and relocation of bridge necklace lighting; traffic signal modification work on Delancy Street; the removal of existing and installation of closed circuit television; video vehicle detection; aviation navigation obstruction lights; lane control signal; variable message signs, all with optical fiber cable connections on the Williamsburg Bridge and multiplex transfer of data to ports at the Traffic Management Center (TMC); the installation of electrical conduits feed including conductor rails for the traveling maintenance platforms; water main installation work on Delancy Street; and structural steel work on main bridge truss bottom and top chord repair, main span diagonal repairs. Client: NYCDOT

Reconstruction of Williamsburg Bridge Northern Roadways, Contract 7, New York, NY; 2002-2004. Senior Inspector. This $230-million project consisted of the demolition and reconstruction of four northern roadway lanes on the bridge approaches and main span. The pre-assembled foot walk was transported via barge up the East River and then lifted to the bridge level through the East River and then lifted to the bridge level through the East River Park, across the FDS Drive. It was erected over active subway tracts. New sidewalks and paving of areas below the bridge; containment system for paint removal from structural steel; maintenance painting; rehabilitation of floor beams; lateral bracing; and wind chord. Responsible for supervision of inspection for reconstruction of the Brooklyn approach bikeway/footwall (along active rail lines), including sidewalk excavation, and local street work in Brooklyn and Manhattan involving sidewalk and curb installation, asphalt and concrete pavement work. Also assisted on contract work close out finalizing item quantities, as-built drawing requirements for submittal of acceptance. Client: NYCDOT

Greaves Avenue Bridge over Staten Island Railway, NY; 1999-2001. Office Engineer/Senior Inspector. Project work involved complete removal of the existing three-span superstructure and substructures including the concrete deck slab, stringers, utilities, abutments, and piers which span over two active Staten Island Railroad tracts. The new structure was constructed with new reinforced concrete abutments and wingwalls. Also involved the installation of a new one-span superstructure using steel stringers and a jointless reinforced concrete deck slab and approach slabs; the replacement of the existing eight-inch diameter water main and telephone conduits; the removal of an abandoned sewer forcemain (asbestos type); replacement of existing approach pavements and sidewalks within the project reconstruction limits; and installation of new street lighting and modification of existing traffic signals. Responsibilities included field inspection supervision of all work listed above. Office work included processing change orders; contractor's payments; monthly progress status; materials acceptance log with all QA requirements; monthly estimate log book and filing system. Client: NYCDOT

Construction Inspection Services for the Rehabilitation of the On/Off Ramps between the Cross Island Parkway and the Throgs Neck Bridge, Queens, NY; 1995. Office Engineer. This project received the Construction Management Association of America's 1995 Project of the Year Award and the Concrete Industry Board Inc.'s Award of Merit. Project work involved the replacement of structural steel, concrete deck, and new approaches. Responsibilities include monitoring as-built drawings; maintaining project documents in accordance with project procedures; and monitoring all materials, certifications and specifications for each item delivered to the job site for acceptance requirements. Also maintained a checklist for all items in the item file; and reviewed inspector's daily reports and entered quantities in computer and item quantity book. Client: MTA

Bridge Painting on the Robert Moses Causeway, Suffolk County, NY; 1993. Senior Inspector. Project work included the application of the intermediate and final cost of the maintenance painting. During inspection, atmospheric temperature, mixing and thinning paint application, checked wet and dry film thickness, and checked for recoating and over coating (spot check) and material storage. Also assured that the contractor provided proper MPT. Client: New York State Dept. of Transportation

Gregory Lau
Electrical Inspector

Professional Profile
Mr. Lau is an electrical inspector with experience on roadway and bridge projects involving inspection of electrical facilities such as traveler systems, closed circuit TV cameras, bridge and building lighting systems, electronic traffic control devices, security systems, fiber optic cables, and other components of the NYS INFORM system.

Proposed Project Assignment
Construction Inspector - Electrical

Registration/Certifications
NICET II/NY
ACI - Concrete Field Testing Tech. Grade I/NY

Education
BE/1990/Electrical Engineering

Course Work
10-Hour OSHA Training Course

Total Years Experience 18

Project Experience
Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 6/10-Present. Electrical Inspector. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Mr. Lau is responsible for the electrical inspection of the replacement of the street lamps and underdeck luminaires along the ramps; the electrical inspection of CCTV cameras and associated equipment near the Manhattan Bridge; and the electrical inspection of the replacement of the dehumidification system in the anchorages. Client: New York City Dept. of Transportation

Staten Island Bridges Rehabilitation, Staten Island, NY; 9/03-11/06. Electrical Inspector. The project involves construction management services for structural, civil, mechanical, electrical, and bridge painting services. Responsibilities included inspection of electrical facilities including bridge and building lighting, electronic traffic control devices security systems and fiber optic cables. Review of design and testing of electrical and electronic equipment. As electrical inspector for the central access door control system, was responsible for construction management services for electrical, structural and mechanical services; inspection of new security system for cameras, motion sensors, card access and doors using Lenel OnGuard and Verint; and assists in the design of the testing parameters. Client: Port Authority of NY/NJ

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 2/07-6/10. Electrical Inspector. This $280-million project involved the construction engineering and inspection for the Rehabilitation of the main bridge. The scope of work for the project included abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Responsibilities included electrical inspection of installation of electroliers, two bridge

travelers, ITOS/CCTV/VVDS systems, anchorage and bridge lighting and lane control system using fiber optic and VMS signs. Client: New York City Dept. of Transportation

Northern State Parkway ITS/INFORM Upgrade, Contract #D259535, Nassau & Suffolk Counties, NY; 11/06-2/07. Electrical Inspector. The project involves construction inspection services for the $13.6-million upgrade to the NYSDOT, Reg. 10, INFORM System. The project features include installation of rigid conduit and fiber optic cable from the Reg. 10 INFORM Control Center in Hauppauge to the Queens County line. The new fiber optic system will include nine Travel Time Signs, (EZ Pass) Tag Readers, Acoustic Vehicle Sensors, Closed Circuit TV cameras, and transmit antennas. All necessary support system hardware, controllers, and system software will also be installed. This high-tech project requires very sophisticated installation, testing and acceptance procedures. Mr. Lau was responsible for the inspection of all construction activities performed by the contractor. Client: New York State Dept. of Transportation

ABT Builders, Inc., Nutley, NJ; 8/02-3/03. Supervisor. Managed several trades to renovate a restaurant in Newark Airport Terminal C; liaison to Port Authority inspectors to ensure that all renovations were within code; and was responsible for keeping the project to schedule and within budget.

MTI Technology, Inc., Hazlet, NJ; 2/00-3/02. Systems Engineer. Designed data storage structures utilizing devices in a fibre channel data network; managed multiple, simultaneous projects from delivery to implementation and support; designed a Windows NT 4.0 network for MTI equipment to simplify support and access; and maintained customer documentation.

Vestals, Inc., New York, NY; 9/99-2/00. Systems Engineer. Maintained Windows NT 4.0 hosts and streaming video servers and wrote documentation.

Fleet Financial, New York, NY; 6/98-8/99. Systems Engineer. Designed, implemented and tested Windows NT 4.0 network for all branch offices; automated software updates for workstations; created security policies implemented in the organization; trained internal personnel on the new network; and wrote documentation.

Fleet Financial, New York, NY; 6/96-6/98. LAN Administrator. Led project to convert paper documentation to electronic format by archiving data to CDs as off-lien and near-line data; supported end-users on hardware and software issues; and wrote documentation.

Micro 2000 Computers, Carle Place, NY; 2/94-6/96. Service Engineer. Operated and maintained customer service center.

Proconics International, East Fishkill, NY; 6/92-9/93. Field Engineer. Responsible for maintaining fleet of automated wafer handlers for microchip production at IBM.

Computer & Other Skills:
Windows NT, 2000, and XP; MS-DOS, MS-Office
Backup Software: Legato Networker and Veritas NetBackup
Knowledge of storage architectures SAN, NAS, and DAS
Brocade fibre channel switches
Implementing security policy in computer networks
TCP/IP and Novell networks, Unix and Linux

LPE

Robert Zayas

SUMMARY:

Over 35 years of experience in electrical and mechanical systems. Started as an electrician in the United States Navy. Worked through the construction industry as a Supervising Mechanic, then Construction Supervisor and then to Mechanical Inspector. Possess experience in mechanical, civil, electrical and architectural inspection duties.

RELEVANT EXPERIENCE:

Mechanical Inspector, Resident Engineer's Office & LGA Redevelopment Program, LaGuardia Airport, NY
LPE Enterprises / Port Authority of NY & NJ 1990- Present

- Responsible for installations involving structural steel erection, plumbing, HVAC, underground utilities, fire and sprinkler protection, sanitary and sewer systems.
- Performs civil, electrical and architectural inspection duties.

Construction Supervisor, Dynaire Corporation 1989 - 1990

- Responsible for planning and supervision of heating, ventilation and air conditioning installations in commercial, industrial and residential construction.

Supervising Mechanic, Pilgrim Psychiatric Center 1977 - 1989

- Supervised maintenance employees and outside contractors in service, operation and repair of refrigeration and air conditioning equipment.
- Scheduled work assignments, prepared cost estimates, inspection and emergency repair of equipment.

Maintenance Electrician 1975 - 1977

- Performed work assignment trouble shooting of electrical devices.
- Performed installation and maintenance of power, distribution of electrical and lighting equipment.

Electrician, United States Navy, USS Ticonderoga 1970 - 1973

Chronological History of Employment:

1990 – present	LPE Enterprises
1989 – 1990	Dynaire Corporation
1977 – 1989	Pilgrim Psychiatric Center
1975 – 1977	Maintenance Electrician
1970 – 1973	United States Navy

LPE

Balachanthiran Balakrishnan [Bala]

SUMMARY

- Performed electrical inspection of several treatment plant installation involving filtration systems, pumps, process with flow control systems and motor control centers to comply with NEC,NEMA, NFPA industry standards and code requirements.
- Designed power distribution systems involving switchgear, proactive relaying, AC and DC variable speed drives, transformers motor controls, grounding, lighting. Control systems, power electronics and heat tracing system.
- Experience in Power distribution equipments such as switchgear, protective relaying, AC and DC variable speed drives, transformers, motor controls, grounding, lighting. Control systems, power electronics, heat tracing system.
- Experience in SCADA systems and radio frequency equipment such as VHF, UHF and microwave antenna.
- 10 years of experience in working of MS office tools.
- Team player with excellent skills and interpersonal skills.

PROFESSIONAL EXPERIENCE

Electrical Inspector / Field Engineer, JFKIA ***2005 – Present***
Port Authority of NY & NJ (Consultant)

- Supervised field installations, maintenance of electrical process Instruments and Controls as well as Mechanical equipments.
- Monitored the time scheduled equipments to NEC codes, NEMA standard and specification.
- Handled Planning, coordinating, periodic maintenance and troubleshooting.
- Programmed power panel distribution and luminaries' schedules.
- Performed quality analysis of the instruments.
- Performs inspections of all electrical work in progress on a continual basis and completes final checkout of electrical installations to ensure quality and conformance to specifications and codes prior to turnover to client for startup
- Coordinates with Engineering to resolve drawing and Cable & Raceway database issues.
- Inspects permanent plant materials during the receiving process to insure they meet project standards and drawings.
- Supervises and coordinates work activities of electrical field engineering staff
- Assists the technical coordination activities of the lock-out and tag-out program
- Responsible for on-site Cable & Raceway design databases and associated interface with electrical installations and tests
- Calculated the sizing of UPS systems, emergency generators and co-generator plants.

Electrical Inspector / Field Engineer, Water Treatment Plant, Washington DC ***2003 – 2005***
DC WASA (Consultant)

- Supervised field installations, maintenance of electrical process Instruments and Controls as well as Mechanical equipments.
- Performs inspections of all electrical work in progress on a continual basis and completes final checkout of electrical installations to ensure quality and conformance to specifications and codes prior to turnover to client for startup
- Monitored the time scheduled equipments to NEC codes, NEMA standard and specification.

- Handled Planning, coordinating, periodic maintenance and troubleshooting.
- Performed luminaries' calculations,
- Programmed power panel distribution and luminaries' schedules.
- Responsible for on-site Cable & Raceway design databases and associated interface with electrical installations and tests
- Assists the technical coordination activities of the lock-out and tag-out program
- Performed quality analysis of the instruments.
- Calculated the sizing of UPS systems, emergency generators and co-generator plants

Assistant Manager, Armond, Washington, DC ***2002 - 2003***

- Write letters of proposals to the prospective clients.
- Maintained filing system for work in progress and completed jobs.
- Monitored overall profitability, accurately projecting production costs and product pricing.
- Compiled all employee hours and forwarded to payroll department via e-mail.
- Handled all incoming calls.

Electrical Engineer, Water Treatment Plant, Richmond, VA ***2001 - 2002***
W.M. Schlosser

- As an Electrical Engineer performed design and supervised installation of electrical equipments, pumps and motors.
- Commissioned, retrofitted, designed and repaired the following product lines: motors, switchgear (up to 36 kV), drive systems (up to 600 V), PLC's, UPS and related control products (Toshiba).
- Provided support and training, specified and procured electrical equipment and enhanced variable speed drive and switchgear packages.

Electrical Testing Engineer, Dynamic Technical Service ***2000 - 2001***

- Perform testing, commissioning, provisioning, switching and trouble-shooting fiber optic Network Elements. This includes DS0, DS1, DS3, OC48, OC192 and LH OPTera.
- Worked with Systems configuration, this includes Linear, Non-Linear and Ring systems.
- Computed the expert analysis of network data associated test results and optimized the network performance.
- Resolve technical issues by interfacing with multiple levels of technical support within the customer company.
- Re-Engineered the projects on "traffic bearing" Networks (Live Systems).
- Supervised between eight to fifteen contractors in the field.
- Testing the equipments such as TTC307 DS3 Test Set, DWDM test, ProComm Plus Optical Power Meter, Back Reflection Meter, RF Power Meter, Site Master, T-Bird Carrier Analyzers, Optical Microscope, Fluke DMM, Visual Fault Locator, ProComm Plus, T-BERD T3/DS3 Analyzer

EDUCATION

- M.Sc. in Management Information System Security, Colorado Technical University *2004 - 2005*
- B.Sc. in Electrical Engineering, West Virginia University Institute of Tech *1997 - 1999*
- Dip in Electrical Engineering Institute Technology Negeri, Malaysia *1989 - 1992*
- Nortel Sonet O & M MCI Worldcom, Career Enhancement University, TX *2000 - 2000*

ASSIGNMENT

Senior Electrical Inspector

EDUCATION

B.S. Electrical Engineering, Syracuse University, May 1987

REGISTRATION

NICET IV
PATH Track Safety Training
2008 National Electrical Code Refresher Course
OSHA 10 Hour Certificate
Coaxial Cable 10 Hour Course

REPRESENTATIVE AND PERTINENT EXPERIENCE

Mr. Bessim has over 18 years of construction management and field construction inspection experience in highway, bridge, and railroad projects. He has inspected various electrical systems, components, substations, fiber optics, ITS communications, signal installations and building renovations to ensure compliance with drawings and specifications. He is familiar with Port Authority specs and procedures.

- **Senior Electrical Inspector, Port Authority of New York and New Jersey, PATH** - Performed inspection of electrical installations in stations, tunnels, and yards including:
  - > ***MF 100.506 WO24 - Access Control Keltron Replacement*** - Installed card access control readers throughout PATH facility and new doors and advanced alarm systems at all coin rooms and all doors at secured areas throughout facility.
  - > ***PAT 624.308 SIMULCAST UPGRADE of VHF Radio Channels Phase 2*** - Installation and commission of new radio base stations, installation of new simulcast equipment at various locations throughout facility, upgrading existing desk sets at all locations and cutover of new equipment and installation of GPS antennas at all locations.
  - > ***PAT 610 WO 20 - JSTC Beam Pocket Smoke Detectors*** - Installation of smoke detectors and integration to existing system at JSTC mechanical rooms.
  - > ***MF 100.507 WO 28 - Temporary Event Detection System Tunnels A B E F*** - Installed devices and equipment throughout facility including WTC.
  - > ***PAT 354.072 Encoder Decoder Project*** -- Installation of encoders and decoders for cameras at all locations on PATH facility.
  - > ***MF 100.507 WO25 - WTC Portals Flood gates at Tunnels E and F***
  - > ***MF 100.507 WO10 - Exchange Place Portals Flood Gates at Tunnels E and F***
  - > ***PAT 624.223 - Emergency Diesel Generator at Washington Street Substation No 2***
  - > ***PAT 614 - AC Units in Communication Rooms throughout facility***
  - > ***LIDS Tunnel Intrusion Project*** - Installed tunnel intrusion detection devices at Exchange Place and WTC for tunnels E and F. (5/07 – Present)

- **Senior Electrical Engineer/Inspector, Port Authority of New York and New Jersey, Restoration of PATH Service to Manhattan** - Responsible for construction inspection of electrical systems, equipment and components associated with the rehabilitation and expansion of Exchange Place Station, Tunnel "E" and "F", and temporary WTC PATH station. Inspected other PATH projects, including the following:
  - > ***PAT 558A JSTC Fire Smoke Alarm Modifications*** - Lead Engineer on project which consisted of installation of new addressable fire alarm system at JSTC. Also included replacement of existing sprinkler valves at facility. Duties included assuring that system complied with all applicable fire protection and electrical codes, coordination with PA Risk Management Division.
  - > ***PAT 602 WO6 JSQ And Exchange Place Radio Simulcast System*** - Lead Engineer on project which consisted of upgrading existing radio communication system between JSQ and WTC.
  - > ***PAT 602 WO 1,9 PATH Waldo Car Wash Blower Dryer Unit and Electrical Rehab***. - Lead Engineer on project which included new blower dryer unit at PATH Waldo train car wash and refurbishment of entire electrical system.
  - > ***PAT 624.223 Washington Street Substation No.2 Emergency Diesel Generator Replacement*** - Lead Engineer on project which included installation of temporary and permanent diesel generators and associated switchgear.
  - > ***PAT 684.026 PATH Digital Video Recording System*** - Lead Engineer on project which included furnishing and installation of an IP based Digital Video Recording System located in Journal Square Transportation Center. This included installation of encoders, decoders, video servers, master servers, fiber channel switches, ethernet switches, and all associated management software.
  - > ***PAT 624.119 Path Fare Collection System*** - Senior Inspector on project which included installation of new fare Collection system throughout PATH system.
  - > PATH tenant projects completed include:
    TAA 0205 - Storycorps Kiosk at WTC temporary Path station concourse level.
    TAA 0104 - JSTC - Concourse Level new Duane Reade Store
    TAA 0705 - JSTC concourse level XCEL Federal Credit Union (10/02 – 4/07)

- **Senior Project Engineer, NJSCC, Paterson Public Schools** - Developed bid packages for rehabilitation of 31 schools in Paterson, NJ. Provided liaison services during bid opening process.

- **Senior Inspector, Port Authority of New York and New Jersey, George Washington Bridge, Fort Lee, NJ, Various Contracts** - Served as electrical inspector for various projects, including ITS and EZ-Pass installations, upper level lighting upgrade, rehabilitation of Henry Hudson Ramps to GWB, tower elevator upgrade, microwave detector installations, fixed sign renovations. Duties included field inspection, change orders, payment applications and coordination of daily MPT activities.

- **Senior Electrical Inspector, NJDOT, Route 4 and 17 Interchange Project, Paramus, NJ** - Responsible for electrical lighting, ITS communications, traffic signal installation inspections on $120 million multi-stage interchange reconstruction project in Paramus, NJ, as well as inspection of major roadway items such as paving, concrete, grading, barrier replacements, guiderail and bridge items.

- **Senior Inspector, NJDOT, Route 21 and 46** - Senior bridge and highway inspector on this $26 million project which consisted of connecting NJ State Routes 21 and 46 with 1 major bridge structure for truck traffic. Duties included inspection of all facets of bridge and highway inspection, as well as full responsibility of all electrical items on project.

ASSIGNMENT

Senior Electrical Inspector

EDUCATION

Continuing Education in National Electrical Code, Touro College, NYC, NY, 1993-1996
M.S. Physics, The Moscow State University, Moscow Russia, 1971
B.S., Electrical Engineering, Moscow Mining College, Moscow Russia, 1967

REGISTRATION

Licensed Professional Engineer in the State of New York
OSHA 10 Hour Certified

REPRESENTATIVE AND PERTINENT EXPERIENCE

Mr. Belov presents over thirty years experience in engineering and construction. His diversified experience includes construction inspection of mechanical, electrical, and structural work for infrastructure, transit, toll plaza, office and institutional buildings. His specific electrical experience includes inspection of contractors' means and methods for medium and low voltage feeders, cable, conduit, transformers, highway lighting, sign lighting, fiber optic cable, and communication systems and components in accordance with plans and specifications.

- **Senior Electrical Inspector, Port Authority of NY & NJ, WTC PATH Hub** - Work on this $2.2 billion project consists of PATH facilities, PATH Terminal Building, underpinning of No. 1 Subway, Pedestrian connections, and LMDC facilities, infrastructure and tenant alterations to Tower No. 7. Performed daily inspections, site visits, and prepared daily narratives for WTC projects:
  - < PATH-WTC-TOWER ONE TCA WTC-1OO1-Utility Relocation - Duties included: EIC for workers in PATH area, reviewing contract and as-built drawings & documents, daily, and final inspection for electrical systems and components.
  - < WTC-Tower # 7 TAA #7001... TAA#7039 FitOut (4, 10 ... 42, 50 ... 53 Floors) - Duties included reviewing drawings & documents, daily, above ceiling and wall inspection for electrical part of projects.
  - < WTC -Tower #4 TCA #4000.07-MEP Under Ground & MEP Above Ground - Duties included reviewing drawings, documents and payments, daily inspection, attend and analyzing test results for electrical systems and components.

- **Senior Inspector, Triborough Bridge and Tunnel Authority**, **Project TB-09 B, Deck Replacement for Harlem Lift Span.** Served as inspector for $42 million project for orthotropic deck replacement of the Harlem River Lift Span, Approach Truss Spans and Fender System Replacement. Inspected contractors means and methods for installation of deck panels, structural steel, pull boxes, conduit, light poles, electronically operated gates, traffic signals, sign lighting, and navigation lights.

- **Senior Inspector, Port Authority of NY and NJ, Various PATH Projects.** Responsible for inspection of ventilation improvement and substation at Hoboken Terminal; Hackensack River Bridge control tower and motor generator building, including security improvements(CCTV, public address,

and intercom systems); drainage improvements at West Side Avenue and rehabilitation of Tunnelle Avenue retaining wall; and replacement of 2-5MVA transformers for 15KV distribution system at Substation 2A.

- **Senior Inspector, Project BB-15, Triborough Bridge and Tunnel Authority**. Replacement of Traffic Control and Signal Systems in the Brooklyn Battery Tunnel. Inspected fiber optic cables, VMS signs, lane use signals, and remote terminal units (RTU's) all terminating in a redundant programmable logic controller system.

- **Senior Inspector, TB-62, Electrical Relocation on the Triborough Bridge, Triborough Bridge and Tunnel Authority.** This $5 million project involved the relocation of electrical and communications systems located in the medians of the Queens and Manhattan approaches. Responsible for inspecting installation of new wiring and raceway systems, connections to existing power sources, relocation of lighting and signal systems, illuminated signs located on the bridge, and communication components.

- **Senior Electrical/Mechanical Inspector, TB-09A, Rehabilitation of the Harlem Lift Span**, **Triborough Bridge and Tunnel Authority**. Responsibilities on this $25 million project included inspection of modification of existing span drive mechanical system, removal and replacement of the main and auxiliary counterweight ropes, rehabilitation of the main span motors and power distribution system installation of transformers and lighting panels, motor control center, drop cables, lighting receptacles, intercom, telephone, security and fire alarm systems as well as rehabilitation and/or replacement of HVAC systems in the machinery rooms and tower houses.

- **Senior Inspector**, **Project TN-37**, **Triborough Bridge and Tunnel Authority, Rehabilitation of Throgs Neck Bridge**. Served as electrical inspector on this $7.5 million project. Responsibilities included monitoring the installation of all electrical hardware and power feeder and distribution networks for the bridge and approach roadway lighting systems, toll collection systems and fire and communications systems. In addition to overseeing inspection forces, was directly involved in field design changes, Change Order preparation, preparation of partial payments and preparation of As-Built quantities and drawings.

BENJAMIN FERRANTE

Electrical Inspector

Mr. Ferrante has over 20 years working as a field engineer/electrical inspector. His extensive experience includes site inspection and field engineering of major capital construction projects, quality control/assurance and supervision of other key personnel. He has provided technical solutions, value engineering and approvals for contractor estimates. Mr. Ferrante has been a part of projects for the NYC Transit Authority, NJDOT, NJ Housing Authority and NYDEP Sewage Treatment Plants.

Key Highlights

- ✓ Over 20 Years Experience as an Electrical Inspector
- ✓ Past Agency Experience, Including the PANY&NJ

Education

- **Electrical Technician Diploma,** RCA Institute of NY, 1980
- **Certificate in Electrical Commercial & Industrial Lighting,** NJIT, 1987

Certifications

- **AutoCAD v12 – v14**
- **MS Office**

New York City Department of Environmental Protection (NYCDEP) – Various Projects – New York, NY
Assistant Lead Inspector

Assigned to the Bronx, Manhattan and Wards Island Grit Chamber, where he handled the electrical inspection and design, reviewed all electrical change orders and the engineering design modifications. As the Lead Inspector, Mr. Ferrante coordinated with all contractor/subcontractor trade works (masons, steelworkers, carpenters, electricians and mechanicals) he also processed all daily engineering correspondence.

New Jersey Transit – Port Jervis/Middletown Station Renovations – Port Jervis & Middletown, NY
Senior Electrical Inspector

Assigned to the Port Jervis/Middletown Rail Station renovation project where he maintained responsibility for electrical inspection and design, coordinated all subcontracting trade work (masons, steelworkers, and electricians), and reviewed all electrical change orders and any engineering design modification of signaling for the rail system. He was responsible for oversight of the installation of Para-Tronic Fire Alarm systems, as well as assisted in the design and modification during the installation process of those systems.

Metropolitan Transportation Authority, New York City Transit (MTA NYCT) – ATM Network System Management Service – New York, NY
Senior Electrical Inspector (QA/QC)

Mr. Ferrante worked as the electrical field supervisor responsible for design review and inspection services for the upgrade of the N.Y.C.T.A. Fiber Optic Network for 187 stations to a Sonet/ATM Network with two core rings and four edge rings.

South Jersey Transportation Authority (SJTA) – Atlantic City International Airport – Atlantic City, NJ
Field Supervisor

Responsible for review of contractor submittal and he provided technical support for the rehabilitation of runways, taxiway, edge lights and centerlines light system. Benjamin interfaced with clients to establish system standards and to provide technical assistance during the installation. He also estimated additional costs due to change orders and negotiated addendums to contracts caused by the change orders.

New Jersey Transit – Hudson-Bergen Light Rail – NJ
Electrical Field Supervisor

Performed overhead catenary work and inspection of all electrical field work. Reviewed all electrical change orders, electrical plans, and engineering design modifications resulting in approximately $1,000,000 in savings.

He handled negotiation of contracts and change orders involving the above with subcontracting and general contracting units.

New York City Board of Education – Various Projects – New York, NY
Senior Electrical Inspector

Conducted a pre-design survey for the rehabilitation and renovation of the electrical deficiency and assessment for upgrading the electrical power distribution and lighting apparatus, for the NYC Board of Education. This survey was done on the existing 1,400 schools located in the five boroughs. In doing this he was able to assist in the estimated budget to repair each individual school.

New Jersey Turnpike Authority (NJTA) – Various Projects – NJ
Senior Electrical Inspector

Managed the workflow of subordinate personnel and reviewed their work product. Benjamin was responsible for all construction processes and engineering layouts, he reported project activities to the client, representative and contractor's field supervisor and assisted in resolving disputes and daily issues. He also reviewed daily inspector reports and helped prepare the Resident Engineer summary reports from data compiled from the inspection reports. It was necessary to document contract requirements and review the contractor's role on the project, including maintaining the project's status reports. Benjamin supervised a crew of 15 union field personnel. He worked on the completion of EZ-Pass and coordinated engineering activities with (RE) to meet project schedule and budget.

Metropolitan Transportation Authority, New York City Transit (MTA NYCT) – Various Projects – New York, NY
Senior Electrical Inspector

Ensured compliance by the contractor with regards to the contract plans and specifications. He also coordinated and maintained start-up testing of equipment by documenting the operations and providing technical solutions, value engineering, approval of contractor estimates, progress and approving contracts. Benjamin was responsible for design and review of the installation and rehabilitation of the tunnel lighting on the Canarsie Line. He worked with the contractor for the Brooklyn Bus Terminal on issues such as permits and operation of the central inspection facilities for fire alarm systems. He oversaw the electrical audits and did report preparation including fire detection, grounding code compliance standby emergency power and security systems.

New Jersey Department of Transportation – Various Projects – Newark, NJ
Electrical Field Supervisor

Benjamin worked on this $30 million project for the renovation and modernization of the Route 1 and 9 South over Hackensack River, Lift Span Bridge. He was responsible for design, review of field installation inspection of 6,000 amp Electrical Supply Feeders and main switchgear. He monitored contractor activities and prepared daily reports, as well as supervised an electrical team performing new installations, wiring, electrical equipment such as power distribution, transformers, motors, motor controllers and motor disconnects. Oversaw field construction activities of the site, assisted the Resident Engineer turning the facility over to the project owner at the conclusion of the project. In this role, Benjamin was responsible for the inspection of the Division Quality Assurance and Quality Control program. He also directed all source inspection activities including resolution of related code requirements and related problems.

DEENA JAIN

Electrical Inspector

An accomplished, proactive engineer with a Bachelor's degree in Electrical Engineering and possessing over ten years experience. Past experience as an Office Engineer/Field Engineer in the construction projects of NYCDEP, AMTRAK, PATH-WTC, NYCHA, SCA and NYCTA. Strong ability to prioritize and remain focused on the essence of an issue. Deena has been recognized for strong adherence to both safety and quality throughout projects. Along with the ability to work both independently and as a team, Deena holds proven technical, interpersonal, communication and multi-tasking skills, exceptional work ethic. Past experience in handling multiple projects and deadlines concurrently.

Key Highlights

- ✓ Over 10 Years Industry Experience
- ✓ Extensive Field Inspection Work
- ✓ Proficient in Primavera Expedition

Education

- **BS, Electrical Engineering**, Sadder Patel University, India

Computer Skills

- Primavera Expedition
- MS Office Suite
- CITRIX

Technical Knowledge

- Proficient in MURK Reporting System

Certifications

- PMP/PMG Training (NYCTA)
- OSHA – 30 Hour Certification
- Document Security Training (World Trade Center Project)
- Loss and Prevention Training Confined Space Training (NYCDEP)
- QC/QA Certification
- Contractor's Safety Workshop
- Quality Workshop

The Port Authority of New York & New Jersey (PANY&NJ) – WTC Transportation Hub – New York, NY

Electrical Estimator/ QA/QC Electrical Inspector

- Worked as hands on estimator on the PATH HUB Project (World Trade Center Redevelopment - $2 Billion Project). Prepared detailed take offs and estimates for 90% Design and Final Design documents for 15KV and 480V Power distribution, Lighting, Fire Alarm, Security, SCADA, Controls, and Fiber-optic & Radio Communication Systems. Reconciled estimates with the design engineers and independent estimating group. Prepared variance reports.

New York City Department of Transportation (NYCDOT) & New York State Department of Transportation (NYSDOT) – Movable Bridge Group & Street Lighting Division – Replacement of Willis Avenue Bridge – New York, NY

QA/QC Electrical Inspector III-

Provided onsite inspection of various construction activities related to the replacement of the Willis Avenue Bridge over Harlem River Drive and the installation of street lighting systems over the Major Deegan Expressway for NYCDOT-Movable Bridge Group and NYSDOT-Street Lighting Division.

New York City Department of Environmental Protection (NYCDEP) – Citywide SCADA Project – New York, NY

Construction Supervisor II & QA/QC Electrical Inspector

- Responsible for on-site Inspection of various construction activities as related to a citywide SCADA system installation for water pollution treatment plants.
- Provided onsite installation inspections of pump stations for educational facilities, as well as witnessed testing of various electrical cables and equipment.
- Provided solutions for various electrical issues regarding ground water treatment plants and operable units for Lockheed Martin Co.
- Assisted Electrical designers for QA work upcoming Arc flash project, Fire Alarm system project for Water Pollution Control Plants and administrative functions for ongoing projects.

PACO Group

AMTRAK Fire and Life Safety Group – New York, NY
QA/QC Electrical Inspector

Sole QA/AC Electrical Inspector on Amtrak's $130M vent shaft projected located at 34th Street First Avenue in New York City. The project consisted of the installation of six (6) remotely controlled SCADA 350 HP ventilation fans to allow extraction of smoke and fumes and to supply air to Amtrak's four (4) tunnels located under the East River.

- Duties included the inspection of the installation of all electrical equipments for substations, conduits, wiring and termination testing to ensure compliance with specifications and drawings.
- Witnessed the pre-installation testing of various pieces of equipment both electrical and mechanical based on my familiarly with the ongoing progress on the job site.
- Reviewed electrical portion of contractor's monthly pay request to ensure correctness and updated quantities in the biweekly progress report.
- Reviewed electrical and mechanical shop drawings & as built drawings.

New York City Housing Authority (NYCHA) & New York City School Construction Authority (NYCSCA) – Various Projects – New York, NY
Senior Electrical Inspector

Provided existing condition assessments survey for various building systems and associated components, including: Existing Panels, Power & Lighting systems including Building site and exterior lighting Communication & Security systems Fire Alarm & Emergency lighting systems, Electrical systems associated with other building systems, e.g. HVAC equipment, plumbing systems, Vertical transportation systems etc. to facilitate long term capital planning, maintenance & rehabilitation projects for New York City Housing Authority & School Construction Authority.

Prepared assessments reports using collected data on Mobile Validity Hand Held Computers (CITRIX program), including: Condition based rating, Priority ranking, comparison between statistical anticipated useful life of various systems and probable useful life of operational system, based on evaluations made, deficiencies that exists at the time of survey, probable cause an recommended remedial work for deficiencies, estimate of remaining useful life. Additionally performed QA/QC review and approval of reports prepared by various inspectors using NYCHA – CITRIX program.

Metropolitan Transportation Authority (MTA), New York City Transit (NYCT) – Capital Program Management – New York, NY
Senior Electrical Inspector / Office Engineer

- Performed project coordination, project administration, design coordination, staging of construction operations, engineer in charge & field/ site inspection and evaluation of various field requests to assure that qualified contractors construct the project safely, with a high quality of workmanship and in a timely fashion.
- Assisted Construction Manager and Project Engineer in the determination of long-term goals for various projects and close-outs of projects successfully within budget & scheduled time frame.
- Conducted various meetings such as construction & administrative kick-off, communication, safety and various progress meetings with user groups, public agencies, and contractors to proactively address and resolve issues, achieve goals successfully within time frame.
- Reviewed various electrical & communication shop drawings, as-built Drawings and catalog cuts, specifications, operation and maintenance manuals to assure that comments have been incorporated and NYCT standards have been met or exceeded for various communication systems and construction facilities.

INSPECTION PERSONNEL – COATINGS

Evan Steele
Coatings Inspector

Professional Profile
Mr. Steele provides comprehensive coatings removal and application inspection for bridge, roadway, and treatment plant facility rehabilitation/reconstruction projects. In addition, he has significant experience working within the specific recordkeeping requirements of public agencies and municipalities. Mr. Steele is a NACE Certified Coatings Inspector.

Proposed Project Assignment
Construction Inspector - Coatings

Registration/Certifications
NACE Coatings Inspector Level I
ACI Concrete Construction Special Inspector (Pending)

Total Years Experience 21

Project Experience

Rockville Centre Bridge Painting, Rockville Centre, NY; 3/10-Present. Coating Inspector. The project involves painting and rehabilitation of pedestrian bridges over Peninsula Boulevard in Rockville Centre, Nassau County. Responsibilities include quality assurance of all coatings operations of four pedestrian bridges which involves SP-10 blast standard, three-coat (zinc/epoxy/urethane); the removal and replacement of existing asphalt pathways; the cleaning and coating (anti-graffiti coating) of all masonry surfaces; designated areas for guardrail and fence resetting/replacement; the laying of concrete curbs and curbwalls; quality assurance and designation of grades for concrete paving stone placement; the removal and replacement of paving stones; the removal and replacement of granite coping stones (replaced with concrete block); coordinating MPT and documenting contractors daily work activities; review of project progress and making sure county project manager is updated daily; and assisting project manager with monthly estimates. Client: Nassau County Dept. of Public Works

Consolidated Edison Tank Inspection, NY; 6/09-8/09. Coating Inspector. Project involved providing quality assurance oversight for Consolidated Edison on the cleaning and relining of four treated water tanks. Provided inspection of abrasive blast cleaning ops, lining application, post lining inspection and daily coordination of the contractor's activities. Also provided photographic documentation of the work progress along with QA documentation. Client: Consolidated Edison Company of New York

Suffolk County Water Authority Water Tank Inspections, Suffolk County, NY; 3/09-6/09. Coating Inspector. Project involved providing full-time inspection services to monitor the coating and rehabilitation of reservoirs, standpipes and elevated water storage facilities and the construction of wireless cellular installations on elevated water storage tanks. Mr. Steele's responsibilities included inspection of work being performed for compliance with project specifications and industry standards, with written and photographic documentation provided to the client. Client: Suffolk County Water Authority

Throgs Neck Bridge (TN-85), Queens, NY; 9/07. Coating Inspector. Project includes structural steel paint removal and new coatings application for the Main Span underdeck painting at the Throgs Neck Bridge. Mr. Steele's responsibilities for this major abrasive blasting project include coordination and oversight of Contractor operations during implementation of paint removal, surface preparation and new coatings application activities; conducting non-destructive testing of newly coated surfaces and recording quality assurance and site safety documentation for applied materials and equipment and related work operations; review of Contract submittals and containment drawings and development of controls and checklists/inspection forms for lead paint removal, surface preparation and new coatings application in accordance with SSPC and Triborough Bridge and Tunnel Authority reporting and quality assurance/ quality control protocols. In addition, coordination of work activities and Contractor schedules with the TBTA Engineering and Operations Department.

Eastern Welding Co. Facility, Riverhead, NY; 1/08-3/08. Shop Inspector. Mr. Steele provided shop inspection services during structural steel component cleaning and painting for John F. Kennedy Airport's Jet Blue Terminal rehabilitation in accordance with Port Authority of NY/NJ protocols.

Evan Steele
Coatings Inspector

Fly over Ramp LaGuardia Airport, Queens, NY; 4/07-8/07. Chief Inspector. Project included structural steel paint removal and new coatings application for a fly over ramp at LaGuardia Airport. Mr. Steele's responsibilities for this project included coordination and oversight of Contractor operations during implementation of paint removal, surface preparation and new coatings application activities; conducting non-destructive testing of newly coated surfaces and recording quality assurance documentation for applied materials and equipment; review of Contract submittals and containment drawings and development of controls and checklists/inspection forms for lead paint removal, surface preparation and new coatings application in accordance with SSPC and Port Authority of NY/NJ reporting and QA/QC protocols.

Muellers Boat Works, Brooklyn, NY; 3/07-4/07. Shop Inspector. Mr. Steele provided shop inspection services during high pressure water jetting and painting of steel and galvanized ship components in accordance with United States Coast Guard (USCG) requirements.

DeFoe Construction Co. Facility, Mt. Vernon, NY; 2/07-3/07. Shop Inspector. Performed shop inspection for cleaning and painting of fabricated galvanized steel components for the Holland Tunnel project at the DeFoe fabrication facility in accordance with Port Authority of NY/NJ protocols.

Henry Hudson Bridge, New York, NY; 8/06-12/06. Chief Inspector. Project involves structural steel paint removal and new coatings application for this large steel arch bridge over Spuyten Duyvil Creek between Bronx/Manhattan. Mr. Steele's responsibilities for this project include coordination and oversight of Inspection staff during Contractor operations for all paint removal, surface preparation and new coatings application activities; providing quality assurance inspection/testing and documentation for applied materials and equipment; review of Contract submittals and containment drawings and development of controls and checklists/inspection forms for lead paint removal, surface preparation and new coatings application in accordance with SSPC and Triborough Bridge and Tunnel Authority reporting and quality assurance/quality control protocols.

D.E.P Underground Water Tank, Queens, NY; 2006. Chief Inspector. Mr. Steele provided daily on-site management for inspection services for this project including: coordination and oversight of Contractor operations during implementation of paint removal, surface preparation and new coatings application activities; conducting non-destructive testing of newly coated surfaces and recording quality assurance documentation for applied materials and equipment; review of Contract submittals and development of controls and checklists/inspection forms as necessary for lead paint removal, surface preparation and new coatings application in accordance with SSPC and New York City Department of Environmental Protection reporting and quality assurance/quality control protocols.

Waste Water Treatment Plant, Suffolk County, NY; 2006. Field Inspector. Provided daily on-site inspection for this rehabilitation project including: coordination and oversight of Contractor operations during implementation of paint removal, surface preparation and new coatings application activities; conducted site safety surveys during Contractor work operations; review of Contract submittals and development of controls and checklists/inspection forms as necessary for lead paint removal, surface preparation and new coatings application in accordance with SSPC and Suffolk County reporting and quality assurance/quality control protocols.

Throgs Neck Bridge, Queens, NY; 2004-2005. Chief Inspector. Project included structural steel paint removal and new coatings application for the Main Span outer chord and fascia painting at the Throgs Neck Bridge. Mr. Steele's responsibilities for this project included coordination and oversight of Contractor operations during implementation of paint removal, surface preparation and new coatings application activities; review of Contract submittals and containment drawings and development of controls and checklists/inspection forms for lead paint removal, surface preparation and new coatings application in accordance with SSPC and Triborough Bridge and Tunnel Authority reporting and QA/QC protocols.

Omar Soriano
Inspector

Professional Profile
Mr. Soriano is an inspector with the following experience.

Project Experience
Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 5/10-Present. Inspector. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Responsible for the erection of Safespan Platform system in accordance with the proposed shop drawings for the ramp structures, main span and approach steel structures. Also responsible for inspecting sandblasting and painting operation including Class A containment set up; metal deck platform installation; assuring that the steel is blasted to near white metal as per SP 10 requirements or as specified in the plans for each structure; enforcing the standards specified in the material data sheets for the proposed corrosion protection coating system applied including the primer, intermediate, stripe and finish; approving and paying for each applied coat after the appropriate curing time is reached. Client: New York City Dept. of Transportation

Proposed Project Assignment
Construction Inspector - Coatings

Registration/Certifications
Intern Engineer/NY
NACE Coatings Inspector Level 1/NY
ACI Concrete Field Testing Technician - Grade I

Education
BE/2008/Civil Engineering

Course Work
10-Hour OSHA Training Course
1-Hour Lead Awareness Training
10-Hour Construction Industry Outreach Training Program
Practicing Institute of Engineering, Inc.-
P [redacted] Value Engineering Certification
Value Engineering at the Brooklyn Bridge Traveler Replacement Contract

Total Years Experience 7

Rehabilitation of the Brooklyn-Queens Expressway (I-278), Park Avenue Viaduct, D259766, Kings County, NY; 3/08-5/10. Inspector for this $138-million project involving construction engineering and inspection for the widening, redecking and repainting of this 850,000 sq ft viaduct with complex MPT on and below this heavily traveled structure. Rehabilitation of this high-volume, major interstate urban highway/bridge includes replacement of more than 400 bearings and 1,500 meters of bridge expansion joints. The structure will have seismic reinforcement installed which includes retainers and plates at the top of columns and additional stiffeners and plates at the base. Also included is extensive coordination with agencies and local communities. Mr. Soriano's responsibilities involved the inspection of the proposed seismic reinforcement of the Park Avenue Viaduct steel columns including the core drilling of holes and the installation and grouting of the 1100mm long anchor bolts. Also responsible for the steel reinforcement and the concrete deck placement for the two lanes 1485 meters in length, state IVA/IVB of reconstruction; inspection of the saw grooving, concrete deck protective sealing installation and elastomeric concrete armorless joints placement for the before mentioned stage of reconstruction. Duties included examination of shop drawings; quality assurance of the concrete and reinforcement placement as specified in the contract plans and the NYSDOT Standard Specifications; reporting daily progress of the work being performed and making payments as per the specified item description; inspection of the Park Avenue Viaduct sandblasting and painting operation including class A containment set up; fence and metal deck platform installation; assuring that the steel was blasted to near white metal as per SP 10

requirements; enforcing the standards specified in the material data sheets for the primer, intermediate, stripe and finish coat applied; approving and paying for each applied coat after the appropriate curing time was reached. Supervised the Nassau Concord Viaduct East Abutment pedestals repairs and bearing reset, including the jacking of nine floor beams and placement of temporary steel columns;and creating excel spreadsheets to finalize quantities for the closing of the project. Client: New York State Dept. of Transportation

Exterior Street Ramp Bridge over Metro-North Rail Road, Bronx County, NY; 4/07-3/07. Senior Engineering Technician. Involved inspection of excavation and demolition of an existing bridge including lead paint removal from the bridge girders, stringers and diaphragms; examination of shop drawings for the construction of a temporary bridge to rebuild the existing Exterior Street Bridge ramp, abutments and columns; inspection of sheet piles and mini piles installation; and also involved computing volume calculation and payment for the asphalt placement on the temporary bridge.

Installation of Intelligent Transportation System (ITS) Improvement along the Cross Bronx Expressway Corridor, Routes I-95, I-295, I-695), NY; 9/06-12/06. Transportation Construction Inspector III. Involved inspection of installation and removal of electrical conduit for ITS optic fiber, camera, street lighting and VMS board; inspection of adequate trench and conduit excavation, and backfill; responsible for safety MPT application in accordance with the contract plans and specification based on the Manual for Uniform Control Devices (MUTCD); inspection of foundation reinforcement and concrete pouring; responsible for conducting slump, air and cylinder tests of the concrete in accordance with the NYSDOT Standard and Specification Manual; responsible for writing daily inspector's report to pay the contractor for the work he achieved. The reports included computations of quantities of the item(s), description of work performed, etc.

Safety Improvement of the Major Deegan Expressway Acceleration Lane and Fordham Landing Playground, NY; 6/06-9/06 and 6/05-12/05. Transportation Construction Inspector III. Inspection of excavation of 30-ft-deep holes on earth with auger machinery for soldier piles installation; checked that excavated holes were in accordance with the depth and diameter specified on the contract plans to avoid soil erosion and failure in the foundation; installation of soldier piles and pre-cast wall panels for a retaining wall of approximately 300m long; computed an immense quantity of structural excavation, including the removal of an existing retaining wall, concrete and asphalt pavement excavation; inspection of the pouring of structural concrete and asphalt pavement of two 300m-long acceleration and shoulder lanes; conducted various slump, air and cylinder tests for the sections poured.

Rehabilitation of Arthur Sheridan Expressway, Bronx County, NY; 6/04-12/04 and 6/03-12/03. Transportation Construction Inspector. Assisted the office engineering with quantity check calculations including cost estimate; assisted the resident engineer with calculations and design of the vertical alignment for the 2.5-mile weaving lane; reviewed contract's shop drawings and staging plans; participated in the placement of sub-grade sub-base and European pavement of the three lanes and ramps of the three-mile-long expressway.

Richard Procaccio
Coating Inspector

Professional Profile
Mr. Procaccio is an experienced coatings inspector for bridge reconstruction and painting projects.

Proposed Project Assignment
Construction Inspector - Coatings

Registration/Certifications
NACE Coatings Inspector Level 1/NY
ACI Concrete Field Testing Technician - Grade 1/NY

Education
Diploma/2002/Paint Theory and Practicum, Structural Coatings

Course Work
Paint Theory and Practicum 1-6, Structural Coatings Technology Practicum 1-6
Hazardous Materials, Foremanship and Supervision, Construction Documents
Structural Graphics 1&2, Blueprint Reading 1&2
Introduction to CADD, CADD Applications, Interior Decorative Trades 1&2

Total Years Experience 13

Project Experience

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 9/09-Present. Coatings Inspector. This $280-million project involves the construction engineering and inspection for the Rehabilitation of the main bridge. The scope of work for the project includes abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower and intermediate tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom chord rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and electroliers, integration of intelligent transportation operating system, seismic retrofit of the intermediate towers, installation of contraflow barrier and erection of barrier transfer machine facility, including augured concrete piles. Responsibilities include ensuring that all structural steel work followed approved drawings and specifications; north/south truss diagonal repairs, floor beam web repairs, bottom chord lacing bar/batten plate replacement and lateral brace repairs; calibrating the torque wrench and checking all new connections for proper torque; monitoring all painting activities that took place; ensuring ambient conditions were within an acceptable range for coating the steel; inspecting coated surfaces including checking that the coating was free of any defects, and taking wet film thicknesses and dry film thicknesses; monitoring the mixing and thinning of two and three part coating system; performing numerous steel inspections ranging from SP-1, SP-2, SP-3 and SP-5 levels of cleanliness; and was also responsible for all destructive and non-destructive inspections on the coating system. Client: New York City Dept. of Transportation

Protective Coating of Grand Central Parkway over BQE Bridges, Queens, NY; 7/08-9/09. Coatings Inspector. Resident engineering inspection, environmental monitoring/hazardous waste management and construction support services for the protective coating of five Grand Central Parkway/BQE bridges. Mr. Procaccio's responsibilities included daily monitoring of ambient conditions for coatings applications; inspection of sand blasted steel to an SP-10 finish and inspection of power tool cleaned steel, to an SP-6 or SP-15 finish to ensure the level of cleanliness as required in the job specifications; inspection of a four part coating system that includes a primer, a rust sealer, an intermediate, and a top coat. Inspections were done to verify proper coating thickness and coverage as well as to determine if the coating is cured for the following paint application. He also prepared a daily work report noting the days work activities which included start and stop times, man power, equipment, locations, paint batch numbers and dates and general notes. Client: New York City Dept. of Transportation

Richard Procaccio
Coating Inspector

Queensboro Bridge Lead Paint Removal and Protective Coating, Contract BRC231P, New York, NY; 5/04-11/06. Coatings Inspector. This $170-million project involves the erection of containment structures, abrasive blasting and lead paint removal for the entire East River Bridge, and the application of a three-coat painting system. Mr. Procaccio's responsibilities included daily monitoring of ambient conditions for coatings applications; inspection of sand blasted steel to ensure the level of cleanliness as required in the job specifications; and inspection of a three-part coating system which includes primer, intermediate coat, and top coat. Inspections were done to verify proper coating thickness and coverage as well as to determine if the coating is cured for the following coat. He also filed daily reports that detailed the day's work and progress. Client: New York City Dept. of Transportation

The Robert F. Kennedy (Triborough) Bridge Deck Replacement, TB-64A, New York, NY; 11/03-5/04. Coatings Inspector. Mr. Procaccio's responsibilities included daily monitoring of ambient conditions for coatings applications; inspection of hand/power tool cleaned steel to ensure the level of cleanliness as required in the job specifications; inspection of three-part coating system which includes primer, intermediate coat, and top coat. Inspections were done to verify proper coating thickness and coverage as well as determining if the coating is cured for the following coat. He also filed daily reports that detailed the day's work and progress. Client: Triborough Bridge and Tunnel Authority

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York, NY; 8/02-10/03. Inspector for this $175-million project which involves rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Responsibilities included daily monitoring of ambient conditions for coatings applications; inspection of hand/power tool cleaned steel to ensure the level of cleanliness as required in the job specifications; inspection of three-part coating system including primer, intermediate coat, and top coat. Inspections were done to verify proper coating thickness and coverage as well as determining if the coating is cured for the following coat. He also filed daily reports which detailed the day's work and progress. Client: New York City Dept. of Transportation

Manhattan Bridge Reconstruction, Painting and Interim Rehabilitation, Contract #BRC1568C, New York, NY; 4/99-10/01. Inspector. This $124-million project involves the rehabilitation of the Manhattan plaza area, Manhattan Arch and Colonnade; replacement of the structural steel stringer and floorbeam support system for the west side subway tracks; replacement of truss bearings on top of the piers of both approach spans; rehabilitation of eyebars anchoring one of the main suspension cables; and removal of existing paint from the entire west side, both towers and two main cables, and replacing with new coating. Client: New York City Dept. of Transportation

Edgar Painting Corp., Massapequa, NY; 12/06-7/08. Foreman. Responsible for painting of various interior and exterior substrates, i.e. drywall, stucco, wood, concrete, block, siding, cedar shingles, etc. Also repaired damaged surfaces with caulk, spackle, and joint compound; stained and clear coated wood railings and stair cases; and managed one team, two painters ensuring that jobs were completed in a timely and efficient manner.

David C. Bradham
Chief Coatings Inspector

Professional Profile
Mr. Bradham has many years of experience in the protective coatings industry. As chief coatings inspector, responsibilities include protective coatings and linings, engineering and project management for a variety of industrial and power plant projects on various locations throughout the United States.

Proposed Project Assignment
Construction Inspector - Coatings

Registration/Certifications
NACE Coatings Inspector Level 2

Course Work
ANSI Level II Protective Coating/ Lining Applicator

Total Years Experience 37

Project Experience

Battery Park City Ferry Terminal at the 39th Street Pier, Brooklyn, NY; 12/07-7/08. Chief Coating Inspector. Project involved inspection of a barge which was designed to be used as the in and out point for people that use the New York waterway as a means of getting into and out of New York City. This is a 180 ft x 180 ft platform that is used in the East River at Battery Park in lower Manhattan. The coating, as designated by the Port Authority specification as the S-3 system, is the Carboline 859 zinc rich epoxy primer, Carboline 888 epoxy mid coat, Carboline 950 Metallic gray finish, followed by a clear coat of the Carboline 950. Surface preparation for the steel was an SSPC-SP10. In the shop, the surface preparation and coating system is the same; but because of the installation of the components, only the primer and mid coat were applied as the construction damage and welding and repairs are easier to repair. After the welding was acceptable, the coating repairs and final application was started. In the shop, the surface preparation started with a visual inspection for defects that could damage the coatings, followed by a solvent cleaning to remove oil grease and welding product. This was followed by abrasive blasting to an SSPC-SP10 near white metal blast cleaning. Responsibilities involved verifying surface profile of 2 to 3 mils with the test-X tape; monitoring the mix of the primer; monitoring the application of the same. After the minimum cure time, measurements were conducted of the dry film thickness of the primer. If no repairs and/or defects were found, the mix and application of the mid coat followed. After the minimum cure time, obtained the Dry film thickness of the combined system. If no defects or repairs were required, allowed the unit to be moved out of the shop and staged to be placed into position on the barge. On the barge, the units were already in the mid coat and were in need of repair. After all parties satisfied the requirements of the specification they were involved with, the unit or area was then prepared to meet the requirements for the part of the coating system being repaired. Client: Port Authority of New York/New Jersey

Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 2/10-Present. Chief Coating Inspector. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Mr. Bradham's responsibilities include fabrication and implementation of site specific coating inspection; schedules and forms; and assisting in the coordination of field inspectors for the various assignments. Also responsible for inspection of the platform and containment erection; surface preparation (sp10, sp15, sp3, sp2); application of a four-coat paint system profile measurements; chloride testing; and dry film thickness (DFT) measurements. Client: New York City Dept. of Transportation

George Washington Bridge Coatings Services, Fort Lee, NJ; 7/04-12/05. Senior coating lead inspector for this $100-million contract, which involved Class 1A containment of both towers of this structure, the

removal of existing lead paint and the application of a new three-coat system to approximately 2.1 million sq ft of steel. Mr. Bradham's responsibilities included the inspection and documentation of the erection of the containment system, the removal of lead paint, surface preparation, paint application and paint film thickness verification. Client: Port Authority of NY & NJ

Goethals Bridge Paint Inspection, Contract AKG-274.022, Staten Island, NY and NJ; 2000. Senior Inspector. Removal of lead-based paint, and recoating with a three-part system. Inspected erection and operation of Class A containment system for abrasive blasting removal of lead paint. Verified and documented proper substrates profile and film thickness by use of electromagnetic gauge. Inspected maintenance and protection of traffic (MPT) for lane closures on the NJ Turnpike and coordinated with Port Authority and New Jersey police. Client: Port Authority of NY & NJ

Protective Coating of Grand Central Parkway over BQE Bridges, Queens, NY; 7/08-2/10. Chief Coating Inspector. Project involves construction inspection, environmental monitoring/hazardous waste management and construction support services for the protective coating of five Grand Central Parkway/BQE Bridges. Responsible for the inspection of the erection of containment system; removal of lead based paint and recoating with four-coat system; verifying and documenting proper substrate profile and film thickness and inspecting painting operations. Also responsible for reviewing and monitoring MPT for traffic on the Grand Central Parkway; updating office records required by the contract specifications; assisting with the management of the records from the contractor to the client; interfacing with the on-site personnel from various agencies of the city; contacting the various agencies, NYCDOTSR, NYPD Traffic, JTOC, EMS and Fire & Safety, to inform of possible impact to traffic (closure of travel lanes) on the GCP; monitoring Health and Safety records of the contractor; and informing the contractor of possible changes to the work schedule as directed by the client. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 1/06-12/07. Chief Coating Inspector. This $150-million project involved the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge in suspended and approach spans; and repair of flagged conditions. Mr. Bradham's responsibilities included the inspection and documentation of the application of a three-part coating system at the Manhattan Bridge approaches, travelers, tower bases, and walkway canopy steel. Duties included inspection of containment and blast operations to remove existing lead paint, testing of surface preparation, monitoring paint application, verification of approved film thickness and documentation of all paint related items. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; NY; 2/01-7/04. Senior coating lead inspector for this $175-million project which involved the rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Responsibilities as lead inspector included inspecting the erection of containment system, removal of lead based paint, and recoating with three-coat system. Also, verified and documented proper substrate profile and film thickness and inspected painting operations at New York City Transit rail facilities on the bridge. Client: New York City Dept. of Transportation

Professional Affiliations
Steel Structures Painting Council, National Association of Corrosion Engineers (NACE)

John Marcel
Inspector

Professional Profile
Mr. Marcel's many years of experience encompasses all general components of bridge and highway construction. He has acquired the experience from construction inspection assignments with New York State Dept. of Transportation, New York City Dept. of Transportation, New Jersey Dept. of Transportation and various other municipalities and utility companies. He is a veteran of the United States Air Force where his military service included the responsibility of fire protection/inspection of residential and commercial buildings' fire suppression systems.

Proposed Project Assignment
Construction Inspector - Coatings

Registration/Certifications
NICET IV/NY
NACE Coatings Inspector Level 1

Course Work
10-Hour OSHA Training Course
1-Hour Lead Awareness Training

Total Years Experience 19

Project Experience
Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 4/10-Present. Senior Inspector. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Mr. Marcel's s responsibilities include inspection of platform and containment erection, surface preparation (sp10, sp2, sp3), and application of a four coat paint system including surface profile measurements, chloride testing, and dry film thickness measurements. Client: New York City Dept. of Transportation

Rehabilitation of the Brooklyn-Queens Expressway (I-278), Park Avenue Viaduct, D259766, Kings County, NY; 1/08-4/10. Inspector for this $138-million project involving construction engineering and inspection for the widening, redecking and repainting of this 850,000 sq ft viaduct with complex MPT on and below this heavily traveled structure. Rehabilitation of this high-volume, major interstate urban highway/bridge includes replacement of more than 400 bearings and 1,500 meters of bridge expansion joints. The structure had seismic reinforcement installed which included retainers and plates at the top of columns and additional stiffeners and plates at the base. Also included is extensive coordination with agencies and local communities. Mr. Marcel was responsible for the installation of SSPC Class 1A containment systems for lead content paint removal operation via abrasive blasting method along with ensuring application of three-coat moisture cured paint system. Responsibilities also included daily monitoring/documentation of this operation including contractor's compliance to any related OSHA/EPA regulations. Client: New York State Dept. of Transportation

Queensboro Bridge Lead Paint Removal and Protective Coating, Contract BRC231P, New York, NY; 8/07-1/08. Inspector. This $170-million project involved the erection of containment structures, abrasive blasting and lead paint removal for the entire East River Bridge and the application of a three-coat painting system. Mr. Marcel's responsibilities included cataloging of shop drawings for scaffold and containment erection, field inspection and documentation of erection of scaffolding and containment structures. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 11/06-8/07. Inspector on this $150-million project involved the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of

anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge in suspended and approach spans; and repair of flagged conditions. Responsibilities included installation of lower roadway grid deck and placement of concrete in grid deck and approaches of the lower roadway. Client: New York City Dept. of Transportation

Reconstruction of Three Bridges - Deck Replacement of I-295 over Randall Avenue, Reconstruction of E. Tremont Avenue over I-295 and Replacement of I-95 over I-695, Bronx, NY; 9/04-11/06. Senior Inspector. Inspected various construction elements including demolition of bridge deck super/sub structures, erection of temporary bridges, new bridge construction including pre-cast concrete beam, S.I.P. form, reinforcement and C.I.P. concrete. Inspection of electrical portion of project including demolition, temporary lighting/permanent lighting, traffic signal and I.T.S. systems installation. Client: New York State Dept. of Transportation

Reconstruction of Arthur Sheridan Expressway, Bronx, NY; 4/02-9/04. Senior Inspector. Inspection responsibilities included removal of existing six-lane expressway, on/off ramps and replacement with European Design type pavement. Conducted daily inspections for maintenance and protection of traffic (MPT). Client: New York State Dept. of Transportation

Reconstruction of New Hyde Park Road Bridge over I-495, Long Island Expressway, NY; 1/00-3/02. Senior Inspector. Inspected all of the construction elements of this $15-million construction project including demolition of pre-existing concrete rigid frame bridge, erection and removal of prefabricated temporary truss bridge, new substructure and pre-stressed concrete beam supported superstructure with high performance CIP concrete bridge slab. Inspection assignments included construction of retaining wall, noise barriers, new full-depth concrete pavement, milling and resurfacing of existing pavement, drainage, lighting, traffic signals and ITS facilities. Also responsible for MPT. Client: New York State Dept. of Transportation

Reconstruction of NY 25A and Replacement of NY 25A Bridge over Cold Spring Brook, NY; 4/99-1/00. Senior Inspector. Inspected widening and full-depth reconstruction of approximately two miles of NY 25A Main Street/Northern Boulevard through Cold Spring Harbor including replacement of a culvert with a new bridge over Cold Spring Brook. Inspection tasks included full-depth bituminous pavement, drainage, guide rail, site work, and delineation, MPT and lighting for nighttime construction. Client: New York State Dept. of Transportation

I-495 Long Island Expressway, HOV Lanes, Exits 57-61, NY; 2/98-4/99. Senior Inspector. Responsible for inspecting new construction of approximately 28 lane-miles of full-depth concrete pavement with asphalt overlay and replacement of I-495 Bridge over NY 454, Veterans Highway. Inspection duties included excavation, grading, placement of sub-base, asphalt paving, concrete barriers and installation of overhead sign structures. Client: New York State Dept. of Transportation

Reconstruction of Sunrise Highway, NY 27, Freeport to Valley Stream, NY; 6/97-2/98. Construction Inspector. Inspected placement of concrete for curb, barriers, sidewalk, full and partial depth pavement repairs, asphalt paving, thermoplastic and epoxy pavement markings. Client: New York State Dept. of Transportation

Columbus Avenue Reconstruction Project, 85th Street - 110th Street, Manhattan, NY. Construction Inspector. Inspected new waterman and sewer installations, protection and relocation of utilities, drainage pipe and structures and placement of concrete for curb and sidewalk.

Sylvain Rodrigue
Coating Inspector

Professional Profile
Mr. Rodrigue has several years of experience on various large bridge contracts involving coatings application, structural steel and concrete installation, as well as environmental and safety compliance.

Project Experience
George Washington Bridge Coatings Services, Fort Lee, NJ; 4/05-8/06. Coatings Inspector. This $100-million contract involves Class 1A containment of both towers of this structure over the Hudson River involving the removal of existing lead paint and the application of a new three-coat system to approximately 2.1 million sq ft of steel. Responsible for monitoring containment operations, quality of paint material and proper storage and mixing. They inspect surface preparation, paint application and test for compliance with contract specifications. Client: Port Authority of NY & NJ

Proposed Project Assignment
Construction Inspector - Coatings

Registration/Certifications
NACE Certified Coatings Inspector/NY
ACI Concrete Field Testing Technician - Grade 1

Education
BS/1995/Environmental Science

Course Work:
10-Hour OSHA Training Course
SSPC C-3 Supervisor/Competent Person Training, Coatings Inspection Instrument Training, OSHA/Lead Awareness Training

Total Years Experience 15

Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 3/10-Present. Chief Coatings Inspector. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Responsibilities include fabrication and implementation of site specific coatings inspection forms and coordination of field inspectors for various assignments. Responsibilities also include inspection of platform and containment erection; surface preparation (sp10, sp3, sp2); and application of a four-coat paint system including surface profile measurements, chloride testing, and dry film thickness measurements. Client: New York City Dept. of Transportation

Bronx-Whitestone Bridge Bronx/Queens Approach, BW-89/WBM-342, Bronx, NY; 10/09-3/10. Chief Coatings Inspector. This $192-million project involved the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work included the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure there was massive concrete placements for concrete footings and piers. Traffic on the bridge was maintained with five lanes open to traffic. During the staged construction, work was staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting. Other work items on the project included new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure. Responsibilities included fabrication shop inspection visits for the fabrication/ coating of new bridge girders and bearings to ensure compliance with the specification. Also, daily inspection of the installation and grouting of stay-in-place forms for partial depth deck repairs along the Bronx Approach Span. Client: Triborough Bridge and Tunnel Authority

Sylvain Rodrigue
Coating Inspector

Bronx-Whitestone Bridge Cable/Suspender Rope Rehabilitation, BW-85/86, Bronx, NY; 1/08-3/10. Chief Coatings Inspector. Project involves construction management and inspection services for coating removal and application and cable/suspender rehabilitation for Project BW-85/86, Select Cable Panel Opening/ Suspender Rope Removal and Replacement and Painting at the Bronx-Whitestone Bridge. Mr. Rodrigue was responsible for the creation of paint inspection forms, overseeing and assisting other coatings inspectors during daily activities which include surface preparation inspection for SSPC-sp 2,3,10,11,15 prepared surfaces, dry film/wet film thickness readings, and surveying of tower interiors for needed work. He also worked on the bridge painting of the suspension system and towers. Client: Triborough Bridge and Tunnel Authority

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York; NY; 1/07-1/08. Coatings inspector on this $150-million project involving the reconstruction of the lower roadway; removal and replacement of floor beams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge in suspended and approach spans; and repair of flagged conditions. Responsibilities included inspection of traveler rail track beams, tower balconies and additional miscellaneous areas abrasive blasted to near white metal. Surface profiles were measured on prepared substrate along with dry film thickness measurements on the subsequent four-coat paint system. Additional responsibilities required inspection of surface preparation and coatings application to faying surfaces as new steel is installed for the lower level deck replacement. Client: New York City Dept. of Transportation

Queensboro Bridge Lead Paint Removal and Protective Coating, Contract BRC231P, New York, NY; 8/06-1/07. Coatings Inspector. This $170-million project involves the erection of containment structures, abrasive blasting and lead paint removal for the entire East River Bridge and the application of a three-coat painting system. Responsibilities included surface preparation verification along with dry film thickness measurements to verify subsequent coatings meet the specified thicknesses. Client: New York City Dept. of Transportation

Tappan Zee Bridge Painting, TANY 01-86BP, New York, NY. 6/02-4/05. Chief Inspector. This work involved SSPC Class 1A containment system, SSPC-SP10 Near-White Blast Cleaning to remove existing lead based coating and replacement of a four coat system consisting of a zinc rich epoxy primer, penetrating sealer, epoxy intermediate and polyurethane top coat. Client: Weidlinger Associates/ New York State Thruway Authority

Bronx-Whitestone Bridge, Projects WBM 319X and BW 87A & C,Miscellaneous Painting and Suspended Rope Collar Replacement & Flag Repairsand Pin Replacement, New York, NY; 3/01-6/02. Chief Inspector. The two concurrent projects totaling $4 million involved the cleaning and painting of several thousand feet of bridge median barrier, several thousand sq ft of tower interior and critical sections of the bridge suspender cables, and the installation of specialized elastomeric collars at the suspender penetrations through the main fascia girders. Also, over 1,000 critical structural steel flag repairs were completed by the contractor. Responsible for the oversight of the contractor's operations with respect to the coatings portion of the project. Client: Triborough Bridge and Tunnel Authority

Main Channel Pier Protection and Steel Tower Painting of the Tappan Zee Bridge , TANY 97-65B, Westchester County, NY; 1999-2000. Construction Inspector. Responsibilities included being in charge of the concrete testing and sampling operation for all cast in place concrete used on site. As construction inspector, duties included monitoring contractors' quantities and progress in accordance with approved plans and specifications. The project involved the installation of 48 in. diameter steel pipe piles to support post tensioned concrete tee beam panels to form the fender system for the main channel piers. Client: New York State Thruway Authority

Elliot Strika
Coatings Inspector

Professional Profile
Mr. Strika has over 17 years of diversified construction experience in bridge rehabilitation and painting processes.

Project Experience
2006-2010 Port Authority On-Call Construction Management Services - Staten Island Bridges Rehabilitation, Staten Island, NY; 10/08-2/10. Coatings Inspector. The project involves construction inspection for structural, civil, mechanical, electrical, and bridge painting services for the three Staten Island Bridges operated by the Port Authority of New York/New Jersey. Mr. Strika's responsibilities at the Bayonne Bridge included inspection of abrasive blasting and painting operation and quality control for the Port Authority. Client: Port Authority of NY/NJ

George Washington Bridge Painting, New York, NY; 7/09-10/09. Coatings Inspector. This $100-million contract involves Class 1A containment of both towers of this structure over the Hudson River involving the removal of existing lead paint and the application of a new three-coat system to approximately 2.1 million sq ft of steel. Responsible for inspecting power tool cleaning of bridge and three-coat paint system application for the cable socket closures. Client: PA NY/NJ

Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 2/10-Present. Coatings Inspector. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Mr. Strika's responsibilities include NYCDOT quality assurance including inspection of all phases of surface preparation and paint systems application. Client: New York City Dept. of Transportation

Rehabilitation of Robert Moses Causeway, NY; 5/07-12/07. Responsible for installation and removal of cable and chain link fence platform systems including stretching 5/8 in. steel cable, down riggers and out riggers, laying down chain link fence, building and removal of containment, stripe painting of nuts, bolts, corners and edges, airless spray application of the second and finish coats. Most of the work was accomplished utilizing suspended scaffold and spider baskets.

Rehabilitation of Manhattan Bridge, NY; 6/06-11/06. Responsible for installation and removal of the cable SafeSpan platform system, as well as pipe scaffolding installation. Sandblasting with steel grit and airless spray application of primer coat.

Rehabilitation of Rikers Island Bridge, Astoria, NY; 9/05-2/06.Responsible for installation and removal of cables and SafeSpan platform systems including stretching of 5/8 in. steel cable, installing out riggers, cable tie-ups; ¾ in. safety cables, handrails and toe boards installation.

Proposed Project Assignment
Construction Inspector - Coatings

Registration/Certifications
NACE Level III Certified Coatings Inspector/NY
NICET I
NYCT Track Safety Certified
Lead Certification/NJ

Course Work
Confined Space Training
NACE CIP Bridge Course
Corrosion and Surface Preparation Units 1, 2
MTA NYCT Track Safety
10-Hour OSHA Training Course, #001210422

Total Years Experience 17

Elliot Strika
Coatings Inspector

Astoria Power Plant, Astoria, NY; 6/05-8/05. Responsible for Union Shop Steward, paper work and on-site responsibilities for 5 painters performing brush and roller painting of large AC units with the use of spider baskets.

Broadway Junction Subway Station Rehabilitation, New York, NY; 10/04-5/05. Had foreman responsibilities of 15 painters and three apprentice painters. Worked with MTA inspector and MTA flagmen establishing work procedures, time and locations for the station rehabilitation project. The rehabilitation included offices, storage rooms, on and above tracks in tunnels and elevated structures. Responsibilities included temporary traffic control for work in man lifts above the roadways. Also negotiated work locations on a multi-trade job site.

American Bridge, Macombs Dam Bridge, NY; 5/03– 9/04. Responsible for sandblasting with black beauty to achieve SP10 "near white" surface profile for two span truss structure; running of the WiWa airless spray pump, including maintenance of spray equipment and instruments; working with six painters and one apprentice. Also instructed painters in procedures and assigned locations to work.

Additional work history includes:

- Atlantic Beach Bridge; 4-02-2/03
- TBTA Toll Booths; 6/01-11/01
- Pulaski Bridge; 10/00-6/01
- Williamsburg Bridge; 4/00-10/00
- Van Wyck Expressway; 10/99– 3/00
- George Washington Bridge; 4/98-9/99
- 59th Street Bridge; 5/96-11/96
- Various Painting Projects; 2/93-5/96

Marcus Olivo
Inspector

Professional Profile
Mr. Olivo possesses the following experience.

Project Experience
Reconstruction of Willis Avenue Bridge, New York, NY; 1/10-Present. Inspector. Project involves replacement of the existing movable bridge and approaches with a new structure, built offline from the existing structure. Mr. Olivo's responsibilities include monitoring and inspection of Fiberglass Reinforced Plastic (FRP) Piles being driven into the Harlem River for the fender system around the new bridge Piers; monitoring the installation of the false work required to set up the template needed to drive FRP Piles and the wale beams of the fender system; performing concrete test of many different classes of concrete used in the construction of the Willis Avenue Bridge's River piers in the Harlem River; providing welding inspection for the welding of shear stud connectors onto Caissons which formed ring beams around the caissons; monitoring iron workers who were performing field splices of tub girders using high strength bolts following the NYS Steel Construction Manual's specification; and monitoring and inspecting the installation of epoxy coated reinforcing bar used in the construction of the new bridge's retaining walls, columns, piers, and pier caps. Client: New York City Dept. of Transportation

Rehabilitation of the Brooklyn-Queens Expressway (I-278), Park Avenue Viaduct, D259766, Kings County, NY; 11/07-12/09. Inspector. This $138-million project involves construction engineering and inspection for the widening, redecking and repainting of this 850,000 sq ft viaduct with complex MPT on and below this heavily traveled structure. Rehabilitation of this high-volume, major interstate urban highway/bridge includes replacement of more than 400 bearings and 1,500 meters of bridge expansion joints. The structure will have seismic reinforcement installed which includes retainers and plates at the top of columns and additional stiffeners and plates at the base. Also included is extensive coordination with agencies and local communities. Mr. Olivo's responsibilities included the monitoring and inspection of welders and welds to make sure that they comply with the welding procedure specifications (WPS); performing concrete testing of the structural concrete which includes slump tests and air tests; casting the cylinders which are sent out for destructive testing; overseeing many general work tasks which include, but are not limited to, the removal of paint on the steel structures, the placement of concrete barrier, installation of pedestrian safety fencing, and monitoring installation of light pole foundations, light poles, electrical conduit and electrical conductors. Also monitored iron workers during prep work of column base plate retrofit to see that the steel was cleaned properly and was able to be welding. He assisted senior inspectors during night shift to

Proposed Project Assignment
Construction Inspector - Coatings

Registration/Certifications
NACE Coatings Inspector Level 1/NY
NICET II
Certified Associate Welding Inspector/NY
American Concrete Institute - Field Inspector Grade I/NY
SSPC C-3 Supervisor/Competent Person for Deleading/NY

Education
AAS/2006/Construction Management Technology
BT/2008/Facilities Management

Course Work
30-Hour OSHA Training Course
10-Hour OSHA Training Course
1-Hour Lead Awareness Training Class
Materials and Methods of Construction I and II
Construction Drawing, Statics and Strengths of Materials I and II, Construction Management I, II and III, Structural Design - Concrete and Steel, Computer Applications, Surveying I Estimating, Materials Testing- Concrete and Steel, AutoCad, Building Service Systems

Total Years Experience 4

inspect that the proper MPT layout was followed. Also assisted in blast inspection of existing steel to be painted and inspection of field applied paint systems. Monitored paint to ensure intensity of the paint is as specified. Monitored containment for visible emissions of lead dust. Performed dry film thickness (DFT) test to make sure paint applied thickness is as specified. Client: New York State Dept. of Transportation

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 11/06-11/07. Inspector on this $150-million project involving the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge in suspended and approach spans; and repair of flagged conditions. Responsible for the overview of the removal of the old floorbeams, stringers, diaphragms, cross beams, steel barriers and deck panels. Also responsible for overseeing the installation of the new structural steel members, which include the floorbeams, stringers, diaphragms, and grid deck panels. When a floorbeam is removed, the ironworkers must buff out the rust and lead paint. He was responsible for making sure the ironworkers torque bolts are correct and replacing them if they are not acceptable. He gave approval as to whether or not it is clean enough for the painter to prime that connection in order for the new floor beam to be installed. In addition, he oversaw the excavation of asphalt, sub-base concrete and miscellaneous excavated material. He checked to make sure all grades were correct and no utilities were damaged in the process of excavating. He oversaw the process of backfilling and assured the material was rolled properly to pass compaction test. He inspected formwork to assure its integrity before placing concrete. Client: New York City Dept. of Transportation

Macombs Dam Bridge over the Harlem River Rehabilitation, Contract #BRX287R, New York, NY; 6/06-11/06. Inspector. This $145-million rehabilitation project includes structural steel replacement and reinforcement for ±3,000 ft total length of viaducts, a camelback, a swing span, ramps over Metro-North Railroad, structures over Harlem River Drive and Major Deegan Expressway. Responsibilities included filing inspectors' daily reports; completing engineers daily diaries; inspection during night work; filing all documents related to project; sending out all documents related to project; completing items pertaining to project closeout; assisted in the review and preparation of monthly progress and extra work payments to the contractor; inspection during night work in assisting senior inspectors for the mechanical operations of the Swing Span as well as inspecting the set up of the MPT for full bridge closures; inspection of subbase material placement and grading; testing of concrete and inspection of concrete placement for the sidewalks below the Viaduct (+/- 4,000 lin ft long, 40 ft. wide); inspection of steel faced concrete curb installation (+/- 4,000 lin ft) including 20 ea handicap ramps; inspection of asphalt placement; miscellaneous punch list work items such as painting of structural steel, minor structural steel repairs. Client: New York City Dept. of Transportation

Mr. Olivo has worked as an intern contract administrator responsible for filing submittals; submitting contracts to subcontractors; submitting drawings for bids; operating primavera expedition; and for phoning subcontractors for project information; 11/05-1/06

As a survey technician, he worked as a rodman for topographic surveys; assisted in GPS surveys; executed field edits; and assisted in utility surveys; 6/05-8/05.

Professional Affiliation
American Society of Civil Engineers (ASCE)

Garry L. Pettriess
Chief Coatings Inspector

Professional Profile
Mr. Pettriess has many years of experience in the protective coatings industry and is NACE certified. His background includes numerous bridge projects that involved lead paint removal, hazardous waste management and environmental compliance. He has provided Quality Assurance/Quality Control (QA/QC) inspection services to the United States Air Force including SMARF and LC40 at various facilities throughout Cape Canaveral, FL, and he also has experience in the power generation industry. Inspection experience includes knowledge of cleanliness standards for both steel and concrete. Product application inspection includes most types of coatings including Metalizing field and shop applied sacrificial and barrier coatings and 100% solid floor surfaces (conductive and non-conductive). This also includes coatings inspection both prior to and after application using both nondestructive and destructive test methods. Mr. Pettriess also has extensive supervisory experience managing multiple inspectors on large projects.

Proposed Project Assignment
Construction Inspector - Coatings

Registration/Certifications
OSHA Scaffold Competent Person
NACE Certified Coatings Inspector
Certified Open Water Diving

Education
Diploma/1960

Course Work
NYC Transit - Track Safety Course
SSPC C-3 Supervisor/Competent Person Deleading
SSPC C-5 Supervisor/Competent Person Training
SSPC T-1 Industrial Lead Paint Removal & Abatement
SSPC/OSHA Annual Lead Awareness Training

Total Years Experience 40

Project Experience
George Washington Bridge Coatings Services, Fort Lee, NJ; 11/04-9/06. Chief Coatings Inspector. This $100-million contract involves Class 1A containment of both towers of this structure over the Hudson River involving the removal of existing lead paint and the application of a new three-coat system to approximately 2.1 million sq ft of steel. Responsible for overall inspection of day-to-day operations for lead paint removal and repainting. Responsibilities included supervising the eight coating inspectors, both GPI and our subconsultant, KTA Tator, review of QA/QC procedures including the adequacy of surface preparation, chloride testing and remediation, paint application and paint film testing, maintenance of records by daily reports, and preparation of quantities in order to process progress payments to the contractor. Client: PANY/NJ

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; NY; 2/01-11/04. Chief coatings inspector for this $175-million project which involved rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; repainting of the north half of the bridge including the cables and trusses. Responsible for overall inspection of day-to-day operations for lead paint removal and repainting. Responsibilities included the field supervision of several coatings inspectors, review of QA/QC procedures including the adequacy of surface preparation, chloride testing and remediation, paint application and paint film testing, maintenance of records by daily reports, and preparation of quantities in order to process progress payments to the contractor. Client: NYCDOT

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, #BRC1568C, New York, NY; 4/99-10/01 Assistant Resident Engineer. This $124-million project involved the rehabilitation of the Manhattan plaza area, Manhattan Arch and Colonnade; replacement of the structural steel stringer and floor beam support system for the west side subway tracks; replacement of truss bearings on top of the piers of both approach spans; rehabilitation of eye bars anchoring one of the main suspension cables; and removal of existing lead paint from the entire west side, both towers and two main cables, and replacing with new protective coating. Responsibilities included supervision of day-to-day inspection operations for

lead paint removal and repainting. These responsibilities included the field supervision of several coatings inspectors, review of QA/QC procedures including the adequacy of surface preparation, chloride testing and remediation, paint application and paint film testing. Maintained records in order to determine quantities needed for progress payments to the contractor**.** Client: NYCDOT

Bridge Painting Contracts, Various Locations, MA; 8/97-4/99. Resident Engineer/Chief Inspector. Provided on-call coatings inspection services for lead abatement and bridge painting contracts in District 4 under a two-year contract. Construction cost: $275,000. Client: MHD

District 2 Bridges 662, 666 and 1415, Various Locations, CT; 6/96-7/97. Chief Inspector. Responsible for inspection of contract work during bridge refurbishment projects involving lead containing coatings. This included coating removal, re-coating and documentation of coating activities, overseeing lead abatement activities, maintaining project documentation, review and analysis of containment systems and other services related to deleading and painting operations. Provided these services under several multi-year open-end contracts. Construction cost: $296,000. Client: ConnDOT

District 2 & 3 Bridge Projects, Various Locations, CT; 1996. Senior Inspector. Projects involved lead paint removal and re-coating, hazardous waste management and environmental compliance. Client: ConnDOT

Gerald Gentlemen Station, North Platte, NE; 1994. Quality assurance inspector for coatings inspection of precipitator ducts, duct supports, and pipeline supports. Client: Nebraska Public Power District

United States Air Force, Cape Canaveral, FL; 1993. Senior Inspector. Provided QA/QC coatings inspection services to the United States Air Force at various facilities throughout Cape Canaveral. Product application inspection included all types of coatings and 100% solid floor surfaces (conductive and non-conductive). Client: USAF

Seminole Electric Power Plant, Palatka, FL; 4/88-5/88. Inspector. Responsible for cleaning and coating inspecting white metal blasted and applied Belzona products to the inside of water boxes. Client: Seminole Electric

Worked with another firm as a paint foreman for a commercial company. Supervised crew, paint, equipment, and quality; 4/84-7/85.

Worked with another firm as a structural steel painter; 11/82-4/84.

Self employed as a painting contractor specializing in industrial painting; 3/78-11/82.

Professional Affiliation
National Association of Corrosion Engineers (NACE)

ESTIMATORS / SCHEDULERS

Michael Rabkin, P.E., AVS
Senior Engineer

Professional Profile
Mr. Rabkin is a professional engineer with many years of management experience on construction projects in the New York Metropolitan area. He also has extensive experience in inspection, design and analysis of steel, concrete and timber structures, offshore platforms, railroad facilities and underground structures, as well as project engineering and management, conceptual engineering, proposals and studies, field testing and report writing.

Mr. Rabkin provides supervision of engineers, technicians and subconsultants, establishes procedures and scope for design and inspection of various critical projects, and performs quality assurance/quality control (QA/QC) review of work utilizing the latest technological advances on many of these projects. Mr. Rabkin also recommends money saving strategies to reduce the overall cost of construction.

Proposed Project Assignment
Estimator/Scheduler

Registration/Certifications
Professional Engineer/NY
Professional Engineer/FL
Professional Engineer/PA
NACE Coatings Inspector Level 1
AWS Certified Welding Inspector
Associate Value Specialist

Education
BS/1980/Civil Engineering
Course Work
10-Hour OSHA Training Course
VE Workshop I, 40 hours
Practicing Institute of Engineering, Inc.-
PS [redacted] Work Zone Safety, 8 hours
Primavera P3e/c for Construction, 22.5 hours

Total Years Experience: 30

Project Experience
On-Call Construction Management Services for Terminals, Bridges and Tunnels, Various Locations, New York, New Jersey; 4/03-11/07. Scheduler / Estimator/ Technical Specialist. For the Port Authority's rehabilitation program at various bridges, tunnels and terminals, GPI is providing construction inspection, scheduling and estimating services. Mr. Rabkin's responsibilities involve schedule review / biddability and constructability reviews . Projects include the review of the contractor's schedules of several construction contracts on the George Washington Bridge , PA Bus Terminal and the ramp from the Palisades Interstate Parkway to the lower level of the George Washington Bridge using Primavera Project Planner.

- **George Washington Bridge**. Mr. Rabkin was responsible for investigation of the time impact on the painting contract for the agency with all possible remedies.
- **Port Authority Bus Terminal.** Mr. Rabkin was responsible for biddability review and analysis for the duration of the bus terminal seismic retrofit reconstruction project. The purpose of this study/analysis was to determine the approximate duration of each stage and provide an estimated duration for the entire contract. As a result of this analysis, the model of the construction schedule for the entire contract was generated.
- **Palisades Interstate Parkway Ramp**. The Port Authority also requested that GPI determine the adequate contract duration for the construction of the ramp from the Palisades Interstate Parkway to the lower level of the George Washington Bridge. Mr. Rabkin was responsible for review and revision of the proposed construction sequence in order to provide better constructability and to minimize impact to the bridge traffic. He analyzed six conceptual schedules to define all possible complications and remedies to the future contract. Performing schedule review, Mr. Rabkin checked the initial schedule submission to assure the appropriate logic relationship, if the schedule met the contract milestones, and if the proposed activity durations were reasonable. During schedule updates, he identified changes to constraints, float calculations and other options found in Primavera scheduling software.

Client: Port Authority of NY & NJ

Michael Rabkin, P.E., AVS
Senior Engineer

Rehabilitation of Bridge No. 02295, Route 136, Norwalk, CT; 8/09-Present. Scheduler. Construction engineering and inspection for the rehabilitation of Bridge No. 02295, Route 136 Norwalk. State Project No. 102-300, FAP No. BHM-2974(010). The bridge is a lift bridge crossing the Norwalk River in the town of Norwalk, CT. Responsible for schedule updates and time extension reviews. Client: Connecticut Dept. of Transportation

Contract C-502A Capital Program Management Consultant and I-95 Scudder Falls Design Management Consultant; 12/08–Present. Project Control/ Scheduling Manager. This program is a continuation of support for Delaware River Joint Toll Bridge Commission and their Engineering Department in its delivering of the Capital Program and I-95 Scudder Falls Replacement Project. Responsibilities include developing and maintaining master schedule, participation in monthly and bi-weekly CPMC/DMC staff meetings, review and monitor individual project schedules for compliance with master schedule. Client: Delaware River Joint Toll Bridge Commission

Belt Parkway Bridges Program Management Services, Brooklyn, NY; 11/06-Present. Technical Specialist. GPI is providing program management and resident engineering and inspection services for the rehabilitation/replacement of seven bridges along a 7.5-mile section of the Belt Parkway. Mr. Rabkin's responsibilities include constructibility and biddability review of the contract documents, **scheduling** and cost estimating. Client: New York City Dept. of Transportation

Reconstruction of East and West Houston Street, New York, NY; 7/05-9/06. Sr. Resident Engineer. Project involved resident engineering and inspection services for the installation of sewer, watermain, street lighting, curb and sidewalk, tree pruning and planting, and traffic work. Responsibilities included contract management on a day-to-day basis; **review of the construction schedule;** daily MPT site patrol; Engineer's Diaries; issuance of contractors' Field Memos and Field Orders; bi-weekly progress meetings; Community Outreach Program; QA/QC of materials; review and approval of construction means and methods; field modifications to design; and shop drawing review for the constructibility and compliance with the specifications and plans. Client: New York City Dept. of Design and Construction

Detail/Build of Nine Bridges, Contract HBCREPL 98A, Various Locations, NY; 11/00-7/03. Chief Design Engineer. Project involves repair, rehabilitation and maintenance of various bridge components in order to update the overall bridge rating. Responsibilities include the preparation of final design documents, development of maintenance and protection of traffic (MPT) schemes, signage, obtaining of environmental permits, coordination with various City agencies, public and private utility companies, estimating and **scheduling**. During the bidding process, Mr. Rabkin actively participated in construction cost estimate for the general contractor. Client: New York City Dept. of Transportation

REI for Emergency Resurfacing of World Trade Center Area, Contracts HWMWTC A2, HWMWTC A3, New York, NY; 4/02-6/02. Office Administrator/Scheduler. This project involved the resurfacing of two separate lists of streets damaged during the recovery efforts after September 11, 2001. Responsibilities included **daily progress schedule updates**, coordination with Con Edison and ongoing contracts in the area, participation in daily progress meetings, review of inspection reports, coordination with testing agencies, preparation of agendas for emergency meetings and minutes of the meetings. Client: New York City Dept. of Design and Construction

Resident Engineering Inspection and CSS: Reconstruction of Northern Boulevard Bridge over CIP, Replacement of Park Lane South Bridge over LIRR, Reconstruction of Jerome Avenue Bridge over Moshulu Parkway, Contract #'s HBQ 1073/HBQ 1005/HBX 1105, Queens/Bronx, NY; 11/98-7/01. Project manager responsible for overseeing REI and CSS for bridge reconstruction projects. Responsibilities included QA/QC, supervision of field and design professionals, coordination with various private and public agencies, value engineering and cost control. Author of several innovative proposals implemented during duration of the contracts. Client: New York City Dept. of Transportation

Thomas D. Gibbons, P.E.
Senior Engineer

Professional Profile
A highly qualified transportation engineer, Mr. Gibbons has many years of design, construction, facility operations and maintenance experience, and forensic engineering studies. The majority of this experience was gained during a 29-year career with the New York State Dept. of Transportation in both the New York City and Long Island Regional Offices. While with NYSDOT, Mr. Gibbons was the Regional Director of Transportation/Maintenance, responsible for a 600 employee department, 4,000 lane miles of highways, bridges and parkways and managed a $15-million annual program. He initiated all maintenance, repair, painting and rehabilitation work, including ordering the supplies and materials for the highway and bridge maintenance personnel and scheduling and supervision of work to determine the priority and sequencing of maintenance, repair and rehabilitation contracts. His many years with NYSDOT.

Proposed Project Assignment
Estimator/Scheduler

Registration/Certifications
Professional Engineer/NY
LAI - Lead Supervisor/Competent Person Refresher T
NACE Certified Coatings Inspector/NY
Supervisor-Training for Deleading of Industrial St
Certified Temporary Traffic Control Engineer, FHWA
Certified Bridge Inspector, NYSDOT & FHWA/NY
Portland Cement Plant Inspector, NYSDPW
Bituminous Concrete Plant Inspector, NYSDPW

Education
MS/1964/Structural Engineering (Foundations and Soils)
BS/1960/Civil Engineering

Total Years Experience: 50

Because of this previous experience, Mr. Gibbons is responsible for providing constructibility reviews and quality assurance and quality control for GPI projects. His diverse background, which includes design and inspection, makes him uniquely suited to provide these critical reviews. He possesses the experience needed to review a set of plans from a construction point of view and makes recommendations that will not only provide for a constructible project, but one that can be built in a shorter time frame with less disruption to the public.

Project Experience

Quality Assurance Representative; 1996-Present. Mr. Gibbons has served as CQAR on TBTA projects VN-17A, TB-13, TB-17, TB-64A, BW-10, TN-82 and BW-87. As the CQAR, Mr. Gibbons is responsible for ensuring that the project-specific Quality Assurance Plan is strictly adhered to. Client: Triborough Bridge and Tunnel Authority

The High Line Maintenance Protocol, New York, NY; 1/06-Present. Project Engineer. GPI will provide engineering and planning services to provide a maintenance protocol and advice as to the acceptability of the proposed connections to the High Line by private developers. Responsible for selling expertise in bridge maintenance and maintenance management. Also provided cost estimating for annual maintenance program. To date, the process has involved the listing of the criteria for the annual maintenance requirements for maintaining the structure and the cost of the annual maintenance program as well as the review of the proposed connections to the High Line structure and the establishment of the requirements for the connections so that the structure may be maintained. The actual maintenance manual has not yet been started. This will require the desired level of maintenance that the owner will wish to perform, the owner's policies and the desired end effect and methods that the owner wishes to conduct the maintenance. Client: New York City Economic Development Corp.

Roosevelt Island Bridge - Preliminary Design, New York, NY; 8/97 -12/03 Technical Advisor. The completed Roosevelt Island Bridge will provide an alternate marine traffic route along the east side of Manhattan. Responsible for coating design and cost estimating. Client: NYCDOT

East Hampton Airport, Wainscott, NY; 7/03-Present. Technical Advisor. Project involves peer review of runway rehabilitation design as well as the review of required air navigation obstructions for Runway 28

at East Hampton Airport. The project involves coordination with pilots association, airport and designing firm. Responsible for technical assistance to repair and repair runway 4-22 at the airport. Client: Save East Hampton Airport, Inc.

Forensic Investigation of Bulkhead Failure, Shinnecock Canal, Shinnecock Hills, Suffolk County , NY; 7/98-1999. Project manager and forensic engineer for the collapse of the bulkhead along the west bank of the canal, just north of the tide gates. Mr. Gibbons provided overall review of operations and hydrology, computed the forces and described the underlying affect of the failure cause. He also alerted the county to the potential for the future failure of the bulkhead and timber dolphins at the approaches to the tide gates. Client: Suffolk County Dept. of Law, County Attorney's Office, Suffolk County, NY

Northern State Parkway and Long Island Expressway Interchange Improvements at NY 110, D015281/PIN 0516.41), Huntington, NY; 4/04-7/05. Quality assurance officer responsible for conducting quality assurance and constructibility reviews during the preliminary design phase of this $45M roadway reconstruction project. Client: New York State Dept. of Transportation, Reg. 10

Coating Condition Survey and Design, NJTA Contract R-1436 (OPS 1944), Newark Bay Bridge, Newark - Bayonne, NJ; 10/01-7/04. Field Investigator and Designer. This project involved the complete removal and recoating the approaches and the main tied-arch spans of the Newark Bay Bridge for the New Jersey Turnpike Authority. Mr. Gibbons performed the field survey, evaluation and recommendations, as well as the design of the coating systems to be applied to this structure, which is the approach to the Holland Tunnel from New Jersey. The owner is the New Jersey Turnpike Authority, and the job is awaiting letting. Client: NJ Turnpike Authority

Bear Mountain Bridge Paint Design and Construction Support Services, Fort Montgomery, NY; 1/97-12/97. Project manager and designer for the design to de-lead and coat structural steel towers for this picturesque and major Hudson River crossing north of New York City. Developed coating system and removal methods unique to the particular environment, enabling project work to be done year round, over the river and railroad tracks on both sides of the river. NYSDOT Class A Containment (SSPC Class I) and Lead Health and Safety Protocol were utilized at this highly sensitive area. He provided the scheme for working over and around traffic, which had to be maintained at all times on both lanes. He managed and provided construction support services and forensic engineering for the partial collapse of under supported scaffolding. Forensic investigation of scaffolding collapse during high wind event in 1998. Estimated construction cost: $ 3.6 million. Client: New York State Bridge Authority.

65th Place over LIRR, Bridge Reconstruction, Contract #D006164, Queens, NY; 6/95-9/97. Project Manager. Managed resident engineer and inspection services for reconstruction of bridge over LIRR Mainline. Extensively involved with MPT schemes and with traffic pattern of the bridge and detours it several blocks away and meetings with the community board and local participation. Client: NYCDOT

Manhattan Bridge Paint Design, Contract #BRC1568C, Manhattan, NY; 3/95-6/97. Project manager and designer for the design to de-lead and coat structural steel and cables on this major NYC suspension bridge. Developed new coating system for both structural steel and cables. Developed largest de-leading and Class A (NYSDOT) containment, i.e. SSPC Class I containment in the United States to date. Developed entire scheme with most stringent MPT requirements to date, only one-lane closed continuously during the project. Created models for containment, moving, cleaning and coating. Also determined need to replace more than 150,000 rivets in the two towers. Developed potential use of robotic cable cleaning and split use of NYTA tracks for contractors supply operations. Estimated construction cost: $100-million. Client: NYCDOT

Leonard J. Holland
Estimator

Professional Profile
Mr. Holland is an electrical engineer experienced in all phases of new and renovated construction for commercial and residential projects.

Proposed Project Assignment
Estimator/Scheduler

Education
BS/Electrical Engineering
Honors: Tau Beta Pi, Eta Kapa Nu

Total Years Experience: 21

Project Experience
2006-2010 Port Authority On-Call Construction Management Services - John F. Kennedy International Airport, Queens, NY; 10/09-Present. Estimator/Inspector. As part of this on-call construction management services project, Mr. Holland is assigned to projects at JFK Airport. The Port Authority supplements their own staff with consultant-provided personnel to manage and administer construction contracts at their owned and operated facilities. Responsibilities include review of contractor's change order proposals; review of design and specification documents on projects; generating MEP estimates for projects and change orders; performing job site inspection to ensure that construction complies with the design drawings and specifications; performing final inspection of construction work at job site for completion; and providing general field/office support as required. Client: Port Authority of New York/New Jersey

AirTrain Terminal at Jamaica Station, Jamaica, NY; 2004-2009. MEP Cost Estimator. This is a $350-million project involves a seven-story terminal building, mezzanine bridge, enclosure roof, westerly bridge and new street concourse along Sutphin Boulevard. Responsible for generating MEP estimates and change order review; providing job site inspections at Tenant Alteration Projects and TWA Flight Center interior restoration. Client: Port Authority of New York & New Jersey.

Various New York City Board of Education Projects, New York, NY; 1999-2003. Assistant Project Manager. This is a $3-million renewable, term contract which involved providing construction management services on Board of Education maintenance work at all schools in New York City. He surveyed work sites for detail description of work; composed unit price estimates based on field surveys; wrote proceed orders for contractors; processed contractor requisitions and change orders; supervised and assigned workloads to site managers; had daily interface with contractors for updated progress reports; and maintained all tracking logs and files. Client: New York City Board of Education

Served as an independent electrical consultant/contractor, providing electrical estimates for home improvement. 1995-1999

Served as an assistant project manager; 1988-1995. Mr. Holland managed electrical installations in new construction and alteration projects; coordinated with field personnel to evaluate and resolve problems in the field; supervised draftsmen in the design of shop drawings and directed the take-off of drawings; prepared material and labor estimates, change order estimates and monthly client billing requisitions; filed and obtained permits for all electrical installations with various New York City agencies; and attended weekly coordination meetings with senior-level management. Projects included: Worldwide Plaza, a commercial, residential and recreational complex; Carter Wallace.

Served as an assistant project manager; 1986-1988. Mr. Holland generated project shop drawings; prepared equipment takeoffs and estimates; initiated progress payment requisitions; recommended materials procurement and managed vendors; and attended weekly job site and project coordination meetings. In addition, he compiled project cost data for entry into client billing database.; and identified system default, which resulted in system reprogramming and subsequent recovery of potentially lost revenue. Projects included: Long Island Jewish Hospital Cancer Care Center; Brooklyn Botanical Gardens; Rikers Island.

Skills: Valid NYC Site Safety Manager License, Proficient in Microsoft Word, Microsoft Excel and Internet applications, Solid understanding of contracts, plans, and specifications.

James F. Weber
Senior Office Engineer

Professional Profile
Mr. Weber possesses many years of construction inspection experience relating to the rehabilitation of major bridge and highway structures in the metropolitan area, with a progression towards more complex assignments and challenging responsibilities. Mr. Weber has been part of the GPI Williamsburg Bridge Team for the past 17 years.

Proposed Project Assignment
Estimator/Scheduler

Registration/Certifications
NICET IV
NICET Certified Engineering Technologist
NYSDOT Maintenance & Protection of Traffic Cert.

Education
MS/1991/Civil Engineering
BS/1983/Civil Engineering
AS/1980/Civil Engineering Technology

Total Years Experience 28

Project Experience

Belt Parkway Bridges Program Management Services, Brooklyn, NY; 5/06-Present. Senior Office Engineer. Program management and resident engineering and inspection services for the rehabilitation/replacement of seven bridges along a 7.5-mile section of the Belt Parkway. Responsibilities include management of all office engineering functions for the entire Belt Parkway Program. Mr. Weber will draw on his extensive experience from the Williamsburg Bridge Program, which had a construction program value exceeding $1 billion. Mr. Weber manages all office engineers on each of the individual six Belt Parkway Bridges and ensures a cohesive methodology for all office engineering standards, all in accordance with NYSDOT MURK. Mr. Weber works closely with and advises both the program manager and assistant program managers on many technical issues on this project and prepares the majority of correspondences which require action. Mr. Weber also maintains all information databases and scheduling programs in use on this project to track all project submittals including the use a web based field information management system. Client: New York City Dept. of Transportation

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 8/03-9/07. Office Administrator. This $280-million project involved the construction engineering and inspection for the rehabilitation of the Williamsburg Bridge. Responsibilities included overseeing an engineering staff of seven people, managing all office engineering responsibilities and directly negotiating all contract change orders on this project. Mr. Weber worked closely with and advised the resident engineer on many technical issues on this project and prepared the majority of correspondences which required action. Mr. Weber also maintained all information databases in use on this project to track all project submittals. Because Mr. Weber has worked on the Williamsburg Bridge rehabilitation program since its inception, his experience and technical expertise were an invaluable resources to NYCDOT and his methodology in organizing and managing a complex construction engineers field office has become the model for which other NYCDOT projects have emulated. Client: New York City Dept. of Transportation

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 12/00-8/03. Office Administrator. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included overseeing an engineering staff of ten people, managing all office engineering responsibilities and directly negotiating all contract change orders on this complex project. Mr. Weber also advised the resident engineer on many technical issues and draws from his experiences from Contracts 4, 5 and 6 to solve many of the project's issues. Responsibilities also included the establishment and maintenance of an extensive computer database system for the tracking and coordination of all project correspondence, submittals and payments. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY;

7/98-12/00.As office administrator, Mr. Weber was directly responsible for the office administration of this $176-million reconstruction program of the Williamsburg Bridge. Mr. Weber oversees an office staff of ten people. Due to the critical scheduling of this project and the extreme importance of project communications, Mr. Weber spent the majority of his time coordinating the resolution of project technical issues and overall schedule management for the project. This involved daily contact with the numerous subconsultants who were involved in specific areas of this project, and reviewing all issues prior to communicating a formal response back to the contractor, reviewing and approving contractor submitted schedules and analysis of contractor claims. Client: New York City Dept. of Transportation

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 1994-7/98.As office administrator, Mr. Weber was directly responsible for the office administration of this $310-million reconstruction program of the Williamsburg Bridge. Mr. Weber oversaw an office staff of 14 people. Due to the critical scheduling of this project and the extreme importance of project communications, Mr. Weber spent the majority of his time coordinating the resolution of project technical issues and overall schedule management for the project. This involved daily contact with the numerous subconsultants who were involved in specific areas of this project, and reviewing all issues prior to communicating a formal response back to the contractor, reviewing and approving contractor submitted schedules and analysis of contractor claims. Mr. Weber also worked directly with the NYCDOT Bureau of Bridges to assist in the establishment of a uniform construction field office administration policy. This included being the Bureau of Bridge's representative in the development of a state-of-the-art computerized construction payment system. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable Rehabilitation, Contract 4, #BRC253A, New York, NY; 1991-1994. As office engineer for this $88-million cable rehabilitation project, Mr. Weber's specific responsibilities involved the supervision of all field office operations in accordance with NYSDOT MURK and NYCDOT. At the request of NYCDOT, Mr. Weber lectured at training sessions for EEO Utilization and Disadvantaged Business Enterprises on federally funded construction projects. In addition, Mr. Weber prepared and negotiated all contract change orders and to date has prepared over $17.1-million in extra work. Mr. Weber has also written procedures and guidelines for the Bureau of Bridges/Bridge Construction Group on the following topics: Preparation of Construction Change Orders, Contractor Progress payment requirements, Record Keeping on a Time and Material Basis, High Strength Bolt Sampling, Testing and Inspection, Construction EEO Goal Requirements and Monitoring, and Field Office Record Keeping Procedures. Client: New York City Dept. of Transportation

Interborough Parkway Inspection, #D252310, Glendale, NY; 1988-1991. As office engineer on this $48-million highway and bridge reconstruction project, Mr. Weber was in charge of all field office operations, in accordance with NYSDOT MURK requirements. He used state-of-the-art computerized project management software to monitor the construction schedule. He also utilized microcomputers in the field office to track submittals, correspondence, and shop drawings utilizing one master database. He processed the contractor's estimates using the NYSDOT CEES program (Computerized Engineers Estimate System), and wrote status reports for the owner, tracking progress, work performed, and the forecasting of all potential problems. Client: New York State Dept. of Transportation, Reg. 11

While previously employed prepared plans and construction estimate for the rehabilitation of the **Henderson Yard** for the NY/NJ Port Authority.

While previously employed prepared plans for **Holland Tunnel** truck clearance system for NY/NJ Port Authority.

CARLOS SANCHEZ, PE

Senior Scheduler

Mr. Sanchez is a licensed Professional Engineer with over 20 years experience performing cost control on a broad range of transportation related planning and construction projects. His experience includes: rail, aviation, heavy civil, universities, hospitals, and public housing. Mr. Sanchez has expertise performing all facets of Cost Control, Cost Estimating, Project Controls, Scheduling, Contract Administration, Contract Change Management, and Claim Management. His experience encompasses all project phases: engineering design, procurement, and construction. Additional skills include performing strategic long-range manpower planning, budget forecasting, and expert-level proficiency in Primavera P3 and P6. Mr. Sanchez worked on complex FTA funded projects developing resource loaded CPM schedules comprising several thousand activities, with multiple project/contract interfaces with agency-wide projects with values in excess of $2 billion. He has hands-on experience preparing WBS coding structure, cost/schedule variance analysis, earned values, project trend, and contract change notice. Computer skills include Excel, Word, Configuration Management Contract Control System (CCS), and other industry standard Project Management Software.

Key Highlights

- ✓ Registered PE
- ✓ Expert in Cost Control

Education

- **Construction Management Diploma**, New York University, New York, 1991
- **BS, Civil Engineering**, Central East University, San Pedro de Macoris, DR, 1983

Professional Registration

- 2003/PE/New York [redacted]

Professional Memberships

- PMI
- CMAA
- ASCE
- AACEI

Various Projects – PACO Group, Inc., New York

New York City Metropolitan Transit Authority (NYC MTA) -- Five-Year Capital Construction Program – New York, NY
Scheduler

As Senior Scheduler Carlos prepared design and construction schedules for projects in the New York City Transit Authority's five-year Capital Construction Program. He reviewed schedules and reports prepared by General Contractors, and provided narrative-analysis of schedule reports. The work was to complete renovation and rehabilitation of 50+ Subway Stations ($200 million). The program included improving and adding new entrances on the northern side of the Times Square station complex in coordination with NYCDOT. Other work included improving ADA accessibility at 17 key stations, replacement of 25 escalators at four stations, and new passenger transfers at Bleecker Street in Manhattan and Jay Street in Brooklyn.

New York City Metropolitan Transit Authority (NYC MTA) – Capital Construction Security Project – New York, NY
Scheduler

Carlos prepared and managed the CPM schedule for the MTA Capital Construction Security Project that included work with NYCT, LIRR, Metro-North, and Amtrak. He coordinated with the contractor to receive and review the monthly updated schedule and provided comments via the monthly update report to MTA managers. Design, develop, furnish and install Integrated Electronic Security System and Security Operations Centers at various locations to monitor facility and MTA infrastructures in the 5 boroughs of New York City using electronic surveillance equipment with an estimated value at completion of more than $300 million.

PACO Group

New York Metro-North Railroad (NYC MTA) – Hudson Line Station Improvement – Yonkers, NY
Scheduler

Carlos prepared, reviewed and analyzed the monthly update schedule; prepared responses to contractors; reviewed, verified and recommended contractor monthly payments; prepared progress meeting minutes, performed change order analysis/management, and prepared various monthly and weekly reports. The project entailed the rehabilitation of nine stations in the Hudson Line corridor including the demolition of existing platforms and construction of new pre-cast platform, demolition and construction of overpasses and elevators. The work is part of a $93 million capital improvement project along the Hudson Line.

Hampton Roads Transit (HRT) – Norfolk Light Rail Transit Project ($232M) – Norfolk, VA
Project Controls

Mr. Sanchez provides his expertise in configuration management, planning, scheduling, and cost management, providing both a detailed and summary documentation that satisfies the needs of the funding authorities as well as planning and procuring authorities. He maintains and manages the Project Execution Plan deliverables needed to obtain funding from the FTA. He also uses his extensive background in project controls to help HRT train its staff in implementing and maintaining an agency-wide document control system. Carlos is currently concentrating on Baseline Management that involves using ccs.Net Documents, Contract Modifications, Correspondence, and Submittals modules.

Battery Park City Authority - Construction Management Services for North End Cove – New York, NY
Engineer

Carlos provided office engineering services for the North End Rehabilitation project during 2005 and 2006. Specific tasks included: inspections; submittal tracking; permit applications and schedule reviews. This project was carried out as part of a larger development and rehabilitation program set forth by the Battery Park City Authority to update and renovate existing site conditions. Specific improvements included the addition of fencing and hedging, HVAC systems installed at the marina facilities, and the restoration of the Rector Place Park including drainage and the installation of open grid paving.

Port Authority of New York and New Jersey (PANYNJ) – JFK AirTrain -- New York, NY
Scheduler

Carlos provided CPM Scheduling services, and analyzed schedule updates to determine whether the downstream impact of any delay affected a milestone by any more than ten days. A similar analysis was used to pinpoint the source of any negative float. He presented recommendations in a combination of narrative reports and Level I, II, and III schedules, where the greatest level of detail was used to illustrate where change was needed, and the summary level of detail to indicate how the overall schedule was impacted. The Airport Access Program is an 8.4-mile people mover system linking the airport's nine passenger terminals to one another, to rental car areas and long-term and employee parking, and to the Long Island Rail Road and New York City subway system.

New York State Department of Transportation (NYSDOT) – Tappan Zee Bridge/I-287 – New York, NY
Cost Estimator

Mr. Sanchez developed the cost estimate for the six preliminary transportation modes alternatives analysis in the Draft Environmental Impact Statement (DEIS). The Corridor extends 30 miles between the Village of Suffern in Rockland County and the Village of Port Chester in Westchester County. The counties are linked by the Tappan Zee Bridge (TZB) over the Hudson River. Transportation, environmental and cost criteria were developed in order to assist in making the transit mode decision.

BORIS LENDERMAN

Senior Estimator

Mr. Lenderman has more than 30 years of experience in the construction industry as a civil engineer with extensive skills in cost estimating, project controls and project management. His knowledge encompasses all stages of the construction process in transportation, industrial, and residential projects. He served for 19 years as an Estimator/Scheduler and Project Manager with the Department of Railroads in the Ukraine (f.USSR). During the last twelve years, he has specialized in major transportation and heavy construction projects in New York City including the MTACC and NYC Transit as an Estimator and Project Controls Engineer. He is knowledgeable civil, structural and architectural estimator within the transit and transportation industry with experience that includes tunneling, train stations, ancillary facilities including structure and architectural finishes system.

Key Highlights

- ✓ Over 30 Years Experience
- ✓ Significant Transit Experience
- ✓ Proficient in Primavera P3/P6 and HCSS

Education

MS, Industrial & Civil Engineering, College of Railroad Engineers, Gomel, Byelorussia 1979

Software Skills

- HCSS
- Primavera P3 & P6
- Microsoft Project
- SureTrak
- MS Office

Metropolitan Transportation Authority, New York City Transit (MTA NYCT) – Second Avenue Subway – New York, NY

Senior Supervising Estimator

- Supervised a team of estimators and was responsible for updating and developing Cost Estimate for all stations of the Phase#1 contracts for different stages of Design development, starting from 60% to 100% Design.
- Integrated a new approach to developing take-offs by utilizing MicroStation.
- Played major role in periodical updates of the cost estimate for phase I of the project, working closely with design package managers, task leaders to ensure accurate information update.
- Collaborated with procurement group on splitting and repackaging contracts, developing and updating price breakdown schedules for contracts that and supporting team during negotiation process by providing necessary information
- Provided client with detailed bid analysis for awarded contracts, comparing engineer's estimate with those of lowest responsible bidder.
- Provided client with cost comparison analysis between different revisions of estimate as design progressed for all contracts of phase I.
- Developed bid unit cost prices for new items to be incorporated in the estimates; analyzed and reviewed existing bid unit cost prices, and obtained quotes for new materials and made adjustments.
- Evaluated planned conceptual design changes and provided order of magnitude cost estimate.
- Supported project controls group and contributed to construction schedule development and updates by developing and providing durations and productivity rates for all activities, and participating in the workshops for schedule updates.
- Participated in risk analysis and constructability review workshops for each contract.

Metropolitan Transportation Authority, New York City Transit (MTA NYCT) – Capital Program Management – New York, NY

Cost Estimator

- Provided cost estimating for new and rehabilitation construction projects, budget forecasting conceptual estimates for future capital program projects, additional work orders for project in progress, project delays and cost impact analysis.

PACO Group

HILL International Inc. – Various Projects – New York, NY
Project Controls Engineer

- Prepared cost estimates, change orders negotiation for different project around New York City.
- Participated in meetings and met with contractors, owners and architects regarding all aspect of project progress. While there he prepared cost estimates documents for bids and produced estimates ranging from order of magnitude level to detailed construction level estimates for transportation and heavy civil construction projects.

Greyhawk North America – Various Projects – New York, NY
Project Controls Engineer

- Supervised and developed the master schedules and project baseline schedules. He created the project execution schedules (design, procurement, delivery, construction) and prepared monthly updates.
- Maintained detailed project resources loaded and cost loaded schedules and performed monthly progress reports and graphs on construction progress and cost status using Primavera scheduling software.
- Performed critical path analysis and implemented corrective and recovery plans.
- Prepared cost estimates for all stages of design representing different agencies and provided constructability reviews.

Egis Inc. – Various Projects – New York, NY
Cost Estimator

- Provided numerous construction services directly to MTA NYCT Transit Department of Capital Program Management.
- Responsible for cost estimating for new and rehabilitation construction projects, budget forecasting and conceptual estimates for future capital program projects, additional work orders for project in progress, project delays and cost impact analysis.

Judlau Contracting, Inc. – Various Projects – New York, NY
Cost Estimator

- Prepared cost estimates for bids held by various New York City agencies including MTA, DOT, and DEP.
- Developed the master and project baseline schedules.
- Updated projects schedules and prepared monthly schedule status report for management and participated in meetings regarding project delay issues and suggested alternative means and methods of scheduling in order to recover the project's progress.
- Prepared additional work orders and participated in constructability reviews.

Construction and Engineering Company – Korosten Department of South-West Railroad – Ukraine (Former USSR)

- Estimator / Scheduler
- Provided integrated estimating and scheduling services for major projects.
- Developed and implemented baseline schedules including monthly updates of both schedules and cost information.
- Monitored project performance and tracked project issues.
- Provided the project team with accurate and timely information to make critical decisions.

Mizanur Rahman

Scheduler

Career Profile

Mr. Rahman is an experienced scheduler with more than fifteen years of extensive experience in large scale construction companies. He is proficient with scheduling utilizing Primavera having worked for some very large companies in their Planning and Scheduling Departments, CAD Department, Engineering Departments (Architectural, Structural, Civil, Electrical, and Mechanical), and Document Control Section also responsibilities included the following: Extensive experience providing full support to planning department, document control, cost control utilizing Primavera P3, P6, SureTrak and Microsoft Project. Providing expertise in AutoCAD, MicroStation, supporting the architectural, civil, electrical, mechanical, HVAC and structural departments, with electronic drawings, shop drawings, submittals, and various site specific information. He also provided networking support for Windows NT server/workstation (MCSE) utilizing my Microsoft education and certified abilities.

Education

BSCs Engineering

BSC's (King Saud International Engineering and Technology University) 1990

Professional Certifications/Training

OSHA 10 Hour Construction Safety - 2008

Project Management Professional, PMP (completed)

Software

AutoCAD Windows Vista, XP, Windows 2000, NT 4, Windows 9x, Sun Solaris7, HP-UX

CAD Programs: AutoCAD 12, 14, 2k and 2002-07. MicroStation P3 – P6, SureTrak, Microsoft project, MS Office, Digger 3.0 MS-Exchange Server 2002

Project Experience

2006- Present, Con Edison, NYC, NY

Senior Scheduler

As Senior Scheduler Mr. Rahman was responsible for Project controls such as schedules, Time Impact Analyses, Claims, duration issues, created and updated Baseline, Tracking and forecast in schedule adding resources. He Processed claims, researched received and compared RFI Logs, Submittals logs, Payment schedules, progress photographs, and previous updates. As required he generated claim impact summary chart in xls, ms project, P3 in Digger. He provided analyses of submitted schedule for logic defects, duration issues, and non compliance with contract requirements and provide written documentation to Higher Management. He attended meetings with Contractor and Project Engineer to resolve Schedule related issues. He developed and advised on the avoidance of claims and analyzed any contraction claims. He created and updated two week look ahead schedule report sent to jobsite and tracked. He Created Primary Schedule according to Con Edison standard. He provided support in reconciliation of impacts of proposed changes of scope, schedule and cost. He provided overall project schedule and integrated it into a main schedule. He was held responsible for cost control and Scheduling for the Planning Department and Project Control. He developed and maintained resource loaded project schedules for engineering, procurement, and construction work using Primavera planning software P3, P6 and provided report for using Digger 3.0 and MS Project Scheduler, provided and reported in Gantt, Excel and MPP file within Microsoft Project 2003, 2007 Server.

Projects

- W59 St. Power Station
- 74th Power Station
- Astoria Power Plant
- 29th and 36th St. Substations and Distribution and Controls
- Harrison Substation
- Washington St. Substation

2007-2008, NYCDEP, Croton Water Treatment Plant, Bronx, NY
Sr. Scheduler-Project Control, NYCDEP, Croton Water Treatment Plant
Mr. Rahman is responsible for Project controls such as cost control and schedule, he created and updated Baseline, Tracking and forecast in schedule adding resources. He developed design and construction schedules, analyzed baseline schedules and schedule updates. He monitored schedule delays, tracked progress in the field, tracked contract changes, analyzed time extension requests, analyzed project phase changes, analyzed value engineering impacts and analyzed claims using Primavera project planning P3 and Primavera Management P6 software. He processed claims, received and compared RFI Logs, submittal logs, payment schedule, progressed photographs and previous updates. He also generated claim impact summary chart in xls, ms project, P3 and Digger 3.0 as required. Provided support in the areas of project controls, scheduling analysis, earned value management, claims analysis and construction activities in support of projects. Mr. Rahman analyzed project planning and schedule updates as well as delays. He provided analyses of submitted schedules for logic defects, duration issues, and noncompliance of contract requirements and provided written documentation to Higher Management. He created Primary Schedule which contained more than twenty-one thousand activities. He created Baseline Schedule and made submissions to NYCDEP. He provided overall project schedule and integrated it into main schedule. He was also held responsible for cost control and Scheduling for Planning Department and Project Control.

2004 – 2007 Power Plant Project, Sigma Energy Solutions, NY
Scheduler
As Scheduler Mr. Rahman was responsible for project controls such as cost control and schedule, he created and updated baseline tracking and forecast in schedule adding resources. He developed design and construction schedules, analyzed baseline schedules and updates. He monitored schedule delays, tracked progress in the field, tracked contract changes, analyzed time extension requests, analyzed project phase changes, analyzed value engineering impacts and analyzed claims. He processed claims, received and /compared RFI Logs, Submittals logs, Payment schedules, progress photographs, previous updates and as required and generated claim impact summary chart (in xls, ms project, P3). He provided overall project **schedule** and created different level schedules using P3 and SureTrak. He prepared and compiled Monthly Progress reports for submission to the Senior Management. He provided baseline target schedules, fiscal year schedules and program schedules. He provided required analyses to determine impacts on the program schedule. He provided oversight and incorporated contract schedules into the master schedule. He organized and maintained the Engineering CAD department.

2000 – 2004, Cadman Plaza, Brooklyn, NY, Federal Plaza, NYC, NY & USPS Office, Pocono, PA
Scheduler – Project Control Engineer
He created construction schedules supporting architectural, civil, electrical, mechanical, HVAC, structural, activities providing electronic drawings, shop drawings, submittals, and other job specific information from the various sites. He created and provided reports to Project Manager. He provided overall project schedule utilizing P3, SureTrak and Microsoft Project software. He prepared and compiled Monthly Progress reports for submission to the Senior Management. He organized and maintained the whole engineering department. He installed and Configured **AutoCAD & Microstation. He also** provided information to engineering staff from Jobsite.

FELMIN A. EARLE

Scheduler

Felmin A. Earle is an experienced project controls engineer with close to 20 years of experience. His experience includes projects for the New York City School Construction Authority, and New York City MTA. He has worked on transit, infrastructure and schools construction projects throughout his career. Felmin is proficient in the latest industry software including: Primavera P3 & P6, Expedition and SureTrak.

Key Highlights

- ✓ 20 Years Industry Experience
- ✓ Significant Work in Project Controls in both the Public and Private Sector

Education

- **MBA,** Long Island University, 1991, Brookville, NY
- **BS, Mechanical Engineering,** Manhattan College, 1974, Riverdale, NY

Software Skills

- Primavera P3 & P6
- Suretrak
- Primavera Expedition
- MS Office & Access

Project Management Resource Group, Inc. – Various Projects – New York, NY
Senior Project Controls Engineer

As Senior Project Controls Engineer Felmin was responsible for preparing CMP schedules for a wide variety of construction projects including mass transit. He used earned value techniques to evaluate performance and monitor progress. He utilized recourse loading and research leveling techniques to manage timeline on projects and monitor performance. He analyzed the critical path and evaluated alternatives in construction methods to support the on time completion of projects. Felmin also reviewed schedules and proposals company wide.

Skanska USA Building – Various Projects – New York, NY
Manager Project Controls

As manager of Project Controls Felmin prepared and developed schedules for proposals within varieties of project sizes in construction. He developed design and construction schedules to manage integrated construction for meeting project objectives, analyzed baseline schedules, and prepared schedule updates. He interfaced with vendors for management of deliverables and equipment deliveries I coordination with supporting construction schedule. He supported projects in claim situations as well as interacted with engineering disciplines to update progress and prepare monthly reports for the project team. He designed groups and upper management and provided input for development of construction phasing plans. He monitored schedule delays, tracked progress in the field, and tracked contract changes. He also analyzed time extension request to determine impact on contract completion time.

New York City School Construction Authority (NYC SCA) – Various Projects – Long Island City, NY
Project Manager/ Scheduler

As Project Manager and Scheduler Felmin reviewed and evaluated contractor baseline CPM schedules for all construction trades. He analyzed and updated schedule and prepared reports on forecasted completion dates. Additionally, he communicated and coordinated with all project field personnel. He interacted with owners contractors and consultants to avoid conflicts and to update progress of projects. Felmin also prepared and negotiated change orders that affected schedules. He used Look-Ahead Schedules to forecast slippage and apply planning knowledge to work with site supervision to develop recovery plan.

PACO Group

Metropolitan Transportation Authority (MTA) – Various Projects – New York, NY
Scheduling Engineer

As Scheduling Engineer Felmin prepared schedules for wide variety of rehabilitation projects for mass transit infrastructure and operation. He used earned value techniques to evaluate performance and monitor progress. He utilized resource loading and resource leveling techniques to manage timeline on projects and performance. He analyzed the critical path and evaluated alternatives in construction methods to support the on time completion of projects. He also managed multiple projects using limited labor resources.

Higgins Engineering and Construction – Various Projects – Hamilton, Ontario
Senior Project Engineer

As Senior Project Scheduler Felmin implemented the use of CMP Scheduling, developed the initial construction plan known as the Baseline Schedule with an identified critical path. He performed periodic updates of the project schedule and prepared narrative reports that analyzed construction progress using earned value analysis to monitor performance. He also provided support and training for other members of the project team.

Orange & Rockland – Various Projects – Pearl River, NY
Senior Project Engineer

In the capacity of Senior Project Engineer and Supervising Engineer Felmin had responsibility for capital projects. He conducted Engineering Project Management from Project Inception to final commissioning. He prepared project specifications and developed project Schedules. He supervised engineering and craft personnel. He served as liaison between other technical consultants, contractor and industry representatives. He prepared schedules for phasing plans in the design and construction segment of projects. He was involved in infrastructure rehabilitation and construction of new facilities. He reported construction progress to the team and upper management.

STAN MICHALOWSKI

Scheduler

Mr. Michalowski is an experienced Project Controls professional. His experience includes tracking budget deviations and scope changes, contingency tracking and analysis, cash flow projections, cost and schedule. He is experienced in scheduling, planning, expediting, and maintaining the progress of work and the construction management of major construction projects. Stan has mastered these over the past 26+ years in the industry where he has worked throughout the complete project life cycle. His experience includes Management and Reporting, Project Scope Management, Earned Value Management, and Performance Measurements, Change Control Process, Communication Planning, Quality Control, Acceptance Process, Estimate Process Class, and the Change Control Process.

Key Highlights

- ✓ Over 25 Years Project Controls Experience.
- ✓ Past Work on both Rail and Transit Projects in the Northeast.

Education

- **AAS, Computer Technology Data Institute**, 1978, New York, NY

Computer Software

- Primavera P6; Expedition
- MS Project
- MS Office
- Lotus

2007 - 2009 – VJ Associates – Newark, NJ
Project Controls Engineer

As the lead Project Controls Engineer Stan supported clients in Data Center Construction; Waste water Treatment Facilities; Schools and Transportation projects.

Jan. 2007 - Aug. 2007 – Louis Berger Group – Construction Management
Project Controls Manager

As Project Controls Manager Stan was responsible for all Scheduling related issues as they relate to: Freedom Tower, Memorial, Towers 2, 3,4, and 5; Vehicle Security Center; Chiller Plant; Transit Hub; Park; Streets; and Plazas; and others.

2002 - 2006, MTA, East Side Access Project, New York, NY
Project Controls Engineer

Upon Stan joining the project he undertook a major Re-base lining effort for the Project, which has been completed successfully. He created a fully inter-grated schedule with the design and construction of over 30 plus sub-projects. The estimated cost of these projects was in excess of $5 billion dollars. Approximately 6,000 cost loaded activities defining the design portion of the project made up the schedule. The design efforts included, Environmental, Geotechnical, Drainage, Track Alignment, ROW, MPT, Utilities, Survey, Plumbing, Grading, Ventilation, TBM Tunneling, etc. The Construction Schedule activities are fully integrated from one sub-project-contract to the next. This provided a good understanding of the critical elements to this undertaking. Primary critical path and Secondary critical path with associated delaying factors. While using Primavera Microsoft's Excel, and Corel Presentations as some of his primary tools he was able to provide a thorough analysis of the staging. These charts were useful tools in identifying where the shortcomings are and improvements could be made. He interfaced with Risk Management teams in order to better understand Risk and Hazard related elements of the project undertook an effort to study Risk Management. During this period Stan developed a 200+ page reference manual that included PHA Preliminary Hazard Analysis, HA Hazard Analysis, HAZOPS, FTA, FMEA, Safety and Security Certification.

PACO Group

Metropolitan Transportation Authority (MTA); Long Island Railroad (LIRR); Triborough Bridge and Tunnel Authority (TBTA) – New York, NY
Construction Management—CM, Project Coordinator—Sr. Scheduling & Cost Control

- Developed schedule coding requirements for Lire's Jamaica Station.
- Coordinated track outages for Atlantic Avenue, with several contractors merging schedules.
- Created station track occupancy charts.
- Set-up a system for taking and archiving progress pictures.
- Provided an analysis of train routing with Main Line, Montauk and Atlantic Lines.
- Conducted an analysis of platform / track capacity with drop-off and go methods.
- Developed drawings for Jamaica to identify and track progress.
- Identified serious scheduling flaws with the PA Schedules in conflicts of track outages.

Mr. Michalowski performed these tasks on the following projects:

- LIRR—JFK Airport Access Light Rail System
- LIRR—Jamaica Station Reconstruction
- LIRR—Jamaica Central Control Design
- LIRR—Jamaica Interior Fit Out Design
- LIRR—Atlantic Avenue Station; Revitalization
- LIRR—Manhasset Station Reconstruction
- LIRR—Shea Substation Construction Project
- LIRR—Island Park Substation Design
- LIRR—Valley Stream Substation Design
- TBTA—Triborough Bridge Suspender Rope and Deck Replacement
- TBTA—Queens Midtown Tunnel Drainage Rehabilitation

1996-1999 – Impulse/ F&V Metro Contracting Corp. – Farmingdale, NY
Consultant

- Stan was the Consultant / Technical Supporter in the areas of Project Management and Scheduling. He participated in Bid documentation and awarding. He worked on Material Procurement. He performed construction of document preparation and schedule development. He also constructed operations, prepared progress monthly narrative reports, and project closeouts known as owner turnovers.
- Developed remote office reporting system for New York City Transit.
- Successful in obtaining Time Extensions, and Impact Costs.
- Successfully coordinated 10 Projects with monthly analysis and reports.

1992-1996 – Watchtower Bible and Tract Society -- Moscow, Russia
Stan's duties included providing project management, scheduling expertise, organizational and technical support in Russia. He was responsible for management and scheduling coordination for activities in St.Petersburg and Moscow as they relate to Headquarters Construction, Conventions, Translation, and Training.

Accomplishments:

- Effectively Scheduled resources/Successfully Coordinated large scale International Conventions
- Established Scheduling procedures for Literature Distribution.

ERMIN AVDAGIC

Estimator

Mr. Avdagic has 25 years experience in estimating, scheduling and project/program management construction planning and implementation of multi-million dollar construction projects, including airports, tunnels, bridges, rail, fire and police stations, correctional facilities, educational buildings and water/wastewater. He is an accomplished engineering professional, who rigorously applies engineering skills to transform technical concepts into bottom line revenue. Mr. Avdagic is an effective team builder with excellent problem solving, presentation, interpersonal and writing skills. Additionally, he is proficient with numerous industry software packages such as MC2, Success, GTCO Digitizer, Excel, Timberline, Primavera P3 Scheduling, ACE, and Microsoft Office.

Key Highlights

- ✓ Over 25 Years Industry Experience
- ✓ Extensive work with Mass Transit Agencies Throughout the Northeast

Education

- **BS, Civil Engineering,** University of Sarajevo, Bosnia & Herzegovina, 1983

Computer Skills

- Primavera P3
- MC2
- Success
- GTCO Digitizer
- Timberline
- ACE
- MS Office

Port Authority of New York & New Jersey (PANY&NJ) – Trans-Hudson (PATH), Tunnels E&F Floodgates and Water Management System – New York, NY
Chief Estimator

Responsible for the cost estimates of architectural, structural, civil and electrical systems. Mr. Avdagic saved the Authority $17 million at one (W.O. #25) of multiple estimates on this $100 million project.

Port Authority of New York & New Jersey (PANY&NJ) – World Trade Center Transportation Hub – New York, NY
Senior Estimator

Responsible for cost estimates of civil and structural trades. The $3 billion Transportation Hub, equivalent in size to Grand Central Station, will be comprised of a new PATH subway station serving approximately 100,000 daily commuters with additional underground concourse connections to 13 subway lines, the Hudson River ferry, and the World Financial Center. The Transportation Hub will include 500,000 square feet of retail facilities.

Port Authority of New York & New Jersey (PANY&NJ) – George Washington Bridge, Tower Base Improvements – NJ & NY
Chief Estimator

Responsible for providing cost estimates for civil, HVAC, plumbing and electrical.

Port Authority of New York & New Jersey (PANY&NJ) – LaGuardia Airport Central Terminal Building Modernization Program – New York, NY
Senior Civil Estimator

Developed cost estimates for elevated roadways, taxiways, and aprons. The main focus of the project is the $5 billion program to replace the 45 year-old Central Terminal Building and its concourses to increase the types of aircraft that can be accommodated and to provide greater flexibility in adapting to programmatic changes of the airlines served by the facility. The program includes a new 1.2 million SF Central Terminal Building and concourses with 38 gates; new ramp; relocated taxiways; a new 6,000 space parking structure; and reconfigured roadway and utility systems.

PACO Group

Harvard University, Allston Development Group – Allston Science Complex – Cambridge, MA
Senior Lead Estimator

Responsible for providing cost estimates of the civil, HVAC, plumbing and electrical systems. The scope of work included a 500,000 SF, state-of-the-art, research space above ground in four buildings linked by pedestrian bridges, with a large central open space between.

Dallas-Fort Worth (DFW) International Airport – 20-Year Capital Improvement Program – Dallas, TX
Senior Estimator/ Program Director

Provided estimating services including: developing cost estimates and change order review and negotiation that were directly or indirectly related to the proposed new International Terminal D and the proposed Automated People Mover (APM). Individual project scopes to this point have ranged between $1 and $100,000 million. The nature of projects at this airport is dynamic, and as a consequence, the basis of estimates range from highly conceptual estimates to estimates prepared from complete construction documents. Mr. Avdagic saved to the client over $6 million on the steel structure for APM.

New York City Department of Design & Construction (NYC DDC) – Central Park Police Precinct, New York, NY
Chief Estimator

Responsible for the preparation of change order cost estimates of all trades and supervising the work of estimating team members. The project consisted of the restoration and an addition to the Police Precinct.

SUNY College at Old Westbury – New Academic Building – Old Westbury, NY
Chief Estimator

Responsible for preparing cost estimates for all trades, as well as performing and supervising change order review and negotiation. The scope of work included the construction of a new 150,000 SF building, upgrades to boiler plant equipment in an adjacent building and demolition of existing space.

Port Authority of New York & New Jersey – PATH 800 MHZ Trunked Radio Communication System – New York, NY
Chief Estimator

Responsible for the cost estimates of the civil, HVAC, plumbing and electrical systems. The scope of work included adding 800 MHz ITAC and 450 MHz UTAC channels to an existing 800 MHz simulcast site.

New York City Department of Design & Construction (NYC DDC) – FDNY Fire Station Rehabilitation Projects – New York, NY
Chief Estimator

Supervised all trade cost estimates for the rehabilitation of fire stations throughout New York City. Also performed and supervised change order review and negotiation. The scope of work included full gut renovations of the kitchen/dining rooms and rehabilitation of new structural floor slabs/structural steel beams at apparatus floor, masonry repair, re-pointing and waterproofing, and roof replacements.

New York City Department of Environmental Protection (NYCDEP) – Fresh Kills Landfill Evaluation of Staten Island Borough Presidents Roadway Proposal – Staten Island, NY
Senior Civil Estimator

Developed detailed and complex cost estimates for an evaluation of a proposed four-mile roadway network traversing the East Park portion of the Fresh Kills Landfill. Final Report included an evaluation of roadway geometry, pavement, traffic, drainage, signing and striping, as well as impacts to the landfill containment system and natural resources. Task included preparation of conceptual roadway plans, estimate and schedule to serve as a basis of comparison.

CONSTRUCTIBILITY/BIDABILITY/ GENERAL ENGINEERING REVIEW/CONSTRUCTION STAGING

Ralph Csogi, P.E.
Senior Vice President

Professional Profile
Mr. Csogi is an experienced and well respected engineer, who is highly proficient in design and construction management. He has spent the majority of his career on major, complex transportation construction projects in the New York/New Jersey area. In his more than 30 years of experience, he has worked for a contractor, managed design projects, and served as resident engineer and project manager on some of the region's largest construction projects. He has also managed GPI's largest multi-disciplined branch office, and has been an active participant on many transportation related committees to further the goals of the profession.

Proposed Project Assignment
Constructibility/Bidability/General Engineering Review/Construction Staging

Registration/Certifications
Professional Engineer/NY
Professional Engineer/NJ
Professional Engineer/CT
NACE Coatings Technician Level 1

Education
BS/1977/Civil Engineering

Total Years Experience 34

Project Experience
Peer Evaluation Experience

Port Authority 42nd Street Bus Garage Ramp Replacement Peer Review, New York, NY. Peer Review. The Port Authority of New York and New Jersey (PA) owns and operates a commuter bus facility at 42nd Street just off of Times Square in New York City. At this facility there are a series of bus ramps that directly tie the bus garage to the entrance of the Lincoln Tunnel. These ramps were approximately 40 years old and were badly deteriorated due to the constant heavy bus traffic and the lack of maintenance. Maintenance and subsequent rehabilitation could only be performed in small overnight windows since these ramps were in constant use. Disruption of commuter service was not an option to the Port Authority since it would limit revenue and add passenger vehicular volume to an already congested Lincoln Tunnel. To make matters worse, these ramps contained a series of tubing in which they pumped hot oil to de-ice the ramps during snow and ice events. This tubing was leaking and in serious need of replacement.

In 1988, the PA asked Mr. Csogi to join a panel of leading construction engineers to develop a construction-staging scheme in which these bus ramps and de-icing systems could be rehabilitated. Over the course of a week, Mr. Csogi and the team brainstormed replacement ideas, organized six different preliminary schemes, and ultimately through the use of cost/benefit analysis methods, reduced these schemes down to a single plan. This plan was further refined by the team, and consisted of an elaborate MPT scheme, bus re-scheduling and an in-situ lining of the de-icing tubing. The project is currently under construction utilizing many of our team's initial concepts and ideas. Client: Port Authority of NY/NJ

Belt Parkway Bridges Program Management Services, Brooklyn, NY. Technical Specialist. GPI is providing program management and resident engineering and inspection services for the rehabilitation/ replacement of seven bridges along a 7.5-mile section of the Belt Parkway. This $450-million program includes the rehabilitation or replacement of the following four waterway bridges and three land bridges to current standards:

- **Waterway Bridges:** Gerritsen Inlet; Mill Basin; Paerdegat Basin; and Fresh Creek Basin
- **Land Bridges:** Nostrand Avenue; Rockaway Parkway; and Bay Ridge Avenue

Each bridge will contain three full width lanes in each direction with standard left and right shoulders. Five of the seven bridges incorporate a full width pedestrian and bicycle sidewalk that is separated and adjacent to the proposed eastbound roadway. The structures will be constructed to the latest AASHTO Standard Specification for Highway Bridges, with a live load carrying capacity of HS25 and will accommodate a design speed of 100 km/hr. Also, the design of the bridges will meet current seismic and scour requirements.

The three land bridges include Belt Parkway over **Nostrand Avenue, Rockaway Parkway**, and **Bay Ridge Avenue** and all utilize multi-stage construction, with their final horizontal alignment basically

matching the existing highway alignment. The proposed Nostrand Avenue Bridge is a multi-girder structureand is comprised of a single span of 32 meters. The proposed Rockaway Parkway Bridge is also a multi-girder structure and is comprised of a single span of 28 meters. The proposed Bay Ridge Avenue Bridge will be a precast, prestressed box girder structure and is comprised of a single span of 18 meters.

The four waterway bridges are **Gerritsen Inlet, Mill Basin, Paerdegat Basin** and **Fresh Creek Basin**. Each waterway structure will provide at least the existing horizontal and vertical clearances for marine vessels within the navigable channels. Although the existing Mill Basin structure consists of a movable span, which opens to allow larger vessels through the crossing, the proposed structure will consist of fixed, non-movable spans. In order to accommodate tall marine vessels, the proposed Mill Basin Bridge will be constructed on a higher vertical alignment than the existing structure. This new structure will provide a minimum under-clearance of 55 feet at the channel. The approach roadways of all the bridges will be rebuilt to reflect the new geometry of the bridge structures and accommodate the latest design criteria. Also, sections of the roadway between Fresh Creek, Rockaway, Paerdegat Basin and Mill Basin Bridges will be reconstructed, being that the new bridges and approaches immediately adjoin each other. Maintenance and protection of traffic will be the major critical issue on the heavily traveled parkway.

Mr. Csogi's responsibilities include individual constructability reviews for the individual bridge contracts, as well as studying the MPT effects on adjoining mainline Approaches to the bridges. In addition, he has assisted with the "combination" of several bridge contracts into 1 or 2 "mega" contracts to improve the overall project and program schedules. Client: New York City Dept. of Transportation

Rehabilitation of the Brooklyn-Queens Expressway, Park Avenue Viaduct, New York, NY; 7/05-Present. Project Manager. This project involves construction engineering and inspection for the widening, redecking and repainting of this viaduct with complex MPT on and below this heavily-traveled structure. Rehabilitation of this high-volume major interstate urban highway/bridge includes replacement of more than 400 bearings and 1500 meters of bridge expansion joints. Also included is extensive coordination with agencies and local communities. Responsibilities include providing staffing resources for the project, acting as technical advisor for construction issues that arise during the course of the project and acting as liaison with the project's subconsutlants and NYSDOT. Client: New York State Dept. of Transportation, Reg. 11

Roslyn Peer Review, Contract #D015290, Roslyn, NY. 7/03-11/04. Project Director. NYSDOT initiated a peer review contract for the replacement of the Roslyn Viaduct structure when it was decided that the new structure would be a precast, post-tensioned concrete segmental box girder type superstructure. The existing structure, built in 1949, has 29 spans and carries Northern Boulevard over Hempstead Harbor and local streets in the Village of Roslyn. Figg Engineering teamed with GPI to perform the peer review. GPI is intimately familiar with NYSDOT standards and procedures, and provided constructibility review comments, maintenance and protection of traffic standards review, and construction staging suggestions to ensure the State's goals were achieved for this $85-million project. Mr. Csogi was responsible for the constructibility review of the civil/site elements of the Roslyn Viaduct project. He also coordinated the MPT review comments and structural review comments for project elements such as the retaining walls, abutments, etc. with Figg Bridge Engineers. Client: NYSDOT

NJTurnpike 6-9 Widening Program Constructability Consultant, NJTA, NJ; 2008-Present. Constructability team leader for NJTA's $2.7-billion Interchange 6-9 Widening Program. As team leader, Mr. Csogi applies his more than 30 years of construction management experience to assist the NJTA in delivering the widening program in the most cost-effective and efficient manner. The 35-mile program is critical to solving the growing congestion and safety problems on this segment of the Turnpike. Mr. Csogi is responsible for managing a group of experienced construction professionals to address construction issues that are not necessarily addressed during the design phase. Client: New Jersey Turnpike Authority

Thomas A. Napolitano, P.E.
Director of Construction Services

Professional Profile
Mr. Napolitano is a well respected, highly-qualified senior construction engineer and manager with over 23 years of experience in the supervision of major transportation construction projects. He has extensive experience on large-scale, high-profile projects that require complex staging, resource allocation and MPT to successfully complete. Mr. Napolitano has a unique blend of experience that is very well suited toward a constructability review assignment. His construction experience includes progressive field management positions including Resident Engineer, Field Manager, and Project Manager. He now serves as the Director of Construction of one of the most prestigious construction management/inspection firms in the NJ/NY area. This position requires him to manage the resources of more than 50 construction professionals statewide for various major transportation agencies including the New Jersey Turnpike Authority. Currently, his staff is involved in the supervision of over $500 million in construction around the Garden State. As a part of this leadership role, Mr. Napolitano has developed project management tools for his engineers that will allow them to better plan as well as monitor construction activities through the use of scheduling, budget analysis, claims avoidance and construction reporting techniques. In addition, he is an active member of several professional organizations such as UTCA, CECNJ Construction Committee and ASHE that has afforded him the opportunity to make key contacts that will support him in his role on this project.

Proposed Project Assignment
Constructibility/Bidability/General Engineering Review/Construction Staging

Registration/Certifications
Professional Engineer/NJ
Professional Engineer/NY
Professional Engineer/PA
Professional Engineer/FL

Education
BS/1990/Civil Engineering

Course Work
NACE III
SSPC C3
SSPC C5
Lead Paint Removal & Abatement
Rapid OSHA 40hr
Design & Construction of Steel Sheep Piling Structures
Graduate Course - Hazardous Management

Total Years Experience 25

Project Experience

Driscoll Bridge Rehabilitation, Middlesex County, NJ; 2006-Present. Project Manager. As a partner with PB Americas, GPI is providing construction supervision services for the $100 million rehabilitation of the Driscoll Bridge over the Raritan River. The work includes replacement of the existing deck with HPC, replacement of existing main girder bearings with electromeric or isolation bearings; and installation of new bolsters between existing stringers and floorbeams. Approach roadway drainage and paving and new overhead signage will complete the work. GPI is providing Resident Engineering and construction inspection on this project - which is the single largest construction contract ever for the New Jersey Turnpike Authority. Client: NJTA

Route 36 Bridge over the Shrewsbury River, Monmouth County, NJ; 2007-Present. Project Manager. GPI is providing construction inspection services on this $125 million project to replace the existing double leaf bascule bridge over the Shrewsbury River with a new high-level fixed structure. The new bridge will be precast concrete segmental construction - the second such bridge being built in New Jersey. Client: NJDOT

Route I-295, MountLaurel/ Westhampton Townships, NJ; 2007-Present. Project Manager. This project involves repairs to roadway pavement and bridge decks for approx. 10 miles of this 2 and 3 lane expressway. The project included temporary traffic control for main line lane closures, ramp closures and detours to facilitate the repairs. The repairs included full depth/ partial depth concrete replacement/ repairs, slab stabilization, milling and paving, crack stitching, diamond grinding and traffic striping. The full depths repairs were replaced with precast slabs doweled and grouted in place, the partials depth repairs

were repaired with a hot applied polymer resin and reopened to traffic within hours after placement. The bridge approach slabs were stabilized, ramps milled and paved the roadway surface diamond ground and re-striped. Client: NJDOT

Route I-80 Resurfacing, East of the Delaware River to West of Knowlton, Mile Post 0.4 - 8.0, Townships of Hardwick and Knowlton, Warren County, NJ; 2007-Present. Project Manager. This resurfacing project consists of milling and Superpave Hot Mix Asphalt paving of 7.6 miles of Route 80 in Warren County. GPI will provide construction engineering services, field construction inspectors and a Primavera scheduler to review the progress schedule and updates, and also provide claims analysis with an emphasis on time impacts. Inspection responsibilities included: inspection of milling and HMA paving, and MPT/Safety as well as environmental inspection. Client: NJDOT

I-287 Widening, Middlesex County, NJ; 2007-Present. Project Manager. GPI is providing construction inspection services on this $44M fast track project to widen I-287 in this heavily congested corridor. The project also includes widening of two bridges carrying I-287, replacement of several bridge decks, construction of a temporary two-lane bridge over US Route 1 to maintain the current number of lanes during the six-stage deck replacement work of Route I-287 NB and SB over US Route 1, extension of the fiber optic backbone along the corridor, installation of Digital Message Signs, CCTV cameras and Weigh in Motion Systems and connection to the existing communication hub at Route 1. Services include construction inspection, office engineering, scheduling and claims management. Involves construction staging, deck replacement with precast deck panels, resurfacing, a contraflow lane, HMA paving, detours and an elaborate MPT scheme. Client: NJDOT

OPS P3078 Supervision of Construction Services for GSP Contract No. 84-1291, Northern Bridge Repairs Parkway Mile 128.4 to 169.2; 3/07-Present. Project Manager. This GSP project requires construction supervision services for milling and paving, guide rail repairs, line striping, numerous night operations, MPT, drainage, miscellaneous repairs , decks, deck joints, bearings, substructures, superstructures, fencing, barriers, sign supports, drainage facilities, MPT, night work and slope protection. Responsibilities include: Quality Assurance Manager, supervision of inspection staff, checking accuracy of inspection reports, monitoring progress schedule and progress, resolving conflicts between inspection staff and contractor, and reviewing monthly pay estimates. Client: NJTA

Route 1 & 9 Section 1K & 3M, Construction Inspection; 2/06-Present. Project Manager. This $40M project allows for the realignment of Route 1&9 to connect the existing roadway to the new Rahway River Bridge that was built during the previous contract. There will be a tremendous amount of utility relocation, ROW issues, sign structures, fiber optics, electrical work, traffic signals, elaborate MPT, nightwork, drainage, paving and roadway construction. Client: NJDOT

Route 73 & Route 30 Berlin Circle Elimination, NJ; 8/06-Present. Project Manager. The work consists of the elimination of the circle on Routes 73/30 in Berlin. The project entails noise wall installation, utility relocation, roadway construction on aproximately 3 miles of road. There are a great deal of business within the project limits. The contractor is South State and the construction costs is $40M. The project will be aproximately 50% complete before GPI begins their CI services. The NJDOT will be providing the RE, ARE and the Chief Inspector. Client: NJDOT

Alexander Road Bridge Construction Services, West Windsor, NJ; 8/06-Present; $8M. Project Manager. The project consists of the replacement of the existing Alexander Road Bridge over AMTRAK's Northeast Corridor. The work includes construction of the new bridge, demolition of the existing structure, and staged construction for the replacement of the existing T intersection at North Post and Alexander Road with a roundabout. Client: NJDOT

James G. Tarpey, P.E.
Vice President/Resident Engineer

Professional Profile
Mr. Tarpey is an experienced resident engineer on major highway and bridge rehabilitation projects. He has been the resident engineer on the Manhattan Bridge for the past 17 years, and is held in high regard by NYCDOT for his efforts. Mr. Tarpey's experience includes aggressive schedules, extensive maintenance and protection of traffic coordination, and working with a multitude of utilities and outside agencies. He is consistently commended for his outstanding professional management and his ability to meet schedules on large, complicated projects.

Proposed Project Assignment
Constructibility/Bidability/General Engineering Review/Construction Staging

Registration/Certifications
Professional Engineer/NY
Coatings Inspector-KTA Tator
NYSDOT Maintenance & Protection of Traffic Certified
OSHA Scaffold Competent Person

Education
BS/1973/Civil Engineering

Total Years Experience 37

Project Experience

Manhattan Bridge Rehabilitation of Cables and Suspenders, Contract 14, #BRC156R, New York, NY; 9/09-Present. Resident Engineer. This $149-million project involves the unwrapping and rewrapping of cables; replacement of suspenders; replacement of necklace lighting messenger cables and cable hand ropes; installation of new access platforms to existing tower platforms; reversal of lower roadway and operation of HOV lane and replacement of multi-rotational bearings at the Towers; replacement f light poles and luminaries on South upper roadway; replacement of lane control radar on South upper roadway; and retrofit of track stringers and diaphragm connections and other miscellaneous work. Responsible for the communication and coordination of activities with the contractor ensuring that work is performed in accordance with the contract documents. Working closely with his assistant resident engineer, chief inspectors, project specialists, and NYCDOT EIC and other staff, he is responsible for mediating and/or negotiating extra work resulting from changes in the project scope, coordinating with all agencies, monitoring the Project Team's DBE goals, coordinating with the support consultants, and devoting every effort to ensuring that the job is accomplished on schedule. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 2/04-8/09. Resident engineer on this $150-million project involving the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; and repair of flagged conditions. Responsible for the communication and coordination of activities with the contractor ensuring that work is performed in accordance with the contract documents. Working closely with his assistant resident engineer, chief inspectors, project specialists, and NYCDOT EIC and other staff, he is responsible for mediating and/or negotiating extra work resulting from changes in the project scope, coordinating with all agencies, monitoring the Project Team's DBE goals, coordinating with the support consultants, and devoting every effort to ensuring that the job is accomplished on schedule. Client: New York City Dept. of Transportation

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10, #BRC156C, New York; NY; 2/01-2/05. Resident engineer for this $175-million project involving rehabilitation of the north upper roadway approach and suspended spans; installation of a new north side bikeway; replacement of the north side truss bearings on the approaches; repainting of the north half of the bridge including the cables and trusses; and installation of an Intelligent Traffic System (ITS) including CCTV's. Responsible for the communication and coordination of activities with the contractor ensuring that work is performed in accordance with the contract documents. Working closely with his assistant resident engineer, chief inspectors, project specialists, and NYCDOT EIC and other staff, he was responsible for mediating and/or negotiating

extra work resulting from changes in the project scope, coordinating with all agencies, monitoring the Project Team's DBE goals, coordinating with the support consultants, and devoting every effort to ensuring that the job is accomplished on schedule. Client: New York City Dept. of Transportation

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C, #BRC1568C, New York, NY; 8/97-10/01. Resident engineer for this $124-million project, which involved the rehabilitation of the Manhattan plaza area, Manhattan Arch and Colonnade; replacement of the structural steel stringer and floorbeam support system for the west side subway tracks; replacement of truss bearings on top of the piers of both approach spans; rehabilitation of eyebars anchoring one of the main suspension cables; and removal of existing paint from the entire west side, both towers and two main cables, and replacing with new coating. Responsible for planning, staffing and supervising all aspects of project, as well as coordination with outside agencies, NYCDOT specifications and record keeping procedures. Client: New York City Dept. of Transportation

Rehabilitation of the Manhattan Bridge South Side Approach and Suspended Spans, Contract #BRC156E, New York, NY; 12/92-7/97. Resident engineer on this $96-million project for the repair of the approaches to the bridge leading from Flatbush Avenue in Brooklyn and Canal Street in Manhattan. This project involved the replacement of reinforced concrete-filled grid deck and structural steel stringers and diaphragms, installation of new steel expansion joints and replacement of downspout drainage system for the two west side approach spans, installation of a truss stiffening system for both west side spans and completion of the stiffening system for the east side spans, and completion of rehabilitation of pedestrian west walkway including new extension ramp in Manhattan. Responsible for planning, staffing and supervising all aspects of project, as well as coordination with outside agencies; NYCDOT specifications and record keeping procedures. Client: New York City Dept. of Transportation

Manhattan Bridge Modification of Traveler System and Lower Level Interim Rehabilitation, Contract #D253248, New York, NY; 1990-1992. Resident engineer for the removal and replacement of existing track beams, removal and replacement of existing hangers including modification of partially fabricated hangers and providing new system of yokes, mechanical drive, electrical control, skew correction system and electrical feed system. Also included was the removal and disposal of existing conduits, conductor rails, pull boxes, junction boxes, mechanical machinery and electrical equipment. The project also involved interim rehabilitation to the structural steel support members for the lower roadway of the bridge, rehabilitation of floorbeams, crossbeams and ends of stringers. Responsible for planning, staffing and supervising all aspects of project, as well as coordination with outside agencies, NYCDOT specifications and record keeping procedures. Client: New York State Dept. of Transportation, Reg. 11

Marine Parkway Rehabilitation, New York, NY; 1990. Resident engineer for the rehabilitation of one of the longest vertical lift bridges in the world. The work included replacement of all wire ropes for the lift span, rehabilitation of the air buffers, rehabilitation of all mechanical elements, drainage upgrade at the toll plaza, complete replacement of deck and supporting steel for the walkway. Responsible for planning, staffing and supervising all aspects of project, as well as coordination with outside agencies; NYCDOT specifications and record keeping procedures. Client: Triborough Bridge and Tunnel Authority

Brooklyn Bridge Rehabilitation of Main Cable, Contract #D251686, New York, NY; 1985-1990. Resident engineer for this project that involved replacement of suspenders, stays and cables; rehabilitation of main cable; replacement of cable wrapping wire; new timber and concrete promenades; new roadway and necklace lighting; new bearings on approaches; and complete painting of bridge and approaches including disposal of hazardous waste. Responsible for planning, staffing and supervising all aspects of project, as well as coordination with outside agencies; NYSDOT specifications and record keeping procedures. Client: New York State Dept. of Transportation, Reg. 11

Anthony S. Grosso, P.E.
Vice President/Resident Engineer

Professional Profile
Mr. Grosso has over 20 years of experience in the management of large-scale transportation construction projects. He joined GPI after serving in various capacities with the New York City Dept. of Transportation and earlier New York State Dept. of Transportation. At the end of his tenure with the New York City Dept. of Transportation, Mr. Grosso was the maintenance director, Bureau of Bridges. Prior to this assignment, he served as engineer-in-charge for the New York State Dept. of Transportation and supervised field inspections and rehabilitation and reconstruction of some of the largest structures in the New York Metropolitan area. Mr. Grosso possesses first-hand knowledge of the construction, maintenance, repair and painting of major highway and suspension bridges.

Proposed Project Assignment
Constructibility/Bidability/General Engineering Review/Construction Staging

Registration/Certifications
Professional Engineer/NY
NACE Coatings Inspector Level 1
NYSDOT Maintenance & Protection of Traffic Cert.
SSPC C5 Supervisor/Lead Competent Person
ATSSA Traffic Control Flagger/Technician

Education
MS/1977/Transportation Planning and Engineering
BS/1976/Civil Engineering

Course Work
10-Hour OSHA Training Course
1-Hour Lead Awareness Training
NYCT Track Safety Course
Confined Space Training
NYCDOT Supervisor Course

Total Years Experience 33

Project Experience
Brooklyn Bridge Approaches and Ramp Structures Improvements, Contract 6, New York, NY; 6/10-Present. Chief Resident Engineer. Project involves construction management and inspection services for the $500-million rehabilitation of this Iconic National Landmark. The scope of work for the project includes replacement of approach roadway in Manhattan and Brooklyn over the arch blocks; rehabilitation of the Manhattan side ramp structures with widening and deck and bearing replacements; rehabilitation of the approach steel structures with full superstructure replacement of the York and Main Street structures and orthotropic deck installation at Franklin Square; seismic retrofitting of the main bridge, Franklin Square and ramp structures; painting of the ramp structures and suspended spans in their entirety; restoration of historic features. Client: New York City Dept. of Transportation

Rehabilitation of the Brooklyn-Queens Expressway (I-278), Park Avenue Viaduct, D259766, Kings County, NY; 8/05-6/10. Resident Engineer. This $138-million project involved construction engineering and inspection for the widening, redecking and repainting of this 850,000 sq ft viaduct with complex MPT on and below this heavily traveled structure. Rehabilitation of this high-volume, major interstate urban highway/bridge included replacement of more than 400 bearings and 1,500 meters of bridge expansion joints. The structure has seismic reinforcement installed which included retainers and plates at the top of columns and additional stiffeners and plates at the base. Also included is extensive coordination with agencies and local communities. Mr. Grosso's responsibilities included the direct daily supervision of a team of engineers, technicians and support staff; the day-to-day coordination with the construction contractor; and the maintenance of positive community relations in a dense urban area. Client: New York State Dept. of Transportation

Williamsburg Bridge Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract 8, #BRC253CCA, New York, NY; 4/03-8/05. Resident Engineer. This $280-million project involves the extensive rehabilitation of the two main and six intermediate towers. The scope of work for this project also includes: replacement of truss bearings, installation of maintenance traveler, replacement of cable suspenders, painting of trusses, installation of intelligent transportation system (ITS) and its

integration at the Traffic Management Center, installation of fender system and installation of sign gantries and VMS. Client: New York City Dept. of Transportation

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 4/99-8/03. Resident Engineer. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. The scope of work for this project included: the removal of the north inner and outer roadways; installation of bored-in-piles; construction of new reinforced concrete footings, plinths, columns, pier caps, pedestals, retaining walls and abutments; the installation of roadway superstructure including lighting and drainage; replacement of bridge roadway with orthotropic deck and steel barrier; replacement of truss bearings; and painting of underdeck and installation of IVH system. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 6/97-7/01. Resident Engineer. This $176-million project involved the construction inspection for the replacement of the entire mid-section of the bridge that supports the New York City transit tracks (BMT Line). Work included replacement of approaches and abutments, BMT tracks, structures and stringers, repairs to BMT floorbeams, construction of a new signal instrument room, installation and testing of signal, communications and traction-power systems, replacement of stringers on main bridge main span and painting of overhead truss, north transit hanger and anchorage steel. Mr. Grosso's responsibilities included the supervision of a staff of over 35 engineers and administrative personnel and coordinating with a community relations consultant. Client: New York City Dept. of Transportation

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 1996-10/98. Resident Engineer. This $310-million project involved the construction engineering and inspection for the reconstruction of the south inner and outer roadways. Mr. Grosso's responsibilities included the supervision of a staff of over 35 engineers and administrative personnel. Mr. Grosso also coordinated community relations issues to address the local community's concerns and to keep the traveling public apprised of the construction work and resultant road closings on the bridge. The work included the reconstruction of the south roadways; interim bracing of the north roadway and the subsequent demolition of the south roadway framing; construction of a new approach structure, including installation of bored-in-piles; construction of new reinforced concrete pile caps, piers, retaining walls and abutments; and a new superstructure. Client: New York City Dept. of Transportation

Bronx-Whitestone Bridge Painting and Cable Rehabilitation, BW-10, New York, NY; 1994-1996. Mr. Grosso performed resident engineering duties for the first stage of this $21-million project which included surface preparation of the steel superstructure in a Class 1 containment and the application of a three-coat high performing epoxy paint. Client: Triborough Bridge and Tunnel Authority

Brooklyn Bridge Anchorage Rehabilitation, New York, NY; 1983-1988. Engineer-in-Charge. At the time, the largest project let by NYSDOT, Mr. Grosso supervised field inspections in repairing deficient elements of both anchorages of this historic New York City landmark. Work on this $53-million project involved reconstruction of the approach promenades; enlargement and reconstruction of the main cable anchorage pits; spreading of cable strands at the anchorage and removal and replacement of suspender components. He was also responsible for reviewing and approving field changes designed by the support service consultant. Client: New York State Dept. of Transportation, Reg. 11

FDR-South Street Viaduct, Manhattan, NY; 1982-1983. Engineer-in-Charge. Mr. Grosso supervised the construction inspection consultant responsible for the removal and replacement of the concrete roadway deck and repairs to deficient structural members of this important interchange. Client: New York State Dept. of Transportation, Reg. 11

Philip J. Smykal, P.E.
Vice President / Resident Engineer

Professional Profile
Mr. Smykal has been resident engineer on several major construction inspection projects, and is thoroughly familiar with heavy highway and large bridge construction and rehabilitation methods and practices.

Proposed Project Assignment
Constructibility/Bidability/General Engineering Review/Construction Staging

Registration/Certifications
Professional Engineer/NY
Professional Engineer/NJ
NACE Coatings Inspector Level 1/NY
NYSDOT Maintenance & Protection of Traffic Certified
OSHA 10-Hr. Occupational Safety and Health Training Course/NY
AWS Certified Welding Inspector

Education
BS/1973/Civil Engineering

Course Work
10-Hour OSHA Training Course, #001874483

Total Years Experience 37

Project Experience

Verrazano-Narrows Bridge Rehabilitation of Structural Steel Repairs, VN-32, New York, NY; 4/10-Present. Resident Engineer. Project involves construction administration, on-site inspection, and testing and support services. Includes repair of deteriorated subfloorbeams, stringers, stiffener/connection plates, cracked/broken missing welded connection plates, reinforce deteriorated stringer top flange and remove and replace deteriorated bolts, rivets, and drainage piping. Responsibilities include inspection oversight for all construction work; preparation and processing of progress and final payments; review and approval of schedules, staging plans, traffic control plans, and proposed subcontractors; implementation of QA, Safety, and Security Programs; monitoring of the Contractor's compliance with WBE Programs; liaison with MTA B&T design consultants, other Contractors and other Agencies; processing shop drawings, catalog cuts, material submittals, and all other submittals for approval; and on-site and off-site materials inspection. Client: Triborough Bridge and Tunnel Authority

Verrazano-Narrows Bridge Rehabilitation of the Lower Level Approaches, VN-17A, New York, NY; 1/07-4/10. Resident Engineer. This project involved the administration and quality assurance inspection of all work associated with the rehabilitation of the lower level approaches of the Verrazano-Narrows Bridge. Responsibilities included inspection oversight for all construction work; preparation and processing of progress and final payments; review and approval of schedules, staging plans, traffic control plans, and proposed subcontractors; implementation of QA, Safety, and Security Programs; monitoring of the Contractor's compliance with WBE Programs; liaison with MTA B&T design consultants, other Contractors and other Agencies; processing shop drawings, catalog cuts, material submittals, and all other submittals for approval; and on-site and off-site materials inspection. Client: Triborough Bridge and Tunnel Authority

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11, #BRC156A, New York, NY; 11/06-1/07. Assistant resident engineer on this $150-million project involving the reconstruction of lower roadway; removal and replacement of floorbeams, stringers, bearings and deck in main span and side spans; rehabilitation of anchorage chambers; installation of new lighting and traffic signs on lower roadway; rehabilitation of travelers in suspended spans; replacement of maintenance platforms at towers; painting of bridge in suspended and approach spans; and repair of flagged conditions. Mr. Smykal assisted with safety-related issues. Client: New York City Dept. of Transportation

Project Management/Quality Review Audits/Value Engineering/Estimating, Various Projects in the New York Metropolitan Area; 1/06-11/06. Mr. Smykal has performed various tasks including reviewing plans and quantity estimates for the Roosevelt Island Bridge over the East River; the Reconstruction of County Route 3 (Wellwood Avenue) Bridge over Southern State Parkway; various hotel/condo developments such as the AB Hotel, 450 W. 17th Street, Highline 23, and 10th Avenue along the High Line Railroad in Manhattan. He also performed Quality Audit reviews for the Rehabilitation of the Brooklyn-Queens Expressway (I-278)/Park Avenue Viaduct as the consultant quality assurance representative.

Philip J. Smykal, P.E.
Vice President / Resident Engineer

Bronx-Whitestone Bridge Deck Replacement - BW-82, Bronx, NY; 5/03-3/05. Resident Engineer. This $136-million project involves replacing the roadway deck at the suspended spans of this major suspension bridge with orthotropic deck panels installed in a lane-by-lane sequence. Daily realignment of temporary moveable barriers allows an additional lane to be utilized for north bound or south bound traffic during morning and evening rush hours, as appropriate. The work includes replacement of median and side barriers, deck finger joints, stiffening girder pins, lateral bracing, and roadway, tower and navigation lights. Also included in the project scope is painting of structural steel, construction of a new underdeck moveable traveler system, replacement of electrical feeders and substations, and installation of a new fiber optic control and communication system. All of these operations will be carried on while maintaining traffic on this high-volume toll facility. Mr. Smykal's responsibilities included performance of a constructibility/bidability review, evaluation of the low bidder's qualifications, and other pre-construction services; supervision of all field inspection work; maintaining an "Expedition" based document control system; review and approval of CPM schedules, staging plans and traffic control plans; implementation of Quality Assurance, Health and Safety, Construction Inspection and Security Programs; processing monthly progress payments and preparing change orders; processing shop drawings, catalog cuts and material submittals for approval; monitoring Contractor's compliance with MBE and WBE requirements; tracking and documenting hazardous waste handling and disposal; and serving as liaison with personnel from the TBTA design consultant, U.S. Coast Guard and other Contractors. Client: Triborough Bridge and Tunnel Authority

The Robert F. Kennedy (Triborough) Bridge Deck Replacement, TB-63, Queens, NY; 7/98-5/03. Resident Engineer. This $135-million project is actually comprised of two major reconstruction efforts: the complete replacement of the Randall's Island Junction Structure, and the redecking of the Bronx Approach and truss spans. Work includes the demolition of existing decks and ramps, construction of temporary structures, new foundations, erection of new steel including curved girders and placement of precast and cast-in-place concrete decks. All of these operations were carried on while maintaining traffic on a high volume toll facility. Work on the Bronx truss spans included demolition of an existing steel deck and replacement with an orthotropic deck. Work that was also performed in this contract included upgrading bridge electrical systems, construction of a new de-icing/salt storage facility, lead and asbestos abatement and reconstruction work at various shops within the Junction Structure. This TBTA project utilizes NYSDOT bridge standards as well as MURK procedures. Mr. Smykal's responsibilities include inspection of all construction work; processing partial payments and change orders; review of schedules, staging plans and traffic control plans; on-site and off-site material inspection, testing and approval; liaison with TBTA design consultant and other contractors; and processing of shop drawings, catalog cuts and material submittals for approval. Client: TBTA

The Robert F. Kennedy (Triborough) Bridge TB-13 - Queens Approach Concrete Structure Deck, Queens, NY; 10/96-7/98. Resident Engineer. This project involved construction engineering and inspection services for the Queens approach concrete structure deck replacement at the Robert F. Kennedy (Triborough) Bridge. This $16-million project included reconstruction of substructure elements in accordance with seismic resistance criteria; replacement of deck slab with precast "Inverset" deck units, along with cast-in-place deck replacement; replacement of parapets, median, sidewalks, drainage system and lighting; concrete repairs to rigid frame structure; lead and asbestos abatement, as necessary; all accomplished while providing maintenance and protection of traffic with no permanent lane closings. A unique aspect of the project required construction of new cap beams below the existing cap beams so that the existing structure may be blocked and wedged to the new cap beams for support during sequential removal throughout the ten stages of construction. The existing superstructure and a portion of the substructure were removed in "panels," using circular and wire concrete cutting saws for demolition. The new Inverset deck slab/superstructure units were installed in similar "panelized" fashion. This TBTA project utilized NYSDOT bridge standards as well as MURK procedures. Mr. Smykal's responsibilities included inspection of all construction work; processing partial payments and change orders; review of schedules, staging plans and traffic control plans; on-site and off-site material inspection, testing and approval; liaison with TBTA design consultant and other contractors; and processing of shop drawings, catalog cuts and material submittals for approval. Client: Triborough Bridge and Tunnel Authority

Michael Rabkin, P.E., AVS
Senior Engineer

Professional Profile
Mr. Rabkin is a professional engineer with many years of management experience on construction projects in the New York Metropolitan area. He also has extensive experience in inspection, design and analysis of steel, concrete and timber structures, offshore platforms, railroad facilities and underground structures, as well as project engineering and management, conceptual engineering, proposals and studies, field testing and report writing.

Mr. Rabkin provides supervision of engineers, technicians and subconsultants, establishes procedures and scope for design and inspection of various critical projects, and performs QA/QC review of work utilizing the latest technological advances on many of these projects. Mr. Rabkin also recommends money saving strategies to reduce the overall cost of construction.

Proposed Project Assignment
Constructibility/Bidability/General Engineering Review/Construction Staging

Registration/Certifications
Professional Engineer/NY
Professional Engineer/FL
Professional Engineer/PA
NACE Coatings Inspector Level 1
AWS Certified Welding Inspector
Associate Value Specialist

Education
BS/1980/Civil Engineering

Course Work
10-Hour OSHA Training Course
VE Workshop I, 40 hours
Practicing Institute of Engineering, Inc.-
PS [redacted] Work Zone Safety, 8 hours
Primavera P3e/c for Construction, 22.5 hours

Total Years Experience: 29

Project Experience

On-Call Construction Management Services for Terminals, Bridges and Tunnels, Various Locations, New York, New Jersey; 4/03-11/07. Scheduler/Estimator/ Technical Specialist. For the Port Authority's rehabilitation program at various bridges, tunnels and terminals, GPI is providing construction inspection, scheduling and estimating services. Mr. Rabkin's responsibilities involve schedule review / biddability and constructability reviews . Projects include the review of the contractor's schedules of several construction contracts on the George Washington Bridge , PA Bus Terminal and the ramp from the Palisades Interstate Parkway to the lower level of the George Washington Bridge using Primavera Project Planner.

- **George Washington Bridge**. Mr. Rabkin was responsible for investigation of the time impact on the painting contract for the agency with all possible remedies.
- **Port Authority Bus Terminal.** Mr. Rabkin was responsible for biddability review and analysis for the duration of the bus terminal seismic retrofit reconstruction project. The purpose of this study/analysis was to determine the approximate duration of each stage and provide an estimated duration for the entire contract. As a result of this analysis, the model of the construction schedule for the entire contract was generated.
- **Palisades Interstate Parkway Ramp**. The Port Authority also requested that GPI determine the adequate contract duration for the construction of the ramp from the Palisades Interstate Parkway to the lower level of the George Washington Bridge. Mr. Rabkin was responsible for review and revision of the proposed construction sequence in order to provide better constructability and to minimize impact to the bridge traffic. He analyzed six conceptual schedules to define all possible complications and remedies to the future contract. Performing schedule review, Mr. Rabkin checked the initial schedule submission to assure the appropriate logic relationship, if the schedule met the contract milestones, and if the proposed activity durations were reasonable. During schedule updates, he identified changes to constraints, float calculations and other options found in Primavera scheduling software.

Client: Port Authority of NY & NJ

Michael Rabkin, P.E., AVS
Senior Engineer

Rehabilitation of Bridge No. 02295, Route 136, Norwalk, CT; 8/09-Present. Scheduler. Construction engineering and inspection for the rehabilitation of Bridge No. 02295, Route 136 Norwalk. State Project No. 102-300, FAP No. BHM-2974(010). The bridge is a lift bridge crossing the Norwalk River in the town of Norwalk, CT. Responsible for schedule updates and time extension reviews. Client: Connecticut Dept. of Transportation

Contract C-502A Capital Program Management Consultant and I-95 Scudder Falls Design Management Consultant; 12/08–Present. Project Control/ Scheduling Manager. This program is a continuation of support for Delaware River Joint Toll Bridge Commission and their Engineering Department in its delivering of the Capital Program and I-95 Scudder Falls Replacement Project. Responsibilities include developing and maintaining master schedule, participation in monthly and bi-weekly CPMC/DMC staff meetings, review and monitor individual project schedules for compliance with master schedule. Client: Delaware River Joint Toll Bridge Commission

Replacement of County Road 67, Motor Parkway Bridge at the LIE, Exit 55, Town of Islip, NY; 5/10-Present. Resident Engineer. This project is a four-stage replacement of the existing 50+ year four-span bridge with the new structure. The scope of work includes installation of the new free-standing abutments and wingwalls, steel elastomeric bearings, steel framing and concrete deck with integral wearing surface. The project also includes the reconstruction of the Motor Parkway. Responsible for review and approval of construction submissions; overall supervision of field personnel; payment review and processing; QA/QC; safety and health; and schedule control and remedies. Client: Suffolk County Dept. of Public Works

NJTA 6-9 Widening Constructability - Constructability Reviews, NJ; 08/08-Present. Technical Specialist. The responsibilities include review and comments on various construction contracts for $3 billion Widening Dualization Program for the New Jersey Turnpike Authority. Current reviews include the Contracts T869.201, T869.501 and T869.701. Client NJTA

Design/Build of Nine Bridges, Contract HBCREPL 98A, Various Locations, NY; 11/00-7/03. Chief Design Engineer. Project involved repair, rehabilitation and maintenance of various bridge components in order to update the overall bridge rating. Responsibilities included the preparation of final design documents, development of maintenance and protection of traffic (MPT) schemes, signage, obtaining of environmental permits, coordination with various City agencies, public and private utility companies, estimating and scheduling. During the bidding process, Mr. Rabkin actively participated in construction cost estimate for the general contractor. Fee: $900,000. Client: NYCDOT

Bridge Component Rehabilitation and Reconstruction Projects, New York, NY; 11/96-8/02. Project Manager. Responsibilities included in-depth inspection of six bridges, development of scope of work and cost estimates for rehabilitation, design, construction inspection and construction support services. Overall project management, work coordination with subconsultants, solicitation processes and budgeting. Client: NYCDOT

Constructibility Review of 145th Street over the Harlem River, New York, NY; 5/01-1/02. Chief Engineer/Project Manager. Responsibilities included the constructibility review of civil, structural and architectural parts of the project. Client: NYCDOT

CSS for Rehabilitation of Forest Park Drive Bridges over LIRR, Contracts HBQ655 and HBQC030, Queens, NY; 12/99-3/01. Project Manager. Responsibilities included review and approval of shop drawings, shielding, demolition and jacking procedures. Specialized services consisted of additional repairs of structural steel and stabilization of slopes by regrading. Client: NYCDOT

CSS, Rehabilitation of 4th Avenue Bridge at 38th Street over NYCTA, Contract HBK549R, Sea Beach Line, Brooklyn, NY; 11/98-6/01. Project Manager. Responsibilities included review and approval of shop drawings, shielding and demolition procedures. Specialized services consisted of redesign of MPT to accommodate pedestrian needs, review of Verizon and KeySpan submissions for utility attachments to the NYCDOT structure, guide rail redesign to improve overall safety. Client: NYCDOT

Brendan Scahill, P.E.
Resident Engineer

Professional Profile
Mr. Scahill is professional engineer with many years of diversified design and inspection experience. During his career, Mr. Scahill has worked extensively on East River Bridge Crossings, including the Brooklyn, Williamsburg, Queensboro and Robert F. Kennedy (Triborough) Bridges. His experience includes orthotropic deck installation, cable rehabilitation, and bridge coating applications.

Proposed Project Assignment
Constructibility/Bidability/General Engineering Review/Construction Staging

Registration/Certifications
Professional Engineer/NY
AWS Certified Welding Inspector/NY

Education
BS/1984/Civil Engineering

Course Work
10-Hour OSHA Training Course
Traffic Work Zone Safety Training Course - GPI
Night Time Bridge Work Safety - Institute of Safety & Health

Total Years Experience 26

Project Experience

Bronx-Whitestone Bridge Bronx/Queens Approach, BW-89/WBM-342, Bronx, NY; 11/08-Present. Assistant Resident Engineer. This $192-million project involves the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work will include the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure there will be massive concrete placements for concrete footings and piers. For the duration of the project, traffic on the bridge must be maintained with five lanes open to traffic. During the staged construction work will be staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting. Other work items on the project include new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure. Mr. Scahill's responsibilities on the project include construction management and inspection of the major steel components on the jobsite. He will provide quality assurance for the Authority during the fabrication of steel girders and other steel components. He will oversee the fabrication and installation of the temporary steel support systems for the existing roadway structure. Mr. Scahill will supervise field inspectors during the structure demolition and steel erection stages of the construction. Providing oversight to ensure that all work is being performed in accordance to the Contract Documents. Client: Triborough Bridge and Tunnel Authority

Bronx-Whitestone Bridge Deck Replacement - BW-82, Bronx, NY; 1/05-11/08. Assistant Resident Engineer. This $136-million project involved replacing the roadway deck at the suspended spans of this major suspension bridge with orthotropic deck panels installed in a lane-by-lane sequence. Daily realignment of temporary moveable barriers allowed an additional lane to be utilized for north bound or south bound traffic during morning and evening rush hours, as appropriate. The work included replacement of median and side barriers, deck finger joints, stiffening girder pins, lateral bracing, and roadway, tower and navigation lights. Also included in the project scope is painting of structural steel, construction of a new underdeck moveable traveler system, replacement of electrical feeders and substations, and installation of a new fiber optic control and communication system. All of these operations were carried on while maintaining traffic on this high-volume toll facility. Mr. Scahill's responsibilities included the performance of constructibility reviews, cost estimates and claim evaluations; supervision of all field inspection work for the installation of new orthotropic deck panels; and monitoring the Contractor's performance and compliance for work performed in accordance to the Contract Documents. Client: Triborough Bridge and Tunnel Authority

Brendan Scahill, P.E.
Resident Engineer

The Robert F. Kennedy (Triborough) Bridge Deck Replacement, TB-64A, New York NY; 1/01-12/04. Resident Engineer. This $144-million project involves replacing the existing concrete deck roadway (eight traffic lanes) with a new orthotropic deck system (252,000 sq ft) while maintaining seven traffic lanes in an urban environment. REI services include the replace the Queens approach span deck with pre-cast panels, replace the suspension bridge suspender ropes and installation of a new roadway lighting system on the bridge structure. As resident engineer, Mr. Scahill was responsible for the field inspection effort and also involve in the fabrication process of the 392 orthotropic deck panels which require coordination between all parties. Client: Triborough Bridge and Tunnel Authority

Williamsburg Bridge North Roadways Reconstruction, Contract 7, #BRC253CA, New York, NY; 1/00-12/00. Assistant Resident Engineer. This $248-million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. Responsibilities included the inspection of the north wind chord repairs; north truss bottom chord repairs; demolition of north roadway floorbeams, stringers, railing and grating; the fit-up of orthotropic deck; submerged arc welding of orthotropic deck, floorbeam, lateral brace and orthotropic deck installation, barrier installation, north footwalk demolition and shear connector installation; inspection of rock and soil piles with the Tubex method on the Manhattan and Brooklyn approach; abrasive blast paint removal and painting of existing floorbeams and bottom chords on main span; inspecting existing floorbeam and lateral brace repairs; monitoring shrinkage and warpage at submerged arc welded orthotropic deck joints; inspection of north outer roadway orthotropic deck shot blasting; and Sterling Lloyd waterproofing membrane application and Trinidad asphalt paving. Client: New York City Dept. of Transportation

Williamsburg Bridge BMT Structure Rehabilitation, Contract 6, #BRC253BBA, New York, NY; 1/99-1/00. Assistant Resident Engineer. This $176-million project involved the construction engineering and inspection for the reconstruction of the BMT structure. Mr. Scahill's responsibilities included the supervision of the demolition of the existing structure and the steel erection of the new structure. Client: New York City Dept. of Transportation

Williamsburg Bridge South Roadways Reconstruction, Contract 5, #BRC253BAA, New York NY; 2/96-1/99. Assistant Resident Engineer. This $310-million project involved the construction engineering and inspection for the reconstruction of the south inner and outer roadways. Mr. Scahill's responsibilities included the supervision of the placement of the orthotropic deck on the main bridge. Mr. Scahill was in charge of field supervision for the $9-million emergency repair work to the north roadways. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable Rehabilitation, Contract 4, #BRC253A, New York, NY; 10/95-2/96. Assistant Resident Engineer. For this $88-million project, Mr. Scahill was responsible for coordinating strand removal and replacement of Main Cable A at the Manhattan Anchorage. Supervised field personnel in the completion of the remaining cable work including wire wrapping, neoprene wrapping and footwalk erection. Client: New York City Dept. of Transportation

Williamsburg Bridge Main Cable, Contract 4, #BRC253A, New York, NY; 5/92-10/95. Senior Inspector. Instruction of contractor personnel in the procedures of the wire rope suspender removal and replacement. Monitored the application of linseed oil and compaction to the main cables. Client: New York City Dept. of Transportation

Park Avenue Viaduct and New York State Thruway, New York, NY; 9/91-5/92. Design Engineer. Performed structural analysis on structural steel and concrete structures. Reviewed design calculations and prepared contract plans. Client: New York City Thruway Authority/ New York State Thruway Authority

CERTIFICATE OF AUTHORIZATION

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

GREENMAN PEDERSEN INC
325 WEST MAIN STREET
BABYLON, NY 11702-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0005942

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

State of New Jersey

Division of Consumer Affairs

State Board of Professional Engineers and Land Surveyors

THIS CERTIFIES THAT

GREENMAN-PEDERSEN, INC.
325 WEST MAIN STREET
Babylon NY 11702

Has met the requirements of the State Board of Professional Engineers and Land Surveyors and is hereby issued a

CERTIFICATE OF AUTHORIZATION

to offer the following services

Eng.,Land Surv.&Building Design Svc	***09/01/2008***	***08/31/2010***

Person in Responsible Charge GARY T ETTER

For the names of other Responsible Charge Licensees, go to: http://www.njconsumeraffairs.com/pels/certrpt.pdf

Date: September 16, 2008
Certificate No. 24GA27959500
Expiration: 08/31/2010

Arthur Russo

Executive Director

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

MAITRA ASSOCIATES PC
450 SEVENTH AVE
SUITE 2505
NEW YORK, NY 10123-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0006048 DUPLICATE

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

MBE/WBE CERTIFICATION

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

by

Office of Business & Job Opportunity

LPE Enterprises Ltd.

Certificate PA-26300

This certificate acknowledges that the above named firm is certified as a **Women-owned Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business that affects ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: January 07, 2010

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: January 06, 2015

Form: 6/10/93

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Kenneth J. Ringler, Jr.
Executive Director

Certified

by

Small Business Programs

Maitra Associates, P.C.

Certificate PA-97

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
General Manager
Certified: January 27, 2006

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: January 26, 2011

Form: 6/10/93

THE PORT AUTHORITY OF NY & NJ

RECEIVED JAN 08 2008

December 31, 2007

Mr. Frank Otero
President
PACO Group, Inc.
110 Willam Street, Suite 3010
New York, NY 10280

RE: **MBE CERTIFICATION**
TYPE: **PURCHASING**

Dear Mr. Otero:

This is to acknowledge receipt of the Uniform Certification Application which your firm submitted. **PACO Group, Inc.** has been included on our roster of eligible **Minority Business Enterprises (MBEs)** for contracts with the Port Authority of New York and New Jersey.

Please be advised that the Port Authority's Office of Business & Job Opportunity periodically reviews all certifications and reserves the right to decertify any previously certified firm that no longer meets the Port Authority's guidelines for **MBE** designation.

Additionally, any **MBE** whose business incurs changes in any substantial manner must notify the Office of Business & Job Opportunity within thirty days of that change. These changes include, but are not limited to, a change of officers, directors, location, corporate name, or financial condition. Failure to advise of these changes may result in our removing the firm from our roster of eligible **MBEs.**

If you have any questions regarding your certification, please feel free to contact Rosemary Jenkins-Varela at (212) 435-7806.

Sincerely,

Lash Green
Director
Office of Business & Job Opportunity

LG/AM/pl

Enclosures: Certificate
Registration Notice

233 Park Avenue South
New York, NY 10003

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Anthony E. Shorris
Executive Director

Certified

by

Office of Business & Job Opportunity

PACO Group, Inc.

Certificate PA-557

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

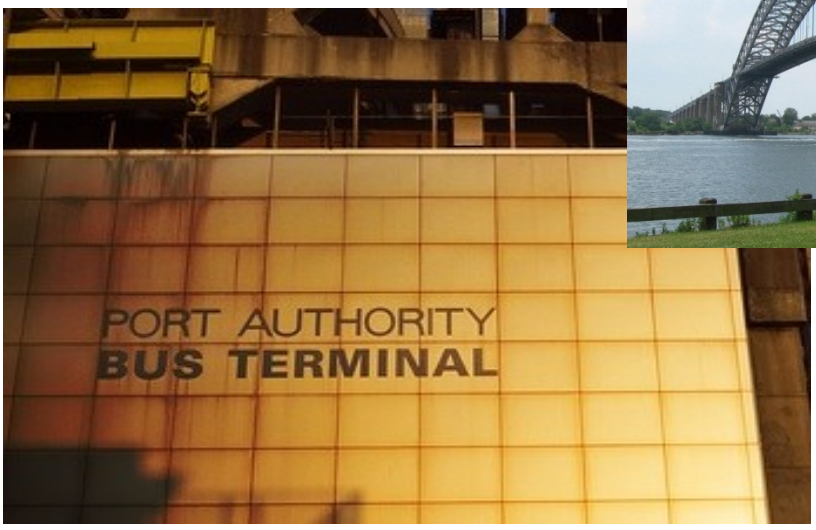
Lash Green
Director
Certified: December 31, 2007

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: December 31, 2012

Form: 6/10/93

SECTION F

Hourly Rate Schedule



GPI Greenman-Pedersen, Inc.
Engineering and Construction Services

GREENMAN - PEDERSEN, INC.

Salary Schedule

Performance of Construction Management Services on a "Call-In" Basis During 2011 - 2014

Name		Title	Level	Rate
Baptiste	Lynnette	Inspector	N II	$27.50
Bradham	David	Senior Coatings Inspector	N III	$48.45
Brugge	Jeffrey	Senior Inspector	A III	$51.00
Caceres	Gina	Admin Assistant	N II	$30.63
Capilupi	Ralph	Resident Engineer	A IV	$60.00
Cardinez	Garfield	Senior Inspector	N III	$45.66
Charles	Mhed	Senior Inspector	N IV	$44.78
Chasse	Daniel	Assistant Resident Engineer	A IV	$55.00
Chiang	John	Inspector	A III	$35.00
Chuc	Jason	Accountant	N III	$37.07
Colon	Christopher	Trainee	N/A	$21.50
Crozier	Gary	Senior Inspector	N IV	$54.53
Cunningham	David	Inspector	N II	$26.89
Dean	Elaine	Office Engineer	A III	$43.97
Delio	Anthony	Inspector	N III	$36.82
DiFinizio	Victor	Junior Technician	N I	$19.89
Ferdinandsen Jr.	William	Assistant Resident Engineer	A VI	$77.60
Finfrock	Lorraine	Office Engineer	N IV	$60.28
Flores	Fernando	Inspector	N III	$36.40
Fortuna	Lorena	Assistant Office Engineer	N/A	$28.00
Gallo	Frank	Project Manager	A VII	$83.74
Godfrey	William	Inspector	N III	$37.20
Goon	John	Senior Inspector	A III	$47.67
Gormley	Brian	Inspector	A III	$25.00
Greenman	Joseph	Senior Inspector	N III	$48.38
Grosso	Anthony	Resident Engineer	A VII	$82.00
Holland	Leonard	Cost Estimator	N/A	$42.67
Jones	Steven	Senior Inspector	N IV	$44.34
Kemp	Darryl	Inspector	N IV	$46.00
Khinchin	Vitaliy	Office Engineer	N III	$42.85
Khoury	Richard	Office Engineer	N IV	$53.47
Lageyre	Gabriel	Senior Inspector	N III	$36.43
Lau	Gregory	Inspector	A III	$43.02
Leo	Ken	Inspector	N II	$26.66
Leo	Robert	Chief Inspector	A IV	$52.00
Leong	William	Inspector	N III	$28.00
MacKenzie	Ian	Senior Inspector	N III	$39.65
Major	Keith	Inspector	N II	$27.50
Mando	Jeffrey	Inspector	N I	$27.35
Marcel	John	Inspector	N III	$40.32
Martinez	Nancy	Office Engineer	N II	$35.11

GREENMAN - PEDERSEN, INC.

Salary Schedule

Performance of Construction Management Services on a "Call-In" Basis During 2011 - 2014

Name		Title	Level	Rate
Matalon	Marc	Resident Engineer	A V	$66.00
Moen	Thomas	Senior Inspector	A III	$42.33
Moschides	Plato	Senior Inspector	N IV	$43.58
Neophytou	Neophytos	Senior Inspector	A IV	$57.00
O'Har	John	Senior Inspector	N III	$45.36
Olivo	Marcus	Inspector	N II	$29.40
Ortega	Ignacio	Senior Inspector	A III	$52.32
Pan	Zhong Wen	Junior Engineer	A II/I	$30.00
Pandya	Gopesh	Office Engineer	A III	$39.66
Perez	Albert	Senior Inspector	N IV	$50.11
Perez	Juan	Trainee	N I	$21.42
Porter	Nzinga	Assistant Office Engineer	A II/I	$34.81
Procaccio	Richard	Coatings Inspector	N II	$33.28
Rabkin	Michael	Project Manager	A VII	$67.00
Rafol	Edgar	Office Engineer	A III	$48.44
Reese	Douglas	Resident Engineer	A V	$70.00
Reynolds	Jonathan	Inspector	A III	$25.00
Rodrigue	Sylvain	Coatings Inspector	N III	$49.00
Saba	Reza	Senior Inspector	N IV	$49.15
Sajous	Sandra	Admin Assistant	N/A	$25.00
Sanchez	Cynthia	Admin Assistant	N/A	$19.75
Scahill	Brendan	Assistant Resident Engineer	A V	$66.00
Schneck	Henry	Project Manager	A VI	$70.00
Schweizer	Ronald	Inspector	N III	$41.60
Shah	Jayendra	Resident Engineer	A V	$67.40
Shepherd	Thomas	Senior Inspector	N IV	$50.00
Smith	Hy	Inspector	N III	$40.80
Smykal	Philip	Resident Engineer	A VII	$81.60
Somersall	Terrance	Senior Inspector	N IV	$43.47
Soriano	Omar	Inspector	A II/I	$28.56
Steele	Evan	Coatings Inspector	N III	$40.00
Strika	Elliot	Inspector	N III	$39.87
Tarpey	James	Resident Engineer	A VII	$83.64
Toussaint	Guy	Senior Inspector	N IV	$42.00
Trapani	Philip	Resident Engineer	A V	$69.00
Trapani	Robert	Chief Inspector	N IV	$47.96
Vainblat	Guerman	Resident Engineer	A V	$57.50
Valenti	James	Resident Engineer	A VI	$67.00
Vasquez	Natanael	Inspector	N I	$22.44
Watts	Mathew	Inspector	A III	$26.45
Weber	James F	Office Engineer	A IV	$62.50
Zamor	Phenol	Senior Inspector	A III	$53.79
Zenk	Gregory	Director of Construction	A VII	$80.00

LPE
ENTERPRISES

NAME	TITLE	RATE	CERTIFICATIONS
Bala Balakrishnan	Construction Inspector	$50.55	
Alonzo Bryson	Construction Inspector	$48.62	NICET III, ACI I
Felicia Alexander	Contract Specialist	$28.25	
Diana Gonzalez	Document Control	$38.20	
Cynthia Ronald	Contract Specialist	$27.15	
Nick Russo	Construction Manager	$50.13	
Elaine Reid	Contract Specialist	$26.58	
Aida Sanabria	Contract Specialist	$27.59	
Ewa Szulc	Office Engineer	$34.07	
Robert Zayas	Construction Inspector	$50.05	
Nelson Parada	Construction Inspector	$45.50	Mechanical P.E.
Arshad Jamil	Construction Inspector	$48.30	Civil P.E.

RATE SCHEDULE

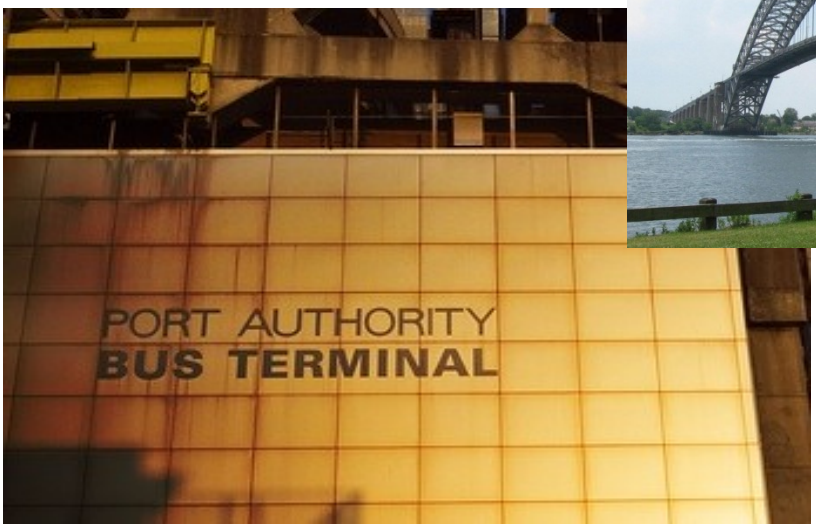
NAME	HOURLY RATE
Aleksandr Belov, P.E.	$43.46
Jose Rodriguez	$25.00
John Petekiewicz	$42.44
Kuldip Sachdev	$42.13
Wayne McMahon	$47.48
Metin Bessim	$45.15
Len Espinar	$42.85
Rochelle Lancy	$46.58

PACO Group, Inc.

Candidate	Position	Rate Hourly/Direct
Carlos Sanchez, PE	Scheduler/Estimator	$67.60
Boris Lenderman	Estimator	$60.00
Mizanur Rahman, PMP	Scheduler	$52.00
Felmin Earle	Estimator	$55.00
Ermin Avdagic	Scheduler	$76.92
Stan Michalowski	Scheduler	$59.00
Victor Clark	Structural Inspector	$50.00
Ajayi Ohore	Structural Inspector	$38.00
Benjamin Ferrante	Mechanical/Electrical Inspector	$45.00
Joseph Henry	Civil Inspector	$37.00
Deena Jain	Mechanical/Electrical Inspector	
Tamara Skeeter	Civil Inspector	$40.00

SECTION G

Firm Experience



Firm Experience

Greenman-Pedersen, Inc. (GPI) is a transportation engineering firm with more than 1,000 personnel in branch offices throughout the eastern United States. We have provided our services for 44 years, and are recognized as the ***leading firm*** for comprehensive engineering design and construction in the northeast United States. Specifically in the New York metropolitan area, these services have been provided to such agencies as PANY/ NJ, TBTA, NYCDOT, NYCDDC, NYSDOT, NYSTA, NJDOT, NJTA, and ConnDOT, as well as many of the local municipalities. GPI has provided on-call services to many of the above agencies and has earned an excellent reputation for being responsive to the client's needs and producing quality consulting engineering services.

A multi-discipline firm, GPI is able to develop preliminary and final design that requires expertise in various engineering disciplines including bridge/structural engineering and design; in-depth bridge inspections; street reconstruction design; underwater inspections; seismic analysis; uniform land use review procedures/ environmental quality review; traffic engineering and transportation planning; public outreach liaison; mechanical and electrical engineering; environmental engineering; geotechnical engineering; constructability reviews; software systems development; survey and mapping; utility coordination, relocation and design; construction support; resident engineering and inspection; and value engineering.

We attribute much of our success to the talented engineers, resident engineers, construction managers, and inspectors we employ, many of whom have long-term tenures with GPI. To keep these talented individuals in the forefront of industry standards and technology, GPI provides rigorous training programs for its staff. We have adopted certification programs for our field personnel such as NICET, ACI, ICC, NACE, SSPC, CWI, among others. In addition, many of our inspectors have attended traffic safety programs sponsored by the New York State Department of Transportation, and other agencies. We routinely hold seminars for all our resident engineers, which serve as a forum to share the latest in construction techniques, maintenance and protection of traffic, project experiences and case studies. GPI has instilled a corporate culture that demands the best of our inspection personnel, and we have trained our staff to meet these criteria. The GPI construction philosophy has also emphasized maintaining open lines of communication at all times. By communicating and working closely with the owner, contractor, and community, GPI has the proven ability to manage and inspect a construction project so that it is completed safely, with minimal disruption, on or ahead of schedule, and within budget.

Our construction inspection and management techniques are practical and proven. We assign seasoned professionals to each and every assignment. Team leaders and experienced construction specialists know how to identify potential problems - and deal with them early - before they impact project budgets and schedules.

GPI offers a unique combination of expertise as well as knowledge of acceptable state and federal guidelines in all disciplines required by Port Authority of NY/NJ (Authority). Our technical engineering expertise has provided opportunities for the firm to participate on a vast array of projects, from high profile projects to smaller, yet important, contracts. GPI's clients continue to extend existing on-call contracts and select the firm for new call-in work. For example, GPI has been providing on-call construction management services for the for the Authority's 2002-2006, and 2006-2010 Programs. Also, for over 20 years, the Authority has selected GPI to provide call-in traffic engineering services and structural call-in services. The Authority has credited GPI with its ability to be responsive and provide the right staff for the job. In addition, GPI has successfully led on-call contracts for NYSDOT and NYCDOT. These agreements required close coordination between these and other impacted agencies, utilities, and the local communities. We assure the Authority the same attention to successfully assist you with your construction management assignments under this contract.

Firm Experience

The following are projects for which GPI has provided construction management services that are comparable to the services that will be required under this contract.

2006-2010 Port Authority of NY & NJ On-Call Construction Management Services, Various Locations, NY

Owner/Client: Port Authority of NY & NJ
Project Manager/Tel No.: William Kehoe P.E., [redacted]

GPI is responsible for providing construction management and inspection services on an on-call basis. PANY/NJ supplements their own staff with consultant-provided personnel to manage and administer construction contracts at their owned and operated facilities. To date, GPI has received assignments at JFK International Airport, Newark Airport, PA Bus Terminal, and the Battery Park Ferry Terminal. GPI is currently involved with the PANY/NJ's Security Capital Program, hardening all of the PANY/NJ facilities. Projects include:

John F. Kennedy International Airport. Project involved inspection services at JFK International Airport. GPI's responsibilities included inspecting installation of new electrical equipment for compliance with the contract/Port Authority standards and NYC codes and coordinating scheduled electrical shutdowns with PANY/NJ Electrical Shop and various departments. Projects to date include:

- Jet Blue Terminal
- Hangar 17 Parking Facility
- JFK Expressway
- Bulk Fuel Farm and Satellite Fuel Farm
- JFK Red Garage
- AOA Guard Post Security Posts
- Rehabilitation of Traffic Signal System
- Rehabilitation of Cargo Service Road and North Service Road
- JFK Expressway Outbound Widening
- JFK Airport Perimeter Strengthening
- Central Taxi Hold Improvements
- JFK Airport 800 Mhz Trunked Radio In-Building Coverage Expansion Phase 1 & 2

Newark Airport. Inspection services at Newark Airport including field inspection and construction supervision, coordination with materials division of Port Authority operations and contract and shop drawings review for different projects. Projects involved:

- Federal Express service road repaving
- Modification of truck wash bay at Building #79
- Installation of water quality treatment structures
- Terminal B - Rehabilitation of B2 and B3 Apron
- Rehabilitation of Taxiway W and S
- Rehabilitation of Runway 11-29

Port Authority Technical Center. Construction management services for several office facilities in NYC and at the PANY/NJ's Jersey City Tech Center (PATC. The latest projects involve the build out of the vacant 8th and 9th floors at 115 Broadway in NYC, each floor is 13,500 sq ft and the 2nd floor at 116 Nassau Street which is 8,500 sq ft. Work at each building includes the construction management of various trades which includes demolition, general construction, HVAC, plumbing, electrical, furniture, telecommunications, and relocation of personnel upon completion. Other projects include:

Firm Experience

- **PANY/NY, Public Safety Department, Police Academy**. Construction of approximately 13,400 sq ft of office space into the new Port Authority Police Academy and construction of various office improvements within the PATC. Various aspects of construction included metal stud and drywall construction, suspended acoustical ceiling panel construction, HVAC, fire sprinkler system, plumbing, audio visual and telecommunications, locker rooms with shower facilities, and training rooms.

Battery Park City Ferry Terminal. Project involved inspection of a barge as a support to the canopy structure at this Ferry Terminal. The barge was designed to be used as the ferry entry and exit point and is a 180 ft. x 180 ft. platform in the East River at Battery Park in lower Manhattan. The coating, as designated by the Port Authority specification, involves an S-3 system—Carboline 859 zinc rich epoxy primer, Carboline 888 epoxy mid coat, Carboline 950 Metallic gray finish, followed by a clear coat of the Carboline 950. Surface preparation for the steel was an SSPC-SP10. In the shop, the surface preparation and coating system is the same; but because of the installation of the components, only the primer and mid coat were applied as the construction damage and welding and repairs are easier to repair. After the welding was acceptable, the coating repairs and final application was started. In the shop, the surface preparation began with a visual inspection for defects that could compromise the integrity of the coatings system, followed by a solvent cleaning to remove oil grease and welding product. This was followed by abrasive blasting to an SSPC-SP10 near white metal blast cleaning.

PATH Station. This project involved the installation and integration of the 27KV, 15KV, 480V, DC Traction Power, SCADA and multiple communication systems at the temporary PATH station at the WTC Site. Also assured contractor compliance with contractual obligations, pertinent specifications and codes, contractor compliance with quality control plan, analyzed and evaluated omissions in technical construction documents and provided solutions to the resident engineer's office. The GPI Team also provided system startup on various electrical/communication sub-systems, contractor compliance with federal and state construction safety requirements.

Port Authority Bus Terminal Ramps Reconstruction. This reconstruction effort focused on rebuilding and rehabilitation of the ramps connecting the Lincoln Tunnel with the Port Authority Bus Terminal (PABT). Work included demolition and replacement of ramp decks using precast deck panels, lead-based paint removal and repainting of structural steel, replacement of mechanical snowmelt system, architectural enhancements to the 9th Avenue PABT facade, bridge lifting, and seismic bearing installations.

Port Authority Bus Terminal Structural Modifications. This $50-million involved structural strengthening to maintain structural integrity of the PA Bus Terminal in New York City during a seismic event. Structural modifications (seismic retrofit) strengthened the bus terminal building structures with shear walls, bracing, and truss members to resist moderate seismic loads in the north south and the east west directions for the south wing and expansion joint bracing for the north wing of the PA Bus Terminal. It also required relocation of the existing electrical, electronic communication, HVAC, plumbing and fire protection system in order to perform the work. Work included quality assurance inspection of all construction activities including demolition of existing structures, installation of structural steel bracing, and fin trusses; surveys, removal, relocation, and installation of mechanical and electrical utilities; architectural finishes to interior, exterior shear walls, bus gates, concourse areas, and tenant spaces; coordination and scheduling of work between the contractor, facility, and tenant spaces; MPT on the bus ramps, inside the facility roadways, bus gates, and surrounding streets; performing job site safety inspections for work sites and personal protective equipment; and generating estimates for extra work being performed by the contractor.

Firm Experience

Staten Island Bridges Construction Inspection. The project involves construction inspection for structural, civil, mechanical, electrical, and bridge painting services for the three Staten Island Bridges operated by the Authority. Projects include the inspection of the installation and testing of a bridge fire standpipe system, drainage pipe downspouts and removal of old standpipes and downspouts, the installation of cast-in-place and precast bridge sidewalks and support steel, bridge deck repair of spalls and through holes, shotcrete installation, inspection of structural steel bridge repairs including jacking operations and repairs to floor beams using high-strength bolts and installation of floor beam brackets. Also includes maintenance and protection of traffic (MPT) by coordinating lane closings with the Authority, local and NJ Turnpike Police. Project assignments include:

- **Goethals Bridge Guard Rail Upgrade**, MF 205.907, W.O. #7. Contract included removal and replacement of existing guardrail at various locations of the Goethals Bridge. Contractor removed and replaced various types of rail including deck mounted rail, soil bearing rail, post drive rail, rub rail and barrier mounted transitional rail. Contract required cooperation between various bordering agencies including NJ Turnpike, Contrail and NJDOT.

- **Emergency Back Up Generators**, AK 166A. Day-to-day supervision of construction; assisting with organization and document control; producing change order estimates as well as T&M forecasts.

- **Outerbridge Crossing Red Flag Repairs**, AKO 284.037. Performed various structural steel repairs. Repairs ranged from rivet replacements to cantilevered floor beam bracket replacements. All work was performed using the localized platform to access areas. All types of connections made, i.e., bolted, welded. Once all repairs completed, all new members were prepared and painted in accordance with approved paint system (S-1). Work also involved close coordination with other agencies to perform work within their respective areas including NJTA, NJ Transit and Conrail.

- **Goethals Bridge, Outerbridge Crossing & Bayonne Bridge Maintenance of Structures** –, AK-181. Contractor is on-call to perform various repair operations at all three Port Authority Bridges in Staten Island. Work includes concrete deck repair (full-depth and partial depth), concrete slab repair (full-depth and partial-depth), asphalt patch repairs, asphalt resurfacing, sidewalk installation, curb repair, road striping and spall repairs of vertical members.

- **Outerbridge Crossing**, NY and NJ Abutment Rehabilitation, MF-205.901X. Work included replacement of delaminated concrete throughout various abutment members. Work performed in detailed sequence due to nature of work (sensitive P.A. materials engineers sounded out all locations of repair including under deck, stringers, girders and vertical columns. Contractor first designed and submitted temporary shoring structures to relieve bridge live load during construction. Once individual shoring locations completed, contractor then began removal and installation of new concrete. This contract required extensive lane closures to address the various areas of repair. Once all concrete work completed, contractor then installed new drainage troughs as per contract.

- **Wide-Load Truck Staging Area** AKG-274.114. Project involved facilitating a location for wide load trucks to standby and wait for escort from police. This contract was rather small in size, but very sensitive due to the location (industrial area full of high pressure gas lines and extremely high voltage conduits buried below). This contract was performed with coordination from many agencies including NJDOT,

Elizabeth Gas, NJ Turnpike Authority and PSE&G. Includes full supervision of all aspects of job including initial paperwork procedures (material submittals, CPM review, payment schedule review etc.).

- **Security Upgrades** AK.170 SIB. Project involved upgrading all perimeter fencing surrounding all of Port Authority property limits for all three Staten Island Bridges. This contract was very critical to the Port Authority and Dept. of Homeland Security. This contract was very sensitive to the public and was performed in a discreet confidential manner.

- **Miscellaneous Pavement Repairs** AK 172. Project involved maintaining roadways and other facility property which required repair. Majority of work included emergency on-call deck repairs (concrete and asphalt) when warranted **at all three Staten Island Bridges**. Included all aspects of contract including receiving issued work order from Port Authority facility management. Contacting contractor to mobilize work force to perform work, provide lane closures as per approved contract drawings and perform all work in accordance with details of Port Authority drawings.

- **Outbridge Crossing Concrete Repairs (Abutments)**MF-205.901x. Project involved locating and repairing delaminated spalled concrete on the structure. Utility surveys and relocation were critical to the work on this project and required close coordination between the contractor, utilities and the Authority. The project also involved erection of shoring towers as per the approved shoring submittal. All concrete repair work was performed as per contract drawings.

2002-2006 Port Authority of NY & NJ On-Call Construction Management Services, Various Locations, NY

Owner/Client: Port Authority of NY & NJ
Project Manager/Tel No.: Ronald Gumann P.E., [redacted]

Under this on-call contract, GPI provided various construction management services at Port Authority facilities including bridges, tunnels, bus terminals, and office facilities. Assignments required structural, civil, mechanical and electrical inspectors on projects including:

George Washington Bridge. This $100-million project involved Class 1A containment of both towers of this structure over the Hudson River. Work involved the removal of existing lead paint and the application of a new three-coat system to approximately 2.1 million sq ft of steel. GPI inspectors were involved on the following assignments on this structure:

- Monitoring containment operations, quality of paint material and proper storage and mixing, inspection of surface preparation, paint application and testing for compliance with contract specifications.

- Quality assurance inspections of structural steel and reinforced concrete repairs including daily planning and monitoring of maintenance and protection of traffic (MPT) as well as preparation of reports for compliance with contract plans and specifications.

Firm Experience

- Nighttime construction operations and coordination with facility and PA police for implementation of required MPT for contract work on various roadways.

- Management and inspection of multiple work order contracts including HVAC improvements at the toll plaza, rehabilitation of facility building fire system, and installation of new bus station elevator and fire alarm system.

- The New York and New Jersey anchorage dehumidification including installation of structural steel, catwalks and stairs, wire rope enclosure profile, and tension membrane fabric. Also included installation of dehumidifiers, controls, and power supply including 4160 KV switchgear.

Staten Island Bridges Rehabilitation. GPI provided construction management services for the Outerbridge Crossing and the Bayonne e and Goethals Bridges. Work under these assignments included:

Outerbridge Crossing - As part of this rehabilitation project, GPI provided construction inspection for the following elements:

- Installation of fiber optic cables, conduit and conductors for bridge lighting, electronic traffic control devices and security systems
- Painting of the Outerbridge Crossing approaches in Staten Island and New Jersey
- Inspection for the erection of a containment system for abrasive blasting, surface preparation, and coating application
- Inspecting structural steel repairs and verifying the proper installation of steel materials as described in the contract documents
- Partial- and full-depth repair of structural steel including floorbeam bracket replacements
- Placement of a precast concrete sidewalk
- Maintenance and protection of traffic

Bayonne Bridge - The main objective of this project was to overcome the outward stresses present within the abutment due to Alkali-Silica Reactivity (ASR). To overcome these internal stresses, external forces were applied to the abutment in two orthogonal horizontal directions by means of horizontal tendons and vertical direction by means of rock anchors. The phases of this project included:

- Cofferdam construction
- Concrete demolition on top of the abutment and at the vertical faces.
- Column jacking to be able to remove and replace the concrete under the columns on top of the abutment

- Stage-One concrete phase to encase the abutment
- Initial pressure grouting of the abutment
- Horizontal tendon hole drilling and installation of horizontal tendons
- Rock anchor hole drilling and installation of rock anchors
- Stage II concrete phase

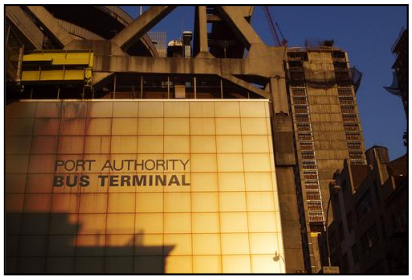
Goethals Bridge - GPI provided construction engineering and inspection services for the two-staged rehabilitation of the deck, structural steel and replacement of sidewalks throughout the multi-span truss and approach viaducts. As quality assurance inspectors of this construction contract included:

- Milling and repaving of the roadway surface
- Application of a waterproofing membrane
- Concrete deck repairs
- Replacement of roadway joints and scuppers
- Miscellaneous structural steel repairs
- Demolition and construction of sidewalks and barrier curbs
- The replacement of the fire protection system in accordance with contract drawings and specifications
- Review and inspection of the installation of temporary platforms for paint removal and application

Holland and Lincoln Tunnel ITS Improvements. GPI provided engineering services for construction of and improvements to the Holland and Lincoln Tunnels' Intelligent Transportation Systems (ITS) as per Authority contract specifications, NY and NJ Construction Code guidelines, and NEC regulations. Work included:

- Inspecting electrical systems including wiring of communications cabinets, circuit breakers, and installation of conduit, both overhead and underground.
- Inspecting fiber optic cable installation, splicing and testing, and fiber optic termination cabinet installation.
- Inspection, installation and maintenance of closed circuit television, vehicle detection systems, security card entrance systems, and variable message sign systems.
- Opening, closing and maintenance of traffic protection during lane closures and monitoring the safety of all personnel assigned to these high-traffic work areas.

Port Authority Bus Terminal Construction Program. GPI provided construction management, constructibility review and value engineering services for this project. This project involved the seismic retrofit of the main bus terminal building structure, new parking facilities in the existing building and construction of barrier gates for terminal security. GPI's responsibilities included oversight of electrical work for this project as follows:



- Ensuring contractor compliance with contractual obligations, pertinent specifications and the National Electrical Code.
- Coordinating electrical construction activities, system shut-downs and system re-starts with Port Authority Bus Terminal Facility staff.
- Contractor compliance with federal and state construction safety requirements.
- Developing a standardized methodology for electrical inspections and verifying that other electrical inspectors enforce the Port Authority's Electrical Specifications.
- Reviewing and approving subcontractors payment applications and evaluating and approving electrical change orders.

The project also involved replacement of Chillers 1, 2 and 4 with state-of-the-art 900 ton chillers with peripheral subsystems to include new 5KV starters, new 5KV feeders, four, 100hp motors, a Building Management System for automation and a new firm alarm system all done without any disruption to the facility.

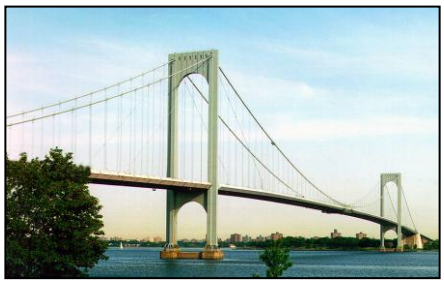
Port Authority Bus Terminal Ramps Reconstruction. This reconstruction effort focused on rebuilding and rehabilitation of the ramps connecting the Lincoln Tunnel with the PABT. Work included demolition and replacement of ramp decks using precast deck panels, lead-based paint removal and repainting of structural steel, replacement of mechanical snowmelt system, architectural enhancements to the 9th Avenue PABT facade, bridge lifting, and seismic bearing installations. Project elements included removal of roadway deck; installation of pre-cast roadway deck; placement of latex-modified concrete; installation of shear studs; installation of parapet walls and guide rails; replacement and rehabilitation of roadway deck heating system; installation of debris/vertical shielding; installation of concrete masonry unit; application of shotcrete; application of fire proofing membrane; demolition of concrete masonry unit facade; checking alignment and installation of multi rotational bearings; directing x-ray technician to check T.I.G. (Tungsten Inner Gas) weld on stainless steel pipe connection at various locations; maintenance of traffic; and installation of conduit and conductors.

Jersey City Tech Center Security and Office Improvements. GPI provided construction management services for several office facilities at the PA's Jersey City Tech Center. The first project included construction of 10,000 sq ft of office space to house a new Public Safety Department, Central Police Desk and Emergency Operations Center. State-of-the-art audiovisual and radio dispatch equipment were installed for these three new offices. Elements of the project also included HVAC, fire/ sprinkler system, plumbing, finish carpentry, metal stud and drywall construction, suspended metal pan and acoustical ceiling panel construction, glass partitions, telecommunications, audio visual, and kitchen units for break rooms. Additionally, GPI provided construction management for the PA Police Academy and Operations Services Space. Construction included metal stud and drywall construction, suspended acoustical ceiling panel construction, HVAC, fire sprinkler system, plumbing, audio visual and telecommunications, locker rooms with shower facilities, training rooms, and an auditorium.

Firm Experience

Bronx-Whitestone Bridge Replacement of the Bronx Approach and Miscellaneous Repairs to the Queens Approach, BW-89

Owner/Client: Triborough Bridge and Tunnel Authority
Project Manager/Tel No.: Vincent Montanti P.E., [redacted]



This $192-million project involves the staged removal and replacement of the Bronx Approach superstructure and substructure from the Bronx Toll Plaza to the Bronx Anchorage. Work includes the installation of excavation support systems, mini-pile foundations and temporary steel support systems to support the existing structure during the staged construction. During the construction of the substructure, there will be massive concrete placements for concrete footings and piers. For the duration of the project, traffic on the bridge must be maintained with five lanes open to traffic. During the staged construction, work includes staged demolition of the existing roadway, installation of multiple continuous steel girders, placement of a staged composite concrete deck, installation of permanent concrete barrier and installation of permanent street lighting. Other work items on the project include new utility systems at the Bronx Toll Plaza, installation of new salt storage dome building and miscellaneous steel and concrete deck repair on the Queens Approach structure.

Robert F. Kennedy (Triborough) Bridge Rehabilitation Projects.

Owner/Client: Triborough Bridge and Tunnel Authority
Project Manager/Tel No.: Tom Bach P.E., [redacted]

GPI provided resident engineering and inspection services for four construction projects on this major structure linking Manhattan, the Bronx and Queens. These projects are as follows:

TB-13 Concrete Deck Replacement on the Queens Approach - Construction engineering and inspection and construction support services for concrete structure deck replacement. This $14.6-million project primarily encompasses the replacement of the primary structural components of the approach structure, including jacking the existing piers, constructing new cap beams, repairing the rigid frame, and replacing the concrete deck.

TB-17 Rehabilitation of Main Suspension Cables - Construction engineering and inspection for $8.9 million complete rehabilitation of the main suspension cables. Work involves erection of the temporary footwalk system, removal of the existing wire wrapping and cleaning the main cable sections between cable bands, repairing corroded or broken wires, compacting the oiled sections, applying red lead paste and wire wrapping, retensioning cable band bolts, recaulking existing cable bands, and applying new protective paint coating to rehabilitated cable areas.

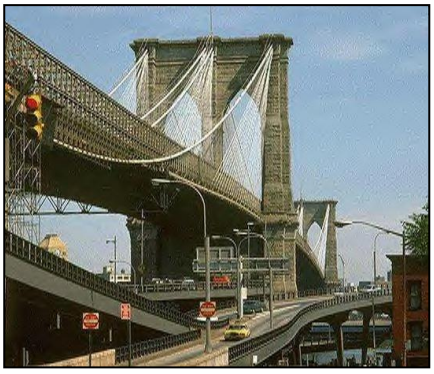
Firm Experience

TB-63 Randall's Island Junction Structure & Bronx Approach Reconstruction - The project was actually comprised of two major reconstruction efforts, the complete replacement of the Randall's Island Junction Structure, and the redecking of the Bronx Approach. Because of the 65 million vehicles that used this facility annually, the Junction Structure was replaced within its own "footprint" by building the substructure between and below the existing structure. Then, through a sequential series of single lane closures, the deck areas were replaced. The Bronx Approach underwent a similar reconstruction effort with the exception that the Truss Spans remained intact with the deck and cross beams being replaced. On the Camelback Truss Span an orthotropic deck section was installed to replace the existing "battle deck". Work also performed in this contract included upgrading bridge electrical systems, replacement of bridge drainage systems, a new de-icing/salt storage facility and reconstruction work at various shops within the Junction Structure.

TB-64A Queens Approach Deck Replacement -This RFK (Triborough) Bridge project replaced the Queens approach span deck with pre-cast panels, replaced the suspension bridge suspender ropes, and replaced the suspension bridge roadway with a new orthotropic deck panel system. Four lanes of traffic were maintained in each "peak" direction with three lanes in the opposing "off peak" direction through the use of movable barrier. A single lane was closed and dedicated for deck replacement operations. In addition to this single closed lane, the contractor was allowed to "bump out" the movable barrier to form two closed lanes during the overnight periods in order to place cranes and facilitate the movement of large pieces of equipment or material. With this single lane approach, the roadway areas were replaced with modular deck units on a "lane-by-lane" basis, progressing from the Queens-bound right lane to the Bronx-bound right lane. Each lane replacement was considered a discrete stage of construction, with two pre-stages that prepared the bridge for the eight stages of construction. In these pre-stages, the Queens Plaza and Approach areas were widened and the median barrier/deck replaced with temporary deck and the movable barrier system. This "cleared the deck" to afford the contractor the flexibility to move lane-by-lane and replace the RFK's deck under traffic. Rounding out the deck and suspender replacement work was an extensive bridge lighting and electrical system replacement effort. Finally, through a series of complex structural lifting and re-support operations, the truss pins were removed and replaced.

Brooklyn Bridge Painting and Structural Repairs, Contract 6

Owner/Client: New York City Dept. of Transportation
Project Manager/Tel No.: Hasan Ahmad, P.E., [redacted]



GPI is providing resident engineering inspection services for this $500-million rehabilitation project, and is responsible for coordination of all project activities, quality assurance inspection of all rehabilitation work, and cost control and payment distribution. Construction work activities to be performed during Contract 6 include: rehabilitation of the approach roadway pavement above the masonry structures; rehabilitation of the Manhattan side ramp structures; painting of the ramp structures and main span; rehabilitation of the approach steel structures; and full replacement of the York and Main Street Structures. Specific work tasks will include: deck replacement for approaches and ramps, installation of concrete barriers and replacement of joints; installation of a new drainage system; strengthening or replacement of York Street, Main Street and Prospect Street superstructures at the Brooklyn

Approach; reconfiguration of Ramp A; installation of ITS components (Traffic Management Center); repair or re-pointing of stone masonry and waterproofing of masonry arches; seismic retrofitting at all bridge locations (suspended span, approach span masonry arches and ramps including strengthening of the masonry towers and approach arch spans, on ramps (replacement of existing bearings with elastomeric bearings, bearing seat extensions, strengthening of columns and foundations); painting of the entire bridge structure, including; abrasive blast cleaning to SSPC SP-10 requirements; application of protective coatings; graffiti removal; removal, storage, treatment and disposal of paint removal waste; and maintenance and protection of traffic (MPT).

Williamsburg Bridge Five Rehabilitation Projects

Owner/Client: New York City Dept. of Transportation
Project Manager/Tel No.: Verghese Menachery P.E., [redacted]

Since 1991, GPI has managed the resident engineering and inspection on five major rehabilitation contracts as follows:

North Roadways Reconstruction, Contract #7 -This $248 million project involved the construction engineering and inspection for the reconstruction of the north inner and outer roadways. The scope of work for this project included: the removal of the north inner and outer roadways; installation of bored-in-piles; construction of new reinforced concrete footings, plinths, columns, pier caps, pedestals, retaining walls and abutments; the installation of roadway superstructure including lighting and drainage; replacement of bridge roadway with orthotropic deck and steel barrier; replacement of truss bearings; and painting of underdeck and installation of IVH system.

Reconstruction of Miscellaneous Rehabilitation of the Main Bridge, Contract #8 - This $280 million project involved the construction engineering and inspection for the rehabilitation of the main bridge. The scope of work for the project included abrasive blasting and painting of main bridge stiffening trusses, rehabilitation and strengthening of the main towers, rehabilitation of the intermediate towers and installation of seismic shear keys, main cable saddle repair and restraint, rehabilitation of wind tongue and wind chord, main tower bearing installation, main tower leg removal and replacement, stiffening truss top and bottom rehabilitation, traveling maintenance platform installation, re-profiling of main span vertical curve by incrementally adjusting suspender cables, modification of orthotropic footwalk deck expansion joints, waterproofing and surfacing of orthotropic roadway deck, installation of ornamental balconies and integration of intelligent transportation operating system.

BMT Structure Rehabilitation, Contract #6 - This $175 million project involved the construction engineering and inspection for the reconstruction of the BMT structure. The BMT structure itself is one mile in length, and was demolished and rebuilt utilizing new steel girder framing, with the new track work, traction power system and new fiber-optic train control signal system. The complete replacement of these systems was accomplished during a single, four month double track outage, on a 24/7 construction effort. This project required a major coordination effort with the NYC Transit and the NYCDOT.

Firm Experience

South Roadways Reconstruction, Contract #5 - This $310 million project involved reconstruction of the south inner and outer roadways. Major work items included demolition of the Dept. of Sanitation and Dept. Health buildings under the Manhattan approach; interim bracing of the north roadway and structures to remain and subsequent demolition of the south roadway framing; construction of the new approach structure, including the installation of 671 bored-in-piles, construction of new reinforced concrete pile caps, piers, retaining walls and abutments; new superstructure consisting of steel girders with a concrete filled grid deck, new drainage and bridge lighting; replacement of maintenance traveling platforms; replacement of the deck and framing system on the main bridge with an orthotropic deck system and accompanying barriers; and extensive MPT plans.

Main Cable Rehabilitation, Contract #4 – Construction engineering and inspection services for the $88.3 million rehabilitation of the cable suspension system. Work consisted of removal and replacement of all suspender cables; unwrap, inspect, repair, treat, coat and re-wrap four main cables totaling 11,940 ft; rehabilitate anchorage roofs; replace necklace lighting; rehabilitate tower tops; replace NYCT circuit breaker structure; and MPT.

Manhattan Bridge Rehabilitation Program, 8 Contracts

Owner/Client: New York City Dept. of Transportation
Project Manager/Tel No.: Brian Gill P.E., [redacted]

Since 1982, GPI has managed construction on the Manhattan Bridge under separate contracts. These contracts are as follows:

Manhattan Bridge Main Cable Rehabilitation, Contract 14. GPI is providing resident engineering and inspection services for this $149 million rehabilitation project, which involves construction of suspended work platforms and debris shields beneath the main cables and suspended span work areas; unwrapping, cleaning, performing condition assessment inspection, wire repair, compacting and rewrapping of all four bridge main cables; cable band re-tensioning at all locations; removal of all 1,256 suspender ropes and replacement with new suspender ropes and hardware, hand rope and necklace lighting systems; installation of inspection platforms at the bridge towers between Truss A-B and Truss C-D; and daily and long-term multiple stage maintenance and protection of traffic (MPT) for lower roadway and HOV lane reversals. Completion: 2013

Manhattan Bridge Rehabilitation of Lower Roadways, Contract 11. GPI provided resident engineering and inspection services for the $150-million reconstruction of the lower roadway, including; removal and replacement of floorbeams, stringers, support bearings and road deck on the main span, side spans and approach spans; rehabilitation of the anchorage chambers; installation of new lighting and traffic signs on the lower roadway; rehabilitation of travelers on the suspended spans; replacement of maintenance platforms at the bridge towers; replacement of pre-selected suspender ropes on the bridge main span; and repair of flagged conditions at multiple locations. Completion: 2009

Firm Experience

Manhattan Bridge Rehabilitation of North Spans over East River, Contract 10. GPI provided resident engineering and inspection services for this $185-million construction project that included stiffening of the north side suspended spans and tie-in with the south side main span laterals; rehabilitation of the north side approach spans and subway tunnels; rehabilitation of the north upper roadway in the suspended spans; replacement of the north upper roadway deck on the Brooklyn and Manhattan elevated structures, construction of a new north side bikeway; removal of the bridge railing along Truss D at the anchorages; installation of maintenance platforms and netting under the Brooklyn and Manhattan approaches; renovation of the interior of the Manhattan arch; and installation of a new Intelligent Traffic System (ITS) including CCTV's. The maintenance painting portion of this contract included the removal of existing paint coatings and replacement with a new three-coat paint system for all structural steel on the north side, including the trusses, floorbeams, stringers and brackets, suspension cables and suspenders. Completion: 2004

Manhattan Bridge Painting and Interim Rehabilitation, Contract 8C. GPI provided resident engineering and inspection services for the $124-million rehabilitation of the west side tunnels and plaza areas on the approaches; the replacement of the lower roadway double floorbeams at PP37-38 on both the approach spans and at PP0 at the anchorages; the rehabilitation of the eye bars in anchorage chamber "B", the dehumidification of the anchorage chambers; the rehabilitation of Brooklyn Plaza Park; the replacement of subway floorbeams and stringers on the west side of both approaches and suspended spans; installation of fencing and gates at railing locations; installation of new railings at the anchorages; installation of hand-drives on the travelers; and installation of new lighting on the west upper roadway. Existing paint coatings were removed from the west side of Truss A to east side of Truss B, both towers, and cables A and B, and replaced with new coatings systems in accordance with SSPC and NACE protocols. Rehabilitation of the Manhattan Arch and Colonnade included repair and replacement of stone lintels and balustrades, replacement of the Arch roof, cleaning and pointing of the entire structure and installation of a new arch and colonnade lighting system. Completion: 2001

Manhattan Bridge Rehabilitation of South Side Approach and Suspended Spans, Contract 5. GPI provided resident engineering and inspection services for the rehabilitation of the south side of the Manhattan and Brooklyn approaches including replacement of the structural support steel and replacement of the reinforced concrete-filled grid deck, structural steel repairs to the spans, and placement of a polymer overlay to provide a longer lasting wearing surface. This $96-million project also included the installation of a new drainage system, steel expansion joints and concrete barriers. The project involved installation of a side span stiffening system, including: installing a new upper lateral system under the upper roadway suspended spans; repairing the floorbeams and stringers under the upper roadway suspended spans; replacement of the bearings on both the west upper roadway and under the track stringers; reinforcing the outer truss diagonals and bottom truss chords at the towers and anchorages; installing shear end frames at the towers and anchorages and installing a new lateral system under the entire lower level. Completion: 1997

Manhattan Bridge Traveler System and Lower Level Interim Rehabilitation, Contract 4. GPI provided resident engineering and inspection services for removal and replacement of existing track beams, removal and replacement of existing hangers including modifications to partially fabricated hangers, and providing a new system of yokes, mechanical drive, skew correction system, electrical feed system and electrical controls. This $21-million project involved the removal and disposal of existing conduits, conductor rails, pull boxes, junction boxes, mechanical machinery and electrical equipment. Also included was the interim rehabilitation of the structural steel support members for the lower roadway of the bridge, rehabilitation of floorbeams, crossbeams

and ends of stringers, replacement of truss "A" bearing at the Brooklyn Anchorage, and rebuilding of the backwall at the Manhattan Anchorage. Completion: 1992

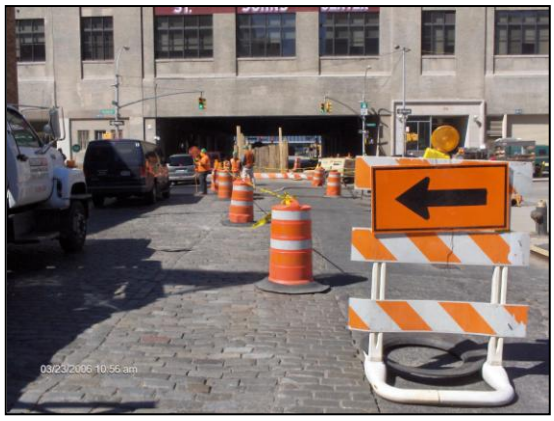
Manhattan Bridge Rehabilitation of Main Cable and Cable Anchorage in Chamber "C", Contract 4A. GPI provided resident engineering and inspection services for the $14-million rehabilitation of the main cable in the Manhattan Anchorage, Chamber "C" including the installation of new cable anchorages; removal and reinstallation of the existing splay castings; installation of new additional splay bands, spreading of cable strands, inspection, removal and replacement of deteriorated individual wires; and the re-anchoring of strands to new or existing cable anchorages. In addition, the work also involved cutting of select strands, installation of new sockets on strands and anchor rods, strand jacking to a predetermined force while verifying the position of a reference mark on the strand, and measuring the jacking force with strain gauges. Completion 1988

Manhattan Bridge New Maintenance Platforms, Rehabilitation of Track Framing, Anchorage, Piers and Abutments, Contract 1. GPI provided resident engineering and inspection services for the removal and replacement of six maintenance platforms along with their tracks, electrical systems and electric motors; and the installation of new access stairs and docking platforms. Also included in this $7.5 million contract was the rehabilitation of the steel framework which supports four NYCTA subway tracks on the approach spans, replacement of the stringer bearings, steel paint removal and application, rehabilitation of the through floorbeams on the Brooklyn approach spans, masonry repairs to the tower and piers, and enlargement and waterproofing of the cable anchorage chambers. Completion: 1985

Reconstruction of Houston Street, New York, NY

Owner/Client: New York City Dept. of Design & Construction
Project Manager/Tel No.: Joseph Crupi, P.E., [redacted]

This resident engineering and inspection project along Houston Street, located in downtown Manhattan, was broken into three phases: from West Street to 6th Avenue, from 6th Avenue to Broadway and from Broadway to the Bowery. The major work included installation of a 48-in. diameter steel water main that started from a new water main shaft on Hudson Avenue and goes east to the Bowery. Also included was the full upgrade and replacement of 20-in. and 12-in. diameter distribution water mains with a tie-in on West Street. The scope of the project also involved replacement of catch basins with drainage, sewer improvements, traffic signals, street lighting, fire alarm for NYC Fire Department and NYC Police, reconstruction of the median from 6th Avenue to the Bowery, new concrete base and asphalt pavement, pavement striping and marking. As part of resident engineering and inspection, GPI was involved in review and approval of trunk water main geometry and fabrication shop drawings utilizing the NYCDEP Standards.



Firm Experience

Rehabilitation of the Brooklyn-Queens Expressway (I-278), Park Avenue Viaduct

Owner/Client: New York State Dept. of Transportation
Project Manager/Tel. No.: Sokwon Im P.E., [redacted]

GPI is providing resident engineering and inspection services for this $138-million reconstruction project. The project's major construction goals are to re-deck the viaduct while maintaining six lanes of traffic, perform a major steel rehabilitation or replacement and re-painting at street level along the length of the viaduct in proximity of the Fort Greene neighborhood and business districts. Included in the deck work will be replacement of all expansion joints, replacement of steel railing with single slope concrete barrier, and drainage improvements for both viaduct structures. The Park Avenue viaduct is to be widened by about 0.6 m on each side, and will require seismic improvements, fatigue upgrades and bearing replacements. In addition, work will be done on approaches and ramps, new lighting, and lead abatement/painting of the steel structures and ITS work.

The maintenance and protection of traffic (MPT) operations for this project were complex and included issues such as construction phasing, lane closure restrictions, lane rentals, night work, and weekend work. MPT needs must be addressed both at the viaduct level and at street (Park Avenue) level, as well as complex traffic shifts at the entrance and exit ramps. There were provisions for Critical Path Method (CPM) scheduling, and a project schedule that integrated a "block-by-block" street level substructure construction effort with that of a linear "slice-by-slice" effort at deck level. Extensive involvement with local communities and their representatives were required on a constant basis, and there will be continual coordination with many New York City agencies.

Protective Coating of Grand Central Parkway over Brooklyn Queens Expressway Bridges

Client: New York City Dept. of Transportation
Project Manager/Tel. No.: Mark Lenkovskiy P.E., [redacted]

GPI provided resident engineering inspection, environmental monitoring/hazardous waste management and construction support services for the protective coating of five Grand Central Parkway/BQE Bridges. The resident engineering inspection services included monitoring contractor operations of cleaning, surface preparation, and application of protective coating; monitoring erection of scaffolding and containment system; monitoring of ambient and steel surface condition for proper painting; and processing of contractor's payments.

Work also required field measurement and collection of data necessary to submit monthly and final estimates and progress reports; preparation of record plans, indexing and microfilming. The construction support services portion of the project included review of contractor's containment drawings, design calculations, manufacturer's data sheets, proposed MPT plans and permits, point samples, etc. Environmental services included providing air quality monitoring; monitoring and maintaining records for hazardous waste; monitoring containment and work site equipment performance via instrument and visual methods; and compliance with OSHA.

SUBCONSULTANT RELEVANT EXPERIENCE

LPE ENTERPRISES, LTD., a New York based WBE/DBE program management & construction management support services firm that identifies and serves the needs of construction management and engineering companies for skilled and experienced project-based personnel. The firm's staff members, all of whom are actively engaged on projects in the New York and New Jersey and South Florida areas, are full-time employees of LPE.

Of particular relevance to the PANYNJ Call In Construction Management proposal is the fact that LPE personnel have been providing Construction Management support to Port Authority facilities for many years. Specifically, staff currently is supporting the **John F. Kennedy International, LaGuardia, Newark Airports** and **Teterboro Airport Resident Engineering** offices under existing Call In agreements.

MAITRA ASSOCIATES, P.C. is a multi-disciplined engineering firm which has been continuously involved in construction management work on major metropolitan agency projects since its inception in 1982. Since 1988 they have provided engineering services for a multitude of projects for the Port Authority through Call-in contracts. Regarding the Port Authority's Construction Division, they provided construction management services as prime consultant under 4 consecutive call-in contracts and 4 other contracts as a subconsultant. Some of our major construction management projects with the Port Authority include:

- **Construction Management Call-In Agreement, 2010, PA#410-10-016, Various Facilities**
- **Construction Management Call-In Agreement, 2007-2009, PA#410-07-005,Various Facilities**
- **Construction Management Call-In Agreement, 2004-2006, PA#410-04-001, Various Facilities**
- **Construction Management Call-In Agreement, 2001-2003, PA#410-01-032,Various Facilities**
- **Construction Management for World Trade Center Transportation HUB and Other World Trade Center Site Projects, Contract PCP-05-002**
- **Construction Management on a Call-In Basis for 2006 – 2010, Contract #410-06-009**
- **Construction Management Services for TB&T Facilities on an "As Needed" Basis During 2002, 2003, 2004, 2005 and 2006**
- **Construction Management Services for the Downtown PATH Restoration Project and other PATH Projects, Contract 410-02-005**

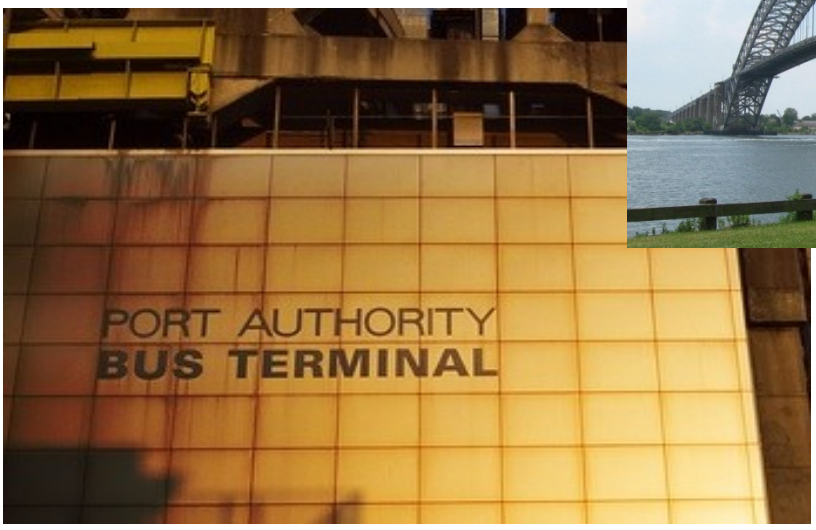
Firm Experience

PACO GROUP, INC., founded in 1989, is a full service minority-owned Program and Construction Management consulting firm that provides cost/schedule management, project control services and software for projects of all types to owners, architects, engineers, and construction professionals. With more than 90 employees, and regional offices located in New York City and Miami, PACO provides expertise in the areas of capital program development and construction management for major infrastructure facilities, urban designs and redevelopment projects. Their Port Authority projects include:

- **Goethals Bridge Modernization Program**
- **Port Authority Program Management Call-In**
- **John F. Kennedy Airport Access Program (AirTrain)**
- **JFK/LaGuardia Airports CM Call-in Services**
- **Facility Condition Surveys for Bridge & Tunnel Facilities**

SECTION H

Proposed Management Approach



GPI Greenman-Pedersen, Inc.
Engineering and Construction Services

Introduction

The Port Authority's Capital Construction Projects/Construction Management Program is successful because it was created and has been implemented based on the dual concepts of flexibility and diversification. Flexibility of task organization and staff management is a key component to fulfill the need for rapid placement of skilled staff during various work assignments and the necessity to hit the ground running during those assignments. Diversification of technical abilities is equally important, allowing for staff to be placed on a variety of facility projects without interruption or loss of quality. This criteria works well within The Port Authority of NY & NJ's (Authority) unique hands-on management system, in which Authority personnel are placed in direct charge of and work side by side with consultant construction management and inspection staff. The leadership staff is comprised of Authority facility resident engineers and sometimes multiple assistant resident engineers. Based on the amount and diversity of work to be performed, the Authority's needs become more facility-focused rather than project specific-focused. This approach to construction projects differs conceptually from most other clients in the New York City/New Jersey metropolitan area.

The Authority's construction management services approach requires that the consultants providing professional services have the breadth and depth of resources capable of responding to various task needs in a relatively quick response time. In addition, recent enhancements for existing staff qualifications for new assignments will require that a minimum of ten NY or NJ licensed engineers/architects, ten ACI Concrete Construction Special Inspectors, three ICC Certified Structural Steel and Bolting Inspectors, and one NACE Level I Certified Coatings Inspector be included on the chosen CM Teams. The GPI Team has the required staff to address these requirements. GPI Team individuals assigned to Port assignments will be capable of working independently, self-motivated, and have the proper disposition to work productively with Port Authority representatives and contractors. It is these precise qualities that the GPI Team offers the Port Authority for this important Professional Construction Management Services contract. We have successfully demonstrated our ability to provide these services on a long-term basis during our previous 2002-2006 and 2006-2010 "call-in" basis assignments.

Currently, Greenman Pedersen, Inc. (GPI) and its consultant team have 30 full time staff assigned to construction inspection on a variety of Port Authority projects and work orders at terminals, airports, buildings, bridges and tunnels throughout the metropolitan area. Facilities at which these staff members are working include the George Washington and Staten Island bridges, JFK and LaGuardia airports, the Port Authority bus terminal, and office facilities. The new 2011-2014 "call-in" agreement will provide the perfect opportunity for the Port Authority to continue this relationship. By capitalizing on the GPI Team's talented staff and providing the opportunity for these experienced individuals to transition from their current assignments onto future program projects, the Port will benefit immensely. The Authority has expended significant time and energy honing this group's skill set in agency protocols and procedures, making these individuals ***perfect*** candidates for future Authority projects. Also, the timing for transition of GPI staff is ideal. The current Construction Management contract will be winding down during the 2010-2011 season, allowing for a seamless transfer of our full complement of resources onto this next as-needed services contract. With more than 1,000 employees in offices along the eastern United States and bolstered by primary branch offices located in metropolitan New York and New Jersey, the GPI Team stands ready to implement

assignments at any of the Authority-owned and operated facilities when requested. The GPI Team is the right Team for this assignment.

Management Plan

To fully address the unique requirements of this contract, GPI has developed a comprehensive Management Plan for consideration by The Port Authority of NY & NJ. The intention of the plan is to introduce the project team and discuss the capabilities and role of each key staff member, and to describe GPI's management and coordination approach for the project assignments amongst team members including qualified subconsultant firms.

For this on-call Professional Construction Management Services Project we propose our top construction management staff and inspection team. **Gregory Zenk P. E.,** GPI Vice President and Director of Construction Inspection Services will serve the dual roles of Project Principal and Project Manager. Mr. Zenk has served as project manager on a wide variety of construction projects throughout the New York City area. These projects include major bridge, tunnel and highway rehabilitation and reconstruction, building restoration, pier and bulkhead reinforcement and installation, and site development projects. He has also been the key point person for numerous toll facility projects and he understands the target objective of keeping traffic running as problem-free and efficiently as possible during major and minor rehabilitation projects. Mr. Zenk is acutely aware of the expectations of Authority – those of a first-rate, responsive consultant in step with a quality, on schedule, on budget and safely executed project. For the last eight years during two consecutive "call-in" service agreements, Mr. Zenk has been performing in this very capacity; first under our 2002 – 2006 TB&T services agreement and then under the general 2006–2010 "on-call" agreement. He has been instrumental in working with the Authority on addressing technical issues and directing resources to Authority needs. He understands the delicate balance and unique relationship that must be maintained between facility operations and engineering and construction rehabilitation projects.

Most importantly, Mr. Zenk has been working closely with the Authority's Engineer of Construction for during the last eight years assisting in staffing and providing other critical resources needed for construction management of rehabilitation work totaling more than $650 million dollars.

In his role as project manager, Mr. Zenk will be the central point of contact for the Port Authority. At contract start-up, Mr. Zenk will meet with the Authority's engineer of construction and organize the tasks into three-month and six-month look-ahead schedules to highlight staff and resource needs. With more than 250 New York/New Jersey construction management personnel available for assignment team-wide, Mr. Zenk will identify and assemble the resource team appropriate to best meet the needs of the required tasks as each task is identified. Depending upon the current assignment, the team will consist of:

- Construction engineers for constructability/biddability reviews
- Engineers for staging/traffic maintenance review
- CPM schedulers to develop and monitor construction progress
- Individual quality assurance inspectors from various disciplines for on-site field assignments
- Contract administrators to document and track contractor work and payments
- Cost estimators to review and/or provide construction cost estimates

Management Approach

To assist Mr. Zenk with issues related to quality assurance and quality control (QA/QC) pertaining to construction inspection, GPI will assign **James Valenti, P.E**. as certified quality assurance representative (CQAR) for this project. Mr. Valenti will perform periodic quality control inspection of project documentation, staff and subconsultant performance to ensure that they meet or exceed all Port Authority standards and expectations.

GPI will take the lead in supplying top-notch field inspection personnel for all construction activities, and will be supplemented in our inspection duties by our equally qualified subconsultant team members **Maitra Associates** (electrical/mechanical inspection), **LPE Enterprises** (airside and landside construction inspection), and the **PACO Group** (cost estimating and scheduling). Altogether, the GPI Team's unique, individual capabilities will complement each other to provide completely encompassing coverage of all work activities with no tasks unaccounted for. Mr. Zenk will coordinate all subconsultant efforts and will manage the MBE/WBE participation program to confirm that utilization of these important team members is maximized.

Mr. Zenk will provide direct staff supervision through periodic site visits, e-mail correspondence, telephone communication, and/or fax transmission for all approved inspection Team members. He will also provide proactive liaison between the Port Authority Construction Management Division, facility staff, as appropriate, and the resource team. Mr. Zenk's hands-on involvement will serve to assure the Authority that their objectives for budgets and schedules are being met fully by the GPI Team.

The GPI Team maintains offices throughout New York and New Jersey and has certificates of authorization to practice engineering in these states. Our team, combined, has over 250 construction management/inspection staff in the New York metropolitan area that are experienced in civil, structural, electrical/mechanical and related disciplines. Our Team is in compliance with the qualification requirements listed in the RFP as follows:

RFP CRITERIA	NUMBER OF STAFF* THAT MEETS THIS CRITERIA	NAMES FOR REFERENCING ON RESUMES
At least 10 engineers/ architects licensed in the states of New York and/or New Jersey	**21** *(GPI has 33 licensed engineers in its entire construction division in the NY metro area)*	G. Zenk, J. Valenti, B. Scahill, M. Rabkin, P. Trapani, D. Chasse, N. Neophytou, R. Capilupi, J. Brugge, J. Shah, M. Matalon, W. Ferdinandsen, T. Gibbons, C. Sanchez, R. Csogi, T. Napolitano, J. Tarpey, A. Grosso, P. Smykal, R. Leo, A. Belov,
At least 10 must be ACI Concrete Construction Special Inspectors	**11** *(GPI has 81 ACI Grade 1 inspectors on staff in the NY metro area; many of which will be testing for the Concrete Construction Special Inspectors certification)*	D. Cunningham, P. Moschides, R. Saba, D. Mann, D. Chasse, J. Petekiewisz, R. Lancey, T. Shepherd, K. Sachdev, J. Rodriquez; M. Quesenberry

RFP CRITERIA	NUMBER OF STAFF* THAT MEETS THIS CRITERIA	NAMES FOR REFERENCING ON RESUMES
At least 3 must be ICC Certified as Structural Steel and Bolting Inspectors	**6** *(GPI is currently aggressively training its staff for ICC certification.)*	R. Saba, G. Vainblat, J. Petekiewisz, K. Sachdev, W. McMahon, R. Lancey
At least one must be NACE 1 coatings certified	**6** *(GPI has over 41 NACE trained inspectors–NACE I & II – in the NY metro area.)*	G. Zenk, S. Rodrigue, T. Gibbons, E. Steele, E. Strika, P. Trapani

** This information is included on the resumes of our proposed staff members in Section E of this document.*

The GPI Team promotes several internal training programs to maintain the highest levels of qualified available inspection staff. The GPI Team includes many professionals having ICC Special Inspector certifications, NICET certifications, and specialty certifications such as NACE, AWS-CWI, ACI, SSPC, NYSMPT, and ATSSA. Staff continuing education is a priority part of GPI's company objectives to ensure both client and employee satisfaction. We continually strive to provide the best all-around inspection staff in the New York metropolitan area.

Construction Management Services

The project RFP has identified specific areas of construction management services that may be assigned as part of the 'as-needed' contract. The GPI Team has excellent direct experience in each of these areas and has the resources and capabilities to undertake assignments in any or all work categories including:

Task A. Constructability/Biddability and General Engineering Review

In concert with our involvement on major rehabilitation projects and programs for several of our NYC clients, GPI regularly performs detailed constructability and biddability reviews. As identified in our organizational chart, GPI has a complement of technical experts having many years of construction experience on large urban transportation rehabilitation projects. Through these efforts, our experts have amassed a unique understanding of the special issues that can arise in an urban, highly congested environment like New York/New Jersey, and especially when working on large, historically significant structures.

The main objectives of a constructability/biddability review are: to ensure that the contract documents clearly communicate the owner's intent regarding the proposed work; to promote a competitive bidding environment; and to uncover any discrepancies or vulnerabilities in the plans and specifications which could prevent efficient, effective implementation of the work. In other words, the process is undertaken to provide answers for the following questions: can the documents be understood? Can they be administered and enforced? Will the Port Authority get a knowledgeable contractor to do the work at a fair price?

When tasked with constructability/biddability responsibilities, the project manager will mobilize a task review team comprised of experienced individuals with demonstrated expertise in design and construction of similar type projects. The project manager will establish - in accordance with input and direction from the Engineer of Construction - the time-table for submission of draft reviews, put forth roundtable discussions with the review Team to discuss draft findings, and will oversee the preparation and submission of final review comments.

A database will be developed to inventory, organize, and track all relevant comments. Included comments will range from minor concerns to major potential deal breakers. By consensus, they will be assigned priority status of low, medium or high. Our review team will review and openly discuss all comments with the Port Authority and their designer and provide appropriate direction/insight with regard to the clarification and/or expansion of any idea/comment as necessary.

Our ultimate goal is to provide a perspective as close to the contractor's as possible during the constructability/biddability process to minimize the potential for conflict during the construction and administrative processes by incorporating beneficial changes to the specifications and drawings during the final stages of design.

Task B. Construction Staging

Construction staging in essence is the building of a jigsaw puzzle. By placing all the right pieces in the right places in the right order, a project comes together to form a clear picture of a successfully completed construction method. The GPI Team has incorporated construction staging into several of our recent reconstruction/rehabilitation projects, and we are well aware of the rewards and the potential shortfalls of regimented construction processes. We have gleaned from our experiences a forward thinking "what if" approach, which projects a big picture vision of the work to be performed and the consequences of individually staged multiple construction scenarios. The process focuses on innovative approaches to staging and sequencing of projects and work tasks to minimize inconveniences to the traveling public and unnecessary expenditures for the client. We are well aware of and sensitive to the critical need to keep traffic flowing with minimal inconvenience, particularly on toll facilities. Recently during the orthotropic deck replacement project at the Triborough Bridge, our inspection staff, in concert with the prime contractor, devised a staging scheme which permitted multiple construction stages to be combined by removing the center median at the start of construction and creating an additional traffic lane. This novel alternative to traditional staging allowed the work to be completed ahead of schedule with the added benefit of returning full traffic flow several months earlier than originally anticipated. We have incorporated similar modifications and strategies during rehabilitation projects performed at the Williamsburg and Manhattan Bridges, which historically have some of the highest daily traffic volumes in New York City, to reduce overall construction schedules and overall impacts from the work.

At the Bronx-Whitestone Bridge, during the constructability/biddability phase our design Team realized that by realigning the construction staging and adjusting the MPT layouts, the overall construction schedule could be reduced significantly. This proactive evaluation of construction staging allowed the TBTA to reduce the contract length before the project was even started. Our inspection Team has carried through this approach by tweaking contractor schedules and making recommendations on submitted work plans to help streamline construction and further reduce

inconvenience and cost. These collective experiences with staged construction at the Triborough, Williamsburg, Manhattan and Bronx-Whitestone bridges over the past several years have reinforced the importance of minimizing delays and other impacts. NYC area clients continue to look to GPI for recommendations on how to improve all types of staged construction.

During development or review of staging plans, the vast experience of our Team will be supplemented and additionally enhanced by the capabilities of our outstanding traffic engineering department. The GPI traffic engineering department has developed MOT and layout plans for work at virtually every Authority facility including JFK and LaGuardia Airports, Port Authority Bus Terminal, George Washington Bridge, Newark Airport and Port Newark and is completely familiar with operational issues, facility management protocols and PANYNJ standards. This experience will be invaluable in optimizing construction staging for the variety of projects initiated at the many Authority facilities during this "Call-In" Contract.

Task C. Schedule Development and Monitoring

The key to schedule control during construction is the development and proper utilization of a computerized critical path method (CPM) construction schedule. The CPM combines all activities related to approval, delivery, inspection, installation, and testing which could possibly affect the project timeline. Additionally, supplementary factors including cost, labor hours, and equipment resources needed to conduct the work are directly linked to these primary indicators. The master CPM network identifies all major project milestones and tracks them through the life of the project. This important tool will be used as the basis for the detailed construction schedule that all parties rely on to establish accountability for the project duration.

The GPI schedule review team will evaluate the contractor baseline and monthly update schedules (as applicable) to verify that contract specifications are adhered to, identified activities are logical, activity durations are realistic, and ancillary or minor work activities are not included on the critical path. As presented on the contractor's cost-loaded schedules, we will check that the contractor has not loaded the front part of the schedule, and also that costs and labor man-hours are reasonably represented in relation to the specific activity duration and work scope. We consistently recommend that the baseline schedule be back-end loaded, in order to adequately accommodate required project closeout activities such as performance testing, training, and preparation and delivery of operations and maintenance manuals and as-built drawings. Upon completion of the contractor's baseline schedule review process, our Team will report all findings to the Port Authority and offer a recommendation for either acceptance or rejection of the schedule. Upon acceptance, the contractor's baseline schedule will be incorporated into the master schedule.

GPI Team schedulers will continue to monitor scheduled work activities against actual performed work activities, throughout the project, to determine if the project is diverging from the original timeline and/or critical path. The monitoring assignments will include updating the CPM master schedule, verifying as-built information, analyzing and implementing schedule workarounds to recover from changes and delays, and ensuring that all project participants identified on the critical path are aware of their pending responsibilities. We will produce regular schedule review reports, including: the management report and project reports (which will include cost-loaded and resource-

loaded, if desired), CPM schedule reports, summary bar charts, CPM networks and logic diagrams, as well as summary narratives that highlight current or anticipated problems.

GPI will conduct special studies that will become the basis for recommending workarounds and other schedule improvements. Special studies will be invoked as needed to identify and mitigate potential delays caused by any of the following circumstances: differing site conditions, operational restrictions, project planning alternatives, effects from other projects and uncategorized or unexpected occurrences such as decisions by the client and other technical considerations. We will supplement these studies with "what if" examinations of the schedule, which are intended to analyze potential schedule problems to anticipate the need for time recoveries.

Task D. Quality Assurance Inspection

Quality assurance is another key area where GPI excels. Our philosophy with regard to quality assurance inspection is simple – by paying attention to detail, small issues can be resolved as they are discovered – preventing them from transforming into large issues that can affect the construction process, budget and schedule. As previously discussed, the GPI Team is comprised of more than 250 New York/New Jersey area construction quality assurance inspection personnel. Unlike many of our local competitors, GPI does not adopt a "job shop' mentality for construction inspection assignments. Top-notch inspection starts with the quality of the individuals—their experience, training and ability to communicate with the Authority, contractor and each other. We are loyal to our home-grown inspection talent and technical professionals and, in spite of the nomadic nature of the construction inspection industry; we maintain a majority of staff who are long-tenured. The result is an in-house inspection environment consisting of equal parts consistency and competence. Another benefit is the 'comfort-ability' factor – our inspectors know one other and know the management staff as well. They are not just numbers; they are completely aware of each other's strengths and unique capabilities, and therefore can rely on each other for assistance in their particular areas of expertise. This provides for a dynamic inspection environment where the individual units come together in concert to create an all-encompassing, formidable team.

Another critical facet of successful inspection is having staff rich in project-related experience. GPI, having completed many of the largest, most complex rehabilitation projects in the New York metropolitan area, is largely made up of field inspection staff members who have been exposed to just about every aspect of facility rehabilitation. Reconstruction programs that have been ongoing for decades at the Manhattan and Williamsburg Bridges have been training grounds for our maturing inspection staff. Since 1982 and 1991, respectively, these projects have literally replaced or completely rehabilitated all bridge, roadway and rail systems with traditional or state-of-the-art components – in some cases leaping 100 years of technological improvements during a single rehabilitation event. The length of service provided at these facilities is a testament to the quality of the inspection teams provided by GPI to New York area facility owners.

What also contributes to making GPI so successful is that since the early 1990s, GPI has been ahead of the curve in providing its inspection staff with the necessary training and certification from nationally recognized engineering and inspection societies and association programs to meet the needs of all sorts of rehabilitation projects. From complex welding processes and lead abatement and coatings application, to special inspection for reinforced concrete placement and steel bolting , GPI

has sponsored engineers/inspectors to achieve certified welding inspector/certified associate welding inspector (CWI/CAWI) from the American Welding Society, engineers /inspectors to achieve NACE I or better coatings training from the National Association of Corrosion Engineers (NACE) and engineers/inspectors to achieve quality assurance for field testing of transit mix concrete from the American Concrete Institute (ACI). In step with the Authority's expanding quality assurance program, GPI has recently provided our inspection staff with ACI/ICC Special Inspector training for concrete and structural steel and bolting disciplines. We are aggressively training our staff so they become certified in this area. This cross-training approach lends a great deal of flexibility when assigning staff to multi-disciplined projects such as this on-call services agreement. This flexibility approach reinforces the concept of attention to detail during inspection because it provides any inspector regardless of assignment with the ability to recognize site conditions with confidence, which might otherwise go unnoticed and possibly uncorrected. Ultimately, the major benefits of our attention to detail philosophy are cost savings for GPI's clients combined with superior quality of finished product.

Experience and training are also GPI hallmarks when providing quality assurance inspection in the specialty arena of maintenance and protection of traffic. GPI routinely provides training seminars which are focused on federal, state and facility requirements for traffic maintenance, and worker and user safety. This training not only ensures that our field level and supervisory staff are kept current with federal and state standards and facility protocol, but provides them with the tools and motivation to implement them in an all-around more efficient, effective way.

GPI is aware of the importance of maintaining balanced traffic flow at all toll-generating facilities owned and operated by the Authority. Our quality assurance inspection program is tailored to closely monitor the contractor's compliance with maintenance and protection of traffic contract requirements to ensure that adequate protection is in place at all times in accordance with the Authority's directives. Our inspection personnel will be completely familiar with these requirements before entering into the various project assignments. They will record any deficiencies in their daily reports and will report them to the resident engineer to take corrective action without delay. GPI Team inspectors will continually inspect all work zones to ensure that adequate protection is in place at all times and the proper placement of temporary barriers, pavement markings, signs, and flashers are maintained by the contractor. The GPI Team will take appropriate action in the field with the contractor to minimize or overcome traffic delays due to the contractor's operations, such as not adhering to lane closure allowable time restrictions and failing to maintain proper set-up of MPT materials and safety devices. Our inspection staff will serve as the liaison between the respective contractors and the PA's resident engineers for the coordination of work requiring maintenance and protection of traffic operations in conjunction with notification and approval of the facility operation managers.

During the construction periods when traffic schemes are in effect, members of the GPI Team will monitor the contractor's compliance with the maintenance of traffic contract requirements on a daily basis. Placement and conditions of temporary construction signage will be continuously monitored to assure maximum effectiveness. The individual designated for MPT related inspection assignments will be completely familiar with these requirements, as well as the NYSDOT Manual of Uniform Traffic Control Devices (MUTCD). The inspector(s) will constantly observe that all proper MPT protocols and approved plans are being adhered to.

During the progress of the work, which affects or may be affected by vehicular traffic, adequate safeguards and protective equipment to protect life, health and safety of the public and workers will be provided by the contractor. GPI will ensure that the contractor provides such measures in conformance with a detailed maintenance and protection of traffic plan. The referenced plan, to be provided by the contractor and reviewed and coordinated by GPI, will include:

- Written text defining the proposed schedules of lane closures and the work scheduled to be completed during each task affecting vehicular traffic.
- A detailed description defining the duration of any proposed lane closure. Lane closures, when required for the progress of work or dictated by safety requirements, will be limited to the hours of operations as defined in the contract documents.
- A detailed listing of equipment and manpower proposed to implement the traffic control plan and methods for installing and removing traffic control devices.
- Full size traffic control plan drawings of the proposed equipment layout and location of safety and traffic control devices such as truck-mounted impact attenuators, flashing arrow boards, regulatory and warning signs, and traffic cones. Plan drawings will also identify specific construction vehicular access points.
- Procedures to be followed in the event of an accident. At a minimum, this would include identification of designated and responsible GPI personnel, designated contractor personnel in the field, and representatives of the Authority.

As part of the overall traffic control plan, GPI will coordinate field meetings with the contractor to confirm that his labor force is fully informed of the plan specifics and their individual responsibilities. These meetings will also serve to instruct and remind field personnel of potential hazards within the work zone. The extensive relevant experience of our team will be an invaluable asset as the various phases of construction are implemented, so that the traveling public can safely pass through the construction zones at all times, without discomfort or inconvenience, and the contractor and construction inspection workforce are properly protected from passing traffic.

In addition to MPT operations, coordination of work activities and locations for all construction work tasks will be necessary to sustain a conflict- and delay-free work environment. This is of critical importance, considering that there may be several simultaneous contracts underway at multiple facilities, plus scheduled routine maintenance being performed by the Port Authority's own forces. Although contractors are clearly notified and kept apprised of the possibility of interference with other active contracts and facility maintenance forces, the GPI Team will take a proactive role in the coordination of these work operations to minimize potential conflict. GPI, under the direction of facility engineering, will hold monthly coordination meetings with all stakeholders to discuss short- and long-term schedules so each participant has a clear understanding of what the others are doing. Additionally, weekly look-ahead work schedules will be available and distributed to all stakeholders. The project manager and staff will maintain contact lists containing office phone, fax and cell phone numbers for the key people involved with each project so that in the event that changes occur in

schedules or emergencies arise, we can quickly and effectively coordinate response actions and alternative planning.

The monthly project meetings will also serve as prime opportunities to embrace effective coordination and communication amongst all project participants. GPI team members, the contractor's representatives, and subcontractors will attend the meetings with facility representatives, design team members and others, as appropriate. This is considered absolutely essential for promoting the close coordination of all work activities and parties involved. At these meetings all issues associated with the projects will be discussed, documented and resolved so as not to potentially delay construction. Schedule, submittals, manpower, facility access, project progress, impact by/on other construction projects, and coordination with outside agencies (such as utilities), are just some of the issues that will be addressed on every meeting agenda.

Inspection Documentation
As part of our quality assurance inspection program, inspectors will prepare daily reports for each calendar day of work in the contractor's contract. Entries will be based on his/her inspections of the relevant daily activities performed by the contractor and subcontractors. Acceptability of the work will be based on conformance with the contract documents and referenced standards. The inspectors' daily report (IDR) includes sections for general information and also for specific site conditions and events, including: weather, location and description of work performed; payment information; deviations and non-conformances; safety violations; and identification of the contractor and subcontractor's personnel and equipment utilized during the daily work operations. In addition to standard reporting attachments utilized by the Authority, GPI has developed activity-specific checklist attachments to the IDR designed to provide individual task details and intended to enhance data presentation and ease of use. The following are examples of IDR possible attachments the Authority and/or GPI may incorporate:

- Non-Conformance Report
- Accident Report
- Item/Activity Specific Checklist
- Equipment Calibration Sheet
- Material Delivery Sheet
- Deviation/Punchlist Sheet
- Concrete and Asphalt Placement Checklist(s)
- Field Paint Application Checklist(s)

Our programs are based on ISO 9001 standards for quality assurance and will be structured to meet or exceed the Authority's expectations.

Safety
GPI field inspectors inherently understand that their responsibilities extend beyond those of documenting and tracking generic construction work progress. A quality finished product is important but of equal value is how the work is executed. The importance of safety for any project can never be emphasized enough, and it is GPI's number one priority - bar none. Given the continuous news stories of scaffolding collapses, workers falling from heights, etc., we are constantly reminded of the dangerous environments that engineers, inspectors and tradespersons face on a daily

basis when executing construction projects. GPI recognizes that you cannot become complacent when working in temporary lane closures along busy highways, or working on elevated scaffolds and platforms and when working in close proximity to heavy equipment and machinery. We are cognizant of the potential ripple effect a serious or fatal injury can have on a project schedule and cost if outside agencies become involved (i.e. OSHA). To maximize the implementation of safety protocols and practices, GPI takes a three-prong approach to ensuring that all personnel remain safe when working on projects that we manage:

1. Inspector Safety Training
2. Monitoring of Contractor's Safety Training
3. Enforcement of the Contractor's Health and Safety Plan

Our safety program applies to construction inspection staff and indirectly to contractor personnel. To start, a preconstruction safety training session will be held with the staff. All employees assigned to the project after the preconstruction training session will be given an individual training session by the resident engineer or assistant resident engineer at the start of their assignment. As a supplement and to reinforce safety first thinking, weekly safety meetings will be conducted by the resident engineer at which time specific topics will be discussed that involve requirements for fall protection, scaffolding erection, MPT protocol, etc. Inspectors will receive specific safety training prior to the start of special field work operations such as lead abatement, confined space entry, etc. Special technical seminars pertinent to the work will also be conducted at the site to discuss new advances and applicable changes to current OSHA regulations.

Prior to the beginning of construction, members of the GPI Team will meet with the contractor and the facility's resident engineer to discuss and emphasize safety procedures. GPI will ensure that the contractor's approved *Safety Plan and Procedures* are strictly adhered to throughout the life of the project - including the OSHA requirement for them to implement weekly safety toolbox meetings. GPI team field inspectors will attend these meetings to monitor conformance with the OSHA requirements.

By continually focusing on and incorporating safety education, the objective to keep safety at the forefront of all participants' minds will be realized. If individuals do not follow required safety rules and regulations, the GPI team stands ready to implement a zero tolerance approach to those who violate MPT, fall protection and other safety considerations.

In the event of an emergency, the GPI Team will also enforce the following secondary requirements at the site:

- In the field office, a key telephone list of emergency, Port Authority, and other important contacts will be maintained and posted.
- Two-way radios and mobile telephones will be used to maintain communication between the field office, inspectors, the U.S. Coast Guard, and the contractor.
- The GPI Team will be fully cognizant of the location of all area emergency centers and hospitals.
- GPI will submit correspondence to area emergency agencies (i.e., fire, police, ambulance), identifying the work locations and best routes for emergency response.
- No obstructions will be permitted along emergency routes.

- A procedure to document incidents will be implemented, including photographs of the incident site.

Security

Unfortunately, the world has changed since September 11, 2001. New York City has changed also. As the financial capital of the world and the nerve center of the United States, NYC in particular is a vulnerable target for terrorist organizations looking to make another statement on the world stage and destroy our accustomed way of life. Recent attempted attacks aimed at the heart of Manhattan remind us that protecting our most valuable assets has become of paramount importance.

Based on the events of September 11, 2001, security has been elevated to the forefront of facility needs and infrastructure protection throughout the Authority facility network. The Authority has responded with new security and safety zone provisions that are now in place and are currently being implemented by teams of GPI inspectors at multiple bridge and tunnel facilities.

The GPI Team will continue to implement the current plan and any changes that the Authority police and security may require as the program continues to evolve. The current plan includes the following:

- Project Contact List – Copy of current project emergency telephone numbers.
- Mustering Method for Crews – Outline of how personnel will be received, identified and released from project work areas.
- Personal Identification – Each and every project participant shall wear photo identification, clearly displayed, that is issued by the Authority through the Secure Worker Access Consortium (SWAC) or Airport specific security ID offices.
- Deliveries – Outline of how equipment/goods will be received, tagged and removed from project areas.
- Flammable Items – Type, size and location of flammable inspection items.
- Vehicle List – Type, location and operator.
- Personnel List – List of workers for active projects.
- Needs/Solutions – Project unique security items and proposed means to address them.

Public transportation facilities are truly business enterprises on a grand scale. In the days since 9/11, for a large public transportation agency it is a necessary but exceedingly difficult task to completely protect multiple facility venues when confronted with a very real and ever-increasing potential threat. To complicate matters, implementing simultaneous construction contracts at multiple facilities means allowing and tracking scores of tradespersons as they move regularly through and around security sensitive areas within individual facilities. It is precisely within this range of security parameters that the GPI quality assurance inspectors are most effective as pro-active members of the front line security effort.

By serving as additional eyes and ears during ongoing construction activities, the GPI Team will be actively and acutely aware of all changing conditions regarding materials, equipment and personnel at each jobsite. As such, the GPI Team will take the lead in notifying the Authority security force of any instances of suspicious and unattended packages, unauthorized personnel and vehicles, and potential

threatening conditions. With direct communication links to Authority security and local Police and emergency providers for real-time response, the GPI Team will be an integral and major link in the Port Authority site security program chain.

Task E. Contract Administration

The core component of the overall quality assurance process for any construction rehabilitation project is the administration program. The administration program consists of procedures and protocols developed and implemented by the administrative staff to track and document all correspondence and project records from start to finish to/from all participants. The success of the administration program is invariably linked to the organizational skills, relevant experience and qualifications of the administrative staff.

Since 2002, the GPI Team has developed and completed - and is currently implementing - administration programs for several Authority projects very similar in scope and complexity to those which will be required for this 2011-2014 Construction Management "Call-In" contract. As such, the GPI Team members include assistant resident engineers and office engineers who have held leadership positions in QA administration and have implemented quality assurance processes at many Authority facilities. From GPI's experience and our understanding of the Authority contract administration process, we have outlined the following criteria which we strongly feel must be considered during project start-up to yield a successful contract administration program at the end of the job.

Post Award Contract Changes and Change Orders
Post award contract changes (PACC) are an important part of the administrative process. PACCs are prepared and initiated on an individual basis, and can be issued by multiple departments within the Authority realm (Construction Management Division, Project Management Division, Tunnels Bridges & Terminals, etc.), depending on particular circumstances. The department that initiates a PACC prepares all required documentation backup, including:

- Contract data, description and reason for the change;
- Engineer's estimate and drawings, sketches and photos detailing the scope of work;
- Required forms and supplemental information.

During the review process, the GPI Team will assist the resident engineer in researching and preparing independent, task-specific PACC estimated costs (Engineer's Estimate). The completed PACC package is forwarded, in order, to the resident engineer, the engineer of construction, and the line department for review and approval. When the estimate for the PACC exceeds $50,000, the assistant chief engineer joins the review and approval process. The resident engineer simultaneously solicits a request for quote (RFQ) from the project contractor. Upon receipt of both the contractor's proposal and the approved PACC by the resident engineer, the contractor's proposal is compared against the engineer's estimate. The contractor's proposal is deemed acceptable if it falls within the following guidelines:

Engineer's Estimate	Deviation in Contractor's Estimate
<$10,000	25%
>$25,000	10%

In cases of deviation of the contractor's cost proposal outside these ranges, the PACC is re-issued by the resident engineer and the review process is repeated using the contractor's cost for comparison. The Authority can either accept the contractor's price or exercise the option to proceed with the PACC work on a time and material (T&M) basis. In either case, once the work is authorized to be performed and funding has been allocated, the PACC becomes a change order and the contractor can begin work. The GPI Team has extensive experience in reviewing and processing PACC requests using Authority guidelines and has, on previous occasions, provided key input within this process that has been beneficial in providing time and monetary savings to the Authority.

Time and Material Procedures
Change orders are included in the contractor's monthly requests for payment. For change orders in conjunction with an agreed price, payment is made based on the percentage of the work complete. For T&M change orders, contractor-submitted records for all labor, materials and equipment are reviewed and accepted by the office engineer.

Time and material work falls into three categories - net cost work, extra work, and disputed work**.** Net cost work is work that may occur but uncertainty exists as to the necessity or the actual quantity of work (for example underground utility relocation). Extra work and disputed work occurs when the contractor is ordered by the Authority to perform work not originally anticipated, or due to changed or unforeseen field conditions/requirements, while an agreement on the value of the extra work is negotiated. Extra work can be paid either as a lump sum payment, or based on T&M records compiled during the performance of the work.

During work that is considered to be paid on a T&M basis, the GPI inspectors will track and record all aspects of the work being performed, including man-hours spent, use of materials and equipment, and any conditions or circumstances that may be relevant to establishing validity of payment for the work. The tracking tickets will be corrected (if applicable), signed and stamped by the inspector, and then will be forwarded to the office engineer for review and to verify or reject the legitimacy of the contractor's request for payment. In the event that the work is completed prior to final agreement of a PACC, the T&M tracking data will be utilized during the negotiation process to establish a fair and agreed upon lump sum price. The GPI office engineer will provide the resident engineer with all pertinent information and back-up available in order to make an informed final decision for the approval or disapproval of the contractor's T&M request.

Partial Payment Processing
Payment applications are submitted by the contractor on a monthly basis. Authority contracts are generally paid as lump sum contracts; therefore progress payments are based on the percentage of work completed. The GPI administrative staff has significant experience within the Authority system with this payment-tracking scenario. The process for the monthly payment application will be as follows: Upon submittal of a payment request by the contractor, the GPI assistant resident engineer will review and verify the submitted percentages and quantities. In addition, all time and material charges will be "desk audited" by the office engineer. The office engineer will compile all required back-up forms. The assistant resident engineer will then submit the reviewed payment (with comment as necessary) to the resident engineer for approval and subsequent processing.

Document Control Systems
For the past 32 years, GPI has been actively involved in construction management and inspection endeavors for major bridge rehabilitation and retrofit projects in New York City for key clients such as the Port Authority, NYCDOT and the TBTA. During this time, GPI has been involved every step of the way with developing and implementing a multitude of improved computerized documentation control systems (CDCS) using wide-ranging and cutting edge CDCS methods and programs.

The GPI Team is thoroughly knowledgeable and fully capable of incorporating the latest technology and automation tools available into the contract administration process to manage project information and data. For ongoing Authority projects, the GPI Team is currently using WINTRAK (similar to CONTRAK) to administer and maintain all contract information such as prime contractor and subcontractor information, minority participation goals, and Authority form templates, in addition to all the financial information for the construction project.

Additionally GPI office engineers and administrators have created and maintained systems including relational databases for the tracking of all project information such as:

- Correspondence Tracking Systems
- Shop Drawing Tracking System
- Payment System
- Force Account Tracking Systems
- Field Data Measurements
- Submittal Tracking System
- Progress Meeting Action Item Tickler
- Change Order Tracking
- Deficiency/Punchlist Tracking
- Material Control and Quality Control Program

Databases used allow for easy storage, manipulation and retrieval of large amounts of information. The organization of a given project is greatly enhanced by the use of such systems by increasing the accountability of all contract responsible participants. GPI has scored high praise from our clients for our innovative approach to project record keeping and administration. Our staff is completely familiar with and trained in the use of Expedition, Lotus Approach and Microsoft Access.

Project Meetings
Project meetings are another key element for a successful rehabilitation project, for they present an open forum for all parties to review and discuss scheduled and anticipated events, construction and administrative progress, and ongoing issues of concern.

The GPI Assistant Resident (Lead) Engineer and the Office Engineer will attend and contribute input during all progress meetings. Additionally, GPI staff participates in weekly facility impact meetings to assist in the coordination of operations among the facility and the various contractors. The GPI Team will also attend any supplemental meetings such as schedule meetings, safety meetings, time recovery meetings, which may be necessary to address construction issues and the performance of work during the life of the project.

Task F. Cost Engineering/Estimating Services

In order to enhance our construction management services, GPI has included PACO Group, Inc. on our team to provide cost engineering/estimating services. Under the direct supervision of GPI, PACO will provide the Authority with a full range of estimating services for all construction disciplines and all types of estimates. These include conceptual estimates, preliminary estimates, schematic design estimates, design development estimates, and estimates of all necessary working drawing phases up to and including final estimates. Additionally, our team is experienced in value engineering, owner's representation, feasibility studies, comparative cost analysis, bid analysis, change order negotiations, product studies, and review of contractor bid items. **PACO has provided these quality services to the Port Authority in the past.**

Cost estimating constitutes the foundation of project cost and schedule control, and gives owners control over their projects. The GPI Team recognizes the need for owners to minimize costs, and utilizes seasoned professionals who understand the complex variables which determine cost: materials, equipment, labor rates, productivity, profit, benefits, taxes, insurance, schedules, etc. We combine this understanding with unmatched estimating and cost management skills, accurate data and a thorough knowledge of client objectives to create the information needed to make sound functional and economic decisions during design, and to effectively control costs during construction.

Estimating is typically a four-stage process that, throughout the design phase, develops increasingly accurate cost information for the client. Cost reduction decisions made during design, and before major monetary commitments, save clients time and money, and encourage responsive construction bidding. With our system, we can adjust the method of take-off to varying levels of detail, depending on the available plan and specification data. This feature enables us to produce reasonable estimates from very preliminary information.

The first project estimate, the budget/conceptual estimate, compares the initial budget with historical cost data for a similar project. The historical cost date is continuously updated by our knowledge of current market conditions. This estimate also takes into account specific project and site constraints as well as financial limits. We then work with the design team to achieve these goals. Construction costs are compared with our own and industry databases to identify high cost elements and suggest ways to reduce them.

The second estimate defines major building components, such as site work, foundations, and specialty items, for which we develop preliminary costs. A more detailed review of the A/E's cost estimate is performed at the design development phase as specific project components are better defined. Our estimators review the design to identify information and systems. All estimates are reconciled using applicable unit rates based on current cost information. Should the situation occur in which information is unavailable on a particular component or portion of the estimate, we will factor those costs based on historical data.

The third estimate evaluates and defines the cost of major elements and sub-elements, including long-lead items and other major requirements. From these three estimating procedures, problem areas with respect to cost will be identified for review and reevaluation.

Finally, our estimators use bid documents, complete working drawings and specifications to establish the fourth and most detailed estimate - the takeoff construction estimate. This final estimate serves as the basis for the computerized cost control model that is used to monitor project status throughout construction. It should be understood that estimates are performed before and in support of value engineering studies.

Each estimate takes into account specific project characteristics: operational constraints, environmental considerations, utility relocation and upgrading, design requirements, construction phasing limitations, and any temporary operational measures required. It also reflects logistical problems the contractor may have when actually organizing and constructing a proposed project. For each estimate, a realistic allowance is made for cost escalation and contingency. This allowance is identified and included in the total cost.

Task G. Resources

The depth of resources provided by the GPI Team and the breadth of experience in the discipline areas required will be key to the successful execution of the Authority's assignments under this contract. The GPI Team is prepared to fully commit our vast resources to this project. With a combined resource pool in the NY/NJ area of more than 250 multi-disciplined engineers and quality assurance inspectors, and over 12 schedulers and estimators, the GPI Team is *extremely* well positioned to respond to the needs of any project assignment.

With regard to the requirements in the RFP for specific licensed and certified personnel, the GPI Team is in compliance with the requirements, as demonstrated in the Table on page 4 of this proposal.

With regard to other resources needed to complete construction management assignments, the GPI Team understands what it takes to complete the successful management of rehabilitation projects. We have at our disposal both in-house and outside services for providing surveying, material subconsultants, testing services, leasing of job vehicles, and industry specialist relationships. We routinely enter into subcontractor, testing and leasing agreements.

Subconsultants and MBE/WBE Participation
GPI is thoroughly committed to using qualified and experienced minority and woman-owned business enterprise firms that are in compliance with the Port Authority's guidelines. For this project, GPI will meet the 12% and 5% requirements for MBE and WBE firms, respectively. We have selected firms each with outstanding capabilities in the field of construction management and inspection. Our team's MBEs are Maitra Associates and PACO Group, Inc. Maitra Associates, located in Manhattan, NY and Bridgewater, NJ, will provide electrical/mechanical and structural inspectors as needed for the assignments. PACO Group, Inc., of Manhattan, NY, will provide cost estimating and scheduling services and supplement our team with inspectors as needed. Our proposed WBE is LPE Enterprises, Ltd. LPE, located in Garden City, NY, has been providing construction management services to the Port Authority since 1989. LPE will provide inspectors as required for this contract. These three firms were subconsultants on GPI's previous Construction Management contract for the Port Authority. GPI maintains excellent working relationships with these firms and is confident that they will enhance and complement the range of services provided.

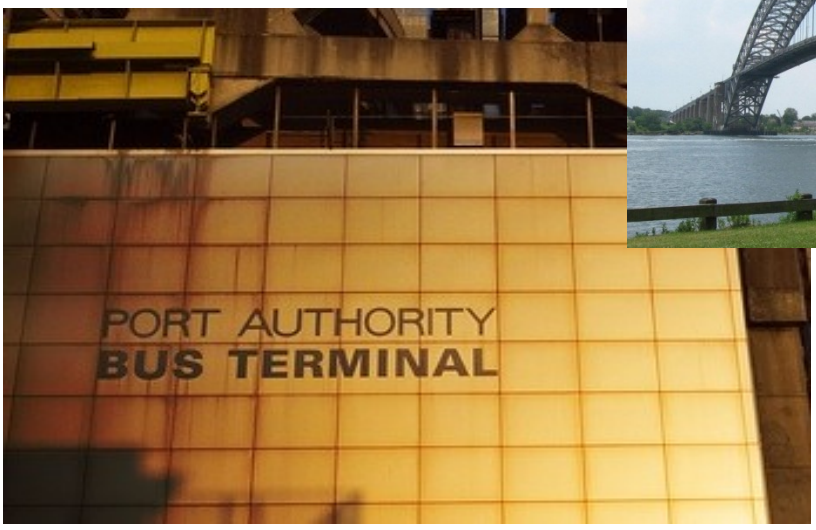
Management Approach

Summary

The GPI On-Call Project Team is capable of addressing all assignments presented to us by the Port Authority of NY & NJ. The Authority will have at their disposal a team of multi-discipline professionals ready to tackle scopes of work on any of the facilities owned and operated by the Authority. Our team is eagerly awaiting the opportunity to continue working with the Port Authority's Construction Management Division.

SECTION I

Firm Affiliates



B. Company Profile – List of Affiliates and Subsidiaries

The following are subsidiaries of the Greenman-Pedersen, Inc. organization. There are no affiliates.

Underwater Engineering Services, Inc.
3306 Enterprise Road, Suite 103, Fort Pierce, FL 34982 (EIN: [redacted])

Instrument Sales, Inc.
3306 Enterprise Road, Suite 203, Fort Pierce, FL 34982 (EIN: [redacted])

Aerial Cartographics of America, Inc.
1722 W. Oak Ridge Road, Orlando, FL 32809 (EIN: [redacted]

GPI Southeast, Inc.
3555 Timberlane School Road, Tallahassee, FL 32312 (EIN: [redacted])
1414 S.W. Martin Luther King Jr. Avenue, Ocala, FL 34474 (EIN: [redacted]
13097 Telecom Parkway North, Temple Terrace, FL 33637 (EIN: [redacted]
1010 East Adams Street, Suite 17, Jacksonville, FL 32202 (EIN: [redacted]

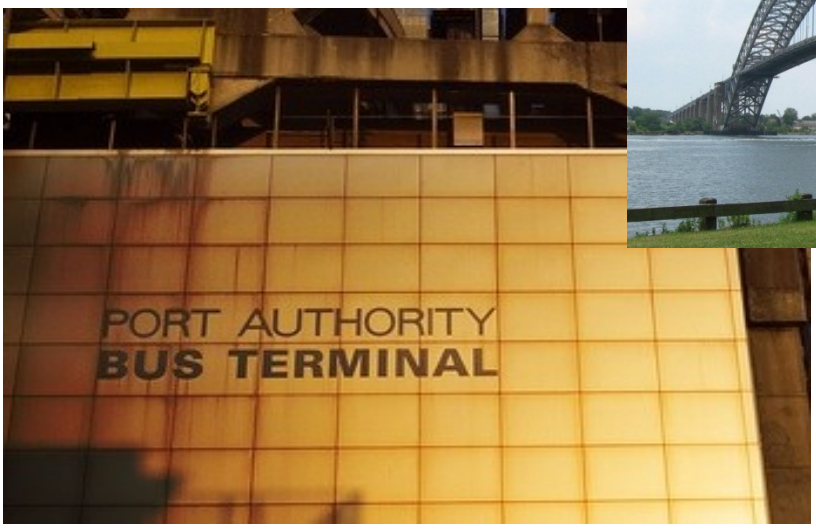
Keller & Kirkpatrick, Inc.
301 Gibraltar Drive, Ste. 2A, Morris Plains, NJ 07950 (EIN: [redacted])

Corrosion Control Consultants & Labs, Inc.
4403 Donker Court, SE, Kentwood, MI 49512 (EIN: [redacted]

Strategic Environmental & Ecological Services, Inc.
653 McCorkle Blvd., Suite G, Westerville, OH 43082 (EIN: [redacted])

SECTION J

No Conflict of Interest Statement

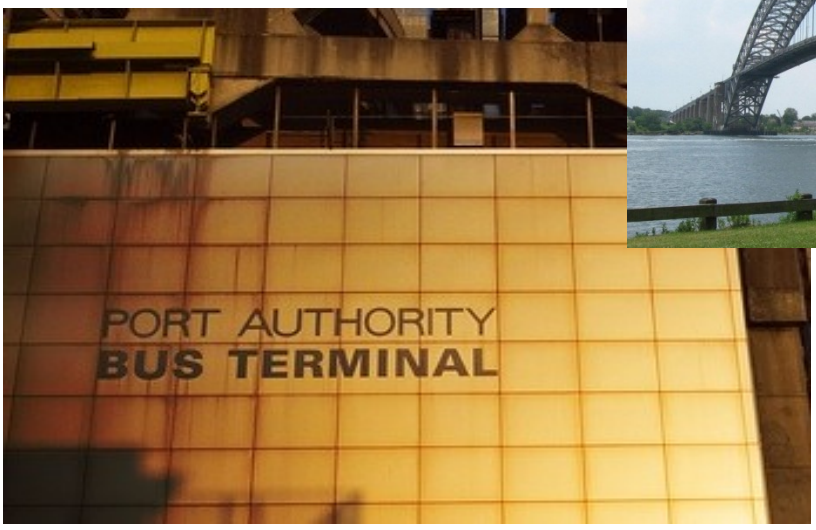


No Conflict of Interest Statement

Greenman-Pedersen, Inc. nor any of its employees, agent or subcontractors have, may have or give the appearance of having any conflict of interest with respect to the Port Authority of New York & New Jersey.

SECTION K

Statement on Agreement and Terms and Conditions

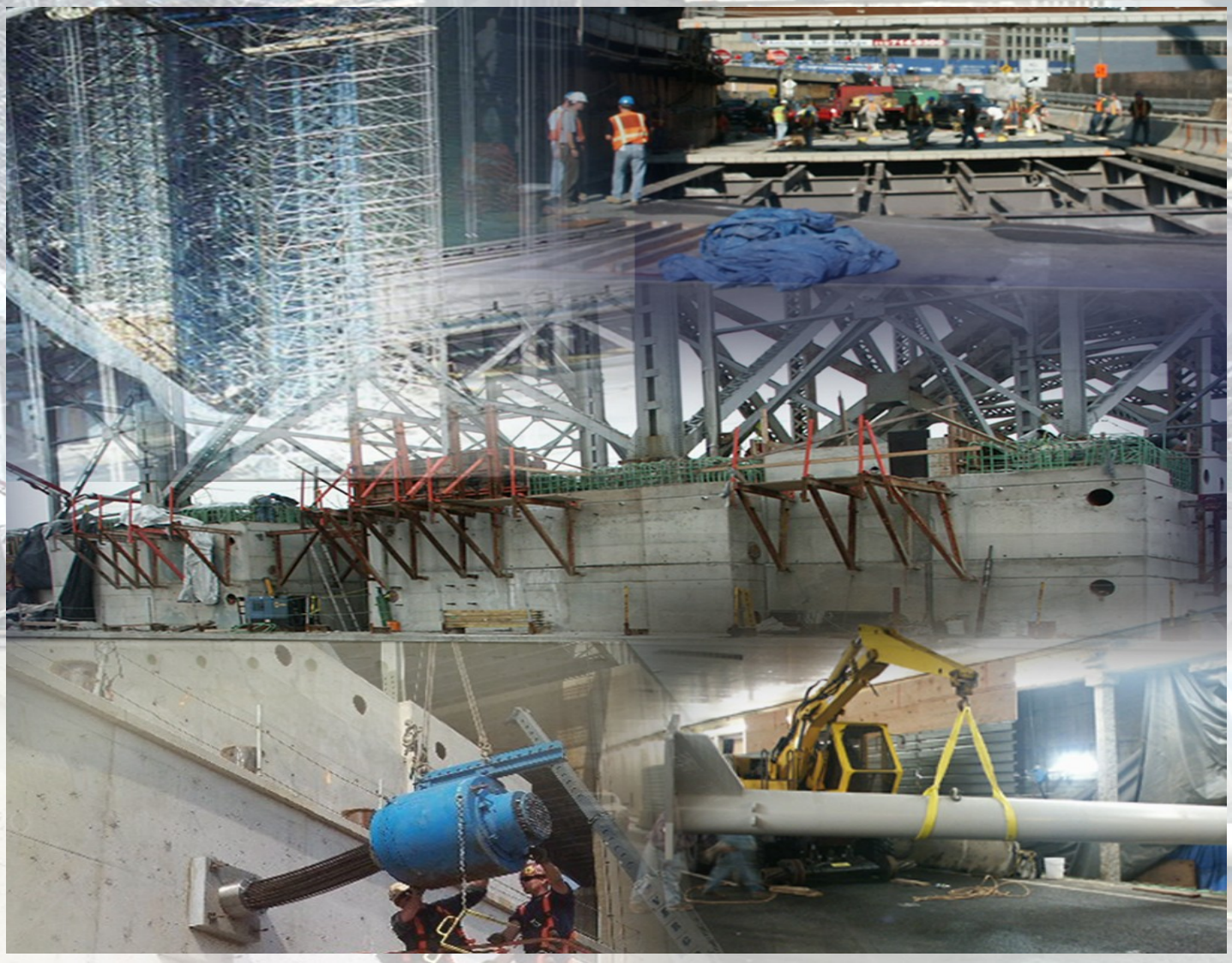


GPI Greenman-Pedersen, Inc.
Engineering and Construction Services

Statement on Agreement and Terms and Conditions

Greenman-Pedersen, Inc. is in agreement with the form of this agreement and its terms and conditions. Greenman-Pedersen, Inc. has not made any changes in the Agreement nor have we restated any of the provisions in the Port Authority of New York & New Jersey RFP No. 22094 or the supporting material.

Greenman-Pedersen, Inc.



Teamwork Quality Commitment

HAKS Construction Management Engineers Architecture
Land Surveyors Material Testing

40 Wall Street, 11th Floor, New York, NY 10005 · Phone (212) 747-1997 · Fax: (212) 747-0861 · www.haks.net

August 23, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attn: RFP Custodian

Ref: Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call In" Basis during 2011-2014 (RFP #22094)

Dear Sir/Madam:

HAKS is pleased to submit this Proposal to provide construction management services for the referenced project. In this proposal, we demonstrate our compliance with the prequalification requirements listed in "Proposer Requirements". HAKS is a 400 person multi-disciplinary engineering firm with offices throughout the Northeast. HAKS is headquartered in New York City and this centralized location ensures our prompt communication as well as our ability to provide convenient access to work sites. We have enhanced our team by adding JCMS, Inc. (MBE) to provide Scheduling services, Maitra Associates, P.C. (MBE) to provide MEP services and Entech Engineering, P.C. (WBE) to provide Environmental Inspection services.

We are familiar with requirements of The Port Authority of NY&NJ and the facilities for which it is responsible. HAKS has provided Expert Professional Services Construction Management Services on a call-in basis under contract with the Port Authority continuously from 2001 to 2009. In addition, we have a long history of providing construction management for public agencies including MTA Bridges and Tunnels, New York State DOT, MTA New York City Transit, among others. Descriptions of our major relevant projects are outlined in the Firm Experience Section of this proposal.

We offer an excellent organization and staff to complete the work to the fullest satisfaction of the Port Authority of NY&NJ. Our proposed team is available to start work on this project upon receiving your "Notice to Proceed".

The HAKS Team offers:

- Directly relevant and successful experience. There will be no learning curve.
- Extensive experience with Construction Management, Special Inspection, Scheduling, Estimating, etc.
- Familiarity with Port Authority of NY&NJ.
- Professional Engineering Firm certified to practice in the states of New York and/or New Jersey
- The capacity to respond immediately to the client's requests.
- A Staff of highly skilled and experienced Engineers.
- A reputation for Quality and Pro-Active Service.

We appreciate your consideration and look forward to the opportunity to work with The Port Authority of NY&NJ on this highly interesting and challenging project.

Sincerely,
HAKS

Alberto Villaman, P.E.
Vice President

CONTENTS

Performance of Expert Professional Construction Management and Related Technical Services As Requested On A "Call-In" Basis During 2011-2014 (RFP #22094)

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HAKS

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*. not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

HAKS
(Company)

(Signature)

Vice President
(Title)

August 23, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #22094)

1. Company Name (print or type):

   HAKS

2. Business Address (to receive mail for this RFP):

   40 Wall Street, 11th Floor

   New York, NY 10005

3. Business Telephone Number: (212) 747-1997

4. Business Fax Number: (212) 747-1960

5. Firm website: www.haks.net

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 07 / 25 / 94

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See attached sheet

9. Officer or Principal of Firm and Title:

   Mr. Husam Ahmad, P.E., President/CEO

10. Name, telephone number, and email address of contact for questions:

    [redacted]

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? x Yes ☐ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

HAKS List of Affiliates

ENTITY	ADDRESS	EIN/TIN
HAKS Engineers, P.C. (CT)	306 Industrial Park Road, Suite 201 Middletown, CT 06457	[redacted]
HAKS Engineers, Architects and Land Surveyors, P.C. (NJ)	570 Broad Street, Suite 401 Newark, NJ 07102	
HAKS Stone & Webster (JV)	40 Wal Street, 11th Floor New York, NY 10005	
HAKS/DMJM + Harris (JV)	605 Third Avenue New York, NY 10158	
HAKS/Earth Tech (JV)	40 Wall Street, 11th Floor New York, NY 10005	
HASA Construction, LLC	40 Wall Street, 11th Floor New York, NY 10005	
HASA Realty, LLC	22 Central Drive Farmingdale, NY 11735	
SIMCO Engineering, P.C.	80 Maiden Lane Suite 501 New York, NY 10038	
Washington Group/HAKS (JV)	One Penn Plaza, 32nd Floor New York, NY 10119-2901	

Breakdown of Multiplier

HAKS

			% Direct Labor Field
A	Direct Labor		100%
B	Department Overhead		
	Fringe Costs		46%
	Officer's Salary		3.90%
	Indirect Salary		37.4%
	Insurance		3.31%
	Workman's Comp. Ins		0.49%
	Travel & Entertainment		1.39%
	Rent		3.97%
	Office Supplies		1.06%
	Depreciation		0.91%
	Telephone & Utilities		1.19%
	Temporary Staffing		0.05%
	Professional Fees		0.99%
	Bid & Proposal Costs		0.01%
	Consultants		1.35%
	Dues & Publications		0.24%
	Auto Expense		0.83%
	Equipment Rental		0.43%
	Furn, Fixt & Equipment Under 2500		0.08%
	Taxes		0.36%
	Relocation		0.03%
	Recruitment		0.49%
	Printing & Xerox		0.19%
	Repairs & Maintenance		0.22%
	Community Service		0.03%
	Seminars & Education		1.12%
	Security		0.00%
	Postage		0.16%
	Overhead Recovery		-0.15%
C	Total Departmental Overhead	106%	
D	Profit	2%	
	Total	2.1	

ORGANIZATION CHART
EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT and RELATED TECHNICAL SERVICES
AS REQUESTED ON A "CALL-IN" BASIS DURING 2011-2014

H: HAKS Engineers and Land Surveyors, P.C. (MBE)
E: EnTech Engineering, PC (WBE)
J: JCMS, Inc. Scheduling (MBE)
M: Maitra Associates, PC (MBE)

THE PORT AUTHORITY OF NY & NJ

Principal-in-Charge
Husam Ahmad, P.E. (H)

QA/QC Safety Officer
Lawrence King, P.E. (H)

Project Manager
Paul Cavota, P.E. (H)

Schedulers
Saurin Pathak, AIA, LEED AP (H)
William Niles (H)
Murali Puthiyarambath (J)
Sanjay Kumar Shah (J)
Pankaj Agrawal, PMP (J)

Deputy Project Manager
Frank Verderame, ACI (H)

Cost Estimators
Douglas DePena (H)
Magdi Sidarous (H)

Contract Administrators
Reda Gendy (H)
Kimberly Hall, N-IV (H)
Lesly Remy, N-III (H)
James Reynolds, Jr., N-IV (H)
John Marshall, N-III (H)
Georgiana Inturrisi (H)

Constructability/ Design Review
Richard Hallahan, P.E. (H)
Kenneth Mangam, P.E. (H)
Robert Gallup, P.E. (H)

Field Inspection Staff

AVIATION PLANNING
Construction Manager
Henry Hessing, P.E. (H)
Jeffrey Terzakis (H)

Resident Engineer/ Chief Inspector
James Reynolds, Jr., N-IV (H)

AWS/Material Testing/Special Inspection
Lab Director
Eugene Tacktovich, PhD, P.E.

Resident Engineer/ Chief Inspector
Abdul Somat, P.E. (H)

Inspectors
Marc Weinman, N-IV (H)
Emmanuel Bamimore, ACI (H)
Dipak Upadhuaya, N-II (H)
Omont McBride, N-I (H)
Sajjad Javaid, ACI (H)
Tete Mensah, ACI (H)
Jarrus Mitchell, ICC (H)
Roldan Mendoza, AWS (H)
Marc Kemmis (H)
Carl Colye (H)
Daniel Shahahan (H)

CIVIL ENGINEERING
Construction Managers
Hector Ankrah, P.E. (H)
Magdy Elkafafi, P.E. (H)
Victor Sanchez, P.E. (H)
Nick Shah, P.E. (H)
Hesham Kotby, P.E. (H)
Paul Diamond, P.E. (H)
Moustafa Rezk, P.E. (H)

Resident Engineer/ Chief Inspector
Mohy Abotaleb, P.E. (H)
Lawrence Alexander, P.E. (H)
Frank Fragapane, N-IV (H)

Inspectors
Shahid Sheikh, N-IV (H)
Josias Innocent, N-IV (H)
Gil Leggard, N-III (H)
Hector Beltran, N-III (H)
Saul Correa, N-II (H)
Richard Urena, N-II (H)
Mikeal Ramessar, N-III (H)
Alex Mekhanikov, ACI (H)
Hesham Mohammed (H)
Ashque Hussein (H)
Shirish Shah (H)

COATING ENGINEER
Construction Manager
Ilya Gologorskiey, P.E. (H)
Jeffrey Wright, P.E. (H)
Omar Ockeh, P.E. (H)

Inspector
Omar Petty, ACI (H)

ENVIRONMENTAL ENGINEERING
Construction Manager
Fawzi Faraj
Jeffrey Bradstreet, PhD, P.E. (E)
Susan Bayat, P.E. (E)
Shahab Raza, P.E. (E)

Resident Engineer/ Chief Inspector
Kwesi Amegah, N-III (E)

Inspectors
Joseph Fenton, N-II (E)
Josh Magnas (E)

FIRE PROTECTION ENGINEER
Richard Koch (H)
Elliot Greenberg (H)

MEP ENGINEER
Construction Manager
Harold Palmer, P.E. (H)
Robert Milo, P.E., LEED AP (H)

Resident Engineer/ Chief Inspector
Aleksandr Belov, P.E. (M)
Nestor Santana (H)
Timothy McCoy (H)

Inspectors
Metin Bessim, N-IV (M)
Richard Georges, N-III (H)
Ilyas Khan (H)
Gene Yee (H)
Mohammed Shaque (H)
Haresh Panchal (J)
Telly Frias (M)

RAIL ROAD/TRACK ENGINEER
Construction Manager
Harry Fosteris, P.E. (H)

Resident Engineer/ Chief Inspector
Maher Mahmoud, N-IV (H)
Michael Farrugia, N-IV (H)

Inspectors
Jose Pinto (H)

HAKS

HUSAM AHMAD, P.E. *Principal-In-Charge*

Education

Master of Engineering, Civil Engineering, City College, New York City, 1985 (Structures)

Bachelor of Engineering, Civil Engineering, NED University of Engineering & Technology, 1981 (Civil)

Professional Registration

Professional Engineer – New York 1990, # ; Connecticut 2002, ew Jersey 1999, Pennsylvania 2002, Massachusetts 2003, Maryland2003, Virginia 2007, Florida 2005, ; Washington D.C. 2010, #

Licenses and Certifications

Professional Member ACI, AISC, ACEC, ASCE, Municipal Engineers of NY, CIB, SAME

Safety Inspection Training - Construction Safety Management & Training Institute

Bridge Structures: Assessment, Design & Contraction - Bridge Engineering Association, Oct 2004

Bridge Engineering Association: 8 Professional Development Hours for 5th Int'l. Cable-Supported Bridge Operator's Conference & LRFD Workshop 2006

Summary of Experience

Mr. Ahmad, President of HAKS, established the firm as a partnership in 1991. The firm incorporated in 1994, and has been known as HAKS Engineers and Land Surveyors since 2004. HAKS has grown steadily from the start, to the point where now it is a leading, mid-sized consultant in the New York Metropolitan area with a multi-disciplined staff of over 400 employees. Under his leadership the firm has established a reputation for providing all of its clients with the highest quality of engineering, architectural and construction management services, and to completing all assignments on schedule, within budget and without compromising quality or function. Mr. Ahmad has over 29 years of diversified experience in design and construction supervision of bridges, roads, piers and buildings. Representative projects are:

- **Principal-In-Charge –** Expert Professional Services – Performance of Construction Management Services for Projects on a "Call-In" Basis During 2007, 2008, 2009, for **PANYNJ.** Fee: $5 million
- **Principal-In-Charge** – Expert Professional Services – Performance of Construction Management Services for Projects on a "Call-In" Basis During 2004, 2005, 2006, for **PANYNJ.** Fee: $2 million
- **Principal-In-Charge** – Expert Professional Services – Performance of Construction Management Services for Projects on a "Call-In" Basis During 2001, 2002, 2003, for **PANYNJ.** Fee: $2.25 million
- Construction Coordination and Management Services for the Cross Bronx Expressway/ Bruckner Interchange Rehabilitation Project in Bronx County for New York State DOT. Construction Cost $240 million
- Emergency Repair and Interim Deck Replacement on the Gowanus Expressway, Kings County, NY for NYSDOT. Construction Cost $133 million
- Resident Engineering and Inspection Services for Belt Parkway over Ocean Parkway Project in Brooklyn, NY for NYCDOT. Construction Cost $55 million
- Construction of a new interchange on Interstate 84 at Drury Lane with the staged reconstruction of Drury Lane

and an access road from Drury Lane to Stewart International Airport. Construction Cost $50 million

- On-Call Contract for CM/Build Services for NYCHA. Scope of work includes CM/Build services ($50 Million) for various Façade Rehabilitation Projects for residential buildings throughout the five boroughs of NYC
- Construction Management Services for a new 290,000 SF Bus Maintenance, Storage and Administration Facility located in Hamden, CT for ConnDOT. Construction Cost $100 million
- Alley Creek CSO Abatement Facilities for the NYC Department of Environmental Protection. Construction Cost $30 Million
- Construction Management Services, Croton Reservoir System, NYCDEP. Construction Cost $75 million
- Holmdel State Police Facility for the New Jersey Turnpike Authority. Construction Cost $8 million
- Resident Engineering Inspection Services for Reconstruction of Flatbush Ave. Bridge over Belt Parkway in Brooklyn, NY for New York City DOT. Construction Cost $5 million
- Resident Engineering Inspection Services for Reconstruction of South Avenue Bridge over Staten Island Railroad for New York City DOT. Construction Cost $ 3.4 million
- Resident Engineering Inspection Services for Reconstruction of Metropolitan Avenue Bridge over English Kills, Brooklyn, NY for New York City DOT. Construction Cost $40 million
- Resident Engineering Inspection Services for Protective Coating of Madison Avenue Bridge over Harlem River, Manhattan/Bronx, NY for New York City DOT. Construction Cost $5 million
- Resident Engineering Inspection Services for Reconstruction of 91st Place over Long Island Rail Road, Queens, NY for New York City DOT. Construction Cost $4.5 million
- Resident Engineering Inspection Services for Demolition of Hope Avenue Bridge over Abandoned Railroad and Reconstruction of New Roadway, Staten Island, NY for New York City DOT. Construction Cost $500,000
- Construction Inspection Services on (I-278) Gowanus and Park Avenue Viaducts for underdeck netting installation, Brooklyn, NY for New York State DOT. Construction Cost $2 million
- Construction Inspection Services for the cleaning and painting of 10 bridges on lower Gowanus Expressway and Belt Parkway in Kings County, NY for New York State DOT. Construction Cost $3.4 million
- Construction Inspection for Repainting Suspension Bridge Towers of the Bear Mountain Bridge in Rockland/Westchester Counties, NY for New York State Bridge Authority. Construction Cost $3.6 million

HAKS

PAUL L. CAVOTA, P.E. *Project Manager*

Education

BCE 1959, Manhattan College

Professional Development Hour Credit - Practical Applications of FRP on Civil Engineering Structures

Concrete Strengthening Techniques & Design Considerations Seminar 5/2/2008 – 4 of Credits AIA/CES Learning Units

Professional Registration

Professional Engineer - State of New York - # [redacted] 964

Summary of Experience

Mr. Cavota has over 45 years of experience, including 30 years for the New York State Department of Transportation, in construction of highways and bridges. Following is a list of his experience:

- **Project Manager –** Expert Professional Services – Performance of Construction Management Services for Projects on a "Call-In" Basis During 2007, 2008, 2009, for **PANYNJ.** Fee: $5 million
- **Project Manager** – Expert Professional Services – Performance of Construction Management Services for Projects on a "Call-In" Basis During 2004, 2005, 2006, for **PANYNJ.** Fee: $2 million
- **Project Manager** – Expert Professional Services – Performance of Construction Management Services for Projects on a "Call-In" Basis During 2001, 2002, 2003, for **PANYNJ.** Fee: $2.25 million
- **Project Manager** - Stewart International Airport Access Improvement Project for NYSDOT. Construction of a new interchange on Interstate 84 at Drury Lane with the staged reconstruction of Drury Lane and an access road from Drury Lane to Stewart International Airport. Construction cost $55 million. (1/06-Present)
- **Assistant Construction Manager** – Construction Management for the Route 9A Reconstruction Project, New York, NY for NYSDOT. This Route 9A Reconstruction Project consists complex construction for the reconstruction of Route 9A in lower Manhattan. Construction cost $70 million (3/05-10/06)
- **Construction Manager** - Construction Coordination and Management Services (CCMS) for the Cross Bronx Expressway(I-95)/Bruckner (I-278) Interchange Rehabilitation Project in Bronx County for New York State DOT. This $204 million bridge rehabilitation and highway improvement project was completed in May 2002, *one year ahead of schedule*. *This project was cited with the CMAA 2003 Project of the Year (Over $60 Million) Award, NYACE 2003 Platinum Award for Engineering Excellence, New York Construction News 2001 Award of Merit: Bridge Project, ARTBA Pride Awards Honorable Mention and NYSDOT Deputy Chief Engineer's Citation*. Construction cost $204 million. (6/99-5/02)
- **Project Executive** – Construction Inspection of TANY 03-53B, Rehabilitation of the Mainline Bridge over the Saw Mill River Parkway, Westchester County, NY for NYSTA. Construction cost $14 million. (7/05-present)

- **Project Manager** - Term Agreement for Construction Inspection Services, NJDOT Southern Region. Project locations encompassed Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem Counties where significant traffic volumes and soil erosion/runoff control needed to be maintained throughout construction. An assignment under the contract entailed milling of the entire width of existing pavement, and resurfacing with a 3_inch Superpave HMA 12.5H76 surface course, selected curb and sidewalk improvements, construction of handicap ramps, installation of loop detectors, pavement striping and markings, and landscaping on Route 130 NB and SB from MP 46.67 to 51.18 in the Townships of Burlington and Florence.

- **Project Manager** -Smart Moves 2007 Statewide Construction Inspection Agreement for NJDOT.

- **Project Manager** - Construction Inspection Services for Maintenance Roadway Repair, Central, Sub-Region C-2, Contract C201 and Sub-Region C-3, Contract C301 in Burlington, Hunterdon, Monmouth, Ocean and Somerset Counties, NJ for NJDOT.

- Construction Inspection Services for Reconstruction of Brooklyn-Queens Expressway (I-278) from 25th Ave. to Broadway in Queens County for New York State DOT. The project calls for the total replacement of the existing roadway pavement, drainage system and highway lighting system. Both the horizontal and vertical alignments will be changed to increase sight distance. Wider shoulders will be added at most locations for breakdowns. Bridgework included replacement of four CSX Freight Rail Bridges that run adjacent or over the BQE, twelve highway bridges and one city street bridge that spans the BQE. Construction cost $254 million.

- **Director of Field Operations**- Managed the following projects: (1995-1998)
  - Component Rehabilitation of various Bridges for NYCDOT. Locations included 96th Street Interchange at West Side Highway and various bridges throughout New York City. (1996-1998)
  - Construction management for expansion and modernization of P.S. 102, Bronx for the School Construction Authority.
  - Construction Management Services at Stonybrook University for SUCF.
  - Construction management for rehabilitation of bathhouse at Orchard Beach, Pelham Bay Park, Bronx, Forest Park Bandshell, Queens NY and numerous other parks and playgrounds for NYC Parks & Recreation. Reconstruction of the New York Times printing plant pumping station sewer system, and service road construction, Queens.
  - Reconstruction of the Hunts Point area in the Bronx, NY for the NYC Dept. of Design & Construction.
  - Reconstruction of Hutchinson River Parkway Bridge over Amtrak and Conrail, Bronx for New York City DOT.
  - Major Deegan Expressway (I-87). sign structures, Staten Island Expressway (I-278) and West Shore Expressway projects, deck repairs on the Gowanus Expressway (1997-1998) and HOV lanes on the Long Island Expressway for New York State DOT.

FRANK J. VERDERAME, JR. *Deputy Project Manager*

Education

BSCE, Manhattan College, Riverdale, NY 1993

Construction Safety & Health Training Course-OSHA, 10 hour – 2002

Construction Safety & Health Training Course-OSHA, 40 hour – 2003

Contract Administration and Management using Primavera Expedition – Etrac Solutions-2003

Bentley ProjectWise Course-2004

ACI NJ Chapter Concrete Construction Technology Course, 2005

Asphalt Paving Construction Technologist Certification-NJSAT-2005

Summary of Experience

Mr. Verderame has over 14 years of experience in Construction Inspection and the rehabilitation of bridges and highways. He has 8 years of experience working with **PANYNJ** as well as extensive experience on NYC Department of Parks & Recreation projects.

- **Office Engineer** – Responsible for the Construction Management for NY Projects on a call-in basis for **PANYNJ**. Construction cost: $50 million. His responsibilities include administration of pre-construction meetings and preparation of minutes; processing contractor payment applications including: entering payments into computer programs, different funds charged to different accounts, auditing contractor records for T&M work, verifying itemized and lump sum work, verifying compliance with Prevailing Wage, AAEEO & Insurance laws and regulations, preparing for Resident Engineer and Engineer of Construction's signatures, forwarding to Construction Management Division; preparing contract change orders; preparing additional lump sum and unit price conversions; performing requests for additional funds for contracts, auditing contractor proposals, estimates and submittals; processing audit requests and assisting auditors; updating financial details and construction forecasts on a monthly basis to track budgets; issuing directives for on-call contracts; updating, preparing and filing contract correspondence, specifications, drawings & submittals; scheduling inspections for all contracts; verifying compliance with changing security regulations; researching information from closed-out contracts; administering office computers (hardware & software); closing out completed contracts including: verifying and processing final financial documents for payments and preparing completion memos, certificates, permits, audits for facility, Construction Management & Chief Engineer's approvals. Some of the scope of work on various projects are construction of new piles, pile repairs, wrapping, jacking, rehabilitation of relieving platforms, underwater and above water pier repairs, bulkhead repairs and new construction, fender systems, fence, guide rail, lighting, signage, guard booths, building construction, sprinkler systems, roofing, digital fiber optic video monitoring systems, paving, etc. Various contract assignments are as follows:
- BP-364.006 Brooklyn PA Marine Terminal, Pier 8 Roof and Sprinkler Rehabilitation. Construction cost: $2.6 million.
- BP-364.019 Brooklyn PA Marine Terminal, Bulkhead Rehabilitation Between Piers 2 and 3 and Piers 4 and 5. Construction cost: $1.8 million.
- BP-364.025 Brooklyn PA Marine Terminal, Piers 1, 2 and 3 Rehabilitation of Low Level Relieving Platforms. Construction cost: $4.8 million.
- BP-364.027 Brooklyn PA Marine Terminal, Streetscape Program. Construction cost: $2.3 million.

- BP-364.030 Brooklyn PA Marine Terminal, Rehabilitation of Piles-Piers 1, 2, 3 and 5. Construction cost: $4.7 million.
- **Deputy Project Manager** – Catwalk Safety Improvements (T100.095), Interim Zone Painting (T100.048) of NJ Turnpike Bridge over Newark Bay for New Jersey Turnpike Authority. Contract No. T100.048-Safety improvements to the catwalk system, installation of stainless steel wire safety ropes on the walkway, replacement of deteriorated walkway plates with hot-dip galvanized steel diamond plates, and miscellaneous repairs to structural steel and steel ladders. Contract No. T100.095-cleaning and painting previously painted locations of the superstructure and parapet steel to SSPC standards. The work requires shoulder closings, limited lane closings, containments for environmental protection during cleaning, painting, handling and disposal of the paint removed. Construction Cost $4.5 million.
- **Project Manager** – NJDOT Smartmoves 2007 Statewide ITS Contract. Scope of work includes upgrades, installations, connections and troubleshooting for New Intelligent Transportation Systems throughout the State of New Jersey. Work items involve wiring, fiber-optics, panels, pull boxes, conduit, sign structures, HARs, CCTV and foundations.etc. Construction cost $3.5 million.
- **Project Manager** – Construction Engineering and Inspection Management of various project: Clients include NYCDOT, NYCDDC, NYSDOT, NYSTA, NYCT, MTA (LIRR, TBTA, MN), CTDOT, NYCDEP.
- **Project Manager** – Resident Engineer Services for the Reconstruction of Manhattan Bridge Contract No. 11 for NYCDOT.
- **Project Manager** – Construction Management and Inspection Services for VN-28, curb plate and scupper installation and painting.
- **Project Manager** – Construction Supervisor/Inspection Metro North Switch Gear Replacement Project, New York City for MNRR providing civil/structural inspection services for construction work to upgrade Metro North's 59th Street facility and its 72nd Street substation. Repair of the roadway waterproofing membrane on Park Avenue and street level reconstruction work; Rehabilitation of the existing storage room to provide a suitable location for housing new auxiliary electrical equipment. Construction includes brick/mortar repairs, new door jamb and door installations, concrete floor work and more; Interception and relocation of existing lighting/receptacle circuits from existing electrical panel board equipment. HAKS is also providing site safety and quality assurance services.
- **Resident Engineer** – NJDOT, Median Guide Rail Replacement. Work included replacement of existing appurtenances, MPT operations on high speed, high volume roadways such as I-78, I-80 and I-287. Extensive documentation and coordination with NJDOT Operations, State Police and contractor scheduling. Construction cost: $2 million
- **Resident Engineer** – Bloomfield Ave. and Northfield Rd. Bridge, Essex County- Complete replacement of existing culvert bridge structures. Operations included dewatering, stream diversion and broad environmental protection. Extensive MPT and coordination with local police, town representatives and commercial establishments.

HAKS

LAWRENCE S. KING, P.E. *QA/QC Safety Officer*

Education

B.S. in Civil Engineering, CCNY – School of Engineering, NY, 1972

Professional Registration

Professional Engineer –New York 1984, [redacted]

Membership

Member of Mu Alpha Theta National Mathematics Honor Society

Network Member of Partnership for Rebuilding our Infrastructure

Member of ACI

Member of NYEIC Steering Committee

Summary of Experience

Mr. King has over 38 years of design, construction and quality assurance experience. He is currently HAKS' QA/QC Officer overseeing inspection and record keeping quality and safety on all company projects. Before joining HAKS he was Deputy Chief Engineer for the New York City Department of Transportation, responsible for consultant and contract supervision, management and quality control of design, construction and rehabilitation of all fixed land and waterway bridges under the City's jurisdiction, and a budget of $2.3 billion over the past 10 years. Before that he served for 10 years as Director of Quality Assurance in the Department's Division of Bridges, where he developed and initiated QA policy and Materials Acceptance Procedures. Among the major projects advanced during his tenure at NYCDOT are These and other examples of his experience follow:

- **Quality Assurance, Quality Control Officer** - Oversees Quality Assurance/Quality Control and Health and Safety for all HAKS construction management, engineering, architecture, land surveying and material testing projects, ensures the quality of design, inspection and record keeping. Responsible for the development and implementation of processes that enable each Department to become ISO 9001 certified. (04/10-present)

- **Deputy Chief Engineer –** Bureau of Roadway Bridges, New York City Department of Transportation. Duties included, for all fixed land and waterway bridges under jurisdiction of the Division of Bridges, directing all activities related to consultant supervision, contract supervision and contract management for design, construction, reconstruction and rehabilitation projects on all fixed land and waterway bridges and related structures; overseeing an ongoing program to reconstruct all fixed land and waterway bridges and related structures; executing structural, electrical and architectural design and related engineering work for the construction and/or rehabilitation of all fixed land and waterway bridges and related structures, at all times coordinating design efforts with interested public and private agencies; reviewing and commenting on structural plans submitted by private developers, governmental agencies, and public utility companies; managing all work of the Bureau under the terms of the Interfund Agreement (IFA), keeping its budget in line with fees charged by private consulting contractors. Had final responsibility for major structural construction and rehabilitation projects valued in excess of $2.3 billion over the last 12 years, providing executive direction for all construction related activities, programs and on-going projects assigned to the Bureau, and ensuring that construction activities were

performed in accordance with city, state, and federal rules and regulations, all Agency rules and regulations, integrity controls and Code of Conduct.

Duties also included preparing a quarterly budget for capital expenditures; directing and reviewing staff performance in accordance with the Division's Managerial Objectives; monitoring and evaluating the actions and performance of private consultants and contractors working under the City's responsibility; allocating the expenditures of OTPS funds authorized for disbursement through the Bureau in accordance with the Integrated Financial revision of the City Charter; working closely with both Federal and State authorities in preparing capital construction projects; coordinating and routing an accurate flow of information about each project undertaken by the Bureau to the respective Borough Presidents, the City Planning Commission, and affected Community Boards; representing the Bureau in City, State, and Federal agency conferences, and in meetings with community groups, contractors, consultants, private developers; assuring that all work undertaken met Federal requirements as stipulated by the Federal Highway Administration (FHWA); implementing Agency management orders and directives; tracking projects and keeping records that enabled data for management activities could be channeled through the Chief Engineer; supervising actions of private consultant firms engaged in inspecting bridges assigned to the Bureau; establishing and maintaining liaison with high-level officials and representatives of government, business and civic or community organizations; representing Division of Bridges on boards, committees and technical organizations/task forces; performing other related high level engineering, administrative and managerial duties at the request of the Chief Engineer and the Commissioner.

Directly responsible for managing a technical staff of 75 Professional Engineers, Construction Managers and Administrators with a ten year capital budget approaching $2.3 billion dollars. At any given time some 90 projects were in various states of design with upwards of 20 projects in the construction phase. Major projects advanced during my tenure include: (10/98 – 3/10)

- Reconstruction of Queens Boulevard and Honeywell Street over Sunnyside Yards – $81 million, completed in 2002.
- Reconstruction of the Grand Concourse over East 161 Street wherein a public plaza dedicated to Yankees great Lou Gehrig was constructed – $56 million, completed in 2008.
- Reconstruction of three Belt Parkway Bridges--Paerdegat Basin, Fresh Creek and Rockaway Parkway – $345 million, now in construction.
- City Island Cable Stayed Bridge – $100 to $120 million, now in final design, will be the first vehicular cable stayed bridge in New York City.
- Protection against Marine Borers along the FDR – $80 to $100 million contract to be bid in 7/10.
- Reconstruction of three Belt Parkway Bridges--Gerritsen Inlet, Mill Basin and Nostrand Avenue – $350 to $400 million, now in final design.
- East 153 Street over Metro-North Rail Road, $100 to $120 million, bid ready.

HAKS

HENRY HESSING, P.E., FASCE *Aviation Planning Construction Manager*

Education

Master of Science, Transportation Planning, Polytechnic Institute of New York, 1978

Bachelor of Science, Engineering, State University of New York, Stony Brook, 1970

Professional Registration

Professional Engineer – NY1976, # [redacted] PA 2009, [redacted] NJ 2010, [redacted]

Certifications

Exceptional Service Team Award was given by **PANYNJ**, June 2002

The Aviation Department- **PANYNJ**- gave two letters of commendation, November 2001

American Registry of Outstanding Professionals, 2003-2004

ASCE L.I., NY Branch President

Outstanding Service Award for Project Management, March 2006

Summary of Experience

Mr. Hessing has over 34 years experience as a professional engineer with extensive knowledge of construction management and resident engineering for new and rehabilitated highways, bridge structures, rail line segments and transportation-related buildings and airports. Mr. Hessing has a strong background in design engineering, interdisciplinary coordination, transportation planning programs, highways and bridges, airports, rail lines, utilities and constructability review.

- **Project Manager – Master Planning-** JFK Airport for the **PANYNJ**. Mr. Hessing established budgets and schedules for multiple construction contracts; developed, updated and maintained planning parameters; and monitored budgets and schedules for functional, preliminary and final design of all contracts. This included monitoring construction to ensure airport operations were not interrupted along with coordinating with other design/ construction projects. He also analyzed multi-million claims for the Port Authority and made recommendations for resolution. Individual projects included facilitating Transportation Security Administration installations of Explosive Detection Systems and Electronic Trace Detection for baggage screening and IT rack installation and coordinating the performance of this work through the Port Authority's tenant alternation application process for each passenger and baggage screening check point at all nine terminals in the Central Terminal Area; also managing development and implementation of $550 million in roadway and utility improvements while fully coordinating with airport operations and other components of the program. This work included civil and traffic engineering technical reviews, evaluations, recommendation and administration for the various terminal redevelopments in the CTA. Total Project Construction Cost $9.50 billion (05/00 – 05/07)
- **Project Manager** – Air Traffic Control Tower Demolition- Responsibilities included design and support services, coordination with subconsultants, and consultation with the **PANYNJ** during the design and demolition phase of this project. The project was successfully completed with minimal impact to airport operations. The airports general manager described the job as, "a model for how construction should be undertaken in an operating airport environment. The job was well planned, the work site was properly managed and maintained and the communication of

the project schedule to airport staff was very effective". Estimated Construction Cost $3,500,000 (1998)

- **Project Manager** – Reconstruction of New Croton Aqueduct for NYCDEP; CRO-334 G & E. HAKS in a joint venture is overseeing rehabilitation of approximately 26 miles of aqueduct and 40 shafts. Construction Cost $94 million (03/09 – present)
- **Assistant Project Manager –** Construction Management, Completion of 3rd City Water Tunnel, Manhattan, NYCDEP – Work included completion of the tunnel, installation of user pipe shut-off valves in ten tunnel shafts, diversion structures with additional valves, piping and eventual connection to street water mains, elevators to shaft valve chambers, and ventilation and lighting at each location.
- **Project Manager** – Construction Inspection of TANY07-04B for Steel Repairs (Phase II) on the Tappan Zee Bridge at MP14.67. HAKS is overseeing the repair or replacement of diaphragms, catwalks, deck trusses, floor beams, main trusses, fascia girders, stringers, gusset plates and bracings. Repair work is concentrated on the north and south outside fascia girders, first interior stringers and cantilevered diaphragm beams, and floor beam and main truss members in spans 179 through 191 of the East Deck Truss spans. Miscellaneous steel repairs include gusset plates, wind bracing, catwalk and utility support members of the bridge. Construction Cost $29 million (6/08 – 6/10)
- **Project Manager** – Rehabilitation of Robert Moses Causeway over Great South Bay, Suffolk County, New York**.** Project included structural concrete repairs to the substructure both above and below water and "Class A containment" for the removal and replacement for existing coatings. The project received ASCE Long Island Branch's "Project of the Year Award" in May 2008. Project Construction Cost $41 million (05/07 – 07/08)
- **Project Manager –** JFK International Airport Deicing Facility**,** Queens, NY. Management of design/build/operate/maintain (DBOM) new, state of the art, infrared aircraft deicing facility. The structure deices aircraft up to and including 747-300. The project earned the "Quality of Life" award from ASCE Long Island Branch in May of 2007. Project Construction Cost $9.5 million
- **Director of Construction** – Responsibilities included, preparing proposals, staffing, billing, contract negotiating with various agencies. Projects included: Reconstruction of the Atlantic Bridge; LIE Construction of HOV Lanes, Region 8 Call in Services, JFK Light Rail System; constructability reviews for multiple clients and their projects. Project Construction Cost $ 1 billion. (1995– 2000)
- **Air Train Light Rail System** – The new system links airport terminals with car rental facilities, parking areas and the New York City transportation network, including the LIRR and the NYC subway and bus network. Mr. Hessing was responsible for writing civil specifications, LRS drainage design, pavement design, civil details and permit reports. Construction Cost $1.9 billion (1998)

HAKS

JEFFREY T. TERZAKIS *Aviation Planning Construction Manager*

Education

MBA, Finance, Fordham University, New York, NY

B.S., Mechanical Engineering, Villanova University, Villanova, PA

Summary of Experience

Mr. Terzakis has over 24 years of diversified experience in construction management and the inspection of facilities including airport terminals, transportation facilities, residential buildings, hospitals, schools, etc. He has proven effectiveness in project management, problem solving and leadership roles. Mr. Terzakis offers clients a unique and customized approach to their project needs. By anticipating project issues from the beginning, he manages outcomes through preparedness, consensus, and accountability. Since coming to HAKS in 2005, he has served as Principal-In-Charge, Project Executive, Project Director and Project Manager on many construction projects for numerous clients, with emphasis on large capital programs, pre-construction services, and construction management. Details of these and other of his projects past and present follow:

- **Project Manager** - Quality Control and Quality Assurance (QC & QA) at the World Trade Center Memorial & Cultural projects, **Port Authority of NY & NJ**. Supervised and administered the controlled inspection work of steel reinforcement installation for all reinforced concrete structures (footings, liner and shear walls, piers, slabs, etc). Construction cost $1.1 billion. (8/08 – present)

- **Project Director** – Construction Management Services, Alley Park Environmental Restoration and Oakland Lake Park Improvement in Queens, for NYCDEP. Works at Alley Park involve excavation and stockpiling of the wetland area north of Northern Boulevard, transport and disposal of the excavated material at the approved disposal facility, subgrade fine grading and spreading sand planting material in the Western Basin, planting in wetland salty marsh and maintain erosion and sedimentation control facilities. Additional items to be undertaken include planning of trees, shrubs, warm season grass and wildflower seeding. Construction at Oakland Park involves restoring five isolated locations within the Park, including reconstruction of sidewalks, remediation of gullies, removal of invasive plants, trees and common weed near the lake, modification of catch basins, and shrub and tree plantings. Construction cost $12 million (11/08 – present)

- **Project Manager** – Construction Management Services, Highway Maintenance Facility Rehabilitation and Salt Shed Construction, New Canaan, for ConnDOT. The scope of work includes site development work, paving, drainage, reinforced concrete, masonry cavity walls, historic slate roofing and other roofing materials, mechanical work and other building construction requirements. HAKS is responsible for monitoring the contractor's work to assure strict compliance with the contract plans and specifications, quality construction, timely completion and cost control. Construction cost $7 million (7/09 – present)

- **Project Manager** - HAKS is providing a Resident Engineer to support the Long Island Rail Road's Vanderbilt Yard Reconstruction Project, under our contract with LIRR for on-call construction management services. The project will make land available within

the existing Vanderbilt Yard site for private commercial and residential development. Responsibilities include field inspections and daily monitoring of the construction, participating in and expediting shop drawing review, reviewing and making recommendations on contractor submittals, means of construction and standard practices, ensuring against unsafe conditions, coordinating Force Account activities, and more. Construction cost $300 million. (Estimated completion 2012) (2008 – present)

- **Project Director** - Alley Creek CSO Abatement Facilities for the NYCDEP. Project consists upgrading and expanding an existing pump station, extensive site piping, utilities and wetlands restoration work. Also included is the rehabilitation of the Alley Pond Environmental Center building. Construction cost: $30 Million. (2007 – present)
- **Project Executive** – Construction Management Services, Construction Contracts in the New York Downstate Area, for NYCDEP. A major part of this effort will focus on contracts for installing and operating chlorination/dechlorination facilities including all mechanical, electrical, instrumentation and civil work for specified water pollution control plants in both the North area (Hunts Point, Redhook, Newtown Creek, Bowery Bay, Tallman Island, Wards Island and North River Plant and pumping stations), and the South area (Owls Head, Oakwood Beach, Coney Island, 26th Ward, Rockaway and Port Richmond Plants and pumping stations). Other aspects of the CM work include providing safety personnel to oversee installation and commissioning of the chlorination equipment, and establishing a master project schedule to monitor all activities and identify scheduling delays, which would then be corrected to keep the projects on schedule. Construction cost: $10 million (Estimated completion 2011) (6/08 – present)
- **Project Executive** – On-Call Contract for CM/Build Services for NYCHA. Scope of work includes CM/Build services ($80 Million) for various façade rehabilitation and roof replacement projects for residential buildings throughout the five boroughs of New York City. Serve as Project Executive for multiple projects at the Fort Washington, Harlem River and Rangel Houses, a $22 million assignment consisting of roof replacements and façade rehabilitations in resident occupied buildings. Also working in Brooklyn at Williams Plaza, Independence Towers and Bushwick Houses as well as the Stapleton Houses on Staten Island. (7/08 – present)

HAKS

FRANK FRAGAPANE *Chief Inspector*

Education

BS - Construction Engineering Technology, Fairleigh Dickinson University, Teaneck, New Jersey, 1993

Professional Registration

NICET Level IV 2004, [redacted]

Licenses and Certifications

ACI Concrete Field Testing Technician - Grade I, 1998

ACI CCSI Concrete Construction Special Inspector, 1998

Asphalt Paving Construction Technologist Certification - NJSAT, 2002

Traffic Control Coordinator - Rutgers, The State University of New Jersey, 2002

TR-13-CS "Specialized Fiber Optics Course" (40 hours) - SIECOR, 1996

30-Hour Occupational Safety and Health Training Course - OSHA - 2004

Summary of Experience

Mr. Fragapane has over 14 years experience in construction management and construction inspection. His representative projects include:

- **Chief Inspector** - Construction Inspection Services for Emergency Repair and Interim Deck Replacement on the Gowanus Expressway, Kings County, NY for NYSDOT. The work involves deck replacement, BQE Connector widening/replacement, lower Gowanus Expressway pavement rehabilitation, structural steel and concrete repairs, structural steel painting, drainage work, and operation of the existing HOV lane. This is a large deck replacement project located in a high speed, high traffic volume, urban area. This project includes traffic management strategies such as construction phasing, lane closure restrictions, night and weekend work, etc. Construction cost $152 million. (6/06-present)

- **Chief Inspector** - Engineering and Inspection Services for Various County Bridge and Culvert Projects, Essex County, New Jersey. Tasks included: $1.4 million Bloomfield Avenue Bridge Replacement, Verona; and $800,000 East Northfield Road Bridge Replacement, Livingston. (1/06-5/06)

- **Chief Inspector** - (D259904) Replacing & Rehabilitation of Existing Box Culverts on Route 9W, Stony Point Rockland County Responsibilities included coordination and supervision of inspectors' daily work assignments; reviewed inspectors' daily reports for accuracy, detail and compliance with contract plans and specifications; monitored all soil erosion controls; calculation of quantities; preparation and negation of orders on contract for approval; coordinated with job superintendent daily to discuss issues that needed clarification with regard to field work; tracked pay quantity over and under-runs to assure proper payment in monthly estimates; managed the project on daily basis. Input quantities into NYSDOT Computerized Engineers Estimate System(CEES) Estimated Construction cost $200,000. (9/05-12/05)

- **Senior Engineer**-Pre-design /construction survey for New York City Housing Authority (NYCHA). Perform condition/structural surveys of residential and facility buildings at Johnson Houses. Project objective was to provide NYCHA with a structural survey that would indicate the necessary work to repair foundations, basements, apartments, roofs, stairs, stairwells, elevators, and roof top water tank. Work included: coordination with residents, NYCHA Superintendent, and NYCHA main office; create & prepare survey sheets; coordinate & perform daily inspections; prepare and maintain spreadsheets; report red flags; submit findings and assist NYCHA in preparation of construction documents for bid; attend pre-bid meetings and field questions during project walk through. (6/05-8/05)

- **Construction Manager** - Construction Management Services for Ulster County Transit Center, Kingston, NY. The project consists of a 25,000 sq. ft. building on 2.5 acres. The $4.5 million (est.) building is subject to New York State's Wicks Law and will be constructed by four prime contractors (i.e., General Contractor, HVAC, Plumbing and Electrical). Duties include: development and implementation of project procedures; monitoring and coordination of the contractors; documentation of all stages of work; project planning and scheduling; progress payment control; other related activities and services necessary to control costs, time and quality. Underground utilities include water main, gas line, electric & communications. (12/03-12/04)

- **Resident Engineer** - Construction Inspection Services on an As-needed Basis for Project GFM-405A for MTA Bridges & Tunnels, New York, NY. Project assignments included inspection for VNM-322, Repairs to the Fire Standpipe System, Concrete Barrier, Sign Gantry and Beam Strengthening at the Verrazano Narrows Bridge. Responsibilities included coordination and supervision of contractors' daily activities to ensure compliance with plans and specifications; review and approval of weekly project schedules; coordination with other contractors on the bridge to prevent work zone or MPT conflicts; maintain all project documents including project files, various logs, daily, weekly and monthly reports; set up monthly progress meetings and prepared of minutes of the meetings; review and track all submittals to ensure a timely response; prepare and negotiate change orders. Night time work. An ISO 9000 (2000) project; no findings of deficiencies were noted in an audit of project records. (11/02-8/04)

- **Chief Inspector/Resident Engineer** - Reconstruction of "C" Street at Stewart International Airport for New York State Thruway Authority (Contract TANY #01-41, D213053), NY. Project scope included complete demolition, re-grading and replacement of a full section roadway using Superpave Hot Mix Asphalt; installation of a complete new water main and drainage system; electric, telephone and street lighting for the full length of the roadway (2,400 feet); and line striping and installation of road signs. Responsibilities included coordination and supervision of inspectors' daily work assignments; reviewed inspectors' daily reports for accuracy, detail and compliance with contract plans and specifications; monitored all soil erosion controls; calculation of quantities for and preparation of orders on contract for approval; coordinated with job superintendent daily to discuss issues that needed clarification with regard to field work; tracked pay quantity over and under-runs to assure proper payment in monthly estimates; managed the project on daily basis; tracking changes and recording project as-built plans. Construction cost $2.73 million. (8/01-10/02)

- **Chief Inspector** - Bernard Township, NJ. Inspection of multiple commercial construction projects including new construction of Dewy Meadows Shopping Plaza, Mountain View Business Complex and Bonnie Brae School. Construction entailed architectural, structural, mechanical, electrical and site/civil elements. Scope of services included visits to each project on daily basis to ensure construction was in accordance with plans and specifications. Responsibilities also included checking to see that all soil erosion and environmental controls were installed properly; and monitored installation of storm drain, maintenance and protection of traffic, landscaping and paving operations. (4/01-8/01)

HAKS

FAWZI M. FARAJ *Environmental Construction Manager*

Education

B.S. Civil Engineering, New Mexico State University, 1983

NHI FHWA Bridge Inspection Refresher Course – 1998

NHI FHWA Bridge Management Training Inspection Session – 1998

- Bridge Inspection Course - NYSDOT, 1999

Professional Registration

National Asbestos Council

Summary of Experience

Mr. Faraj has 23 years of experience on environmental projects including the mitigation of issues concerning State designated wetlands and permits. Some of his major representative projects are as follows:

- **Project Manager/Environmental Manager** - In-charge of all environmental aspects of projects firmwide including all aspects necessary for effectively monitoring, inspecting and reviewing environmental inspections and contracts (10/96-present). Some of the Projects supervised by Mr. Faraj include:
- **Environmental Consultant on the Fresh Kill Landfill project** – Final Compaction State and Meadowland Rehabilitation Program - Performed air, water and soil Evaluation and sampling. Developed and implemented U.S. EPA underground injection control (UIC) closure plans. Prepared spill prevention, control and countermeasures plans and procedures. Developed Storm Water pollution prevention procedures and Storm Water Pollution Prevention plans for the overall site. Maintain soil remediation systems, reviewed all NYSDES's, wetland permits and monitored all contractor adherence to U.S. DEP, EPA and NYSDEC requirements.
- **Construction Department Manager/Contract Administration** - As Construction Department Manager at Law Environmental Associates, provided comprehensive asbestos construction services specific to asbestos and lead abatement, work site observation, air monitoring and evaluation of laboratory data and report preparation. As Contract Administrator, responsibilities included assessment and cost estimating, bid analysis and contract negotiation; researching and analyzing current market trends regarding construction activities, managing a cost center of up to 25 people; developing and implementing standard operating procedures; quality assurance; reviewing reports and day-to-day supervision of technical staff. (1987-96)
- **Project Manager/Designer** - Responsibilities included performing hazardous material survey and production of design specification for the removal of Asbestos and lead containing materials from the 300,000 square feet of Harbor Side Health Care Facility. Duties included performing weekly meetings, production of progress and final reports, community and facility meetings, reviewing of contractors pay-application and submittal. The project was executed while partially occupied by 200 elderly patients. The property was managed by Woodsedge Care Center. Total construction cost-$500K. (1996)
- **Asbestos and Lead Related Experience** - Performed numerous asbestos surveys and assessments at various locations in the NY Metropolitan Area. Additionally, he designed

many asbestos abatement projects, performed work site observation and managed a multi-million dollar project. (1987-96)

- **Building Condition Survey** - Mr. Faraj has performed various building condition surveys in the NY Metropolitan area. Evaluations performed included visual surveys of building exteriors, roof surfaces, unit surfaces, unit interiors, and site work. Additional responsibilities included report preparation, recommendations, estimated useful life of various structural systems as well as budgetary figures for recommended repair and/or renovation. (1987-96)
- **Project Manager** - Managed numerous major Lead and Asbestos abatement projects involving four different facilities (museums and Indian reservation) in NYC, the environmental phase of this project was completed on time and within budget. This project had many unique and challenging tasks due to its historical status, these facilities are owned and managed by the Smithsonian Institution. Construction cost over $100 million. (1995)
- **Project Manager** - Responsibilities included the inspection of lead and asbestos containing materials for 400,000 square feet of Hospital space (Horton Hospital) located in Middletown, New York. Other duties included work site observation, project administration, QA and managed approximate Construction cost-$600K. (1994)
- **Project Manager**- As the project manager of two major asbestos removal and soil remediation projects, of an industrial facility owned by the NYCEDC. Responsibilities included the preparation of design specifications, contract administration, technical review, project submittal review, field observation, QA/QC of Microscopic and other laboratory analytical procedures, held weekly progress meetings and served as a Community Liaison for the NYCEDC. Construction cost $5 million. (1994)
- **Project Manager -** Responsibilities included the project management of asbestos, lead and indoor Air Quality tasks at the One NY Plaza Facility (a 40 story building, owned by Chase Manhattan Bank and managed by E.S. Gordon). The project entailed the removal of 1.6 mil. square feet of hazardous materials (Asbestos and Lead) and was carried out by six different contractors working simultaneously over a period of fourteen months. The asbestos and lead removal and the subsequent structural fireproofing operation had a total construction cost of over $150 Million. (1992)
- **Senior Project Manager/Project Director -** Construction Department at Law Associates. Supervised technical staff for a multi-million dollar asbestos abatement project. Simultaneously assumed the position of Project Director on a $100 million NYC School Construction Authority Project. Responsibilities included performing Abatement Quality Assurance for approximately 300 NYC schools, supervised the work of 30 Environmental Consultants and 25 Asbestos Contractors, directed a staff of 50 people, interacted with various NYC agencies such as the Inspector General, Board of Education, OSHA, EPA, NYC Mayor's Office, and the DEP. (1992-93)
- **Project Engineer -** Responsibilities included surveying the performance of asbestos and abatement designs of a 35 story building located in Manhattan at 551 Fifth Avenue. Additional duties included project management and contract administration of the ensuing abatement activities. This project was completed in three (3) years at a total construction cost of $200M. (1988-93)

HAKS

EUGENE TAKHTOVICH, PE *Material Testing Lab Director*

Education

Ph.D., Materials Engineering, Technical Institute of Concrete and Reinf. Concrete, 1988

Master of Science, Engineering Mechanics, The Moscow Aviation Institute, 1976

Professional Registration

Professional Engineer – New York 1995, [redacted]

Licenses and Certifications

AWS Certified Welding Inspector 2008, [redacted]

ACI Concrete Construction Special Inspector2007, [redacted]

ACI Concrete Field Testing Technician, 2005

ICC Spray Applied Fireproofing Special Inspector, 2009

Radiation Safety Officer, 2007

PCI Level II inspector 2008, [redacted]

US Army Corps of Engineers Construction Quality Management for Contractors Training Course, 2006

OSHA, Confined Space Awareness, 2001

OSHA 10-Hour Construction Safety and Health Training Course, 2009

Nuclear Testing Equipment (Troxler), 2007

MTA NYCT Track Safety, 2007

Summary of Experience

Extensive "hands on" experience in design and construction inspection of a variety of public works and infrastructure projects including bridges, buildings, water supply/water treatment facilities, stadiums, pipelines, retaining walls, pile and spread foundations, and renovations. Extensive knowledge of soil/rock/geotechnical conditions and stabilization, structural integrity inspection, construction methods and materials. Proven ability to manage field stuff and sub consultants providing inspection services for major public work projects in New York Metropolitan area. Experience includes lead field management activities involving field stuff management, uniform records keeping, daily Inspectors Reports, quantities measurement and documentation, certifying contractors' payment requests, chairing/conducting progress meetings/safety meetings and related activities.

Gained recognition as expert in cast-in-place and pre-cast concrete, concrete mix design, field and laboratory QA/QC procedures and its use in construction.

Being an American Concrete Institute (ACT) instructor/examiner, he conducts ACT certification classes to construction inspectors, laboratory technicians, engineers, managers, and other construction professionals. Active member of ACT and serves on four (4) ACT technical committees: Committee C214 — Evaluation of Test Results, Committee C630 — Concrete Construction Inspector Certification, Committee C 121 — Concrete Quality Assurance, Committee C345 — Concrete Bridge Construction.

Material Testing Lab Director. In this position he runs material testing lab, insuring quality of inspection and testing, relations with the clients, supervision the most important jobs including September 11 Memorial, World Trade Center Tower One (for PANYNJ) World Wide Inspection for NYCT, Concrete and Soils Inspection for NYCDDC, Inspection and Testing Services for various NYS and NYC agencies. The lab is involved in steel, concrete, asphalt, soils, and masonry inspection and testing, including destructive and non-destructive methods. On the steel side he is managing World Wide Inspection subcontract which involves supervision of steel fabrication shops. Involved fabrication shops are located in New York, New Jersey, and Pennsylvania.

- **Material Testing Lab Director –** Materials Term Agreement Assignments, Steam Tunnel and Health Care Facilities in Manhattan & Brooklyn for DASNY. Scope of work included concrete field inspection requiring sampling, slump, air content and temperature tests in the field; inspection of reinforcing steel bar installations in the field; inspection of structural steel erection in the field; soil sampling and laboratory analysis in the field and in the lab; inspection and testing of soil density in the field. Fee: $81,000 (12/08 – 9/09)
- **Material Testing Lab Director** – Total Design and Construction Support Services of Gowanus Expressway for NYCDOT. Duties included removal and replacement of deck pavement and arch fill; waterproofing the top of the arch; repair of all substructure members. Scope of work included new base course and asphalt pavement, new sidewalk and curb, drainage, street lighting and utility improvements. (4/09 – 9/09)
- **Material Testing Lab Director –** Construction Support Services, Throgs Neck Bridge for MTABT. Scope of work included review of shop drawings; inspection of members in the lower outer roadways not included in rehabilitation work; inspection of outstanding structural flags to determine if repairs had been made; issuance of new flags as needed; documenting conditions that had changed from the previous biennial inspection. (8/2009)
- **Material Testing Lab Director –** Concrete Cylinder and Quality Control Testing Services for NYCT. Responsibilities included visiting the designated job site or sites where concrete is being placed; taking concrete samples and performing slump, air content and temperature tests of the material as it is delivered from the truck. Fee: $200,000 (7/2009)
- **Material Testing Lab Director –** Worldwide Consultant Technical Inspection Services for NYCT. Services include in-plant material inspection and quality auditing for both in-process and finished goods. Duties included providing material testing, review of test data, and witnessing of testing. Other works included providing plant audits, evaluation of manufacturing facilities, machinery, equipment, and quality systems; reviewing quality manuals and quality assurance programs. Fee: $2 million (3/07 – 2/09)
- **Material Testing Lab Director –** On-call Inspection and Testing for Concrete Quality, Brooklyn-Queens Expressway for NYSDOT. Responsibilities included availability around the clock, doing field testing as needed, preparing cylinders and transporting them to the lab for curing and testing. Construction Cost $130 million (6/08 – 9/08)
- **Material Testing Lab Director** – Quality Control of Concrete and Asphalt for Cross Bay Bridge Rehabilitation for TBTA. Scope of work included inspections at concrete plant supplying material to the project; inspections of concrete at the job site, including sampling, slump, air content and temperature tests; laboratory testing of concrete cylinders for strength; inspections at asphalt plants supplying material to the project; job site testing on soil density; job site testing of Soil Proctor characteristics. Construction Cost $58 million (03/08 – 04/08)

HAKS

HECTOR ANKRAH, P.E. *Construction Manager*

Education

Master of Science, Civil Engineering, City College, City University of New York, NY, 1995

Bachelor of Science, Civil Engineering, University of Science & Technology, Ghana, 1984

Professional Registration

Professional Engineer –New York 1995, [redacted] isconsin 1996

Licenses and Certifications

NACE Coating Inspector Training – Level III, [redacted]

Certificate of Attendance, Institute of Seismology and Earthquake Engineering, Skopje, Yugoslavia

Certified Concrete Technician –NYCDOT

NJSAT Asphalt Paving Construction Technologist, 2008

Traffic Control Coordinator - Rutgers, the State University of New Jersey, 2008

C3-Supervisor/Competent Person Training for Deleading of Industrial Struct. SSPC

The Practicing Institute of Engineering, Inc. – High Definition Survey (HDS); 3D Laser Scanning, Course #PS000977

Summary of Experience

Mr. Ankrah has over 24 years of experience in construction engineering, design and record keeping. As Resident Engineer, he is responsible for monitoring work progress on-site; ensuring conformance to engineering plans, specifications, maintenance of construction and safety standards, etc. His representative projects are as follows:

- **Structural Engineer – PANYNJ** Contract No. HT 345. Prepared shop and working drawings of all concrete and steel details on the Holland Tunnel Salt Storage Facility project. (1/1994)
- **Structural Engineer – PANYNJ** Contract No. BT-275A. Prepared shop and working drawings of the structural details for the Ceiling & Bronze Fascia Support at the 42nd Street Bus Terminal. Supervised construction ensuring compliance to contract drawings and specification. (9/1992)
- **Structural Engineer – PANYNJ** Contract No. HT 317. Prepared working drawings and supervised demolition and reconstruction of new roofing system ensuring compliance to contract drawings and specification for the Holland Tunnel New York Land Ventilation Building. (3/1990)
- **Resident Engineer** – Catwalk Safety Improvements (T100.095), Interim Zone Painting (T100.048) of NJ Turnpike Bridge over Newark Bay for New Jersey Turnpike Authority. Contract No. T100.048-Safety improvements to the catwalk system, installation of stainless steel wire safety ropes on the walkway, replacement of deteriorated walkway plates with hot-dip galvanized steel diamond plates, and miscellaneous repairs to structural steel and steel ladders. Contract No. T100.095-cleaning and painting previously painted locations of the superstructure and parapet steel to SSPC standards. The work requires shoulder closings, limited lane closings, containments for environmental protection during cleaning, painting, handling and disposal of the paint removed. Construction Cost $4.5 million (8/08 – Present)
- **Resident Engineer** – TANY 04-12BR, Rehabilitation of I-87 Bridge Northbound Ramp Bridge over Sawmill River Parkway for NYSTA. Work includes removal of existing asphalt wearing course with concrete overlay after concrete deck repairs and milling and paving the approaches. Work also includes removal and installation of new drainage structures, transverse and longitudinal joint systems on deck. Installation

of new bridge railings, painting of entire bridge structure, resetting of existing concrete median barrier in areas of crossovers are also part of the bridge rehabilitation,. Substructure operations for the project involve structural lifting operations for the replacement of bearings and Class D concrete repairs to abutment and pier surfaces. Project involves extensive MPT including maintaining traffic on the northbound bridge during repairs to the southbound bridge and vice versa. Responsibilities include monitoring, coordinating and documenting all aspects of the project execution. Construction Cost $15 million (9/05 – 8/08)

- **Resident Engineer** – Construction Inspection Services, NYSDOT Region 8 Term Agreement. Work includes roadway milling and asphalt resurfacing and roadway crack sealing, bridge cleaning and painting, bridge washing, deck repairs, concrete barriers, bridge steel repairs, pavement markings and tree removals in Westchester, Rockland, Orange and Ulster Counties, NY. Project also involved removal and installation of new drainage structures. Project involves extensive MPT including maintaining traffic and night time lighting operations. Responsibilities include monitoring, coordinating and documenting all aspects of the project execution. Project also involved coordination with the local residence for maintaining access on driveways. Construction Cost $5 million (5/05 – 9/05)
- **Resident Engineer** – Material Testing Services for Rehabilitation of Mainline Bridge over the Saw Mill River Parkway, NYSTA. Work included testing of slump and air content for concrete items. (12/04-6/08)
- **Resident Engineer –** Resident Engineering Inspection Services for Protective Coating of Madison Avenue Bridge over Harlem River, Manhattan/Bronx, NY for New York City DOT. Work included installation of temporary suspended platform over Harlem River and Harlem River Drive for surface preparation and application of protective coating of the bridge. Project was performed safely ensuring a sound Maintenance and Protection of Traffic over Madison Avenue Bridge and Harlem River Drive including coordination with the Coast Guard to avoid disruption of marine traffic. Work also included surface preparation and application of protective coating; monitoring ambient and steel surface conditions for proper painting and gathering data for field measurements and monthly and final estimates and progress reports; air quality monitoring services; providing emergency response standby; calibrating and operating all monitoring equipment; reviewing worker blood lead level results and stopping paint removal work if it was not conducted in a safe and protective manner. Construction Cost $8.5 million (5/03 – 5/05)
- **Resident Engineer –** Construction Inspection As-Needed, TBTA Project GFM-405A, New York City. Work included dock repairs, concrete placement, concrete testing and mold casting, installation of barrier plates and rumble strips, removal of steel door frames, sewer replacement as well as manholes replacements, sewer lines and power lines, installation of unit heaters and toll booths. (3/03 – 4/03)
- **Resident Engineer –** Resident Engineer Inspection Services for reconstruction of 91st Place Bridge over LIRR, Queens for NYCDOT – Work included installing new traffic signals and street light systems, modifying existing catch basins, installing new drainage pipes and a new gas main, replacing an existing water main with a larger one. (12/2002)

HAKS

PAUL DIAMOND, P.E. *Construction Manager*

Education

Bachelor of Science, Civil Engineering, Manhattan College, 1972

Professional Registration

Professional Engineer – New York 1985, [redacted]

Summary of Experience

Mr. Diamond has over 33 years experience on construction projects. Examples of his experience are as follows:

- **Resident Engineer** - Construction Management Services, Croton Reservoir System, Putnam County, NY for NYCDEP. Project involves the reconstruction of Croton Falls Dam, Croton Falls Diverting Dam and Cross River Dam in Putnam County, NY. Construction cost $80 million. (3/07-present)
- **Project Manager** - Engineering Inspection Services for Reconstruction of Throgs Neck Area, Borough of The Bronx, NY Owner: NYCDDC Location: Bronx County, NY Construction Cost: $8.3 million. (2/06-10/06) Scope of Services for this project involved:
  - Reconstruction and replacement of combined sanitary sewer (15", 18" ESVP, 24", 30", 36", 48" RCP 76"x48" HERCP Class III) and 8" DIP water mains (including manholes)
  - Installation of sewer outfall in U.S. bulkhead area requiring special NYS DEC Wetlands Permit
  - Installation of catch basins and chute connection
  - Construction of new sidewalks including survey work for encroachments
  - Roadway work including placement of 6" open graded stone base over filter fabric, 6" concrete base and 3" asphalt wearing course
  - Pruning, transplanting, removal and planting of trees per direction of tree consultant
  - Relocation of utility poles in accordance with field survey
  - Identify encroachments and notifying as well as working with owners to remove/relocate encroachments Located curb where discrepancies existed
  - Made design recommendations on curb, sidewalk and roadway
  - Minimized new grade impact to properties by adjusting grades
  - Pavement markings, street name signs, traffic signs, street & traffic lights
  - Original contractor defaulted, worked with DDC, bonding company & new contractor to ensure satisfactory completion of project.
- **Resident Engineer** – Construction Inspection Services (CIS) for the NYSDOT Region 8 Term Agreement in Rockland, Westchester, Orange, Putnam, Dutchess, Ulster and Columbia Counties. Total construction cost is estimated at $35M. Construction operations include roadway milling and asphalt resurfacing in Westchester, Rockland, Orange and Ulster Counties; and roadway crack sealing, bridge cleaning and painting, bridge washing, highway repairs, bridge repairs, pavement markings and tree removals in all counties. (8/05-2/06; 10/06-3/07)
- **Resident Engineer** - Reconstruction of I-684, Region 8, NYSDOT. Work included reconstruction of 3.1 miles of highway and component rehabilitation of 5 bridges between Exit 2 and I-287. (11/02-7/05)

- **Resident Engineer** - Emergency Structural Repairs to Bridges, Region 8, NYSDOT. Work included heat straightening of steel members, permanent shoring of wingwalls, modifications to superstructure for clearance, bridge joint replacement and temporary shoring of bridge piers. (11/02-7/05)
- **Resident Engineer** – Potter Ave. Bridge over MNRR New Haven Line and NYS Thruway, Westchester County, NYSTA. Work included replacement of a 5 span bridge over active railroad. Maintenance and protection of existing catenary, signal and communication systems below the bridge work. (3/01-11/02)
- **Resident Engineer** – NYCDDC – Engineering Inspection Services, Replacement of Water Mains, Canal Street Area, New York City – Work included removing and disposing of high pressure water mains, hydrants, hydrant valves, rims and covers. Excavated test pits to uncover underground facilities. Managed project and ensured that all work was completed in compliance with the contract requirements. Construction Cost $8.7 million (01/01 – 03/01)
- **Resident Engineer** - Honeywell St. Bridge and Queens Blvd. Bridge, NYC, NYCDOT. Work included replacement of 21 and 18 span bridges over active railroad and the Sunnyside Railroad Yard, the largest Amtrak facility in the United States. Extensive hazardous waste removal. The catenary system was supported by the existing bridges. Prior to demolition, new foundations and catenary support structures were constructed for the replacement catenary system. (11/96-1/01 and 9/82-12/86)
- **Resident Engineer** - Madison Ave. Bridge, NYC, NYCDOT. Work included rehabilitation of a 307 ft. swing bridge, complete replacement of the main span floor system, repairs to the main trusses and replacement of 1200 ft. of approach viaducts over the Harlem River. The project also included painting using Class “A”containment, complete mechanical and electrical replacements, rehabilitation of the fender system, new submarine cables, new overhead lighting and replacement of the control houses. Construction cost $45 million. (11/96-1/01 and 9/82-12/86)
- **Resident Engineer** - Riverside South, NYC, Trump/New World. Work included construction of 3 bridges over active railroad and 2 roadway structures on 100,000 cy to fill to extend the grid of Manhattan streets over the old Penn Central train yard. (11/96-1/01 and 9/82-12/86)
- **Resident Engineer** - Rockaway Park Station, Brooklyn, NYCT. Work included construction of an addition to an existing train station, new station structure, track work signals and communications, and all station finishes. (11/96-1/01 and 9/82-12/86)
- **Resident Engineer** - 3 Wantagh Parkway Bridges, Long Island NYSDOT. Work included widening of bridges (fixed and movable), new barrier, paving, railing and lighting. (11/96-1/01 and 9/82-12/86)
- **Resident Engineer** - Asst. Resident Engineer - Linden Yard Development, Brooklyn, NYCT - Construction of a new railroad yard, new 2000 ft long elevated transit structure, 8000 ft, of track, office and utility buildings, service roads, storm drains, sewers, retaining walls, lighting, and fueling stations. Extensive signal and communication facilities constructed to tie the new railroad yard into the existing system. (11/96-1/01 and 9/82-12/86)

HAKS

MAGDY A. ELKAFAFI, P.E. *Construction Manager*

Education

Bachelor of Science, Civil Engineering, 1996

Attended 12 graduate credits (Structure major) in CCNY

Professional Registration

Professional Engineer– New York 2001, [redacted]

Licenses and Certifications

OSHA 10-Hour, Construction Safety & Health Training Course, 2007

MPT ATSSA – Traffic Control Technician, 1999

Certified for Concrete Testing DDC/QMS

Professional Development Hour Credit – Practical Applications of FRP on Civil Engineering Structures

Member of the American Society of Civil Engineers (ASCE)

Summary of Experience

Mr. Elkafafi has over 20 years experience in construction inspection services. As Resident Engineer, Mr. Elkafafi is responsible for the on-site day-to-day operations of each project; adapting engineering techniques, procedures and criteria. He devises new approaches to solving problems, is knowledgeable of and performs standard discipline engineering activities on projects of relatively small size and complexity within the business line with minimal technical oversight and coordinates technical issues with other departments on projects including constructability requirements and reviews. He provides technical direction for specific tasks and assigns work to subordinate senior engineers, engineers, designers, drafters or project sub-groups. His representative projects experience includes:

- **Resident Engineer** – Resident Engineering Inspection, Trunk Water Main Replacement, Clove Road, Staten Island for NYCDDC – Work includes excavating pits, surveying the site, developing information for determining the exact route and layout of pipes, providing input to the fabricator to help manufacture the pipe. Construction cost $28 million (11/07 – present)
- **Resident Engineer –** Engineering Inspection Services, Reconstruction of 86th Street from Shore Road to Gatling Place, Brooklyn, NY for NYCDDC – Work included installing new granite, concrete and steel faced concrete curb, pigmented and un-pigmented concrete sidewalk, installing concrete base roadway and concrete bus pads, new hydrants, resetting/replacing subway vent gratings, surveying/location under-sidewalk vaults to maintain their structural integrity, installing new street and traffic lighting and special street light posts, providing emergency stand-by service to handle any unexpected areas of contamination encountered, documenting all work involving soil removal, sampling and disposal, overseeing and directing all activities involving environmental concerns. Construction cost $$26.5 million (4/07– 9/07)
- **Resident Engineer -** Engineering Inspection Services for the Construction of Water Mains on Richmond Road, Borough of Staten Island for NYCDDC. Construction cost $18.5 million. (5/06-3/08)
- **Resident Engineer -** REI Services for the Construction of Sanitary and Storm Sewers and Water Mains, Lenevar Avenue, Staten Island, NY for NYCDDC. Work included reviewing trap surveys to determine sewer house connection elevations and their viabilities to be connected to proposed sanitary sewers. Also reviewing drill and cut sheets for proposed

sanitary and storm sewers. Contract drawings called for sewers at specific locations to be installed on piles. Pile-driving equipment and procedures were reviewed; utilized the EN driving formula for timber piles to determine refusal limit. House connection assessment cost was prepared and sent to the NYC comptroller office. Also providing construction supervision for the construction of storm water best management practices and associated facilities in Lemon Greek. Work includes erosion and sediment control practices in bluebelt areas, the installation of head and retaining walls, planting and landscaping. Duties include managing the entire project and ensuring the accuracy and completeness of work activities in conformance to the project plans and specifications. Computer programs have been created to expedite job performance significantly. Also coordinate progress meetings, brief local politicians and community representatives on project status. Construction cost $18 million. (08/03-11/06)

- **Resident Engineer** - Engineering Inspection Services for the Installation and Testing of a new 36" Water Main and Appurtenances on Cropsey Avenue from Bay Parkway to Stillwell Avenue, Brooklyn, NY for NYC Dept. of Design & Construction. Work included installation of 10", 12", 15", 18", ESVP storm sewer and 24", 30", 36", 42", 54", RCP storm sewer, both encased in concrete and/or on piles; installation of 10", 12", 15", 18", ESVP sanitary sewer encased in concrete and/or on piles; installation of 48" and 36" steel trunk water main; installation of 20", 12" and 8" distribution water main; installation of catch basins and chute connections; installation of curbs, sidewalks and pedestrian ramps; removal and disposal of contaminated (non-hazardous) soil; roadway trench restoration included 8" concrete base and 3" asphalt wearing course; installation of street lighting, traffic signals and fire alarms; maintenance and protection of traffic. He received a Letter of Recommendation form NYCDDC for his exemplary performance on this project. Construction cost $12.4 million. (12/01-08/03)

- **Assistant Resident Engineer** - Reconstruction of Catch Basins, etc. (SE-CB-02K/R); Construction of Pedestrian Ramps as Necessary (HWP20000R); and Installation of Sidewalks, Curbs & Pedestrian Ramps (HWS20098X) for NYC Dept. of Design & Construction. Duties included assigning daily inspection tasks and coordinating work schedules with contractors. Checked the accuracy and completeness of all inspectors' daily reports in conformance with the project plans and specifications as well as the MURK format; created computer tracking system for sidewalk assessments to expedite job performance significantly; coordinated monthly progress meetings; briefed local politicians and community representatives on project status. Maintained meeting minutes and correspondence between all parties involved with the construction contracts. (9/99-12/01)

- **Senior Field Engineer** - Bridge Component Rehabilitation, Citywide (HBCRE94CR) for New York City DOT. Work included preparing preliminary sketches of deteriorated members and designing repairs in accordance with the contract documents and NYSDOT specifications. Inspected and tested the tension necessary for high strength bolts used in structural steel connections as required by contract plans and in conformance with AISC; supervised and inspected bridge deck slab waterproofing process; supervised and inspected bridges repairs which included replacing abutment wall reinforcement, portion of bridge deck, built-up floor beam webs, flanges and connection angles. (4/99-9/99)

HAKS

HESHAM KOTBY, P.E. *Construction Manager*

Education

Bachelor of Science, Civil Engineering, Alexandria University, Egypt, 1984

Professional Registration

Professional Engineer – New York 1997, [redacted]; Delaware 1997, #[redacted]

Licenses and Certifications

NYCDOT **CCSI** Certified Concrete Inspector

Professional Development Hour Credit-Practical Applications of FRP on Civil Engineering Structures

OSHA 10-Hour Construction Safety and Health Training, 2007

OSHA Confined Space Awareness. 1910.146, 2008

Summary of Experience

Mr. Kotby has more than 24 years of experience as a Project Manager and as a Resident Engineer. As a Project Manager, Mr. Kotby is currently responsible for the oversight of all NYCDDC projects. Mr. Kotby attends all projects meetings, interacts with clients and advises the appropriate parties when advice is needed. Mr. Kotby assumes a proactive role when dealing with project issues.

As a Resident Engineer, Mr. Kotby was responsible for the on-site day-to-day operations of each project and coordination of contract work with utility companies and other governmental agencies. Other tasks include, but are not limited to, the preparation and modification of reports, inspection of construction site progress and monitoring of specifications and construction safety standards. His representative project experience includes:

- **Project Manager** – South Brooklyn Marine Terminal Infrastructure Rehabilitation for NYCEDC. This project is located in the Borough of Brooklyn, NY. It is a water front project, from 2nd Avenue to the pier line, and from 39th Street to 29th Street. It involves partial removal of building structure at the north-west side, including asbestos abatement; strengthening of the two remaining wings and construction of closure walls. Placement of security fence in the perimeter of the property (5,800 ft). Removal of several rail road tracks (8,000 ft) and construction of two new rail road tracks coming from 1st avenue (2,300 ft). Removal of existing light poles. Erection of new high mast light poles throughout the property including deep foundations. Installation of 3 electrical substations, 38-15kV, 15kV-480V, 15kV/27mV. This work includes trenching for new conduits for the light poles and service feeds, fiber optic cable for communications, manholes and hand holes. Construction Cost $68 million (2009 – 2011)
- **Project Manager / Resident Engineer** – REI Services for the Reconstruction of 86th Street from Shore Road to Gatling Place, Brooklyn, NY. $26 million NYCDDC. The project requires the installation of a 72” trunk water main, sewers, new curbs and sidewalks as well as reconstruction of the roadway. Construction Cost $3.5 million (7/06-Present)
- **Project Manager** – REI Services for the Reconstruction of Complex Ped. Ramp, Brooklyn, NY, NYCDDC. The project requires the installation pedestrian ramps various locations around the borough of Brooklyn. Construction Cost $9 million (7/06 – Present)
- **Project Manager** – REI Services for the Reconstruction of Paulding Ave Area, Bronx, NY, NYCDDC. The project requires the installation water mains, sewers, curbs and sidewalks as well as a new roadway. Construction Cost $39 million (11/06 – Present)

- **Project Manager** – REI Services for the Reconstruction of 183rd Step Street, Bronx, NY, NYCDDC. The project requires the replacement of 120 ft high stair case and the stabilization of the rock retaining wall, curbs and sidewalks as well as roadway restoration. Construction Cost $7 million (4/07 – Present)

- **Project Manager** – REI Services for the Reconstruction of North Rail Rd area, Staten Island, NY, NYCDDC. The project requires the installation of a water main, storm and sanitary sewers, new curbs and sidewalks, reconstruction of the roadway and the rehabilitation of two BMP areas for NYCDEP. Construction Cost $38 million (6/07 – Present)

- **Project Manager** – REI Services for the Reconstruction of Clove Rd, Staten Island, NY, NYCDDC. The project requires the installation of a 72" trunk water main, sewers, new curbs and sidewalks as well as reconstruction of the roadway from SI Expressway service Rd to Victory Blvd. Construction Cost $29 million (3/07 – Present)

- **Project Manager** – REI Services for the Rehabilitation of 48" Trunk Water Main in Madison Ave, NY, NY, NYCDDC. The project requires the lining of 48" trunk water main using HDPE type of lining; replace sections of the existing 48" and 36" trunk water mains and roadway restoration. This project is the first of its kind in the New York City area and serves as a test to decide whether or not this method is cost effective and/or environmentally friendly. This method was also chosen to minimize the impact of construction on the adjacent surroundings. This project runs from 79th street to 36th street along Madison Ave. Construction Cost $19 million (1/07 – Present)

- **Project Manager** – Construction Management Services, Hunts Point Streetscape Project in Bronx for NYCEDC. Scope of work included landscaped medians, new pavements, sidewalks and curbs, new street lighting, traffic signals and street signs, site furniture and general site landscaping. Construction Cost $10 million (10/2009)

- **Project Manager** – Over see the close outs of All NYCDDC Projects including:

  REI Services for the Construction of Sanitary and Storm Sewers and Water Mains in Lenevar Avenue between Ramona Avenue and Ramapo Avenue and Vicinity, Borough of Staten Island for NYCDDC. Construction Cost $18 million.

  - Resident Engineering Inspection Services for the Reconstruction of the Throngs Neck Area in the Bronx, NY. Construction Cost $8.3 million.
  - Requirements Contract for Resident Engineering Inspection Services for the Borough of Brooklyn, NY for NYCDDC. Fee $5.5 million.
  - Construction of Sanitary and Storm Sewers and BMP in the Rossville Area, Borough of Staten Island for NYCDDC.
  - REI Services for the Construction of Distribution Water Main/Extensions Replacement (New Buildings), Staten Island & Brooklyn, NY for NYCDDC.

- **Resident Engineer** - Resident Engineering Inspection Services for the Installation of Combined Sewers and Water Main in along with subsurface remediation at Prospect Park West, Borough of Brooklyn, NY for NYCDDC. Construction Cost $1.4 million (1/06-6/06)

HAKS

VICTOR M. SANCHEZ, P.E. *Construction Manager*

Education

Master of Science, Geotechnical Engineering Polytechnic University, New York, NY, 1989

Bachelor of Science, Civil Engineering, Polytechnic University, New York, NY, 1985

Professional Registration

Professional Engineer – New York 2004, [redacted]

Licenses and Certifications

Slope Stability and Landslides Certification Course, Wisconsin University, Madison, 1986

Biotechnical Slope Protection and Erosion Control Certificate Course, Wisconsin Univ., Madison, 1986

Summary of Experience

Mr. Sanchez has over 25 years experience in Geotechnical, Civil Engineering and Construction Inspection. Examples of his representative projects are as follows:

- **Resident Engineer** – Resident Engineering Inspection, Infrastructure Reconstruction at South Brooklyn Marine Terminal, NYCEDC –Work includes the following elements: 1. Structural. Abating and demolition of the west end of a large warehouse, splitting it into two buildings, and closing up the ends of the new buildings with new foundations, concrete walls, structural steel and façade. 2. Civil. Abating and demolishing small buildings; removal and installation of railroad tracks; installation of a security fence. 3. Electrical. New power distribution service; installation of three new electrical substations 37, 27, and 15 kV, transformers and duct banks; installation of 20 high mast light poles (1/09-present)

- **Resident Engineer** – Construction of two ramps connecting the approach to the Macombs Dam Bridge, with two parking garages for the new Yankee Stadium. Work includes modification to the existing sidewalks, construction of the reinforced concrete ramps, relocation of a light pole, installation of new structural beams, diaphragms, bridge bearings, and armored joints. Responsible for the verification of work and coordination of work with the general contractor, designer, and NYCDOT. Construction cost $1.0 million (11/08 -10/09)

- **Resident Engineer** – Installation of sidewalks at various locations in Manhattan for NYCDDC. Supervising staff of five inspectors and office engineer, assuring all construction is in accordance with contract plans and specifications. Responsibilities include project budget control, contractor payment estimates, verification of completed work and quantities, interaction with community boards, coordination with schools, parks and residents adjacent to various work sites. Construction cost $3.8 million. (8/07 – 11/08)

- **Controlled Inspections Engineer** – Conducted inspections at several schools in the Bronx for the School Construction Authority, including soils, concrete reinforcement and fireproofing; pile driving inspections and pile testing to verify piling installations met specifications; testing concrete structures with ultrasonic rebar locator to determine if reinforcements were correctly sized and spaced. Inspections for NYC Department of Design and Construction at World Trade Center site, of temporary support of pedestrian bridge and

control excavation of ground around it; retrofitting construction inspection of fire houses in Brooklyn involving excavation and bracing of walls. (3/07 – 8/07)

- **Assistant Resident Engineer** - Reconstruction on the Brooklyn Queens Expressway from Flushing/Classon Avenues to Nassau Concord Viaducts for NYSDOT. The work includes deck replacement and superstructure repairs for the Park Avenue and Nassau/Concord viaducts. The deck replacement includes replacement of all expansion joints, replacement of steel railing with single slope concrete barrier and drainage improvements for both viaduct structures. The Park Avenue viaduct will be widened (by approximately 0.6 m on each side) in addition to seismic improvements, fatigue upgrades and replacement of bearings. Also included is the related work on associated approaches and ramps as well as installation of new lighting and lead abatement/painting of the steel. This project includes traffic management strategies such as construction phasing, lane closure restrictions, night and weekend work, critical path method scheduling provisions, involvement with the communities and many New York City agencies, etc. Construction cost $124 million. (11/05 - 3/07)

- **Professional Engineer –** Under contract with the NYCTA conduct an inspection of a concrete plant in Spokane, Washington, producing concrete railroad ties. Coordination of the production of 2,000 concrete ties and inspection prior to shipment. Responsibilities include approval of the concrete plant and accepting production. Prepare protocol to be used in the concrete plant/concrete ties inspection. (12/06 -2/07)

- **Senior Inspector** - Resident Engineering Inspection Services for Reconstruction of Williamsburg Bridge Contract No. 8 Miscellaneous Rehabilitation of Main Bridge for NYCDOT. Rehabilitation work includes removal and replacement of structural steel bracing in main towers as well as in the intermediate towers, replacement of MTA track hangers, new inspection traveler system under main span, replacement of inspection platforms in intermediate towers, replacement of cable saddle stoppers, replacement of bridge bearings, installation of reinforcement plates above roadway in columns of main towers and below roadway in intermediate towers, rehabilitation of VMS system, cleaning, priming and painting of bridge structure and installation of VMS, ITS, LCS and FBOS systems. Construction cost $173 million. (10/03-11/05)

- **Senior Inspector** - Resident Engineering Inspection Services for the demolition and construction of a new bridge and access ramps on the Belt Parkway over Ocean Parkway in the County of Brooklyn. This is a design/build project that includes replacement of a 20" water main in coordination with DEP, new pile foundation, new bridge piers, new abutment walls, wick drains around abutment walls, tree relocation, new inverset deck placement in the three spans, complex and extensive MPT that included detours during construction, the construction of a temporary bridge to secure traffic in six lanes at all times on the Belt Parkway and realignment of Ocean Parkway roadway. Construction coordination with adjacent hospital and high school. (8/03 – 10/03)

HAKS

NILESH (NICK) A. SHAH, P.E. *Construction Manager*

Education

Master of Science, Civil Engineering, Stevens Institute of Technology, New Jersey, 1994

Bachelor of Science, Civil Engineering, Sardar Patel University, India, 1985

Professional Registration

Professional Engineer –New York 1997, [redacted]; Delaware 1989, [redacted]

Certification

NJTA Track Safety Training Class, 2010

Summary of Experience

Mr. Shah has over 21 years of experience in on various construction projects.

- **Senior Geotechnical Engineer** - Continental Airlines Global Gateway Program at Newark International Airport, NJ, **Port Authority of New York and New Jersey**. As a Senior Geotechnical Engineer, responsibilities included oversight of the installation of over 4,000 piles which consisted of 12" diameter steel pipe and 8" diameter mini piles supporting the expansion of Terminal C, reconfiguration of the access roadway to the terminal, and the enclosure of an airside drainage ditch about a half-mile in length. When low overhead and/or vibrations to existing structures were an issue, mini piles were used. The threaded joint casing was installed to the full depth of the pile. After the tremie pipe was placed to the bottom of casing and flushed with water, grout was pumped through the tremie pipe to top of pile. After inserting a center reinforcing bar the casing was withdrawn to a specified elevation while pressure grouting continued to bring grout to top of casing. Static load tests were later performed. Construction Cost $1.5 billion (8/98 – 2002)

- **Senior Geotechnical Engineer** - Terminal 4 Redevelopment and Landside Roadways at JFK International Airport, NY, **Port Authority of New York and New Jersey**. As a Senior Geotechnical Engineer, responsibilities included oversight of the installation of over 3,400 piles supporting the construction of a new international arrivals terminal and the reconfiguration of the access roadway to the terminal. The pile-testing program included dynamic and pile integrity I compression, lateral and tension tests. Construction Cost $1.8 billion (8/98 – 2002)

- **Resident Engineer** – Resident Engineering Inspection Paulding Avenue Area, Bronx, NYCDDC – Responsibilities included the replacement and regarding of worn and deteriorated streets, curbs, pedestrian ramps and geometric alignment modifications, new street lighting, drainage and environmental studies, and study of traffic patterns. (7/08-9/09)

- **Resident Engineer –** REI Services for Reconstruction of Step Street at East 183rd Street Borough of the Bronx for NYCDDC. Responsibilities include demolition of the north and south stairs and replacement with new stairs, structural steel installation (box beam gutter) including expansion bearings, reconstruction of sidewalks, utility lines, replacing lights, traffic signals, roadway pavements, pavement markings, stabilization of the rock face by installing rock anchors and protection of the rock face by installing wire mesh and anti-climb fences. Construction Cost $5 million (5/07-present)

- **Resident Engineer** - Downtown Flushing Pedestrian Project, Flushing, NY, NYCEDC. Resident Engineer for this project to provide pedestrian amenities at various locations within Historic Downtown Flushing. Project includes rehabilitation of the Lippmann Arcade that connects Roosevelt Avenue to the Municipal Parking lot, sidewalk and roadway rehabilitation on 39th Avenue between Union Street and 138th Street and at the intersection of Bowne Street and 37th Avenue. In addition, sixteen historic sites will receive pedestrian amenities such as lighting, signage, historic markers and inlaid thermoplastic crosswalks. Construction Cost $5 million (7/05-5/07)
- **Resident Engineer** - Rehabilitation of Lincoln Road Bridge, Brooklyn, NY, NYCDOT. Resident Engineer responsible for oversight of the removal and reconstruction of the existing bridge including sidewalks, curbs and approach roadways. Demolition of the upper portion of existing abutments to remain as a retaining wall, construct new integral abutment on Steel H piles driven behind the existing abutment, new parapet. Installation of new utilities under new sidewalk and provide support for existing utilities. Construction Cost $8 million (5/04-6/05)
- **Assistant Resident Engineer** - Reconstruction of I-87 & 1-287 from Tappan Zee Toll Plaza to Saw Mill River Parkway, Westchester, NY, NYSTA. Assistant Resident Engineer for this $190M project, which included the removal and reconstruction of multiple steel girder bridges, the construction of new flyover ramps, rock blasting and excavation, drainage and lighting improvements, retaining and noise wall construction, grading and asphalt concrete paving. Construction Cost $190 million (2003-4/04)
- **Project Engineer** – Hill View Reservoir, Yonkers, NY, NYCDEP. Project Engineer responsible for monitoring of instrumentation in the embankment, beneath the reservoir bottom slabs and dividing wall during the drawdown of the reservoir basins (one at a time) for construction of a concrete buttress to stabilize the dividing wall. (1999-2001)
- **Resident Engineer/Assistant Resident Engineer** - Bronx-Whitestone Bridge Rehabilitation (End Ramps and Approach Slabs), NY, MTA - Bridges and Tunnels. Worked as a Resident Engineer/Assistant Resident Engineer for another consultant on this project. He took over as Resident Engineer after some initial problem and worked successfully on the project. Responsibilities included oversight of the removal of existing overlay replaced with rapid setting LMC, partial and full-depth repairs of deck. Work included replacement of missing gutter plates, installation of weep pipes, removal and replacement of deck expansion joints, bearings and damaged finger joint. Construction Cost $10 million (1997-1998)
- **Chief Inspector/Office Engineer** - Routes I-278 & 440 Improvements, Staten Island, NY, NYSDOT. The project included replacement with new HPBO corrugated beam guide rail, overhead signs superstructures and landscaping improvements for various structures and roadways. Construction Cost $10 million (5/95 – 3/97)
- **Chief Inspector/Office Engineer** - Rehabilitation of 12 Bridges, various State Highways, Staten Island, NY, NYSDOT. Project included installation of new & existing structural steel, including the structural lifting operation for replacing cap-bearing, partial and full-depth concrete repair for approach and deck slabs. Construction Cost $35 million (5/95 – 3/97)

HAKS

ROBERT MILO, P.E. *MEP Construction Manager*

Education

Bachelor of Science, Mechanical Engineering University of Tirana, Tirana, Albania, 1986

Certificate in Computer Programming-Mainframe Globe Institute of Technology, NY, 1999

Professional Registration

Professional Engineer – New Jersey 2010, [redacted]

LEED AP, 2010

Certification

NYCDOB 4-Hour Supported Scaffold, 2009

Summary of Experience

Mr. Milo is a Professional Engineer in Mechanical Engineering and LEED Green Associate. He has an in-depth understanding of mechanical systems and equipments, expertise with building systems for residential and commercial construction, solid understanding of mechanical and electrical installations, strong background in computer software and hardware, solid communication skills, strong organizational problem solving and follow-through skills and is able to work independently and as a cooperative team member. Following is a list of his representative experience:

- **Chef Inspector** – NYCDEP – Construction Management Services, Alley Creek Pump Station Upgrade, Queens – Work includes complete upgrade of the existing Old Douglaston Pump Station with renovation/rehabilitation of the existing structure and process equipment, and HVAC, plumbing, electrical and associated controls work. Also included demolition, rehabilitation and reconstruction of two existing outfalls, which will involve temporary roadway construction through adjacent wetlands to provide access, Start- Up testing of Mechanical Electrical and Plumbing, Balancing of HVAC systems and Instrumentation and Commissioning. Construction Cost $30 million. (11/09-Present)
- **Inspector** – Metro North Railroad – Construction Inspection, Harmon Croton Yard Replacement Phase III and Additional Facilities, Harmon, NY – Work included removal of existing tracks, pavements and electrical feeds, construction of pile-supported foundations for a coach shop, a locomotive shop and an oil water separator system, replacement of more than a dozen realigned tracks, and overhaul of two electrical substations and associated electrical work. Reviewed shop drawings for mechanical system and start-up testing procedure, inspecting testing-adjusting-balancing and commissioning of M E P systems on both shops. Performing As-built for underground and above ground utilities. Construction Cost $300 million. (08/07-10/09)
- **Senior Mechanical Inspector** - Quality Assurance staff member for building assessment project in New York City Public Schools. Trained and mentored staff in assessing building condition for mechanical discipline. Monitored quality of work done by mechanical engineers on-site as well as provided solutions in eliminating or minimizing deficiencies that buildings have had in terms of initial cost and operating costs. Designed the menu to be used by mechanical engineers on site to identify mechanical systems and their components, with condition and deficiency rating. Work included physical surveys and preparation of assessment reports on building facades, interior and exterior structural elements, roofs, mechanical and electrical systems, ADA compliance and site improvements. These reports

assisted the SCA to maintain the stock of schools and administrative buildings in structurally sound and water tight condition under the Capital Plan. Assessments were undertaken for site areas, building envelope (exterior), interior and transportable/temporary units. Site inspection includes paved and unpaved surfaces, landscape, site drainage, lighting, playgrounds, street furniture, etc. Building inspections include all exterior and interior components such as façade, roof, stairs, structure, doors, and windows, mechanical electrical and plumbing systems. (2004 – 2007)

- **Mechanical Project Manager -** Oversaw the administration of construction projects encompassing all phases of the construction project cycle. Supervised, provided guidance to, and coordinated efforts of the planning, design and construction management activities. Assigned personnel within construction project environment. (1998-2004)
- **Supervisor** - Designer and Field Supervisor for mechanical work (heating and air conditioning) on new commercial and institutional projects (schools, offices and governmental buildings). Supervised installation of heating/cooling equipment, piping, pumps, ductwork, controls and other accessories. Performed field survey on renovation project, preparing observation reports, giving recommendations, preparing the design and supervising the construction work. (1990-1997)
- **HVAC Designer** – Mechanical Design Institute, Tirana, AL. Designed HVAC systems for schools, offices and other governmental buildings. Load calculation, fresh air calculations, equipment sizing and selection. Participated in coordination meetings with government officials and architects. (1986-1990)

HAKS

HAROLD M. PALMER, P.E. *MEP Construction Manager*

Education

Bachelor of Science, Mechanical Engineering, Polytechnic University of New York, 1987

Professional Registration

Professional Engineer –New York 1996, #0[redacted] Connecticut 2002, #[redacted]

Licenses and Certifications

NJSAT Asphalt Paving Construction Technologist, 2003

Traffic Control Coordinator, Rutgers, The State University of New Jersey, 2003

OSHA 10-Hour Construction Safety and Health Training Course, 2009

Summary of Experience

Since 1987, Mr. Palmer has had progressive experience in transportation construction projects. Beginning as a junior engineer with NYSDOT, he has served as an Office Engineer, Field Engineer, Assistant Engineer-in-Charge, and Resident Engineer on bridge, roadway, and railroad projects in the New York metropolitan area. Examples of his experience are as follows:

- **Resident Engineer** – REI Services in connection with the Emergency Reconstruction of Borden Avenue Bridge for NYCDOT. Responsibilities include supervising HAKS inspection staff to oversee contract work to ensure conformance to contract plans and specifications; ensure conformance to HASP and safety of public, contractor, consultant, and agency personnel; review project submittals, RFI's, etc and maintain database of review status; review contractor payment request; review contractor's schedule; coordinate inspection and acceptance of material acceptance; chair weekly progress meetings; provide updates on progress to agencies. (1/09 – present)

- **Resident Engineer** – Resident Engineering Services, Vanderbilt Yard Reconstruction, Brooklyn, LIRR. Scope of work includes construction and relocation of rail yards and tracks, new tracks, integrated signals, new portal to existing tunnel. Estimated Construction Cost $300 million (12/06 – 11/08)

- **Geotechnical Engineer** – Construction Inspection Services for Harmon Shop Replacement - Phase III & Wheel True Facility, M-7 Bench Test Equipment and MTA Police K-9 Yard for Metro-North Commuter Rail Road. Scope of work for this project includes removal of existing tracks, pavements, and electrical feeds; construction of pile-supported foundations for a coach shop, a locomotive shop, and a wheel true facility, which entails the driving of over 1,500 taper tube piles, the construction of a new wheel true facility, a new coach shop, and a new locomotive shop; the construction of new employee parking lots; the replacement of over a dozen realigned tracks; overhaul of two electrical substations; and associated electrical work in the MNR Harmon Croton Yard. Construction Cost $300 million (12/06 – 07/07)
- **Resident Engineer** – REI Services for the Reconstruction of Metropolitan Avenue Bascule Span Bridge over English Kills, Brooklyn, NY for NYCDOT. Scope of work included removal of approach spans on structure and replacement of new approach slabs on grade; removal of load bearing walls and replacement of new concrete retaining walls on concrete piles and concrete pier walls; replacement and removal of stone-faced retaining walls,

railings and guide rails beyond existing approach slabs on structures; removal of flanking spans, support steel and replacement with new reinforced concrete slab on new structural steel; removal and replacement of existing grid deck and stringers of the main bascule span; cleaning and painting of superstructure which included blasting to bare metal, using a 3 coat paint system with vacuum containment. The "Safespan" decking system was employed suspended below the girders. Removal of bridge railing bascule span and replaced with four rail steel bridge railings with pedestrian fencing; removal and replacement of first and second floors of the operator house; removal of ACM pipe cover and replacement of non-ACM pipe cover; removal and replacement of machinery such as open gearing, shafting, couplings, bearings, brakes, sump pumps and machinery support; removal and replacement of electrical equipment such as electrical motors, control equipment, control desk, relay panels, service lighting, navigation lighting and traffic control equipment; install new current transformer cabinets, automatic transfer switch (ATS), step-up transformer and main circuit breakers; main power will be stepped up to 460 volts for motor operations, etc. Construction Cost $40 million (7/04 – 12/06)

- **Office Engineer** – NYC Dept. of Design & Construction, Pavement milling contract in the Bronx and Manhattan Counties in the City of New York. Monitored progress of milling operation, prepared payments, and prepared change orders for this project. Construction Cost $8 million (2/04 – 7/04)
- **Assistant Resident Engineer / Chief Inspector** – NYS Thruway Authority, I-87/I-287 from Tappan Zee Bridge to Saw Mill Parkway, Westchester County, NY. The project included complex maintenance and protection of traffic, extensive rock blasting, the reconstruction of two interchanges (8 & 9), the reconstruction of the entire mainline pavement, **11** new/reconstructed bridges, major construction of retaining walls, noise barriers, ITS, auxiliary lanes, replacement and upgrading guide rails, non-vegetative surface treatment, materials control, and environmentally sensitive issues crossing Talleyrand Swamp. Construction Cost $169 million (2/03 – 2/04)
- **Resident Engineer** – Amtrak, Installation of Fire Standpipe in East River and North River Tunnels, New York, NY. This project entailed the installation of greater than 75,000 L.F. of 6" fire standpipe in the Amtrak tunnels into and out of Penn Station. Construction cost $80 million (03/02 – 12/02)
- **Resident Engineer / Office Engineer** – NYS Thruway Authority, TANE 01-56, Pavement Repairs and Diamond Grinding on I-95, Westchester County, New York. Work included removal of the existing microchip asphalt, repairs to the underlying concrete pavement, rehabilitation of the existing roadway joints, and diamond grinding of the concrete pavement surfaces along a 14-mile portion of I-95. Contract work was performed at night due to lane closure restrictions. The project limits extended through residential areas and community concern regarding noise levels was considerable. Extensive communication with village mayors, local police departments, and village boards was crucial to the success of the project. Construction Cost $7 million (9/01 – 2/02)

HAKS

HARRY C. FOSTERIS, P.E. *Rail Road Construction Manager*

Education

Master of Engineering, City College City University of New York, 1981

Bachelor of Engineering, City College City University of New York, 1980

Professional Registration

Professional Engineer – New York 1990, [redacted]

Summary of Experience

Mr. Fosteris is a Professional Engineer with more than 27 years of experience in Resident Engineering, Construction Inspection, Project Engineering and Project Management for a variety of construction and project settings including railroad facilities and other transportation sector locations. He has directly applicable experience in elevator work at New York City Transit (NYCT) stations. Selected projects include:

- **Resident Engineer** - New York City School Construction Authority (SCA). Provided a baseline building condition assessment survey for all school facilities throughout the city (1,520 buildings including school buildings, administrative buildings, lease facilities, annexes, mini schools and temporary buildings) for the New York City Department of Education's Division of School Facilities (DOE/DSF).
- **Resident Engineer –** NYCT, Various Station Rehabilitation Projects. Supervised the construction of new electrical facilities and the installation of new elevators. (06/04-10/08)
- **Resident Engineer –** NYCT, Tunnel Lighting Rehabilitation of Broadway Line. $30 million, 26 track miles of tunnel. Supervised the installation of new tunnel lighting and the construction of 31 EDRs at 19 subway stations. (01/01-05/04)
- **Project Engineer –** NYCT, Department of Capital Program Management. Directly in charge of three major Tunnel Lighting Rehabilitation projects (over $50 million), and one in design phase. Worked under the direction of the Construction Manager with great latitude for the exercise of independent judgment responsible for management of construction, as well as administration of these projects. (06/96-10/97)
- **Administrative Engineer –** NYCT, Department of Capital Project Management. In charge of Rehabilitation of Tunnel Lighting, 8th Ave. Line, Project ($12.8 million). Supervised and supported the group of engineers executing this work, resolve problems that may arise, prepare cost estimates, B.S.S., processing and negotiating AWOs. (03/93-06/96)
- **Railroad Signal Specialist –** NYCT, Electrical Department, Capital Projects, Field (RRSS). Directly supervised subordinates preparing and implementing plans and specifications for new signal equipment being repaired or altered. Reviewed plans, drawings, specifications with reference to safety, standardization and economy in construction, practicality of installation, and efficiency of maintenance and operation of equipment. (05/89-03/93)
- **Resident Engineer A.E.E. –** NYCT, Rockaway Signal Modernization Project. Responsibilities included supervision of the railroad signal engineering activities with other NYCT projects at the same location. Evaluation of circuit and layout drawing, as well as quality of installation. While supervising construction on an operating railroad, was

responsible to see that the work was performed in a manner to minimize interference and maximize safety to the riding public. (09/85-05/89)

- **Resident Engineer –** NYCT, The Modernization of Signal Blocking at New Lots Line Project. Responsible for Design Engineering changes (as a result of field conditions). Coordinated schedule of work activities for the contractor working in the same vicinity with other projects. Monitored the timely completion of the work, preparation of field surveys and payment estimates to the contractor. (03/81-09/85)
- **Resident Engineer –** NYCT, Bushwick-Boerum substation in Brooklyn. $10.3 million. Supervised the construction and installation of new electrical equipment, fire alarm, intrusion alarm and CCTV as well as testing and placing in service new rectifiers and transformers.

HAKS

ILYA GOLOGORSKIEY, P.E. *Coating Construction Manager*

Education

Bachelor of Science, Civil Engineering, University of Civil and Industrial Engineering, Kiev, Ukraine, 1986

Professional Registration

Professional Engineer – New York 2008, [redacted]

Licenses and Certifications

NACE Coating Inspection Technician

ACI Concrete Testing Technician – Grade I, 2003

NYCDDC Quality Assurance Bureau for Performing Concrete Field Testing

Summary of Experience

Mr. Gologorskiy has over 24 years of experience as a Resident Engineer. Some of his representative projects include:

- **Resident Engineer** – Reconstruction of Sands Street for NYCDDC. Work includes installation of new bike lane and reconstruction of street drainage system; concrete curbs and sidewalks; concrete base and asphalt pavement; 12" combined sewer; 20" distribution water main; street lighting, traffic control and fire alarm systems. Construction Cost $4 million (2008 – present)

- **Resident Engineer** – Reconstruction of Flushing Avenue for NYCDDC. Scope of work includes reconstruction of 30" to 72" trunk water main; 8" to 20" distribution water main; 15" to 54" combined sewer; street drainage system; concrete curbs and sidewalks; concrete road base and asphalt pavement; street lightning, traffic control and fire alarm systems. Project has partial NY State funding. Duties also include reviewing contractor's schedule (prepared with MS Project), requesting and/or implementing necessary adjustments during project duration; responsible for maintenance and keeping all contract documentation, computerizing contractor's payment and quantity record system, as-built drawings and support documentation; involving in reviewing and approval of trunk main geometry and fabrication drawings, road design drawings, sheeting design, etc; requesting from the contractor and/or utility companies all documents necessary for contract change orders; negotiating with contractor technical procedures and price for the work and materials under the change orders; estimating new items price and time and material needed; producing, submitting and getting approved 4 Overruns and 26 Change Orders for: Pier/Plate Protection System, Restoration of 32" Sewer with DEP Approved Lining Method, Curb Design and Lay-out, Additional Distribution Water Main, Building Underpinning, etc; renegotiating with the Contractor prices for the existing contract items; working with client agencies: NYCDOT, NYCDEP and NYSDOT; responsible for coordination with utility companies, sub consultants and community. Construction Cost $44 million (2004 – present)

- **Resident Engineer –** Installation of Pedestrian Ramps for NYCDDC. Work involved reconstruction of more than 2,000 corners in the borough of Brooklyn, NYC. Responsible for the crew of 5 inspectors and office engineer. Also worked close with the client agencies NYCDDC and NYCDOT. Construction Cost $4 million (2002 – 2004)

- **Office Engineer** – Installation of Pedestrian Ramps for NYCDDC. Work involved maintenance of all project documents per NYCDOT MURK including Inspector's Daily Reports, Payment Items, and monthly payment requisitions; keeping all office and project documentation (correspondence; data sheets; QA and DDC reports; approvals; etc); maintenance of computerized engineer's estimate system; maintenance of computerized contractor's payment and quantity record system using Microsoft Access database and Microsoft Excel spread sheets. (2000 – 2002)

- **Office Engineer** – Citywide Resurfacing Contract for NYCDDC. Work involved maintenance of all project documents per NYCDOT MURK including Inspector's Daily Reports, Payment Items, monthly payment requisitions; maintenance of computerized engineer's estimate system; maintenance of computerized contractor's payment and quantity record system using Microsoft Access database and Microsoft Excel spread sheets. (1999 – 2000)

- **Assistant Office Engineer** – Reconstruction of 16th Avenue Bridge, Brooklyn for NYCDOT. Work included assisting Office Engineer with record keeping in accordance with Manual of Uniform Record Keeping; assisting Office Engineer with revision of Inspector's Daily Reports; keeping records of safety and project meeting minutes. (1999 – 2000)

- **Inspector** – Route 9A Reconstruction. Work included inspection of water main replacement, installation of electrical lines for Con Edison, installation of new and adjustment of the old electrical boxes; performance of field tests, calculations, and maintenance. (1999 – 2000)

- **Inspector** – Sheepshead Bay Parking Garage Construction. Work included supervising the forms and reinforcement installation for the foundation of garage – pile caps and grade beams; performing the field measurements and calculations; preparing various structural details and sketched drawings. (1999 – 2000)

- **Inspector** – Citywide Resurfacing Contract for NYCDDC. Work included supervising the excavation, compaction of the subgrade, form preparation and pouring the concrete for the concrete curbs and sidewalks; supervising installation of the new concrete base for pavement, adjustment and modification of the existing utility structures, grinding of existing asphaltic concrete wearing course, paving of the new asphaltic concrete wearing course; performing field concrete tests including slump test, air content test and preparing of the cylinders for laboratory tests; performing maintenance and protection of the traffic during the construction; performing the field measurements and calculations for the estimating of the work quantities; performing the elevation measurements. (1998 – 1999)

HAKS

OMAR OCKEH, P.E. *Coating Construction Manager*

Education

Bachelor of Science, Civil Engineering, Memphis, Tennessee, 1987

Professional Registration

Professional Engineer –New York 1997, [redacted]

Licenses and Certifications

NACE Coating Inspector Program Level I and II

Radiological Safety and Nuclear Gauge Use Training Course

C-3 Supervisor/Competent person training for De-leading of Industrial Structures

The Practicing Institute of Engineering, Inc. – High Definition Survey (HDS); 3D Laser Scanning Course [redacted]

OSHA 10-Hour Construction Safety and Health Training Course, 2007

Summary of Experience:

Mr. Ockeh has over 17 years of experience in construction engineering, design and record keeping. As Resident Engineer, he is responsible for monitoring work progress on-site; ensuring conformance to engineering plans, specifications, maintenance of construction and safety standards, etc. His representative projects are as follows:

- **Resident Engineer** – REI Services for the Reconstruction of Paulding Ave Area, Bronx, NY for NYCDDC. The project requires the installation water mains, sewers, curbs and sidewalks as well as a new roadway. Construction Cost $39 million (11/06 – present)
- **Resident Engineer** – Engineering Inspection Services for Reconstruction of Throgs Neck Area in Bronx for NYCDDC. Scope of work included reconstruction and replacement of combined sanitary sewers, including 15- and 18-inch vitrified pipe, 24- through 48-inch reinforced concrete pipe, and 76- x 48-inch elliptical RCP; and 8-inch ductile iron pipe water mains with manholes; installation of a sewer outfall in a U.S.-designated bulkhead area requiring a special NYSDEC wetlands permit; installation of catch basins and chute connection; construction of new sidewalks including survey work for encroachments; road work including placement of 6-inch open graded stone base over filter fabric, 6-inch concrete base and 3-inch asphalt wearing course; pruning, transplanting, removing and planting of trees per direction of the tree consultant; relocation of utility poles in accordance with a field survey; installation of pavement markings, street name signs, traffic signs, street and traffic lights; gas main support and relocation; special care excavation. Construction Cost $8.3 million (10/06 – 11/06)
- **Resident Engineer** – REI Services for New York City's Department of Design and Construction on an As-Needed Basis. Currently working at Radcliff Avenue. This project included installation of 8" water main along Duncan Street and Radcliff Ave., as well as reconstruction of 8' x 6'6" , 8' x 4'6" combined sewer single barrel box culverts, and 36" concrete sewer pipe in various sections of the project, pile driving as needed and recommended by the designer, as well as roadway, curb, and sidewalk replacement. Duties included reviewing construction drawings and sewer box shop drawings, supervised the installation of the box culverts,

and sewer pipes, supervised the pile driving operation, contributed in the design of the new curb and roadway, negotiated and prepared the construction change requests, conducted and prepared the minutes of the progress meeting. Responsible for the finalization work of the project including, the water main field cards, as-built drawings, substantial completion and final payments. Fee: $3 million (11/04 – 05/06)

- **Resident Engineer -** Inspection Services and Environmental Monitoring/ Hazardous Waste Management for Protective Coating of Various Bridges for New York City DOT. Worked at 241st Street, Bronx. Work included surface preparation and application of protective coating; monitoring ambient and steel surface conditions for proper painting and gathering data for field measurements and monthly and final estimates and progress reports; air quality monitoring services; providing emergency response standby; calibrating and operating all monitoring equipment; reviewing worker blood lead level results and stopping paint removal work if it was not conducted in a safe and protective manner; maintenance and protection of traffic and construction safety. Construction Cost $4 million. (08/03 – 07/06)

- **Resident Engineer –** Construction Inspection Services, Newburgh-Beacon Bridge Expansion Joint Replacement, Dutchess and Orange Counties in NY for NYSBA. Scope of work included replacement of existing armored joints and plug joints with ten new asphaltic plug joints; replacement of twelve existing modular expansion joints with new modular expansion joints; full-depth concrete repairs; removal of concrete haunches at 47 floor beam locations. Construction Cost $1.5 million (7/2004)

- **Resident Engineer -** Protective Coating of Broadway Bridge over Harlem River, NYCDOT Bridge Painting. The Broadway Bridge is a movable bridge with lift span and tower structure. It spans over the Harlem River and Metro North, and carries NYC Transit tracks on top of structure. Reviewed shop drawings, Health and Safety Plan and other Contractor submittals. Supervised the erection of temporary work platform under the bridge, scaffolding system at the towers, building containment, and the abrasive blasting/protective coating of the steel structure. Coordinated work scheduling with Metro-North and NYC Transit railroads. Prepared payments for the contractor and railroads. (5/00-7/03)

- **Resident Engineer -** Protective Coating of Ten Bridges over Amtrak, NYCDOT Bridge Painting. On these bridges the contractor used abrasive blasting, hand tool and power tool methods of surface preparation. Duties included: reviewing shop drawings, Health and Safety Plan and other Contractor submittals; reviewing environmental and personnel blood lead levels; coordinating with Amtrak, Conrail (CSX), NYCDOT, USEPA and NYCDEP; reviewing and approving monthly invoices of contractor, Amtrak, consultant and subconsultant; conducting monthly progress meetings; preparing project record keeping in accordance with the NYSDOT Standard specs and MURK system; and preparing final package for the finalization of the project. (4/98-5/00)

HAKS

JEFFREY WRIGHT, P.E. *Coating Construction Manager*

Education

Bachelor of Science, Civil Engineering, Rensselaer, Polytechnic Institute, 1981

Professional Registration

Professional Engineer – New York 1986, #[redacted]

Licenses and Certifications

NACE Coating Inspector Training 2001, [redacted]

Individual Member of **NACE** - [redacted]

NYSDOT Bridge Inspector's Training Course, 1988

Bridge Climbing Class, 1994

C3- Supervisor/ Competent Person Training for Deleading of Industrial Structures SSPC, 1999

MPT ATSSA Traffic Control Supervisor, 2008

OSHA 10-Hour Construction Safety and Health Training Course, 2007

OSHA Confined Space Awareness, 2008

Summary of Experience

Mr. Wright has more than 26 years of experience in the design and inspection of structural steel and reinforced concrete structures with emphasis on the design and inspection of bridges. His experience includes the inspection of over 500 bridges and the load rating of over 150 bridges. His project involvement in bridge inspection has ranged from Assistant Team Leader to Team Leader to Quality Control Engineer to Project Manager and has inspected bridges from culverts to simple spans to suspension and trusses. Mr. Wright is very familiar with the day-to-day operations of the biennial inspection project including scheduling, cost control, coordination with railroads and utilities and client communication.

Details of these and other project past and present follow:

- **Project Director** – 2009-2010 Biennial Bridge Inspection & Design of Miscellaneous Repairs at the Marine Parkway and Cross Bay Bridges for the TBTA. The project involves the inspection of bridges, preparation of reports, and review of available plans, inventory updating, load rating verification and structural integrity evaluation of bridges which included updating database for various elements of the bridges. Fee $963,000. (4/2009 – present)
- **Project Director –** 2008-2009 Biennial and Interim Bridge Inspection of 689 bridges in 7 counties, Region 8 for the New York State DOT. The work involves the inspection of bridges, preparation of reports, and review of available plans, inventory updating, load rating verification and structural integrity evaluation of bridges using BIPPI. Fee $7.0 million. (4/2008 – present)
- **Project Manager** – Biennial and Interim Bridge Inspections in New York County, NYSDOT Region 11. Work involved inspection of 200 bridges with 2,800 spans. Overall project responsibility; ensuring quality of work; inspection scheduling; maintenance and protection of traffic scheduling and implementation; public notifications. Construction cost $5,575,000 (4/2008 – 3/2009)
- **Team Leader/Quality Control Engineer** – 2007-2008 Biennial Bridge Inspection & Design of Miscellaneous Repairs at the Henry Hudson and Queens Midtown Tunnel Approach Bridges (Group D) for TBTA. The work involved the inspection of bridges, preparation of reports, review of available plans, inventory updating, load rating verification and structural

integrity evaluation of the bridge which included updating database for various elements of the bridge. Construction cost $794,000 (8/2007 – 11/2008)

- **Resident Engineer** – REI Services for Superstructure Painting of Rip Van Winkle Bridge for NYSBA. The project involved blasting the existing 1,600' through truss portion of the bridge to a near white finish and painting with a zinc-rich epoxy primer and two-coat water based acrylic. Additional work included cleaning and repainting 9,950' of sidewalk railings. The existing paint contained lead, therefore class 1A containments were erected and all debris was classified as hazardous waste. The work was performed successfully over traffic and over the Hudson River. Construction cost $9.6 million (3/2007 – 4/2008)
- **Resident Engineer** – Construction Inspection Services, NYSDOT Region 8 Term Agreement. Work included roadway milling and asphalt resurfacing; roadway crack sealing, bridge cleaning and painting bridge washing, highway repairs, bridge repairs, pavement markings and tree removals in Westchester, Rockland, Orange and Ulster Counties. Construction cost $50 million (12/2006 – 2/2007)
- **Team Leader** – Biennial Bridge and Under Water Inspection in New York and Albany Division for NYSTA. Responsibilities included the inspection of the Tappan Zee Bridge under deck elements of the through truss as well as the towers and caissons. The inspection utilized the existing travelers under the bridge to inspect the bottom chords, floorbeams, stringers and curb support steel. The four main towers were inspected by climbing. The insides of the caissons were inspected by climbing the ladders and utilizing flash lights. Fee: $300,000 (10/2006 – 1/2007)
- **Resident Engineer** – Resident Engineering Inspection Services for the West Approach Rehabilitation of Mid-Hudson Bridge for NYS Bridge Authority. This project involved replacing the original concrete deck of the NYS Route 9W overpass to the Mid-Hudson Bridge with a new concrete deck on stay-in-place forms. New approach slabs and concrete barrier were included. In addition to the bridge work, over five lane miles of asphalt concrete pavement were milled and filled. Work included the installation of a half mile of fiber optic and electric power conduits for security work. As Resident Engineer Mr. Wright was responsible for budget, schedule, and quality of workmanship. Construction cost $2.9 million (3/2006 – 12/2006)
- **Resident Engineer** – Construction Inspection Services, Kingston-Rhinecliff Bridge Superstructure Painting, Kingston and Rhinecliff, NY for NYSBA. This project involved blast cleaning and repainting the 5,200 feet of deck trusses of this bridge over the Hudson River. Work included utilizing class 1A containment during blasting operations, as the existing paint contains lead. Hazardous waste removal and air quality will be closely monitored. The paint system consisted of a moisture cure zinc primer followed by a sealer stripe coat and two coats of a waterborne latex paint. Construction cost $11.5 million (3/2005 –2/2006)

HAKS

MOHY M. ABOTALEB, P.E. *Resident Engineer / Chief Inspector*

Education

Bachelor of Science, Civil Engineering, Alexandria University, Egypt, 1987

Professional Registration

Professional Engineer – New York 2005, #[redacted]

Summary of Experience

Mr. Abotaleb has over 20 years of experience in civil engineering and land surveying, 6 years experience in Design and AutoCAD, 4 years experience in Surveying, 2 years experience as an Estimator, 8 years experience as a Sanitary and Structure worksite engineer. Some of his major representative projects are as follows:

- **Project Manager** – Reviewed, Designed and prepared engineering reports and plans for multiple projects proposed in metropolitan NY.

- **Project Manager –** Managed and supervised the construction of Pre-engineered Garage. Prepared engineering reports and plans for relocation of the main water line. Site inspection and quality assurance of Packed Tower Aeration System for two water Wells, Witnessed water system pressure test, and pump test. Interpreted complicated drawings and assisted in feasibility study for alternative water source for Airport. Updated the design and approved shop drawings for rehabilitation of commercial swimming pool. Supervised the Dismantling and Demolition of an existing Incinerator and Designed drainage system for Village Hall. Designed detailed plans and specifications, prepared the design calculations, and handy-Drafting detailed plans for pump station for drainage system. Altered the design, Supervised the installation, Field measurements, Prepared As-Built records, and Drawings for water system alterations between two water wells. (2007)

- **Project Manager –** Prepared engineering reports, hydraulic analysis, design calculations, detailed plans and specifications, AutoCAD plans and specifications for gravity sewer systems, pump stations, force mains and temporary septic disposal systems. As Project Manager, provided analysis of sewerage house connection to existing sewer lines, sewer analysis of gravity sewer design systems to find design mistakes. Supplied grease trap calculations. Prepared pump station plans Operation & Maintenance Manuals and detailed plans and specifications including scan, trace existing site plan showing metes and bounds. Performed field inspections and took field measurements. Prepared Topographic Map and STP area plan from existing old contour map and aerial map and adjusted scales to locate the site boundaries and STP location. Assisted in the preparation of STP structure design. Prepared Septic System and water connection plans and specifications. Prepared as-built detailed plans. Assisted in engineering hydraulic analysis of storm drainage and ground water conditions. Assisted in preparing plans & specifications of electrical work projects. Assisted in reviewing shop drawings. Prepared detailed plans and specifications, and force main for sewage pump stations and prepared preliminary design plans. (2003 – 2007)

- **Survey Technician / Topographic Draftsman –** Prepared projects for Field, data collection reduction, compilation of deeds and analysis of filed maps to establish

boundary corners. Developed analysis for boundary included resolving numerous gaps and gores within the boundary limits and along adjacent property, hydrographic, right-of-way, utility information, topographic survey, and construction layout. Provided calculations for field data editing and office drafting of boundary, topographic and construction layout surveys. Collected and researched information from local, state, and federal agencies and municipalities for right-of-way and benchmark information. Prepared proposals for the county for boundary surveys. Coordinated research of subject parcel and surrounding parcels, highway plans and railroad plans. Assisted in design and drafting engineering drawings for subdivisions and commercial job sites including road and lot grading and drainage calculations. Researched zoning requirements, and reviewed title reports and other matters affecting real property. Drafted survey maps, surveys for permits, and construction of flood insurance for residential and commercial construction.

- **Project Engineer –** Performed field inspections and Prepared sections of an Operation & Maintenance Manual. Witnessed the taking of soil-borings. Prepared Excel work sheet to perform water consumption analysis and projected sanitary sewage flow for the projects. Prepared engineering surveys, hydraulic analysis, design calculations, detailed plans and specifications, reviewed shop drawings, inspected installations, witnessed leakage and mirror tests, reviewed contractor requisitions, prepared as-built drawings, prepared plan and inspected refurbishment operations to improve leaching capability of recharge systems. (2001 – 2003)

- **Civil Engineer / Estimator –** Prepared Quantity Estimates for projects of water supply, sanitary sewer, Booster pumps, pump station and force main projects for New York City School Construction Authorities. (2000 – 2001)

- **Architectural Engineer –** Assistant Model Maker / Draftsperson AutoCAD Operator preparing laser cut machine drawings. Interpreted AutoCAD 14 drawings and manipulated as necessary to match input requirements of laser cutting machine. Fit checked and adjusted model parts as needed. (1999 – 2000)

- **Civil Engineer –** Designed and implemented water pipe laying, drainage and storm sewers. Designed and implemented lift plants with their pressure and gravity lines. Prepared Estimates Quantity Tables and specifications for projects of buildings, Water and Sanitary Projects. Coordinated projects with The Saudi Government such as Municipality of Taif and Jeddah Cities, Electricity Department, Traffic Department, Telecommunication Department, Water and Sewage Department. Operated and maintained water networks, sewage and storm-water systems. Created general clearing drawings for maintenance of water networks, drainage and storm-water systems. Designed and carried out concrete construction of foundation concrete skeleton, building and finishing. Issued and searched purchase orders and prepared the company store program. Tested concrete samples and soil samples. Established and performed work schedule of water and sewage pipe laying projects. Implemented water and sewerage house connection lines. (1992 – 1998)

HAKS

LAWRENCE ALEXANDER, P.E. *Resident Engineer / Chief Inspector*

Education

B. S. - Civil Engineering, 1970, City College of New York.

M.S. - Civil Engineering, 1973, New York University

Professional Registration

Professional Engineer - New York 1974, [redacted] onnecticut 2000, [redacted]

Licenses and Certifications

CSI Construction Documents Technologist

OSHA Construction Safety & Health Training Course

Certified Site Safety Manager

7-Hour Refresher Course for Site Safety Manager, 2004

The Practicing Institute of Engineering, Inc. - High Definition Survey (HDS); 3D Laser Scanning, Course #PS000977

Summary of Experience

Mr. Alexander has over 37 years experience in project management and engineering pertaining to bridges, buildings, transportation and special structures. His representative projects are as follows:

- **Senior Engineer** - Building Condition Survey for New York City Housing Authority. Work includes condition surveys of approximately 3500 residential and facility buildings. The overall project objective is to provide NYCHA with a Capital Plan to maintain its building assets in a state of good repair for many years to come. Surveys are being undertaken for the site, buildings and facilities (assets). Site inspection includes paved and unpaved surfaces, landscape, site drainage, lighting, playgrounds, street furniture, etc. Building and facilities inspections include all exterior and interior components such as facade, roof, stairs, structure, doors, windows, finishes, electrical and mechanical systems. (5/05-present)

- **Resident Engineer** - Construction Inspection and Related Work at Johnson Houses, New York, NY for NYC Housing Authority. The construction work includes masonry (brick/block) installation and repair, reinforced concrete construction and repair, structural and miscellaneous construction. Determine the structural condition and the type and extent of repair required. During inspection, responsible for meetings, drawings and safety requirements, safety issues, compliance with OSHA regulations, NYC Building Code, regulations governing sidewalk sheds, license requirements, etc. Construction cost $23 million. (7/03-4/05)

- **Project Engineer/Site Safety Manager**- Construction Inspection and Related work at Vladeck Houses (Phases II&III) for New York City Housing Authority. Works included structural rehabilitation work of numerous apartments within the housing complex. This effort was done with no disruption to the housing residents. Items of work included architectural modifications; ceilings, thru slab reconstruction; masonry repair; concrete repair; roof parapet replacement. Construction cost $51 million. (6/99-5/03)

- **Project Engineer** - Design Services for the Rehabilitation of the Essex/Delancey Street Station Complex, Borough of Manhattan, NY for New York City Transit. Scope of work included topographic survey, structural inspection of the station elements including ceilings, walls, columns, platform surface, platform overhang and track bed, concrete

repair, steel column repair, platform repair, etc. Worked with the operator to obtain flagmen and track use without impacting operations. Also, prepared preliminary/final plans and cost estimates. Construction cost $30 million. (11/98-5/99)

- **Project Engineer** - Design/Construction Administration Services for the Rehabilitation of the 86th Street Station, Lexington Avenue Line, Borough of Manhattan, NY for New York City Transit. Scope of work included: prepared ADA compliance details for the platforms; completed topographic and utility surveys; preparation of preliminary/final survey & utility plans; review of shop drawing submittals; assisted the resident engineer on constructability issues; updated contract drawings resulting from unforeseen site conditions discovered during construction activities; coordinated with utility companies and obtained all necessary approvals; performed platform level survey including horizontal and vertical track clearance determinations; updated MTA Standard specifications as per project requirements; developed waterproofing details for sidewalk undersides above MTA structures; developed details for new sidewalk and MTA ventilation gratings; developed utility support details. Construction cost $25 million. (4/99-6/99)
- **Project Engineer** - Design/Construction Administration Services for the Rehabilitation of the 77th Street Station, Lexington Avenue Line, Borough of Manhattan, NY for New York City Transit. Scope of work included: prepared ADA compliance details for the platforms; completed topographic and utility surveys; prepared preliminary/final survey drawings and utility plans; reviewed shop drawing submittals; assisted the resident engineer on constructability issues; updated contract drawings resulting from unforeseen site conditions discovered during construction activities; coordinated with utility companies and obtained all necessary approvals; performed platform level survey including horizontal and vertical track clearance determinations; updated MTA Standard specifications as per project requirements; developed waterproofing details for sidewalk undersides located above MTA structures; developed details for new sidewalk and ventilation gratings; developed utility support details. Construction cost $21 million. (4/99-6/99)
- **Project Manager** - Design Services (Phase I-IV) for Rock Slope Protection at various locations in New York City, New York for New York State DOT. Major items of work involved field survey, aerial photography, ROW mapping; roadside clear zone evaluation, inspection of rock slope, drainage, existing highway lighting, etc.; provided collection of continuous (72) hour traffic volume data at selected locations; review and analysis of accident data for the various project sites; analysis of substandard geometric design features as part of the design services for the rock slope protection at various location in Bronx, Manhattan, and Staten Island; development of conceptual details for full rock-fall prevention involving scaling, recutting, cable netting, buttressing applying shotcrete, rock bolting, fencing, providing Jersey barriers as necessary, upgrading drainage system, improving lighting and guiderails and environmental impact evaluations; prepared of landscaping plan. Construction cost $10 million. (3/97-10/98)
- **Project Manager** - Biennial Inspection of Brooklyn Bridge for New York State DOT. Inspected multigrid steel beams, stringers at 3 panel points on the Manhattan side, 4 spans on the Manhattan approach, 1 multigrid span and 3 arches, inspected 24 arch spans on the Brooklyn approach. (4/96-12/96)

HAKS

ABDUL S. SOMAT, P.E. *Resident Engineer / Inspector*

Education

Master of Science, Civil Engineering (Highway / Transportation), Polytechnic University, New York, 1997

Diploma in Building Construction Management, NYU-SCE, New York, NY, 1991

Bachelor of Science, Civil Engineering, University of Guyana, 1986

Professional Registration

Professional Engineer – New York 2003, [redacted]

Licenses and Certifications

AWS Certified Welding Inspector, 2009

ACI Concrete Field Testing Technician – Grade I & II, 2009

ACI Construction Special Inspector, 2009

ICC Applied Fireproofing Special Inspector, 2009

ICC Structural Masonry Special Inspector, 2009

ICC Structural Welding Special Inspector, 2010

ICC Structural Steel and Bolting Special Inspector, 2010

Secure Worker Access Consortium (SWAC), 2009

OSHA 10-Hour Construction Safety and Health Training Course, 2009

NYCDOB 4-Hour Supported Scaffold, 2009

ASNT ACCP Level II, 2009

Magnetic Particle Testing Level II, 2009

Summary of Experience

Mr. Somat has over 24 years experience in Civil Engineering. His representative projects are as follows:

- **Project Engineer/Construction Inspector** – Assigned to George Washington Bridge, PANYNJ and Henry Hudson Parkway Bridge, Upper Deck Replacement (TBTA) NY. Responsibilities included the pre-bid review of drawings and specifications, development of site staging plans based on traffic conditions, structural analysis of shop drawings for temporary structures, estimating material and labor costs for change orders, design of changes to contract drawings based on field conditions, coordination and supervision of contractor's construction activities. On site field engineering included the rehabilitation of bridge approaches and superstructure elements, parapet and retaining walls, median barriers, curbs and sidewalks, decks, girders, drainage structures, installation of overpass bridge armored expansion joint, verified field construction of new sign foundation pedestals, transition barriers, drilling of 36 inch caisson for foundation through solid rock, removal and erection of bridge mount and overhead signs structures. (01/98 – 05/02)

- **Assistant Lab Director / Civil Engineer / Certified Special Inspector –** Responsibilities include assisting lab director in managing laboratory materials; reviewing inspectors concrete, soils, fireproofing and masonry reports Stamp NYS-P.E.; reviewing certified welding inspectors reports for CWI working in steel fabrication plant for clients PB-World, MTA, NYSDOT; performing welding and steel plates, angles and diaphragm fabrication for MTA Tappan-Zee Bridge rehabilitation; supervising rebar and formwork on site inspectors at World Trade Center Memorial site; signing off daily release for concrete placement for Port Authority of New York and New Jersey; preparing and training in-house inspectors and engineers for taking ICC certification exams for fireproofing, masonry, structural steel and bolting; approving timesheet and expense sheets for inspectors and engineers. (6/10 – present)

- **Certified Special Inspector** – Term Agreement for Surveying Services (TASS), Region 11, for NYSDOT. Work included planning, conducting, adjusting, and reporting surveys accomplished through GPA technology, establishing baseline,

benchmark and other control points, topographic surveys, utility and drainage surveys, property surveys, right-of-way mapping, photogrammetric control, cross-section surveys, control point identification, and preparation of survey plans. (11/09 – present)

- **Certified Special Inspector** – Construction Inspection of Structural Steel Repairs East Deck Truss Spans of Tappan Zee Bridge, NYSTA. Work included replacement of diaphragms, catwalks, deck trusses, floor beams, main trusses, fascia girders, stringers, gusset plates and bracings. Construction Cost $25 million (06/00 – present)

- **Certified Special Inspector** – Construction Inspection, World Trade Center Transportation Hub, New York City. Work includes Site preparation and underpinning of subway pedestrian tunnels, including demolition and removal of remaining existing and damaged structures, foundations construction and related excavations, full restoration of three station platforms and adding a fourth platform to accommodate construction phasing with ongoing PATH operations, vertical circulation (elevators, escalators and stairs), fare collection and Authority police facilities, operational spaces, and HVAC systems. Construction Cost $1.1 million (6/09 – present)

- **Certified Special Inspector** – Surveying Services for Building Addition and Traffic Study for Proposed Dynamic Care Facility at Nassau University Medical Center, Hempstead, NY. Work included locating drainage structures, utilities, street signs including size and text, pavement marking, bus stops, traffic signals, and traffic signal pull boxes, constructing a topographical base map of the Area C of Nassau University Medical Building, Parking Area and all roadways adjacent to the project site including a portion of Hempstead Turnpike. (6/09 – 10/09)

- **Certified Special Inspector** – Construction Inspection Services for Northern State Parkway and Emergency Repairs to Sagtikos Parkway Bridge over Long Island Expressway, Suffolk County, for NYSDOT. Work included removing portions of superstructure, installing new columns, cap beams, pedestal and bearings, repairing concrete pavement, installing guide rails and bridge railings, upgrading drainage systems, rehabilitation of bridge deck, installing armor joints using the Inverset Bridge System, maintaining and protecting traffic. (5/09 – 10/09)

- **Certified Special Inspector** – Surveying Services, Upper Level Roadway of Henry Hudson Bridge, New York City, TBTA. Work included topographic surveys, drainage structure investigations, establishment of grid and elevation for site assessment work, preparation of survey plans. (5/09 – 9/09)

- **Certified Special Inspector** – World Trade Center Site, Licensed Engineer responsible for control inspection of work and rebar installation at the World Trade Center Memorial. (04/09 – present)

HAKS

MARC S. WEINMAN *Chief Inspector*

Education

Bachelor of Science, Construction Management, Pratt Institute

A.A.S Const. Technology, NYC Technical College

Professional Registration

NICET IV Equivalent

Licenses and Certifications

ACI Concrete Field Testing Technician, 2009

PANYNJ – Certified Roadworker

Safety and Traffic Control Training

Work Zone Safety Inspection Instructor's Course

Fall Protection Training, NYSDOT

Night Time Work Zone Safety Training

OSHA 10-Hour Construction Safety and Health Training Course, 2008

OSHA 8-Hour General Industry Training

Hazardous Waste Site Operation Emergency Response (HAZWOPER)

Basic First Aid and AED– American Safety and Health Institute

Forklift Operator Course Attendance 101/2-F

Delehanty Institute-1,000 hours Architectural Drafting Course

Pavement Distress Identification

Techniques for Pavement Rehabilitation

Engineer-in-Charge Training for NYSDOT

Summary of Experience

Mr. Weinman's career includes thirty-five years with the New York State Department of Transportation, twenty-seven of those within the Construction Field Division, inspecting numerous types of projects, and eight years as a Concrete Supervisor for Materials Division. Strong with safety/maintenance & Protection of traffic (MPT) experience, following his retirement from N.Y.S.D.O.T., he was the Safety Officer (OSHA)/MPT, along with construction inspection at the F.D.R. Rehabilitation Project (E.53rd – E. 64th Streets) in Manhattan. Examples of his experience are as follows:

- **MPT / Inspector** – Construction Inspection, Southern State Parkway, Mill and Fill, NYC Line to Nassau Road, Nassau County for NYSDOT. Two inches of existing asphalt pavement overlay is to be milled and resurfaced. Some areas require concrete pavement and joint repairs. This project includes traffic management strategies such as construction phasing and lane closures. It also involves significant night work. Construction Cost $16.5 million (8/07 – present)

- **MP&T Safety Inspector** – FDR Reconstruction Project for NYSDOT. Responsible for construction site health and safety and MPT and material inspection. The area has heavy traffic which requires wide-ranging MPT expertise and attention. The project rating is "Highly Complex" and involves work in land and in waterways. He is in charge of all aspects of safety and MPT including project safety supervision, conducting safety meetings to review and correct safety concerns at the site, ensuring compliance with OSHA requirements including any work performed in waterways, ensuring compliance with NYSDOT, NYCDOT, USDOT, and other involved agencies and authorities requirements, maintenance and protection of traffic (M&PT), safety training of employees, review and comment on contractors and consultants health and safety plans. The project involves major construction activities in dense and high traffic areas and in waterways. He also performs construction material inspection as he has a strong background in this area. Construction Cost $136 million (2004 – 2007)

- **Civil Engineer I Materials Supervisor** – Region 11 for NYSDOT. Annual computer automation at concrete facilities; Supervise Consultant Inspector at the concrete facility; Assisted project team regarding NYSDOT requirements; Approved specialty mix designs submitted by the contractor, and update state mix designs for concrete facilities. (1996 – 2004)

- **Chief Inspector –** Brooklyn Bridge for NYSDOT. Scope of work included performing structural inspection of bridge components such as access ramps in Manhattan, subway entrance at North End of ramps, new railings, walkway, and barrier. Construction Cost $35 million (1992 – 1994)

- **Chief Inspector –** BQE / L.I.E. for NYSDOT. Responsibilities included interchanging bridge structures comprised of 6 overpasses; performing new concrete deck, joint repair, full and partial depth repair; new guide railing. Construction Cost $15 million (1990 – 1992)

- **Senior Inspector** – Gowanus Expressway for NYSDOT. Scope of work included miscellaneous steel repairs; full deck replacement and repairs; ensuring safety compliance / Maintenance and Protection of Traffic (MPT). Construction Cost $15 million (1988 – 1990)

- **Civil Engineer I Construction Field Division** –Region 11, NYSDOT. Field inspection of construction projects throughout Region11. Concrete placement for structures and pavements, main line asphalt pavements, soils backfilling, installation of guide rail fencing, electrical installations, street lighting, structural reinforcement for pavements and structures, piles and pile driving equipment, sheet piling and cofferdams, masonry, bridge bearings, joint systems, traffic barriers, structural steel paint system, bridge drainage system, structural slab reconstruction, removal and replacement of structural concrete, shotcrete, specialized concrete overlays for structural slabs, structural lifting operations, bridge railing, replace existing steel, protective coating for concrete. Maintenance and protection of traffic (MPT), OSHA and Safety compliance, and office engineering as per the state MURK manual. Prepared construction safety plan, ensured a safe environment for the public, contractors' workers, and NYSDOT construction inspectors, investigated reported injuries and accidents, recommended protective. (1970 – 1996)

HAKS

EMMANUEL BAMIMORE, *Construction Inspector*

Education

Graduate Certificate in Project Management – New Jersey Institute of Technology, Newark, NJ

Bachelor of Science, Civil Engineering, Yaba College of Technology, Lagos, Nigeria

Licenses and Certifications

ACI Concrete Field Testing Technician – Grade I, 2007

ACI (CCSI) Concrete Construction Special Inspector, 2008

ICC Spray Applied Fireproofing Special Inspector, 2009

PCI - Quality Control Personnel Certification - Level I and II, 2008

Work Zone Safety Awareness Program - Rutgers, the State University of New Jersey, 2008

Traffic Control Coordinator - Rutgers, the State University of New Jersey, 2008

OSHA 30-Hour Construction Safety and Health Training Course, 2009

NYC DOB 4-Hour Supported Scaffold, 2009

New Jersey Society of Asphalt Technologists Level I Certification

Summary of Experience

Mr. Bamimore has 16 years experience in construction management and construction inspection of roadways, utilities and buildings. His representative project experience includes:

- **Senior Special Inspector** – Construction Inspection, World Trade Center Transportation Hub in New York City for **PANYNJ**. (Package #9X-ALT-1 WTC 224-54) Duties include special control inspection of reinforcement and formwork of the top-down construction of the reinforced concrete multi level PATH Greenwich Street transportation hub. Construction Cost $1.5 billion (12/09 – present)
- **Senior Special Inspector** – Construction Inspection, World Trade Center National September 11 Memorial and Museum Project in New York City for **PANYNJ** (WTC NS11M). Duties included special control inspection of reinforcement placement and formwork installation. Construction Cost $700 million (05/09 – 12/09)
- **Project Site Engineer** - $550,000 Interior Renovations of **PANYNJ** Administration Building, Weehawken, NJ (PANYNJ). Project Site Engineer for general contractor. Coordinated subcontractors for HVAC, restrooms, and electrical systems upgrades. Performed site inspection of work, directed installations, coordinated shop drawings and vendor submissions, progress payments and change orders. (04/00 – 11/01)
- **Senior Inspector** – Reconstruction of Pedestrian Sidewalk Ramps, Various Locations in Brooklyn, NY for NYCDDC. Ensured compliance with construction documents, performed field concrete tests, and enforced MPT and safety requirements. Inspection also included all associated civil works (e.g. relocation of traffic and pedestrian signal poles, street lights and catch basins). Construction Cost $40 million (8/07 – 4/09)
- **Senior Inspector** – Resident Engineering Inspection, Water Mains, Sanitary and Storm Sewers, North Railroad Street Project in Staten Island for NYCDDC. Scope of work included the installation 3 miles of new and replacement water distribution mains and hydrants, 3 miles of new sanitary sewers, 3 miles of new storm sewers, catch basins, curbs,

pedestrian ramps, landscaping and Best Management Practice structures. Construction Cost $34.7 million (1/09 – 2/09)

- **Senior Inspector –** Atlantic County Construction Inspection on Call Services for Atlantic County Department of Law. Responsibilities included performing quality checks of concrete placement, backfilling and compaction operations; inspecting installations of asphalt pavement roadway courses; inspecting installation of various erosion and sediment control set up. (6/07 – 8/07)
- **Senior Inspector –** Street Milling and Paving, Various Locations in Brooklyn and Staten Island for NYCDDC. Milled asphalt concrete wearing course, followed by 2 inch (average) resurfacing. Responsibilities included initial inventory of street furniture, followed by construction inspection of contractor's work activities and community liaison. Construction Cost $16 million (05/06 – 04/07)
- **Construction Inspector –** Reconstruction of Pedestrian Sidewalk Ramps at Various Locations in Manhattan, Brooklyn and Bronx for NYCDDC (Contract #HWP2009T). Duties included ensuring compliance with construction documents and specifications, performing field concrete tests and enforcing MPT and safety requirements. Also included all civil works such as relocation of street hardware, traffic/pedestrian signals. Construction Cost $50 million (05/02 – 06/05)
- **Site Engineer** - $500 million Nigeria Merchants Bank Headquarters Building, Lagos, Nigeria. Site Engineer for Bourgues Nig Ltd, the general contractor, responsible for extensive landscaping on the grounds of this 22 floor new building. Also responsible for various aspects of the project including concrete and rebar work. He also supervised placement of precast structural members such as beams and façade elements. He was one of two key persons to close out the project. (02/90 – 05/93)
- **Site Engineer** – Trunk Water Main, Ibadan, Nigeria. Construction Engineer during placement of 50 mile long trunk main (40 and 56 inches), and distribution lines (6 inches), and pumps. Largely responsible for coordination of site inspectors' report verification, preparation of invoices and daily project scheduling. Sponsored by African Development Bank. (06/93 – 07/95)
- **Site Engineer** – Water Main Distribution System, Lagos, Nigeria. Site Engineer for this World Bank-sponsored project. Monitored project on a daily basis including site clearing, trench excavation, foundations, pipe placement, backfilling, etc. (07/95 – 03/98)

HAKS

HECTOR BELTRAN *Senior Inspector*

Education

Master of Science, Civil Engineering, Polytechnic University, 1977

Bachelor of Science, Civil Engineering, Polytechnic University, 1994

AAS, Civil Engineering, NYC Technical College, 1992

Professional Registration

NICET Level III 2001, [redacted]

Licenses and Certifications

ACI Concrete Field Testing Technician – Grade I, 2007

ACI Associate **(CCSI)** Concrete Construction Special Inspector, 2008

PCI Quality Control Personnel Certification – Level I and II, 2008

Traffic Control Coordinator, Rutgers, the State University of New Jersey, 2003

Summary of Experience

Mr. Beltran has over 26 years experience in construction inspection services including supervision, ensuring conformance with contract plans and specifications, measuring quantities and monitoring contractors operations. His representative projects are as follows:

- **Senior Inspector** – Construction Inspection Services for the work associated with connection of the Macomb's Dam Bridge to the New Garage of the Yankee Stadium. (11/09 – present)

- **Senior Inspector** – Construction Inspection Services for Emergency Repair and Interim Deck Replacement on the Gowanus Expressway, Kings County, NY for NYSDOT. Work involves deck replacement, BQE Connector widening/replacement, lower Gowanus Expressway pavement rehabilitation, structural steel and concrete repairs, structural steel painting, drainage work, and operation of the existing HOV lane. This is a large deck replacement project located in a high speed, high traffic volume, urban area. This project includes traffic management strategies such as construction phasing, lane closure restrictions, night and weekend work, etc. Construction Cost $152 million (7/06 –11/09)

- **Senior Inspector** – Resident Engineering Inspection, Rehabilitation of Macombs Dam Bridge over the Harlem River in Bronx for NYCDOT. Responsibilities included replacement of the roadway and approaches; removal of lead paint using SSPC sand blast method; Construction of a temporary bridge (pile driving, steel girder erection, etc) during deck slab removal; installation of new trusses for staging, to support the viaduct over Jerome Avenue; weighing swing span end reactions; replacement of truss members; removal, repair, and strengthening of existing shafts and gearing components; installation of new swing span machinery. Construction Cost $137 million (11/2009)

- **Senior Inspector** – Engineering Inspection Services for Reconstruction of Prospect Park West in Brooklyn for NYCDDC. Work involved the installation of 8-inch and 20-inch ductile iron pipe water mains and house service connections; removal of unsuitable subbase from the building line to the street; installation of new hydrants; new granite curb and 4-inch and 7-inch pigmented concrete sidewalk; new concrete base roadway; survey of building basements to assure their structural integrity; new 3-inch asphaltic concrete pavement; new

sewer construction; review of contractor submittals pertaining to the landmark work. Construction Cost $1.4 million (7/2006)

- **Senior Inspector** – Construction Supervision/Inspection Metro North Switchgear Replacement Project in NYC for Metro North Railroad. Construction work to upgrade Metro North's 59th Street Facility and its 72nd Street substation included repair of the roadway waterproofing membrane on Park Avenue and street level reconstruction work; rehabilitation of the existing storage room to provide a suitable location for housing new auxiliary electrical equipment – construction included brick/mortar repairs, new door jamb and door installations, concrete floor work and more; interception and relocation of existing lighting/receptacle circuits from existing electrical panel board equipment. Fee: 174, 895 (6/06 – 7/06)

- **Senior Inspector** – Construction Management and Inspection Services for VN-28. Work included the installation of new Steel Faced Concrete Curb, replacement of pre-cast Scuppers and painting for the MTA Bridges & Tunnels. (3/06 – 6/06)

- **Senior Inspector** – REI Services for Metropolitan Avenue Bridge over English Kills in Brooklyn for NYCDOT. Scope of work included eliminating and reconstructing the existing approach spans with concrete slab over grade; constructing new concrete sidewalks, curbs, railing, protective fencing and traffic gates; installing new machinery and a new electrical system in a reconstructed operator's house. Construction Cost $45 million (3/2006)

- **Senior Inspector** – Resident Engineering and Construction Inspection Services for the implementation of an Advanced Traffic Management System (ATMS) on the Major Deegan Expressway from Triboro Bridge to City Line in the Bronx and Manhattan subregion for NYSDOT. The ATMS includes an ITS configuration which would yield a system capable of full scale traffic and incident management. The system will be equipped with closed circuit television cameras which would provide video surveillance on the roadways within this subregion. Traffic sensors will be placed at mainline and ramp locations to provide real-time traffic information and to detect the occurrence of incidents. Variable Message Signs (VMS) and Highway Advisory Radio (HAR) will be included for motorist information and route diversion purposes. Construction Cost $26 million (4/05 – 3/06)

- **Senior Inspector** – Construction Inspection Services for reconstruction of the BQE from Broadway to 25th Avenue, Queens, NY for NYSDOT. Work included replacing / rehabilitating deteriorating pavements, bridges including and railroad bridge, retaining walls, utility lines, and drainage structures, reduce or eliminate safety deficiencies, such as limited sight distance, and improve other non-standard features such as lane merges. Construction Cost $254 million (3/02 – 4/05)

HAKS

SAUL CORREA *Field Inspector*

Education

New York City Technical College, City University of NY, 1998

Associate in applied Science, Construction Technology, 1998

Professional Registration

NICET Level III 2010, [redacted]

Licenses and Certifications

ACI Concrete Field Technician – Grade I, 2008

ACI Associate **(CCSI)** Concrete Construction Special Inspector, 2008

Traffic Control Coordinator, Rutgers, The State University of New Jersey, 2004

Traffic Control Coordinator Refresher - Rutgers, The State University of New Jersey, 2008

OSHA 10 Hour, Construction Safety and Health Training, 2007

PCI Quality Control Personnel Certification – Level I, 2008

Summary of Experience

Mr. Correa has over 9 years of experience in inspection. Examples of his experience are as follows:

- **Inspector** – Requirements Contract for Resident Engineering Inspection Services, Brooklyn, NY:
    - Task #8 – SEQ002624, Trench Restoration #10. Cost $2.9 million (1/08-11/09)
    - Task #20 – HWK732C, 5th Avenue – 24th Street to 34th Street. Cost $10 million. (11/09-present)
- **Inspector** – Survey Services for the Rehabilitation of 3 Pump Stations at Queens and Brooklyn for NYCDEP. Responsibilities included providing a detailed topographical, utility and right-of-way maps of Queens Blvd from Bush St. to 60th St. (6/2008)
- **Inspector** – Construction Inspection Services under a Backdrop Agreement for various projects in Region 10 (Nassau & Suffolk Counties), NY for New York State DOT. This project required 13.2 kilometers of Asphalt Concrete Milling and Paving on the Southern State Parkway in the Town of Hempstead, Nassau County. Daily extensive coordination was required to properly schedule contractor day and night field operations with the New York State Police, local New York State maintenance forces and intelligent highway facilities coordinator INFORM. Pavement condition surveys were conducted to determine proper repair details such as restoration of existing joints, installation of new joints, crack sealing and full depth pavement removal and replacement with rapid setting calcium chloride concrete. Other work typical of this project included; existing condition drainage structure surveys to determine repair details such as rebuilding tops of existing drainage structures, resetting frames and grates or replacement of frames and grates; application of new waterproof membrane systems on bridge decks; placement of new Epoxy Reflectorized Pavement Markings and installation of thirty six (36) new loop detectors in the new asphalt concrete pavement. Construction Cost $12 million (9/07 – 12/07)
- **Inspector** – Construction Inspection Services for Reconstruction of Route 21, Newark, NJ for NJDOT. The project consists of widening and realignment along a section of a major urban roadway, Route 2 (McCarter Highway) in downtown Newark. It extends from I-280 North to the Route 21 Viaduct at Oriental Street in the vicinity of Passaic Street. Grading,

paving, drainage, electrical work, extensive utility relocations and landscaping are major elements of construction. Construction Cost $31 million (3/05 – 8/07)

- **Construction Inspector** – Construction Inspection Services for Reconstruction of the Long Island Expressway (I-495) between Exits 32 and 37 to provide a High Occupancy Vehicle (HOV) lane, plus replacement of the Willis Avenue/Mineola Boulevard Bridge, Nassau County, NY for New York State DOT. Work includes construction of composite pavement and full-depth asphalt pavement; pavement resurfacing; ramp reconstruction; mainline widening and shoulder reconstruction; construction of retaining walls and noise barrier; and overall improvement and modifications to drainage, lighting and INFORM systems. Replacing and widening the existing steel girder Willis Avenue/Mineola Boulevard Bridge. The project utilizes A + B bidding to ensure timely completion, and also includes incentive/disincentive, lane rental and Critical Path Method scheduling provisions. This project involves day and night construction. Construction Cost $97.5 million (5/03 – 12/04)
- **Water Main Inspector** – Engineering Inspection Services for the Installation and Testing of New 36" Water Main and Appurtences on Cropsey Avenue from Bay Parkway to Stillwell Avenue, Brooklyn, NY for NYC Dept. of Design & Construction. Work included installation of 10", 12", 15", 18", ESVP storm sewer and 24", 30", 36", 42", 54", RCP storm sewer both encased in concrete and/or on piles; installation of 10", 12", 15", 18", ESVP sanitary sewer encased in concrete and/or on piles; installation of 48" and 36" steel trunk water main; installation of 20", 12" and 8" distribution water main; installation of catch basins and chute connections; installation of curbs, sidewalks and pedestrian ramps; removal and disposal of contaminated (non hazardous) soil; roadway trench restoration includes 8" concrete base and 3" asphalt wearing course; installation of street lighting, traffic signals and fire alarms; maintenance and protection of traffic. Construction Cost $12.4 million (3/03 – 5/03)
- **Construction Inspector** – Engineering Inspection Services for the Construction of Marble Hill Avenue Area, Borough of the Bronx for NYC Dept. of Design & Construction. Scope of work included installation of 15" ESVP sanitary sewer on concrete cradle, reconstruction of existing 15" diameter circular combined sewer using D.E.P approved lining method, reconstruction of existing 28"Wx42"H egg-shaped combined sewer using D.E.P approved lining method, installation of 12" distribution water mains, installation of catch basins and chute connections, installation of pavement using 3" ACWC on 8" concrete base and 11" reinforced concrete pavement for steep graded streets, installation of steel faced and concrete curbs and concrete sidewalks, installation of traffic signals and fire alarms, installation of street lighting and planting of New Trees. Construction Cost $4.5 million (8/02 – 2/03)
- **Construction Inspector** – Resident Engineering Inspection Services for Rehabilitation of Honeywell Street & Queens Boulevard Bridges over Sunnyside Yards for New York City DOT. Work included demolition and removal of existing bridge/ superstructure and abutment tops; construction of a new bridge structure and repair of abutments, setting structural steel, retaining walls and stone facing; erection of new stringers & a poured in place concrete deck; remove all catenary cables from bridges and transfer to towers; community Affairs coordination; CCTV at Queens Blvd. Bridge; maintenance and protection of traffic. Construction Cost $75 million (5/01 – 8/02)

HAKS

DOUGLAS A. DEPENA, *Cost Estimator/Scheduler*

EDUCATION

MBA, Accounting, Mercy College, Dobbs Ferry, NY, Currently Enrolled

Bachelor of Science, Accounting, Mercy College

Associate of Science, Civil Engineering, Westchester Community College

Diploma – Construction Management, New York University, 2001

Teterboro School of Aeronautics – Metallurgy, Framing Systems, Hydraulic Systems, Welding, Electrical Systems, HVAC, Engine Design

Licenses and Certifications

Lead Abatement

Asbestos

OSHA 10-Hour, Health & Safety Training Course, 2010

Licensed Instrument Rated Pilot

Membership

American Society of Professional Estimators

Summary of Experience

Mr. Pena possesses extensive experience in Construction Management having worked on Residential, Commercial and Industrial construction projects. The following is a list of his representative experience:

- **Estimator –** Ward's Island. Responsible for change order (DEP), water treatment plant. (11/09 – 12/09)
- **Estimator –** Water Pollution Hudson River, NYCDEP. Responsible for change order. (10/2009)
- **Estimator** - (HAKS Medford Job # JM09-289) Elmer Train Station Relocation Project (Transportation Enhancement Program) (10/2009)
- **Estimator** – Newark Housing Authority (NHA) Detailed Physical Needs Assessment Survey at Gi Gi Foushee Towers, Newark, New Jersey – Project involved site inspections of paved and unpaved surfaces, landscape, site drainage, lighting, playgrounds, street furniture. Building and facilities inspections consisted of all exterior and interior components such as façade, roof, stairs, structure, doors, windows, finishes, and electrical and mechanical systems. (9/09-10/09)
- **Scheduler –** NHA – (J04-021) RFP #03-P1887-2 A/E Services for A Complete Roofing System Tear-Off and Replacement/ Exterior waterproofing Design at NJ2-17 & NJ2-21A, Kretchmer Elderly, and NJ2-21E & NJ2-21F, Seth Boyden Elderly (7/2009)
- **Scheduler** - Professional Architectural & Engineering Services for the due diligence and design projects at River-Terrace Apartments at 157-10 Riverside Drive West, New York, NY. (7/2009)
- **Estimator** – Construction Management Services, Miscellaneous Downstate Area Projects, NYCDEP – Work included providing CM services for construction contracts in the New York Downstate area, which will involve contracts for installing and operating chlorination/de-chlorination facilities, all mechanical, electrical, instrumentation and civil work; fire alarm system upgrades; and sludge dewatering facilities improvements. $ 13 million (6/09 - present)

- **Scheduler** – Construction Supervision and Inspection Services for the Holmdel State Police Facility in Holmdel, NJ – Responsibilities included reconstruction of parking lots, a new reinforced concrete helipad, sand filter drainage system, sidewalks, colored concrete walkways, site lighting, landscaping, and installing interior and exterior security cameras, radio antenna, data and fiber optic cabling, backup power, two-way mirrored windows, bullet-resistant glass and wall panels and impact-resistant architectural bollards in front of entrances. $ 8.2 million (6/09-7/09)

- **Scheduler** – Architectural and Engineering Design Services, Rehabilitation of Claremont V, Bronx, NYCHA – Scope of work included preparing contract documents for removing the existing boilers and replacing them with new ones to serve the complex. $ 5.4 million (10/08 & 9/09)

- **Scheduler** – Resident Engineering Inspection, Infrastructure Reconstruction at South Brooklyn Marine Terminal, NYCDEC – Responsibilities included work on electric substations, lighting and fiber optic upgrades, removal and realignment of antiquated rail lines serving SBMT, rehabilitation of the main track at Brooklyn Army Terminal. $ 28 million (9/2008)

- **Scheduler** – Design Services, reconstruction of Storm Drainage System Outfall-G, Consolidated Edison Astoria Facility, Queens, NY – Scope of work included conducting studies to indicate inadequate portions of the system for design storm. $ 700,000 (9/2008)

- **Estimator –** Requirement Contract for Construction Management Services for Various Capital Construction Projects for NYCHA. Work under this contract includes the rehabilitation of the exterior envelope of buildings within housing developments throughout the five boroughs of New York City. Also included are upgrades to building systems such as electrical, HVAC and security systems, as well renovations to community centers and improvements to sidewalks and landscaping. Tasks include: Fort Washington Roofing; Harlem River Brickwork; and Rangel Brickwork and Roofing. (8/08-10/09)

- **Chief Estimator/Project Supervisor –** Responsibilities included obtaining new work projects; estimating and scheduling; and managing meetings. Wrote the Scope of Work for buyouts. Took responsibility as Project Supervisor on various projects conducting layouts, shooting grades, and ensuring work conformity to job specifications.

- **Estimator/Project Supervisor –** Worked on project for the New York City Department of Parks and Recreation constructing a $2.5 million park.
- **Project Manager –** Responsibilities included managing day to day operations, conducting project related meetings, reviewing payment requisition for accuracy, approvals and rejections, and other managerial duties. Hired testing laboratories and reviewed work to ensure conformity to contract specifications. Kept projects on CPM schedule.

HAKS

REDA GENDY *Contract Administrator*

Education

Bachelor of Science Computer Information Systems, CUNY NYC College of Technology, 2003

Licenses and Certifications

ACI Concrete Field Technician – Level I, # [redacted], 1992

NJSAT Asphalt Paving Construction Technologist, 2006

Traffic Control Coordinator, Rutgers New Jersey Course #[redacted]

Secure Worker Access Consortium (SWAC), 2009

DDC Concrete Certificate
DD L-C-2075-QA
Exp. Date 09/19/10

Summary of Experience

Mr. Gendy has over 7 years of experience in the construction inspection industry in New York City. He has performed office engineering duties as well as field inspection for various projects for NYCDOT & NYCDDC. He is familiar with NYC record keeping procedures and contract requirements. His representative projects include:

- **Office Engineer –** Construction Management Services for Projects on a "Call-In" Basis for **PANYNJ.** Office: Create and process change orders, payments, lump sum agreements, work order contracts, tracking submittals, insurance, RFI's, some estimating and scheduling. Generate monthly report tracking work-in-place figures, current year forecast and budge numbers. Maintain work in process report detailing progress on each work order; attend bi-weekly progress meetings and job meetings at various facilities, as well as site visits. Assignments include Office Engineer for the George Washington Bridge Resident Engineer. (09/08 – present)

- **Office Engineer** – NYCDDC Contract: Installation of Bus Pads, Citywide – Management of all project documents utilizing NYSDOT MURK system, preparation and issuance of task orders, review of Inspector's Daily Report for payment quantity, preparation of monthly partial payments and maintenance of certification and material acceptance log. Verified quantities of pay items, preparation of Change Orders and Overruns as needed. Monitored the permits for expiration and stipulation to ensure the contractor's compliance with all regulations. (03/08 – 08/08)

- **Office Engineer –** NYCDDC Contract: Reconstruction of Fulton St, Manhattan – Phase I of the Reconstruction of Fulton Street in lower Manhattan included installation of 20" and 24" water mains. A high profile project that involved working directly with Lower Manhattan Capital Construction (LMCC) as well as the Mayor's office. Heavy utility interference that required close monitoring of all pay items to determine which entity is being charged. Maintained minutes of all weekly progress meetings and prepared monthly payments for the contractor as well as TEA Forced Accounts. (10/07-03/08)

- **Office Engineer –** NYCDDC Contract: Installation of Catch Basins, Various Locations – Manhattan – Management of all project documents utilizing NYSDOT MURK system, preparation and issuance of task orders, review of Inspectors' Daily Report for payment quantity, preparation of monthly partial payments and maintenance of certification and

material acceptance log. Verified quantities of pay items, preparation of Change Orders and Overruns as needed. Monitored the permits for expiration and stipulation to ensure the contractor's compliance with all regulations. Prepared all documents related to close-out procedures including the punch list, Final & Substantial Payments. (7/06-10/07)

- **Office Engineer –** NYCDDC Contract: Installation of Pedestrian Ramps, Manhattan – Conducted a comprehensive survey based on a list of locations provided by NYCDOT and compiled the data recommending the feasibility of pedestrian ramp installation. Communication with all three Community Boards encompassing the project during pre-construction and post-construction phases. Management of all project documents utilizing NYSDOT MURK system, preparation and issuance of task orders, review of Inspectors' Daily Report for payment quantity, preparation of monthly partial payments and maintenance of certification and material acceptance log. Verified quantities of pay items, preparation of Change Orders and Overruns as needed. Monitored the permits for expiration and stipulation to ensure the contractor's compliance with all regulations. (7/05-07/06)

- **Inspector –** NYCDOT Contract: Installation Pedestrian Ramps, Brooklyn - Supervised pedestrian ramps installation which included concrete curb, steel faced concrete curb, concrete sidewalk and catch basins modification & rehabilitation. Supervised the placement of temporary and permanent asphalt pavement. Monitored the Maintenance and Protection of Traffic procedures, prepared field reports describing work performed, quantity of material used, amount of work force, and equipment. (09/04-07/05)
- **Inspector –** NYCDDC Contract: Citywide Milling – Assisted in the inspection, management, coordination and administration of the removal of asphaltic concrete wearing course at various locations in New York City. The operation involved measuring the trucks, determining the milled quantity, preparing the tonnage log, calculating the yield and reporting the result to the field office. (07/04-09/04).
- **Inspector –** NYCDDC Contracts: Columbia Street Rehabilitation & Reconstruction of 86th St Brooklyn – Vault Survey, consisting of administrative and fieldwork tasks that included the following: Compiled data of all properties including addresses, block/lot numbers, owners' information. These data were prepared and checked twice, before and after field visits. Expedited Certificate of Occupancy for all properties from the Department of Buildings in Brooklyn. Created a mailing list and uniform letters informing owners of the project as well as establishing a date and time to access the vault area. Work included accessing vault areas, take measurements and create sketches, and take photos. Reports were prepared containing drawings to scale showing areas of access and existing utilities, data tables and photos. (03/03-09/04)

HAKS

RICHARD K. GEORGES *Senior Inspector*

Education

Faculte Des Sciences-Universite D Etat D' Haiti-Port-Au-Prince, Haiti

Physics, Chemistry and Mathematics Certificate, 1971

Bachelor of Science, Electro-Mechanical Engineering, 1974

Professional Training 26th Session Jeimes Cadres, EDF, France, 1976

41st Session Prevention Technique Electrique EDF France, 1976

Transmission of Electrical Energy – 27th Session EDF France, 1979

Professional Registration

NICET Level III 2009, [redacted]

Licenses and Certifications

ACI Concrete Field Testing Technician – Grade I, 2002

NJSAT Asphalt Paving Construction Technologist, 2004

OSHA 10-Hour Construction Safety and Health Training Course, 2007

Nuclear Gauge Certification, 2009

NETTCP Soils and Aggregate Inspector, 2009

Traffic Control Coordinator, Rutgers The State University of New Jersey, 2010

Summary of Experience

Mr. Georges has over 35 years experience. Responsibilities have included inspection, cost control, claim review, payment reviews, change orders, time impact analysis, coordination between contractors, and various administrative duties, prepared reports and maintained project records. Examples of his experience are as follows:

- **Senior Inspector** – Construction Management Services, Alley Creek Pump Station upgrade, Queens, NY for NYCDEP. Project consists of an upgrade and expansion of an existing pump station, extensive site piping, utilities and wetlands restoration work. Also included is the rehabilitation of the Alley Pond Environmental Center building. Construction cost $30 million (7/09 – present)
- **Senior Inspector** – Construction Management and Inspection Services for Integrated Electronic Security System. Work included inspection of wiring, conduit, CCTV, fiber optics for security camera system in stations. Some night work was also involved. (2/07-6/09)
- **Inspector** – Resident Engineering Inspection Services for Reconstruction of Manhattan Bridge Contract No. 11 for NYCDOT. Scope of work included concrete deck repairs, steel reinforcement, new concrete deck placement, steel joints and shear studs, Structural steel repairs at floor beams and diaphragms, new steel floor beams, stringers, grid deck and haunches, major welding inspections throughout the bridge, torquing of bolts at all connections, New traffic barrier installations, electrical service replacement and refurbished including panels, wiring and piping for new bridge lighting and traffic signals. (5/06-2/07)
- **Senior Inspector** – Construction Inspection Services for the replacement of roof and building repairs at the Brooklyn Battery Tunnel Services Building for TBTA. Scope of work includes installation of HVAC and electrical panel for project BB-21A, installation of AC condenser, roof drain and plumbing, installation of sump pump in the Service Building, demolition of existing roof and installation of new roofing components. Construction cost $3 million. (6/05-5/06)
- **Senior Inspector** – Construction Inspection of Bruckner Expressway Corridor for Intelligent Transportation System in Bronx

County for NYSDOT. Work includes installation of new fiber optic cable, communication conduits and pull boxes along the Cross Bronx, Bruckner, Sheridan and Throgs Neck Expressways and the Bronx River Parkway; installation of 14 CCTV camera, 2 permanent Variable Message Signs, 11 Radar detectors, 17 Vehicle amplification detectors and modifying 2 permanent Variable Message Signs. Maintenance of the above equipment. Construction cost $17.4 million. (7/01-5/05)

- **Resident Engineer** – Construction Management Services for La Tourette, Silver Lake and South Shore Golf Courses, Staten Island, NY for NYC Parks & Recreation. Scope of work included construction of concrete curb.; planting trees, sod; asphalt pavement; construction of chain link fence; maintenance and protection of traffic; plumbing work; electrical work; computerized irrigation sprinkler system; water wells and rock excavation. Fee $148,698 (5/00-7/01)

- **Inspector** – New Jersey Department of Transportation, MAGIC 1A Project on Routes 4 and 80. Work included installation of fiber optic wires; installation of cameras; installation of VM Signs; electrical work. The construction and testing of the fiber optic fusion splices and splice enclosures were performed per EIA/TIA, CCITT and FDDI standards. All fusion splices were made using a fusion splicer ensuring that the splice enclosure was air tight, water tight, corrosion resistant, rodent proof and re-enterable. Certified by manufacturer for below ground and having sufficient capacity to splice up to 144 optical fibers. Performed attenuation tests on all spliced optical fibers with an OTDR capable of recording and displaying anomalies of 0.2 dB as a minimum. Inspected OTDR print out with numerical loss values to approve the splices. In a letter of appreciation for this project Mr. William Ducsak, Resident Engineer, NJDOT, wrote: “On behalf of the NJDOT I would like to extend our thanks for your work and dedicated service in the building of the NJDOT construction project, Route 80 MAGIC 1A. Your knowledge and experience of electrical work for the installation of various components of the computerized guidance and information control systems was very important for the success of the project and is well appreciated. In the long run, you may know that your hard work and professionalism as part of our team will affect the planning and implementation of new projects similar to MAGIC, some of which are already being developed by the Department”. Construction cost $20 million. (4/99-5/00)

- **Project Engineer** – Field supervision and coordination of activities. Scheduling, cost estimation of various projects in the Dade County (Miami Florida) area, including public schools, airport (Miami International), local water and sewer department. Evaluated compliance of material and equipment in accordance with job specifications. (10/96-3/99)

- **Sales Engineer** – Responsible of codification, including participation in international bid preparation. The inclusion of transmission lines and substation and distribution into the technical translation of bid documents. Analyzed and reviewed contract drawings for compliance in execution of a $12,000,000 project including the installation of power lines for sub-stations and plants of various voltage systems in the 15KV to 230 KV range. Prepared various quotas and requisitions for the purchase of materials and equipment related to several projects in Central and Latin America. Prepared and translated of bid documents from Spanish to English and English to Spanish. Inspected negotiation and codifications of systems for project execution in conjunction with Price Water House. (7/94-11/96)

ELLIOT GREENBERG *Fire Protection Engineer*

Education

Bachelor of Science, Mechanical Engineering, City College of New York

American Management Association, Supervisory Leadership Training

College of Insurance, Management Training Program

Insurance Institute of America, Principles of Property and Liability Underwriting (AIU-61)

Licenses and Certifications

OSHA 24-Hour Emergency Response Training, 1992

Yearly Refreshers, 1993-2000

Hazardous Waste Management 8-Hour Training Program, 1996

Hazardous Materials Transportation 8-Hour Training Program

New York State DOL, Asbestos Project Designer Certificate

National Fire Association

National Fire Protection Association Committee for Fire Protection in Chemistry Laboratories, NFPA 45

Secure Worker Access Consortium, 2010

Summary of Experience

Mr. Greenberg has 34 years experience in fire protection. Examples of his experience include:

- **Fire Protection Engineer** – Expert Professional Services – Performance of Construction Management Services for Projects on a "Call-In" Basis during 2007, 2008, 2009 for the **PANYNJ**. Work includes maintaining a fire safe environment at Authority facilities for employees, tenants and patrons and on an effective HPR (highly protected risk) based property loss prevention program. Conduct and witness annual and acceptance tests of fixed fire protection systems and equipment review and comment on plans for fire code compliance, and participate in special technical investigations. Fee: $5 million. (5/07 – present)
- **Fire Protection Engineer** – Construction Management Services for New York Airport and Port Commerce Projects on a "Call-In" Basis During 2004, 2005, 2006 for **PANYNJ.** For the Risk Management Division of the Operations Unit, providing fire protection engineering services including inspection and plan review at various facilities throughout the area, including: Kennedy, Newark Liberty and LaGuardia Airports. (3/04 – 4/07)
- **Fire Protection Engineer** – Construction Management for NY Projects on a call-in basis for **PANYNJ**. For Risk Management Division of the Operations Unit, provided fire protection engineering services including inspection and plan review at various facilities throughout the area, covering: Kennedy, Newark, and LaGuardia Airports. (6/01-2/04)
- **Fire Protection Engineer** – Construction Management for NY Projects on a call-in basis for **PANYNJ**. Primarily responsible for the management of all Fire Safety and Fire Protection Engineering program matters for the University. Duties included but were not limited to: review and approval of construction plans for compliance with laws, codes, regulations, policies and procedures, development and monitoring of University standards for all fire protection systems, primary liaison with governmental agencies and insurance organizations regarding University issues. Directly responsible for the development, presentation and implementation of Fire Safety training programs for University employees. Responsibilities also included the development and

issuance of periodic reports to top University management in regards to the ongoing Fire Safety Inspection program. In addition, provided project management for the installation and/or repair of fire protection systems, hazardous waste, annual NYC right-to-know reporting and periodic laboratory inspections conducted by FDNY. Assisted and participated in the following Environmental Services programs: asbestos management, indoor air quality, internal laboratory inspections and emergency chemical spill response. (3/91-11/00)

- **Loss Control Manager** – IRM Insurance, Northeast Regional Office. Responsibilities included: all Loss Control Operations of IRM's largest regional office, covering a geographical area from Maine through Maryland. Overall duties included the direct supervision of a field staff of twelve Loss Control Representatives and office staff. Responsibilities also included: salary and performance appraisal reviews, loss control budget and weekly work and expensive reporting. Loss control duties included review of all prospective new business surveys and supervision of all loss control review activities. (1/86-3/91)

- **Home Office Engineering Staff** - IRM Insurance White Plains, NY. Varied responsibilities included: Fire Protection Engineering for large accounts, the largest of which was the State of New Jersey. Duties included the review of plans for major new construction projects and installation of fire protection systems and equipment. Corresponded directly with the New Jersey State Office of Risk Management and attended various meetings, at their request, when the need arose. In addition, was in charge of research and preparation of technical information bulletins in regard to current fire protection engineering practices and standards, for distribution to IRM field representative and insurers. Assisted in the development of training materials and programs for presentations to company engineering and outside organizations. (5/82-12/85)

- **Property Loss Control Analyst** – I.T.T Corporation World Headquarters, NY. Responsibilities included establishing and administering property conservation program for all of I.T.T. Corporation Domestic Units (US, Canada, Virgin Islands, Puerto Rico). Partial duties involved traveling to any unit where a problem must be handled firsthand. Responsibilities included reviewing and analysis of all property insurance loss prevention reports received from our insurance carrier and the forwarding of these reports to the individual unit. As part of the review, responsibilities included making suggestions to either I.T.T. unit or the insurance carrier whenever it was felt that additional input was required. In addition, to fire protection engineering duties, assisted the Property Insurance Manager in various risk management and administrative functions. These include, but not limited to the following: review of insurable property values and establishment of rate schedules, preparation of premium cancellations to various policies issuance of certificates of insurance, and control of loss handling procedures. (1/77-5/82)

- **Direct Supervising Engineering** – Industrial Risk Insurers (IRI). Duties involved supervision of field engineers making loss inspections at industrial properties and handling fire protection engineering for various nationwide accounts. (5/72-12/76)

- **Field Engineer** – Industrial Risk Insurers (IRI). Duties included inspection of various industrial properties and development of property loss prevention recommendations for submittal to the insured. (3/68-5/72)

HAKS

RICHARD T. HALLAHAN, P.E. *Constructability / Design Review*

Education

Bachelor of Science, Civil Engineering, Union College, Schenectady, NY, 1974

Professional Registration

Professional Engineer
–New York 1981,
[redacted] New Jersey1980,
#[redacted]

Summary of Experience

Mr. Hallahan oversees the provision of the full range of professional engineering services in the areas of transportation, facilities and railroads. He serves as Principal-In-Charge for major metropolitan clients, including the New York State Department of Transportation, the New York State Thruway Authority, the Connecticut Department of Transportation, the Port Authority of New York and New Jersey, the New York City Department of Transportation, the New York City Department of Environmental Protection, as well as other public and private sector clients.

Mr. Hallahan has more than 30 years of technical and management experience including experience as a structural engineer in the design, rehabilitation, and inspection of bridges, tunnels, buildings and waterfront structures. His representative projects include:

- **Principal-In-Charge –** Condition Surveys of Building Facilities, Port Authority Marine Terminal, Port Elizabeth for **PANYNJ**. Work involves conducting detailed in-depth inspections (100% visual and 10% hands on) to find and document any deficiencies; providing repair recommendations in the inspection report; documenting the status of previous priority repairs and safety items; evaluating their conditions at the time of inspections. Fee: $219,000 (8/09 – present)
- **Principal-In-Charge** – Structural Inspection and Design for Rehabilitation of Upper Level Structural Steel, George Washington Bridge for **PANYNJ**. Work involved providing priority repair details, including stringers, floor beams, orthotropic deck elements, transverse deck joints, finger joints, upper chords of stiffening trusses, curb barriers; addressing drainage system repairs; summarizing all criteria to be used in designing the repairs, including loads, material grades, utilities, codes and assumptions. Construction Cost $30 million (2/09 – 6/09)
- **Principal-In-Charge –** Resident Engineering Inspection, Infrastructure Reconstruction at South Brooklyn Marine Terminal for NYCEDC. Work involves conducting value engineering reviews of the project during the preconstruction period; developing alternate bid items that would lead to cost savings, such as replacing the concrete pavement originally called for with flexible pavement; developing design and construction plan changes. (6/08 – present)
- **Principal-In-Charge** – Professional Engineering Services for Deconstruction of 130 Liberty Street in New York City for Lower Manhattan Development Corporation. Work involved maintenance of traffic; monitoring of basement slab, retaining walls and steel structures; as-built utility plans and coordination; preparation of pre-, during- and post-deconstruction photographic documents; vibration monitoring (during deconstruction period); office engineering; truck routing plan; MTA Influence Line Plan for building; controlled inspections; inspection of exterior façade for safety. Construction Cost $75 million (11/2009)

- **Principal-In-Charge –** Construction Management Services, Hunts Point Streetscape Project in Bronx for NYCEDC. Work included implementing landscaped medians; new pavements, sidewalks and curbs; new street lighting, traffic signals and street signs; site furniture; general site landscaping. Construction Cost $10 million (9/08 – 10/09)
- **Principal-In-Charge –** Biennial and Interim Bridge Inspection Services, 2008-2009, Region 8 for NYSDOT. Responsibilities included managing all aspects of the project and monitoring and ensuring the quality of work. Contract Value $7 million (8/08 – 11/09)
- **Principal-In-Charge** – Term Agreement for Civil Design Services As-Needed, New York City Parks, NYCDPR. HAKS is providing civil engineering services for the construction and reconstruction of various NYCDPR-owned buildings and facilities throughout the City. First assignment is the upgrade of site drainage at McNeil Park in Queens. Also, included is the ADA upgrade of the Park comfort station. Contract value $1 million (8/2009)
- **Principal-In-Charge** – Design Services for Palisade Avenue Retaining Wall in Bronx for NYCDDC. Work included evaluating the condition of the stone masonry wall and developing several viable options for rehabilitating the existing stone masonry wall. Construction Cost $2.2 million (6/08 – 6/09)
- **Principal-In-Charge** – Construction Management Services, Miscellaneous Projects in the Downstate Area for NYCDEP. Work included installing and operating chlorination/dechlorination facilities including all mechanical, electrical, instrumentation and civil work for specified water pollution control plants in both the North area (Hunts Point, Redhook, Newtown Creek, Bowery Bay, Tallman Island, Wards Island and North River Plant and pumping stations), and the South area (Owls Head, Oakwood Beach, Coney Island, 26th Ward, Rockaway and Port Richmond Plants and pumping stations); providing safety personnel to oversee installation and commissioning of the chlorination equipment, and establishing a master project schedule to monitor all activities and identify scheduling delays. Fee: $13 million (2/09 – 5/09)
- **Principal-In-Charge** – Structural Design of an Adjoining Structure with Design Services for Additions to the Existing Structure for SUNY Cortland. Work included complete structural design of all elements, including concrete slabs on grade, new concrete footings and pedestals, steel moment frames, masonry site walls, and masonry veneer walls. Construction Cost $10,000,000 (10/08 – 3/09)
- **Principal-In-Charge** – Special Inspection, Testing, Structural Analysis and Design, Gold Star Bridges for ConnDOT. Work included gusset plate analysis, design of restraining details for the pin and hanger systems and rocker bearing pins, and monitoring and evaluating the effects of frozen bearings. Fee: $1 million (11/08 – 2/09)
- **Principal-In-Charge** – 2007 Biennial Bridge Inspection, Miscellaneous Repairs Design, Henry Hudson and Queens Midtown Tunnel Approach Bridges for TBTA. Work included project coordination, office support, maintenance and protection of traffic and the structural inspection of the bridges, light poles, sign structures, and rock slopes. Construction Cost $794,000 (11/2008)

HAKS

KIMBERLY HALL-CARRINGTON, *Chief Inspector*

Education

Mechanical Engineering Technology, Hudson Valley Community College

Professional Registration

NICET Level IV 2008, [redacted]

Licenses and Certifications

ACI Concrete Field Testing Technician – Grade I 2005, #[redacted]

SSPCC6 Overview of Inspection Basics in Bridge Painting, 2000

Summary of Experience

Ms. Hall has over 15 years of engineering experience. Ms. Hall has served as Office Engineer and Senior Inspector on Construction projects for the NYSDOT. Her project experience includes:

- **Consultant Manager Project –** Construction Management Services for Gilboa Dam Reconstruction, Schoharie County for NYCDEP. Work included construction of an access road, utilities, outlet works, spillway control, side channel and stilling basin, dikes, dam embankment repairs, rock anchors, abutment stabilization and more. (9/09 – present)
- **Consultant Manager Project** – Construction Management Services Miscellaneous Projects in the Downstate Area. Work included providing CM services for construction contracts, installing and operating chlorination/de-chlorination facilities including all mechanical, electrical, instrumentation and civil work for specified water pollution control plants. (6/09 – 9/09)
- **Consultant Manager Project –** Assist NYSDOT Regional Local Project Liaison with review of NYCDOT/NYCDDC projects that have been federally funded under the FHWAER Project. Reviews include Design approval, PS&E packages, contractor and consultant advertisements and bids, payments made by the city agency to the Consultant and the Contractor and reimbursement packages. Ensure that the city agency follow the NYSDOT and FHWA guidelines required for EEO and DBE goals of subcontractors and sub-consultants. Perform initial review of permit request by local businesses and government agencies that seek to perform work within the Route 9A vicinity. Coordinate with various State and Local Government agencies to review and issue the required permits; Verify State Code required insurance, Work Zone Traffic Control Plan is listed and NYSDOT material and specifications are in detail, contact information of the owner and contractors have been provided. (9/08 – 5/09)
- **Office Engineer** – Construction Management Services, Croton Reservoir System, Putnam County, NY for NYCDEP. Project involves the reconstruction of Croton Falls Dam, Croton Falls Diverting Dam and Cross River Dam in Putnam County, NY. Duties include preparation of field change orders, processing of contractor's payments and other related services. Construction Cost $74 million (3/07 – 8/08)
- **Office Engineer** – NYSDOT Installation of ITS System in Richmond County, Region 11. Project involved Excavation and backfill operations, Installation of conduit, Junction and pull-boxes, conductors, ET2000 guide railing, VMS sign panels, and Maintenance and Protection of Traffic, processing multiple order-on-contracts, partial payments, field change orders, and bi-monthly estimates, reviewing inspectors' reports, preparing monthly

status reports, updating CEES material acceptance records, reviewing contractors monthly payrolls, EEO audits and Reviews, and submit trainee status reports. Construction Cost $26 million (4/04 – 2/07)

- **Office Engineer** – Replacement of Signs, Sign Structures, and Guide rail installation. These two (2) projects were for NYSDOT in Region 8. Inspected the installation of concrete footings, type-B sign posts, and panels, guide railing, and MPT. Prepared monthly cost estimates, prepared order-on-contacts, reviewed inspector reports. Construction Cost $3.5 million (3/02 – 4/04)
- **Office Engineer/Senior Inspector –** Reconstruction of the Marcy Avenue Ramp to the Williamsburg Bridge in Brooklyn, New York for NYSDOT. This projects fieldwork includes the installation of a temporary roadway and bridge, demolition of an existing ramp, installation of new pre-stressed segmental concrete structure, and placement of new drainage, junction boxes, conduits and conductors, guide rails, and roadway deck. Performed concrete and proctor tests. Prepared monthly estimates, order-on-contracts, interim payments, status reports, and reviewed inspector daily reports. Construction Cost $35 million (9/00 – 3/02)
- **Office Engineer/Senior Inspector** – Reconstruction of Old Westbury Road in Nassau County, NY for NYSDOT Region 10. This projects field work included milling, asphalt paving, concrete curb and sidewalk installation, and drainage modification and MPT. Performed proctor and concrete tests - Soil and concrete testing was standard during this project. Assisted Resident Engineer with CEES entries, processing monthly pay estimates and preparing Order-On-Contracts. (3/00 – 9/00)
- **Senior Inspector** – Bridge drainage cleaning of viaducts within the New York City Limits. Inspected and reported on the condition of existing drainage structures, prepared daily reports and payments, reviewed MPT and Night time lane closures. (9/98 – 12/99)
- **Senior Inspector/Assistant Office Engineer** – Rehabilitation of the Loop Parkway in Nassau County, NY for NYSDOT. This project involved concrete testing and placement, asphalt paving, installation of gabions and new gres-walls, guide railing installation, piles, and installation of pre-cast segmented floor beams. As the Assistant Office Engineer, reviewed inspectors daily reports, updated the engineers diary and the materials acceptance book, assisted with processing monthly estimates and preparing Order-On-Contracts. (11/97 – 9/98)
- **Inspector** – Resurfacing of the Harlem River Drive in Manhattan, NY for NYSDOT. This projects work included MPT, night and weekend work, full and partial depth pavement repairs, rapid set concrete, milling, frame and grates, replacing existing damaged curbing, guide rails, lamp post and updating electrical wiring and pull-boxes, asphalt paving, roadway striping, utilization of movable concrete barrier and landscaping. (5/97 – 11/97)
- **Inspector** – Rehabilitation of the Bruckner Expressway in Bronx County, NY. This projects field work included electrical conduit, conductors, pull-boxes, ground boxes, lampposts, and luminaries, excavation, drainage, frame and grate installation, concrete paving (micro silica), and demolition. (9/95 – 5/97)

HAKS

SHAFI-UL-HAQUE *Structural Engineer*

Education

Bachelor of Engineering, Civil Engineering, N.E.D. University of Engg. & Technology, Karachi, Pakistan, 1981

Summary of Experience

Mr. Haque has over 20years of experience in project management, construction inspection, supervision, planning structural design and estimation. His representative projects are as follows:

- **Inspector** - Deconstruction of 130 Liberty Street. Work includes Pre-construction services including coordination with NYC Transit and gaining approval of the MTA Influence Line Plan, coordination between LMDC, the **Port Authority of NY/NJ**, and various contractors for site logistics including gaining approval of a Truck Routing Plan, street closures as required during deconstruction activities, Maintenance and Protection of Traffic Plans on and around the site as well as controlled inspections and other construction phase services.

- **Construction Inspector / Monitor** – Construction Management Services, miscellaneous projects in the Downstate area for NYCDEP. The scope of work includes providing CM services for construction contracts in the New York Downstate area. CM Fee $7million

- **Inspector** - Under this contract with New York State Division of Housing & Community Renewal (NYS DHCR), HAKS was assigned to monitor the construction activities of various projects as per the NYS building codes, rules and regulations. Thus far HAKS has provided Construction Monitoring Services on eleven (11) projects located in the New York State area. The cumulative construction cost of all of the projects is approximately $100 million with the construction period spanning from July 2004 to present. Out of eleven projects, seven have been completed and four are on-going. These projects consist of new construction as well as major rehabilitation of existing buildings. The new and modernized buildings consists of handicap adaptable apartment units, multi-story (4 to 9) floors, (8 to 102) apartment units each building with Cellar, Commercial space, Community center or parking garages. Building structure consist of concrete foundation walls, steel structure, metal decking, pre-cast concrete units, exterior brick veneer, metal joists, wood joists, metal studs framing insulation and dry wall system and roofing. Plumbing and sprinkler system, HVAC and Electrical system including fire alarm systems. Construction cost: $100 million. (2004-2009)

- **Engineer** - Construction Inspection and Related Work at Vladeck Houses for NYC Housing Authority. Duties include inspection of construction of new masonry bulkhead including installation of dowels, ties, and flashing; inspection of bricks on new parapet wall as per drawings and specifications including installation of shelf angles, copper flashing, positive drainage, wall ties, air cavities and coping stones, etc.; ensure for the evenness of the wall, mortar joints and mortar; examine caulking for the coping and the expansion joints; survey of brick mortar joints, bricks & sills in order to indicate the deteriorated area to be removed on the entire facade; prepare quantities for the above and the punch list; and monitor mortar mix & taking samples for testing. Construction cost $51 million. (10/03-present)

- **Structural Engineer** - Architectural & Engineering Services for Closet Door & Staircases Survey at various locations in New York City for NYCHA. Work includes condition survey of all closet doors and stairs of the housing complex; submission of

condition report including recommendations; design of proposed closet doors, shelves, rods and specifications; preparation of form of proposal, proposal for repair work of stairs, quantities and estimates.

- **Structural Engineer** - Renovation of 136 Arlington Avenue, Jersey City, NJ for Jersey City Housing Authority. Renovation work includes: reconfiguration of unit interiors and addition of closet and storage areas; provide new kitchen and bathrooms; wall and floor repairs; replace existing dropped ceilings with sheetrock; door buck and door replacement; complete repainting and retiling; new replacement windows and new windows in window openings; provide GFI outlets in bathrooms and kitchens; provide through-wall air conditioning units with sleeves in all living rooms and bedrooms; exterior work includes entry/exit ways; roof (membrane, flashing, installation, drains, leaders, etc.) and facade changes to the building's exterior to be sympathetic to the surrounding neighborhood, exterior site elements include grading, drainage, lighting, fencing, walks, steps, railings, ramps, landscaping, retaining walls, patio, etc.; and modify and rehabilitate fire escape at the rear of the building. (8/03-present)

HAKS

ASHAQUE HUSSAIN *Construction Inspector*

Education

NED University of Engineering & Technology, Karachi Pakistan, 1985

Bachelor's Degree in Architecture, Howard Community College, Columbia, MD, 1994

Professional Registration

NICET Level I 2006, [redacted]

Licenses and Certifications

NYCDDC Concrete Testing Certification, 2005

NYCDDC Good Neighbor Training, 2005

OSHA 10-Hour Construction Safety & Health Training Course, 2008

Summary of Experience

Mr. Hussain has over 22 years of experience. Following is a list of his representative experience:

- **Inspector** – Resident Engineering Inspection for Newtown Creek Water Pollution Control Plant Upgrades – Work included fencing, landscaping, security. Construction Cost $1.5 billion. (4/09-present)
- **Inspector** – NYC Transit, Design and Construction of Charleston Bus Depot Annex, Staten Island. HAKS is serving as a major subconsultant for construction management of this $113 million New York City Transit project, which involves the design and construction of a new bus annex to meet bus storage and service assignments in the Borough of Staten Island. Duties include monitoring the contractor's work daily to assure conformance to the contract plans, specifications and quality requirements, review the contractor's payment requisitions and coordinating material testing on site and at independent testing labs, to assure the quality of materials going into the project. (5/08-4/09)
- **Inspector** – Construction of Storm Sewer, Sanitary Sewer and Water mains in Brookville blvd, Queens, NY. Inspector for this $12 million NYCDDC project. This project consists of 7'x 6'.6", 7' x 3' box, 20" – 36" Strom, 16" – 20" Sanitary sewer, catch basins, 8"- 20" distribution water mains, construction of curbs, sidewalks, and roadways, street lighting, installation of traffic signals, traffic street name signs. Tunneling/Jacking for 54" (class 5) RCP landscaping and tree plantings. Work also includes coordination with various city agencies. Assist office engineer for reviewing inspectors reports, processing payments, change orders as per NYCDDC specs and procedures. Construction cost $12 million. (2005 – present)
- **Inspector** – Reconstruction of Streets in Throgs Neck Area for NYCDDC, $10 million project, approximately 25 blocks within the project limits. The existing roadways, curbs and sidewalks were in deteriorated condition affecting riding quality. The project included reconstruction of the entire Streets infrastructure including new sidewalk, curb, road restoration, traffic signals, street lights, 20", 12", 8" water main, 36", 24", 15" storm sewer, catch basins, as well as, connecting the existing outfall with the new sewer system in compliance with the environmental regulations (wetlands permit is required). There were more than 50 encroachments (landscapes, fences) removed to transfer house water services from existing 20" WM (within the sidewalk) into the new 20" main in the streets. Construction cost $10 million. (2005 – present)

- **Inspector** – Installation of water mains, Catch basins manholes, Pedestrians ramps and sidewalks. Inspector for these NYCDDC, $1 - $2 million projects these projects had various locations in Queens. Scope of work included installation of 8” water main gate valves, fire hydrants, wet connections, Catch basins and manholes. Sidewalk and curb restoration. Prepared field cards, fix assets, in-service sheets, also assist in final quantities and close out details of the projects. Construction cost $1 - $2 million. (2005 – present)

HAKS

JOSIAS INNOCENT *Chief Inspector*

Education

Bachelor of Science, Engineering Science, Staten Island College, 1999

Bachelor of Science, Civil Engineering Higher Technical Institute, 1984

Professional Registration

NICET Level IV 2002, [redacted]

Engineer-In-Training 2002, New York

Licenses and Certifications

ACI Concrete Field Testing Technician Grade I, 2007

NETTCP Soils and Aggregate Inspector, 2010

OSHA 10-Hour Construction Safety & Health Training Course, 2000

Concrete Field Testing Training Course – NYCDDC

Nuclear Gauge Safety Training – Troxler Electronic Laboratories, Inc., March 2004

Asphalt Paving Construction Technologist Certification – NJSAT, 2005

Traffic Control Coordinator – Rutgers, The State University of New Jersey, 2005

Summary of Experience

Mr. Innocent has over 20 years experience in construction inspection projects. Examples of his experience are as follows:

- **Senior Inspector** – Resident Engineering Inspection Services, Emergency Reconstruction of Borden Avenue Bridge, Queens for NYCDOT. Work involved installing a steel-sheeted cofferdam around abutment and wing walls; demolishing the existing timber relieving platform beneath the wing walls, demolishing concrete abutment, excavating the cofferdam to elevation, constructing a reinforced abutment and wing wall stems, bridge seats and pedestals, and replacing the armored joint. Construction Cost $37 million (1/09 – present)

- **Senior Inspector** – Construction Inspection Services for NYSDOT under a Backdrop Agreement for Various Projects in Region 10, NY. This project required 13.2 kilometers of Asphalt Concrete Milling and Paving on the Southern State Parkway in the Town of Hempstead, Nassau County for the New York State Dept of Transportation, Region 10. His responsibilities included daily extensive coordination to properly schedule contractor's day and night field operations with the New York State Police, local New York State maintenance forces and intelligent highway facilities coordinator INFORM. Pavement condition surveys were conducted to determine proper repair details such as restoration of existing joints, installation of new joints, crack sealing and full depth pavement removal and replacement with rapid setting calcium chloride concrete. Other work typical of this project included; existing condition drainage structure surveys to determine repair details such as rebuilding tops of existing drainage structures, resetting frames and grates or replacement of frames and grates; application of new waterproof membrane systems on bridge decks; placement of new Epoxy Reflectorized Pavement Markings and installation of thirty-six (36) new loop detectors in the new asphalt concrete pavement. Construction Cost $12 million (8/07 – 12/07)

- **Senior Inspector** – NJDOT Central Region – Resurfacing Project. Scope of work includes monitoring milling and paving of various routes in central NJ, maintenance and protection of traffic. Construction Cost $17.4 million (4/08 – 10/08)

- **Senior Inspector** – Construction Inspection Services, Catenary and Bridge Rehabilitation on the New Haven Main Line,

Fairfield and Bridgeport, CT. His responsibilities included civil, structural, mechanical and electrical inspection. Construction Cost $80 million (12/07 – 4/08)

- **Senior Inspector** – Construction Supervision/Inspection for Metro-North Switchgear Replacement Project, New York, NY for Metro-North Railroad. His responsibilities included civil/structural inspection services for construction work to upgrade Metro North's 59th Street facility and its 72nd Street substation; repair of the roadway waterproofing membrane on Park Avenue and street level reconstruction work; rehabilitation of the existing storage room to provide a suitable location for housing new auxiliary electrical equipment. Construction included brick/mortar repairs, new door jamb and door installations, concrete floor work and more; interception and relocation of existing lighting/receptacle circuits from existing electrical panel board equipment. Fee: $174,895 (5/07 – 8/07)
- **Senior Inspector** – Resident Engineering/Inspection Reconstruction of Grand Concourse Bridge Over East 161st Street, Lou Gehrig Plaza & 161st to 166th Street for NYCDOT. Josias' inspection responsibilities included; demolition of existing bridge structure above the spring lines, construction of top of bridge abutment and back walls utilizing soldier pile and wood lagging, rehabilitation of existing concrete on abutment wall, construction of new superstructure consisting of precast, pre-compressed concrete/steel composite superstructure units. Construction Cost $9 million (6/2007)
- **Senior Inspector** – Construction Inspection Services, Reconstruction of Route 21 (McCarter Highway), Newark, for NJDOT. In charge of inspecting demolition of buildings adjacent to the work site; construction of a new combined sewer (storm and sanitary) separation chamber; construction of large diameter combined sewers, and reconstruction of existing brick sewers; extensive water main installation with cathodic protection; new Verizon and PSE&G electrical and gas distribution facilities; full-depth roadway reconstruction; intensive traffic management; extensive urban landscaping, including colored and patterned concrete, brick pavers, granite curbing, wide-scale plantings. Construction Cost $31 million (2/05 – 4/07)
- **Senior Inspector** – Construction Inspection, Long Island Expressway Capacity Improvement Project, Exits 32-40, NYSDOT. Work included conducting earthmoving operations initially, which also called for the installation of erosion control devices and subsequent stabilization and seeding. Because of problems encountered in the course of the work, a major change order was needed to redesign retaining walls in one area. This resulted in the construction of major retaining walls including tiebacks for the area. Noise walls were also installed throughout the project. Construction Cost $130 million (7/02 – 12/04)
- **Inspector –** Engineering Inspection Services for Edgemere Urban Renewal Project, Phase I, Queens, for NYCDDC. His responsibilities included civil, structural, mechanical and electrical inspection. Construction Cost $13 million (6/02 – 7/02)
- **Inspector** – Engineering Inspection Services, Installation and Testing of Water Mains, Sewers on Cropsey Avenue, Brooklyn, NYCDC. Responsibilities included civil, structural, mechanical and electrical inspection. Construction Cost $12.4 million (4/02 – 6/02)

HAKS

GEORGIANA INTURRISI *Contract Administrator*

Education

Academy of Advanced Traffic, New York, NY

Katharine Gibbs School, Montclair, New Jersey Academy of Advanced Traffic, New York, New York

Licenses and Certifications

ACI Concrete Strength Testing Technician – Grade I

OSHA Construction Safety & Health Course

American Welding Society Fundamentals of Welding Quality Management, 2010

Maintenance of Traffic and Work Area Protection

Notary Public of New Jersey, 1996 Member

Summary of Experience

Mr. Inturrisi has over 10 years of experience as an Office Engineer. Following is a list of his experience:

- **Office Engineer** – **PANYNJ** – Expert Professional Services – Performance of Construction Management Services for Project on a Call-In Basis During 2007,.2008,2009 – work included contract administration from pre-construction through closeout covering all financial information, payments, extra work, daily reports, material certifications, EEO and wage compliance, insurance, correspondence, etc. (5/07-2/08)

- **Office Engineer** – **PANYNJ** – Expert Professional Services – Performance Construction Management Services for Projects on a Call-In Basis During 2004,2005,2006 – Work included contract administration from pre-construction through close-out including all financial information, payments, extra work, daily reports, material certifications, equal opportunity and wage compliance, insurance, and correspondence for all contacts. (3/07-4/07)

- **Office Engineer – PANYNJ**, Security Capital Program - Tunnels, Bridges, Terminals, Ports, Airports. Office: Create and process change orders, payments, lump sum agreements, work order contracts, tracking submittals, insurance, RFI's, some estimating and scheduling. Generate monthly report tracking work-in-place figures, current year forecast and budget numbers. Maintain work in process report detailing progress on each work order; attend bi-weekly progress meetings and job meetings at various facilities, as well as site visits. Assignments included Office Engineer for the Security Capital Program with a total contract value of $100 million at numerous Port Authority facilities. (6/05-Present)

- **Office Engineer - PANYNJ**, Airtrain Project. Office: Compose change order packages to Engineering for architectural, structural, electrical and mechanical project changes. Research history of change, construct estimate at times, gather applicable contract drawings, and modify drawings if necessary, RFI's, and any other documentation necessary to make change. Construct paperwork in layman's terminology that includes the description, reason of change and associated documentation. Field: Frequent visits to site to visually clarify changes to contract. Assignments include Office Engineer for Jamaica Airtrain Project with a total of $450,000,000 building superstructure and railroad construction project. (1/04 – 6/05)

- **Office Engineer - PANYNJ**. Office: Create and process change orders, payments, lump sum agreements, work order contracts, tracking submittals, insurance, RFI's, some estimating and scheduling. Generate monthly report tracking work-in-place figures, current year forecast and budget numbers. Field: Daily site visits of the job to inspect job progress, safety issues, problems on site, maintenance of traffic, as well as subcontractors' work schedules. Assignments included Office Engineer for the Holland and Lincoln Tunnels and Bus Terminal with a total contract value of $50 million roads/building construction projects and consisted of 20-25 contracts. Additional Assignment included Office Engineer for two $60 million bridge constwction projects. (12/00 – 1/04)

- **Office Engineer** – Construction Inspection Services, Queens Midtown Tunnel Ventilation Buildings and Emergency Garage Facilities, Queens and Manhattan – Work included roof and window replacement, asbestos abatement, lead-based paint removal, application of corrosion inhibitive coating to structural steel, terra-cotta replacement, overhead concrete rehabilitation, demolition of shear walls and brick parapet, installation of fan damper, replacement of overhead roll-up doors. (12/07-12/08)

- **Contract Administrator -** Window Manufacturer & Installer. Contract Work: Generate and update monthly AlA requisitions; create and update change orders, invoices, purchase orders, collections. Maintain schedules, union reporting, invoices and stamps for union employees. Report and distribute payroll, maintain vacation schedule and personnel records for non-union employees. Contact with distributor regarding payments due, tracking jobs in production, ordering replacement parts. AIR — NP: Maintain and determine taxes due for federal and state sales tax (NJ, PA, NY). Maintain database with regards to recording accounts payable and accounts receivable, transfer monies to various accounts, issue all company checks. (4/98 – 12/00)

- **Assistant Project Manager** - General Contractor. Job Site: Assistant Project Manager for $5 million project at the Passaic Valley Sewerage Commission renovating existing buildings. Tracked CPM schedule, generate all required reports; generate RFI's, change orders; cost coding of project, massive record-keeping; daily contact with vendors, architects and project superintendent; attendance at monthly progress meetings; initiate all job correspondence; Safety Officer. Assisted in bidding for new contracts inclusive of buy-outs, contracts, purchase orders and submittals. (2/95 – 4/98)

HAKS

SAJJAD JAVAID *Construction Inspector*

Education

M.S., Mechanical Engineering, City University of New York

B.S., Mechanical Engineering, University of Engineering and Technology, Lahore, Pakistan

Licenses and Certifications

ACI Concrete Field Testing Technician – Grade I 2009, [redacted]

AWS Certified Welding Inspector [redacted]

Magnetic Particle Testing, Level II, NDT Method

Summary of Experience

Mr. Javaid has over 20 years of experience as a special inspector. Some of his representative projects include:

- **Inspector** – Responsible for performing engineering control inspections on buildings, bridges and shopping malls to verify their conformance with project specifications and applicable standards and codes. Additional responsibilities included performing steel fabrication shop inspections for different projects; performing visual and non destructive testing of welds using different NDT methods; conducted inspections for Sprayed Fire Resistive Materials to verify the thickness of material applied on the steel structure , performing adhesion/cohesion test and verifying the density of material applied on the steel structure , performing adhesion/cohesion test and verifying the density of material applied on the steel structure , performing adhesion/cohesion test and verifying the density of the material; Performing firestopping inspections in the buildings to verify their compliance with project specifications and applicable standards; conducting concrete inspections at the concrete plants and performing field test on the concrete received from the concrete ready mix plants; inspecting the reinforcing rebars in the field; performing bolting inspections in the field and performing masonry inspections. (1989-1998)

- **Inspector –** Responsible for the design and selection of mechanical and electrical systems for flood control and sanitary sewer pumping stations. Duties included preparing feasibility reports for projects; designing and installation of forced ventilation systems for disposal stations; performing pump and pumping stations hydraulic test; performing seismic investigation of pumping stations and designing anchorage and supports for mechanical and electrical equipment; drilling bore holes in the underground aquifers to abstract water using submersible and deep well turbine pumps; designing of chlorination system for water distribution systems and planning and designing of sanitary sewers. (1998-10/09)

HAKS

MARC J. KEMMIS *Construction Inspector*

Education

Welding, Blueprint Reading, Dutchess Community College, Poughkeepsie, NY, 1989

License

CWI – Certified Welding Inspector

Summary of Experience

Mr. Kemmis has over 21 years of experience in inspection and welding. Some of his representative projects include:

- **Inspector / Operations CWI –** Responsibilities included scheduling & overseeing welding/steel inspections; performing daily inspections including VT, PT, MT; performing welder qualification; assisting/advising engineers & project managers on code related issues; maintaining & overseeing daily inspection reports. (2009 – 2010)

- **Inspector / Operations CWI/CWE –** Responsible for obtaining NYCDEP Security clearance; constructing Inspection reports specifically to suit needs of the UV project using word and excel programs; reviewing procedure qualification reports, welding procedure specifications, and welder qualification reports to assure all code requirements are met prior to the commencement of welding; witnessing welder qualification testing as well as preparing, bending, and evaluating test specimens, preparing and certifying welder qualification reports; performing visual and magnetic particle inspections on 100% of weld joints on large bore piping being welded on site; overseeing all the welding procedure processes being utilized on the project to adherence of all job specifications and code requirements; assisting as needed for code compliance and interpretation of welding related issues, assisting project supervisor with productivity rates; supporting QC Manager with any quality, tracking or code related issues; maintaining daily inspection reports, pipe, and weld maps. (2008 – 2009)

- **Senior Inspector / Operations CWI/CWE –** Scope of work included layout inspection plans, performing inspections and daily reports; assisting, informing, and advising Engineers, Project Managers, and welding personnel; qualifying welding procedures, specifications, and operators; training and teaching various weld related aspects; assisting in daily operations. (2007 – 2008)

- **Owner –** Responsibilities included precision welding of pressured vessels and specialty alloys; conducting daily operations of scheduling, materials and production; job set-up, fixturing and welding equipment; maintaining a safe, productive work environment while upholding quality standards; working with engineers on prototype work to develop and qualify new designs, processing, fixtures, and inspection points; overseeing all phases of inspection processes including VT, PT, MT, UT and maintaining dimensional tolerances. (1999 – 2007)

HAKS

ILYAS KHAN *Electrical Inspector*

Education

Bachelor of Engineering in Electrical Engineering, N.E.D. University of Engineering & Technology, Karachi, Pakistan. 1981.

Professional Affiliations

Registered as Professional Engineer in Pakistan Engineering Council, # [redacted] 1982

Member Electrical of the Institution of Engineers, Pakistan, # [redacted] 1984,

Associate Member of the Institution of Electrical Engineers, Pakistan. # [redacted] 1984

Summary of Experience

Mr. Khan has over 25 years of experience in electrical engineering, specializing in planning, design and construction of electrical systems for commercial and industrial complexes & distribution networks. He specialized in the electrical inspection of L.V., M.V., and H.V. electrical power equipment including transformers, motors, generators, switchgear, cables, etc. Examples of his work area as follows:

Senior Electrical Engineer/Inspector - Metro-North Railroad's $300 Million Harmon Shop Replacement Program. This $300 Million Program is providing new shop and maintenance facilities for MNRR including a new Wheel Truing Facility, a new Locomotive Shop, and a new Coach Shop. Mr. Khan is providing electrical engineering expertise and inspection of the contractor's work as it pertains to all electrical systems and equipment.

Electrical Inspector - Various Consulting Projects (2001-Present)

- Inspected, Low, medium, and high voltage power distribution servicing industrial facilities.
- Assisted maintenance with interpretation and application of engineering criteria to maintain original design intent of facilities equipment such as:
  - Substations, including transformers, primary and secondary breakers, cables and bus ducts
  - Lighting systems (interior, exterior, and emergency)
  - Power backup systems (diesel generator, UPS, etc.)

Electrical Engineer – Saudi Electricity Company (formerly SCECO), Medina, Saudi Arabia (1986-2001)

- Planned and designed 13.8 & 33kV S/S distribution networks and installed more than 2000 distribution S/S with different capacities from 100 to 500 WA, in the city of Medina-Munawara
- Load managed for over-loaded feeders and substations.
- Inspected, Tested & commissioned distribution equipment like 13.8KV/220V indoor or outdoor package S/S ring main units, PMTs & overhead distribution lines.
- Studied feasibility for different distribution projects in urban as well as in rural areas of the City of Medina.
- Inspected sites & areas for future growth.
- Executed operations for distribution networks (13 .8KV& 3 3KV).

- Isolated faults after breakdowns and restored power supplies.
- Organized, planned and scheduled the operations of crews and contractors engaged in the construction, maintenance and repair of underground and/or overhead distribution and transmission lines. Inspected the same and reported from time to time for quality control.
- Liaise with design staff engaged in the planning and design of underground and/or overhead electric distribution extensions and improvements.
- Liaise with large bulk customers on operational issues. Inspected their industrial facilities. Coordinated with the consultants and prepared reports.

Projects with SCECO include:

1. Transformation of 11 kV distribution network (of 2500, 11/0.22kV S/S) to 13.8kV distribution network. Work involved replacement of more than 300 S/S with in 6 months time tap changing for the remaining, and replacement of under ground cables from 11kV to 13.8 kV.
2. Bir Ali 110/13.8kV S/S having 3x40 MVA Transformers with 33, 13.8kV feeders, feeding the
   Bir Ali area's 200 distribution S/S and subsequent dismantling of 33/13.8kV Bir Ali S/S and 2x
   16 MVA Transformers with all the feeders and respective switchgears.
3. "Hara Gharbia" 110/13.8 kV S/S having 3x40 MVA Transformers with 33, 13.8 kV feeders, feeding about 300, 13.8kV 5/5 feeding western part of MM.
4. "Hara Nasr" 110/13.8 kV S/S having 3x40 MVA Transformers with 33,13.8kV feeders, feeding about 300, 13.8kV 5/5 feeding central part of MM.
5. "Haram-I" 110/13.8kV S/S having 3x40 MVA Transformers with 34, 13.8 kV feeders, feeding 150 MW load of prophet's mosque and 100MW load of nearby area. And subsequent dismantling of 33/13.8 kV Bab Shamy and Al-ambaria S/S and three 25MVA Transformers with all the 13.8kV feeders and respective switchgears.
6. "Haram-II" 110/13.8 kV S/S having 3x40 MVA Transformers feeding the entire Air conditioning load of prophet's mosque thru 10 miles cool air tunnel.

- **Resident Electrical Engineer** – Holy Family Hospital, Karachi, Pakistan. Project Electrical Resident Engineer responsible for the initial inspection, design, installation, testing & commissioning of power distribution including cables, transformer & Distribution Boards. Scope involved coordination with the utility company as well as with the consultant and the contractors. (1981-1985)
- **Electrical Engineer** – Grind lay's Bank Karachi, Pakistan. Project Electrical Engineer responsible for design and plan preparation for the replacement of some of the existing lighting & power cables. Preparation of single line diagram. Involved in the measurement of lighting levels after construction. Monthly fire alarm testing and inspection of all the Bank's branches and facilities and the development of report with recommendations.

HAKS

RICHARD KOCH *Fire Protection Engineer*

Education

Staten Island Community College, Staten Island, NY 1970

Union College Barbourville Kentucky, 1970/1971

Port Authority Police Academy January, 1974

Total credits earned to date towards BBA, 1997

Summary of Experience

Mr. Koch has over 23 years experience in fire protection and safety. Examples of his experience include:

- **Fire Protection Engineer** - Construction Management Services for Projects on a "Call-In" Basis during 2001-2009 for the **PANYNJ**. For Risk Management Division of the Operations Unit, providing fire protection engineering services including inspection and plan review at various facilities throughout the area, covering: Kennedy, Newark, LaGuardia Airports and other PA facilities. Work includes maintaining a fire safe environment at Authority facilities for employees, tenants and patrons and on an effective HPR (highly protected risk) based property loss prevention program. Conduct and witness annual and acceptance tests of fixed fire protection systems and equipment review and comment on plans for fire code compliance, and participate in special technical investigations. Conduct inspections as Port Authority and Tenant maintained buildings on Port Authority Facilities for partial and or conditional occupancy for fire protection and life safety systems to ensure conformance with approved plans, specifications, PA standards, and all applicable codes and standards. (04/2005-Present)

- **Project Consultant/Manager -** Work included installation of inter agency emergency communication systems for **PANYNJ**: New York City Police Department; Federal Aviation Administration; US Coast Guard and Port Authority of New York and New Jersey Aviation Operations. (2/2004 - 4/2005)

- **Fire Marshal/Assistant Fire Marshal** - **PANYNJ** at JFK Airport, NY: Fire Marshal, John F. Kennedy Airport, 1999 to retirement 2003. Assistant Fire Marshal, John F. Kennedy Airport, 1994 to 1999. Duties encompassed all aspects of fire prevention and follow up procedures. Inspection of all construction sites, during and after, to ensure that building codes are being followed. Liaison with New York City Fire Department companies, to ensure local facility training and familiarization with Kennedy Airport.

- **Police Officer** - **PANYNJ**, JFK Airport, NY: Protect life and property on Port Authority owned and operated facilities in New York and New Jersey, utilizing strong observation skills; Uphold laws and codes of the States of New York and New Jersey; Cooperate with local and federal law enforcement agencies; Maintain community relations; give seminars on Law Enforcement Careers. (1/1974 – Retirement 12/06/2003)
  Administrative Staff Assignments, Coordinate, Oversee, and Direct all work orders for Police Buildings at Kennedy Airport with maintenance, mechanical and electrical units of the Port Authority, also coordinate all trades with construction, equipment installations and repair from start to finish for specification compliance.

Supervise and maintain building Fire Safety Program's and serve as Lead Fire Safety Coordinator. Coordinate all buildings safety crises responses and disaster recovery efforts. Serve as Liaison to Emergency Response Agencies in Crises Management.

Construction Coordinator between VRH construction Port Authority Resident Engineer's Office and Police Administration for the Renovation and Expansion of Police Headquarters and Emergency Garage at Kennedy Airport
Received training from Kirkwood Consulting Associates, Inc. Pittsburgh, Pennsylvania, to act as a member of the steering committee for the expansion and renovation of Police Headquarters and Emergency Garage at Kennedy Airport.

AFFILIATIONS

National Fire Protection Association 1995 .
Fire Marshals Association of North America.
Suffolk County Fire Safety Educators Association.
New York State Association of Fire Chiefs.

SPECIAL PROJECTS

United Nations General Assembly
Logistics and Operations Officer for the coordination of the 45,50 and 55 summits with the Department of the Treasury Secret Service and Port Authority Police command post at Kennedy Airport.

Y2K Emergency Preparedness
Responded to the multitude of tasks and projects necessary to address compliance issues pertaining to the systems and equipment at Kennedy Airport, and creating a contingency plan.

Community Mayors of New York and New Jersey
Participate in the planning and coordination of special events for 4,000 physically challenged and handicapped children in the New York City area (Christmas Party)
At Kennedy Airport.

Special Events Command Post
Instrumental in establishing a multi agency command post with communications and computer links in the event of a major situation where interagency communications is necessary.

HAKS

GIL E. LEGGARD *Senior Inspector*

Education

Training and Technology Courses, Union Carbide, Associated Universities

Professional Registration

NICET Level III 1989, [redacted] Expired 7/1/1999 (Renewal in progress)

Licenses and Certifications

ACI Concrete Construction Technologist - NJ Chapter, 2008

ACI Concrete Field Technician Grade I, 2007

PATH Track Certified, 2008

AWS Welding Inspector 40 HR Seminar, 2008

OSHA 10-Hour Construction Safety and Health Training Course, 2000

OSHA Confined Space Awareness Course, 2008

Traffic Control Coordinator Rutgers, New Jersey Refresher Course#1017, 2002

NJSAT Asphalt Paving Construction Technologist, 2008

NYCT Track Safety Certified, 2007

SSPC C-3 Supervisor/Competent Person Training of Deleading of Industrial Structures, 2009

Summary of Experience

Mr. Leggard has more than 26 years experience in construction inspection on projects involving bridge and roadway reconstruction, rehabilitation and painting of reinforced concrete substructures, superstructures, structural steel, drainage and electrical utility systems, excavation and compaction, project safety and traffic control. Examples of his considerable experience are as follows:

- **Senior Inspector –** Miscellaneous Structural Repairs Project on Ben Franklin and Walt Whitman Bridges. Provided inspection services for reinforcement of towers which included bolting of additional structural steel plates at roadway level as well as installing explosion proof doors at entrances which also serve as added prevention against unauthorized entry. Also inspected cleaning of existing steel surfaces and application of three (3) coat carboline paint system – responsible for monitoring and recording proper conditions (i.e. ambient/surface temperatures, humidity, dew point etc.) before applying paint to structure. Inspected replacement of tower elevator shaft's lighting conduit, junction boxes and cable as well as witnessed megger testing of all newly installed cable before energizing. 12/09 – 01/10.

  Reference: HNTB Resident Engineer Alex Lawrason P.E.

- **Senior Inspector –** Concrete Super Slab Replacements on Route 42 for New Jersey Department of Transportation. HAKS provided construction inspection services under a term agreement with the New Jersey Department of Transportation's Southern Region, generally in Hunterdon, Mercer, Middlesex, Monmouth, Ocean, Somerset and adjoining counties. Construction on this task order assignment, involved concrete super slab replacements on Route 42 over a distance of 5.7 miles in Camden and Gloucester Counties. Existing sections of deteriorated pavement slabs were removed and replaced with precast concrete slabs that were placed on grade and secured in place with dowels and grouted into adjacent existing slabs. 03/09-11/09

  References:
  NJDOT Consultant Coordinator – William Mullouney [redacted]
  NJDOT Resident Engineer – Ashok Amin [redacted]

- **Assistant Resident Engineer –** Catwalk Safety Improvements (T100.095), Interim Zone Painting (T100.048) of NJ Turnpike Bridge over Newark Bay for New Jersey Turnpike Authority. Contract No. T100.048 – Work included Safety improvements to the catwalk system, repairs below deck (replacement of steel flooring diamond plates) installation of stainless steel wire safety ropes on the walkway, replacement of deteriorated walkway plates with hot-dip galvanized steel diamond plates, and miscellaneous repairs to structural steel and steel ladders and installation of new wire rope at both under deck and aviation inspection walkway railings. Contract No. T100.095 - Work included monitoring/recording ambient and surface conditions for application of three (3) coat paint system, cleaning and painting previously painted locations of the superstructure and parapet steel to SSPC standards. The work requires shoulder closings, limited lane closings, containments for environmental protection during cleaning, painting, handling and disposal of the paint removed. Work was performed predominately at night on this heavily traveled section of Turnpike with major traffic control operations. Construction Cost $4.5 million. (09/08- 02/09)

References:
NJTA Project Engineer – Joseph Sheedy, P.E. [redacted]

- **Senior Inspector –** Construction Management and Inspection Services Contract for the MTA Homeland Security Program for NYCT. Work includes inspection of wiring, conduit, CCTV cameras, fiber optic cable, etc. for upgrades to security systems at various stations (including all structures) for example: bridges, tracks, tunnels, etc. throughout the five boroughs. (1/07-08/08)

- **Assistant Resident Engineer** - Route 9 Bus Shoulder Use and Pedestrian Improvements, Old Bridge Township, Middlesex County, New Jersey for NJDOT. The work includes resurfacing/milling and paving, Hot Mix Asphalt, drainage improvements, utility work, significant MPT and traffic control, and night work. Pedestrian improvements involved sidewalk construction, signalized intersections and others. Construction cost $6.9 million. (6/06-01/07)

- **Assistant Resident Engineer** - Cleaning and Painting of 10 Bridges on Garden State Parkway, Essex and Passaic Counties, NJ for NJTA. Responsible for cleaning and painting of the 10 structural steel bridges, sand blasting, removal of lead based paint systems, application of new protective coating systems, protection of the environment, maintenance and protection of traffic, ensuring safe conditions and coordination with the Maintenance and Operations Department, state and local police, utilities (e.g., Verizon, PSE&G and Passaic Valley Water Commission) and the U.S. Coast Guard. Construction cost $4 million. (01/06-05/06)

HAKS

MAHER A. MAHMOUD *Chief Inspector*

Education

Postgraduate Courses in Hydraulics & Soil Mechanics Engineering, Colorado State University, Colorado, USA, 1989

Master of Science, "Hydraulics & Soil Mechanics", Ain Shams University, Cairo, Egypt, 1989

Bachelor of Science, Civil Engineering, Ain Shams University, Cairo, Egypt, 1984

Professional Registration

NICET Level IV, # [redacted]

Licenses and Certifications

ACI Concrete Field Testing Technician - Grade I, 2006

ACI NJ Chapter – Concrete Construction Technology Course, 2008

OSHA 10-hour Construction Safety and Health Training Course, 2008

NJSAT, 2008

TCCP Certification

NYCT Track Safety Training

LIRR Track Safety Training

MTA Safety Training

Member of ASCE

Summary of Experience

Mr. Mahmoud has 23 years of engineering and construction experience. Examples of his experience are as follows:

- **Chief Inspector/Assistant Resident Engineer** - Design-Build Contract for JFK International Airport Air Train Light Rail System with connection to Long Island Railroad (LIRR) trains station at Jamaica Avenue and New York City subway system for **PANYNJ** (Contract # LRS 100.001). Led a team of 12 inspectors providing quality assurance of all phases of construction of the 8.4 mile elevated light rail system. The scope of work consisted of driving of steel piles, cast-in-place concrete piles, pile caps, foundations, columns, beams and superstructure erection of the segmental pre-cast concrete box for the elevated double track structure, construction of new ten structural steel substations, widening of Van Wyck Expressway from Rockaway Boulevard to Atlantic Avenue to accommodate the installation of the elevated structure along the expressway's median from the airport to LIRR Jamaica station, widening of twelve entrance and exit ramps, installing new catch basins, manholes, concrete curbs, concrete base roadway, asphalt pavement (super pave) and concrete median barriers in accordance with NYSDOT standards and specification, structure retaining walls with tiebacks including performance and proof tests of soil anchors and corrosion control electric system in accordance with NYSDOT specification and standards, new ITS (Intelligent Traffic Systems), inspection of MPT devices and construction signs to ensure compliance with plans, specifications and MUTCD, reviewing the inspector's daily reports, participating in QC/QA daily meetings, reviewing contractor's daily activities and details with field inspectors and participating in progress construction and safety weekly meetings. Construction cost $1.6 billion. (11/99-10/01)
- **Senior Project Engineer** – Extension of the #7 Subway from 41st & 8th Avenue Westward under 41st Street to 11th Avenue and Southward under 11th

Avenue to West 25th Street for MTA Capital Construction. Work site consisted of five staging areas, Construction of three shafts to provide access for tunnel mining operations, construction of an adit, two Tail Tunnels and two TBM Assembly Chamber/Starter Tunnels. Construction of five cross passages that connect the two running tunnels, underpinning and structural modification of the existing 8th Avenue subway structure. Retrofit of the existing no.7 Line tunnel structure. Construction of two bored tunnels , 22-feet diameter each about 120 feet below ground level, construction of a permanent roadway decking system within the lower level of the existing Port Authority Bus Terminals (PANYNJ) and construction of electrical sub-station. Duties include providing construction management services that includes QA/QC program to assure the project work is carried out in a planned, controlled manner and in compliance with MTACC guidelines. The quality program includes forms and procedures for planning, scheduling, assigning work, recording, retention and retrieval of records for construction activities. It also includes provision for identifying and resolving deficiencies and verifying compliance with the QA program and contract documents. CCM develops and implements this QA program that meets MTACC requirements. Construction cost $1,900 million. (10/08 – present)

- **Chief Inspector/Asst. Resident Engineer** - REI Services for Reconstruction of Grand Concourse from E 161st St. to E 166th St. (Contract # HWXP136R) and Reconstruction of E 161st St. Bridge (Contract # HBX1104), Bronx NY for NYCDOT. Work included replacement of an arch overpass and 6-block reconstruction of a major urban 10 lane wide through fare. Providing REI services for two multi-staged projects included; demolition of 60-ft wide, 550-ft long concrete arched bridge, construction of reinforced concrete abutments, back walls, pedestals, bearings, superstructure deck and approaches. Reconstruction of four staircases at the portals of the bridge, reconstruction of the underpass roadway and sidewalks. Rock tiebacks to existing wing wall. Reconstruction of combined sewer system, water main, street lighting, traffic signals, Con Edison duct banks, Telephone, medians, pedestrian ramps and landscaping. Placement of concrete base roadway and HMA super pave. Duties include supervision of daily construction activities, review shop drawing and suggestion. Participated in monthly progress meetings with the A/E consultant, contractor and the client. Review and approved contractor's CPM schedule and prepare monthly progress reports. Coordinate and manage all project documentation. Construction cost $55 million. (3/06-10/08)

HAKS

KENNETH MANGAM, P.E. *Constructability / Design Review*

Education

Bachelor of Science, Civil Engineering, Rutgers University, 1992

Professional Registration

Professional Engineer –New York 1998, [redacted]

Licenses and Certifications

OSHA 10-Hour Construction Safety & Health Training Course, 2000

Context Sensitive Solutions, Connecticut Transportation Institute, 2003

Deep Foundations Institute (DFI) - Augered Cast-In-Place Piles, 2004

Design & Construction of Tunnels – ASCE, 2005

NJDOT Training on 2006 Standard Specifications for Road and Bridge Construction, 2006

Society of American Military Engineers, 2004

Summary of Experience

Mr. Mangam is a Project Manager in Civil and Structural Engineering design with extensive experience in the rehabilitation and replacement of infrastructure (bridges, buildings, railroads, highways and related facilities) in and around New York and New Jersey. He has been responsible for all phases of project development including structural inspections, engineering analyses, rehabilitation designs, agency coordination and preparation of comprehensive contract documents for multi-disciplined engineering design projects. Examples of his relevant experience are as follows:

- **Project Manager** – Condition Survey of 3 Building at JFK Airport, Queens, NY – **PANYNJ**. Managed the structural condition inspection and reporting of 3 steel framed buildings (280,000 SF total) including the Calpine JFK Energy Center in accordance with PANYNJ Condition Survey Guidelines. Coordinated efforts with PANYNJ Facility Operations, inspection subconsultants, lift equipment vendors and security escorts for airside inspections. Fee: $220,000 (08/09 – present)

- **Project Manager** – Condition Survey of 6 Buildings at Elizabeth – Port Authority Marine Terminal, Elizabeth, NJ – **PANYNJ**. Managed the structural condition inspection and reporting of 6 steel framed buildings (550,000 SF total) at Port Elizabeth in accordance with PANYNJ Condition Survey Guidelines. Coordinated efforts with PANYNJ Facility Operations, inspection subconsultants and lift equipment vendors. Fee: $220,000 (05/09 – present)

- **Project Manager** – Professional Services for Structural Engineering Services on a "Call-In" Basis During 2005, 2006 & 2007 for **PANYNJ**. Served as PANYNJ's on-call structural designer for a three-year period preparing structural engineering studies, condition surveys, designs, contract drawings, technical specifications, and construction cost estimates for a wide variety of new facility structures and structural renovation and rehabilitation projects. Major tasks include the Structural Design for Rehabilitation of the George Washington Bridge NY Approach Ramps LX1, LX2, and Lower Level Ramps HR3, HR4, a $10 Million Construction effort. (2005 – present)

- **Project Manager** - Deck Replacement of Hylan Blvd Bridges over the Staten Island Expressway, Staten Island, NYSDOT. Manager for the design and construction support services for the rehabilitation of two steel multi-girder bridges over the high-volume Staten

Island Expressway. Rehabilitation includes deck replacement, superstructure repairs, bearing replacement and substructure modifications. Work includes in-depth inspection, load ratings, traffic analysis, hazardous materials investigation and a concrete coring and assessment program. Estimated Construction Cost: $7 million (03/10 – Present)

- **Project Manager** – Reconstruction of Collect Pond Park, New York, NY – NYC Parks & Recreation. Design for the complete reconstruction of this historic existing park site, including a new shallow pond with pedestrian bridge, interactive ground sprays, additional trees, walkways and sitting areas. The project will require that the south vehicle parking area be converted to Parks space. Estimated Construction Cost: $4.1 million (09/09 – present)

- **Structural Project Manager** – Studio West Additions & Alterations, SUNY Cortland, Cortland NY. Structural design services for a new 2-story addition (12,000 SF footprint) to the existing building in steel and concrete. Alterations to the existing building included new storefront openings, skylights and site walls. ***The project was designed to obtain a LEED Silver certification***. Estimated Construction Cost $11 million (08/08 – present)

- **Project Manager** – Fort Totten Park Sewall Reconstruction, Queens, NY – NYC Parks & Recreation. Design of the reconstruction of approximately one mile of masonry seawall along the East River. Construction Cost $870,000 (08/09 – present)

- **Project Manager** – Hermon A. MacNeil Park Drainage & Comfort Station Improvements, Queens, NY – NYC Parks & Recreation. Managed the design of new park stormwater drainage elements and outfall, as well as architectural and mechanical improvements to bring the existing comfort station into compliance with ADA requirements. Significant coordination with NYSDEC, ACOE, NYCDOB and NYC Design Commission. Construction Cost $500,000 (11/08 – present)

- **Project Manager** – Preconstruction Inspection & Report for the Deconstruction of Fiterman Hall, New York, NY – NYCEDC. Structural condition survey and reporting for two landmark NYC buildings (90 Church Street and 53 Park Place) prior to and during deconstruction of Fiterman Hall in accordance with NYCDOT TPPN#10/88, regarding procedures for the avoidance of damage to historic structures resulting from adjacent construction and NYC Landmarks Preservation Commission Guidelines. Fee: $183,000 (04/09 – present)

- **Project Manager** – New Stormwater Outfall at Con Edison Astoria “G” Facility. Civil engineering design for a new 36” dia. Stormwater outfall. Extensive coordination with NYSDEC and ACOE for design approvals and construction permit applications. Construction Cost $900,000 (12/08 – present)

- **Project Manager** – NYC LL 11/98 Inspection for 520 First Avenue, New York, NY – NYC Office of the City Medical Examiner. Performed Façade inspection in accordance with NYC Local Law 11/98 for this 16 Story building including reporting, scaffold drops and violation removals. Construction Cost $26,000 (04/09 – 06/09)

HAKS

JOHN MARSHALL *Contract Administrator*

Education

AAS Degree in Data Processing, Dutchess Community College, 1970

Continuing Education, SUNY New Paltz, 1981

Summary of Experience

Mr. Marshall worked 33 years for NYS Department of Transportation Assigned as the Engineer in Charge in 1981. He remained their EIC for 22 years until retiring in 2003. His representative projects include:

- **Assistant Office Engineer** – Construction Management Services, Croton Falls Dam, Croton Falls Diverting Dam & Cross River Dam, Putnam & Westchester Counties – Work included project management, resident engineering inspection, project operation services, subcontracted expert and supplement services. (12/09 – present)

- **Assistant Office Engineer** – NYSDOT – Construction Inspection, Bridge Rehabilitation, NB Taconic State Parkway Over New Croton Reservoir, Westchester County – Work included repairing and replacing the structural steel members as needed, complete blast cleaning and repainting of the bridge, replacement of concrete approach slabs, replacement of damaged bridge railing and miscellaneous structural repairs. (10/07 – present)

- **Assistant Office Engineer** - D258924 - The Reconstruction of the Taconic State Parkway and Bridge Rehabilitation & Replacement; Culvert Installations in Westchester County, Region 8. Processed monthly and bi-monthly estimates, reviewed inspectors daily reports, assisted in processing field change orders and orders on contract, material certifications and maintained record plan drawings. (10/03 – present)

- **Engineer in Charge** – New York State Department of Transportation.

    - D258663 - Route 9D Drainage Improvements in Dutchess County & the Village of Cold Spring in Putnam County. November 2001 - March 2003.

    - D258440 - 0.9 kilometers of Asphalt Concrete Reconstruction On Rte 376, Town of East Fishkill, Dutchess county. Assigned as EIC upon the retirement of the original EIC. This involved the placement of a Prefabricated Concrete Box Culvert, building wetland mitigation areas and construction of an embankment for a new roadway realignment and new drainage systems. August 2000 to November 2001:

    - D258098 - Rte 55 Over Metro North Railroad, Dutchess County. Assigned as EIC of project which consisted of bridge replacement and reconstruction involving value engineering proposals. Sept 1999 to August 2000.
    - D257269 - Reconstruction of Rte 22 bridge over East Branch of Croton River, Putnam County. July 1997 to September 1999
    - D256618 - Rehabilitation of four bridges & intersection approach reconstruction on Rtes.6 & 9A, Westchester County. August 1995 to November 1997.

- D256400 - Clearing trees & brush on various routes in various counties in Region 8. May 1995 to July 1996.

- D256533 - Ditch & culvert cleaning on various routes in various counties in Region 8. August 1995 to November 1995.

- D253974 - Rehabilitation of Three bridges on Rtes. I-84 & I-684; Replace Two culverts On Rte. 138; Westchester, Putnam & Dutchess Counties. April 1992 to October 1996.

- D254204 - Rehabilitation of Six Bridges On Rtes. I 684 & Rte. 116; Westchester County. November 1992 to December 1993.

- D252733 - Bridge Rehabilitation of three bridges on Rte 55 and one bridge on Rte. 82 in Dutchess County. March 1990 to September 1991.

- D252734 - Rehabilitation of Four bridges on Rtes. 22,44 & I-84; Dutchess County. September 1989 to December 1989.

- D252654 - Replacement of Rte. 44A bridge over Wappingers Creek; Dutchess County. March 1989 to December 1989.

- D252878 - Maintenance contract work Rte 113, Spackenkill Rd. Bridge over Rte 9 Poughkeepsie, Dutchess County. September 1989 to December 1989.

- D252864 - Replacement of County Rte. 64 bridge over Muddy Brook; Putnam County. July 1989 to December 1989.

- D252181 - Bridge Rehabilitation of Rte 22 bridge over Metro-North RR; Dutchess County. February 1988 to November 1989.

- Sign contract various locations on Rte I-84 Dutchess & Putnam Counties. March 1987 to November 1987.

- Sign contract various locations on Rte I-84 Dutchess County. March 1986 to November 1986.

- Various Asphalt Reconstruction and Paving Contracts on Rtes. 82, 199, 22 & 9 in Dutchess County. March 1982 to March 1986.

- **Engineering Technician/Senior Engineer Technician/ Principal Engineer Technician** - Multiple R & P contracts: Rte 52, Fishkill - Dutchess County; First Phase of East/West Arterial - Rte 44/55 Poughkeepsie - Dutchess County; Rte 22 in Armonk - Westchester County; Washington Ave & Rte 9 - Poughkeepsie - Dutchess Co.; Hooker Avenue Poughkeepsie - Dutchess County. 1973 to 1982.

HAKS

OMONT C. MCBRIDE *Special Inspector*

Education

Bachelor of Arts, Human Relations, University of Pittsburgh, Bradford, 1997

Professional Registration

NICET Level I 2005, [redacted]

Licenses and Certifications

ACI Concrete Field Testing Technician – Grade I, 2010

ACI CCSI – Concrete Construction Special Inspector 2008

PATH Employee In Charge (EIT) Trained

ICC Structural Masonry Special Inspector, 2008

ICC Structural Steel and Bolting Inspector, 2010

OSHA 10-Hour Construction Safety and Health Training Course, 2009

NYCDOB 4-Hour Supported Scaffold, 2010

QC Resource Training

Certified Inspector in:
- Concrete Testing
- Structural Steel Reinforcement
- Soil Density Testing
- Structural Steel and Bolting
- Asphalt Density Testing
- Structural Masonry and Grout Inspections

Summary of Experience:

Mr. McBride has over 13 years of experience as a professional project coordinator and inspector with a strong background supervising projects in diverse environments. He has qualified knowledge of firestopping, fireproofing, curtain wall, welding, vibration monitoring, pile driving, lateral, uplift, and static load tests. Examples of his experience are as follows:

- **TAA / TCA Civil Inspector –** Freedom Tower Project. Duties included performing audit inspections over the Civil, Electrical, Structural, and Mechanical activities; providing site overview/assurance that controlled inspections follow project construction standards; providing oversight and assistance to site safety team as well as interacting with all levels of project team CM, GC, subs, architects, engineers involved on project. (6/09 – 6/10)

- **Field Inspector –** Various SCA Projects in Queens Borough of NY. Performed controlled inspection. (5/09 – 6/09)

- **Project Coordinator and Inspector –** Responsibilities included supervising controlled inspection activities on various projects; ensuring inspections adhere to building codes and project specifications; reviewing invoices, reports, drawings, RFI's and certifications; training and supervising staff on project sites. (5/00 – 4/09)

  For selected key projects listed below, responsible for monitoring the controlled inspections for pile driving, concrete, rebar, masonry, bolting, firestopping, fireproofing, curtain wall and plumbing.

  - **Jetblue Airways, Terminal, John F. Kennedy Airport, Jamaica, NY.** Scope of work included communicating with client regarding project status and as needed resolved issues with site construction procurement, and/or engineering; performing inspections of construction activities to ensure conformance with approved designs/plans; facilitating communication between CM, Architects, and Engineers; monitoring project cost and scheduling performance against Jetblue's Accepted Programme;

working with site staff to maintain a healthy and safe environment for the project employees and site visitors. (4/06 – 12/08)

- **A380 Redevelopment, Terminal 1, John F. Kennedy Airport, Jamaica, NY.** Hired by Av Air Pros Services to oversee the project with CM. Responsible for all controlled inspections from foundation, core and shell of each Gate constructed. (1/06 – 11/08)

- **Multi-tenant Cargo Facility Tract 8 & 9A, John F. Kennedy Airport, Jamaica, NY.** Scope of included assisting the project manager with the daily activities and schedule. Responsible for masonry, rebar, concrete, hydrostatic testing, hydrant flow testing, gas leak testing, duct leak testing, and curtain wall. (8/02 – 6/03)

- **Borgata Casino North Expansion Project, Atlantic City, NJ.** Scope of work included monitoring field staff and daily activities; ensuring that all inspections were done according to specs and code. (11/04 – 7/06)

- **United Nations Federal Credit Union, Long Island City, NY.** Responsible for scheduling daily activities in consultation with CM; monitoring controlled inspections for concrete, masonry, welding, bolting, fireproofing, firestopping, curtain wall, soil compaction and waterproofing. (10/04 – 5/06)

- **Bank One Data Center, Brandywine, Delaware.** Responsibilities included monitoring control inspections including soil/subgrade, asphalt, rebar, concrete, masonry, curtain wall, welding, bolting, fireproofing, and firestopping; hiring and training additional workers to staff the team when project was behind schedule due to the weather. (6/03 – 9/04)

- **Newark International Airport, Newark, NJ. (Terminal C Parking Garage)** Responsible for providing oversight for load tests, pile driving, concrete, rebar, masonry, and curtain wall. (5/00 – 9/01)

- **Pile Engineer Technician –** Scope of work included operating and monitoring seismographs to prevent internal and external structural damage; taking pre and post construction surveys of residences in the vicinity of construction activity; inspecting pressure grout pours that reinforce the soil underneath bridges and superstructures; monitoring pile driving; collecting and analyzing data for static, uplift, and lateral load tests for piles; training new staff members. Selected Key Projects are the following: (10/97 – 5/00)

  - John F. Kennedy Airport Light Rail
  - Atlantic City Welcome Center
  - Philadelphia Navy Yard

HAKS

TIMOTHY C. MCCOY *Senior Mechanical Inspector*

Education

M.B.A., Master of Business Administration, Dowling College, Oakdale, NY

B.S, Mechanical Engineering New York Institute of Technology; Old Westbury, NY

Quality Circles Management Training Class A/B

Total Quality Management (TQM) Training Class A/B

Licenses and Certifications

OSHA 30-Hour Construction Safety and Health Training Course, 2009

OSHA 40-Hour Site Super Safety Course/ Hot Work Permit

Summary of Experience

Mr. McCoy has over 25 years of experience in construction and engineering. His technical qualifications include: Extensive experience with Mechanical Equipment and Life Safety Systems as well as Commissioning of MEP Equipment, CPM scheduling, cost estimating, coordination of the trades, construction inspection to ensure quality, managing of contractors to ensure on-time completion, maintaining daily Superintendent logs for effectively tracking progress, manpower, delays, etc. His representative projects include:

- **DEP-MEP-Superintendent/Commissioner**-Richmond Chlorination Facility Staten Island N.Y. Automated Hypo-Chlorite System, Analyzer System, Liquid Chemical Feeds System and PLC/ MCC Automation Controls. Construction Cost $2.5 million.
- **DEP/MEP ENGINEER- SYSOPS-13G/E: Structures and Equipment** - Groundwater Remediation at Station24, Jamaica, N.Y. for the NYCDEP/ DEC. The work under Contract SYSOPS-13G/E includes all structures and equipment work for the Station 24 ground water remediation system. The principal items of work are: new recovery wells (Recovery Well No.1/2).Well pumps for both the existing recovery well (Recovery Well No.1/2) and new recovery well Enclosures for well pump motors and Controls on both locations. Six Granular Activated Carbon **(GAC)** treatment systems, consisting of three units of two GAC vessels each. A sequestering agent chemical feed system in and around an existing chemical storage containment area, including storage tanks, pumps, piping, fill station, truck containment area, and emergency eyewash/showers, compressor new city water connection and piping, including a backflow preventer. Modifications to the existing Booster Pump Building, new blow-off sump and new connections to the existing storm sewer in 177th Street and 8" sanitary sewer on site. A process control system, Site work including grading and paving. Construction Cost $5 million.
- **Contract SYSOPS-13E: Electrical** the work under Contract SYSOPS-13E includes all electrical work for that Station 24 groundwater remediation system. New Electrical Receptacles Relocation, Feeder Removal at Booster Pump Building The scope of work includes providing CM services for construction contracts in the New York Downstate area. A major part of this effort will focus on contracts for installing and operating chlorination/de-chlorination facilities including all mechanical, electrical, instrumentation and civil work for specified water pollution control plants in both the North area (Hunts Point, Red hook, Newtown Creek, Bowery Bay, Tallman Island, Wards Island and North River Plant and pumping stations), and the South area (Owls Head, Oakwood Beach, Coney Island, 26th

Ward, Rockaway and Port Richmond Plants and pumping stations). Other aspects of the CM work include providing safety personnel to oversee installation and commissioning of the chlorination equipment, and establishing a master project schedule to monitor all activities and identify scheduling delays, which would then be corrected to keep the projects on schedule. Cost of Construction $10 million (1/09 – Present)

- **MEP Superintendent -** Stony Brook University - New 100,000 SF State-of-the-Art Center of Excellence in Wireless and Information Technology (CEWIT) Building. Responsibilities include coordination, planning and phasing of the work of the mechanical trades with that of the building trades. Facilitate coordination meetings with trades, resolve field issues, ensure Quality Assurance/Control, expedite field work to ensure on-time completion, maintain daily superintendent log concerning manpower, progress, delays and safety issues. Construction Cost $65 million
- **MEP Superintendent/Commissioner** - American Airlines – JFK Airport, Terminals 8 & 9. Responsibilities included: Maintain activities pertaining to all structural, mechanical, electrical and plumbing; Facilitate trade meetings to report progress, safety as well as good workmanship; Prepare all monitoring and status reports for client progress meetings; Facilitate coordination meetings with trades; Prepare, update and monitor project schedule deadlines; Receive and transmit all correspondence such as drawings, sketches, and specifications; Maintain daily superintendent log concerning manpower, progress, delays as well as safety issues; Commissioning of all MEP and Life Safety Systems. Construction cost $300 million.
- **Project Engineer/MEP Superintendent** - Intermediate School 1S-137 Ozone Park. Responsibilities included: Support project manager with miscellaneous issues of construction process; Aided project manager and accounting departments with budget analysis, tracking and forecasting; Developed trade contracts, change orders and monthly requisitions for subcontractors; Oversee shop drawings and RFI submittals, review and distribution; Coordinated the work of various contractors. Construction cost $100 million.
- **Project Engineer** – Bank of America Corporate Trading floors at 9 West 57 Street NY. Responsibilities included: Supported superintendent managing work in the field according to plans and specs; Collaborated with estimating department in pricing out floor fit-outs; Developed and maintained schedules for interior floor construction; Involved with project manager in budget development, planning, scheduling and subcontract award process. Construction cost $90 million.

HAKS

ALEX MEKHANIKOV, *Construction Inspector*

Education

Master of Science, Civil Engineering, St. Petersburg State Polytechnical University, St. Petersburg, Russia, 1981

Licenses and Certifications

ACI Concrete Field Testing Technician-Grade I, 2009

ACI CCSI – Concrete Construction Special Inspector 2009, [redacted]

OSHA 10-Hour Construction Safety and Health Training Course, 2009

RCS Building Inspector License, Middlesex Community College, NJ, 2009

Summary of Experience

Mr. Mekhanikov is technically oriented, analytical, and resourceful professional with over 15 years of experience in large commercial and residential projects. His experience includes construction inspection, pile driving monitoring, pile load test inspection, pile foundations, masonry, excavation, sheeting and shoring and mechanical demolition, scheduling, quality assurance, and cost control. He has extensive qualifications in site development and inspections. His most recent positions and projects include:

- **Civil Inspector –** Newtown Creek. Responsibilities include inspection of cast-in-place concrete, Piles' Foundations, Masonry, Excavation, Sheeting and Shoring and Mechanical demolition for contract NC47. (4/09 – present)

- **Project Manager** – Successfully managed 50,000 square foot commercial project. Efficiently coordinated all phases of the project and completed a 10 million dollars project on time and within budget. Scope of work included resourcefully reviewing subcontractors' bids, profitably creating and supervising production schedules, managing cost control, timely developed project plans, revised subcontractor bids, and prepared project progress reports. Examined all material for quality assurance. Productively coordinated efforts of architects, land surveyors, and site planners, conducted site development meetings and professionally negotiated and arranged changes for approval, defined critical paths for projects and effectively implemented quality control on all phases of construction. (3/06-4/09)

- **Construction Field Manager –** Built seven developments of single family homes and townhouses totaling more than one thousand units. Supervised all aspects of production from pre-construction to project completion. Effectively managed material and labor budgets averaging 12 million dollars throughout the duration of the projects to meet profit goals upon completion. Reviewed plans and specifications to assure all material used in construction complied with specifications. Productively applied for building permits, timely scheduled various site inspections and resourcefully reviewed layouts with architects. Effectively scheduled subcontractors and coordinated public service contractors. Constantly monitored project documentation and ensured its compliance. Efficiently maintained safe work environments and trained new personnel. (1/92-3/06)
    - Accumulated experience in the inspections of various phases of construction in several projects under the supervision of professional engineers and architects to

include: Wall panels, Curtain walls and Veneers (+2years), Excavation Sheeting and Shoring (+3years), Piles Foundation (+3years), Firestop Draftstop and Fireblock systems (+2year), Sprayed Fire Resistant materials (+1years)

- **Civil Engineer –** Designed and supervised construction of multiple residential and commercial projects. (3/81-10/91)

HAKS

ROLDAN M. MENDOZA, *Construction Inspector*

Education

Bachelor of Science, Civil Engineering, Pablo Borbon Memorial Institute of Technology, 1993

License

AWS Welding Inspector, 2009

Membership

American Welding Society (**AWS**)

The Welding Institute (TWI)

Welding and Joining Society (WJS)

European Welding Federation (EWF)

Philippine Welding Society (PWS)

Summary of Experience

Mr. Mendoza has over 15 years of experience working as an engineer. He has been involved in structural supervision of civil and piping work, quality assurance and quality control inspection, testing and welding inspection. Some of his representative projects include:

- **QA/QC Welding/Piping Inspector –** RBDP B Topsides Ruby B Full Field Development Project Vung Tau City, S.R. Vietnam. Mr. Mendoza monitored/checked the application of approved procedures based upon applicable drawings, project specifications, standards and codes. Mr. Mendoza was responsible for material inspection and traceability reports. He checked weld joint preparation and fit-up; inspected welds, fabrication dimensions and pre-assembly prior, during and after fit-up and erection. He checked welder's qualifications, welding consumables storage and handling. He verified pre-heat and inter-pass temperatures and prepared daily welding reports for visual inspection of welds. He checked control and selection of joints/welds for NDE and PWHT as per specification requirements. He conducted punch-list/line checking necessary for hydro testing as well as monitoring flushing and hydrostatic pipe testing. He coordinated and liaised with client representatives for punch list, test package clearing before & post testing, as well as approval of all documentation and reports. He maintained reports and documentation. He ensured safety requirements were implemented. (3/05-9/05)

- **QA/QC Welding/Piping Inspector –** SU TU DEN Phase 1 Field Development Wellhead Platform "A" Project, Vung Tau City, Vietnam - Monitored/checked the application of approved procedures based upon applicable drawings, project specifications, standards and codes. Mr. Mendoza was responsible for material inspection and traceability reports. He checked weld joint preparation and fit-up; inspected welds, fabrication dimensions and pre-assembly prior, during and after fit-up and erection. He checked welder's qualifications, welding consumables storage and handling. He verified pre-heat and inter-pass temperatures and prepared daily welding reports for visual inspection of welds. He checked control and selection of joints/welds for NDE and PWHT as per specification requirements. He conducted punch-list/line checking necessary for hydro testing as well as monitoring flushing and hydrostatic pipe testing. He coordinated and liaised with client representatives for punch list, test package clearing before & post testing, as well as approval of all documentation and reports. He maintained reports and documentation. He ensured safety requirements were implemented. (3/03-9/03)
- **QA/QC Supervisor –** Canyon Express Flowlines ELF Exploration & projects, Gulf of Mexico, Pensacola, Florida - On board the multi-purpose Saibos FDS, a dynamic positioned

pipe laying and construction vessel for fabrication and installation of umbilical and flow lines, twin 12" diameter gas lines, his primary responsibilities included: material inspection and pipe number tracking. He reviewed/verified WPS, welders' qualifications and NDE personnel's qualifications. He witnessed the quality work of new welders as per approved WPS, monitoring and checking weld consumables, joint fit-up and bevel preparation. He monitored/checked production and repair weld parameters and weld markings/numbering. He performed visual examination of welds. He reviewed/approved NDE reports (i.e. Visual, AUT, MPI and lamination check). He conducted holiday tests on pipe materials for damage and repairs or all welded joints and prepared reports. He coordinated with client representative for review and approval of all documentation and reports. He maintained reports and documentation and ensured safety requirements were implemented. (1/02-6/02)

- **QA/QC Supervisor –** Girassol FPSO Umbilicals and Flowlines ELF Exploration Project, Luanda Angola, S. Africa - Again on board Saibos FD - for two, 16" diameter gas lines, his main tasks included: material inspection, monitoring the adaptation of the approved QC system, verified application of procedures based on applicable drawings, project specifications, standards and codes. He checked/verified welding consumables, welder's qualification and NDE operator's qualification. He monitored welding parameters, joint and repairs for all welded joints and prepared reports. He coordinated with the client representative for review and approval of all documentation and reports. He maintained reports and documentation ensuring safety requirements were implemented. (10/01-11/01)

- **QA/QC Welding Inspector –** Malampaya Onshore Gas Plant/ Gas import/export Pipleines Project, Philippines - Mr. Mendoza monitored/conducted inspection on both welding procedure qualification and welder's performance qualification tests. He had day-to-day responsibility for supervision of fabrication, erection and installation work and saw to it that the work was in accordance with the design plans and specifications. He checked weld joint preparation and fit-up and performed visual inspection of welds. He supervised/conducted punch list repairs required prior to testing. He maintained/prepared inspection reports, examination and test documentation for hand-over and approval by the client. He ensured compliance with safety requirements. (4/01-6/01)

- **QA/QC Engineer –** Gas Heat Exchangers/Plant Turn Around Shutdown 2000, Leyte, Philippines - He verified/monitored the application of approved procedures based upon applicable drawings, project specifications, standards and codes. He monitored/conducted inspection on both welding procedure qualification and welder's performance qualification tests. He performed daily supervision of fabrication, erection and installation work and saw to it that the work was in accordance with the design plans and specification. He checked weld joint preparation and fit-up and performed visual weld inspection. He issued control, non-conformance reports on all non-conforming work activities, materials and equipment. He witnessed NDE activities for critical welds as required of inspection and test plan. He supervised/conducted punch listing work necessary for testing. He prepared progress monitoring, updates and reports. He maintained/prepared inspection reports, examination and test documents. He reviewed and approved QA/QC documentation. He ensured safety requirements compliance. (1/00-6/00)

HAKS

TETE FOCOCO MENSAH *Construction Inspector*

Education

M.S. & B.S. in Civil Engineering, High National Engineering School at University of Benin, Lome, TOGO, 1985-1991

Licenses and Certifications

ACI Field Testing Technician - Grade I, 2008

ACI Associate **CCSI –** Concrete Construction Special Inspector, 2008

Quality Control Technician/Inspector, Level I & II, PCI Certified, 2008

OSHA 10-Hour Construction Safety and Health Training Course, 2009

Secure Worker Access Consortium (SWAC), 2009

Nuclear Gauge Certificate [redacted]

HASMAT, 2008

Summary of Experience

Mr. Mensah has 13 years experience in concrete inspection, works supervision, technical management, valuation, design, estimation, etc. His representative project experience includes:

- **Concrete Inspector** - Rockaway Main Bridge Renovation. Performing field and lab inspection. (7/08-present)
- **Project Manager** - Construction of 2 hostel block at Legon University, Ghana. 4 storey building with 570 student rooms. Received appreciation from the client, the consultant and the Bank for improvement in management and schedule. Concrete structure and slabs, partition in masonry, roofing tiles or aluminum roofing sheets laid on a wooden frame. (2/07-2/08)
- **Project Manager** - Estate development, design and built of living quarters. Ongoing construction of more than 200 self contains with concrete structure, partition in masonry and iron roofing sheets laid on a steel frame. (11/07-1/08)
- **Project Manager** - Construction of Moov Technical Center in Lome (telecommunication company). Building with more than $16 million equipments. Field precast concrete for floors and roof; field precast concrete for curbs (access roads & parking). Construction of BSIC Head Office (Bank) - field precast concrete for floors and roof. Sewage project in Lome (raining water), concrete drains - precast concrete (in yard) for drains covers & curbs. (5/06-2/07)
- **Project Manager** - Ministry of Public Works, Cameroon. 1. Bridge (1300m) Rehabilitation in EBEBDA; 2. Douala Port Rehabilitation, Douala Port Authority - 1 km concrete quay rehabilitation, 200m new construction. Expertise, auscultation, and diagnostic of docking facilities (concrete and steel) seriously damaged. Visual observations, divings, bathymetric and geotechnical studies, pile sheets resistance measurement report, solutions or proposals in collaboration with the design engineer (ISL France). Demolition and reconstruction of 800m reinforced concrete quay, repair and cathodic protection of pile sheets. Use of 3 steel formworks 1.5 x 6 x 4m height reinforcement (iron rods, sheets and angle bars) fixing and or welding by diving concrete casting in presence of water (1.5m depth), meaning use of special cement and other products. (9/04-4/06)
- **Project Manager** - Construction of 155 schools in Upper West and East, Ghana Ministry of Education. Project completed 2 months before completion date. Repair of the Lee

Breakwater, Takoradi Port, Ghana. Supplied and laid 40,000 m3 boulders for coastal protection - sea defense. (6/02-9/04)

- **Project Engineer** - Bridges construction in northern regions, Togo. (10/01-5/02)
- **Project Engineer** - Rehabilitation of the facilities, Quay, Owendo Port, Libreville - Gabon. Reinforced concrete for beams and slab. (10/00-10/01)
- **Project Engineer** - U.S. Embassy Renovation with Brown & Roots, Lome U.S. Embassy, Togo. Safety facilities, offices, access roads. (5/00-10/00)
- **Project Engineer** - Rehabilitation of Quay N1 and other facilities, Lome Autonomous Port, Togo. Auscultation and rehabilitation of 1000 concrete pillars, beams and slabs off shore - demolition and reconstruction of pillars and beams using metal protection, formworks and special products (SIKA) in the concrete; repair or protection of pillars using SIKA products. Docking metal equipments, defenders, roads, sanitation. Prepared monthly certificates, daily and monthly reports. (1997-2000)
- **Project Engineer** - Repair of the Breakwater - studies and design. (1996-1997)
- **Project Engineer** - Pala II Cotton Plant construction. Field precast concrete for beams and columns. (12/94-12/96)

HAKS

JARRUS MITCHELL *Construction Inspector*

Education

Bachelor of Arts, Architecture
Norfolk State University, Norfolk, VA, 1996

Licenses and Certifications

ACI Concrete Field Testing Inspector, 2007

ICC Master Special Inspector, 2007

ICC Structural Masonry Inspector, 2007

ICC Steel Framing and Bolting Inspector, 2007

ICC Spray Applied Fireproofing Inspector, 2007

ICC Welding Inspector, 2007

ICC Reinforced Concrete Inspector, 2007

CWI American Welding Society, Structural Welding Special Inspector, 2009

Level II – Certified Ultrasonic Shearwave (UT) Inspector

NYCDOB 4-Hour Supported Scaffold, 2008

Summary of Experience

Mr. Mitchell has over 14 years or experience in the field of Architecture and Engineering. Some of his representative projects include:

- **Project Supervisor** –Scope of work included managing QA/QC of multiple construction projects in the New York City area, supervising inspectors, preparing construction schedules and budgets, and maintaining client relations. Projects ranged from 100 million to 1 billion dollars and included a 56 story Bank of America. Mr. Mitchell was the Lead forensic inspector for high rise construction jobs. (2008-2009)

- **Commercial Construction Manager** – Work included managing and maintaining Special Inspections Department, implementing quality assurance program for high-rise construction, monitoring, tracking, and amending construction budgets and progress schedules for multi-million dollar construction projects, managing inspectors, generating and developing new clients for future quality assurance work, managing horizontal construction consultation for large local clients, generating proposals and reports and carried out structural steel inspection using NDT methods such as Magnetic Particle and Ultrasonic Testing. (2005-2007)

- **Commercial Construction Manager** – Work included developing and creating training and technical programs for Structural Steel Inspection Programs using NDT methods. Responsible for implementing strategic marketing procedures and generating construction schedules with corresponding budgets on residential and light commercial projects. (2004-2005)

- **Construction Materials Manager** – Responsible for Construction Materials Testing operation and client management, installing quality control measures for technicians and staff to improve efficiency, helping to create a new QA/QC service line and operating its customer base with emphasis on third party architectural and structural reviews including monitoring all vertical construction, managing eight technicians and multi-managing several residential and commercial projects. (2002-2004)

- **Project Manager/Special Inspector –**Responsible for inspecting commercial buildings for structural soundness, managing multiple residential and asphalt roadway projects in regards to structural quality control inspections, creating caisson designs using AutoCad to regenerate existing house with proposed caisson installed. (2000-2002)

- **Architectural Designer –**Work included assisting architects and construction managers with planning and comprising of construction documents of commercial buildings, producing architectural details and sections and interpretations in the field in regard to quality assurance, producing AutoCad drawings from preliminary sketch designs from architects, working with high end residential clients in schematic phase of custom home design. Residential projects range from five hundred thousand to two million dollars. (1996-2000)

HAKS

HESHAM MOHAMED *Construction Inspector*

Education

Bachelor of Science, Civil Engineering, Alexandria University, Egypt

Summary of Experience

Hesham Mohamed has seven years of experience as an engineer. His highlighted experience includes office engineering, inspection of various construction activities including water mains, sewers, asphalt and roadway reconstruction, the design and engineering of a hospital foundation. The work involved intricate technical evaluations such as designing cross sections of columns for reinforcing concrete. His representative experience includes:

- **Office Engineer** – Resident Engineering Inspection, Trunk Water Main Replacement, Clove Road, Staten Island for NYCDDC – Work included replacement of an 8-inch sanitary sewer with 6,000 feet of 10-inch clay and 10-inch ductile iron pipe sanitary sewers, individually air testing welded joints, ensuring proper insulation in accordance with AWWA specifications. Construction cost $28 million. (12/07 – present)
- **Office Engineer –** REI services for the construction of Distribution Water/Main/Extensions Replacement (New Buildings), Staten Island Island & Brooklyn, NY – (6/07)
- **Office Engineer**- REI Services on an As-Needed Basis in Brooklyn, NY for New York City DDC. Task involved Trench Restoration Project, Brooklyn NY. Scope of work included the process payments requisitions, review and process change orders, prepare meeting minutes, maintain material certification log and payment book, and prepare contract closeout documents. (4/07- Present)
- **Inspector** – Construction Inspection Services for Route 9 Bus Shoulder Use and Pedestrian Improvements, Township of Old Bridge, Middlesex County, NJ for NJDOT. This project entails the creation of a 4.2 mile shoulder lane for use by busses in two sections of Old Bridge Township, Middlesex County. Additionally, pedestrian improvements such as crosswalks and sidewalks, traffic signal improvements, and drainage improvements are included. Work area was restored to base course grade at the end of each work shift. Involves significant night work. (8/06-12/06)
- **Inspector** – REI Services on an As-Needed Basis in Brooklyn, NY for New York City DDC. Task involved Trench Restoration Project, Brooklyn NY. Scope of work included the inspection process for the excavation of trench five feet deep, backfilling, grinding existing roadway curb to curb and asphalt, MPT, safety, trench boxes, sheeting, replacing soil, asphalt and roadways. Responsibilities included inspection and quality control of material, and recording daily quantities and recording entries in an estimation book. (11/05-12/07)
- **Inspector** – REI Services for Installation of Sanitary and Storm Sewer and Water Main, Marcy Avenue and Vicinity, Staten Island, NY for NY DDC. Scope of work included installation and offsetting of 8”, 12” and 20” ductile iron pipe water mains in

advance of the installation of sanitary and storm sewer lines in a primarily residential area in Woodrow, Staten Island. This work included the installation/removal of water valves and fire hydrants and the reconnection of water services to homes. Approximately 20,000 feet of sanitary (11,000 ft.) and storm (9,000 ft.) sewer lines were installed together with more than 120 manholes and sewer chambers. The sanitary sewer lines are 10" & 12" E.S.V.P. pipe either on cradles and piles. The storm sewer lines range in size between 12" and 48" diameter pipes. These are either encased in concrete or on piles. (4/04-11/05)

- **Inspector** – Engineering Inspection Services for the Installation and Testing of New 36" Water Main and Appurtenances on Cropsey Avenue from Bay Parkway to Stillwell Avenue, Brooklyn, NY for New York City DDC. Scope of work included installation of concrete and/or piles 10", 12", 15", 18" ESVP storm sewers, as well as 24", 30", 36", 42", and 54" RCP storm sewers; Installation of 48" and 36" steel trunk water mains and 20", 12" and 8" distribution water mains; Installation of catch basins, chute connections, sidewalks, and pedestrian ramps; removal and disposal of contaminated (non hazardous) soil: The work includes the removal of over 39,000 tons of contaminated (non hazardous) material; Installation of street lighting, traffic signals, and fire alarms; including roadway trench restoration and 8" concrete base and 3" asphalt wearing course. (9/02-10/02)
- **Construction Supervisor** – Egyptian Petrochemical Company, Alexandria, Egypt. Scope of work included maintaining all existing pipelines, foundations, and mechanical equipment. Responsibilities included supervising contractors, estimating quantities, the length of pipes excavation, backway, roadway, asphalt, sidewalks, surveying, block pavers, and planting as well as affiliated items. (8/97-9/00)
- **Construction Design** – Arab Consulting and Design. Alexandria, Egypt. Scope of work included the design of the foundation for the structure of the hospital in accordance to soil conditions from samples. (8/96-8/97)

HAKS

WILLIAM NILES *Senior Scheduler*

Education

BS Business Administration

Licenses and Certifications

Cost/Schedule Control Systems

Proposal/Project Management

OSHA Training (LTP)
MS Project/Office Tools

Bentley ProjectWise Course, 2004

Government Contracts & Pricing

Primavera (P3, P3e, P6 and Sure Trak)

Expedition

American Association of Cost Engineers

Summary of Experience

Mr. Niles has over 35 years of experience as a scheduler and cost engineer. He provided project control and site management services for a variety of new construction and refurbishing projects in the tri-state area. Responsibilities included coordinating activities of several subcontractors reviewing subcontractor schedules and preparing detailed schedule from drawings, specs and estimates. Projects included NJ Transit's Train Station, PATH projects, Downtown PATH reconstruction, renovation of the 42nd Street Subway Station and Amtrak's East River Tunnels project.

- **Senior Project Engineer** - Cost control and scheduling for the **Port Authority of NY & NJ** on their Downtown **PATH** Reconstruction Project. Work included preparation of monthly progress reports, performed completion surveys and monitored T and M costs, supported the 6 Sigma program for Bechtel, and gathered and analyzed safety data for the company. (06/02-10/02)
- **Project Control Engineer** - **Port Authority of New York and New Jersey**. Performed Cost Control and Scheduling for capital projects for tunnels, rails (**PATH**), bridges and terminals. Supported the project managers and construction group with resource allocation plans and cost projections using P3 and Sure Trak. Worked as part of a team to convert all project control from MS Project to P3. (09/97 – 03/98)
- **Project Control Engineer** - **The Port Authority of NY & NJ**. Contracted to the interstate Transportation Division to develop and maintain capital program schedules, using P3, for tunnel bridges, terminals and Rails (PATH). Served on a team for improving the ITD cost management system by merging the PA estimating and cost accounting system with P3 and other applications. Established an on-line schedule status reporting system that was used by all levels of ITD Management. Provided training to staff members in the use of P3. (08/94 - 09/96)
- **Scheduler** – Biennial Inspection and Miscellaneous Structural Repairs, Marine Parkway and Crossbay Bridges Brooklyn and Queens, NY, TBTA – Scope of work included performing detailed in-depth inspections of the bridge substructures and superstructures to document all bridge deficiencies, producing inspection reports for each bridge to TBTA, monitoring any red flag and emergency conditions for timely response, and underwater inspections that will be performed as required. (5/09-present)
- **Scheduler** – Construction Inspection of Structural Steel Repairs East Deck Truss Spans of Tappan Zee Bridge, NYSTA – Work includes the repair or replacement of diaphragms,

catwalks, deck trusses, floor beams, main trusses, fascia girders, stringers, gusset plates and bracings. $ 25 million (4/09-present)

- **Scheduler** – Construction Management Services, Croton Aqueduct Rehabilitation and Site Restoration – Major aspects of the work include opening of the aqueduct for access and ventilation; buried shaft work, including removal of buried shaft covers, removal of ladders, shaft wall repairs and grouting of leaks and voids, rehabilitation of the surface structure, blow off chamber, stream raceway and related surface improvements; and rehabilitation of the 7-mile-long pressure tunnel lining, including crack repairs, brick replacement, contact grouting, consolidation grouting and leak repairs. (4/09-5/09)

- **Scheduler –** Construction Management Services, Alley Creek Pump Station Upgrade, Queens, NYCDEP – Reviewed, evaluated and prepared comments on the baseline schedule. Conducts periodic schedule review meetings and prepare the minutes. Review and comment on the schedule updates and accompanying narrative. (10/07-12/09)

- **Scheduler –** Construction Inspection Services, Catenary and Bridge Rehabilitation on the New Haven Main Line Fairfield and Bridgeport, CT – Work included installing catenary structures, foundations and associated track, signal and communication upgrades, replacing open deck superstructures with ballasted decks, rehabilitating abutments of five Metro-North bridges, and a careful interweaving of interim and permanent traction power and overhead catenary system configurations in order to keep the railroad running throughout the construction. $ 75 million (6/07-present)

- **Scheduler –** 2007 Biennial Bridge Inspection, Miscellaneous Repairs Design, Henry Hudson and Queens Midtown Tunnel Approach Bridges, TBTA – Project involved project coordination, office support, maintenance and protection of traffic and the structural inspection of the bridges, light poles, sign structures, and rock slopes, analyzing field inspection data, presenting various reports that discussed paint condition, steel and concrete vulnerability, hollow sounding concrete and more, updating load ratings as required based on the findings of the inspection, inspecting the various rock slopes near the Henry Hudson Bridge, and comparing findings to previous inspections. (5/07-3/08)
- **Scheduler** – Region 8 (Project D015258) for NYSDOT. Reconstruction and partial realignment of Drury Lane and the construction of a new airport access road. Reviewed, evaluated and prepared comments on the baseline schedule. Conduct periodic schedule review meetings and prepare the minutes. Review and comment on the schedule updates and accompanying narrative. Conduct special studies and prepare ad hoc reports for the owner. (2/06-2/08)
- **Scheduler** - Construction Management Services for Redevelopment of Harlem Hospital Center, New York, NY for Dormitory Authority State of New York. Coordinates and consolidate sub-contractor's schedules. Prepares and maintains special schedules for hospital facilities management including complicated staff and patient relocations. Construction cost $31 million. (9/05-10/06)

HAKS

SAURIN H. PATHAK, AIA, LEED AP, *Scheduler*

Education

Bachelor of Architecture, National Architecture Accrediting Board and New York State Education Department

School of Construction Management, New York University (Continuing Education Courses)

Professional Registration

Registered Architect – New York 2007, [redacted]

LEED AP, 2007

Licenses and Certifications

Primavera Trainings: P3, P3eC for Construction and Expedition Trainings

NRC (Neighborhood Reinvestment Corporation) Training Institute: Building Inspections and Spec Writing, Overcoming the Obstacles of Lead Abatement, Advance Housing Production Management and Design Reviews of Project Managers

Summary of Experience

Mr. Pathak has over 15 years of experience working on rail/transit, educational, environmental/remediation, commercial, infrastructure, housing design and construction projects. He specializes in Project Controls and is trained in EVMS Management. Mr. Pathak is knowledgeable in LEED Green Building Rating systems for various building types. He has successfully coordinated many projects for LEED certifications. Some of his representative projects include:

- **Resident Engineering** – Construction Management Services, Alley Creek CSO Abatement Facilities for NYCDEP. Scope of work includes reconstruction of sidewalks, remediation of gullies, removal of invasive plants, trees and common weed near the lake, modification of catch basins, and shrub and tree plantings. Construction Cost $30 million (07/09 – 12/09)

- **Scheduler** – Construction Management/Build Services for Various Capital Construction Projects in NY for NYCHA. Work included CPM scheduling and procurement of long-lead items; phasing and logistics control that will allow maintenance of existing facility operations and minimal disruption to residents. Construction Cost $30 million (05/09 – 12/09)

- **Scheduler** – Construction Management Services, Alley Creek Pump Station Upgrade, Queens, NYCDEP. Scope of work included procurement of long-lead items and scheduling; maintaining continuous operation of the existing facility and coordination; and community/public participation issues. Construction Cost $50 million (06/09 – 12/09)

- **Scheduler** – Construction Management Services, Miscellaneous Downstate Area Projects, NYCDEP. Work included establishing a master project schedule for all projects to monitor all activities and identify scheduling delays. (10/2009)

- **Senior Project Controls** – Redevelopment of James A. Farley Building, Moynihan Station, New York, NY. Scope of work included coordinating design reviews of the Transportation & Retail Center project in Manhattan; risk assessment analysis and implementation and management of documents and contract control program prolog $700 million.

- **Senior Project Controls –** New Jersey School Construction Corporation, Jersey City, NJ. Projects included design-phase management of a new elementary school $30 million, reconstruction of elementary school, and historical renovation of an elementary school $25 million. Mr. Pathak was responsible for the project controls and pre-design phase management of building evaluations and site feasibility analysis for the school construction program and health and safety improvements. Responsibilities also included construction phase coordination RFI's and submittals; coordination of projects for the LEED certification during design and construction phase. Established construction strategy, budget, phasing and logistics. Coordinated for regulatory compliance, community relations, affirmative action and historic preservation. Development and implementation of 5-year master plan schedule for land acquisition, renovation, expansion and construction of 60 school buildings in Jersey City, NJ. $1,100 million construction program. Implementation and management of document and contract control program Prolog $35 million.

- **Senior Project Controls –** Renovation and Rehabilitation of Facades and Plaza of Marshak Building, City University, New York. Scope of work included project controls and pre-construction management of $40 million new curtain-wall plaza repair project of science building preparation of schedules; design reviews and coordination.

- **Senior Project Controls –** Data Center for JP Morgan Chase, Carlstadt, New Jersey. Coordinated pre-construction phase for the conversion of the Industrial building in to 160,000sf data center. Developed and coordinated detailed design and construction schedule for new data center. This was a high value asset project and had an aggressive completion schedule for $250 million project.

- **Senior Project Controls -** Roebling Museum, Roebling, New Jersey (USACE Project). Coordinated pre-construction and Construction phase of the historical renovation & adaptive reuse of Roebling Main Gate House in to Roebling Museum. Scope of work included preparation of construction schedule coordination of design & construction phase submittals, RFI's and field coordination during design and construction phase $10 million.

- **Project Controls -** United States Postal Service, Greensboro, NC**.** Scope of work included in-depth facilities survey for the identification of the accessibility improvements; identification of the non-compliance items; scope preparation; cost estimating and providing design solutions for the correction of the deficiencies. Responsible for the construction field inspections and web based reporting for the completed survey.

- **Project Engineer -** Delaware River Port Authority's PATCO Accessibility Improvement Project, South New Jersey and Philadelphia. Construction management and project controls of rehabilitation work at thirteen (13) railway stations. The scope of work included complete station rehabilitations including exterior improvements, new stairs, ramps, elevators, escalators, parking, signs, platform improvements and track improvements $25 million.

HAKS

OMAR PETTY *Senior Inspector*

Education

Engineering Technology, Highway Construction, New York College of Technology, 2004

Business Mgmt., Krishno College of Business, 2000

Professional Registration

NICET Level III, #[redacted]

Licenses and Certifications

ACI Field Testing Technician – Grade I, 2010

ACI Associate **(CCSI)** Concrete Construction Special Inspector, 2008

NACE Coating Inspector Level 1, 2009

NYC DOB 4-Hour Supported Scaffolding, 2009

PCI Quality Control Personnel Certification - Level I, 2008

OSHA 10-Hour Construction Safety and Health Training Course, 2004

ASTM Member

Arterial Aerial lifts Certified

Fall Protection Certified

SSPC C-3 Supervisor/Competent Person Training

Summary of Experience

Mr. Petty has over 10 years of experience in the area of Construction Inspection as well as Quality Assurance and Quality Control. His representative projects include:

- **Construction Inspector –** NYSDOT – Construction Inspection Term Agreement, Bridge Cleaning and Painting, Region 10, NYSDOT – Work included inspecting pressure washing, abrasive blast cleaning and painting of steel surfaces. (4/09-present)
- **Construction Inspector** – NYCDDC – Engineering Inspection Services, Reconstruction of 86 Street from Shore Road to Gatling Place, Brooklyn, NY Project cost: $28 million**.** Responsible for the inspection of 8,12 Inch water main and 72 inch trunk water main. Storm and sanitary sewers, excavation and road work, curbs and sidewalk. Prepared inspector's daily report, monitored the site safety and MPT and ensured compliance with contract standards and specifications. (8/08-4/09)
- **Construction Inspector –** NYCEDC – Construction Inspection Services for the Work Associated with Connection of the Macomb's Dam Bridge to the New Garage. (3/09)
- **Construction Inspector –** Construction Inspection Services under a Backdrop Agreement for Various Projects in Region 10, NY – Work included daily extensive coordination, surveying pavement conditions, restoring existing joints as well as installing new ones in addition to crack sealing and pavement removal and replacement with rapid setting calcium chloride concrete. (4/08-8/08)
- **Construction Inspector** - NYSDOT: D260399 Southern State Parkway Mill and Fill (1R) NYC Line to Nassau Road. Project Cost: $10,300,000. Responsible for various inspections including Cold Milling of Bituminous Concrete, Spray Apply Waterproofing Membrane, Cast-in-Place Concrete Curb, Resetting Existing Drainage Frames and Structures, Installing Sediment Filter Bags for Drainage Structures, Cleaning and Sealing Transverse/Longitudinal Joints, Installing Inductance Loops, Appling Tack Coat, Asphalt Paving(12.5mm F1

Superpave HMA, 50 Series Compaction), Installing Raised Reflectorized Snow plowable Pavement Markers with Cast Iron Housing, Installing Thermoplastic Pavement Stripes and Removal/Installation of Reference Markers. (4/06 – 1/08)

- **Construction Inspector /Quality Assurance Officer** - SEPTA: E3X30300 Market Street Elevated Reconstruction Project. Project Cost: $710,000,000. Responsible for the inspection of the construction being done is as per specification and building code. Overseeing initial and final inspection of 3352.8 m of new single-beam supported pre-cast guide way decks, two automatic train control buildings, six fully accessible station building, flat-bottomed rail installation, post tensioning, steel erection, elevators and escalators installation, brick laying, caisson drilling, water-manes and sewer pipes installation, HVAC systems, metal decking roof, standing seam roofs, RTC and ATC cables installation, bid welding, puddle welding, fillet welding, heat trace systems, pre-cast concrete superstructures, abrasive blasting and painting, MPT, erosion control, retaining walls and caisson drilling. (2/2006-4/2006)

- **Inspector/Quality Assurance Officer** - NYSDOT: D258865 Van Wyck Expressway Bridge Rehabilitation and N/B Mainline Operational Improvement. Project Cost: $ 53,875,000. Assigned to review plans specification for two highway overpass and one pedestrian bridge. Field inspect for compliance construction work including demolition and reconstruction of bridge superstructure (stage) construction, including concrete abutments, steel girders, bearings, asphalt roadway overlay, pile driving, scaffolding erection, manhole adjustment and replacement, water main replacement, armored joint systems, electrical roadway lighting, traffic signal installation, excavation, temporary bridge erection, lead paint removal, field painting and landscaping. Also assisted the office engineer with contract close out including coordinating Inspector's Daily Report, review contract quantities and plans specification, verifying and imputing data for approval in various cost analysis before final review, involved in regulatory requirement for safety meetings with various topics from Traffic Control to OSHA. Verifying compliance with MURK (Manual of Uniform Record Keeping), EEO (Equal Employment Opportunities) and DWBE (Disadvantage/Women Business Enterprise). (9/2002-2/2006)

- **Inspector** – Inspected plywood products for dimensional exactness, correct moisture content, proper glue formation and glue application. Responsible for recording and filing merchandise entering and leaving the warehouse for international export. (1998-2000)

HAKS

JOSE PINTO *Rail Road Inspector*

Education

Bachelor of Science, Civil Engineering

Licenses and Certifications

DDC Concrete Field Testing Certificate

OSHA 10-Hour Construction Safety and Health Training Course, 2008

Summary of Experience

Mr. Pinto has over 12 years of experience in the field of civil engineering, including construction supervision of roadway construction, rehabilitation of bridges, sewers, and water main. He is also proficient with NYSDOT, NYCDOT, NYCDDC specifications, ACI and ASTM field sampling and testing procedures.

- **Inspector** - Extension of the #7 Subway from 41st & 8th Avenue Westward under 41st Street to 11th Avenue and Southward under 11th Avenue to West 25th Street for MTA Capital Construction. Work site consisted of five staging areas, Construction of three shafts to provide access for tunnel mining operations, construction of an adit, two Tail Tunnels and two TBM Assembly Chamber/Starter Tunnels. Construction of five cross passages that connect the two running tunnels, underpinning and structural modification of the existing 8th Avenue subway structure. Retrofit of the existing no.7 Line tunnel structure. Construction of two bored tunnels , 22-feet diameter each about 120 feet below ground level, construction of a permanent roadway decking system within the lower level of the existing Port Authority Bus Terminals (PANYNJ) and construction of electrical sub-station. Duties include providing construction management services that includes QA/QC program to assure the project work is carried out in a planned, controlled manner and in compliance with MTACC guidelines. The quality program includes forms and procedures for planning, scheduling, assigning work, recording, retention and retrieval of records for construction activities. It also includes provision for identifying and resolving deficiencies and verifying compliance with the QA program and contract documents. CCM develops and implements this QA program that meets MTACC requirements. Construction cost $1,900 million. (10/08 – present)

- **Inspector** - Region Central Resurfacing - Maintenance Roadway Repair Central, Sub-Region C-2, Contract C201 and Maintenance Roadway Repair Central, Sub-Region C-3, Contract C301, Burlington. Hunterdon, Monmouth, Ocean, and Somerset Counties, NJ for NJDOT. Project involves milling, asphalt paving, line striping, traffic control and night time operations. (4/08-present)
- **Senior Inspector -** Contract No. HWS2007K2 – Installation of Prior Notice Sidewalks- Serving as senior inspector for this project involving excavation, compaction of sub grade, concrete pouring of curbs and sidewalks. Preparing Task Orders, field measurements and calculations for payment quantities and preparing sidewalk assessment construction cards. (7/07 – 4/08)

July 2000 to June 2007

- **Inspector** - Contract No. HWK472 – Reconstruction of Flushing Ave. Served as an inspector for this project involving inspection of the new 8” to 20” distribution water main, hydrants,

valves, wet connections, fittings, including daily field cards, and tap cards. Inspection of the new 15" to 54" combined sewer, catch basins, manhole and house connections. Inspection of full restoration of roadway including paving and concrete base. Also assisted in installation of new 30" to 72" trunk water main. Inspection of television inspection and video taping of sewers and lining of exiting sewers, (shotcrete etc.)

- **Inspector** - Contract No. HD-153B1- Restoration of Edgemere Phase 2B- Served as an inspector for this project involving inspection of driving of timber piles and concrete filled steel pipe piles. Installation of new 6" to 18" sanitary and storm sewers on concrete cradle or encased in concrete including house connections, manholes, chambers, catch basins, etc.
- **Inspector** - Contract No. HBX663 Reconstruction of 3rd Ave. Bridge over Harlem River. Served as an inspector for this project involving inspection of demolition of exiting superstructure and substructures. Inspected daytime and nighttime M.P.T. implementations including lane closures, construction signs, temporary barriers, type 3 barriers, inertial barrier modules, temporary striping, portable VMS installation and removal. Tested and inspected placement of various classes of concrete such as A,C, HP, HP with DCI, HP lightweight, G, G modified etc. Monitored dewatering of excavated material and kept record/ payment of Traffic Enforcement Agents.
- **Inspector** - Contract No. HBQ656R. Rehabilitation of Cross Bay Blvd. Bridge Inspected structural concrete placement, reinforcement installation, formwork for abutment wall, columns, pedestals, footings, superstructure and structural approach slabs.
- **Chief Inspector** - Contract No. HWP2002K. Installation of Pedestrian Ramps in Brooklyn. Served as a chief inspector for the installation of pedestrian ramps at multiple locations. Duties included excavation, installation of steel curb, placement of concrete, temporary and permanent asphalt. Also monitoring of M.P.T, prepare field reports, and oversee work/ reports of other inspectors.
- **Chief Inspector** - Contract No. HWP2001KR. Installation of Pedestrian Ramps in Brooklyn. Served as a chief inspector. Duties included excavation, installation of steel curb, placement of concrete, temporary and permanent asphalt. Also monitoring of M.P.T, prepare field reports, and oversee work/ reports of other inspectors.
- **Inspector** - Contract No. HPQ662. Reconstruction of Guy R. Brewer Blvd. Bridge over Belt Parkway. Inspected M.P.T implementations including complete closure (72 hour) of the Belt Parkway in both directions for the purpose of demolition. Inspected demolition of existing superstructure and substructures. Also inspected structural concrete placement of structural approach slabs.
- **Inspector** - Contract No. HPQ1076. Reconstruction of 65 Street Bridge over L.I.R.R. Inspected structural concrete placement and field sampling and testing as per NYCDOT specifications.

HAKS

MIKEAL RAMESSAR *Senior Inspector*

Education

Associate in Applied Science in Civil Engineering Technology, NYC College of Technology, City University of NY, 2005

Professional Registration

NICET Level III 2009, [redacted]

Licenses and Certifications

ACI Field Testing Technician – Grade I, 2009

ACI CSI – Concrete Special Inspector, 2009

OSHA 10-Hour Construction Safety and Health Training Course, 2009

OSHA Confined Space Awareness # 1910.146, 2009

Summary of Experience

Mr. Ramessar has over 8 years of experience in construction inspection for various bridge and highway projects. His representative projects are as follows:

- **Senior Inspector** – Construction Management Services for Projects on a "Call-In" Basis for **Port Authority of NY&NJ.** Work includes providing inspection of pile driving, dredging, structure concrete placement, superpave asphalt, rebar placement etc., to ensure conformance with specifications and safety standards at Port Newark. (03/09 – Present)

- **Construction Inspector** – REI Services for Reconstruction of Grand Concourse over East 161st Street, & Reconstruction of Grand Concourse over East 161st Street to East 166th Street, Bronx, NY. Project included replacement of an arch overpass and 6-block reconstruction of a major urban 10 lane wide through fare. Two multi-staged projects included: reconstruction of combined sewer system, water main, street lighting, traffic signals, Con Edison duct banks, telephone, mediums, pedestrian ramps and landscaping. Placement of concrete base roadway and HMA super pave. Responsibilities included: monitoring soldier pile installation with wood lagging, demolition of 60-ft wide, 550- ft long concrete arched bridge, abutments stem wall, stair cases, steel grating, steel stringers, underpass roadway, sidewalk & concrete barrier, construction of reinforced concrete abutments, back walls, pedestals, bearing, superstructure deck and approaches. Reconstruction of four staircases at the portals of the bridge, reconstruction of the underpass roadway and sidewalks, permanent grouted tieback to existing wing wall, installment of water mains, drainage structures & manhole, MPT, painting new & existing abutment stem wall, approach slab with pressure relief joints, installation of elastomeric bridge bearings, install armored joint system with compression seal, open steel floor, construction of Lou Gehrig Plaza includes sidewalks, median island ,bridge parapets with architectural fencing and landscaping, installation of new tunnel & street lighting system, pavement striping & traffic signals, resurfacing upper arteries. Construction Cost $52 million (5/06 – 03/09)

- **Construction Inspector** – REI Services for Replacement of the Sikorsky Bridge over the Housatonic River- Stratford/Milford, CT for ConnDOT. Work on this project included the demolition of the existing Sikorsky Bridge and construction of a new five-span continuous steel structure with a composite concrete deck. The substructure includes post-tensioned pier caps with concrete footings supported by six-foot diameter drilled shafts embedded in rock

sockets. The new structure has six lanes with left and right shoulders as well as a sidewalk on the north side. The bridge was constructed in two major stages. Upon completion of the first stage of construction, the existing bridge was demolished. Traffic was diverted to the newly completed section; the second half of the new bridge was then constructed. Route 15, on both approaches to the Bridge, was widened to six lanes with median barriers and shoulders adjacent to the left and right travel lanes. A walkway/bikeway was constructed on the north side of Route 15. The Route 15 Bridge over Milford Parkway under went superstructure replacement and substructure repairs. This project required pier construction and steel erection from barges in the river and temporary trestles over the tidal grasses, as well as the construction of a haul road due to limited site access. Environmental issues include protection of wetlands, prevention of river pollution during demolition of the existing bridge, and proper identification/processing of hazardous materials. Extensive maintenance and protection of traffic and multi-staged construction was required to maintain heavy traffic volumes on Route 15. Work over the active Metro-North Railroad right-of-way was coordinated with the train schedule. Other major considerations include development of a detailed CPM schedule and coordination with local, state and federal agencies, including the Army Corps of Engineers, Coast Guard, EPA and Metro-North. Responsibilities included: monitoring structural steel, sheet piling, riprap, and post tension pier cap rebar installation, parapet wall, piers, bridge deck, keeper block and wing wall installation of finger joint, bearing pads and metal bridge rail and form liner placement, dam proofing, and guide rail, shear connector studs, construction access, cofferdam and dewatering. Construction Cost $90 million (5/05-4/06)

- **Construction Inspector** – REI Services for Reconstruction of the Bruckner Expressway (I-95), Bronx, NY for NYSDOT. Work on this project covered the reconstruction of a 1.5-mile section of the Bruckner Expressway from the Throgs Neck Expressway interchange to the Pelham Parkway. The five-stage construction project included the replacement of the existing roadway and substandard raised shoulders with a 50-year life concrete pavement and flush full-depth shoulders. Existing features, such as a concrete median barrier and guide rail, were replaced for the entire length of the project. A new lighting system was installed during the pre-stage construction sequence. Numerous new ground-mounted signs, six cantilever and five single-span sign structures replaced the existing highway signage. Over 100 new drainage structures and 3,380 meters of pipe supplement the existing facilities. Landscaping work includes extensive planting of new trees and shrubs and selective thinning of existing greenery. Key issues in this project include the complex maintenance and protection of traffic schemes to maintain a minimum of three lanes in each direction. An MPT Specialist was assigned to the project to monitor traffic conditions and verify proper use of construction signs and appurtances, highway lighting, cleanliness and rideability. The project includes provisions for CPM Scheduling, Incentive/Disincentive work, lane closure restrictions and night and weekend work. Responsibilities included: excavation, embankment and restorations, construct concrete pavement (50 year pavement design), installation of fence and highway lighting, landscaping, slope cutting, and road repair, maintenance and protection of traffic, perform concrete testing, prepare daily inspection reports, assist field office with computing final quantities for pay items, inspections of drainage, sewers and pavements. Construction Cost $50 million (1/04 – 12/04)

HAKS

LESLY REMY *Contract Administrator*

Education

Bachelor of Science, Agricultural Engineering, State University of Haiti, Port-au-Prince, Haiti, 1977

Professional Registration

NICET Level III 2001, [redacted]

Licenses and Certifications

ACI Concrete Field Testing Technician - Grade I, 2008

Welding Technologies, 1995

Traffic Control Technician Course (MPT), American Traffic Safety Services Association (ATSSA), 1999

NJSAT, 2003

OSHA 10-Hour Construction Safety and Health Training Course, 2007

Summary of Experience

Mr. Remy has over 29 years of experience in design and construction supervision in the rehabilitation of construction of highways, bridges and buildings. In addition, he is experienced in estimation of "extra work" on contracts, familiar with the utilization of the NYSDOT Manual of Uniform Record Keeping (MURK) and NYSDOT specifications. Examples of his experience are as follows:

- **Office Engineer** – Resident Engineering Inspection Services, Emergency Reconstruction of Borden Avenue Bridge, Queens for NYCDOT. Work included removal and resetting of fascia stones, removal and replacement of existing bridge railing, street lighting replacement, gas main relocation, pavement and sidewalk construction, new fender system installation, rehabilitation of existing roller bearings, installation of a steel sheeted cofferdam around abutment and wing walls, constructing reinforced abutment and wing wall stems, bridge seats and pedestals and replacing the armored joint. (1/09-present)
- **Office Engineer** - Construction Inspection, Southern State Parkway, Mill and Fill, NYC Line to Nassau Road, Nassau County for NYSDOT. Two inches of existing asphalt pavement overlay is to be milled and resurfaced. Some areas require concrete pavement and joint repairs. This project includes traffic management strategies such as construction phasing and lane closures. It also involves significant night work. Duties include preparing and submitting monthly and final estimates and progress reports, keeping all records in accordance with the Manual of Uniform Record Keeping (MURK). Construction Cost $16.5 million (9/07-present)
- **Senior Inspector** – Construction Inspection Services under a Backdrop Agreement for Various Projects in Region 10, NY. Work included surveys of existing drainage structures to determine repair details, resetting or replacing frames and grates, applying new waterproof membrane systems on bridge decks, installation of new joints, crack sealing, and pavement removal and replacement with calcium chloride concrete. (7/07-1/09)
- **Senior Inspector** - Reconstruction on the Brooklyn Queens Expressway from Flushing/Classon Avenues to Sands Street for NYSDOT. Work included deck replacement and superstructure repairs for the Park Avenue and Nassau/Concord viaducts. The deck replacement includes replacement of all expansion joints,

replacement of steel railing with single slope concrete barrier and drainage improvements for both viaduct structures. The Park Avenue viaduct will be widened (by approximately 0.6 m on each side) in addition to seismic improvements, fatigue upgrades and replacement of bearings. Also included is the related work on associated approaches and ramps as well as installation of new lighting and lead abatement/painting of the steel. This project includes traffic management strategies such as construction phasing, lane closure restrictions, night and weekend work, critical path method scheduling provisions, involvement with the communities and many New York City agencies, etc. Construction Cost $124 million (1/06-7/07)

- **Senior Inspector** - Construction Inspection Services (CIS) for the NYSDOT Region 8 Term Agreement in Rockland, Westchester, Orange, Putnam, Dutchess, Ulster, and Columbia Counties. Construction operations included roadway milling and asphalt resurfacing in Westchester, Rockland, Orange and Ulster Counties; and roadway crack sealing, bridge cleaning and painting, bridge washing, highway repairs, bridge repairs, pavement markings and tree removals in all counties. Construction Cost $35 million (8/05-12/05)

- **Senior Inspector** – Construction Inspection, rehabilitation of Mainline Bridge over the Saw Mill River Parkway for NYSTA. Work included milling and paving adjacent highway sections, drainage improvements between northbound mainline and northbound on ramp, removing median barrier for crossovers, installing scuppers, lifting deck and replacing bearings, repairing substructure, deck and fascia concrete, removing wind bracing after structural lifting, restoring median barrier and drainage, repaving shoulders, and restoring disturbed areas. (9/2005)

- **Senior Inspector** – Construction Management Services for Project BB-21A, Roof Replacement and Building Repairs, Brooklyn Battery Tunnel Service Building – Work included supervising construction and coordinating with ongoing service activities to ensure safety for tenants and uninterrupted tunnel operations, removing the existing roofing to the roof deck and the first and second floor levels, making deck repairs, and installing a new SBS built-up, and modifying bitumen roof throughout. (8/05)

- **Senior Inspector** - Construction Inspection Services for Reconstruction of the Long Island Expressway (I-495) between Exits 32 and 37 to provide a High Occupancy Vehicle (HOV) lane, plus replacement of the Willis Avenue/Mineola Boulevard Bridge, Nassau County, NY for NYSDOT. Work included construction of composite pavement and full-depth asphalt pavement; pavement resurfacing; ramp reconstruction; mainline widening and shoulder reconstruction; construction of retaining walls and noise barrier; and overall improvement and modifications to drainage, lighting and INFORM systems. Replacing and widening the existing steel girder Willis Avenue/Mineola Boulevard Bridge. Construction Cost $97.5 million (8/02-7/05)

- **Office Engineer** - Construction Inspection of South Jamaica Area, Queens, NY for NYCDDC. Duties included bookkeeping, official correspondence, shop drawings, design modifications, material certification and acceptance, change orders, payrolls, monthly utilization reports, contractor's partial payments, meeting minutes, MPT violations, utility bills, CET-items. Liaison with City agencies and utility companies. (9/01-11/02)

HAKS

MOUSTAFA REZK, P.E., LEED AP *Construction Manager*

Education

Bachelor of Science, Civil Engineering, Alexandria University, 1984

Professional Registration

Professional Engineer –New York 1997, [redacted]

LEED AP, 2009

Licenses and Certifications

OSHA 10-Hour Construction Safety and Health Training Course, 2008

NYCDOB Construction Site Safety Manager 2007, #1[redacted]

Construction Field Management, NYU, 2004

Rooftop Quality Assurance, Roof Consultants Institute, 2004

Summary of Experience

Mr. Rezk has over 24 years in design, existing condition and construction inspection of various building projects. He has managed a number of construction contracts in New York City where Wicks Law was applicable. As Resident Engineer, Mr. Rezk has successfully coordinated various contractors and subcontractors, conducted bi-weekly job progress meetings and completed the project on time and within budget. He is conversant with CPM scheduling and updated monthly construction schedule of various trades for building projects. Examples of his work experience are as follows:

- **Resident Engineer** – NYC Transit, Design and Construction of Charleston Bus Annex, Staten Island. HAKS is serving as a major team member for construction management of this New York City Transit project, which involves the design and construction of a new bus annex to meet bus storage and service assignments in the Borough of Staten Island. Design meets green buildings requirements. Duties include monitoring the contractor's work daily activities to assure conformance to the contract plans, specifications and quality requirements, review the contractor's payment requisitions and coordinating material testing on site and at independent testing labs, to assure the quality of materials going into the project. Construction Cost $120 million (1/08-present)
- **Senior Engineer/Team Leader** – Building Condition Assessment Survey of Approximately 1,450 New York Schools for NYC School Construction Authority/Board of Education. Assessments were undertaken for site areas, building envelope (exterior), interior and transportable/temporary units. Site inspection includes paved and unpaved surfaces, landscape, site drainage, lighting, playgrounds, etc. Building inspections include all exterior and interior components such as façade, roof, stairs, structure, doors, windows, finishes. Inspections for electrical and mechanical systems include HVAC, plumbing, building site and exterior security lighting; communication & security systems – which includes CCTV system, intrusion alarm system, panic switches, ultrasonic sensors, fire alarm & emergency lighting systems. Generate computerized report. Advice owner of any priority condition. (11/06-1/08)
- **Senior Engineer** - Local Law 11/98 Facade Inspection and A&E Services for NYC Housing Authority. Work involves the facade inspections of 63 buildings in Manhattan and Queens to fulfill the requirements of New York City Local Law 11/98. Project consists of Exterior facade inspection (critical examination) by scaffold inspection & by binoculars. The project goal is to indicate condition of building facades as Safe, or Unsafe. Building components

were inspected include parapet wall, coping stones, windows sills, lintels, brickwork, mortar joints, caulking, awnings, cornices, flagpoles ornaments, A/C window units brackets and all other parts of exterior walls and any accessories. (5/07-7/07)

- **Senior Engineer** - Building Condition Survey, New York City Housing Authority. Work includes condition surveys of approximately 3,500 residential and facility buildings. The overall project objective is to provide NYCHA with a Capital Plan to maintain its building assets in a state of good repair for many years to come. Surveys are being undertaken for the site, buildings and facilities (assets). Site inspection includes paved and unpaved surfaces, landscape, site drainage, lighting, playgrounds, street furniture, etc. Building and facilities inspections include all exterior and interior components such as facade, roof, stairs, structure, doors, windows, finishes, electrical and mechanical systems. (9/06-11/06)

- **Resident Engineer** - Construction Administration and Inspection Services for Project BB-21A, Roof Replacement and Building Repairs at the Brooklyn Battery Tunnel Service Building for MTA Bridges & Tunnels. The scope of work includes construction supervision and inspection and coordination with ongoing service activities in the building to assure tenant safety and uninterrupted tunnel operations. General work requirements include removing the existing roofing to the roof deck at the first and second floor levels, making deck repairs, and installing a new SBS built-up, modified-bitumen roof throughout. Expanding the General Manager's office on the second floor and installing a new HVAC system. Replacing window and door and installing new doors. Removing the second floor facade and replacing with a new facade of insulated stainless steel panels. Restoring and power washing the brick facade and stone. Concrete repairs in the basement boiler room, and installing a new concrete floor slab. Work also includes asbestos and incidental lead abatement. Construction Cost $3 million (11/04-9/06)

- **Resident Engineer** – Construction Inspection and Related Work at Jefferson Houses for New York City Housing Authority. Work includes façade repair for 6 building 22 stories each: brick, lintels and sills replacement, re-pointing, asbestos removal from windows. (6/04 – 10/04)

- **Resident Engineer/Safety Engineer** - Construction Inspection and Related Work at Vladeck Houses (Phases II, III & elevator machine rooms) for New York City Housing Authority. Work includes structural rehabilitation work of 1,600 apartments within the housing complex. This effort was done with no disruption to the housing residents. Items of work include architectural modifications; concrete; thru slab reconstruction; beams, columns and foundations; masonry repair; new roof, concrete parapet wall and new built-up roofs. Safety inspection includes the use of suspended scaffold, sidewalk sheds and PPE's. Construction Cost $51 million (10/99-5/04)

- **Field Inspector/Resident Engineer** - Scope of work consisted of pile driving inspection, indicator piles, load test and production piles. Civil work; utility lines, sewer system, water main and pavement. Structural inspection, reinforcing steel, concrete, masonry, structural steel and soil subgrade. Projects included JFK airport, Terminal 4 - Terminal 7, American Museum of Natural History, Baruch College and School Construction Authority. (4/96-9/99)

HAKS

JAMES S. REYNOLDS *Contract Administrator*

Education

Associate of Applied Science, Architectural Technology, Dutchess Community College, Poughkeepsie, NY, 1987

Professional Registration

NICET Level IV 2008, [redacted]

Licenses and Certifications

OSHA 10-Hour Construction Safety and Health Training Course, 2008

Secure Worker Access Consortium (SWAC), 2009

Summary of Experience

Mr. Reynolds has over 22 years of experience. Following is a list of his representative experience:

- **Office Engineer/Construction Inspector** – PANYNJ – Construction Management on a "Call-In Basis) - Office Engineering (OE) duties at Stewart International Airport include contract administration from pre-construction through closeout covering all financial information, payments, extra work, daily reports, material certifications, EEO and wage compliance, insurance, correspondence, etc. OE's utilize Port Authority database systems for record keeping and payments (06/2008-Present)

- **Office Engineer** – NYSDOT – REI Services, Drury Lane Access to Stewart International Airport, New Windsor - Work included reconstructing Drury Lane, constructing International Boulevard (Route 747), and constructing a diamond interchange between I-84 and Drury Lane. (12/2005-05/2008) *EIC:* Rashid Shariff; *Resident Engineer:* Robert Gardner

- **Office Engineer/Construction Inspector** – NYSDOT Region 8 Project D259096 – Asphalt Concrete Reconstruction and Safety Improvements on Routes 22, 433 & 120 at Interstate 684 Exits 2 and 3 in the Town of North Castle. Construction Cost $8 million (05/2004 – 12/2005) *EIC: Boris Vays; Resident Engineer: Eugene Marra*

- **Office Engineer/Construction Inspector** – NYSDOT Region 8 Project D258517 – Construction of approximately 9.1KM of bikeway in the village of Mahopac and the Town of Carmel, with the majority of the bikeway constructed along the existing abandoned Putnam Division railroad bed right of way. Construction Cost $8 million (04/03 – 05/04) *EIC: Richard Scott Kehoe*

- **Office Engineer/Construction Inspector –** NYSDOT Region 8 Project D258626 – Construction of approximately 1.0KM of bikeway in the Town of Pleasantville, with the majority of bikeway constructed along side of Route 9A and a small portion of bikeway constructed along the existing abandoned railroad bed right of way. Construction Cost $1 million (04/02 – 04/03) *EIC: Richard Scott Kehoe*

- **Office Engineer/Construction Inspector –** NYSDOT Region 8 Project D257080 – Replacement of 3 bridges on Route 302, 17M and County Route 29 in the Towns of Wallkill and East Fishkill, Orange and Dutchess Counties. Construction Cost $10 million (04/01 – 04/02) *EIC: Michael Stein; Resident Engineer: Jack Doyle*

- **Office Engineer/Construction Inspector –** NYSDOT Region 8 Project D258020 – Reconstruction and widening of seventeen kilometers of the Palisades Interstate Parkway (PIP). Rehabilitation of twenty seven bridges crossing the PIP. Replacement of the Conrail bridges over the PIP, and the Thruway (Interstate 87) bridges over the PIP in the Towns of Orangetown and Clarkstown, Rockland County. Construction Cost $58 million (09/99 – 04/01) *EIC: Tom McGuiness; Resident Engineer: Sam Leghorn*
- **Office Engineer/Construction Inspector –** NYSDOT Region 8 Project D257732 – Replacement of the Route 300 Bridge over Interstate 84, and the Thruway (Interstate 87) ramp bridge over Route 300, with reconstruction and widening of Route 300 in the Town of Newburgh, Orange County. Construction Cost $8 million (02/97 – 09/99) *EIC: Walter Greening; Resident Engineer: Mathew Chrystal*
- **Office Engineer/Construction Inspector –** NYSDOT Region 8 Project D256577 – Rehabilitation of Route 17 bridges over Conrail and County Route 13. Reconstruction of Route 17M, Route 94 intersection with safety improvements in the Town and Village of Chester, Orange County. Construction Cost $7 million (07/95 – 02/97) *EIC: Dennis Ruppert, Walter Greening; Resident Engineer: Robert Parks*
- **Construction Inspector/Office Engineer –** NYSDOT Region 8 Project D254479 – Reconstruction and widening of Route 17, Route 207 interchange with safety improvements and establishment of federal wetlands in the Town of Goshen, Orange County. Construction Cost $5 million (06/93 – 07/95) *EIC: Dennis Ruppert; Resident Engineer: Edward Brown*
- **Construction Inspector –** NYSDOT Region 8 Project D254375 – Cleaning of 240 bridges in Rockland and Westchester County. Construction Cost $1 million (04/93 – 06/93) *EIC: Bruce Smith*
- **Graphic Technician/Database Administrator –** IBM New York, Vermont and California Facilities – Field inspection and CAD drafting of architectural, mechanical (HVAC) and electrical technologies for generation of building reproductions. (06/87 – 11/92) *Supervisor: Wes Trent*
- **Construction Inspector –** NYSDOT Region 8 Project D251595 – Construction of hanger access road and taxiway apron off of Route 17K at Stewart Airport in the Town of Newburgh, Orange County. Construction Cost $2 million (05/86 – 09/86) *EIC: Charles Walczak; Resident Engineer: Raymond Pratt*
- **Construction Inspector –** NYSDOT Region 8 Project D500088 – Reconstruction of the Balmville Road Bridge over Interstate 84 including construction of a major retaining wall in the Town of Newburgh, Orange County. Construction Cost $1 million (05/85 – 09/85) *EIC: Charles Walczak; Resident Engineer: Edward Brown*
- **Quality Control Inspector –** Insured that all concrete produced from various concrete plants through out Region 8 met NYSDOT specifications. (05/84 – 09/84)

HAKS

ROBERT C. GALLUP, P.E. *Constructability / Design Review*

Education

Master of Business Administration (EMBA), New York University, 2006

Master of Science, Civil Engineering, University of Connecticut, 2004

Bachelor of Science, Civil Engineering, Lehigh University, 1986

Professional Registration

Professional Engineer
–New York 1993, [redacted] Connecticut 1992, # [redacted]
Massachusetts, 1993 – [redacted]

Summary of Experience

Mr. Gallup has over 23 years of professional experience in both the design and construction of complex projects including agency public facilities, parking lots, city streets, utilities, highways, traffic planning, and retaining walls. He has established successful working relationships with every public agency in New York City, specifically PANYNJ, NYCEDC and various affiliates, NYCDDC, NYCDOT (many groups), NYCDEP, NYCDPR, NYCT Transit, MTA NYCT Subway (Outside Projects), FDNY, TBTA, LIRR, NYSDEC, NYSDOT, and private utilities. In Connecticut, he has worked in design and construction with ConnDOT and MNR and various municipalities. His representative projects are as follows:

- **PANYNJ, Continental Parking Garage at Newark Airport.** Senior Design Engineer. Design included stage construction of the garage with emphasis on maintaining the maximum number of parking spaces and access to the terminal during garage and roadway construction, as well as reconfiguration of existing parking to accommodate four phases of construction. Prepared maintenance of traffic plans of the existing roadways and drive aisles including placement of signs, pavement striping and barricades. ($70M)
- **PANYNJ, Final Design of Miscellaneous Leak Repairs, Port Authority Bus Terminal.** Senior Civil Engineer. Work included detailed pavement condition survey for 3rd and 4th floors. Also contract documents, plans, specifications, cost estimates and construction support services. ($1M)
- **PANYNJ, Investigation and Improvements for a New Parking Lot at the Bayonne Bridge.** Senior Civil Engineer. Included design of a new community parking lot at Morningstar Road in Staten Island, NY. Reviewed existing subsurface conditions from boring program, reviewed utilities for services and interferences, performed grading and drainage design and NYCDEP permitting. ($0.5M)
- **PANYNJ, Parking Lot Upgrade and Swing Gates at LaGuardia Airport.** Senior Civil Engineer. Alternative study was performed and plans for temporary realignment designed. Project included reconstruction of preparation of contract documents, plans, specifications, cost estimates and construction support services. ($0.2M)
- **PANYNJ, Reconstruction of Internal Parking Lot Toll Booths, Newark Airport.** Senior Civil Engineer. Work included reconstruction of existing plaza and design for EZ Pass lanes for revenue collection.

- **NYCEDC – Additional Services, Infrastructure Reconstruction at South Brooklyn Marine Terminal** – Senior Design Engineer. Work included constructability and cost estimation services for the S-Curve Realignment at 1st Avenue and 39th Street including, water, sewer, private utility upgrades, street reconstruction, rail improvements, sidewalks and coordination with the project team. (12/09)
- **NYCDPR – Term Agreement for Civil Design Services as Needed, New York City Parks** – Work included land survey for the design, preparation of contract plans, specifications and cost estimates. $1 million. (11/09-present)
    - **Collect Pond Park, Manhattan.** Project Manager. Design included construction of a shallow pond and pedestrian bridge over an underground structure. Coordination with the landscape architect, NYCDOT geometrics and OCMC, NYC Transit, NYCDEP for new water supply and sewer site connection, FDNY, private utilities, NYC DCAS and NYCDOT Division of Street Lighting was required. ($4M) **NYCEDC, Flatbush Avenue Streetscape, Brooklyn, NY.** Project Manager for the design for the utility infrastructure relocations in support of a landscape architecture prime consultant. The goal was to provide an improved pedestrian-friendly environment. The project required the construction and planting of widened medians, as well as complex coordination with city agencies, public and private utility companies and community organizations. ($23M)
- **NYCDOT, Preliminary Design for Reconstruction of the Grand Central Parkway and Brooklyn Queens Expressway West Leg Interchange.** Led analysis of best-fit alternative and elimination of substandard roadway features, replacement of three bridges including the northbound BQE ramp over the GCP and removal of the 47th Street Bridge. Civil design included analysis of the existing drainage system, utility coordination. Design Report recommended c alternatives to be advanced to final design in phases. ($40M)
- **NYCDPR - Design Excellence Contract, Landscape Architecture**. Lead Civil Engineer. Mr. Gallup, working under four different landscape architect prime consultants, coordinated all civil and structural engineering and permitting for 13 parks rehabilitation projects including parking areas, roadways, sidewalks, signage and lighting. ($4M) Projects included:
    - **Mullaly Park, Bronx.** Water, drainage, grading, NYCDEP permitting.
    - **Entrances to Bronx Park, Bronx.** Traffic study, roadway geometrics, utilities, drainage, street lighting, signs, striping, NYCEDC permitting.
    - **Indian Lake Restoration & Crotona Amphitheatre, Bronx.** Hydraulic design, electrical and environmental permitting.
    - **Four Ball Field Improvements, Bronx.** Water supply, irrigation, drainage, grading, permitting.
    - **Sedgwick & Campanero Parks, Bronx.** Water supply and electrical design.
    - **Van Cortlandt Park, Bronx.** Synthetic turf field, drainage, water supply design.
    - **Ferry Point Park, Bronx.** Synthetic turf field, water supply, signage design.

HAKS

VICTOR M. SANCHEZ, P.E. *Construction Manager*

Education

Master of Science, Geotechnical Engineering Polytechnic University, New York, NY, 1989

Bachelor of Science, Civil Engineering, Polytechnic University, New York, NY, 1985

Professional Registration

Professional Engineer – New York 2004, [redacted]

Licenses and Certifications

Slope Stability and Landslides Certification Course, Wisconsin University, Madison, 1986

Biotechnical Slope Protection and Erosion Control Certificate Course, Wisconsin Univ., Madison, 1986

Summary of Experience

Mr. Sanchez has over 25 years experience in Geotechnical, Civil Engineering and Construction Inspection. Examples of his representative projects are as follows:

- **Resident Engineer** – Resident Engineering Inspection, Infrastructure Reconstruction at South Brooklyn Marine Terminal, NYCEDC –Work includes the following elements: 1. Structural. Abating and demolition of the west end of a large warehouse, splitting it into two buildings, and closing up the ends of the new buildings with new foundations, concrete walls, structural steel and façade. 2. Civil. Abating and demolishing small buildings; removal and installation of railroad tracks; installation of a security fence. 3. Electrical. New power distribution service; installation of three new electrical substations 37, 27, and 15 kV, transformers and duct banks; installation of 20 high mast light poles (1/09-present)

- **Resident Engineer** – Construction of two ramps connecting the approach to the Macombs Dam Bridge, with two parking garages for the new Yankee Stadium. Work includes modification to the existing sidewalks, construction of the reinforced concrete ramps, relocation of a light pole, installation of new structural beams, diaphragms, bridge bearings, and armored joints. Responsible for the verification of work and coordination of work with the general contractor, designer, and NYCDOT. Construction cost $1.0 million (11/08 -10/09)

- **Resident Engineer** – Installation of sidewalks at various locations in Manhattan for NYCDDC. Supervising staff of five inspectors and office engineer, assuring all construction is in accordance with contract plans and specifications. Responsibilities include project budget control, contractor payment estimates, verification of completed work and quantities, interaction with community boards, coordination with schools, parks and residents adjacent to various work sites. Construction cost $3.8 million. (8/07 – 11/08)

- **Controlled Inspections Engineer** – Conducted inspections at several schools in the Bronx for the School Construction Authority, including soils, concrete reinforcement and fireproofing; pile driving inspections and pile testing to verify piling installations met specifications; testing concrete structures with ultrasonic rebar locator to determine if reinforcements were correctly sized and spaced. Inspections for NYC Department of Design and Construction at World Trade Center site, of temporary support of pedestrian bridge and

control excavation of ground around it; retrofitting construction inspection of fire houses in Brooklyn involving excavation and bracing of walls. (3/07 – 8/07)

- **Assistant Resident Engineer** - Reconstruction on the Brooklyn Queens Expressway from Flushing/Classon Avenues to Nassau Concord Viaducts for NYSDOT. The work includes deck replacement and superstructure repairs for the Park Avenue and Nassau/Concord viaducts. The deck replacement includes replacement of all expansion joints, replacement of steel railing with single slope concrete barrier and drainage improvements for both viaduct structures. The Park Avenue viaduct will be widened (by approximately 0.6 m on each side) in addition to seismic improvements, fatigue upgrades and replacement of bearings. Also included is the related work on associated approaches and ramps as well as installation of new lighting and lead abatement/painting of the steel. This project includes traffic management strategies such as construction phasing, lane closure restrictions, night and weekend work, critical path method scheduling provisions, involvement with the communities and many New York City agencies, etc. Construction cost $124 million. (11/05 - 3/07)

- **Professional Engineer –** Under contract with the NYCTA conduct an inspection of a concrete plant in Spokane, Washington, producing concrete railroad ties. Coordination of the production of 2,000 concrete ties and inspection prior to shipment. Responsibilities include approval of the concrete plant and accepting production. Prepare protocol to be used in the concrete plant/concrete ties inspection. (12/06 -2/07)

- **Senior Inspector** - Resident Engineering Inspection Services for Reconstruction of Williamsburg Bridge Contract No. 8 Miscellaneous Rehabilitation of Main Bridge for NYCDOT. Rehabilitation work includes removal and replacement of structural steel bracing in main towers as well as in the intermediate towers, replacement of MTA track hangers, new inspection traveler system under main span, replacement of inspection platforms in intermediate towers, replacement of cable saddle stoppers, replacement of bridge bearings, installation of reinforcement plates above roadway in columns of main towers and below roadway in intermediate towers, rehabilitation of VMS system, cleaning, priming and painting of bridge structure and installation of VMS, ITS, LCS and FBOS systems. Construction cost $173 million. (10/03-11/05)

- **Senior Inspector** - Resident Engineering Inspection Services for the demolition and construction of a new bridge and access ramps on the Belt Parkway over Ocean Parkway in the County of Brooklyn. This is a design/build project that includes replacement of a 20" water main in coordination with DEP, new pile foundation, new bridge piers, new abutment walls, wick drains around abutment walls, tree relocation, new inverset deck placement in the three spans, complex and extensive MPT that included detours during construction, the construction of a temporary bridge to secure traffic in six lanes at all times on the Belt Parkway and realignment of Ocean Parkway roadway. Construction coordination with adjacent hospital and high school. (8/03 – 10/03)

HAKS

NESTOR PERALTA SANTANA *Electrical Inspector*

Education

BS Engineering, Universidad De Santo Domingo

OSHA Training Course 30 Hour

Metro-North Railroad Worker Procedures Certification

Summary of Experience

Mr. Santana has over 18 years of engineering and construction experience. Examples of his experience are as follows:

- **Senior Inspector** - Construction Supervision/Inspection for Metro-North Switchgear Replacement Project, New York, NY for Metro-North Railroad. Duties include civil/structural inspection services for construction work to upgrade Metro North's 59th Street facility and its 72nd Street substation. Scope of work includes: repair of the roadway waterproofing membrane on Park Avenue and street level reconstruction work; rehabilitation of the existing storage room to provide a suitable location for housing new auxiliary electrical equipment. Construction includes brick/mortar repairs, new door jamb and door installations, concrete floor work and more. Installation of new DC switchgear equipment, traction power cables, station battery systems, interconnection with existing Park Avenue Tunnel Alarm System, SCADA Remote Terminal Unit, new 3000 KW Rectifiers, new 3,460 KVA transformer, auxiliary power equipments, grounding system, ductwork, exhaust fans, etc. Construction Cost $9 Million. (8/07 - 1/08)
- **Senior Inspector** - Resident Engineering Inspection Services for Reconstruction of Manhattan Bridge Contract No. 11 for NYCDOT. Scope of work includes concrete deck repairs, steel reinforcement, new concrete deck placement, steel joints and shear studs, Asphalt Milling & Paving Structural steel repairs at floorbeams and diaphragms, new steel floorbeams, stringers, grid deck and haunches, major welding inspections throughout the bridge, torquing of bolts at all connections, New traffic barrier installations, electrical service replacement and refurbished including panels, wiring and piping for new bridge lighting and traffic signals. Construction Cost $150 Million.
- **Electrical Inspector** – Indefinite Quantity Contract-Technical Services for Miscellaneous Construction Projects for NYC Transit Authority. Inspected installation of public address system and customer information Screen System throughout several NYCT train stations (Bronx, Manhattan & Brooklyn).
- **Electrical Inspector** - Rehabilitation of Jay Street and Lawrence Street Stations and Transfer Passageway Connection, Brooklyn, NY, MTA NYCT. Prepare estimate for rehabilitation of Jay/Lawrence Street Stations and the walk-through connection. Coordinate access and protection through Transit Facilities for contractors to survey. Review drawings and specifications to identify and clarify misunderstandings that could lead to additional work orders. Respond to requests for information from the Building Contractors. Attend job progress meetings in order to provide responses, coordinate and schedule activities. Third in the chain of command for asbestos and lead paint abatement. Coordinate and make arrangements with Transit Departments (signal, communications, power, infrastructure, RTO, etc.) And Contractors to perform scheduled activities in a safe manner. Keep the following logs up to date: Access and Protection, Asbestos Related Matters, Change Orders, Daily Inspection Reports, Flagging Reconciliation, Work Train Reconciliation, General

Orders, Request for Information, Shop Drawing, Summary of Transit Service, etc. Fill out Daily Inspection Reports when applicable.

- **Electrical Inspector** - Rehabilitation of Myrtle/Wyckoff Station Complex, Brooklyn, NY, MTA NYCT. Coordinate access and protection through Transit Facilities for contractors to survey. Review drawings and specifications to identify and clarify misunderstandings that could lead to additional work orders. Respond to requests for information from the Building Contractors. Attend job progress meetings in order to provide responses, coordinate and schedule activities. Third in the chain of command for asbestos and lead paint abatement. Inspected soil excavation, compaction testing, formwork, reinforcement, concreting, slump test, air content test, sample for cylinder, etc. Tiles were set on concrete floor and performed pull out test. Steel stairs were repaired by welding plates, replacing rivets with bolts. Coordinate and make arrangements with Transit Departments (signal, communications, power, infrastructure, RTO, etc.) And Contractors to perform scheduled activities in a safe manner. Keep the following logs up to date: Access and Protection, Asbestos Related Matters, Change Orders, Daily Inspection Reports, Flagging Reconciliation, Work Train Reconciliation, General Orders, Request for Information, Shop Drawing, Summary of Transit Service, etc. Fill out Daily Inspection Reports when applicable. Construction cost $50M (awarded).
- **CADD Designer** - Rehabilitation of Burnside Street, 183rd Street, and Kingsbridge Road Stations along Jerome Line, Bronx, NY, MTA NYCT. Prepared electrical designs (computation, drawings, specifications, etc.) To enhance electrical power systems, lighting systems, Automatic Fare Collection, electric heat tracing and snow melting, etc. for these train stations.
- **Electrical Inspector** - Installation of Jackson West Substation, Queens, NY. Checked work if Building Contractors installing Power Equipment such as disconnective means, switchboards, transformers, transfer switches, panelboards, electrical feeders, fiber optic cables, etc. in order to ensure that each task had been completed, standard procedures were followed, the workmanship was qualified, and that the materials used were previously approved and installed following the manufacturer's requirements. Filled out daily inspection reports, collected contractor performance information, identified potential problems that could have led to low quality construction. Ensured that Building Contractors were complying with the required Building Codes: NEC, New York City Transit Code, etc. Summarized and evaluated monthly performance records used to process contractor's monthly payment. Construction Cost $20 Million.
- **Electrical Inspector** – Inspecting a number of construction projects under the Indefinite Quantity Contracts for NYC's Transit Authority. Scope of work included technical inspection of construction, constructability review, construction phasing review, cost estimating and scheduling, safety inspection, quality control, value engineering, contractor evaluation and computer usage. Inspected installation of tunnel lighting system and power equipment for Electrical Distribution Rooms in several locations between Dyckman St and 96th St. Stations (Manhattan). Construction Cost $20 Million.
- **Electrician** - Yonkers, NY. Prepared harness for electrical, control and air conditioning systems of rail cars.

HAKS

SHAHID SHIEKH *Chief Inspector*

Education

Master of Science, Civil Engineering, University of Southampton, UK, 1975

Bachelor of Science, Civil Engineering, University of Karachi, Pakistan, 1966

Professional Registration

NICET Level IV, [redacted]

Licenses and Certifications

ACI Concrete Field Testing Technician – Grade I, 2007

ACI NJ Chapter, Concrete Construction Technology Course, 2002

NJSAT, 2002

OSHA 10-Hour Construction Safety and Health Training Course, 2002

MPT Traffic Control Coordinator, Rutgers, State University of NJ, 2003

40-Hour Site Safety Managers Course, Safety & Quality Plus, Inc

40-Hour HAZWOPER Training, 2001

Summary of Experience

Mr. Shiekh has over 21 years of experience in planning, scheduling, project coordination, execution & inspection of civil, electrical, power, highway and heavy construction works. Examples of his experience are as follows:

- **Civil Engineer** – Responsibilities included detail take-off and pricing/estimation for the following NJDOT, TPKE Authority, New Jersey and **Port Authority NY and NJ** Projects. New Jersey Turnpike widening, Contract No. W-5202, Project comprised of demolition of existing structures, construction of substructures and supersturtures. NJDOT Projects, Route 1&9 section 2AK, Bridge rehabilitation, Bridge replacement, Milling & resurfacing etc. Route 70 section 2G, Milling resurfacing & safety improvements. Route 80 section 9G, 5AR & 10J Grading, paving, Bridge rehabilitation, Bridge replacement etc. Route 30 & 130 section 2g Grading, Paving sign structures safety improvements bridge replacement Bridge structures and signs. (12/90 – 12/91)

- **Chief Inspector –** Resident Engineering Inspection, Infrastructure Reconstruction at South Brooklyn Marine Terminal for NYCEDC. Scope of work included infrastructure improvements to South Brooklyn Marine Terminal (SBMT), which will prepare the dilapidated facility for future use by maritime tenants; electric substations, lighting and fiber optic upgrades; removal and realignment of antiquated rail lines serving SBMT; rehabilitation of the main track at Brooklyn Army Terminal. Construction Cost $28 million (5/09 – present)

- **Senior Inspector** – Construction Inspection Services for Emergency Repair and Interim Deck Replacement on the Gowanus Expressway, Kings County, NY for NYSDOT. The work involved deck replacement, BQE Connector widening/replacement, lower Gowanus Expressway pavement rehabilitation, structural steel and concrete repairs, structural steel painting, drainage work, and operation of the existing HOV lane. This is a large deck replacement project located in a high speed, high traffic volume, urban area. This project included traffic management strategies such as construction phasing, lane closure restrictions, night and weekend work, etc. Construction Cost $152 million (4/07 – 5/09)

- **Senior Inspector –** A/E Services for Roof Assessment and Design at Selected Townhouse Sites-Group B, for Newark Housing Authority. (3/07 – 4/07)
- **Senior Inspector –** Structural Consulting Services, Concrete, Masonry and Roof Repairs, Johnson Houses, New York City, NYCHA. Scope of work included inspecting the brick, mortar, window sills, lintels and window caulk; inspecting the installation of new plaster walls, metal noising and epoxy wearing surfaces on concrete stairways, embedded sleeves for roof fencing and kitchen cabinets. Construction Cost $39 million (3/2007)
- **Senior Inspector** – Local Law 11/98 Façade Inspections and A/E Services for NYCHA. Work included physical examination from a scaffold, termed a "critical inspection," for obtaining a representative sample of the condition of the exterior walls; reporting the inspection results to the Housing Authority with a written description of the inspection findings. Fee: $507,500 (2/07 – 3/07)
- **Senior Inspector** – CM/CI Services for Replacement of Roadway Deck in Suspended Span of Bronx-Whitestone Bridge, The Bronx and Queens, NY for TBTA. This project is composed of removal and disposal of existing stiffening trusses; removal of existing roadway deck and installation of an orthotropic deck with a bonded aggregate wearing surface at anchorages and suspended spans; installation of new expansion finger joints and framing at towers; removal of existing barriers and installation of new steel barriers; installation of new floorbeams at anchorages and suspended spans; and modifications of anchorage chambers. Construction Cost $145 million (6/05 – 12/06)
- **Senior Inspector –** Construction Management and Inspection Services for VN-28, Curb Plate and Scupper Installation and Painting for TBTA. (2/06 – 3/06)
- **Senior Inspector –** Engineering Inspection Services for Reconstruction of Throgs Neck Area, Bronx, NYCDDC. Scope of work included reconstruction and replacement of combined sanitary sewers; installation of a sewer outfall in a U.S.-designated bulkhead area requiring a special NYSDEC wetlands permit; installation of catch basins and chute connection. Construction Cost $8.3 million (5/2005)
- **Senior Inspector** – Requirements Contract for REI Services for New York City's Department of Design and Construction. Worked at Radcliff Avenue. (12/04 – 6/05)
- **Construction Inspector** – Construction Inspection Services for reconstruction of Brooklyn-Queens Expressway from Broadway to 25th Avenue, Queens, NY for NYSDOT. Duties included inspecting the placement of concrete pavement, excavation and backfilling at various locations; installation of ballast for the CSX track over Northern Blvd.; installation of steel sheeting; removal of lead paint; demolition of steel and concrete structures; continuous span structures; retaining walls; conduct compaction test, etc. Construction Cost $254 million (11/03 – 11/04)

HAKS

NILESH (NICK) A. SHAH, P.E. *Construction Manager*

Education

Master of Science, Civil Engineering, Stevens Institute of Technology, New Jersey, 1994

Bachelor of Science, Civil Engineering, Sardar Patel University, India, 1985

Professional Registration

Professional Engineer –New York 1997, [redacted]; Delaware 1989, #[redacted]

Certification

NJTA Track Safety Training Class, 2010

Summary of Experience

Mr. Shah has over 21 years of experience in on various construction projects.

- **Senior Geotechnical Engineer** - Continental Airlines Global Gateway Program at Newark International Airport, NJ, **Port Authority of New York and New Jersey**. As a Senior Geotechnical Engineer, responsibilities included oversight of the installation of over 4,000 piles which consisted of 12" diameter steel pipe and 8" diameter mini piles supporting the expansion of Terminal C, reconfiguration of the access roadway to the terminal, and the enclosure of an airside drainage ditch about a half-mile in length. When low overhead and/or vibrations to existing structures were an issue, mini piles were used. The threaded joint casing was installed to the full depth of the pile. After the tremie pipe was placed to the bottom of casing and flushed with water, grout was pumped through the tremie pipe to top of pile. After inserting a center reinforcing bar the casing was withdrawn to a specified elevation while pressure grouting continued to bring grout to top of casing. Static load tests were later performed. Construction Cost $1.5 billion (8/98 – 2002)

- **Senior Geotechnical Engineer** - Terminal 4 Redevelopment and Landside Roadways at JFK International Airport, NY, **Port Authority of New York and New Jersey**. As a Senior Geotechnical Engineer, responsibilities included oversight of the installation of over 3,400 piles supporting the construction of a new international arrivals terminal and the reconfiguration of the access roadway to the terminal. The pile-testing program included dynamic and pile integrity I compression, lateral and tension tests. Construction Cost $1.8 billion (8/98 – 2002)

- **Resident Engineer** – Resident Engineering Inspection Paulding Avenue Area, Bronx, NYCDDC – Responsibilities included the replacement and regarding of worn and deteriorated streets, curbs, pedestrian ramps and geometric alignment modifications, new street lighting, drainage and environmental studies, and study of traffic patterns. (7/08-9/09)

- **Resident Engineer –** REI Services for Reconstruction of Step Street at East 183rd Street Borough of the Bronx for NYCDDC. Responsibilities include demolition of the north and south stairs and replacement with new stairs, structural steel installation (box beam gutter) including expansion bearings, reconstruction of sidewalks, utility lines, replacing lights, traffic signals, roadway pavements, pavement markings, stabilization of the rock face by installing rock anchors and protection of the rock face by installing wire mesh and anti-climb fences. Construction Cost $5 million (5/07-present)

- **Resident Engineer** - Downtown Flushing Pedestrian Project, Flushing, NY, NYCEDC. Resident Engineer for this project to provide pedestrian amenities at various locations within Historic Downtown Flushing. Project includes rehabilitation of the Lippmann Arcade that connects Roosevelt Avenue to the Municipal Parking lot, sidewalk and roadway rehabilitation on 39th Avenue between Union Street and 138th Street and at the intersection of Bowne Street and 37th Avenue. In addition, sixteen historic sites will receive pedestrian amenities such as lighting, signage, historic markers and inlaid thermoplastic crosswalks. Construction Cost $5 million (7/05-5/07)
- **Resident Engineer** - Rehabilitation of Lincoln Road Bridge, Brooklyn, NY, NYCDOT. Resident Engineer responsible for oversight of the removal and reconstruction of the existing bridge including sidewalks, curbs and approach roadways. Demolition of the upper portion of existing abutments to remain as a retaining wall, construct new integral abutment on Steel H piles driven behind the existing abutment, new parapet. Installation of new utilities under new sidewalk and provide support for existing utilities. Construction Cost $8 million (5/04-6/05)
- **Assistant Resident Engineer** - Reconstruction of I-87 & 1-287 from Tappan Zee Toll Plaza to Saw Mill River Parkway, Westchester, NY, NYSTA. Assistant Resident Engineer for this $190M project, which included the removal and reconstruction of multiple steel girder bridges, the construction of new flyover ramps, rock blasting and excavation, drainage and lighting improvements, retaining and noise wall construction, grading and asphalt concrete paving. Construction Cost $190 million (2003-4/04)
- **Project Engineer** – Hill View Reservoir, Yonkers, NY, NYCDEP. Project Engineer responsible for monitoring of instrumentation in the embankment, beneath the reservoir bottom slabs and dividing wall during the drawdown of the reservoir basins (one at a time) for construction of a concrete buttress to stabilize the dividing wall. (1999-2001)
- **Resident Engineer/Assistant Resident Engineer** - Bronx-Whitestone Bridge Rehabilitation (End Ramps and Approach Slabs), NY, MTA - Bridges and Tunnels. Worked as a Resident Engineer/Assistant Resident Engineer for another consultant on this project. He took over as Resident Engineer after some initial problem and worked successfully on the project. Responsibilities included oversight of the removal of existing overlay replaced with rapid setting LMC, partial and full-depth repairs of deck. Work included replacement of missing gutter plates, installation of weep pipes, removal and replacement of deck expansion joints, bearings and damaged finger joint. Construction Cost $10 million (1997-1998)
- **Chief Inspector/Office Engineer** - Routes I-278 & 440 Improvements, Staten Island, NY, NYSDOT. The project included replacement with new HPBO corrugated beam guide rail, overhead signs superstructures and landscaping improvements for various structures and roadways. Construction Cost $10 million (5/95 – 3/97)
- **Chief Inspector/Office Engineer** - Rehabilitation of 12 Bridges, various State Highways, Staten Island, NY, NYSDOT. Project included installation of new & existing structural steel, including the structural lifting operation for replacing cap-bearing, partial and full-depth concrete repair for approach and deck slabs. Construction Cost $35 million (5/95 – 3/97)

HAKS

ABDUL S. SOMAT, P.E. *Resident Engineer / Inspector*

Education

Master of Science, Civil Engineering (Highway / Transportation), Polytechnic University, New York, 1997

Diploma in Building Construction Management, NYU-SCE, New York, NY, 1991

Bachelor of Science, Civil Engineering, University of Guyana, 1986

Professional Registration

Professional Engineer – New York 2003, [redacted]

Licenses and Certifications

AWS Certified Welding Inspector, 2009

ACI Concrete Field Testing Technician – Grade I & II, 2009

ACI Construction Special Inspector, 2009

ICC Applied Fireproofing Special Inspector, 2009

ICC Structural Masonry Special Inspector, 2009

ICC Structural Welding Special Inspector, 2010

ICC Structural Steel and Bolting Special Inspector, 2010

Secure Worker Access Consortium (SWAC), 2009

OSHA 10-Hour Construction Safety and Health Training Course, 2009

NYCDOB 4-Hour Supported Scaffold, 2009

ASNT ACCP Level II, 2009

Magnetic Particle Testing Level II, 2009

Summary of Experience

Mr. Somat has over 24 years experience in Civil Engineering. His representative projects are as follows:

- **Project Engineer/Construction Inspector** – Assigned to George Washington Bridge, PANYNJ and Henry Hudson Parkway Bridge, Upper Deck Replacement (TBTA) NY. Responsibilities included the pre-bid review of drawings and specifications, development of site staging plans based on traffic conditions, structural analysis of shop drawings for temporary structures, estimating material and labor costs for change orders, design of changes to contract drawings based on field conditions, coordination and supervision of contractor's construction activities. On site field engineering included the rehabilitation of bridge approaches and superstructure elements, parapet and retaining walls, median barriers, curbs and sidewalks, decks, girders, drainage structures, installation of overpass bridge armored expansion joint, verified field construction of new sign foundation pedestals, transition barriers, drilling of 36 inch caisson for foundation through solid rock, removal and erection of bridge mount and overhead signs structures. (01/98 – 05/02)

- **Assistant Lab Director / Civil Engineer / Certified Special Inspector –** Responsibilities include assisting lab director in managing laboratory materials; reviewing inspectors concrete, soils, fireproofing and masonry reports Stamp NYS-P.E.; reviewing certified welding inspectors reports for CWI working in steel fabrication plant for clients PB-World, MTA, NYSDOT; performing welding and steel plates, angles and diaphragm fabrication for MTA Tappan-Zee Bridge rehabilitation; supervising rebar and formwork on site inspectors at World Trade Center Memorial site; signing off daily release for concrete placement for Port Authority of New York and New Jersey; preparing and training in-house inspectors and engineers for taking ICC certification exams for fireproofing, masonry, structural steel and bolting; approving timesheet and expense sheets for inspectors and engineers. (6/10 – present)

- **Certified Special Inspector** – Term Agreement for Surveying Services (TASS), Region 11, for NYSDOT. Work included planning, conducting, adjusting, and reporting surveys accomplished through GPA technology, establishing baseline,

benchmark and other control points, topographic surveys, utility and drainage surveys, property surveys, right-of-way mapping, photogrammetric control, cross-section surveys, control point identification, and preparation of survey plans. (11/09 – present)

- **Certified Special Inspector** – Construction Inspection of Structural Steel Repairs East Deck Truss Spans of Tappan Zee Bridge, NYSTA. Work included replacement of diaphragms, catwalks, deck trusses, floor beams, main trusses, fascia girders, stringers, gusset plates and bracings. Construction Cost $25 million (06/00 – present)

- **Certified Special Inspector** – Construction Inspection, World Trade Center Transportation Hub, New York City. Work includes Site preparation and underpinning of subway pedestrian tunnels, including demolition and removal of remaining existing and damaged structures, foundations construction and related excavations, full restoration of three station platforms and adding a fourth platform to accommodate construction phasing with ongoing PATH operations, vertical circulation (elevators, escalators and stairs), fare collection and Authority police facilities, operational spaces, and HVAC systems. Construction Cost $1.1 million (6/09 – present)

- **Certified Special Inspector** – Surveying Services for Building Addition and Traffic Study for Proposed Dynamic Care Facility at Nassau University Medical Center, Hempstead, NY. Work included locating drainage structures, utilities, street signs including size and text, pavement marking, bus stops, traffic signals, and traffic signal pull boxes, constructing a topographical base map of the Area C of Nassau University Medical Building, Parking Area and all roadways adjacent to the project site including a portion of Hempstead Turnpike. (6/09 – 10/09)

- **Certified Special Inspector** – Construction Inspection Services for Northern State Parkway and Emergency Repairs to Sagtikos Parkway Bridge over Long Island Expressway, Suffolk County, for NYSDOT. Work included removing portions of superstructure, installing new columns, cap beams, pedestal and bearings, repairing concrete pavement, installing guide rails and bridge railings, upgrading drainage systems, rehabilitation of bridge deck, installing armor joints using the Inverset Bridge System, maintaining and protecting traffic. (5/09 – 10/09)

- **Certified Special Inspector** – Surveying Services, Upper Level Roadway of Henry Hudson Bridge, New York City, TBTA. Work included topographic surveys, drainage structure investigations, establishment of grid and elevation for site assessment work, preparation of survey plans. (5/09 – 9/09)

- **Certified Special Inspector** – World Trade Center Site, Licensed Engineer responsible for control inspection of work and rebar installation at the World Trade Center Memorial. (04/09 – present)

HAKS

MAGDI F. SIDAROUS *Cost Estimator*

Education

Bachelor of Architecture and Urban Planning, Helwan University, Cairo, Egypt

Diploma of Architecture, Leonardo Da Vinci Institute, Cairo, Egypt

Summary of Experience

Mr. Sidarous has over 30 years of experience in the field of construction. His background includes resolving complex construction, engineering, and financial issues; assisting clients in contract administration; reviewing plans and specifications; assisting in the preparation of design changes and modifications and financial analysis of individual construction activities and entire projects. Some of his representative projects include:

- **Estimator** – Mixed Finance Projects, New York City Housing Authority, Brooklyn, NY. Serving as Estimator for approximately $25 million in maintenance repairs and improvements to Williams Plaza, Independence Towers and Bushwick Houses in Brooklyn and Stapleton Houses in Staten Island for NYCHA. The project was awarded competitively under a CM/Build Requirements contract. Preconstruction activities commenced in March 2010 and will be completed by December 2011, to meet federal funding deadlines. The scope of work that includes abatement of asbestos-containing materials, complete roof replacement (including stack and parapet repairs) as well as repairs to the exterior brickwork and windows; his responsibilities include preparation of estimates, developing bid packages with the construction manager, participating in constructability reviews, assisting in the preparation of contract documents, reconciling estimates, reviewing applications for payment, change order review and estimating, preparing and finalizing closeout documentation.

- **Estimator** – New York City Housing Authority Requirements Contract, New York, NY. Serving as Estimator for multiple projects at the Fort Washington, Harlem River and Rangel Houses; the $22 million assignment consists of roof replacements and façade rehabilitations in tenant occupied buildings. The work includes:
    - Fort Washington Roofing Project, $6 million, requires the removal of existing asbestos-containing roofing materials, asbestos abatement, new roof installation and related work;
    - Harlem River Brickwork Project, $7.6 million, entails extensive brickwork, the replacement of steel lintels and incidental roofing;
    - Rangel Brickwork and Roofing Project, $8.6 million, calls for replacing roofs on all buildings and the parapets for two buildings, and selective replacement/repair of brickwork and steel lintels.

- **Architectural Estimator** – Echelon Resorts Project, Las Vegas, NV. Served as Architectural Estimator in charge of generating scope from schematic design for different parts of the project (Towers, Meeting Center, and Theaters), creating presentation sketches and following up with the scope as construction documents develop.

- **Architectural Estimator** – Brooklyn Courthouse Program, New York, NY. Served as Architectural Estimator and change manager in charge of document review to establish changes to contract, request scope changes from the owner (GSA), assign values to the scope changes and negotiate final values with contractors and owner and their consultant. Prepared modification of documents (change orders) and issued monthly reports of all work; acted as project manager for a segment of the subcontractors and ultimately closing out their contracts by conducting negotiations in favor of the general contractor while maintaining a level of satisfaction between all entities.

- **Architectural Estimator** – AOL Time Warner Center Project, New York, NY. Served as Architectural Estimator for Change Management group; lead team of architectural, electrical and mechanical estimators in preparing actual and conceptual estimates, estimating scope changes from contract documents (ASI's & Bulletins, etc.); Working with project managers and sub-contractors to evaluate and reconcile cost of changes and working with the Owner in negotiating final costs; Change Management responsibilities include assisting project managers in creating total documentation in Prolog. Assisted with change order and scope change preparation; additionally assisted Senior Management to maintain the accuracy of the Prolog database by performing weekly reviews in preparation of the Owners meeting.

- **Estimator** – Universal Builders Supply Inc. Interiors Millwork division, Mount Vernon, NY. Served as Estimator in charge of client contacts, preparation of detailed quantity and material take-offs, soliciting material prices, preparation of bid documents and cost estimates for various multimillion dollar projects including the Children's Hospital at Montifiore Medical Center in the Bronx, New York Hospital, United States Tennis Association (USTA) new tennis facility in Queens, Butler Library (Columbia University), Prada Stores and Tommy Hilfiger Executive Offices.

- **Construction Engineer** – Universal Builders Supply Inc. (UBS) Construction Division, Mount Vernon, NY. Served as Construction Engineer in charge of client contact, design, calculation and preparation of construction documents, material and labor lists, cost and duration estimates for hoisting and scaffolding also, on site supervision and inspection for multimillion projects including Barneys, Met Life of NY, Jadwin Gym at Princeton University, The Statue of Liberty, GE Building, Redwood Towers (Baltimore, MD), The State Capitol Building (Harrisburg, PA), Battery Park City (NYC), King Khaled Military Academy (Saudi Arabia).

HAKS

DIPAK UPADHYAYA *Construction Inspector*

Education

Bachelor of Science, Civil Engineering

Professional Registration

NICET VT, MP, AND PT Level II

Licenses and Certifications

American Welding Society (AWS) Welding Inspector

ASNT-TC-Certified Level II, 2003

Certified Bridge Inspector Level II

Summary of Experience

- **Senior Engineer –** PSEG Hudson Generation Station in Jersey City, New Jersey for upgrading the station. Objective to reduce Nox, So2, Particulate matter (PM) and Mercury emissions. This will be accomplished by addition and installation of certain new systems like SCR, PAC, SDA, FGD and Pulse Jet Fabric Filter systems. Responsibilities include review of drawings and overlooking the construction activity of reinforced concrete foundations, deep foundations. Quality assurance of ongoing work. (10/2008)
- **Senior Project Engineer –** Test procedure development, inspection, and performing various structural integrity and structural stability test. Providing engineering and project management services to ongoing projects. Inspection, testing and Certification of Structural steel fabrication in shop and in field and erection activities. Major projects including: Hanger at Newark International Airport, Airports, roads, railways, and bridges, K-12 Education Projects and commercial buildings , Industrial projects, Selected Clients Lists – Merck Pharmaceuticals, Continental Airlines, Port Authority, NJ Transit, and NJSCC. (5/1997-2008)
- **President, Owner –** provided construction, execution, design and project management services. Executed Sulfur Black Plant on Turnkey basis, which includes construction, fabrication of structural steel, fabrication and erection of chemical vessels, plants equipments, and plant piping. Fabricated and erected dairy equipments for World's biggest Amul Diary. (1995-1997)
- **Resident Inspector –** In this position, was responsible for managing projects from conceptual to completion and fully operational of all aspects of: Effluent Treatment Plant for dyes, chemicals, and intermediates for Atul Products, Pesticide effluent treatment Plant for cynamid. Key accountabilities included: Developing parameters for constantly changing characteristics of the effluent. Produced construction documentations matching to the developed perimeters. Selecting subcontractors, purchase of plant equipments, and timely execution of the project. (1992-1995)
- **Senior Project Manager –** Attended training in ABB Germany for basic and application engineering, erection and commissioning of the project, network management, supervisory control and data acquisition, setting general safety and protection system. After successful completion of training, deputed at ANTA in India as senior project engineer with a responsibility to manage the execution of the power station, which is India's first combined cycle power station of 450 MW. Coordinated and produced project from the site review to the commissioning of the power plant. which includes three number of gas turbine and one

number of steam turbine. Plant included gas turbine building, steam turbine building, control building, switch gear building, distribution station, pump houses, water reservoir, three numbers of heat recovery boilers, underground service lines, and plant roads. Total project value was approximately $225 million. (1989-1992)

- **Senior Project Manager –** Involved into design and construction of projects on turn key basis. Major projects successfully completed as a project manager, includes: Textile Mills, Research Lab, UN Administration office, Multistoried building, Main Waterline for the city. (1985-1989)
- **Project Manager –** Involved in heavy industrial construction and management for Zambia consolidated copper mines. Provided Project engineering and technical support to Zambia Consolidated Copper Mines including: Project development, scoping, equipment selection, project bidding, contractor selection, construction oversight, and management of safety and environmental activities as a full project engineer. (1983-1985)
- **Site Engineer –** Providing technical assistance and engineering inputs for the execution of the projects including setting up dairy plants, chilling centers, cattle feed plants, and milk packaging industry. Assisted in pre-project activities, preparation of conceptual planning and detail engineering of the project and project management up to commissioning. (1979-1983)

Professional Membership

- American Welding Society – AWS, The American Society for Non-destructive Testing, Inc. – ASNT, American Institute of Steel Construction, Indian Institute of Engineers.

HAKS

RICHARD URENA *Senior Inspector*

Education

Bachelors of Science, Architecture, New Jersey Institute of Technology, Newark, NJ, 2001

Associate Degree, Liberal Arts of Science and Mathematics, Rockland Community College, Suffern, NY, 1999

Professional Registration

NICET Level III, [redacted]

Licenses and Certifications

ACI Concrete Field Testing Technician – Grade 1, 2007

ACI NJ Chapter, 2010

PATH Railroad Worker Safety Training, 2009

OSHA 10-Hour Construction Safety and Health Training Course, 2008

NJSAT Asphalt Technologist, 2009

MPT Traffic Control Coordinator Rutgers, NJ 2008, #[redacted]

Work Zone Safety Awareness Program Course #1012, 2008

MDE Erosion and Sediment Control 2010, [redacted]

Summary of Experience

Mr. Urena has more than 5 years of experience in construction inspection industry. His representative projects are as follows:

- **Senior Inspector** – Resident Engineering Services for Rehabilitation of the JFK Boulevard Columbus Bridge Structure #9000-08, Jersey City, NJ over Conrail and **PATH** for County of Hudson Engineering Department. The bridge consists of two open spandrel concrete arches with two concrete T-beam approach spans. The bridge spans Port Authority Trans-Hudson (PATH) and Consolidated Rail Corporation (Conrail) tracks. Work included reconstruction of a parapet wall, repairing concrete spalls at transverse beams, arch beams, abutments, and bridge under-deck. New deck compression seals and joints were installed along with steel brackets. Track protection was used to protect the tracks and MPT was set up for lane closures. Coordinated with PATH, Conrail, County of Engineer, the fire Dept., and state/local police. In addition to construction inspection, provided shop drawings and erection drawings review, emergency repair design as needed and administrative services including cost, progress and quality control. Monitor the contractor's schedule and operations to assure coordination with railroad traffic during all construction phases. Construction Cost $1.6 million (02/09 – present)
- **Inspector –** NJDOT Central Region – Maintenance Roadway Repair Contract #C301, Sub-Region C-3, for Routes 9 NB, 18 SB, and 72. The scope of work includes milling and paving and maintenance and protection of traffic. Work includes milling variable depths and paving of base, intermediate, and top course Superpave Hot Mix Asphalt; application and installation of tack coat, joint adhesive, pavement markings, two way plowable directional reflectors and rumble strips, construction of concrete sidewalks, curbs, and driveways. Replacements of detectable warning signs, cast iron curb pieces, bicycle safety grates, water valves, and inlet casting. Project also included the placement of construction signs, cones, breakaway barricades, flashing arrow boards, and VMS (NJ State police escorts). Duties included inspection and supervision of all aspects of the project such as monitoring, coordinating, and documenting all daily activities. Construction Cost $8.5 million (4/08 – 11/08)
- **Inspector** – REI Services for Reconstruction of Grand

Concourse from E 161st St. to E 166th St. (Contract # HWXP136R) and Reconstruction of E 161st St. Bridge (Contract # HBX1104), Bronx NY for NYCDOT. Work includes replacement of an arch overpass and 6-block reconstruction of a major urban 10 lane wide through fare. Providing REI services for two multi-staged projects includes; demolition of 60-ft wide, 550-ft long concrete arched bridge, construction of reinforced concrete abutments, back walls, pedestals, bearings, superstructure deck and approaches. Reconstruction of four staircases at the portals of the bridge, reconstruction of the underpass roadway and sidewalks. Rock tiebacks to existing wing wall. Reconstruction of combined sewer system, water main, street lighting, traffic signals, Con Edison duct banks, Telephone, medians, pedestrian ramps and landscaping. Placement of concrete base roadway and HMA super pave. Duties include supervision daily construction activities, review shop drawings and suggestions. Participating in monthly progress meetings with the A/E consultant, contractor and the client. Review and approval of the contractor's CPM schedule and preparing monthly progress report. Coordinate and manage all the project documentation. Construction Cost $52 million (11/07 – 3/08)

- **Inspector** – TANY 04-12BR, Rehabilitation of I-87 Bridge Northbound Ramp Bridge over Sawmill River Parkway for NYSTA. Work includes removal and installation of asphalt pavement; concrete deck repairs; removal and installation of new drainage, transverse and longitudinal joint systems on deck. Project also includes substructure repairs pertaining to structural lifting operations, replacement of bearings and Class D concrete repairs to abutment and pier surfaces, and reinforced carbon fiber wrapping of concrete columns. Installation of new bridge railings and painting of entire bridge structure is also part of the bridge rehabilitation. Project involves extensive MPT including maintaining traffic on the northbound bridge during repairs to the southbound bridge and vice versa. Responsibilities include monitoring, coordinating and documenting all aspects of the project execution. Construction Cost $13 million (9/05 – 11/07)
- **Architectural Draftsman / Administration** – Provided full administrative support which including recruiting to ensure all internal positions were filled and maintained a close working relationship with all employees. Managed all company accounts by providing full customer service and direct documented client contact using a variety of communication techniques to ensure the appropriate flow of information. Worked in a fast-paced environment on a diversity of project types including public space, urban redevelopment, multi-family, site planning, roadway beautification, and upscale residential. Responsible for planning, coordinating and administering architectural projects through all phases of development. (12/04 – 05/05)

HAKS

GEEN H. YEE, *Electrical Inspector*

Education

Bachelor of Science, Electrical Engineering, Polytechnic University, 1980

Licenses and Certifications

Windows NT Certificate, 1996

AutoCAD Certificates (CFA/CADD Training), 1994

Radar / Control Systems Certificates, 1978

AAS Electronics RCA Institute, NYC, 1976

BNL Electrical, Security, Fire Safety Training

Member of BNL Technical Group Certificate

HVAC Training (UCSD)

Summary of Experience

Mr. Yee is experienced in electrical, electronic, mechanical as well as test engineer, design engineer and quality control inspector. Following is a list of his representative experience:

- **Field Engineer / Inspector –** Investigated and evaluated power systems, analog and digital controllers at the **NY/NJ Port Authority** Bus Terminal. (4/95 – 9/95)

- **Electrical Inspector –** Construction Management, Completion of 3rd City Water Tunnel, Manhattan, NYCDEP. Major construction items include work to complete the tunnel, installation of user pipe shut-off valves in ten tunnel shafts, diversion structures with additional valves, piping and eventual connection to street water mains, elevators to shaft valve chambers, and ventilation and lighting at each location. Activation of the tunnel to the City water mains will be a key component of the project, which will require final tunnel cleaning, electrical instrumentation, tunnel disinfection and refilling with clean water, venting, and street main connections through the ten shafts. Construction Cost $176 million. His duties include inspection of all electric work for this project.(3/10 – present)

- **Electrical Inspector** – Constructability Study for RH-68 Structural Repairs of the Perimeter Wall Red Hook Water Pollution Control Plant. Scope of work included the removal of damaged concrete, installation of new structural steel piling to support the reconstructed perimeter concrete wall. His duties included inspecting the relocation of existing above ground telephone and electric cables, site restoration including new drainage inlets, roadway paving, curbs, sidewalks and metal fence. (12/2009)

- **Electrical Inspector** – Environmental Remediation of Barreto Point Site, Bronx, N.Y. for the NYCDEP. Scope of work included providing CM services for construction contracts in the New York Downstate area. A major part of this effort was for installing and operating chlorination/dechlorination facilities including all mechanical, electrical, instrumentation and civil work for specified water pollution control plants in both the North area (Hunts Point, Redhook, Newtown Creek, Bowery Bay, Tallman Island, Wards Island and North River Plant and pumping stations), and the South area (Owls Head, Oakwood Beach, Coney Island, 26th Ward, Rockaway and Port Richmond Plants and pumping stations). (6/08 – present)

- **Field Engineer / Inspector** – General Research under contract with NYCHA for AENAS project. With architectural and building inspection needs, he performed all inspection for

electrical panels, switch boards, emergency power and fire alarm systems. He, inspected all facility, school, and apartments fire alarm security systems. (8/05 – present)

- **Field Engineer** – Responsible for setting up CAD system for automation, Algotex plotter, Assyst-Bullmer and Zund cutter. Provided technical requirements for quality control and installation under service agreements with Levi Strauss Company in Canada. (2/00 – 2/05)
- **Electrical Specialist –** Worked on cavity, anode high voltage power supply project. Provided technical objective for system integration. Used AutoCAD-R14 to release A-1 design for high voltage power supply of RHIC power substation. Also installed video inter-processor, alarm and CCD camera for underground tunnel. (4/98 – 10/99)
- **Field Engineer / QC Inspector –** Investigated and inspected power systems, switching controllers for heating, cooling and signals at Brooklyn Battery Tunnel, New York City. Conducted tests and generated inspection reports. (1996 – 1997)
- **CAD (AutoCAD) Designer –** Performed CAD design for Otis elevator systems. Designed hydraulic and PLC controllers. (5/94 – 3/95)
- **Electrical Engineer –** Designed digital signal and analog power distribution systems. Designed test-systems for RF transmitter and control equipment, up to 12 GHz. Performed field support for Aegis, NWS, MK92, MK167, Harpoon and Terrier RF-projects. Worked with high voltage electronics in radar systems. Ten years in QC as test engineer for Harpoon system, used MIL-Q-9858 for system requirements.

BACKGROUND

Ms. Bayat has over 22 years of successful engineering and construction management experience. She has managed and provided technical expertise for a wide range of construction inspection, management, and environmental projects, including: bridges, highways, roads, transportation facilities, buildings, waste management facilities, and remedial projects. Her strong managerial skills, technical background, and exceptional dedication and determination make her an asset for effective implementation and successful completion of complex, large scale projects.

PROFESSIONAL REGISTRATION

Professional Engineer State of New York, No [redacted]
Professional Engineer State of New Jersey, N [redacted]

PROFESSIONAL EXPERIENCE

NYSDOT, Construction Management of Route 9A Corridor Reconstruction Project, Manhattan, NY

As a sub-consultant project manager, managed and oversaw safety, MPT and environmental during construction projects related to redevelopment of Route 9A. The assignments involve coordination of safety and MPT with the overall planning initiative for lower Manhattan redevelopment projects. The project responsibilities included review of design and construction documents and drawing to ensure the Safety and MPT plans are consistent with the project objectives. Coordinate Safety and MPT between involved parties. Ensure the site conditions are safe. Review the collected traffic data, analyze traffic data, and advise the project manager on any changes on incident management system. Ensure safety and OSHA compliance, environmental monitoring, and OSHA construction safety training as required.

NYCDOT, Construction Inspection for the Rehabilitation of Bruckner Expressway Bridges over AMTRAK and CSX Railroad, Bronx, NY

Ms. Bayat is the EnTech's project manger for this design build project. EnTech is a subconsultant of the REI Team. The project entails performing in-depth inspection, deck evaluation, rehabilitation report, preliminary and final design and construction support services for the rehabilitation of the expressway. REI services include work permits, insurances, work schedule, and MPT. EnTech is in charge of providing environmental services regarding lead-based paint removal and hazardous waste management. Responsibilities include review of related documents and inspecting and overseeing related field operation, testing and monitoring, controlling emissions, air pollution control, and managing soil contamination**.**

NYSDOT Region 10, CI Substructure Repair and Painting, Robert Moses Causeway Bridge over Great South Bay
As a sub-consultant project manager, ensured EnTech's delivery of high quality services to the client. The work included removal and replacement of protective metal jackets with fiberglass jackets, placement of concrete inside the jackets, crack repairs/sealing, and sealing of existing concrete on the N/B Structure. EnTech provided chief inspector and NACE certified painting inspector. EnTech participated in all aspects of the project's daily activities including overseeing contractors work, preparation of contract paperwork, payment review and approval, MPT as per requirements, and other related work.

NYSDOT Region 11, Reconstruction of FDR Drive from East 56th Street to East 63rd Street, Manhattan, NY
As a sub-consultant project manager, managed and oversaw EnTech participation in construction inspection activities. The project involved rehabilitation of the 60 year old, three-level tiered FDR Drive structure. EnTech participated in construction inspection activities and provided MPT, asbestos abatement consulting services, OSHA compliance, environmental compliance, and safety training for the crew. Due to complexity and location, coordination of safety and MPT with construction activities was a challenging task that was achieved successfully.

NYCDOT Six Bridge Design Project
Provided professional services for assessment of hazardous substances for NYCDOT Six Bridges Total Design Project. Prepared reports for each bridge regarding findings and recommendations for safety and environmental considerations during removal/abatement of asbestos, lead, PCB, biological hazard, and other potential hazardous materials prior to rehab or reconstruction activities for the following bridges:

- Crooke Avenue Bridge over BMT Subway Brighton Line
- Brooklyn-Queens Expressway Over Cadman Plaza
- Bryant Avenue Bridge over Amtrak, Bronx
- Grand Street Bridge over Newtown Creek
- Metropolitan Avenue Bridge over English Kills
- Newkirk Avenue Bridge over BMT Subway Brighton Line

EDUCATION

MS, Environmental Engineering, 1985
National Institute of Applied Sciences, Toulouse, France

BS, Chemical Engineering, 1981
Teheran University, Teheran, Iran

BACKGROUND

Mr. Ali has twenty-five years of experience working on transportation and infrastructure related projects mainly in the New York Metropolitan Area. He has served as an inspector, senior inspector, and has advanced to be chief inspector and assistant resident engineer on several construction inspection and construction management projects. In addition to his construction inspection experience, he maintains the SSPC certification and has broad experience in painting and lead-based paint removal projects. Mr. Ali holds a BS degree in Civil Engineering, a NICET IV certification and other related certifications.

PROFESSIONAL EXPERIENCE

Chief Inspector, NYSDOT, Route 9A Maintenance Repairs, Manhattan, NY
Mr. Ali served as the chief inspector for this project, which involved concrete full depth roadway repairs, sidewalk construction, concrete curb, concrete placement, electric conduits and traffic signals installations, installation of the ITS camera system, fiber optic conduits installations drainage and catch basin work, MPT and office work. His tasks included supervising the inspection team during execution of these activities, office work included reviewing of change order submittals, shop drawings, processing contract monthly payments, and attending contract progress meetings.

Senior Inspector, NYCDOT HBX1123A, Rehabilitation of Bruckner Expressway, Bronx, NY
Mr. Ali serves as the senior SSPC inspector for this project. The project involves resident engineering inspection for rehabilitation of the NB and SB Bruckner Expressway Bridges over AMTRAK and CSX Rail Road. His duties include supervising the contractor during the lead abatement work including, reviews of health and safety plan, containment system plan and decontamination measures prior to contractor's paint removal operations. He observes contractors compliance, decontamination of abrasive blasting containment structures, removal and disposal of lead paint debris, and containment performance and blasting operations. He maintains records, conducts testing of paint and paint residue for lead, soil samples for lead during and after lead paint removal. He coordinated the environmental activities at the site, including soil sampling.

Chief Inspector, NYSDOT Belt Parkway Sign Structures and Reconstruction, Brooklyn, NY
Mr. Ali served as the chief inspector for this project which encompassed the construction of fourteen new overhead sign structures. In this role he was responsible for inspecting the excavation work, concrete forms, reinforced concrete placement, and steel erection of the proposed sign structures. He was also responsible for managing and inspecting the drainage system installations and electric work. He also carried out field inspections, review change orders, shop drawings, and attended contract progress meetings.

Chief Inspector, NYSDOT Region 10 CI Bridge Deck Joint Repair/Replacement Various Locations, Nassau & Suffolk Counties, NY
Mr. Ali served as the chief inspector for this project, which involved structure concrete removal, steel expansion joint removal, surface preparation for installation of joint, installation of elastomric joint system, MPT, concrete placement, steel reinforcement, steel girder repairs, bridge bearing jacking removal and replacement. His duties include inspectors' supervision, project records, review inspectors' reports, review OOC, and attend progress meetings.

Senior Inspector, NYCDOT Rehabilitation of the Queensboro Bridge, Manhattan, NY
Mr. Ali served as the senior inspector for this project involving steel member replacement, roadway deck repair, concrete deck foundation placement, expiation joints installations. Mr. Ali was responsible for inspecting the construction of bridge drainage system, manholes, basin, electric and utilities work, field inspection, OOC reviews, and managing monthly payments.

Field Design Support, **NYC Transit Authority 240th Street, Subway Yard Rehabilitation, Brooklyn, NY**
This project involved new steel members erecting, steel repair work, and installation of jacking system. The project also included concrete slab removal and reconstruction, retaining wall building and street painting, drainage, water main and utilities related work. Mr. Ali carried out the field inspection, managed and reviewed shop drawings, and processed change orders.

Team Leader, **NYCDOT Williamsburg Bridge (Contract #7), Reconstruction of the Northern Roadways, Brooklyn, NY**
As the team leader, Mr. Ali was responsible for the project work which consisted of the demolition and reconstruction of four northern roadway lanes on the bridge approaches and main span, removal of the existing structure of excavations, new foundations, concrete placement of columns, pier caps, structural steer erection, the grid deck, concrete deck placement, installation of new drainage system, and utilities.

EDUCATION

BS, Civil Engineering 1982
Alexandria University, Egypt

CERTIFICATION

Lead Competent Personnel Certification - SSPC
Certified NICET Level IV
NYCDOT Lead Paint Protocol
ACI American Concrete Institute Certification
NYSDOT MPT Seminar
OSHA Construction Site Safety Competent Personnel Course
NJSDOT TCC

BACKGROUND

Mr. Fenton has 17 years of experience in construction inspection, civil engineering, and architectural inspection. He has worked on several major NYCDOT bridge and tunnel construction projects including 145th Street Bridge, Williamsburg Bridge, Macombs Dam Bridge, 9th Street Vertical Lift Bridge, Madison Avenue Bridge, and Three NYC Vehicular Tunnels. He also has worked on TBTA, NYCTA Port Authority of NY&NJ project providing construction inspection, architectural inspection and condition survey services. Mr. Fenton is also a NICET II level inspector.

PROFESSIONAL EXPERIENCE

Construction Inspector, PANYNJ, Condition Survey Inspection of Newark International Airport Terminal B, Newark, NJ
Verified existing ceiling construction and sprinkler head, supply and return air diffuser locations and electrical runs. Also, verified roof layouts, roofing, and drains conditions.

Inspector, NYCDOT Willis Avenue Bridge Reconstruction, Bronx, NY
On this $626 million job over the Harlem River, Mr. Fenton serves as the City Inspector, supervising contractor activity while constructing temporary loop ramp to connect traffic from the northbound FDR Drive to the Willis Avenue Bridge. He also inspects the removal of existing roadway, installation of mini piles, the construction of new abatement and beams, and inspected steel erection including installation of bearings and welding to gilders. He supervises MDT activity at the Harlem River Drive which included daily and long term closures.

Inspector, NYSDOT, Southern State Parkway, NYC line to Nassau Road, Town of Hempstead, Nassau County, NY
Mr. Fenton inspected and supervised the cleaning, sealing and/or filling of roadway cracks less than 25 mm wide and the longitudinal and transverse joints and based on the specifications, contract drawings and field conditions laid out the limits of the joint repairs. Prepared payment quantities for the removal of bituminous overlay, tack coat and truing and leveling course.

Inspector, NYCDOT, Rehabilitation of Williamsburg Bridge over East River, Borough of Brooklyn and Manhattan, New York
Responsible for calibrating torque wrench daily and torque testing of the bolted connections on the Manhattan and Brooklyn intermediate and main towers. Supervised platforms installation at main span roadway and upper levels of towers. Monitored structural repairs tower bearing connections. Monitored cleaning of existing stone masonry using pressure washing with micro-abrasion. Supervised re-pointing of granite facing of Manhattan and Brooklyn anchorages, including the grinding and re-grouting of existing joints and re-pointing of comfort stations, reviewed shop drawings and field verified as-built quantity.

Inspector, NYCDOT, Reconstruction of 145th Street Bridge over Harlem River, Bronx and Manhattan, NY
Mr. Fenton inspected reconstruction of granite retaining walls following new roadway profile. Prepared payment quantities for granite, concrete, reinforcement, etc. based on contract drawings and specification. Performed field testing of regular and lightweight concrete and inspected placement of concrete for piers, deck slab, roadway base and sidewalks. Supervised installation of bridge rail and pedestrian fence on the bridge and approaches. Monitored MPT and installation of temporary concrete barriers and fence. Supervised rehabilitation of gatehouses.

Construction Inspector, NYCDOT, Rehabilitation of Macombs Dam Bridge over Harlem River, Bronx and Manhattan, NY
Reviewed rehabilitation drawings and specifications. Performed inspection of stone face and developed alternative anchorage detail. Inspected architectural components for Landmark Bridge, including structural repairs of the camel back, deck truss, and swing span, and the exteriors/interiors of the operator and gatehouses and machinery room. Reviewed shop drawings and verified as-built field quantities.

Survey Inspector, NYCDOT, Rehabilitation of Three Vehicular Tunnels, New York, NY
Survey Inspector Designer and Conditions Inspector - Design and construction services, including architectural and structural inspection/design. Rehabilitation of ventilation chambers, crew quarters and machinery supports. Rehabilitation of the above grade ventilation structures in Battery Park which functioned as an important landscape elements. Design involved restoration of stone cladding and new roofs and doors, while addressing aesthetics, security, OSHA, and maintenance requirements. Designed placement of fan openings for the Park Avenue Tunnel located in the median of Park Avenue.

Construction Inspector, NYCDOT, Reconstruction of 9th Street Vertical Lift Bridge over the Gowanus Canal, Brooklyn, NY
Inspected architectural components of bridge, including concrete for piers, exteriors and interiors of operator and generator houses, and machinery rooms, plus roofing, siding and windows of towers

EDUCATION

Associate, Architectural Technology, 1987
The Institute of Design and Construction, Brooklyn, NY

Coursework, Architecture and Urban Planning Studies
City University of New York

CERTIFICATION

NICET Level II
Training Course for Worksite Traffic Supervisors, ATSSA

BACKGROUND

Mr. Magnas is an experienced Environmental and Construction Engineer specializing in Environmental issues. Mr. Magnas has several years of relevant experience including industrial hygiene, Phase I and Phase II - ESA, asbestos and lead abatement projects, brown fields and remediation, geology, and building sciences and holds relevant certifications. Consulting contracts included agencies as School Construction Authority (NYCSCA), New York City Transit Authority (NYCT), New York City Department of Transportation (NYCDOT), The Department of Design and Construction (NYCDDC), Bureau of Environmental and Geotechnical Services.

PROFESSIONAL EXPERIENCE

Senior Environmental Engineer, NYCDOT Willis Avenue Bridge Reconstruction Project, Bronx, NY
As senior environmental engineer, Mr. Magnas is in charge of environmental issues related to demolition and reconstruction of this major movable bridge project. The Project involves extensive environmental issues including, lead-based paint removal, asbestos abatement, and soil and ground water contamination. He oversees the site activities and reviews the contactor work, completes the review of related reports and documents, the contractors work plan and the health and safety plan, samples of hazardous materials, ensures proper air monitoring, performs review of lab data and recommendation accordingly and coordinates the extensive other construction activities at the site.

Senior Project Manager, LiRo Engineers/Core Environmental, New York, NY
Worked on projects covering several aspects of environmental consulting including Phase I and Phase II - ESA, asbestos and lead abatement projects, brown fields and remediation, geology, industrial hygiene, and building sciences. Served as a project manager and contract administrator for asbestos and lead and environmental consulting contracts with the New York City Transit Authority (NYCT), School Construction Authority (NYCSCA), The Department of Design and Construction (NYCDDC), Bureau of Environmental and Geotechnical Services. Managed a staff that ranged up to twenty employees at peak periods during the execution and completion of projects. Administered projects from job creation through billing while maintaining an active role of oversight and quality control on each project. Served as an environmental expert for other departments.

Project Manager, Airtek Environmental Services, New York, NY
Provided inspection and design services for Phase I and II, and Environmental Assessment Statement (EAS), and asbestos and lead-based paint projects for NYCSCA, NYCDDC, and other clients. Designed and managed emergency sampling and clean-up procedures following the collapse of the World Trade Center for Con Edison, NYCDDC, and several private buildings.

Project Engineer, Langan Engineering & Environmental Services, New York, NY
Project manager and site inspector during sampling, development, renovation, and demolition projects. Tasks included Phase I and II Environmental Site Assessments (ESA's), tank removals, contaminated soils and waters remediation, sub-surface investigations of soil, industrial hygiene, environmental design, asbestos-containing materials (ACM), lead-based paint (LBP), mold, air quality surveys and cost estimates. Site/civil services included inspection of foundation and utility preparations and installations, pile installations, tie-back and tie-down installations and proof testing, and compaction testing. Structural services during construction and demolition activities included vibration monitoring, crack and settlement gauging, and visual inspections.

Internships and Experiences During College
Inspection of highway and bridge construction, utility upgrades, environmental planning, and time and material management for Maryland State Highway Administration - Intern for Army Research Laboratory in Adelphi, Maryland studying alternatives to radar technology. Drafted CADD designs of military aircraft for use in computer simulations - Research of environmental stress as it relates to the reproduction and growth of marine life at Technion University in Haifa.

EDUCATION

Carnegie Mellon University Pittsburgh, Pennsylvania
Major in Civil and Environmental Engineering
Minor in Computer Science and Industrial Management

CERTIFICATION

SSPC (Society for Protective Coatings) Certification
NYCDEP Asbestos Investigator
NYSDOL Asbestos Designer, Inspector, Project Monitor, and Air Sampling Technician
Multiple XRF Training Certificates
US EPA LBP Risk Assessor
OSHA Hazardous Waste Operations and Emergency Response
OSHA Certification for Confined Space Entry
U.S. Nuclear Regulatory Commission, Operator Nuclear Moisture and Density Equipment

BACKGROUND

Mr. Amegah has 25 years of construction inspection and civil and structural engineering experience. He has worked on road and highway construction inspection and bridge inspection projects in the New York Metropolitan area. He has experience in civil design including roadway, drainage, sewers, utilities, curbs and sidewalks. His structural experience includes replacement and reinforcement of steel and concrete bridge elements.

PROFESSIONAL EXPERIENCE

Senior Inspector, PANYNJ, Newark International Airport, Newark, NJ
Inspection during construction of security infrastructure and equipment installation at the Newark International Airport. Project included the erection of steel and reinforced concrete columns at various locations and the installation and monitoring of sensitive equipment. Supervised the assembly of erosion control of concrete mats sections.

Senior Inspector, PANYNJ, Newark Airport Parking Garage C, Newark, NJ
Inspected the Port Authority of New York and New Jersey Newark Airport Garage C for baseline Facility Condition Survey Report. Kept records and reported data to PANYNJ.

Senior Inspector, TBTA Verrazano Narrows Bridge, Staten Island, NY
Inspected roadway pavement resurfacing including inspection of structural retrofit of the Bridge.

Senior Inspector, Conn DOT I-84 Widening, CT
Provided inspection services for the widening of Interstate 84 between Waterbury and Cheshire, CT. Inspected the reinforced concrete pipes, structural modifications made to the existing interstate bridges and investigation of catch basins.

Senior Inspector, NYCDDC REI for Richmond Road, Staten Island, NY
Project involved installation of a 72-inch trunk main in Richmond Road in Staten Island and a 60-inch water main installation in Swan Street between Van Duzer Street and Bay Street. Provided field inspection and preparation of daily reports for the installation of sewers, water main, and roadway replacement.

Structural Engineer, Desimone Consulting Engineers, New York, NY
Provided steel and reinforced concrete design and structural inspection services for high rise buildings including the NYC Cancer Institute and The Estates of Kew Gardens Hills, NY.

Senior Inspector, TBTA Whitestone Bridge, Bronx, NY
Supervised the completion of construction of customer service facility including electrical and mechanical installations.

Senior Inspector, NYCDDC Capital Reconstruction, Brooklyn and Queens, NY
Responsibilities included supervision of NYCDDC Capital Reconstruction Projects, including new water mains, associated drainage, sewers, utilities, curbs, sidewalk, replacement of major roadways and bridge reconstruction in Brooklyn and Queens.

Senior Inspector , TBTA Throgs Neck Bridge, Bronx, NY
Supervised installation of non-skid flooring at the Throgs Neck Bridge garage.

Senior Inspector, NYCDDC Sutphin Boulevard Reconstruction, Queens, NY Provided inspection services for the installation of sewer, water main, new sidewalk, curb, and replacement of roadways. Provided field inspection and preparation of daily reports.

Senior Inspector, NYSDOT Eastern Boulevard Bridge, Bronx, NY
Inspected the reconstruction of the Eastern Boulevard bascule bridge which included the removal and replacement of steel bridge elements, abrasive blasting, and painting. Provided field inspection and preparation of daily reports.

Assistant Civil Engineer, NYCDOB, New York, NY
Responsibilities included engineering analysis of structures and examination of plans for new construction, alteration and repair of buildings.

Assistant Civil Engineer, NYCDOT, New York, NY
Assisted in the planning and preparation of bridge inspections. Climbed bridges to investigate for deterioration of bridge components and took technical measurements in preparation of comprehensive reports on bridge conditions.

Assistant Team Leader, NYSDOT Biennial Bridge Inspections, Queens, NY
Conducted condition inspection of bridges in the borough of Queens. Assisted with the design of steel and reinforced concrete bridge elements.

EDUCATION

BS, Civil/Structural Engineering, 1982
University of Michigan

CERTIFICATION

NICET III (equivalent)
NYSDOT Bridge Inspection
NYCDDC Concrete Field Testing Training
OSHA Construction Safety Awareness

BACKGROUND

Mr. Raza has 18 years experience as a civil engineer and a planner. He has a master's degree in international development and planning and a bachelor's degree in civil engineering. He has developed expertise in the areas of resident engineering inspection, traffic engineering and transportation planning, highway design, road safety audits (RSA), work zone traffic control and related permitting, public outreach and community liaison.

PROFESSIONAL REGISTRATION

Professional Engineer: State of New York License N [redacted]
Professional Engineer: State of Connecticut License No [redacted]

PROFESSIONAL EXPERIENCE

Work Zone Safety/Traffic Engineer, PANYNJ, Construction of Light Rail System from JFK to Jamaica, NY
Work Zone Safety/Traffic Engineer, responsibilities included extensive planning and supervision of work zone traffic control and safety plans of one of USA's busiest Highway I-678 (Van Wyck Expressway), and local streets during accelerated construction of this precast post-tensioned segment viaduct. Work zone traffic control and safety design for the construction of Jamaica Terminal involving variety of lane closures and related traffic and pedestrian impacts.

Project Manager, PANYNJ, George Washington Bridge (GWB) Traffic Study, NY and NJ
Project Manager for traffic data reduction exercise, computed peak hour factors for weekday AM, Midday, and PM peak hours and Saturday Midday peak. He also performed analyses for computations of vehicle adjustments factors to account for significant truck traffic. Capacity analyses were performed to account for impacts in terms of delays and queue lengths due to a variety of planned ramps and roadway closures in relation to capital improvements projects on and around GWB roadway network.

Project Manager, NYC DDC Contract HWP2009Q, Partial REI Services Reconstruction of Complex Pedestrian Ramps, NY
As the Project Manager representing sub-consultant, Mr. Raza ensured the project progressed on time and within budget. Supervised office engineer and actively participated in progress meetings, field office and site visits to gain thorough understanding of the project both technically and administratively. He gained thorough familiarity with the project, which required maintenance and protection of traffic plans, implementation of construction safety programs, and testing for concrete slump, air content, and temperature of daily concrete placement. On a daily basis, verified field measurements and itemized quantities computations for payment of the work completed, oversaw all stages of excavations base from the violations on the PIR's and placement of backfill materials with proper compaction.

Project Executive, NYC DDC Contract HWS2009X, REI Services Sidewalks in Bronx, NY
As the Project Executive, Mr. Raza ensured the project progressed on time and within budget. Supervised all inspectors, office engineers and contractors for this project, which required maintenance and protection of traffic plans, implementation of construction safety programs, and testing for concrete slump, air content, and temperature of daily concrete placement. On a daily basis, verified field measurements and itemized quantities computations for payment of the work completed, oversaw all stages of excavations base from the violations on the PIR's and placement of backfill materials with proper compaction.

Resident Engineer, NYC DDC Contract HWS2007K1, Installation of Sidewalks, Curbs and Pedestrian Ramps, Brooklyn, NY
As the Resident Engineer, Mr. Raza oversaw installation of Complex Pedestrian Ramps especially included as a Change Order by NYCDOT. These ramps involved relocation of traffic signals, modifications to existing sewer manholes, and relocation of catch basin. The project also involved installation of pedestrian ramps in refuge islands along Ocean Pkwy and Coney Island Ave. The project also involved coordination with utilities companies, and designing and overseeing elaborate MPT along Ocean Pkwy & Coney Island Ave. Mr. Raza's job responsibilities also included: ensuring enforcement of construction and consulting services contracts including completion of the contract within time and budget, technical support and management of the REI staff.

Resident Engineer, Newark Department of Engineering – Wilson Ave Reconstruction Project, Newark, NJ
Resident Engineer whose responsibilities included periodic project site visits and supervision of contractor's work for compliance with construction plans and NJDOT standard specifications. Duties also included review of itemized quantities and daily inspection reports (IDR) produced by the senior inspectors. Responsible for authorizing or rejecting any change orders requested by the contractor in consultation with EIC.

EDUCATION

MS, Public Policy Administration, 1999
International Development, Carleton University, Ottawa, Canada

BE, Civil Engineering, 1990
NED University of Engineering and Technology, Karachi, Pakistan

CERTIFICATION

ACI Concrete Field Testing Technician Grade 1, ID [redacted]
New Jersey Asphalt Testing Technician Certified
ATSSA Work Zone Traffic Control and Safety Supervisor
Road Safety Auditor

SANJAY KUMAR SHAH SR. SCHEDULING ENGINEER

Experience Highlights:
Strong background in Project Management and CPM Scheduling.

In-depth knowledge of Primavera P3 & P6.

Total Experience:
15 Years

Education:
B. S. Civil Engineering
Masters in Construction & Project Management

Training:
Primavera P5, P6 & P3
MS Project
Auto CAD –2000
MS Office
SAP2000, MathCAD.

Mr. Shah has over fifteen (15) years of experience in the field of project management and project control. He has provided planning and scheduling services including resource/cost control analysis on a variety of engineering, procurement and construction projects from bidding to design, construction and closeout. In addition to his in-depth project control skills, Mr. Shah has experience in Estimating and Costing, Budgeting – Revenue; Capital & Manpower, Financial Projections, Job Cost Monitoring, Contract Administration, and Claims Management on multidisciplinary EPC/BOT projects.

Mr. Shah has been responsible for the development of WBS, activity codes, resource codes and cost account codes. Mr. Shah's CPM Scheduling experience includes developing and maintaining Integrate d Master Schedules, developing detailed cost and resource loaded construction schedules and performing monthly updates, analyzing impact of changes on project schedule, assessing delays and preparing recovery schedules, reviewing contractor prepared construction schedules and preparing associated charts and reports for the management. Mr. Shah is very proficient in Primavera Project Management software including the latest versions P5/P6.

PROJECT EXPERIENCE:

SEPTA - Market Street Elevated Reconstruction, Philadelphia, PA.: The $740 Million project includes staged replacement of 11,000 feet of the current structure with new single-beam supports, replacing six existing stations, constructing two new Automatic Train Control buildings and other related improvements. As Sr. Scheduler, Mr. Shah's duties include:

- Collecting progress information for three station projects, updating them on a weekly basis and preparing schedule charts and reports.
- Monitoring and updating Outage schedules for the Guideway and Stations contracts.
- Reviewing baseline schedule for new contracts.
- Incorporating and documenting issues into the existing schedules to create an accurate history of events with potential time impact.
- Evaluating time-impact analysis submitted by contractors to determine the validity of time extension and make recommendations to the owner.
- Worked on schedule risk analysis which involved identifying risks and risk types, calculating the risk exposure, relating the risks to schedule activities, identifying key constraints and contributors to project risk, assessing their criticality, and assigning responsibility including mitigation.
- Maintained the project schedule showing risk impacts with periodical updates.

AMTRAK PROGRAM Management Oversight (ARRA Funded Projects): The program includes more than 100 infrastructure improvement projects throughout the U.S with an estimated value in excess of $1.3 Billion, being funded through the American Recovery and Reinvestment Act (ARRA) economic-stimulus package. The project scope is to design and construct the projects such as maintenance facility upgrades, bridge replacements, track work, security enhancements, fall protection systems and various station improvements. Mr. Shah, as Sr. Project Controls Engineer is responsible for developing, updating and maintaining budget loaded program development schedule for 24 Design Build Guaranteed Maximum Price (DB-GMP) contract packages covering 196 Eastern region projects of $218 Million. Mr. Shah is also responsible for review and approval of contractor's resource loaded CPM schedules and updates for currently active 12 Lump sum high value contracts totaling to $ 120 Million.

SEPTA – Fairmount Sub-Station, Philadelphia, PA: As Scheduling Engineer on this multi-prime contract, Mr. Shah was responsible for the following:

- Developing the cost loaded baseline schedule in conformance with the scheduling specifications for the project and preparing a narrative report.
- Updating the schedule monthly.
- Performing logic changes as necessary to keep the schedule current based on changes on the project.

PATH - Signal System Modification Program, NJ/NY: As a part of PATH's capital modernization effort PATH is undertaking the modernization of its signal system throughout the system, from trains to track signals to stations. PATH aims to overhaul its current mechanized signals into a modern, state of art computer-based system. The new computerized signals will route traffic more efficiently and help the rail system meet its goal of increasing capacity. Mr. Shah developed the role/resource loaded integrated initial baseline schedule of stage wise signal system modification program which include design, stage wise installation, testing and training. Mr. Shah's responsibilities included:

- Creating the baseline schedule, assigning trade wise roles and resources to the baseline activities.
- Producing trade wise monthly role distribution tables, generating stacked histograms for all role requirements and producing individual trade wise profile curves to plan in-house resource requirement for PATH.

NJ Transit – Hudson Bergen Light Rail Transit System, Bayonne, NJ: This $65 Million project is the extension of Hudson Bergen Light Rail to 8th St. in Bayonne, NJ. It is a Design, Build, Operate and Maintain (DBOM) contract which includes the construction of a ramp with retaining wall, elevated viaduct and a station at Bayonne with elevated platform. Mr. Shah provided delay analysis services on the project.

- Review and analyze Contractor's request for extension of time.
- Review of Baseline CPM Schedule and various periodic updates.
- Carryout critical path analysis of CPM updates/fragnet analysis to identify periods of major delay.
- Study change orders to identify impact on critical path, assign reason and responsibilities and carryout concurrency analysis of delays.
- Recommend extension of time.

Kolkata Metropolitan Railway – East West Corridor Project, India: The 9 Mile long, East West Corridor Project of Kolkata Metro is being implemented through the densely populated metropolitan city of Kolkata in the state of West Bengal in India. It has approximately 5 mile underground Twin Tunnel passing through Hooghly River and 4 miles long elevated section of viaduct. The underground stretch has six underground stations and elevated stretch has six elevated stations. Mr. Shah's duties on this $1 billion project involve preparing a master schedule, reviewing the line of balance schedules and preparing the cash flow for the owners.

MNR – Shell-At-Grade – Traction, Signal & Communication Improvements, New Rochelle, NY: The $94 Million project consisted of upgrading Amtrak/Metro North's Shell-at-grade interlocking with modification to platforms, signaling, drainage etc. Mr. Shah was responsible for the following:

- Review of contractors' request for extension of time, analyzing the delays. This involved carrying out fragnet analysis and window analysis to assign the responsibility of major delays.
- Developing time extension recommendations based on the analysis and preparing a written report to contractor's request for extension of time.

LARSEN & TOUBRO LIMITED – ECC DIVISION: Mr. Shah served as Sr. Engineer – Planning and Project Control in the transportation & Infrastructure business unit that was responsible for various roadways, bridges, marine and other infrastructure projects on EPC/BOT basis in the State of Gujarat. A large number of these projects involved dealing with international consultants/clients. Responsibilities included:

- Developing Integrated Master Schedule and updating on a periodic basis.
- Developing detailed construction schedule, updating on a monthly basis, analyzing progress and generating associated schedule charts and reports.
- Ensuring availability of plant and machinery, staff, material and other resources required at lowest possible cost, Procuring specialty services and contractors through bidding, evaluation and negotiation. Attending to and resolving contract related issues with agencies.
- Job cost monitoring, cost review and proactive action to keep the project within budget.
- Regular site visit, progress review, identification and resolution of construction problems.
- Coordination with client and consultants.
- Reviewing and settling various construction claims.
- Used Primavera software in conjunction with in-house MIS - Enterprise Information Portal, through which all the projects were monitored.

JCMS, Inc.

PANKAJ AGRAWAL, PMP — PROJECT CONTROL SPECIALIST

Experience Highlights:
Provided Program level and Project level scheduling services

Experience in providing CPM Scheduling services on building and major infrastructure projects.

Experience in scheduling complete project life cycle from design, through bidding, execution and closeout using Primavera (P6/P3).

Total Experience:
8 years

Education:
B.Tech, Civil Engineering Pant Nagar, University, India.

Masters, Project Management School of Planning and Architecture, New Delhi, India

Certification:
Certified Project Management Professional (PMP)

Mr. Pankaj Agrawal is a certified Project Management Professional (PMP), with over eight (8) years experience in the field of project management and project control. His responsibilities include providing planning, scheduling, resource/cost control and delay claims analysis on a variety of engineering, procurement and construction projects from bidding and design phase to construction and closeout. He has extensive experience in using Oracle Primavera for controlling of project time, resource and cost in a multi-project environment.

Mr. Agrawal has been responsible for the development of WBS, activity codes, resource codes and cost account codes. Additionally, he managed the review of contract documents, preparation of summary schedules and detailed construction schedules, assignment of resources and cost to activities and for establishing project baseline schedule and performed Earned Value Analysis to monitor project performance. Mr. Agrawal was responsible for resource planning and leveling to establish optimal usage of resources.

Other responsibilities have included preparing schedule, cost and resource updates, analysis of critical path(s) and preparation of computer tabular reports, charts and narrative reports. He has also been responsible for reviewing and approving contractor prepared construction CPM schedules, for preparing integrated master schedules and for incorporating change orders with associated logic changes, performing time impact/delay analysis to determine the impact of changes on project completion and preparing recovery schedules, as needed. Mr. Agrawal has been involved on various types of design and construction projects including construction of highways and bridges, commercial & residential buildings, shopping centers, etc. Mr. Agrawal's software skills include P6, Primavera Project Planner V. 3.1, Microsoft Project Planner (MS Project 2007) & AutoCAD – 2007 etc.

PROJECT EXPERIENCE:

NJ Transit- Wheel Truing Facility, Hoboken, NJ 06/2009-01/2010
This project involves the construction of a new Wheel Truing Facility, employees' welfare facilities and a storage area. Additionally, the facility includes a bridge crane, a chip conveying system, compressed air system and various utility and yard improvements. The scope of work also includes construction of water service, sanitary sewer connection, natural gas service, electric and telephone service. Mr. Agrawal's responsibilities are:

NJ Transit - Lower Hack Bridge Steel Repairs & Machinery/Operator House, Jersey City, NJ 01/2009-03/2009
The project is located on the NJT Morristown Line at Milepost 2.64 over Hackensack River in Jersey City, Hudson, New Jersey. The work consists of machinery/operator house rehabilitation, structural steel repairs, replacement of walkways and ladders, and inspection and machine work of the counterweight of Lower Hack Bridge. Mr. Agrawal's responsibilities included review of the baseline schedule and monthly updates submitted by contractors and critical path analysis. In reviewing a delay claim by the contractor, Mr. Agrawal reviewed project progress using latest version of primavera software (P6), performed comparative analysis of schedule baseline with updates, developed resource histograms, attended meetings with client and prepared a Delay Analysis Report.

Maryland Correctional Training Center - 192 Cell Housing Unit, Hagerstown, MD 07/2008-01/2010
The project consists of construction of a new Commissary Building (7,718 SF) with related site & utility work. It also includes construction of a new Emergency Sallyport, 192 Cell Housing Unit and Medical Building. As Scheduling Engineer, Mr. Agrawal has been responsible for updating the schedule with time and cost data collected from the contractor and incorporated changes as necessary to keep the schedule current and realistic.

- Reviewing the contractor prepared CPM Schedule for accuracy and reasonableness of schedule duration, logic and critical path.
- Reviewing the schedule updates for accuracy of progress information and/or logic changes made and performing analysis of critical path.
- Preparing a narrative report outlining the progress of the project and discussion of critical areas of the project where action/decision is needed.

SUNY- New Paltz Old Main Building 11/2008-11/2009

The project includes expansion of the State University Building into the courtyard between the existing State University Building and Haggerty Administration Building to include the creation of additional campus conference space, impromptu student presentation/gathering space and a more grand entrance to the campus bookstore. As Scheduling Engineer, Mr. Agrawal is responsible for updating the schedule with time and cost data collected from the contractor and incorporate changes into the schedule as necessary. He is also responsible for delay analysis which includes review change orders and evaluating their impact on schedule completion date.

SEPTA – 30th Street Switching Station, Philadelphia, PA 02/2009- Ongoing

The Project consists of a new traction power switching station to be constructed in a new building located at the intersection of 31st Street & Spring Garden Street within limits of Powelton Yard. The new 30th Street Switching Station will replace the existing Sub 1A. Mr. Agrawal has been responsible for developing a cost loaded baseline CPM schedule using P6 in conformance with the contract scheduling specifications and preparing narrative report. He also developed custom schedule and cost reports based on the requirements of the owner and the contractor.

SEPTA - MSHL- Traction Power OCS Resectionalizing Contract Routes 101 Media & 102 Sharon Hill,
SEPTA - MSHL-Grade Crossing, PA 06/2009-Ongoing

The work includes resectionalizing of traction power overhead contract system (OCS) along routes 101 & 102 of SEPTA's light rail lines located along a right of way in Upper Darby, Springfield, Clifton, Aldan, Collingdale, Media & Sharon Hill in DE & PA Counties. Mr. Agrawal has been responsible for developing a cost loaded baseline CPM schedule using P6 in conformance with the contract scheduling specifications and preparing narrative report. He also developed custom schedule and cost reports.

SEPTA – Fairmount Sub-Station, Philadelphia, PA 06/2009-10/2009

The scope of work for this substation includes installation of new auto-transformers outside the new substation, new electrical components, modifications to the existing power transmission feeder cables and their supporting structures. The new facility will house state-of-the-art circuit breakers, switchgears and control equipment. Mr. Agrawal used Primavera P6 for this multi-prime project. He was responsible for updating the schedule with progress information, performing critical path analysis and preparing schedule charts and reports as well as developing customized reports from the P6 database in conformance with SEPTA reporting requirements.

EMAAR - The Dubai Mall Project, Dubai UAE 2/2005-12/2007

This project involved the construction of 9 million square foot of Word's biggest shopping mall with world's tallest building project Burj Dubai. It consisted of 534,000 m3 of concrete work with over 8000 piles, post tensioning suspended slabs, centralized chilled water system of 37,500 tons capacity with 20 chillers, 12 cooling towers, heat exchange units, ice thermal storage, 150 AHUs, 200 FCUs. As Scheduling Engineer, Mr. Agrawal was involved in the Baseline Schedule development and obtaining client approval. In addition to all civil, structural and architectural work, it included significant MEP scope (large air handling units, 92 elevators, 147 escalators etc). He reviewed progress and updated the schedule on a weekly basis, performed critical path analysis and prepared related schedule charts and reports and performed Earned Value Analysis to monitor the project performance. He also developed detailed micro level schedules for various structural works. Standard progress reporting included daily, weekly, monthly and quarterly project review as well as formal presentations. In addition, Mr. Agrawal was involved in logistic planning, designing layouts, access roads, hoist and tower cranes locations for various work packages etc. Also responsible for delay analysis, assignments, review change orders & their impact on schedule in terms of time.

DMRC - Delhi Metro Project, New Delhi, India 07/2001-01/2005

This project involved the construction of three elevated station buildings owned by Delhi Metro Rail Corporation. Working as Planning Engineer at Skanska International, Mr. Agrawal developed the detailed cost and resource loaded schedules for various components of the project including Work Breakdown Structure and Activity Codes Dictionary. He performed periodic updating of these schedules. The evaluation of the schedules included analysis to meet the contractual milestones with the available resources. He was also responsible for generating various schedule reports, writing management reports and presentation of the same at progress meetings.

Various Design Projects

As Scheduling Engineer, Mr. Agrawal was responsible for developing Design Schedules which included all stages of design (master planning, concept design, schematic design, preliminary and final design), bidding, local authority approvals (NOC's procedures for Water, electricity, local municipality, Civil Defense, etc.) and pre-bid schedules. He also prepared Baseline Schedule for Construction Phase of the work.

Experience Highlights:
Proficient in the use of Primavera P6/P3, Primavera Risk Analysis and other Project Management tools

Strong PM, Project Control and CM experience on diverse projects

Total Experience:
21 Years

Education:
B.S. Civil Engineering, MNIT, India
MBA, Marshall School of Business, USC, Los Angeles

Certifications:
Primavera Certified P6 Consultant/ Trainer

Memberships:
CMAA, Metropolitan Railway Club of NY

Training:
Primavera Risk Analysis, Oracle University, Berwyn, PA
Construction Quality Management – US Army Corps of Engineers, Philadelphia
Financial Mgmt. – Indian Institute of Management (IIM), Calcutta, India
Project Mgmt. – Administrative Staff College of India (ASCI), Quality Mgmt. – National Productivity Council, New Delhi, India
Project Mgmt. & QC – National Thermal Power Corporation, New Delhi, India

Mr. Puthiyarambath is an engineering and management professional with over twenty-one (21) years experience on diverse construction projects including mass transit, commercial, industrial institutional buildings, and defense department projects. His responsibilities included project management, construction management, contract management, project planning, CPM scheduling, cost estimating, bidding, performance reporting, vendor negotiations and subcontracting.

Mr. Puthiyarambath is a Primavera Certified Trainer. He has developed detailed cost and resource loaded CPM schedules, monthly updates including critical path analysis, graphic charts and computer reports and narrative reports. He has also been responsible for reviewing and approving contractor prepared CPM schedules, incorporating changes and change orders, making logic changes and preparing Recovery Schedules. Mr. Puthiyarambath is an expert in the latest version of Primavera's scheduling software.

Mr. Puthiyarambath is also proficient in using project management tools such as "Expedition" and "Prolog" Document Control software other business software including MS Word, Excel, Power Point, Access, etc.

PROJECT EXPERIENCE:

Port Authority of NY and NJ (PATH System) – Capital Program Management Services: The project consists of developing integrated resource loaded schedule and optimizing resource requirements for proposed $2.5B, 10 year capital program projects for PANYNJ's PATH (Port Authority Trans Hudson) Rail System. Mr. Puthiyarambath's responsibilities include preparation of questionnaire for interviews, understanding the scope, duration and resource requirements. Based on the data collected during the interview process, Mr. Puthiyarambath has developed resource loaded master capital program schedule incorporating logistical constraints and optimized resource requirement.

PANYNJ – World Trade Center Transit Hub Project, New York: Develop and maintain two master schedules – West Bath Tub & East Bath Tub. The master schedule for West Bath Tub is being prepared by merging '3' separate schedules of '3' contractors. For the East Bath Tub, the schedule is being developed with input from Tishman/ Turner (TTJV) project team. Both master schedules are level 5 detailed schedules with over 6,000 activities each.

WTC Transportation Hub Project consists of a) Greenwich Street Corridor (1/9 Subway) (underpinning of subway tunnels for pedestrian connections, new foundations, etc.); b) West Bath Tub (PATH Facilities, Tracks, Platforms and Mezzanine – restoration of platforms, new platform, expansion of operational and services facilities, new vertical transportation systems, street entries, and HVAC systems; and c) East Bath Tub (PATH Terminal Building (Transit Hall/ Oculus) – construction of multi-level transit hall with connections to several mass transit systems and streets, bus terminal, vertical transportation systems and HVAC systems) .

LIRR – Power & Track Project Control/ Scheduling Services for LIRR Force Account Projects, New York, NY: Mr. Puthiyarambath provided Project Control/CPM Scheduling services to the Engineering Department at Long Island Rail Road (LIRR) where he was responsible for power and track projects. His responsibilities included creating

detailed resource loaded CPM schedules, updating of the schedules on a monthly basis and reporting the status of the projects with respect to time, resource and cost.

In addition to annual track program, he was a key team member in finalizing the 2009 Calendar Year track outage program, which involved several rounds of discussion, across LIRR departments – Engineering, CPM, Service Planning, Tracks, and vehicles, starting as early as March of current year. He also successfully implemented the first project migration from primavera P3 to P6 for LIRR (including both FA Management & CPM). His responsibilities also included liaison with 3rd Party vendors, contractors & sub-contractors, attending Progress Meetings and visiting project sites. Projects on which he provided project control/ scheduling services are the following:
LIRR FA MGMT. MAJOR POWER & TRACK PROJECTS PNPG & PNPH: Demolition and reconstruction of 8 new traction power substations ($96M); PNT4: Annual track maintenance and upgrade program ($56M); PNPC: Removal and replacement of 15 –ve reactors, replacement of +ve & -ve cables, and installation of a new traction power substation ($30 M); and PNPU: Installation of a new signal motor generator ($18 M)

Miami-Dade Transit – Metrorail Extension, Miami, FL: The North corridor Metrorail Extension is an elevated 9.2 mile double-track, heavy-rail extension of the Miami-Dade Metrorail system. This is a New Starts involving design, procurement and construction. Scope includes construction of elevated concrete structures (pre-stressed, pre-cast and regular cast in-situ); tracks; traction power; train controls and communication; new vehicle procurement; seven new stations; and associated site developments including demolitions, utility relocation, utility services and parking lots. Mr. Puthiyarambath was responsible for evaluating project schedule and project risk. Mr. Puthiyarambath was also responsible for review, analysis and comments on grantee's cost estimates; which involved independently verifying major cost components in conformance with PMOP Operating Guidance #33.

NJ Transit – Hoboken Ferry Terminal, Hoboken, NJ: $ 125 M: The project objective is the restoration and adaptive reuse of the historic ferry concourse and adjacent rail terminal building. The renovations include reconstructing a portion of the building's substructure and superstructure, constructing a ferry service ticket office, restoring the building's roof, refurbishing the terminal's old clock tower, restoring the interior finishes of the ferry terminal area, and performing utility and marine work to support the new ferry operation. Mr. Puthiyarambath was responsible for reviewing the CPM Baseline Schedule and updates submitted by the contractor, verifying progress, analyzing the critical path, preparing reports summarizing the findings and providing recommendations.

NJ Transit – Morrisville Train Storage Yard, Morrisville, NJ: The $100 Million Phase II work includes expansion of the Morrisville Yard to double train storage capacity, including additional electrified tracks to accommodate 120 rail cars, two elevated inspection tracks in a fully enclosed Service & Inspection (S&I) facility, a Wheel Truing Facility, and expansion of the Crew Quarter Building and employee parking area. As a Scheduling Consultant, Mr. Puthiyarambath was responsible for reviewing and analyzing contractor's CPM baseline schedule, monthly updates and comment on schedule integrity and progress. He was also responsible for reviewing and analyzing contractor's Time Impact analysis requesting time extension and making recommendations to the owner.

NJ Transit - The Trans-Hudson Express Tunnel, NJ-NY: $ 8.7 B: The Trans-Hudson Express Tunnel is a railroad tunnel that will be built under the Hudson River, connecting New Jersey and New York. This project will include: 1) Two new tracks under the Hudson River and the New Jersey Palisades, 2) A new six-track passenger station under 34th Street in New York connecting with the existing Pennsylvania Station, 3) Track and systems improvements in New Jersey and 4) A rail storage yard in Kearny, NJ. Mr. Puthiyarambath is responsible for developing the Master Schedule for the construction phase of the project. This includes identifying the major elements of the project, developing a work breakdown structure (WBS) based on the understanding of the various bid packages, assessing priorities, dependencies and construction durations.

NJ Transit - Market Street South Concourse Site Preparation/General contract, Newark, NJ: $ 6.5 M
Site preparation; including fence, gates and turnstiles removal, light fixture relocations and temporary wood partitions, plumbing; including construction of new wash water line system, and foundations; including concrete foundation walls, masonry walls, concrete floors, metal doors and glass walls at Newark Penn station, located in Newark, NJ.
Mr. Puthiyarambath reviewed contractor schedule, prepared master schedule and master schedule updates for streetscape work.

PSE&G – Essex –Kearny 138 kV Circuit: Project includes Installation of new 138Kv OH line between Essex & Kearny and associated 138 kV breakers & half bus at Kearny using breakers rated at 80 kA fault current. Replace breakers at Foundry Street & Essex County Resource Recovery substations to withstand 63 kA fault current. Mr. Puthiyarambath was responsible for developing detailed project schedule incorporating PSE&G's administrative Functions.

US Army Corps. & FBOP: Various projects: Mr. Puthiyarambath completed three projects as Project Manager & Construction Manager. They were a correction facility, a hospital and a processing center worth $15 million for Federal Bureau of Prisons, the US Air Force and the US Army Corps of Engineers respectively. All the projects were completed on-time and within budget. His responsibilities included preparing summary schedules; developing WBS & activity codes; preparing design phase schedules, baseline CPM schedules, and detailed construction schedules using P3 & P3e/c; customizing P3 schedules for data exchange with USACE document management system – QCS; preparing monthly schedule updates, analyzing critical path and initiating/implementing delay mitigation actions.

HARESH PANCHAL MECHANICAL INSPECTOR

Experience Highlights:
- *Aviation project experience*
- *Extensive experience in HVAC projects*
- *Excellent Project Management skills*

Total Experience:
27 Years

Education:
Bachelor of Mechanical Engineering, - Inst. of Engineers

Certification/ Memberships:
Member A.M.I (Mech.) E (UK) – 1980
Member ASHRAE (USA) - 1980
Certificate courses PC hardware, MS-Office and MS-Projects, - Aptech Computer Education, UAE

Mr. Panchal has over twenty seven (27) years of experience in the field of HVAC and MEP design and construction. He has served as Project Manager on a variety of projects supervising a staff of 300 personnel. His experience includes construction and managing multi-million dollar projects, system and product design-development, and manufacturing. His skills include the following:

- Management of $5 to $70 million projects for Airports, Hi-rise Commercial and Residence Buildings, Hotels & Resorts, Hospital, Shopping Mall, University Campus, Pharmaceutical, Textiles and Food processing plants.
- Proficiency in energy conservation methods.
- Completed fast track MEP projects.
- Provided HVAC Design consultancy.
- Proficient MS-Office suite, MS-Project, Primavera, AutoCAD and Data management programs.

PROJECT EXPERIENCE:

PANYNJ – LaGuardia Airport Project
Asst Resident Engineer

Mr. Panchal is serving as Asst. R.E. managing MEP projects for "Port Authority of New York & New Jersey" at La Guardia Airport for upgrading HVAC system at central terminal building, hanger 7 South and new high pressure fire water pump station projects. His responsibilities include project management, job site inspection, ensuring compliance with engineering drawing and specifications of all construction tasks, ensuring a safe working environment is maintained, and overseeing subcontract management, payment and progress reporting based on Primavera P3 and P6.

- HVAC upgrade Central Terminal Building Project - $9.4 millions
- HVAC system upgrades at Hanger 7 South Bldg - $2.1 millions.
- High-pressure Firewater pump station Project - $12.7 millions.
- Aircraft Fire & Rescue Facility Project – 41.2 millions.

BP Mechanical Corp., Glendale, Queen - New York
Project Manager

Managed $6 million School authority project "Eagle Academy of Young Men" (20,000 sq.ft) Bronx. Coordinated bidding process with estimation for renovation projects for office buildings at NY Manhattan. Won $7.3 million projects during year 2007. Focused on continuous improvement of labor efficiency and material utilization, coordinating project specific requirements, obtaining permits, certification and approvals. Obtained familiarity with applicable New York building codes and standards. Interacted with suppliers, subcontractor and clients.

Zamil Operation & Maintenance Co. (Operations & Maintenance Company, Dammam)
Deputy Site Manager

Managed MEP Projects ($18 to $70 Millions) for Airports at "Al-Hafouf" and "Al–Gassim". Administered 300+ multi-national manpower providing O&M operations for regional and ARAMCO airports.
Supervised Civil, Mechanical and Electrical facilities including Power plant, CFR vehicles, Auto workshop,

AFL lighting, Runway lighting, Runway and Apron maintenance, HVAC plant, Water treatment plants and landscape irrigation.
Managed other O&M projects for Royal Palaces, Hospitals, University Campus, Oil & Gas office camps and Shopping malls. Extensively used project planning programs viz. PRIMAVERA, Sure-Track and MS-Project for planning, scheduling, cost control and resource management. Responsible for project cash-flow positions direct to Managing Director.
Al-Gassim and Al–Hafouf Airports - Project Value: $70 million
Zamil O&M Co. - Project Value: $3 to $10 million
NIGERIA: Elektrint (Nig) Ltd., (MEP Contracting Company, Lagos)
Design & Planning Manager
Independently managed and led HVAC Division for European Construction Company. Increased business turnover by 55%, marketing "Clivet" Chillers to potential clients as under:

- Nigerian Bottling Co., (Coca-Cola), Sold "Clivet" Chillers at their various plants all over Nigeria. Provided custom designed HVAC system to meet client's specific requirements.
- GlaxoSmithKline – New Pharmaceutical project at Agbara - Lagos. Provided plants, equipments and commissioned HVAC system with zone pressurization preventing product contamination. Commissioned other utility systems viz, compressed Air, BMS system, Access controls and Purified water systems.
- The Church of Jesus Christ of Latter-day Saints at Aba. Coordinated HVAC project for timely completion within budget. Managed accurate accounting of change orders.

- Offered HVAC services to Oil & Gas Companies - Chevron, Mobil, Total and BP.

MAURITIUS: System Bldg. Ltd., (MEP Contracting Company, Mauritius)
Contracts Manager
Managed fast track projects - 6 to 8 months durations for M/s. Beachcomber Groups of Hotels & Resorts. Successfully completed 4 projects ($ 40 million). Designed HVAC & Utility systems including Golf course irrigation system. Rectified faulty hot water system with minimum interruption of services at Le Cannonier Hotel. Realized 40% savings in fuel energy cost introducing energy conservation measures recuperating rejected heat from AC Chillers. Designed and commissioned fire sprinkler and hydrant system meeting NFPA standard. Designed software application program for data retrievals and BOQ generation saving time and effort with accurate results.

- M/s. Beachcomber Groups of Hotels & Resorts – Project Value $40 million.
- Le Cannonier Hotel – 40% savings in fuel cost – ($10,000 per Month).

UAE: Emirate Trading Co, Contracts Manager
Managed 18 projects ($5 - $15 million) for High-rise residential and commercial buildings.
Trained Project Managers (4 Nos) to utilize MS-Project program for planning material resources. Implemented and controlled project data retrieval process across 18 project sites keeping close controls over cost and other resources. Addressed Techno-Commercial problems with clients and kept track of project expenditures and material controls.Launching automated HVAC duct plant and developed in house production of duct accessories viz., duct dampers, access door and sheet metal parts for fan coil unit.
Abu Dhabi Government Housing Projects – Project Value: $3 to $10 million

ASSIGNMENT

Senior Electrical Inspector

EDUCATION

Continuing Education in National Electrical Code, Touro College, NYC, NY, 1993-1996
M.S. Physics, The Moscow State University, Moscow Russia, 1971
B.S., Electrical Engineering, Moscow Mining College, Moscow Russia, 1967

REGISTRATION

Licensed Professional Engineer in the State of New York
OSHA 10 Hour Certified

REPRESENTATIVE AND PERTINENT EXPERIENCE

Mr. Belov presents over thirty years experience in engineering and construction. His diversified experience includes construction inspection of mechanical, electrical, and structural work for infrastructure, transit, toll plaza, office and institutional buildings. His specific electrical experience includes inspection of contractors' means and methods for medium and low voltage feeders, cable, conduit, transformers, highway lighting, sign lighting, fiber optic cable, and communication systems and components in accordance with plans and specifications.

- **Senior Electrical Inspector, Port Authority of NY & NJ, WTC PATH Hub** - Work on this $2.2 billion project consists of PATH facilities, PATH Terminal Building, underpinning of No. 1 Subway, Pedestrian connections, and LMDC facilities, infrastructure and tenant alterations to Tower No. 7. Performed daily inspections, site visits, and prepared daily narratives for WTC projects:
  - < PATH-WTC-TOWER ONE TCA WTC-1OO1-Utility Relocation - Duties included: EIC for workers in PATH area, reviewing contract and as-built drawings & documents, daily, and final inspection for electrical systems and components.
  - < WTC-Tower # 7 TAA #7001... TAA#7039 FitOut (4, 10 ... 42, 50 ... 53 Floors) - Duties included reviewing drawings & documents, daily, above ceiling and wall inspection for electrical part of projects.
  - < WTC -Tower #4 TCA #4000.07-MEP Under Ground & MEP Above Ground - Duties included reviewing drawings, documents and payments, daily inspection, attend and analyzing test results for electrical systems and components.

- **Senior Inspector, Port Authority of NY and NJ, Various PATH Projects.** Responsible for inspection of ventilation improvement and substation at Hoboken Terminal; Hackensack River Bridge control tower and motor generator building, including security improvements(CCTV, public address, and intercom systems); drainage improvements at West Side Avenue and rehabilitation of Tunnelle Avenue retaining wall; and replacement of 2-5MVA transformers for 15KV distribution system at Substation 2A.

- **Senior Inspector, Triborough Bridge and Tunnel Authority**, **Project TB-09 B, Deck Replacement for Harlem Lift Span.** Served as inspector for $42 million project for orthotropic deck replacement of the Harlem River Lift Span, Approach Truss Spans and Fender System Replacement. Inspected contractors means and methods for installation of deck panels, structural steel, pull boxes, conduit, light poles, electronically operated gates, traffic signals, sign lighting, and navigation lights.

- **Senior Inspector, Project BB-15, Triborough Bridge and Tunnel Authority**. Replacement of Traffic Control and Signal Systems in the Brooklyn Battery Tunnel. Inspected fiber optic cables, VMS signs, lane use signals, and remote terminal units (RTU's) all terminating in a redundant programmable logic controller system.

- **Senior Inspector, TB-62, Electrical Relocation on the Triborough Bridge, Triborough Bridge and Tunnel Authority.** This $5 million project involved the relocation of electrical and communications systems located in the medians of the Queens and Manhattan approaches. Responsible for inspecting installation of new wiring and raceway systems, connections to existing power sources, relocation of lighting and signal systems, illuminated signs located on the bridge, and communication components.

- **Senior Electrical/Mechanical Inspector, TB-09A, Rehabilitation of the Harlem Lift Span**, **Triborough Bridge and Tunnel Authority**. Responsibilities on this $25 million project included inspection of modification of existing span drive mechanical system, removal and replacement of the main and auxiliary counterweight ropes, rehabilitation of the main span motors and power distribution system installation of transformers and lighting panels, motor control center, drop cables, lighting receptacles, intercom, telephone, security and fire alarm systems as well as rehabilitation and/or replacement of HVAC systems in the machinery rooms and tower houses.

- **Senior Inspector**, **Project TN-37**, **Triborough Bridge and Tunnel Authority, Rehabilitation of Throgs Neck Bridge**. Served as electrical inspector on this $7.5 million project. Responsibilities included monitoring the installation of all electrical hardware and power feeder and distribution networks for the bridge and approach roadway lighting systems, toll collection systems and fire and communications systems. In addition to overseeing inspection forces, was directly involved in field design changes, Change Order preparation, preparation of partial payments and preparation of As-Built quantities and drawings.

ASSIGNMENT

Senior Electrical Inspector

EDUCATION

B.S. Electrical Engineering, Syracuse University, May 1987

REGISTRATION

NICET IV
PATH Track Safety Training
2008 National Electrical Code Refresher Course
OSHA 10 Hour Certificate
Coaxial Cable 10 Hour Course

REPRESENTATIVE AND PERTINENT EXPERIENCE

Mr. Bessim has over 18 years of construction management and field construction inspection experience in highway, bridge, and railroad projects. He has inspected various electrical systems, components, substations, fiber optics, ITS communications, signal installations and building renovations to ensure compliance with drawings and specifications. He is familiar with Port Authority specs and procedures.

- **Senior Electrical Inspector, Port Authority of New York and New Jersey, PATH** - Performed inspection of electrical installations in stations, tunnels, and yards including:
  - > ***MF 100.506 WO24 - Access Control Keltron Replacement*** - Installed card access control readers throughout PATH facility and new doors and advanced alarm systems at all coin rooms and all doors at secured areas throughout facility.
  - > ***PAT 624.308 SIMULCAST UPGRADE of VHF Radio Channels Phase 2*** - Installation and commission of new radio base stations, installation of new simulcast equipment at various locations throughout facility, upgrading existing desk sets at all locations and cutover of new equipment and installation of GPS antennas at all locations.
  - > ***PAT 610 WO 20 - JSTC Beam Pocket Smoke Detectors*** - Installation of smoke detectors and integration to existing system at JSTC mechanical rooms.
  - > ***MF 100.507 WO 28 - Temporary Event Detection System Tunnels A B E F*** - Installed devices and equipment throughout facility including WTC.
  - > ***PAT 354.072 Encoder Decoder Project*** -- Installation of encoders and decoders for cameras at all locations on PATH facility.
  - > ***MF 100.507 WO25 - WTC Portals Flood gates at Tunnels E and F***
  - > ***MF 100.507 WO10 - Exchange Place Portals Flood Gates at Tunnels E and F***
  - > ***PAT 624.223 - Emergency Diesel Generator at Washington Street Substation No 2***
  - > ***PAT 614 - AC Units in Communication Rooms throughout facility***
  - > ***LIDS Tunnel Intrusion Project*** - Installed tunnel intrusion detection devices at Exchange Place and WTC for tunnels E and F. (5/07 – Present)

- **Senior Electrical Engineer/Inspector, Port Authority of New York and New Jersey, Restoration of PATH Service to Manhattan** - Responsible for construction inspection of electrical systems, equipment and components associated with the rehabilitation and expansion of Exchange Place Station, Tunnel "E" and "F", and temporary WTC PATH station. Inspected other PATH projects, including the following:
  - > ***PAT 558A JSTC Fire Smoke Alarm Modifications*** - Lead Engineer on project which consisted of installation of new addressable fire alarm system at JSTC. Also included replacement of existing sprinkler valves at facility. Duties included assuring that system complied with all applicable fire protection and electrical codes, coordination with PA Risk Management Division.
  - > ***PAT 602 WO6 JSQ And Exchange Place Radio Simulcast System*** - Lead Engineer on project which consisted of upgrading existing radio communication system between JSQ and WTC.
  - > ***PAT 602 WO 1,9 PATH Waldo Car Wash Blower Dryer Unit and Electrical Rehab***. - Lead Engineer on project which included new blower dryer unit at PATH Waldo train car wash and refurbishment of entire electrical system.
  - > ***PAT 624.223 Washington Street Substation No.2 Emergency Diesel Generator Replacement*** - Lead Engineer on project which included installation of temporary and permanent diesel generators and associated switchgear.
  - > ***PAT 684.026 PATH Digital Video Recording System*** - Lead Engineer on project which included furnishing and installation of an IP based Digital Video Recording System located in Journal Square Transportation Center. This included installation of encoders, decoders, video servers, master servers, fiber channel switches, ethernet switches, and all associated management software.
  - > ***PAT 624.119 Path Fare Collection System*** - Senior Inspector on project which included installation of new fare Collection system throughout PATH system.
  - > PATH tenant projects completed include:
    TAA 0205 - Storycorps Kiosk at WTC temporary Path station concourse level.
    TAA 0104 - JSTC - Concourse Level new Duane Reade Store
    TAA 0705 - JSTC concourse level XCEL Federal Credit Union (10/02 – 4/07)

- **Senior Project Engineer, NJSCC, Paterson Public Schools** - Developed bid packages for rehabilitation of 31 schools in Paterson, NJ. Provided liaison services during bid opening process.

- **Senior Inspector, Port Authority of New York and New Jersey, George Washington Bridge, Fort Lee, NJ, Various Contracts** - Served as electrical inspector for various projects, including ITS and EZ-Pass installations, upper level lighting upgrade, rehabilitation of Henry Hudson Ramps to GWB, tower elevator upgrade, microwave detector installations, fixed sign renovations. Duties included field inspection, change orders, payment applications and coordination of daily MPT activities.

- **Senior Electrical Inspector, NJDOT, Route 4 and 17 Interchange Project, Paramus, NJ** - Responsible for electrical lighting, ITS communications, traffic signal installation inspections on $120 million multi-stage interchange reconstruction project in Paramus, NJ, as well as inspection of major roadway items such as paving, concrete, grading, barrier replacements, guiderail and bridge items.

- **Senior Inspector, NJDOT, Route 21 and 46** - Senior bridge and highway inspector on this $26 million project which consisted of connecting NJ State Routes 21 and 46 with 1 major bridge structure for truck traffic. Duties included inspection of all facets of bridge and highway inspection, as well as full responsibility of all electrical items on project.

ASSIGNMENT

Senior Electrical Inspector

EDUCATION

Polytechnic Institute of' New York, B.S.- Electrical Engineering; B.S.- Mechanical Engineering
Technical Career Colleges, Associates Degree, HVAC
New York University, Management and HVAC Design Courses

REGISTRATION

2008 National Electrical Code Refresher Course
OSHA 10 Hour Certified

REPRESENTATIVE AND PERTINENT EXPERIENCE

Mr. Frias has over 20 years experience in electrical and mechanical engineering and construction, including transportation, airport, school, correctional, and industrial projects. His experience includes hands-on construction inspection for installation of mechanical and electrical equipment, power distribution, substations, HVAC, CCTV cameras, fiber optics, communications and alarm systems. Mr. Frias is knowledgeable of Port Authority and TBTA systems and procedures, National Electrical Code, electrical testing procedures, and fiber optic splicing and testing procedures.

- **Senior Construction Engineer/Inspector, Port Authority of NY & NJ, Newark Airport, Various Projects** – Responsible for oversight for installation of various electrical systems and equipment in airport terminals, tenant facilities, and infrastructure; including airside and landside project, including three airside Switch Houses (Electrical Vaults) of the airport including installation of Switchgear, Automatic Transfer Switches (ATS' s) , Three and Five-Step Current Regulators, Distribution Panels, Emergency generators and other equipment; Runway and Taxiway Lighting systems and Airport signs and signaling systems; three major Lift Stations at different locations of the airport, including pit excavation, pump systems and electrical installations, street lighting systems for the Fuel Farm facility, Truck Wash Bay for Airport trucks, Vehicle Lift System for the maintenance of Airport Fire Trucks, and Switch House No.2. (10/07 – Present)

- **Senior Electrical Inspector, Triborough Bridge and Tunnel Authority, Project BB-15A, Control Room Monitoring Enhancements/Control Room Modernization at the Brooklyn Battery Tunnel** - This $11 million project involves modernization of the central control room and control and traffic monitoring enhancements in the Brooklyn Battery Tunnel. Responsible for inspection of modification of the SCADA system, installation of new E boxes and power cable in the tunnel, new CCTV cameras and public address equipment, fiber optic cable, new communication equipment, power monitoring equipment in each vent building, demoliton of existing control room and installation of work stations, PLC equipment and new media wall. (6/06 – 9/07)

- **Instructor, Lincoln Tech** - Instructor for HVAC system design courses. Trained students to obtain HVAC required licenses. Lectured on design criteria, compressor and system sizing, evaporators, duct work, air flow requirements, high velocity ducts, and electrical requirements.

- **Project Coordinator/ Field Engineer, Various Projects, SW Electric, New York City** - Reviewed contract specifications for various transportation and facility projects. Assisted Resident Engineer with overall project scheduling activities. Completed daily, weekly and monthly inspection reports for electrical and mechanical engineering projects throughout the city or New York. Coordinated personnel and crew activities by scheduling electrical, mechanical and civil trades and other subcontractors for the prompt completion of the projects. Familiar with National Electric Code (NEC), ASME and OSHA codes.

- **Consultant/ Inspector, New York City School Construction Authority, Various Projects** - Involved in different projects including design and inspection of renovation projects for School Construction Authority (SCA). Inspected installation of civil, mechanical and electrical construction trades. Developed and updated specs. Prepared reports to document compliance with plans and specifications. Also worked on a steam utility tunnel at Rikers Island Correctional Facility.

- **Production Manager/ Supervisor, General Electric Company** - Manager of assembly lines at Louisville, Kentucky plant for electrical equipment and air conditioners. Supervised manufacturing of electrical equipment and steam turbines in Fitchburg, Massachusetts. Responsible for scheduling activities for the completion of short cycle orders.

Hourly Rates

HAKS

Name	Job Title	Hourly Rates
Husam Ahmad, P.E.	Principal-in-Charge	$150.00
Paul Cavota, P.E.	Project Manager	$98.82
Lawrence King, P.E.	QA/QC Safety Officer	$84.13
Frank Verderame	Dep. Project Manager	$63.10
Henry Hessing, P.E.	Aviation Planning CM	$83.50
Jeffrey Terzakis	Aviation Planning CM	$91.30
Frank Fragapane	Chief Inspector	$50.00
Fawzi Faraj	Environmental CM	$108.17
Eugene Takhtovich, PhD, P.E.	Material Testing Lab Director	$70.00
Hector Ankrah, P.E.	Construction Manager	$62.00
Paul Diamond, P.E.	Construction Manager	$62.00
Magdy Elkafafi, P.E.	Construction Manager	$65.00
Hesham Kotby, P.E.	Construction Manager	$75.00
Victor Sanchez, P.E.	Construction Manager	$56.65
Nilesh Shah, P.E.	Construction Manager	$56.00
Robert Milo, P.E.	MEP Construction Manager	$46.50
Harold Palmer, P.E.	MEP Construction Manager	$59.30
Harry Fosteris, P.E.	Rail Road Construction Manager	$56.75
Ilya Gologorskiey, P.E.	Coating Construction Manager	$57.00
Omar Ockeh, P.E.	Coating Construction Manager	$60.00
Jeffrey Wright, P.E.	Coating Construction Manager	$75.00
Mohy Abotaleb, P.E.	Resident Engineer/Chief Inspector	$45.00
Lawrence Alexander, P.E.	Resident Engineer/Chief Inspector	$50.00
Abdul Somat, P.E.	Resident Engineer/Chief Inspector	$55.00

Hourly Rates

Name	Job Title	Hourly Rates
Marc Weinman, N-IV	Chief Inspector	$40.50
Emmanuel Bamimore, ACI	Construction Inspector	$35.00
Hector Beltran, N-III	Senior Inspector	$31.70
Saul Correa, N-III	Field Inspector	$34.00
Douglas Depena	Cost Estimator/Scheduler	$56.75
Reda Gandy	Construction Administrator	$43.50
Richard Georges	Senior Inspector	$36.50
Elliot Greenberg	Fire Protection Engineer	$55.00
Richard Koch	Fire Protection Engineer	$43.50
Richard Hallahan, P.E.	Constructability Reviewer	$98.82
Ken Mangam, P.E.	Constructability Reviewer	$67.50
Robert Gallup, P.E.	Constructability Reviewer	$72.12
Kimberly Hall-Carrington	Chief Inspector	$60.75
Shafi-Ul-Haque	Structural Engineer	$38.00
Ashaque Hussain	Construction Inspector	$34.65
Josias Innocent	Chief Inspector	$36.90
Georgianna Inturrisi	Construction Administrator	$41.50
Sajjad Javaid	Construction Inspector	$35.00
Marc Kemmis	Construction Inspector	$37.00
Ilyas Khan	Electrical Inspector	$38.00
Gil Leggard, N-III	Senior Inspector	$42.00
Maher Mahmoud, N-IV	Chief Inspector	$55.00
John Marshall	Contract Administrator	$40.31
Omant McBride, N-I	Special Inspector	$32.00

Hourly Rates

Name	Job Title	Hourly Rates
Timothy McCoy	Senior Mechanical Inspector	$41.50
Alex Mekhnikov	Construction Inspector	$42.00
Roldan Mendoza, AWS	Construction Inspector	$36.50
Tete Fococo Mensah, ACI	Construction Inspector	$20.55
Jarus Mitchell, ACI	Construction Inspector	$37.50
Hesham Mohamed	Construction Inspector	$38.00
William Niles	Senior Scheduler	$59.50
Saurin Pathak, AIA, LEED A.P.	Scheduler	$54.50
Omar Petty, N-III	Senior Inspector	$33.60
Jose Pinto	Rail Road Inspector	$35.00
Mikeal Ramessar, N-III	Senior Inspector	$36.00
Lesly Remy, N-III	Contract Administrator	$39.50
Moustafa Rezk, P.E., LEED A.P.	Construction Manager	$57.00
James Reynolds, N-IV	Contract Administrator	$48.25
Nestor Paralta Santana	Electrical Inspector	$40.25
Shahid Shiekh, N-IV	Chief Inspector	$41.60
Magdi Sidarous	Cost Estimator	$52.89
Dipak Upadhyaha, N-II	Construction Inspector	$35.00
Richard Urena, N-III	Senior Inspector	$32.00
Green Yee	Electrical Inspector	$34.60

SUBCONSULTANTS

EnTech Engineering P.C.

Susan Bayat, P.E.	Environmental CM	$55.00
Abdelhamed Ali, N-IV	Construction Inspector	$44.50
Joseph Fenton, N-II	Construction Inspector	$33.53
Josh Magnas	Environmental CM	$44.35
Kwesi Amegah	Construction Inspector	$42.00
Shahab Raza, P.E.	Environmental CM	$55.00

JCMS, Inc.

Sanjay Kumar Shah	Scheduler	$48.50
Pankaj Agrawal, PMP	Scheduler	$37.14
Murali Puthiyarambath	Scheduler	$60.00

Maitra Associates, P.C.

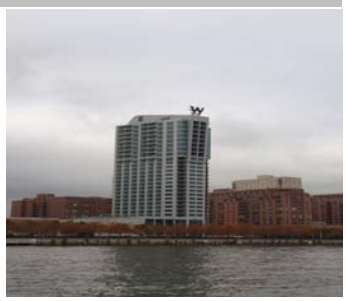
Aleksandr Belov, P.E.	Chief Inspector	$43.56
Metin Bessim, N-IV	Inspector	$45.15
Telly Frias	Inspector	$40.51

MULTIPLIER:

HAKS ……..... 2.1
EnTech ……..... 2.1
JCMS ……..... 2.1
Maitra ……..... 2.1

HAKS

EXPERT PROFESSIONAL SERVICES – PERFORMANCE OF CONSTRUCTION MANAGEMENT SERVICES FOR PROJECTS ON A "CALL-IN" BASIS DURING 2007, 2008, 2009



HAKS is providing Office Engineering, Construction Inspection and Fire Protection Engineering services to the Port Authority of New York and New Jersey on a "Call-In" basis, at the New Jersey and New York marine terminals, airports, tunnels and Operations Unit.

Office Engineering (OE) duties at the Brooklyn Marine, Red Hook Container and Howland Hook Marine Terminals and Battery Park Ferry Landings include contract administration from pre-construction through closeout covering all financial information, payments, extra work, daily reports, material certifications, EEO and wage compliance, insurance, correspondence, etc. OE's utilize Port Authority database systems for record keeping and payments.

Additional duties at the New Jersey Marine Terminals and the Hoboken South Waterfront Development involve Tenant Alteration Application (TAA) projects. Duties include monitoring all construction activities, daily contract paper work, auditing architects/engineers of record, special inspections, conducting preconstruction and monthly progress meetings, reviewing closeout packages, conducting and coordinating all life and safety testing and inspections before a Permit to Occupy or Use is issued. The major TAA project at present is the $100 million "W Hotel" on the Hoboken waterfront.

OE services are also provided for the construction management/general contracting services capital security program at Bayonne Bridge, George Washington Bridge, Newark, JFK and LaGuardia Airports, PATH, Journal Square, Teterboro, Holland Tunnel, and Lincoln Tunnel.

Individual construction contracts cover a wide range of site/facility construction as well as marine construction. We are providing Construction Inspectors to monitor pile installation, pile repairs, wrapping, jacking, relieving platforms rehabilitation, underwater and above-water pier repairs, bulkhead repairs and new construction, fender systems, buildings, digital video monitoring systems, paving, concrete, asphalt and other site work.

At the Port Authority Technical Center, HAKS' Fire Protection Engineers focus on maintaining a fire safe environment at Authority facilities for employees, tenants and patrons and on an effective HPR- (highly protected risk) based property loss prevention program. They conduct and witness annual and acceptance tests of fixed fire protection systems and equipment; review and comment on plans for fire code compliance, and participate in special technical investigations. Post-9/11 their assignment grew to include risk assessment for survivability of certain Authority structures in the event of another terrorist attack or other disaster.

For the Engineering Department/Quality Assurance Division/Construction Standards Unit, our fire protection engineering services include inspection and plan review at various facilities for Authority contract and Tenant Alteration projects. Recent work involved inspections and evaluations for new American Airlines and Jet Blue Airways Terminals at Kennedy, and other work at Newark Liberty and LaGuardia Airports. We are also involved in a new program of fire inspections at all Authority properties ("Post-Construction Inspections) under which initial fire protection inspections were conducted at Stewart International Airport in Newburgh, NY. Other Engineering Department assignments involve reviewing drawings for TAA and major Authority projects, which currently include the Freedom Tower, Towers 2, 3 and 4 and the Memorial at the World Trade Center site.

Owner: The Port Authority of New York & New Jersey
Locations: Port Authority Facilities, NY & NJ

Fee: $5 million (maximum)

Reference: William J. Kehoe, P.E., (201) 2016-2070

NY430 (11/08)

HAKS

EXPERT PROFESSIONAL SERVICES – PERFORMANCE OF CONSTRUCTION MANAGEMENT SERVICES FOR PROJECTS ON A "CALL-IN" BASIS DURING 2004, 2005, 2006

HAKS provided Inspection Services to the Port Authority of New York and New Jersey on a "Call-In" Basis. Locations include the New Jersey Marine Terminals, Operations Unit and Pavonia Station.

For the New Jersey Marine Terminals, HAKS provided inspection of pile driving, foundation construction and structural concrete placement. HAKS is also inspecting installation of underground utilities and placement of superpave asphalt and concrete pavement. HAKS has also provided an Office Engineering services at New Jersey Marine Terminals and New York Marine Terminals (Brooklyn Marine Terminal, Red Hook Container Terminal, Howland Hook Marine Terminal, Downtown Manhattan Heliport, Battery Park Ferry Landings and Gateway Center – Construction Division). Office Engineer's duties included contracts administration from pre-construction through close-out including all financial information and payments, extra work, daily reports, material certifications, equal opportunity and wage compliance, insurance, and correspondence for all contracts. Individual construction contracts involved a wide range of site/facility construction and well as marine construction. Office Engineers were utilizing Port Authority database systems for record keeping and contract payments.

Office Engineering services were also provided through the construction management/general contracting services capital security program for the following facilities: Bayonne Bridge, George Washington Bridge, Newark, JFK and LaGuardia Airports, PATH, Journal Square, Terboro, Holland Tunnel, and Lincoln Tunnel.

At the Port Authority Technical Center, HAKS provided the Authority with four "Fire Protection Engineers." Their duties focused on maintaining a fire safe environment at Authority facilities for employees, tenants and patrons and on an effective HPR (highly protected risk) based property loss prevention program. They conducted and witnessed annual and acceptance tests of fixed fire protection systems and equipment; reviewed and commented on plans for fire code compliance, and participated in special technical investigations including the "Port Authority Safety Board Investigation of September 27, 2002 AirTrain JFK Accident Report". Post 9/11 their assignment has grown to include "risk assessment" for survivability of certain Authority structures in the event of another terrorist attack or other disaster.

For the Risk Management Division of the Operations Unit, HAKS is providing fire protection engineering services including inspection and plan review at various facilities throughout the area, including: Kennedy, Newark Liberty and LaGuardia Airports.

Owner: The Port Authority of New York & New Jersey
Locations:
A. New Jersey & New York Marine Terminals
B. Operations Unit Risk Management Division
C. Pavonia Station, PATH
Fee: $2 million

Reference: Mr. Alex Flores, P.E.
(973) 589-5010

HAKS

EXPERT PROFESSIONAL SERVICES ON CALL-IN, CONSTRUCTION MANAGEMENT OF PORT AUTHORITY PROJECTS—2001, 2002, 2003

Under this 3-year term agreement, HAKS provided construction management and inspection services on a "call-in" basis to the Port Authority of New York and New Jersey. Work locations included the New Jersey & New York Marine Terminals, Operations Unit and Pavonia Station

At the New Jersey Marine Terminals, we inspected pile driving, foundation construction and structural concrete placement. We also inspected underground utilities installation, Superpave asphalt and concrete paving work. Our field personnel tested concrete for slump and air entrainment, and cast concrete molds for compressive strength testing. HAKS has also provided an Office Engineering services at New Jersey Marine Terminals and New York Marine Terminals (Brooklyn Marine Terminal, Red Hook Container Terminal, Howland Hook Marine Terminal, Downtown Manhattan Heliport, Battery Park Ferry Landings and Gateway Center – Construction Division). Office Engineer's duties included contracts administration from pre-construction through close-out including all financial information and payments, extra work, daily reports, material certifications, equal opportunity and wage compliance, insurance, and correspondence for all contracts. Individual construction contracts involved a wide range of site/facility construction and well as marine construction. Office Engineers were utilizing Port Authority database systems for record keeping and contract payments.

At the Port Authority Technical Center, HAKS provided the Authority with four Fire Protection Engineers. Their duties focused on maintaining a fire-safe environment at Authority facilities for employees, tenants and patrons, and on an effective property loss prevention program based on highly protected risk (HPR) considerations. Our engineers conducted and witnessed annual and acceptance tests of fixed fire protection systems and equipment; reviewed and commented on plans for fire code compliance, and participated in special technical investigations including the "Port Authority Safety Board Investigation of September 27, 2002, AirTrain JFK Accident Report". Following the events of September 11, 2001, their assignment grew to include risk assessment of the survivability of certain Authority structures that might be subjected to terrorist attack or other disaster.

We also provided fire protection engineering services for the Risk Management Division of the Operations Unit, which included inspection and plan review at various facilities throughout the area, including Kennedy, Newark Liberty and LaGuardia Airports.

Owner: The Port Authority of New York & New Jersey
Location:
A. New Jersey & New York Marine Terminals
B. Operations Unit, Risk Management Division
C. Pavonia Station, PATH
Fee: $2.25 million

Reference: Mr. Alex Flores, P.E.
(973) 589-5010

HAKS

CONSTRUCTION INSPECTION AS-NEEDED, TBTA PROJECT GFM-405A, NEW YORK CITY

HAKS provided Inspection Services on an as-needed basis to Triborough Bridge and Tunnel Authority at various bridge and tunnel locations around New York City.

At the Throgs Neck Bridge, we inspected HVAC upgrades including installing radiator valves and copper pipes, removing spalled or delaminated concrete, and applying a "non skid" coating at the garage.

At the Verrazano Narrows Bridge, HAKS inspectors oversaw miscellaneous repairs such as crack sealing on the bridge deck. We inspected repairs to the Fire Standpipe System, flag pole repairs and the installation of a concrete barrier.

At the Marine Parkway and Cross Bay Bridge locations, HAKS inspection services covered:

- Deck repairs, concrete placement
- Concrete testing for slump and air entrainment
- Concrete mold casting for compressive strength tests
- Installation of steel barrier plates and rumble strips
- Removal of steel door frames
- Construction of a 2,500-gallon septic holding tank
- Sewer replacement including manholes, sewer lines and power lines
- Installation of unit heaters and toll booths

At The Bronx Whitestone Bridge Facility, HAKS:

- Inspected modifications to the sprinkler system at the Customer Service Room
- Provided oversight of a toll booth addition, wireway installation and light pole replacement

At the Queens Midtown Tunnel, we were called in to:

- Inspect lead abatement work performed on at the QMT building
- Provide oversight of the installation and patching/repair of sidewalk and curb
- Investigated roof leaks and removal/replacement of roof sections
- Inspected replacement/rehabilitation of toll booths and inspected a fixed sign gantry
- Provided oversight of air conditioning equipment replacement
- Provided oversight of rehabilitation work on the Pipe Gallery

Owner: MTA Triborough Bridge and Tunnel Authority
Location: Manhattan, NY
Fee: $1.2 million

Reference: Mr. Igor Shapiro, P.E.

NY258

HAKS

CONSTRUCTION INSPECTION SERVICES, NYSDOT REGION 8 TERM AGREEMENT

HAKS provided Construction Inspection Services for the New York State Department of Transportation in all counties of Region 8. These services covered the Region's multi-contract construction program that included miscellaneous maintenance projects as well as reconstruction of the State transportation infrastructure. In addition, the program allowed for quick response assignments to emergency bridge and highway repair projects.

Total construction cost was about $35 million. Construction operations included roadway milling and asphalt resurfacing in Westchester, Rockland, Orange and Ulster Counties; and roadway crack sealing, bridge cleaning and painting, bridge washing, highway repairs, bridge repairs, pavement markings and tree removals in all counties.

Due to the wide range of work and work locations involved in the program, maintenance and protection of traffic schemes in most cases were temporary. Consequently, safety considerations were given the highest priority in planning and coordinating the various construction operations. Compounding the need for safety awareness was that most construction operations were performed at night due to high daytime traffic volumes. Thus our field staff paid particular attention to ensuring that all personnel, materials and equipment were visible to the highest degree possible.

In addition, we focused on minimizing public inconvenience, particularly with respect to milling and paving operations where travel lanes were significantly reduced and could cause massive traffic build-ups and delays. The contractor was required to conduct such operations so as to minimize their impact on the public, and our inspectors made sure this was done. Where busy shopping locations were near work zones, flag persons were required to assist shoppers in accessing malls and travel lanes as the operations progressed.

This type of construction program often provides little lead time for making personnel assignments, thus presenting a challenge to the consultant. To meet the challenge, HAKS maintained a depth of construction inspection personnel that exceeded 125 people from among which we could choose to make assignments. Our construction inspection staff for this agreement consisted of over 20 people and encompassed chief inspectors, senior and junior inspectors and office engineers. All members of the staff were NICET-certified or had approved NICET equivalency. They were highly qualified and experienced to perform the duties associated with the various construction operations. Thus the successful execution of each assignment under this term agreement was based on timely mobilization of our qualified, experienced staff and the high quality of their work.

Owner: New York State Department of Transportation
Location: Region 8
Construction Cost: $50 million
Fee: $2 million

Reference: ***Scott Hubbard, P.E.***

NY-359 (8/08)

HAKS

RESIDENT ENGINEERING INSPECTION, NEW YORK CITY CONSTRUCTION REQUIREMENTS, NYCDDC

HAKS will provide Resident Engineering Inspection services under a $5 million requirements contract with the New York City Department of Design and Construction. Services are to be performed as needed for construction projects of up to $50 million throughout the five boroughs of the City.

Project assignments will be made to HAKS based on our responses to RFPs that DDC requests through task orders that also describe the project requirements. Our Resident services include ensuring that subcontractors and vendors on the project have been approved by DDC. We will see that all shop drawings are approved before the start of construction and prepare as-built drawings of the construction as the work progresses. HAKS' field crews will inspect the construction to assure the quality of the work performed and that the work conforms to contract plans and specifications. We will see that all material certifications are in place and that the contractor uses only approved materials. HAKS' Project Manager will select inspection staff for each assignment from the large pool of field personnel that HAKS maintains, from Resident and Office Engineers to Chief, Senior and entry level Inspectors, all with the professional licenses or certifications required for the assignment. Inspectors will report daily on the work the contractor accomplishes and track quantities placed for payment.

Other important Resident services include recommending for or against change orders based on contractor submittals, our analysis of the submittal and its cost, field conditions that impact it, and our review of the contract plans and specifications. We will then process in a timely manner those change orders that DDC approves. On completion of the work the Resident secures acceptance of the project from all involved agencies after a final inspection is made and all punch list items have been satisfied. The RE then oversees proper closeout of the project, and that all records are transferred without delay to the Department.

The 3-year contract began in early 2009 and will end in the fall of 2011.

Owner: New York City Department of Design and Construction
Location: All New York City Boroughs
Construction Cost: $50 million

Reference:

NY509 (4/09)

HAKS

Indefinite Quantity Contract, Technical Inspection Services for Miscellaneous Construction Projects, NYCT

HAKS inspected construction projects involving mechanical, electrical, civil and structural engineering for New York City Transit. The services were provided as needed

Major projects under the contract included:

- Lead-Based Paint (LBP) Project sites at City Hall Station, 7 Station Rehabilitation, Gates/Lorimer/Chauncy, and Times Square Complex;
- 240th Street Maintenance Shop, New York City;
- Subway Station Rehabilitation at Kings Highway, 86th Street, Ditmars Boulevard, and Coney Island-Stillwell Avenue, on the N-line, Brooklyn and Queens;
- Modernization at 34th Street and 8th Avenue Subway Station, New York City
- Atlantic Avenue Interlocking Reconfiguration, Brooklyn;
- Installation of CCTV Systems at 98 Platforms, various locations in New York City;
- No. 1 Line stations from Van Cortland Park to Dyckman Street. Security work included the installation of public address systems for emergency situations. Conduit and cable runs for CCTV at all stations were also included;
- Installation of New Fire Detection and Alarm System, including sprinkler systems at six locations throughout the City;
- Installation of circuit breakers, signal equipment enclosure, access platform and other facilities for the Far Rockaway Test Track Area, Queens;
- Furnishing and installing a power rectifier at the Lexington Avenue / East 57th Street Substation, New York City;
- Structural rehabilitation of the Culver Line Viaduct, Brooklyn;
- Structural rehabilitation, painting, tunnel lighting and firefighting water line for the Flushing Line, IRT Division;
- Furnishing and Installing Power Rectifier Equipment for Nostrand Avenue Substation, Brooklyn, NY;
- Structural Rehabilitation of Viaduct Crossing Jamaica Bay on Line A, Queens, NY;
- Structural Rehabilitation of Elevated Line, Surface Preparation and Painting of Flushing Line from Queensboro Plaza to Hunters Point Station, Queens, NY.

HAKS' scope consisted of construction inspection of each project to ensure that all work was completed according to contract specifications and NYCT requirements. HAKS was also responsible for constructability review, construction phasing review, cost estimating, scheduling, safety inspections and value engineering.

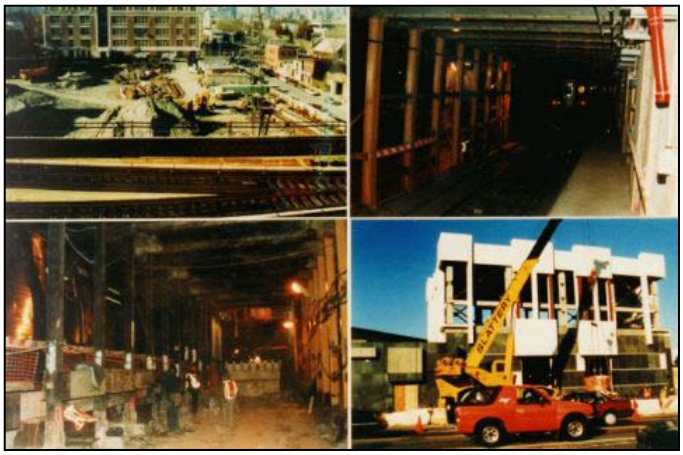
Owner: New York City Transit
Location: Manhattan, NY
Fee: $5 million

Reference: Mr. Krishang Sanghavi

NY248a (1/10)

HAKS

INDEFINITE QUANTITY CONTRACT FOR TECHNICAL INSPECTION SERVICES OF MISCELLANEOUS CONSTRUCTION PROJECTS, VARIOUS BOROUGHS, NY



HAKS provided construction inspection services on an as-needed basis in the fields of mechanical, electrical, civil and structural engineering. Projects included:

- Rehabilitation of Nassau Street/Fulton Street Stations (J, M and Z lines) in New York, New York ($17 Million)
- Rehabilitation of Lexington Avenue/ 59th Street Stations (5,4,6 and N & R lines) in New York, New York ($18 Million)
- Rehabilitation of Queensboro Plaza Station (7 and N lines) in Queens, New York ($16 Million)
- Rehabilitation of Main Street Station and RTO Facilities (7 line) in Queens, New York ($27 Million)
- Rehabilitation of Queens Plaza Station (E,F,G, and R lines) (design phase)
- Rehabilitation of Roosevelt Avenue/74th Street Station (E,F,G and R lines) (design phase)
- 103rd St., 110th St., 116th St., and 125th St. Stations (1& 9 lines)
- 174th St., West Farms/South E. Tremont Avenue, Bronx Park east, Pelham Parkway, Allerton Avenue, Burke Avenue, Gunhill Road Stations (2 & 5 lines)
- Myrtle/Wyckoff Avenue Station (M & L lines)
- Penn Station (A, C & E)
- Coney Island/Stillwell Avenue Station (F, Q, & W lines)

HAKS' scope consisted of project inspection, ensuring that work was completed according to contract specifications and NYCT requirements. HAKS was also responsible for constructability review, construction phasing review, cost estimating, scheduling, safety inspections and value engineering.

Owner: New York City Transit
Location: Manhattan, NY
Fee: $7 million

Reference: Mr. Krishang Sanghavi

HAKS

RECONSTRUCTION OF PARK FACILITIES, FIVE BOROUGHS OF NEW YORK CITY, NYCDPR

HAKS provided construction management services on an as-needed basis for the reconstruction projects involved at parks throughout the city, under a contract with the New York City Department of Parks and Recreation. A typical scope of work included: construction of concrete curb, concrete pavement, asphalt pavement, tree planting; water fountain installation, catch basins, drop inlets, sewer pipe and manholes; reconstruction of masonry-faced building walls; chain link fence construction; installation of waterfall, plumbing, steel flagpole with yard arm, electrical work; maintenance and protection of traffic and more. Specific task orders included:

- Reconstruction of irrigation systems and related work at Pelham Bay, Split Rock, and Van Cortlandt Park Golf Courses, Bronx. Cost $12 million.
- La Tourette, Silver Lake and South Shore Golf Courses, Staten Island. Cost $6.1 million.
- Community Rock Garden Park, Longfellow Avenue and East 173rd-174th Streets, Bronx. Cost $1 million.
- Reconstruction of Nathan Weidenbaum Park, south of Brooklyn-Queens Expressway, 63rd and 64th Streets, Queens. Cost $1 million.
- Construction of Verona Play Ground, Wyona and Vermont Streets between Jamaica Avenue and Fulton Street, Brooklyn. Cost: $975,000
- Reconstruction of Brooklyn Heights Promenade, Remsen and Clark Streets, Brooklyn. Cost $947,000.
- Bathgate Park at East 181st Street between Washington and Bathgate Avenues, Bronx. Cost $850,000.
- Reconstruction of I.S. 111 (FERMI) Playground bounded by Troutman Street, Central Avenue and Starr Street, Brooklyn. Cost $770,000.
- Reconstruction of P.S. 209 Playground (Willets Point), 166th Street between 16th Avenue and 16th Road, Queens. Cost $750,000.
- Reconstruction of Betty K. Rappaport Playground, Fort Hamilton Parkway between 52nd and 53rd Streets, Brooklyn. Cost $700,000.
- Jackie Robinson Park, Bradhurst Avenue between West 148th and West 150th Streets, Manhattan. Cost $585,000.
- Bandshell and Sandscape in Asser Levy Park, Ocean Parkway and Seabreeze Avenue, Brooklyn. Cost $580,000.
- Reconstruction of JHS 194 Playground (Clintonville), Clintonville Street between 17th Avenue 17th Road, Queens. Cost $576,000.

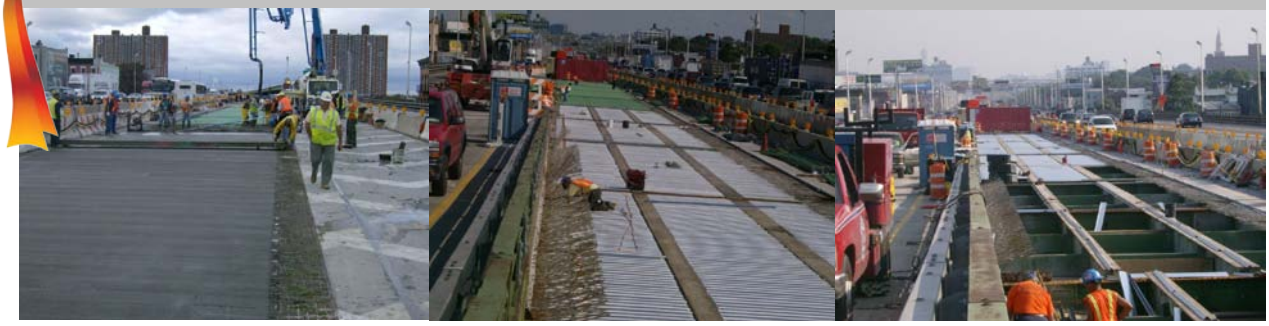
Owner: New York City Dept. Parks and Recreation
Location: All Five Boroughs, NYC
Fee: $2 million

Reference: Mr. George Kroenert

NY195 (11/09)

HAKS

CONSTRUCTION INSPECTION SERVICES
EMERGENCY REPAIR AND INTERIM DECK REPLACEMENT
GOWANUS EXPRESSWAY, BROOKLYN, NYSDOT



HAKS was the lead joint venture partner providing construction inspection services for the $152 million emergency repair and interim deck replacement project on the Gowanus Expressway in Brooklyn, NY. Work extended from the Verrazano-Narrows Bridge to the Brooklyn Battery Tunnel, and on the Prospect Expressway from Church Avenue to the Gowanus/Prospect Expressway Interchange.

Major reconstruction items were deck replacement, superstructure repairs and emergency repairs to the Gowanus Viaduct; widening/replacement of the BQE Connector; and pavement rehabilitation on the Prospect Expressway/Lower Gowanus. Initial work focused on priority deck and steel repairs to ready the structure for the staged reconstruction to follow, and to assure the structural integrity of the viaduct as work progressed.

The work also involved seismic improvements, fatigue upgrades and bearing replacements. Construction also took place on the approaches and ramps, new lighting was installed, and the steel structures were painted, with lead abatement procedures put in place during steel cleaning. Construction operations on the BQE Connector included excavation, pile foundations, new footings and columns, and a new superstructure to support the widened ramps.

HAKS and its joint venture partner evaluated traffic management strategies such as construction phasing, lane closure restrictions, night and weekend work. Critical Path Method scheduling was employed, which was essential to assuring on-time project delivery. In addition, we were involved extensively with local communities and their representatives, and coordinated regularly with many New York City agencies.

The Joint Venture Team addressed a number of critical issues to assure construction quality, minimal community impact, timely completion and project cost control. These issues included scheduling, emergency repairs, maintenance and protection of traffic, safety, modifications and repair of viaduct structures, and community relations.

This project was the second in NYSDOT Region 11 to employ a wireless system to download plans and specifications, manage costs and documents and monitor information. Communication between the field and office was in real time. All information, including inspector reports, forms, specifications, manuals, etc., was accessed from portable tablet computers.

Project letting was in February 2006, completion in December 2009.

The project has been recognized with industry awards that include 2010 Project of the Year, American Society of Civil Engineers, Met Section; 2010 ACEC Gold Award for Engineering Excellence; and 2009 Concrete Industry Board Award of Merit in the Roger H. Corbetta Awards Program.

Owner: New York State Department of Transportation
Location: Brooklyn, New York
Construction Cost: $152 million

Reference: Albert Wong, P.E.

HAKS

CONSTRUCTION INSPECTION TERM AGREEMENT, BRIDGE CLEANING AND PAINTING, REGION 10, NYSDOT

HAKS is providing construction inspection services for bridge cleaning and painting under a term agreement contract with the New York State Department of Transportation. The bridges are located in Nassau and Suffolk Counties, NYSDOT Region 10. They include up to 15 bridges on Interstate Route 495 and State Route 135, in the Towns of Oyster Bay, Huntington and Brookhaven.

Under the term agreement, HAKS inspectors are assigned to the various locations as and when needed by NYSDOT. Because of the exacting inspection requirements, the project has been staffed with experienced inspectors who carry certifications and training from the Steel Structures Painting Council and the National Association of Corrosion Engineers. Major inspection items include pressure washing, abrasive blast cleaning and painting of steel surfaces in accordance with industry standards and State specifications.

As the construction contract requires, the contractor conducts cleaning and painting operations within Class A or Class B containments to assure worker and public safety and environmental protection. HAKS will review shop drawings for the containments and inspect for proper erection of them and for containment integrity during operation. Contractor operations will also be inspected for lead-contaminated waste handling and disposal; compliance with federal, state and local requirements for lead health and safety, air quality, water quality and noise. Another important aspect of safety includes daily monitoring of maintenance and protection of traffic in general and traffic control procedures in particular.

The estimated $20 million project began in September 2008 and is expected to be completed by September 2011.

Owner: New York State Department of Transportation
Location: Nassau & Suffolk Counties, NY
Construction Cost: $20 million (est.)

Reference: Ann Elias

NY494 (1/09)

HAKS

CONSTRUCTION COORDINATION AND MANAGEMENT SERVICES, CROSS BRONX EXPWY/BRUCKNER EXPWY INTERCHANGE REHABILITATION, BRONX, NYSDOT

HAKS provided these services for the interchange rehabilitation under a contract with the New York State Department of Transportation. The $204 million project involved extensive bridge and viaduct rehabilitation work and highway improvements. It was completed in May 2002, one year ahead of schedule, due in great part to the partnering atmosphere created among the construction team members, and the incentive/disincentive provisions in the contract. The project received numerous awards as a result, including the ***CMAA 2003 Project of the Year (Over $60 Million) Award; NYACE 2003 Platinum Award for Engineering Excellence; New York Construction News 2001 Award of Merit: Bridge Project; ARTBA Pride Awards Honorable Mention; NYSDOT Deputy Chief Engineer's Citation; and The ASCE Construction Achievement Project of the Year Award.***

The interchange is a major link between the Cross Bronx Expressway, the Bruckner Expressway, the Bronx-Whitestone Bridge, the Throgs Neck Bridge, and the New England Thruway. It runs from Havermayer Avenue to Huntington Avenue on the Bruckner Expressway and from Castle Hill Avenue to Lafayette Avenue on the Cross Bronx Expressway. Serving as a gateway to the northern part of Queens, Bronx County and the State of Connecticut, it is considered one of the most complex interchanges in New York State and as such, required construction to be undertaken in four stages.

The scope of work included reconstruction of major portions of the interchange viaduct including 14 ramps and bridge structures. In effect, several projects were combined into one, thereby substantially reducing the time and impact of the work on motorists and the surrounding communities. The project also called for roadway improvements including paving, resurfacing and installation of an Intelligent Transportation System (ITS) along the Cross Bronx, Throgs Neck, Bruckner and Hutchinson River Expressways. The ITS provides a comprehensive system for improving vehicular flow in the corridor through traffic monitoring and information gathering.

The ITS scope of work included:

- Installation of new communication conduit and pull boxes
- Installation of seven CCTV cameras, three Highway Advisory Radio transmitters, one permanent variable message sign and temporary advisory signs along highways approaching the interchange

One of the project's biggest challenges was the construction of a temporary crossover needed to maintain two lanes of traffic from the westbound Cross Bronx Expressway to the southbound Bruckner Expressway. This temporary steel structure, approximately 50 feet above ground and nearly 1,000 feet long, bridged the roadways for about six months. Paul Cavota, P.E. was the Construction Manager on this project.

Owner: NYS Department of Transportation
Location: Bronx County, NY
Construction Cost: $204 million

Reference: John Elias, P.E.

Maitra Associates, P.C.

Client
The Port Authority of NY & NJ
c/o Bechtel Infrastructure Corporation
21 East 40th Street, 16th Floor
New York, NY 10016

Contact
Mr. Rog Vignola
(212) 561-6241
Mr. George Slattery
(201) 216-6170

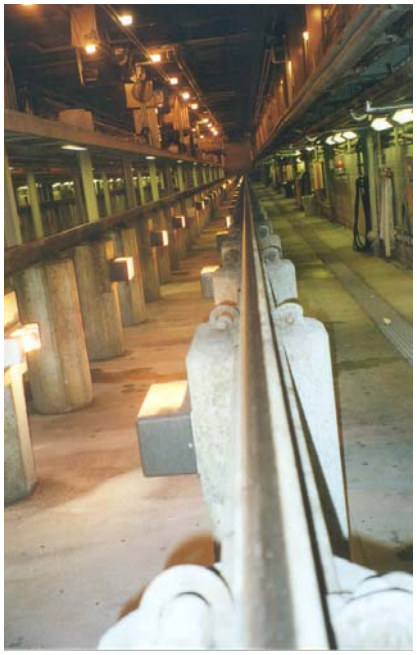
Construction Cost
$3,111,000 (Fee)

Date of Completion
2006

Project Description

Contract 410-02-005, Construction Management Services for the Downtown PATH Restoration Project and other PATH Projects

As a subconsultant to Bechtel, **Maitra** provided construction inspection services for Phase I of the Downtown Restoration Program to re-establish PATH rail service between New Jersey and Downtown New York. The scope of work included construction of a temporary PATH station at the World Trade Center site and associated track and tunnel work, rehabilitation and expansion of the Exchange Place Station in Jersey City, NJ and associated track and tunnel work, rehabilitation of Tunnel "E" and "F" under the Hudson River and new crossovers, tracks and modifications to Tunnel "L" and other infrastructure at the west end of the Exchange Place Station, plus various other capital program projects for PATH facilities at Journal Square Transportation Center, Harrison Yard, Grove Street, 9th and Christopher Street Stations.



Maitra Associates, P.C.

Client
PORT AUTHORITY OF NEW YORK AND NEW JERSEY
c/o PB-URS, Joint Venture
22 Cortland Street
New York, NY 10007

Contact
Mr. Mel Stein
[redacted]

Fee
$3,635,979

Date of Completion
2014

Project Description

CONSTRUCTION MANAGEMENT FOR WORLD TRADE CENTER TRANSPORTATION HUB AND OTHER WORLD TRADE CENTER SITE PROJECTS, CONTRACT PCP-05-002

Maitra is providing construction management and inspection services under a six year contract for this $2.2 billion project consisting of PATH facilities, PATH Terminal Building, Pedestrian Connections, Site Preparation and Underpinning of No. 1 subway, LMDC facilities, including WTC Memorial, museum, WTC Cultural Center, and tenant alterations to the Freedom Tower and Tower 2, Tower 3, Tower 4, and Tower 7. The scope of work also covers common infrastructure projects, including security center, new streets, and central plant equipment.

Maitra Associates, P.C.

Client
PORT AUTHORITY OF NEW YORK AND NEW JERSEY
Two Gateway Center
Newark, NJ 07102

Contact
Mr. Bill Kehoe
(201) 216-2070

Fee
$2,500,000

Date of Completion
2004

Project Description

CONSTRUCTION MANAGEMENT SERVICES ON A "CALL-IN" BASIS 2001- 2003 P.A. #410-01-032

As **Prime Consultant** on this **Term Agreement, Maitra's** scope of services covered construction inspection services for structural steel, structural concrete, asphalt and concrete paving, sidewalks, pedestrian ramps, painting of structural steel, rail, electrical and mechanical systems; construction contract administration, constructibility review and cost engineering/ estimating. Project sites include various Port Authority facilities. Representative assignments included construction inspection at the following:

Port Authority Marine Terminal

Expansion and construction of new tenant facilities, including buildings, sidewalks, pedestrian ramps, utilities, railroad, and infrastructure at Port Newark/ Elizabeth and pier expansion, bulkhead strengthening and Intermodal facility expansion at Port Ivory/ Howland Hook.

LaGuardia Airport

Replacement and installation of water mains, utilities and stormwater drainage; sidewalks, pedestrian ramps, installation of signs and flood light towers; installation of taxiway lighting, including center line & edge lights; and relocation and modifications to utilities to facilitate installation of 102nd Street Bridge.

Lincoln Tunnel

Rehabilitation and Repair of the ramps and bridges within the area of the Manhattan approaches and exits. Scope of work includes full deck replacement, partial depth repair and replacement of structural steel.

Maitra Associates, P.C.

Client
PORT AUTHORITY OF NEW YORK AND NEW JERSEY
Two Gateway Center
Newark, NJ 07102

Contact
Mr. Bill Kehoe
(201) 216-2070

Fee
$3,500,000

Date of Completion
2006

Project Description

CONSTRUCTION MANAGEMENT SERVICES ON A "CALL-IN" BASIS 2004 - 2006 P.A. #410-04-001

As **Prime Consultant** on this **Term Agreement, Maitra's** scope of services covered construction inspection services for structural steel, structural concrete, asphalt and concrete paving, painting of structural steel, rail,electrical and mechanical systems; construction contract administration, constructability review and cost engineering/estimating. Project sites include various Port Authority facilities. Representative assignments included construction inspection and office engineering at the following:

Port Authority Marine Terminal

Expansion and construction of Track 9 and 10 to Maher Terminal and various infrastructure projects at Port Newark/Elizabeth and new Intermodal Rail Transfer facility, tenant facilities, sidewalks, paving, curbs, warehouse, and loading dock at Port Ivory/Howland Hook.

JFK Airtrain

Contract Administration including change order management for architectural, structural, mechanical, and electrical work involving superstructure, rail and Jamaica station construction for this $450 million investment.

Security Capital Program

Contract Administration for multi facility work order contract including security systems and equipment at Newark and JFK Airports, Bayonne Bridge, George Washington Bridge, Port Authority Bus Terminal and PATH.

Maitra Associates, P.C.

Client
PORT AUTHORITY OF NEW YORK AND NEW JERSEY
Two Gateway Center
Newark, NJ 07102

Contact
Mr. Bill Kehoe
(201) 216-2070

Fee
$4,000,000

Date of Completion
2009

Project Description

CONSTRUCTION MANAGEMENT SERVICES ON A "CALL-IN" BASIS 2007- 2009 P.A. #410-07-005

As **Prime Consultant** on this **Term Agreement, Maitra's** scope of services includes construction inspection services for structural steel, structural concrete, asphalt and concrete paving, sidewalks, pedestrian ramps, painting of structural steel, rail, electrical and mechanical systems; construction contract administration, constructibility review and cost engineering/ estimating. Project sites include various Port Authority facilities. Representative assignments include construction inspection at the following:

Port Authority Marine Terminal

Expansion and construction of new tenant facilities, including buildings, sidewalks, pedestrian ramps, utilities, railroad, new truck bridge, and infrastructure at Port Newark/Elizabeth and pier expansion, bulkhead repairs, and new lead rail track.

Newark Airport

Replacement and installation of water mains, utilities and stormwater drainage; sidewalks, pedestrian ramps, installation of signs and flood light towers; installation of taxiway lighting, including center line & edge lights; maintenance facility and relocation and modifications for various tenant facilities, such as Hertz and US Customs facilities.

PATH

Rehabilitation and Repair of track, stations, electrical equipment and components. Inspected 800 MHZ radio system, renovations to Hackensack River Bridge, portal flood gates, and access control.

Maitra Associates, P.C.

Client
PORT AUTHORITY OF NEW YORK AND NEW JERSEY
c/o Greenman-Pedersen, Inc.
325 West Main Street
Babylon, NY 11702

Contact
Mr. Greg Zenk
[redacted]

Fee
$1,607,000

Date of Completion
2010

Project Description

CONSTRUCTION MANAGEMENT SERVICES ON A CALL-IN BASIS DURING 2006—2010, PA# 410-06-009

As a sub consultant to GPI, Maitra is providing construction inspection services for various Port Authority facilities including Lincoln Tunnel, PATH, JFK Airport, and LaGuardia Airport. Representative projects include:

PATH

Electrical inspection for Access Control Keltron replacement, simulcast upgrade for VHF radio channels, smoke detectors, camera encoder and decoder project, AC units in communication rooms, and emergency diesel generator at Washington Street Substation No. 2.

Jet Blue Terminal, JFK Airport

Mechanical and Electrical inspection for new $900 million Jet Blue Terminal, including HVAC equipment, ducts, electrical, sprinklers, fire alarm, emergency generator, 3 sub stations and horizontal and vertical transportation. Scope also included electrical, mechanical, plumbing and fire alarms in Terminal 5.

LaGuardia Airport

Mechanical and Electrical inspection for $10 million HVAC in Central Terminal and Monsignor McClancy Memorial High School Tenant project, including electrical, mechanical, plumbing, and fire alarm.

Lincoln Tunnel

Scope included inspection of multi-discipline trades for various tunnel rehabilitation projects.

Expert Professional CM Support Services As Requested on "Call-In" Basis during 2007, 2008 & 2009

Owner: Port Authority of NY & NJ

Project Cost: Various

Description:

MEP projects at La Guardia Airport include:

- HVAC upgrade Central Terminal Building Project - $9.4 million.
  Replacement of 19 Air Handling Units at Central Terminal Building - Four concourses with new "YORK" make AHU units with new Chilled and Hot water piping

- HVAC system upgrades at Hanger 7 South Bldg - $2.1 million.
  Installation of new 60 Ton "YORK" chiller with three new Air Handling Units to take care of staff canteen, locker room and corridor area including new smoke purge system and modification of Fire Sprinklers.

- High-pressure Firewater pump station Project - $12.7 million.
  New High pressure fire water pump station consists of two Electrical, three Diesel fire pump sets with two 40 feet x 20 feet high Fire water storage tanks with new underground high pressure fire water system piping grid.

- Aircraft Fire & Rescue Facility Project – 41.2 million.
  New ARFF building project to house Airport Emergency rescue vehicles, Police offices and other secret services offices.

Responsibility:

JCMS is providing Resident Engineer services. Responsibilities related to the managing of MEP projects for "Port Authority of New York & New Jersey" at La Guardia Airport for the projects listed above included project management, construction administration, job site inspection, ensuring compliance with engineering drawings and specifications and a safe working environment, supervision of all installations, subcontract management, approval of contractor's payment application and progress reporting based on Primavera P3 and P6.

Reference:
Anthony Vero
PANYNJ
718-533-4278

Program Management Control Services, New York, NY
Owner: Port Authority of New York and New Jersey
Project Cost: N. A.

Description:
The projects under this contract included various capital constructions as well as O&M projects at New York airports including JFK, LaGuardia.

Sample Projects:

1. Aircraft Parking and Taxiway Modifications ($35.0 Million)
2. Rehabilitation of Brewster Road between Buildings No. 339 &5($3.4 Million)
3. Construction of Switch House #3
4. Removal of existing entry and exit tollbooths, installation of a swing gantry and concrete islands Parking Lot P6 at Newark International Airport to support E-Z Pass signage and associated equipment.
5. EWR-Building 42 and 46 Domestic Water control systems
6. NY Airport Access Capital Program for Air train Terminal At Jamaica Station project
7. Newark Liberty International Airport Terminal B Expansion Plan.

Responsibility:
Schedule Control:
JCMS' responsibility included developing and maintaining design/construction Master Coordination Schedule (MCS), monitor/review/update project schedules with Project Managers, assist Program Manager in preparing annual engineering/construction budget sheets for Chief Engineer, prepare project plan summary based on input from design disciplines, analyze/update Present and Planned Workload and report to upper management, develop Earned Value reports, develop Consultant Cash Flow, review and approve sub-consultant invoices, verify monthly progress reports prepared by Project Managers and prepare various miscellaneous reports for reporting to the upper management.

In addition JCMS was involved in the analysis and evaluation of the P3e Beta Version, assisting Project Managers in developing detailed design schedules and construction staging schedules on large projects, facilitating implementation of Expedition on specified large projects and providing feedback by participating in the on-going evaluation of Engineering Proposal Database.

Document Control:
The Document Control responsibilities included tracking issues and correspondences generated, submittals/approvals, RFI's, change orders, subcontracts, maintaining minutes of the meetings, requisitions, monitoring the status of punch list items, setting up and generating various custom reports for project management use, using Expedition.

Reference: Owais Ahmed,
PA of NY & NJ, # 973-792-4713

[IE] George Washington (GWB) Traffic Study & Roadway Closure
New York and New Jersey

Port Authority of New York and New Jersey

Mr. Raza served as the Project Manager for this project. In this role he supervised a comprehensive ATR and a data collection of manual turning movement counts and analyses at 31 locations relating to GWB ramps and surrounding street network. The Port Authority of NY & NJ commissioned the project for periodic traffic data collection for GWB. Mr. Raza performed a traffic data reduction exercise, computed peak hour factors for weekday AM, Midday, and PM peak hours, Saturday Midday peak and also performed analyses: computations of vehicle adjustment factors to account for significant truck traffic. For capital improvement projects on and around the GWB roadway network, performed capacity analyses to account for impacts in terms of delays and queue lengths due to a variety of planned ramps and roadway closures. Prepared, coordinated and managed an umbrella Memorandum of Understanding (MoU) between PA and NYCDOT, for permits of roadway/sidewalk closures. The project was completed on schedule and within budget.

[03121] Construction Inspection for FDR Drive Reconstruction 53rd Street to 63rd Street Manhattan, New York

New York State Department of Transportation, Region 11

The 1.25-mile stretch of the FDR East River Drive between East 53rd and East 63rd Streets, built 60-years ago, transports 150,000 vehicles a day along Manhattan's congested East Side. The $135 million reconstruction project was a part of the NYSDOT's efforts to rehabilitate this complex three-tiered structure. The structure consisted of northbound lanes on the lower tier, southbound lanes running through a viaduct in the middle, and a roof deck providing the foundation for parkl ands and residential buildings above the stacked underpass. The project included replacement of the viaduct and bridge superstructures; rehabilitation of the highway's roof, retaining walls and barriers; seismic retrofitting; installation of lighting, signs and drainage systems; and restoration of the parks atop the roadway. Preparatory work included installation of vibration monitoring equipment in the MTA's East River Tunnel. To accelerate the construction activities a temporary roadway over the East River was built to carry the northbound traffic. Due to this, the project was completed in 56-months instead of the estimate eight-years and the all nighttime and weekend project turned mainly into daytime work.

EnTech was a sub-consultant to the **E&K/URS** JV Construction Inspection Team. EnTech participated in construction inspection activities and provided Maintenance and Protection of Traffic (MPT), asbestos abatement consulting services, ensured compliance with the OSHA and environmental regulations, and provided safety training for the project crew.

[04021] Construction Management - Route 9A Corridor Reconstruction Project Manhattan, New York

New York State Department of Transportation - Region 11

The Reconstruction of Route 9A and West Street from West Thames to Chambers Street (0.71 miles) are to restore the functionality of Route 9A sections destroyed or damaged in September 11, 2001. The project is to improve pedestrian movements, provide setting for the National 911 Memorial, and support economic recovery of Lower Manhattan. The reconstruction will restore the pre-9/11 number of moving lanes, which is 4NB and 4SB. The roadway alignment will be shifted to the west and the profile will be raised to meet the proposed grades of the World Trade Center Memorial (WTCM). The construction of an urban promenade with granite pavement and landscape planting is included under this contract. The removal of the Vesey Street Bridge and modification of Rector Street and Liberty Street Bridges are also part of this project. Additional elements of work include relocation/alteration/installation of water mains, ConEdison and ECS facilities, street lighting, traffic signals, ITS system, and modification of the lighting and promenade pavement between Battery Place and West Thames Street.

EnTech is a sub-consultant to **STV/URS** JV Construction Management Team. EnTech responsibilities include OSHA and environmental compliance, MPT, construction inspection, and coordination with the involved parties. EnTech has provided asbestos and lead abatement oversight, environmental monitoring, asbestos bulk sampling, and air monitoring during asbestos and lead abatement activities. En Tech is responsible for Environmental Performance Commitment (EPC) of this project, which is a joint commitment of agencies (MTA, PAofNY&NJ, NYCDOT, LMDC, and NYSDOT) involved in the redevelopment of Lower Manhattan and World Trade Center Site Projects. This task requires the review of the environmental aspects of the NYS DOT-9A project, preparation of QA/QC report and compliance reports, and environmental monitoring as required.

[06022] Substructure Repair and Painting, Robert Moses Causeway Bridge over Great South Bay Suffolk County, Long Island, New York

New York State Department of Transportation - Region 11

The Robert Moses Causeway over Great South Bay is located on the southwestern shore of Suffolk County. It is an 8.10-mile long non-commercial traffic parkway, and a vital link between the West Islip and 1,170 acres of recreational facilities in the Barrier Beach Islands. This project included the removal and replacement of protective metal jackets with fiberglass jackets, placement of concrete inside the jackets, crack repairs and sealing, and sealing of existing concrete on the northbound structure. The project involved extensive painting operation, construction of a Class A containment, abrasive blast for the removal of lead-based paint (SP-10 = Near White Metal) for both northbound and southbound structures.

EnTech as a sub-consultant to **URS** Corporation provided the chief inspector and NACE certified painting inspector. EnTech as part of the project team, worked on project's daily activities including overseeing contractors' work, record keeping, preparing contract-related documents, reviewing payment for approval, and MPT implementation. The painting inspector oversaw the Class A Containment construction, lead-based paint removal, overall painting operation and ensured compliance with the contract requirements, US Coast Guard, the OSHA and relevant environmental regulations.

[06061] REI - Construction Inspection of the Reconstruction Willis Avenue Bridge the Bronx, New York

New York City Department of Transportation

This $612 million NYCDOT project involves the replacement of the Willis Avenue Bridge, a swing-type movable bridge over the Harlem River along with approach roadways and spans in Manhattan and the Bronx. The new bridge is being constructed just south of the existing bridge. The work in Manhattan involves construction of a temporary loop ramp to direct 2 lanes of traffic from NB FDR to the Bridge in order to remove the existing and construct the new ramp. The approach from 1st Ave is done in stages to maintain 2 lanes of traffic at all times. Most of the work in Manhattan requires extensive MPT for the demolition and all the construction work over, in the median or adjacent to FDR / HRD. Work in the river involves construction of new piers founded in bed rock with close coordination with USCG to maintain the navigation traffic without impact. The new swing span along with all machinery and electrical system is fabricated and assembled off-site and will be floated into place once the foundations, center pier, and rest pipes are ready to receive it. In the Bronx work involved construction of spans over the Harlem River Yard, Waste Management Facility, CSX Rail Road and Bruckner Blvd as well as a new exit ramp in to Bruckner Blvd. A NYSDOT Project for the replacement of the Willis over MDE, construction of flyover ramp to NB MDE and reconstruction of the MDE in the vicinity of the bridge along with entrance and exit ramp are also done under the same contract.

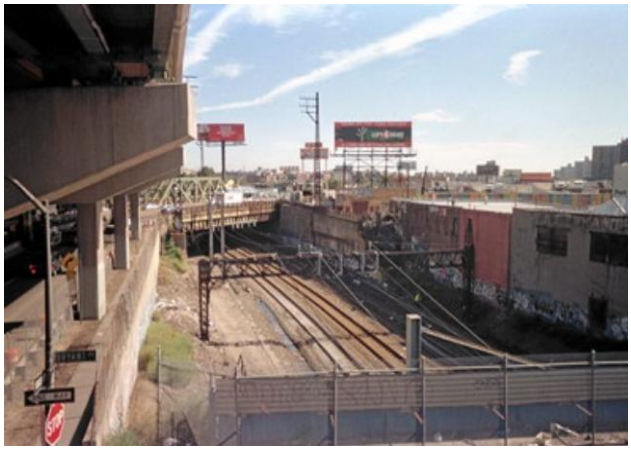
EnTech is subconsultant to PTG/STV JV. The construction inspection team consists of fifty crew members. EnTech, as part of the construction inspection team, provides resident engineer, chief inspector, inspectors, office engineers, and environmental services. Responsibilities include overseeing project activities including highly-technical construction issues, managing daily activities at the site, review of field operations, review of payments to the contractors, review of RFI and shop drawings, coordination with involved parties such as NYSDOT, USCG, OCMC, CSX Rail Road, NYSDEC, NYCDEP, and NYCDOT offices such as EAB and QA, coordination with CSS regarding the design modifications and resolving constructability problems.

[09041] Resident Engineering Inspection for Rehabilitation of Bruckner Expressway Bridges over AMTRAK and CSX Rail Road Bronx, New York

New York City Department of Transportation

This project consisted of the rehabilitation of Bruckner Expressway Bridge over AMTRAK and CSX Rail Roads and involves a new superstructure with rehabilitation of the abutments and replacement of the deck.

On this design and build project, the REI Team is responsible for performing in-depth inspection, deck evaluation, rehabilitation report, preliminary and final design and construction support services for the rehabilitation of the expressway, work permits, insurances, work schedule, and preparation of traffic maintenance plan. On this Design Build project, the REI Team actively communicates with utilities and Rail Road companies for coordination of the work.



EnTech as a sub- consultant to **Hardesty and Hanover** provides environmental services regarding lead-based paint removal, painting, asbestos, hazardous waste, and soil contamination management. Responsibilities include sampling, testing, and monitoring, emissions and air pollution control, and soil sampling.

[98021] Six Bridge Design Project, Various Location, New York City

New York City Department of Transportation

This design project focused on six bridges located in the New York City area. Brooklyn-Queens Expressway Over Cadman Plaza; Bryant Avenue Bridge over Amtrak, Bronx; Grand Street Bridge over Newtown Creek; Metropolitan Avenue Bridge over English Kills; Newkirk Avenue Bridge over BMT Subway; and Crooke Avenue Bridge over Brooklyn-Manhattan Transit Subway Brighton Line. **EnTech** as a sub-consultant to **E&K Engineers** evaluated the presence of hazardous materials at the site of these six bridges.

- Inspected the site of each bridge to verify the presence of suspect hazardous materials, including asbestos containing materials (ACM), lead-based paint (LBP), underground storage tank (UST) and petroleum soil contamination, biological waste, PCBs.

- Reviewed as-built and existing drawings, and utility plates to obtain information on construction materials and/or hazardous materials not visible.

- Conducted sampling from ACM, LBP, PCB, and pigeon waste, and procured laboratory services.

- Evaluated the analytical results and provided recommendations regarding hazardous materials.

- Prepared a report for each bridge site. The report described the process used to identify the suspect hazardous materials, provided an estimate of quantities of hazardous materials, indicated the potential hazard to public and workers health and the environment associated with each hazardous material, and a summary of the pertinent federal, state and local authorities regulations. The report described the requirements for protection from disturbance if the hazardous materials were to stay, and the requirements for their removal from the site during demolition and adequate workers protection requirements.

[10062] Project Management for Re-Construction of NE, SE and SW quadrants of Washington Square Park, Greenwich Village, New York

New York City Parks Department

The 9. 75 ac res l andmark in Ci ty of New York, initially opened at 1871, is best known as a cultural hub in downtown Manhatt an. In December 2007 NYC-DPR has begun co nstruction to renovate th e Washington sq uare Park. Phase 1 of the renovation was c ompleted i n Spring 2 009 and phase 2 was started on Sep. 8, 2009. The s econd p hase of t he reconstruction is focu sed o n repaving pa ths w ith granite a nd a sphalt pavers, restoring la ndscaping, plantings, and flower beds, Upgrading the northeast playground with new play e quipment, wa ter arc h futures and safety surface, construction of new play area in t he s outhwest se ction wi th carp et-style synthetic turf for safety , cons truction a new performance stage, relocating and r ebuilding the two dog runs wi th new wa ter spry jets futures, conserving an d relo cating the Giuseppe Gariba ldi Monument, re construction of th e p etanque cour ts, and rep lacing fences with new iron talle r fences. NYC-DPR project num ber is M98-1-7M with a i nitial value of $9, 096,117.98 a nd sc heduled t o b e completed in 12 month.

EnTech w as a p roject management c onsultant for the general co ntractor, Tucci ERC. E nTech provided construction manag ement, phase sc heduling an d control, d ocument m anagement, c ommunication management and payment requisition ser vices for the project.

WASHINGTON SQUARE PARK - SCHEMATIC PLAN

[08021] Noise Barrier Construction Westbound LIE, Roslyn Heights in Nassau County, NY

New York State Department of Transportation – Region 10

The project consists of the construction of a noise barrier, including soldier piles for lagging walls, and small section of permanent steel sheeting. In addition, the project including relocating and installing a sewer force main, concrete repairs to the roadway, and new pavement with super-pave asphalt on north service road (Power House Road westbound) of the Long Island Expressway at Roslyn Road.

EnTech, as a subconsultant to Shaw E&I provided the chief inspector and senior inspector. The chief inspector was responsible for supervising and instructing the inspectors, ensuring contractors compliance with the quality and quantity according to the NYSDOT specifications, coordination with the contractor for scheduling of construction activities, supervising contractors work performance at the construction site for compliance, and attending construction and project related meetings.

INTRODUCTION

HAKS, along with sub-consultants JCMS, Inc. (MBE), Maitra Associates, PC (MBE), Entech Engineering, PC, (WBE) is pleased to submit this proposal for Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis during 2011 – 2014. The team has worked together on past projects, providing outstanding construction inspection services to our clients.

I.) TECHNICAL QUALIFICATIONS

A. Qualifications and Experience of the Staff

The HAKS team will provide all construction management and on-site inspection services necessary to coordinate and direct the work of the respective contractors on each specific assignment through final completion. We have within the HAKS organization a well-experienced staff of over 400 full-time employees that include construction management/inspection professionals, engineers, architects, reviewers, estimators, schedulers, certified welding inspectors and NACE certified coatings inspectors that we will mobilize as needed to meet all the requirements of each assignment from the Authority. We will back up each HAKS team with main office support resources in various specialties as needed. Additionally, our sub-consultants are an integral part of our team who will provide quality services in the scheduling, electrical, mechanical and environmental disciplines.

B. Qualifications of the Firm

HAKS is intimately familiar with Authority facilities, needs and level of service required based on our past and current experience in providing the same construction management/inspection services to the Authority, under Contracts 405-03-021, 410-01-030, 410-04-007 and 410-07-008. From our extensive experience with "on-call" contracts, we know that construction management projects require personnel who can think on their feet as part of a team working towards a common goal. They also require personnel who are willing to perform above and beyond what is expected to ensure the job gets done safely, correctly, within budget and on time. HAKS has demonstrated its ability to successfully manage this type of contract, and to provide experienced field personnel for project assignments from our vast pool of construction managers/inspectors.

Some examples of this past experience include:

- Port Authority Contract 410-07-008. HAKS filled eight positions under the contract: two fire protection engineers, one senior inspector, one administrative assistant, three office engineers and one assistant resident engineer.
- Port Authority Contracts 410-01-030 and 410-04-007. We filled nine positions under the contracts: two Office Engineers at New York Marine Terminal, one Civil Field Inspector at New Jersey Marine Terminal, two for the temporary PATH restoration and four Fire Safety Engineers working from Jersey City Tech Center.

Experienced Staff

HAKS staff consists of:

66 Professional Engineers
29 ICC Inspectors
23 Concrete Construction Special Inspectors
2 N.A.C.E
7 LEED A.P.

- New York State Dept. of Transportation, Region 8 On-Call, Contract No. D015487. HAKS provided 21 positions in answer to the Region's requests. Of particular note was the initial request for eight inspectors that HAKS received on a Friday for a starting date the following Monday. We met the demanding request by drawing on our extensive personnel resources and working through the weekend to identify candidates, contact and assign them to the project.
- TBTA On-Call Contract GFM-405A. We were tasked with 41 assignments and successfully placed a total of 48 personnel, which included Resident Engineers, Hazardous Waste Specialists, NACE Certified Coatings Inspectors, Office Engineers and NICET Certified or equivalent field inspectors.
- NYC Transit, Worldwide Inspection On-Call Contract CMM 1432. Contract stipulates that HAKS is to provide ANST Certified inspectors and Professional Engineers within four days of receipt of request, regardless of assignment location. To date we have provided six inspectors for work locations in Massachusetts, Georgia, Pennsylvania, New York, New Jersey and Washington. In one assignment we provided a Professional Engineer to establish fabrication and shop inspection protocols at a pre-stressed concrete plant in Seattle, Washington. This protocol is now the template for use by other consultants working on this contract.
- New Jersey Dept. of Transportation, Region South On-Call Contract #2005 BCE499F. Requests for multiple inspectors have been received for three tasks. To date HAKS has successfully placed seven candidates including Professional Engineers, asphalt paving inspectors and NACE certified painting inspectors.

CM Task Order at Bronx Whitestone Bridge Toll Booth Facility

B.1 Quality of Similar Services Provided to Others

In addition to our work with the Authority, we have served as Construction Manager and Resident Engineering Inspection Consultant for on-call contracts for numerous other agencies including the New York State Department of Transportation, New Jersey Department of Transportation - Southern Region, New York City Department of Design and Construction, and Triborough Bridge and Tunnel Authority.

As one of the region's leading CM firms, HAKS possesses term/on-call experience as evidenced by our continuing involvement in numerous on-call programs, including multiple assignments from repeat clients. The range of resources available to HAKS has been instrumental in our ability to staff on-call task order assignments. For many firms, task order and on-call contracts represent "side" work, but for HAKS they are a perfect complement to the full range of services that we offer, and have therefore become a core component of our business. In fact, HAKS our wide ranging experience in providing personnel for many different kinds of on-call, term agreement assignments currently includes work on 36 such assignments. The following is a list of representative projects demonstrating HAKS' clients and experience in providing on-call services to governmental agencies and authorities:

HAKS RELEVANT EXPERIENCE PERFORMED FOR OTHERS			
PROJECT/SERVICE	CLIENT	FEE	PRIME/SUB
CM Services on "As-needed" Basis at Various Bridges and Tunnels	TBTA	$1.2 million	Prime
CM Services Miscellaneous Downstate Construction Projects	NYCDEP	$13 million	Prime
Technical Inspection Miscellaneous Construction Projects	NYCT	$7 million	Prime
Technical Inspection Miscellaneous Construction Projects	NYCT	$5 million	Prime
CM Services on "As-Needed" Basis	LIRR	$5 million	Prime
On-Call CM/I Services, Various Locations NYS	NYSOGS	$4 million	Prime
On-Call CM/I Services, Various Locations NYS	NYSOGS	$2.5 million	Prime
CM Professional Staffing Services	NYCSCA	$4 million	Prime
On-Call Construction Management Services	Nassau County DPW	$1.0 million	Prime
On-Call CM Services for Various Park Facilities	NYCP&R	$2 million	Prime
Scheduling Consultant Services on an "As-Needed" Basis	NYCT	$4 million	Prime
On-Call A/E Services for Capital Improvements	NYCSCA	$500,000	Prime

HAKS professionals are among the region's most skilled construction managers, project control specialists, planners, designers, resident engineers and inspectors. With our breadth of services, HAKS offers a total package from our own offices or by assigning personnel to supplement our clients' staff in their offices. We listen closely to client requirements on each assignment and respond proactively, a commitment that underlies many of the long-term client relationships that we enjoy. Personal service, expert project management and quality management - while it is sometimes difficult to quantify the results of these three qualities in action, we can point to a statistic indicative of client response to our services that HAKS is most proud of: our 87% rate of repeat business.

B.2 Ability to Complete the Services in Accordance with Project Schedule

From HAKS' headquarters location in lower Manhattan and satellite offices in New Jersey and throughout the middle Atlantic states, we have a large pool of locally available field personnel with the expertise and experience who will ensure safe, on-schedule and within budget completion of on-call construction project assignments.

On each on-call assignment, our Project Manager and staff will monitor the contractors' compliance with all planning and scheduling requirements. Where required we will provide a detailed CPM network showing all contract work, which will be updated regularly and reported on throughout the life of the project; reports will include current information on materials and equipment orders and shop drawing schedules.

C. Management Approach for the Performance of the Contemplated Services

KEY PERSONNEL

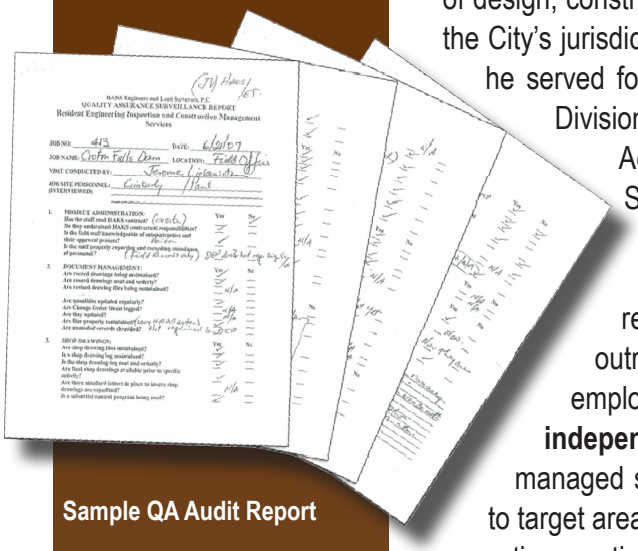
PROJECT MANAGER:

Paul Cavota, P.E., will be HAKS Project Manager, and will apply his more that 45 years experience in construction management, inspection and supervision to the project. He will direct the Construction Management staff, and will be the one point of contact for the Port Authority, translating task orders into project team member assignments, and who will assure proper, thorough and timely execution of all assignments. On receipt of an assignment from the Authority, Mr. Cavota will review project goals and requirements with Authority project management, review staffing requirements, then quickly assemble all team members needed to execute the work. He will be responsible for coordinating the efforts of all project participants, and for reviewing project status, assessing work performance, monitoring progress, and modifying schedules. He has the authority to reach within the firm to draw on whatever resources are needed to meet any technical challenges that develop. Mr. Cavota will lead our partnering efforts.

ASSISTANT PROJECT MANGER:

Frank Verderame will assist Mr. Cavota in the day to day coordination required to get the job done on time and on budget. His 16 years of construction experience include assignments on 8 years on Port Authority on-call contracts, first as Office Engineer from 2002 to 2005, and most recently as Project Manager on the current on-call contract from 2007 to 2009, where he was in charge of all HAKS staff for ongoing assignments at multiple Port Authority facilities. Mr. Verderame will be responsible for day-to-day field operations, assigning HAKS team inspectors to cover construction operations, overseeing field office operations, investigating changed conditions, preparing estimates of change orders for Authority approval, and working closely with the contractor and Authority personnel to solve any field problems that develop:

Responsiveness. Based on our past experience, HAKS understands that the key element in the successful performance of on-call work is being responsive to client needs. **Assistant Project Manager Frank Verderame, therefore, will be available 24 hours a day, 7 days a week** to respond to all of the Authority's needs. Mr. Verderame will be responsible for formally submitting all staff for PANYNJ approval to carry out the work required. These people will be identified and made available immediately on emergency assignments, and within no more than 5 days of notification where time is not a factor.


HAKS Engineers and Land Surveyors, P.C.
QUALITY ASSURANCE SURVEILLANCE REPORT
Resident Engineering Inspection and Construction Management Services

Sample QA Audit Report

QUALITY ASSURANCE AND SAFETY OFFICER:

Lawrence King, P.E., will serve as HAKS' **Quality Assurance and Safety Officer.** Mr. King has over 38 years of construction experience. Before joining HAKS he was **Deputy Chief Engineer** for the New York City Department of Transportation, responsible for consultant and contract supervision, management and quality control of design, construction and rehabilitation of all fixed land and waterway bridges under the City's jurisdiction, and a budget of $2.3 billion over the past 10 years. Before that he served for 10 years as **Director of Quality Assurance** in the Department's Division of Bridges, where he developed and initiated QA policy and Materials Acceptance Procedures. He is authorized through the Occupational Safety and Health Administration (OSHA) to teach construction and general industry occupational safety and health standards and policy. As an OSHA Construction Outreach Trainer, Mr. King conducts regularly scheduled internal10- and 30-hour construction industry outreach courses and issues completion cards to the attending HAKS employees. As an adjunct to his teaching duties, **Mr. King conducts independent quality assurance and field safety inspections** on HAKS managed sites, where he draws on his many years of construction experience to target areas of concern typical to all construction projects, and to identify unsafe practices particular to individual projects.

FIELD INSPECTION:

For every project assignment HAKS will assign expert professional construction managers and certified inspectors with the experience and knowledge required that will produce the highest level of construction inspection, thus assuring the work will be done in accordance with contract plans and specifications, and the resulting end product is of the highest quality. As shown on the organization chart, HAKS depth is in our construction management and inspections staff. Construction managers/resident engineers such as Hector Ankrah, PE, Harold palmer, PE, Paul Diamond, PE, Magdy Elkafafi, PE, Nick Shah, PE, Hesham Kotby, PE, Moustafa Rezk, PE and Lawrence Alexander, PE are second to none. Similarly, we are very proud of our assistant construction managers, resident engineers, chief inspectors, AWS certified welding inspectors and NACE and NICET certified inspectors Dennis Corpas, N-IV, Maher Mahmoud, N-IV, Obi Iwuoha, N-IV, Frank Fragapane, N-IV, Art Spring, N-IV, Abdul Somat, P.E., CWI, Omar Petty, N-III, NACE 2, and Ilya Gologorskiey, P.E., NACE 1.

Our inspectors will prepare for the work by studying and becoming thoroughly familiar with the contract drawings, specifications, approved submittals, required certifications and testing requirements. We will inspect all work performed, and coordinate with the contractor to assure coverage of every operation, at whatever time and to whatever extent required. We will see that our staff is completely familiar with the Authority's procedures and guidelines as well as all project specific critical issues. HAKS will ensure that the materials furnished and the work performed by the contractor conforms to the contract plans and specifications. We will make sure that work progresses on

schedule and within budget. HAKS will identify any potential problems in the schedule or budget and make recommendations to resolve conflicts. Any discrepancies not immediately resolved will be brought to the attention of the contractor and Port Authority management. We will document all inspections by completing daily reports and diary entries, and we will maintain all inspection records, outside inspections, meeting minutes, correspondence and reports. Included in our records will be a list of deficiencies and omissions, and corrective actions, as well as drawings of our own that will be used to verify the contractor's as-built plans.

Availability of qualified personnel on short/immediate notice for the contract duration.

We understand that many assignments may be of short duration. We have the depth of inspector resources to meet such assignments, and have done so many times in the past. Inspectors are assigned with the aid of a computerized "Employee Matrix" database that includes all of our inspectors, all active projects, personnel assigned, and each inspector's experience, skills, licenses/certifications/training and availability. This information gives us the flexibility to quickly identify qualified candidates and availability, and to fulfill any assignments from the PANYNJ, even on short notice. We would like to emphasize, in addition, that our key personnel are highly experienced not only in construction, but in on-call assignments as well. They will bring to the task the kind of knowledge and experience that will assure quality construction carried out in accordance with the plans and specifications, and completion on time and within budget.

Partnering

HAKS uses a partnering approach, whether on a formal or informal basis, on every one of its projects. With a large staff of truly competent CM and inspection professionals, we believe that open communication and partnering are instrumental in assuring successful project completion. We have extensive experience with formal partnering, working with all stakeholders, and will do so on this project if requested. Among the many examples where we successfully used partnering are the NYCDOT Manhattan Bridge and Grand Concourse contracts. We are using it currently on the Tappan Zee Bridge Steel Rehabilitation contract with New York Thruway Authority and its contractor. We will schedule and coordinate all meetings held as the work progresses, including partnering sessions between the contractor, PANYNJ, local business and community groups, and other interested parties.

II.) SCOPE OF WORK

Services to be performed, as indicated in the scope, include providing construction management and inspection staff to perform inspection services, constructability reviews, contract administration, and preparing construction cost estimates and schedules.

TASKS

A. Constructability/Bidability and General Engineering Review

A.1 HAKS will provide ongoing analyses of the constructability of designs during design development (Stage II) and Final Design and Contract Document Preparation (Stage III)

A.2 HAKS will assess designs with regard to practical methods of construction during design stages; perform qualitative and quantitative analysis, identification of contractor access routes, staging areas and office sites, as well as maintenance of vehicular and pedestrian access.

Constructability/Bidability Analyses

HAKS will review the design documents and specifications for compliance with local and state building codes, budget and schedule requirements, and general design practice. The primary objective here is to realize a design that is complete, cost-effective, schedule efficient, and provides optimum value. This is accomplished by establishing open lines of communication with the design team, outside agencies and utilities who will have a potential impact upon the proposed work. We will develop a detailed understanding of all external factors, coordination issues, and interface needs that affect the specific project assignments. Under the direction of **Richard Hallahan, P.E.,** our staff will utilize this understanding and knowledge during the compliance review to effect positive results. Mr. Hallahan has 30 years of experience in engineering in the areas of structures, facilities, transportation, special inspections and materials testing and infrastructures. He has provided constructability and bidability analyses on a significant number of transportation and facility related projects.

The Construction Industry Institute (CII) defines constructability as “the optimum use of construction knowledge and experience in planning, design, and procurement and field operations to achieve the overall project objectives.” The basis of this concept is that experienced construction personnel need to be involved with the project from the earliest stages to check that the construction focus and their experience can properly influence the owners, planners, and designer, as well as material suppliers. Constructability input is intended to supplement and enhance the design effort to check that the final design is the most complete, cost-effective and constructable product possible. HAKS will perform constructability reviews to minimize costs and ultimately develop construction documents that avert adverse impacts to the projects we are asked to review. We will review the design documents for quality and completeness of detail with special attention to:

- Ambiguities
- Conflicts
- Inaccuracies/Deficiencies
- Errors and Omissions
- Availability of Materials within Schedule Parameters
- Sole-Source Specifications
- Phasing and Logistics Requirements
- Potential Claims

Constructability reviews will assess how a project can be built economically within the given site constraints and market conditions. HAKS' role will be to prepare efficient contract sequencing and biddable construction packages. This will be particularly important when complicated staging and phasing of construction are required.
We will mobilize for these assignments immediately upon receipt of the Notice to Proceed and focus on thoroughly reviewing all available project documents. Our goal is to assure the preparation of design documents that can be reasonably constructed in the field without unnecessary cost or project delays and without sacrificing quality. The reviews will be performed by a team of professionals with extensive field experience, a clear understanding of the project's goals and site constraints, the concerns of the surrounding communities, and the various regulatory agencies involved in the project.
Constructability issues must be recognized and addressed early enough so that a quality set of plans and specs is produced, which will greatly help to minimize problems that might arise during construction. Rather than wait until the design, plans and specs are finalized, our constructability reviewers will meet with the design members of the project team to discuss constructability issues throughout the planning and design process. During the project scoping phase, a concentrated effort will be made to identify specific constructability items and determine their impact on the conceptual design.

Personnel that we assign to the project will be familiar in general with construction procedures, practices and standards, and in particular with those of the Authority. In general, the HAKS Team will thoroughly evaluate construction plans and equipment installation sequencing. We will check construction planning and phasing, and evaluate the logic of it. We will look for staging areas to be close to installation areas. We will look for phasing that will keep total construction time to a minimum.

If requested we will also review the estimated construction cost prepared by the A/E-designer. We will insure that every item of work has been considered and has a corresponding pay item. We will prepare, at the Authority's request, an independent cost estimate considering the latest drawings, specifications and value engineering report.

B. Construction Staging

B.1 HAKS will provide input into design options/alternatives on how to maintain facility operations and minimize patron inconveniences.
B.2 HAKS will review construction staging and recommend changes, as appropriate, throughout the construction phases of the contract.

Construction Staging and Phasing Plans

Logistics is the art and science of defining and managing the procurement, maintenance and transportation of material, equipment, and personnel—that is, management of the details in support of the construction activities. Logistics starts at the onset of the project and, properly developed, assists in the planning and design of the project. HAKS will develop logistics plans addressing the project's requirements for control of material, traffic, site security, utility services, facilities, safety and construction staging. This

logistics planning will coordinate all of the work in and around construction zones so as to mitigate impact on the surrounding communities and provide the most expeditious construction progress.

Control of the project and the ability to manage the construction process in densely populated urban areas over a period of years is an ambitious and challenging endeavor. There will be multiple contractors, numerous mobilizations and work sites, large volumes of material, and significant labor force utilization, construction traffic and activity. Development of a sophisticated and usable logistics plan will be a key element in properly managing project assignments, and the plan should be developed as project design develops.

HAKS is uniquely qualified to manage development of the logistics plan for PANYNJ projects. Our unique combination of relevant experience, public and private sector exposure, previous and current participation in large, highly visible projects and dedication to excellence, will provide the Authority with all of the tools needed to complete each project safely, on time and within budget.

Safety and Maintenance and Protection of Traffic. HAKS understands the challenges posed by construction on heavily traveled transportation facilities, and the need for effective MPT. **We place the highest priority on achieving a safe working environment, both for the traveling public and for all personnel working at the site.** It cannot be repeated often enough that safety is of primary concern on every construction project. However, unless the consultant is ever vigilant, it might be taken for granted on "on-call" assignments. We are aware of this and will never be complacent about safety. Our field personnel are ever mindful that the smallest and largest tasks alike require the same high level of safety concern, inspection and enforcement.

We regard safety as the most critical element on any construction site, and our field staff focuses on maintenance and protection of traffic, public and worker safety every day. Before any work begins we will make sure that the contractor submits a **health and safety plan** that gives due consideration to the specific site conditions and ensures that contractor personnel are OSHA trained. Once the work starts, we will make sure that the contractor implements the plan and safety procedures. We will recommend to the Department a no-tolerance safety policy, and will report any offenses found, detailing the circumstances and responses as related to the contractor's operations. Our Quality Assurance inspections typically include tailgate talks for continued safety education. As noted above, HAKS has its own in-house, certified OSHA trainer in Safety Officer Lawrence King, P.E., who will make sure everyone assigned to this project has the 10-hour OSHA safety course.

HAKS' policy, reinforced through Mr. King's efforts, is to assure safe and healthful working conditions for all workers by assisting and encouraging compliance with the OSHA Standards for the Construction Industry.

Fall Protection. The HAKS team will see that good housekeeping methods and proper supervision are provided in order to minimize slips, trips and falls. We will review the contractor's health and safety plan for fall protection and other requirements for working at elevated heights and close to vehicular and rail traffic. We will check that workers are equipped with fall protection gear and that they are tied off when necessary. Any time employees are required to work more than 6 feet above ground, safety harnesses and lanyards must be worn to arrest falls. The lanyards must be of the locking snap hood type, be attached to the belt via a D-ring at the rear of the belt, and be no more than 6 feet long. Two lanyards must be worn to provide 100% tie-off at all times, i.e., when moving from one anchorage to another, one lanyard is always connected. A safety cable will be installed at all elevated work areas to allow workers to tie off. This cable will not be used for other purposes, such as supporting scaffolding. All consultant employees will be trained in the use of fall protection equipment and be provided such equipment at no expense to them. Health and Safety Officer King will ensure compliance with this policy and provide continual supervision of workers.

C. Schedule Development and Monitoring

HAKS will develop a detailed construction schedule for individual contracts. The schedules shall identify the critical path and address staging, project interferences, facility operational restraints and other requirements. Schedules will be updated on a continuous basis. When problems are identified that impact the schedule, HAKS will recommend alternative solutions to minimize or eliminate any negative impact on the schedule.

We will review contractor schedules, as received, for consistency with contract requirements and appropriateness, provide comments and recommend schedules for approval or disapproval, as appropriate, giving reasons. Our staff will provide regular monitoring of contractor schedules as construction progresses. Where contractor schedules are not in conformance with contract requirements, we will recommend methods to accelerate the contractor's work to meet requirements.

D. Quality Assurance Inspection

The HAKS team will provide civil, structural, mechanical and electrical inspection services, as needed, to ensure conformance to all construction contract requirements by the contractors involved. These services shall include but not be limited to, monitoring the contractor's conformance to contract requirements, to conformance with safety requirements (including maintenance and protection of traffic), and to quality construction standards.

Quality Assurance/Quality Control. Inherent in the way the HAKS Team conducts business is ensuring the quality of construction through a rigid application of quality

assurance plans and quality control procedures developed on a project-specific basis. These will then guide the HAKS staff, which provides the first line of defense for QA/QC in the field. Our Project Manager will regularly review the implementation, status and adequacy of the QA plan. HAKS management will review and audit the QA program and its applications to assure that it is functioning properly and producing the intended quality results. These audits will check into procedures, record keeping, review of work, identification of conditions adverse to quality and corrective actions, construction documents and standards, changes, as-built records, control of purchases, construction process controls and inspection controls. Adjustments will be made immediately to correct any deficiencies found. **In addition, Lawrence King, in-house quality assurance officer (QAO) for HAKS, will provide independent quality audits of all work on a regular basis.**

Management Review and Audit. The QAO shall regularly review the adequacy of the quality program, and implement necessary program additions or changes. This review may be accomplished by:

- Review of project reports.
- Discussions with project and client personnel.
- Formal audit by an independent audit team.

Formal audits shall include an evaluation of quality assurance practices, procedures, and instructions; the effectiveness of implementation; and conformance with policy directives. In addition, the audits shall include evaluation of work areas, activities, processes and items, and review of documents and records.

The QAO shall define the scope of the audit and select an audit team experienced in auditing techniques, competent in the technical areas to be evaluated, and independent of project responsibilities. Mr. King will see that the audit is planned and carried out in accordance with written audit procedures or checklists, and the results will be reported back to him, who is responsible for initiating and evaluating corrective action.

Inspection Planning shall include:

- Production/inspection sequencing and identification of mandatory hold points.
- Inspection procedure, personnel qualification and equipment requirements.
- Scheduling inspector training and certification.
- Identifying inspection and testing to be subcontracted.
- Scheduling inspections and tests.
- Identifying individuals authorized to request and to approve inspections and tests.

Inspection Procedures. The QAO shall prepare inspection procedures that establish:

- characteristics to be inspected.
- inspection methods.
- acceptance and rejection criteria.
- methods for recording inspection results.
- special preparation, cleaning, or measuring devices.

Inspection Records. Inspection and testing records shall be identified, collected and indexed to assure retrieval. The records shall include the results of reviews, inspections, tests, and audits, monitoring of work performance, materials analyses, and inspection logs. The records shall also include, as appropriate, closely related data such as qualifications of personnel, procedures, and equipment. Inspection and test records shall, at a minimum, identify the date of inspection or test, the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any deficiencies noted.

Required records shall be legible, identifiable, and retrievable. They shall be reviewed to assure legibility and completeness. The records shall be suitably protected against fire, theft, and damage. The QAO shall identify, collect, review, index, maintain and arrange for the transfer of inspection records to the Authority, which may be done periodically during the project and at the end of the project. The Project Manager shall obtain the specific consent of the Authority prior to the destruction of any inspection records.

Corrective Action for Conditions Adverse to Quality. Conditions adverse to quality may be identified by a number of techniques:

- Audits of HAKS by the Authority.
- Internal HAKS audits.
- Audits of suppliers by HAKS.
- Project reports.
- QAO review of projects.
- Discrepancy Reports.

Each of these techniques has a mechanism to correct the condition found to be adverse to quality; for example, the audit technique has the audit report and response to the audit report mechanism; the project report and the QAO review result in management action; and the discrepancy report has the disposition mechanism.

Significant Conditions Adverse to Quality. These conditions are those that extend beyond a single condition or item. A significant condition adverse to quality must be generic in nature to a large number of items, or a deficiency in the quality program. Each condition adverse to quality shall be analyzed to see if it represents a significant adverse quality condition. The individual making the disposition of the condition shall perform this analysis. The QAO shall perform an analysis to determine if there are any broad programmatic problem areas or if any negative trends are detectable. This analysis shall be performed at least semi-annually, as part of the management review.

E. Contract Administration

HAKS will provide services in support of administering construction inspection contracts, including developing and processing of post-award contract changes (PACC) and change orders, processing time and material (T&M) records, payment applications, updating computer data bases such as CONTRAK, status reporting, document control, and attending contract status meetings.

Our proposed Project Manager, Paul Cavota, and the Construction Managers, Resident Engineers, assistant construction managers and chief inspectors he assigns will establish lines of communication with the Port Authority, the designer, contractors and relevant agencies, and will coordinate with all project participants, review project status, assess work performance, monitor job progress and quality assurance, modify schedules and coordinate manpower requirements. They will schedule and chair progress meetings regularly. Preconstruction meetings will be held with the successful contractor to familiarize him with all aspects of the contract requirements, including scheduling, reporting, Port Authority procedures, force account record keeping and more. They will assist the Authority as requested in developing an information service that will help minimize the impacts of the project. They will monitor the contractors' compliance with all planning and scheduling requirements, including a detailed CPM network showing the work of the entire contract, which will be updated regularly and reported on throughout the life of the project; reports will include current information on materials and equipment orders and shop drawing schedules. They will see that final contract drawings are revised to show actual construction of all of the features of the work, and that CD ROM records of the as-built drawings are provided to the Authority.

The Project Manager and Assistant Project Manager will be responsible for assigning personnel to and from the project as needed. They will select from the people presented in this proposal and others who might be needed because of their specialized abilities. Selection will be made on the basis of experience, professional licensing requirements, NICET level, certification and training. They will submit resumes of all the candidates to the Port Authority for approval. Each of the candidates that we assign will meet the Authority's requirements for experience, training and licensing or certification, will have the knowledge and expertise for that work, and will be familiar with Port Authority engineering and construction procedures, policies, standards, reporting, record keeping, force account record keeping and the project plans and specifications. Mr. Cavota has the authority to reach within the HAKS organization to draw on whatever resources may be needed to meet any technical challenges that develop. He will supplement our field staff with home office backup as needed to meet project requirements and to solve problems. In this respect it should be noted that the HAKS will come to the project with a very large staff of management support personnel that we will draw on when and where needed.

F. Cost Engineering/Estimating Services

HAKS will provide these services throughout design and construction stages in accordance with the Authority's "Construction Estimating Guide". Estimates will be made of the construction duration and completion time, and of the delivery times for all long-lead items. We will provide experienced construction cost professionals to carry out all cost engineering and estimating assignments that the Authority makes. There is a wide variety of cost estimating techniques available to HAKS, which we will select and apply according to the complexity of the project being investigated. In addition, different types of estimates may be used in various stages of a project, among them feasibility

estimates, appropriation estimates, capital cost estimates and definitive estimates. We maintain and regularly update in-house data files with standard cost indexes.

The degree of effort in estimating will be keyed to the stage of the project. During the preliminary design phase the quantities of major items of work will be considered, using unit prices and 10% to 15% contingency. Construction cost estimates will be prepared when final design is completed and approved by the Authority. During this final phase, we will compile all item quantities accurately based on the final drawings. All of our estimates will be presented in CSI format.

HAKS approach to budget management will be proactive, whether we are assigned to work on costs at the design stage or during construction. In design, for example, we will assist the Authority in reviewing all A/E cost submittals to verify that project costs remain within the budget. A uniform estimating framework will be established and maintained throughout the project life, which will facilitate consistent cost reporting and ready identification of cost changes as the design develops. Detailed cost estimates with contingencies will be developed in CSI format in every phase of the design, based on a complete set of drawings and specifications for each phase. Our cost reviews will verify that:

- unit costs are accurate;
- quantity takeoffs are accurate;
- all design elements are included;
- level of detail is appropriate to the design stage;
- cost estimating systems are acceptable;
- formats are correct, with cost escalation factors properly applied;
- up-to-date scope modifications are reflected.

We will document and analyze costs continually throughout the design or construction project. The formal cost estimates will then be reported to the Authority in appropriate forms with detailed backup. For a construction project, we will generate cost estimates as requested by the Port Authority. At the start of the work assignment, the Project Manager will meet with the Authority and contractor to determine the cost of the proposed work and how it affects the project budget. We will do the same for extra work, change order work or additional work ordered by the Authority. Based on our analyses, we will recommend where corrective actions might be taken to bring costs back into line if they appear to be exceeding the project budget. If ordered by the Authority, the Project Manager will prepare an immediate change order to address any work that exceeds the original forecasted budget.

G. Resources

HAKS will provide expert professional construction management staff, material testing services (as a prime and not as a sub-consultant) and vehicles as needed to perform the required services.

HAKS has its own Material Testing Lab where we do asphalt, concrete including pre-cast concrete, soils and steel testing for a number of agencies including the Port Authority of New York and New Jersey, New York Thruway Authority, New Jersey Turnpike Authority, New York City Transit, New York City School Construction Authority and others. **Lab Director Eugene Takhtovich, PhD, P.E.,** is a recognized expert in cast-in-place and pre-cast concrete, concrete mix design, field and laboratory QA/QC procedures and their use in construction. He leads our New York City Department of Buildings (NYCDOB) licensed concrete testing laboratory with a team of laboratory technicians skilled in performing complicated testing and reporting with 100% consistency. Mr. Takhtovich's efforts and laboratory staff provide clients with the assurance that quality materials as designed and specified, will go into their projects.

Special Inspection Management Approach

Should the Authority require Special Inspections, HAKS is can provide this service. We take a proactive or "non-compliance preventive" approach to Special Inspection services and have worked successfully in the past on this service as the owner's representative and consultant. Our special inspection professionals include 10 certified welding inspectors.

- **Work Assignments.** Our assigned staff will review all construction documents and specifications for new construction and confirm the identified special inspections, along with the time line to needed to successfully meet the needs on site.
- Project Kick-Off. The HAKS Project Management Team, including a member of senior management, will attend the kick-off meeting for the project at which time the required Special Inspections will be presented. The Team will inform the owner's representative, contractor, subcontractors, engineer and architect of record of the requirements of these inspections and review the construction schedule and time line to anticipate the dates that these inspections and inspectors will be needed on site; the meeting will define the special inspections requirements and answer any questions about it. As part of our overall partnering effort, we will involve the contractor, and all participants will be made aware of the critical nature of these inspections. Contractors will be advised not to call for special inspections unless they are fully prepared to meet the required acceptance criteria. We will work closely with all parties to save the owner both time (delays in construction to fix faults) and money (cost for multiple inspections and the associated cost of additional construction management time).
- **Trades Kick-Off Meetings.** The HAKS project management team will meet with each trade that requires special inspections, i.e., concrete, masonry, welding, erection and bolting and others. This will allow specific subs to also be aware of the special inspection process and the need for compliance.
- **Reporting.** HAKS provides extensive reporting, not only from reports logged and kept at field sites, but also the reports reviewed by the PM team and forwarded to off-site managers. These reports focus on construction progress as it relates to special inspections and compliant and non-compliant items. There will be a progress report, punch-list report and material testing results reports for concrete, masonry and density tests that will verify structural, code and specification results as they relate to design requirements.

- **Field Visits.** Extensive field visits are a part of the ongoing benefits the HAKS team offers to the Authority, by providing timely advice concerning job progress, field conditions, contractor and subcontractor performance and the like. This will work not just to the advantage of the owner but to that of all stakeholders as well.
- **Management Meetings.** We will attend all regular meetings and provide complete updates on project schedules, along with special inspection issues and their scheduling.
- **Closeout and Final Meetings.** As the project nears completion, critical meetings will be scheduled on and off-site to advise all parties of efforts required that will allows HAKS to give final approval of all required Building Code sign-offs.

WHY HAKS?

HAKS believes that our firm is uniquely qualified to perform Expert Professional Construction Management and Related Technical Services of this on-call contract, as we have done on previous contracts that the Authority has entrusted us with. We offer an experienced, expert staff that has performed successfully on three previous, consecutive Port Authority on-call contracts. We provided outstanding professionals to staff the on-call assignments that we were asked to fill, some of whom are still carrying out these assignments. Among these highly rated individuals is Assistant Project Manger Frank Verderame, who served as Office Engineer from 2002 to 2005, then as HAKS' Project Manager for the 2007 to 2009 on-call contract. They also include James Reynolds, Georgina Inturrissi and Reda Gendy, Office Engineers; Richard Koch and Elliot Greenberg, Fire Protection Engineers; Michael Farruggia, Assistant Resident Engineer; Mikel Ramessan, Senior Inspector; and Evelyn Aguilera, Administrative Assistant.

No better example of the quality of personnel that HAKS assigns to Port Authority on-call work can be advanced than what Thomas P. McGinty, AIA, Architect of Record for the W Hotel on the Hoboken South Waterfront, had to say about Michael Farruggia:

"If I had to single out one individual for the project's construction and occupancy success, it would be Mike Farruggia. His even tempered approach to all problems and his timely scheduling of every review ensured our progress at every stage. He meticulously followed up on any minor deficiencies from any inspection so that nothing was left lingering to create a future problem. Most importantly, Mike's easy going nature makes him extremely adept at arbitrating minor disagreements between our contractors, the Port Authority reviewers and myself. He always maintained a positive attitude that things can be resolved and never lets a stand off remain unaddressed. He was a true advocate for the success of the project."

HAKS would like to continue serving the Port Authority of New York and New Jersey with the same high level of professional services and high quality individuals that we have provided on our three previous on-call contracts. We look forward to continuing our excellent relationship with the Port Authority by being selected to provide the required services on this contract.

HAKS Engineers, Architects and Land Surveyors, P.C. has no conflict of interest in performing services for Port Authority of New York and New Jersey.

HAKS Engineers, Architects and Land Surveyors, P.C. has no exceptions with the standard agreement and its terms and conditions.

Alberto Villaman, P.E.
Vice President

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

By

Office of Business & Job Opportunity

HAKS Engineers, Architects and Land Surveyors, P.C.

Certificate PA-27372

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: March 15, 2010

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: March 5, 2015

Form: 6/10/93

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

HAKS ENGINEERS ARCHITECTS AND LAND SURVEYORS PC
40 WALL STREET
11TH FLOOR
NEW YORK, NY 10005-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0005960

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

THE PORT AUTHORITY OF NY & NJ

RECEIVED
MAR 18 2010
HAKS Engineers, Architect and Land Surveyors, P.C.

March 5, 2010

Mr. Husam Ahmad
President
HAKS Engineers, Architects and Land Surveyors, P.C.
40 Wall Street, 11th Floor
New York, NY 10005

RE: **MBE CERTIFICATION**
TYPE: **Architectural & Engineering**

Dear Mr. Ahmad:

This is to acknowledge receipt of the Uniform Certification Application which your firm submitted **HAKS Engineers, Architects and Land Surveyors, P.C.** has been included on our roster of eligible **Minority Business Enterprise (MBEs)** for contracts with the Port Authority of New York and New Jersey.

Please be advised that the Port Authority's Office of Business & Job Opportunity periodically reviews all certifications and reserves the right to decertify any previously certified firm that no longer meets the Port Authority's guidelines for **MBE** designation.

Additionally, any **MBE** whose business incurs changes in any substantial manner must notify the Office of Business & Job Opportunity within thirty days of that change. These changes include, but are not limited to, a change of officers, directors, location, corporate name, or financial condition. Failure to advise of these changes may result in our removing the firm from our roster of eligible **MBEs.**

If you have any questions regarding your certification, please feel free to contact Marvin Morency at (212) 435-7807.

Sincerely,

Lash Green
Director
Office of Business & Job Opportunity

LG/MM

Enclosures: Certificate
Registration Notice

233 Park Avenue South
New York, NY 10003
T: 212 435 7000

New York City Department of Small Business Services

Division of Economic and Financial Opportunity

MBE CERTIFICATE

Haks Engineers and Land Surveyors, P. C.

This certificate acknowledges that this company has met the criteria as established by the M/WBE Program at the New York City Department of Small Business Services and therefore is certified as a Minority-owned Business Enterprise (MBE).

Certificate Number: 22795 - 122008

Expires on: 12/31/2013

Michael R. Bloomberg, Mayor

Robert W. Walsh, Commissioner

Alfred O. Milton, Associate Director Certification

RMJ-10/04

THE PORT AUTHORITY OF NY & NJ

OFFICE OF BUSINESS AND JOB OPPORTUNITY
ECONOMIC DEVELOPMENT DEPARTMENT
NEWARK LEGAL CENTER
ONE RIVERFRONT PLAZA, 9TH FLOOR
NEWARK, NEW JERSEY 07102

(212) 435-7000
(973) 961-6600

February 28, 2001

Mr. Umesh Jois
President
JCMS, Inc.
P.O. Box 8166
Turnersville, NJ 08012

RE: MBE CERTIFICATION
TYPE: PURCHASING PROGRAM

Dear Mr. Jois:

This is to acknowledge receipt of the Uniform Certification Application which your firm submitted. JCMS, Inc. has been included on our roster of eligible Minority Business Enterprises (MBE) for contracts with the Port Authority of New York and New Jersey.

Please be advised that the Port Authority's Office of Business and Job Opportunity periodically reviews all certifications and reserves the right to decertify any previously certified firm that no longer meets the Port Authority's guidelines for MBE designation.

Additionally, any MBE whose business changes in any substantial manner must notify the Port Authority within thirty days of that change. These changes include, but are not limited to, a change of officers, directors, location, corporate name, or financial condition. Failure to advise us of these changes may result in our removing the firm from our roster of eligible MBEs. If you have any questions regarding your certification, please feel free to contact **Cecelia A. Wallace at (973) 565-5534.**

Sincerely,

Wilfred Chabrier
General Manager
Economic Development Department

WC/CAW/bdd

CC: C. Wallace, I. Perich

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

MAITRA ASSOCIATES PC
450 SEVENTH AVE
SUITE 2505
NEW YORK, NY 10123-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0006048 DUPLICATE

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Kenneth J. Ringler, Jr.
Executive Director

Certified

by

Small Business Programs

Maitra Associates, P.C.

Certificate PA-97

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
General Manager
Certified: January 27, 2006

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: January 26, 2011

Form: 6/10/93

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Anthony E. Shorris
Executive Director

Certified

by

Office of Business & Job Opportunity

Entech Engineering, P.C.

Certificate PA-15304

This certificate acknowledges that the above named firm is certified as a **Woman-owned Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: May 4, 2007

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: May 3, 2012

Form 6 [illegible]

Acknowledgement of Addenda

HAKS

ADDENDUM NUMBER	DATE RECEIVED
Addendum #1	August 6, 2010
Addendum #2	August 9, 2010
Addendum #3	August 10, 2010
Addendum #4	August 12, 2010
Addendum #5	August 19, 2010

Alberto Villaman, P.E.
Vice President

AUGUST 2010

Proposal for the Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011 Through 2014

RFP # 22094

SUBMITTED TO:

THE PORT AUTHORITY OF NY & NJ

SUBMITTED BY:

PB Americas, Inc.

Parsons Brinckerhoff

One Penn Plaza
New York, NY10119
212-465-5000
Fax: 212-465-5737

August 23, 2010

The Port Authority of New York & New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attention: RFP Custodian

Re: RFP No. 22094 - Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014

PB Americas, Inc. (PB) is pleased to submit this proposal to provide Expert Construction Management and Related Technical Services to the Port Authority of New York and New Jersey (Authority) on a "Call-In" basis for years 2011 through 2014. We have been providing these same services to the Authority under our current Call-in agreement for the years 2006 – 2010, and look forward to continuing our excellent working relationship through this contract.

PB, founded in 1885, is one of the oldest continually operating consulting engineering firms in the United States. The firm is an international leader in providing expert engineering and construction management services for airports, bridges, tunnels, ports, buildings and rail transit systems. We bring to the Authority a cadre of multi-disciplined professionals with the full range of technical expertise necessary to support the Authority on any assignment. PB has an impressive record of performance with the Authority and extensive experience with providing construction management and other technical services on a call-in basis for several decades. Because of our breadth of experience, depth of professional resources and longstanding record of performance for the Authority, we are confident that PB is perfectly equipped to serve the Authority under this agreement.

Directing the services of PB for this project is two of our leading construction management professionals, who together offer the ideal background and experience to serve the Authority. *Mr. Garry E. Nunes, Principal-in-Charge and Mr. Gerry Chi, Project Manager and are fully committed to meeting every need of the Authority under this agreement.* As the Project Manager of several similar call-in contracts, Mr. Chi understands the needs of the clients and has a successful track record of providing the timely service. He is currently serving in this same capacity on our current Call-in contract during 2006-2010 with the Authority. *Mr. Nunes has been providing construction management services to the Authority since 1987 under numerous similar agreements.* During the past 23 years he has provided services at virtually every facility of the Authority. The knowledge and experience combined with the commitment of Mr. Nunes and Mr. Chi offers the Authority an assurance that we will meet or exceed all of your expectations.

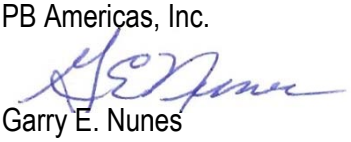
PB recognizes and supports the Authority's long-standing practice to encourage Minority and Women Owned Business Enterprises (MBE/WBE) to seek business with the Authority. For this agreement we have selected some of the region's most well respected and top performing MBE and WBS firms to join our team. The Hirani Group (MBE), LPE Enterprises, Ltd. (WBE), Maitra Associates, P.C. (MBE), and JCMS, Inc. (MBE) each have considerable work experience with PB and the Authority. In fact these same firms have supported PB on many of our call-in agreements including our current CM call-in agreement for 2006 – 2010 with the Authority. PB is can confidently assure the Authority that we will meet or exceed the established participation goals of 12% MBE and 5% WBE.

PB brings to the Authority everything needed to be successful:

- Demonstrated compliance with the Authority's prequalification requirements
- Multiple local offices located within the Port District
- Extensive professional CM resources living and working in New York and New Jersey
- Long-standing Certificate Of Authorization to practice Engineering in New York and New Jersey
- An exhaustive cadre of licensed professionals and certified technicians in every specified technical discipline
- Specific reagent experience with the Authority and numerous other public agencies providing professional construction management services on a call-in basis
- A time-proven management approach to provide exceptional professional services on any assignment
- Leadership with a long history of serving the Authority's Construction Management Division across a wide resection of Authority facilities.
- A commitment to the Authority that is unsurpassed.

We sincerely look forward to supporting the Authority as an extension of your staff. If you have any questions or require any additional information. Please do not hesitate to contact me at 212-465-5127 or nunesg@pbworld.com.

Very truly yours,
PB Americas, Inc.



Garry E. Nunes
Sr. Vice President
National Director of Construction Services

A

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

PB Americas, Inc.
(Company)

(Signature)

Senior Vice President / New York Area Manager
(Title)

August 16, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

B

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #22094)

1. Company Name (print or type):

   PB Americas, Inc.

2. Business Address (to receive mail for this RFP):

   One Penn Plaza
   New York, NY 10119

3. Business Telephone Number: *212-465-5200*

4. Business Fax Number: *212-465-5737*

5. Firm website: *www.pbworld.com*

6. Federal Employer Identification Number (EIN): [redacted]
7. Date (MM/DD/YYYY) Firm was Established: *10/5/1933 (date of incorporation)*
8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See Section I - Affiliates

9. Officer or Principal of Firm and Title:

   Garry E. Nunes, Senior Vice President, National Director of Construction Services

10. Name, telephone number, and email address of contact for questions:

    Garry E. Nunes, Senior Vice President
    Tel [redacted]
    Email: [redacted]

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/ SBE)? ☐ Yes X No

    If yes, please attach Port Authority certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/DoingBusinessWith/economic/html/objo.html to receive information and apply for certification.

C

C. PROPOSER REQUIREMENTS

The following summary clearly demonstrates that the PB and its team far exceed the minimum requirements established in the RFP.

A. PB, whose corporate headquarters office is located in the heart of New York City, also has principal offices in Newark and Princeton, New Jersey. Our team members also have offices in the New York/New Jersey Metropolitan Area. Our firm and team significantly exceed the required 50 individuals on staff who are experienced in performing construction management and/or construction inspection services in the New York/New Jersey Metropolitan Area. The following table offers a summary of experienced staff located in the immediate vicinity of Authority facilities:

	PB	Hirani	JCMS	LPE	Maitra	
Discipline	**Number of Employees**					**Total**
Construction Management	98	7	8	16	2	**131**
Construction Inspection	120	18	16	9	15	**178**

B. PB's Certificates of Authorization to practice Professional Engineering are attached.

C. Our team is highly experienced in performing construction inspection services in all of the following disciplines: Civil, Structural, Electrical and Mechanical Engineering. The following is a small sampling of the skilled staff which fulfill the Authority technical certification requirements:

1. Engineers/architects licensed in the states of NY and/or NJ	2. ACI Concrete Construction Special Inspectors	3. ICC Certified Structural Steel and Bolting Inspectors	4. NACE Level 1 coatings certified
J. Fedun, PE	J. Conroy	W. McMahon (Maitra)	I. Parbhunath
T. Marko, PE	W. Gallagher	J. Petekiewicz (Maitra)	
M. Norris, PE	E. Glazer	K. Sachdev (Maitra)	
M. Markowitz, PE	D. Castelli		
R. Moran, PE	M. Rasheed		
P. Sweeney, PE	S. Pfeiffer		
J. Moore, PE	D. Reilly		
D. Shubber, PE	K. Bines		
S. Fawzy, PE	M. Hanna, PE		
M. Stein, PE	J. Olynyk		

NEW YORK STATE EDUCATION DEPARTMENT

EACH CORPORATION LAWFULLY PRACTICING THE PROFESSION INDICATED HEREON MUST CONSPICUOUSLY DISPLAY THIS CERTIFICATE IN ITS PRINCIPAL OFFICE AT ALL TIMES AS AUTHORITY TO PRACTICE DURING THE CURRENT PERIOD
(In the event of a change of address return this certificate for correction)

THIS IS TO CERTIFY THAT

PB AMERICAS INC
ATTN: KATE CICHY
PB AMERICAS INC
TWO GATEWAY PLAZA/18TH FLOOR
NEWARK NJ 07102-0000

HAVING MET THE STATUTORY REQUIREMENTS OF THE STATE OF NEW YORK IS REGISTERED FOR THE PRACTICE OF PROFESSIONAL ENGINEERING

Triennium Ends: October 31, 2012 Serial No. 99080

Michael J. Abrahamson
Signature of Chief Executive Officier

PRESIDENT OF THE UNIVERSITY AND COMMISSIONER OF EDUCATION

Read instructions on reverse side

State of New Jersey

Division of Consumer Affairs
State Board of Professional Engineers and Land Surveyors

THIS CERTIFIES THAT

PB AMERICAS, INC.
ONE PENN PLAZA
New York NY 10119

Has met the requirements of the State Board of Professional Engineers and Land Surveyors and is hereby issued a

CERTIFICATE OF AUTHORIZATION

to offer the following services

Engineering	***08/26/2008***	***08/31/2010***

Person in Responsible Charge GREGORY A KELLY

For the names of other Responsible Charge Licensees, go to: http://www.njconsumeraffairs.com/pels/certrpt.pdf

Date: December 15, 2008
Certificate No. 24GA28029800
Expiration: 08/31/2010

Arthur Russo

Executive Director

D

D. MULTIPLIER

The PB proposed multiplier for this agreement is 2.25, which is comprised of the following:

Component of Multiplier	2009 Audited OH Rate	Agreement Proposed Rate
Fringe Benefits on Direct Labor • Payroll Taxes • Group Insurance and Workers' Compensation • Fringe Salaries • Other Employee Benefits	33.0%	33.0%
General Overhead Expenses • Office rent • Indirect Salaries • Other insurances and taxes • Other items of overhead	81.3%	71.3%
Profit	10%	10%
Total Multiplier	2.36	2.25

The PB most current supporting overhead schedules for Audit Year 2009 are attached.

Supporting documentation for multiplier calculation and overhead rate schedules for our MBE and WBE subconsultants are also attached.

PB Americas, Inc.
and Certain Subsidiaries

Schedule of Base Field Overhead

Year Ended October 27, 2009

		Total Costs	Percentage of Direct Labor
Direct Labor Base	**$**	**70,520,143**	
Fringe Benefits (Direct Labor)			
Payroll Taxes		5,942,832	8.4 %
Group Insurance and Workers' Compensation		5,902,685	8.4
Fringe Salaries		8,794,609	12.5
Other Employee Benefits		2,625,469	3.7
Total Fringe Benefits (Direct Labor)	**$**	**23,265,595**	**33.0 %**
General Overhead Expenses			
Office Rent		3,524,766	5.0
Depreciation		650,542	0.9
Amortization		384,943	0.5
Repairs and Maintenance		996,946	1.4
Indirect Salaries		22,197,188	31.7
Fringe Benefits (Administrative)		7,348,128	10.4
Computer, Supplies, Reproduction		1,663,784	2.4
Travel and Related Expenses		1,650,440	2.3
Office Relocation and Moving		159,254	0.2
Communications		454,700	0.6
Subscriptions, Books, Publications		276,157	0.4
Consultant Fees		1,097,940	1.6
Additional Compensation		4,828,915	6.8
Miscellaneous Expenses		(17,290)	0.0
General Insurance Others		848,385	1.2
E & O Insurance		1,936,716	2.7
Other Taxes		484,394	0.7
State & Local Income Taxes		1,351,424	1.9
Audit and Legal		872,431	1.2
Bids and Proposals/Research and Development		6,652,638	9.4
Total General Overhead Expenses	**$**	**57,362,401**	**81.3 %**
Total Allowable Overhead For Profit Calculation	**$**	**80,627,996**	**114.3 %**
Facilities Cost of Capital	**$**	**122,980**	**0.2 %**
Total Allowable Overhead Including Facilities Cost of Capital	**$**	**80,750,976**	**114.5 %**
Non-Allowable Expenses:			
Interest Expense		(706)	0.0
Bad Debts (Credit)		(140,312)	-0.2
Professional Listings		1,577	0.0
Charitable & Unallowable FAR Costs		4,513,098	6.4
Entertainment		63,393	0.1
State Tax Expense		(3,245,116)	(4.6)
Federal Tax Expense		(2,876,933)	-4.1
Total Non-Allowable Overhead Expenses	**$**	**(1,684,999)**	**-2.4 %**
Total Base Field Office Overhead	**$**	**79,065,977**	**112.1 %**

See accompanying notes.

HIRANI ENGINEERING & LAND SURVEYING, P.C.
CONSOLIDATED STATEMENT OF DIRECT LABOR,FRINGE BENEFITS AND GENERAL OVERHEAD
FOR THE CALENDAR YEAR ENDED DECEMBER 31, 2008

DIRECT LABOR	Proposed	VOLUNTARY REDUCTIONS	NET COSTS	FAR ADJUSTMENTS	FAR REFERENCES	AUDITED	ALLOCATION BASIS	FIELD	HOME OFFICE
Direct Technical Labor	4,569,220	(78,420)	4,490,800		(1) 31.202	4,490,800	Actual	1,777,422	2,713,378
FRINGE BENEFITS									
Group Insurance	418,776		418,776	(2,819)	(2) 31.205-19 (2) (	416,957	39.58%	164,632	251,325
Paid Leaves & Bonus	714,327		714,327			714,327	39.58%	282,725	431,602
Payroll Taxes & Fringe Benefits	555,557		555,557			555,557	39.58%	219,885	335,672
Pension Plan Fees	13,924		13,924			13,924	39.58%	5,511	8,413
Total Burden & Fringe Benefits	1,702,584	-	1,702,584	(2,819)		1,699,765		672,753	1,027,012
GENERAL OVERHEAD									
Administrative & Indirect Technical Payroll	2,108,967		2,108,967			2,108,967	39.58%	834,712	1,274,255
Auto Expenses & Leasing	251,139		251,139	(9,120)	(3) 31-205-8 (2) (1'	242,019	14.75%	35,696	206,321
Bank Charges	4,690		4,690			4,690	39.58%	1,856	2,834
Bid & Proposal Costs	4,705		4,705			4,705	39.58%	1,862	2,843
Computer Supplies & Services	93,598		93,598			93,598	14.75%	13,806	79,792
Depreciation	110,284		110,284	(2,029)	(4) 31-205-11 (a)	108,255	14.75%	15,968	92,287
Equipment Rental	73,942		73,942			73,942	14.75%	10,906	63,036
Field & Surveying Supplies	35,281		35,281			35,281	Actual	-	35,281
Insurance-General Liability	63,648		63,648			63,648	39.58%	25,191	38,457
Insurance-Professional Liability	94,369		94,369			94,369	39.58%	37,350	57,019
Insurance-Workers Compensation	34,642		34,642			34,642	39.58%	13,711	20,931
Messengers & overnight delivery	20,072		20,072			20,072	14.75%	2,961	17,111
Office & Technical Supplies	130,004		130,004			130,004	14.75%	19,176	110,828
Outsourced Services	92,558		92,558	(18,534)	(5) 31.201-2	74,024	14.75%	10,919	63,105
Postage & Shipping	2,383		2,383			2,383	14.75%	351	2,032
Professional Development Expenses	52,193		52,193	(18,534)	(5) 31.201-2	33,659	39.58%	13,322	20,337
Professional Dues, Licenses & Subscriptions	78,358		78,358			78,358	39.58%	31,013	47,345
Professional Fees-Legal & Accounting	143,558		143,558			143,558	39.58%	56,819	86,739
Recruitment Expenses	11,321		11,321			11,321	39.58%	4,481	6,840
Rent	272,958		272,958			272,958	14.75%	40,261	232,697
Repairs & Maintenance	3,659		3,659			3,659	14.75%	540	3,119
Subscriptions & Publications	10,788		10,788			10,788	14.75%	1,591	9,197
Taxes-State & Local Income	5,740		5,740			5,740	39.58%	2,272	3,468
Telephone	89,802		89,802			89,802	14.75%	13,246	76,556
Travel & Transportation	62,149		62,149			62,149	14.75%	9,167	52,982
Union Funds	528,576		528,576			528,576	Actual	-	528,576
Utilities	31,531		31,531			31,531	14.75%	4,651	26,880
Advertising & Promotion	5,568	(5,568)	-		(6) 31.205-1	-	-	-	-
Bad Debts	757,789	(757,789)	-		(7) 31.205-3	-	-	-	-
Business Gifts	323	(323)	-		(8) 31.205-13	-	-	-	-
Charitable Contribution	7,430	(7,430)	-		(9) 31.205-8	-	-	-	-
Entertainment	73,449	(73,449)	-		(10) 31.205-14	-	-	-	-
Interest	119,219	(119,219)	-		(11) 31-205-20	-	-	-	-
Luncheons & Functions	27,905	(27,905)	-		(10) 31.205-14	-	-	-	-
Miscellaneous						-	-	-	-
Total General Overhead	5,402,598	(991,683)	4,410,915	(48,217)		4,362,698		1,201,830	3,160,868
Total Indirect Costs	7,105,182	(991,683)	6,113,499	(51,036)		6,062,463		1,874,583	4,187,880
Overhead Rate	155.50%		136.13%			135.00%		105.47%	154.34%

JCMS, Inc.
Statement of General & Administrative Expenses
Fringe Benefits and Direct Labor
For the Year ending December 31, 2009

Expense Item Description	Total Expense	FIELD	OFFICE	Unallowable	
Salaries & Wages					
Direct Labor	$3,339,238.26	$3,039,175.72	$300,062.54		
FRINGE BENEFITS					
Sick, Holiday & Vacation Pay	$418,404.01				
Payroll Taxes	$715,327.36				
Health Insurance & Benefits	$374,722.41				
TOTAL	**$1,508,453.78**	$1,372,904.76	$135,549.02		
FRINGE RATE	**45.17%**	**45.17%**	**45.17%**		
OVERHEAD					
Salaries - Overhead	$1,433,231.84	$1,304,240.97	$128,990.87		
Accounting	$22,306.61	$18,960.62	$3,345.99		
Advertising	$6,127.31	$5,208.21	$919.10		
Auto Expense	$45,751.72	$38,888.96	$6,862.76		
Bank Charges	$588.70	$500.40	$88.30		
Billable Expenses	$2,624.54	$0.00	$0.00	$2,624.54	(B)
Conferences, Meetings	$24,735.38	$21,025.07	$3,710.31		
Consultant Fees	$216,814.72	$0.00	$0.00	$216,814.72	(B)
Contributions	$50,891.75	$0.00	$0.00	$50,891.75	(A)
Depreciation Expenses	$22,969.00	$19,523.65	$3,445.35		
Dues and Subscriptions	$12,972.12	$11,026.30	$1,945.82		
Employee Education	$5,631.94	$4,787.15	$844.79		
India Bussiness Development	$38,807.64	$32,986.49	$5,821.15		
JCMS International Expense	$9,263.40	$7,873.89	$1,389.51		
Insurance Officers Life	$4,330.07	$0.00	$0.00	$4,330.07	(D)
Insurance	$42,443.19	$36,076.71	$6,366.48		
Legal	$7,257.98	$6,169.28	$1,088.70		
Lease Expense	$5,706.44	$4,850.47	$855.97		
Office Expenses	$109,415.08	$93,002.82	$16,412.26		
Postage	$5,090.22	$4,326.69	$763.53		
Rent	$153,940.22	$110,169.54	$19,441.68	$24,329.00	(E)
Repairs & Maintenance	$12,428.57	$10,564.28	$1,864.29		
Supplies	$8,517.17	$7,239.59	$1,277.58		
Taxes Property	$32,158.00	$27,334.30	$4,823.70		
Taxes State	$147,713.47	$125,556.45	$22,157.02		
Travel	$43,237.71	$36,752.05	$6,485.66		
Utilities	$60,208.17	$51,176.94	$9,031.23		
Interest	$138.36	$0.00	$0.00	$138.36	(C)
Un-Alloawable Expenses	$114,679.54	$0.00	$0.00	$114,679.54	(G)
TOTAL OVERHEAD COSTS	**$2,639,980.86**	**$1,978,240.83**	**$247,932.05**	**$413,807.98**	
TOTAL DIRECT, FRINGE AND O	**$7,487,672.90**	**$6,390,321.31**	**$683,543.61**	**$413,807.98**	
OVERHEAD RATE	**79.06%**	**65.09%**	**82.63%**		
TOTAL OVERHEAD RATE	**124.23%**	**110.26%**	**127.80%**		

(A) Exclude per FAR 31.205-8
(B) Exclude per FAR 31.202
(C) Exclude per FAR 31.205-10
(D) Exclude per FAR 31.205-20
(E) Exclude per FAR 31.205-36
(F) Exclude per FAR 31.205-46
(G) Exclude per FAR 31.201-6

LPE Enterprises, Ltd.

Detatils for Fringe Benefits and Overhead

Fringe Benefits

Payroll Taxes	11%
Vacation, Holidays, Sick Leave	14%
Group Insurance	12%
Profit Sharing/Retirement Plan	4%
	41%

General Overhead

Technical Salaries - Non Productive	12%
G & A Salaries	11%
Business Taxes	1%
Legal & Accounting	6%
Rent, Office Expense & Maintenance	10%
Telephone, Telegraph & Utilities	1%
Auto, Truck & Airplane Exp.	2%
Business Insurance	1%
Civic Contributions	0%
Meals & Entertainment	0%
	44%

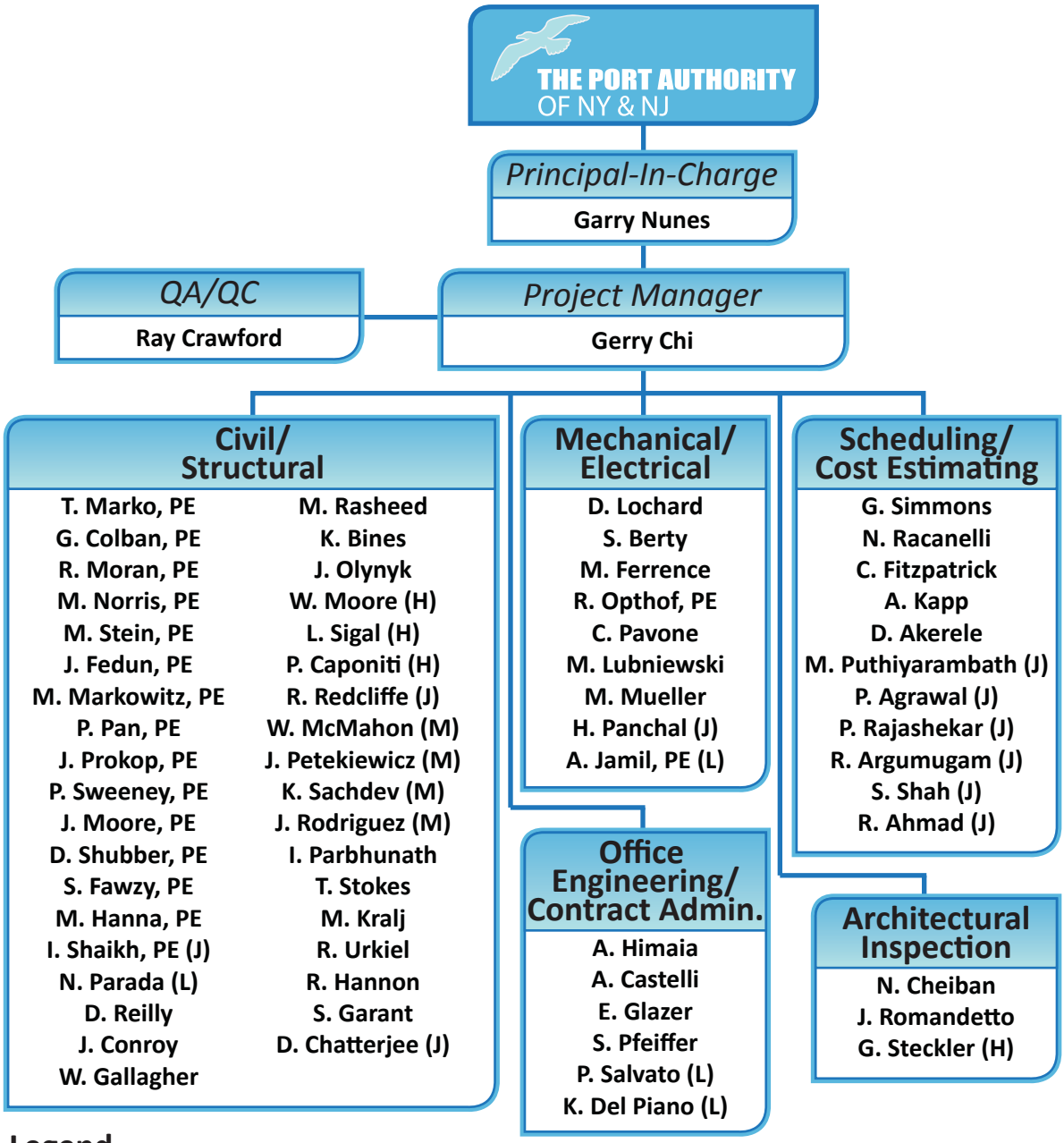
Total (Overheads as a Percentage)	85%
Total (Overheads as a Multiplier)	1.85
Total Multiplier Including Profit @ 10%	2.03

MAITRA ASSOCIATES, P.C.
OVERHEAD SCHEDULE WITH
HOME OFFICE AND ON SITE BREAKOUT
FOR THE YEAR ENDED DECEMBER 31, 2009

					On Site Construction Inspection Services		Home Office Design Services	
	Per Reviewed Financial Statements	Unallowable Costs	Adjusted	Allocation to On Site	Amount	% of Direct Labor	Amount	% of Direct Labor
Direct Technical Salaries:	$3,478,986	($97,192)	$3,381,794	67.63%	$2,287,107	100.0%	$1,094,687	100.0%
Burden and Fringe Benefit Expenses:								
Payroll Taxes	408,439	(4,579)	403,860	67.63%	273,131		130,729	
Employee Benefits	185,763		185,763	67.63%	125,632		60,131	
Retirement Contributions	99,328	(10,250)	89,078	67.63%	60,243		28,835	
Total Burden and Fringe Benefit Expenses	693,530	(14,829)	678,701	20.07%	459,005	20.07%	219,696	20.07%
Overhead Expenses:								
Indirect and Administrative Salaries	2,233,833	(315,819)	1,918,014	67.63%	1,297,153		620,861	
Telephone and Communication	46,368		46,368	67.63%	31,359		15,009	
Professional fees	135,615	(1,000)	134,615	67.63%	91,040		43,575	
Insurance	241,720		241,720	67.63%	163,475		78,245	
Depreciation and Amortization	25,273		25,273	35.00%	8,846		16,427	
Equipment Rental	42,126		42,126	35.00%	14,744		27,382	
Dues and Subscriptions	9,565		9,565	67.63%	6,469		3,096	
Education & Licenses	31,600		31,600	67.63%	21,371		10,229	
Rent, Utilities and Occupancy Costs	324,408		324,408	45.25%	146,795		177,613	
Repairs and Maintenance	36,435		36,435	35.00%	12,752		23,683	
Travel and Entertainment	78,413	(19,266)	59,147	67.63%	40,001		19,146	
Office Expense & Postage	39,783		39,783	45.25%	18,002		21,781	
Recruiting costs	41,655		41,655	67.63%	28,171		13,484	
Supplies	24,507		24,507	35.00%	8,577		15,930	
Total Overhead Expenses	3,311,301	(336,085)	2,975,216	87.98%	1,888,755	82.58%	1,086,461	99.25%
Total Burden, Fringe Benefit and Overhead Expenses	$4,004,831	($350,914)	$3,653,917	108.05%	$2,347,760	102.65%	$1,306,157	119.32%

BUSES
ONLY

Organization Chart



Legend

H: The Hirani Group
L: LPE Enterprises, Ltd.
M: Maitra Associates, P.C.
J: JCMS, Inc.

BUSES
ONLY

F. HOURLY RATES

2010 Actual Hourly Rates for proposed employees:

Name	Firm	Title	Hourly Rate
G. Nunes	PB	P-I-C	$ 300.00/hr *
G. Chi	PB	Project Manager	$ 72.28
R. Crawford	PB	QA/QC	$ 70.58
T. Stokes	PB	Civil/Structural	$ 43.47
M. Kralj	PB	Civil/Structural	$ 31.93
R. Urkiel	PB	Civil/Structural	$ 38.00
R. Hannon	PB	Civil/Structural	$ 59.00
S. Garant	PB	Civil/Structural	$ 48.50
T. Marko, PE	PB	Civil/Structural	$ 74.82
G. Colban, PE	PB	Civil/Structural	$ 74.82
R. Moran, PE	PB	Civil/Structural	$ 69.15
M. Norris, PE	PB	Civil/Structural	$ 57.76
M. Stein, PE	PB	Civil/Structural	$ 91.04
J. Fedun, PE	PB	Civil/Structural	$ 106.18
M. Markowitz, PE	PB	Civil/Structural	$ 74.08
P. Pan, PE	PB	Civil/Structural	$ 68.05
J. Prokop, PE	PB	Civil/Structural	$ 48.46
P. Sweeney, PE	PB	Civil/Structural	$ 98.66
J. Moore, PE	PB	Civil/Structural	$ 72.28
D. Shubber, PE	PB	Civil/Structural	$ 88.30
S. Fawzy, PE	PB	Civil/Structural	$ 51.50
D. Reilly	PB	Civil/Structural	$ 45.32
M. Seel	PB	Civil/Structural	$ 52.43
J. Conroy	PB	Civil/Structural	$ 48.50
W. Gallagher	PB	Civil/Structural	$ 51.20
M. Rasheed	PB	Civil/Structural	$ 54.29
L. Uhlianuk	PB	Civil/Structural	$ 32.46
I. Parbhunath	PB	Civil/Structural	$ 49.78
K. Bines	PB	Civil/Structural	$ 31.64
M. Hanna	PB	Civil/Structural	$ 38.42
J. Olynyk	PB	Civil/Structural	$ 43.26
W. Moore	Hirani	Civil/Structural	$ 33.99
L. Sigal	Hirani	Civil/Structural	$ 39.14
P. Caponiti	Hirani	Civil/Structural	$ 42.00
I. Shaikh, PE	JCMS	Civil/Structural	$ 41.77
D. Chatterjee	JCMS	Civil/Structural	$ 52.13
R. Redcliffe	JCMS	Civil/Structural	$ 57.70
N. Parada	LPE	Civil/Structural	$ 45.50
W. McMahon	Maitra	Civil/Structural	$ 47.48
J. Petekiewicz	Maitra	Civil/Structural	$ 42.44

K. Sachdev	Maitra	Civil/Structural	$ 42.13
J. Rodriguez	Maitra	Civil/Structural	$ 25.00
C. Pavone	PB	Mechanical/Electrical	$ 59.28
M. Lubniewski	PB	Mechanical/Electrical	$ 50.18
M. Ferrence	PB	Mechanical/Electrical	$ 44.13
D. Lochard	PB	Mechanical/Electrical	$ 57.00
S. Berty	PB	Mechanical/Electrical	$ 36.78
R. Opthof, PE	PB	Mechanical/Electrical	$ 61.36
M. Mueller	PB	Mechanical/Electrical	$ 32.00
H. Panchal	JCMS	Mechanical/Electrical	$ 46.15
A. Jamil, PE	LPE	Mechanical/Electrical	$ 48.30
A. Himaia	PB	Office Engineering/Contract Admin.	$ 51.70
A. Castelli	PB	Office Engineering/Contract Admin.	$ 29.57
E. Glazer	PB	Office Engineering/Contract Admin.	$ 32.26
S. Pfeiffer	PB	Office Engineering/Contract Admin.	$ 45.00
P. Salvato	LPE	Office Engineering/Contract Admin.	$ 25.20
K. Del Piano	LPE	Office Engineering/Contract Admin.	$ 36.75
N. Racanelli	PB	Scheduling/Cost Estimating	$ 36.08
C. Fitzpatrick	PB	Scheduling/Cost Estimating	$ 59.20
G. Simmons	PB	Scheduling/Cost Estimating	$ 68.56
A. Kapp	PB	Scheduling/Cost Estimating	$ 77.13
D. Akerele	PB	Scheduling/Cost Estimating	$ 52.03
K. Heilmann	PB	Scheduling/Cost Estimating	$ 44.59
M. Puthiyarambath	JCMS	Scheduling/Cost Estimating	$ 60.00
P. Agrawal	JCMS	Scheduling/Cost Estimating	$ 37.14
P. Rajashekar	JCMS	Scheduling/Cost Estimating	$ 36.06
R. Argumugam	JCMS	Scheduling/Cost Estimating	$ 50.25
S. Shah	JCMS	Scheduling/Cost Estimating	$ 48.50
R. Ahmad	JCMS	Scheduling/Cost Estimating	$ 48.86
N. Cheiban	PB	Architectural Inspection	$ 52.51
J. Romandetto	PB	Architectural Inspection	$ 46.76
G. Steckler	Hirani	Architectural Inspection	$ 50.00

Note: this represents a sampling of the personnel available for this call-in assignment. OH rates used will be those proposed and agreed to by PANYNJ for each firm.

* Indicates Billing Rate

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G. RELEVANT EXPERIENCE

Introduction

PB Americas, Inc. (PB) is pleased to present our proposal to The Port Authority of New York and New Jersey (Authority) to provide Expert Professional Construction Management and Related Technical Services on a "Call-in" basis during 2011-2014. PB is a world leader in the engineering, design and construction of public facilities. Our firm began its 125-year tradition of professional service in New York City, and we continue to guide all global operations from our New York headquarters. PB is recognized for providing exceptional professional construction management, program management and engineering services to federal, state and local agencies, as well as private enterprises. PB is proud of our extraordinary record of performance on some of the world's most challenging projects.

As a multi-disciplined planner, designer and construction manager, PB brings a superior resource pool of highly skilled professionals available to serve the needs of the Authority. The firm has been successfully providing Construction Management services on a call-in basis to multiple agencies in the New York/New Jersey region. Under the direction of *Garry E. Nunes, Senior Vice President*, the firm offers comprehensive professional construction management capabilities. The expertise of our professional staff spans all project phases from conceptual planning, design, and pre-construction through construction and facility commissioning.

PB enjoys our current standing as Engineering News Record's highest ranked Construction Management firm that maintains its corporate headquarters in New York State. As a direct result, we can offer the full toolbox of services with locally based resources from every discipline including many specialties such as LEED Accredited Professionals, specification writers and a vast cadre of estimating, scheduling and other Construction Management support staff. PB, one of the nation's preeminent construction management firms, is presently managing the construction of public projects with a combined capital program value exceeding $50 billion. PB delivers professional construction management services tailored to the size and complexity of any given project. On complex assignments involving numerous projects and contractors, PB's construction management service typically begin during design, and continue through construction and close-out.

- Pre-Construction Services – PB is currently providing constructability and design reviews, construction phasing and logistics, contract strategy development, bid package reviews, cost projections and estimating, value engineering, critical path method scheduling, and other services for numerous projects in the region.
- Construction Services - The firm is currently managing some of the most high profile and complex construction projects in New York area and New Jersey collectively valued in excess of $10 billion. The firm is engaged in such significant projects as:

    - the $3.6 billion Second Ave Subway for MTA Capital Construction
    - the $3.4 billion World Trade Center Transportation Hub for the PANYNJ
    - the $1.4 billion Fulton Street Transit Center for the MTA
    - the $2 billion New Jersey Turnpike Widening project for NJTA

Assignments include the simultaneous management of multiple construction contractors, extensive quality control/quality assurance inspections, interface coordination with building tenants and multiple agency stakeholders, working within occupied facilities, claims prevention and analysis, and the interaction with facility operations for testing, start-up, commissioning and training. In addition, PB is engaged in the management of numerous renovation and reconstruction projects in the region that require comprehensive environmental remediation services for both hazardous and non-hazardous materials.

- Call-In and Term Contract Experience – PB currently provides professional services in an efficient and cost effective manner on a call-in basis for multiple New York and New Jersey agencies, including but not limited to:

    - The Port Authority of New York & New Jersey
    - New York State Office of General Services
    - NYC MTA – Long Island Railroad
    - New York City School Construction Authority
    - The General Services Administration
    - United States Postal Service
    - Federal Emergency Management Agency
    - NJ Department of Transportation
    - NJ Transit

Tasks consist of both individual position assignments as well as projects requiring a complete management staff. Assignments are both long and short term, and are performed at the project location, the client's offices and/or PB's offices. The following table offers a sample of our similar call-in agreements:

NY Region CM Call-In and Term Agreement Experience		
Project	Duration	Value
PANYNJ CM Call-In Contract (ongoing)	4 yrs	$5M
PANYNJ World Trade Center Call-in Contract(ongoing)	6 yrs	$90M
NYSOGS CM Term Agreement D0S2841 (ongoing)	3 yrs	$12M
NYSOGS CM Term Agreement D0S 2859 (2007-2010)	3 yrs	$12M
NYSOGS CM Term Agreement D0S0598 (2004-2007)	3 yrs	$12M
NYCSCA Professional Staffing Services (ongoing)	3 yrs	$15M
NYCSCA Professional Staffing Services (2007-2010)	3 yrs	$15M
NYCSCA Professional Staffing Services (2004-2007)	3 yrs	$15M
GSA TOC Building Renovations (2002-2006)	4 yrs	$5M

The Authority has the unconditional commitment of PB and Mr. Nunes that all services will be delivered professionally, efficiently and to the professional standards set by the Authority. PB is prepared to continue to deliver exceptional people and responsive top quality services on each and every assignment.

Featured Call-In and Term Agreement Experience

We have selected the following recent projects to demonstrate PB's capability to serve every need of the Authority:

Project No. 1:
PANYNJ – Performance of Expert Professional Construction Management Services on a Call-In Basis During 2006-2010 (Agreement NO. 410-06-010)
Project Locations: Various PANYNJ locations
Client Agency and Contact Reference: William Kehoe, PE
PANYNJ Project Manager
(201) 216-2070

PB has been providing Construction Management and Related Services for the Authority on a Call-in Basis during 2006-2010. Projects may be located at the various Authority facilities, including terminals, bridges and tunnels; JFK, Newark, LaGuardia and Teterboro Airports; the PATH Rail System; New York and New Jersey ports and other facilities. PB is providing a full range of construction management and inspection on an as-needed basis, including pre-construction, construction and post-construction services. The firm has provided Construction Management and Inspection Personnel for projects at locations such as:

Task Example No. 1 – Staffing for PANYNJ 42nd Street Bus Terminal - for expansions, alterations and upgrades

Task Example No. 2 – Staffing for Newark Airport Resident Engineers Office – Electrical, Civil, and Office Engineering for various terminal upgrades

Task Example No. 3 – Staffing for the Tech Center - PB has provided scheduling, estimating and administrative personnel to the Authority.

In addition to the PA CM Call-In service – noted above, PB has successfully served the Authority on the following call-in contracts:

Client	Scope of Services	Project Duration
PANYNJ	Call-In Traffic Engineering Services	7 Years + ongoing
	Call-In Structural Engineering Services	27 Years + ongoing
	Call-In Tunneling Technology Services	6 Years
	Call-In Facility Condition Surveys	3 Years
	Call-In Program Management for Security Projects	5 Years
	Call-In Geotechnical Engineering Services	10 Years
	Call-In Aviation Services	3 Years
	Call-In Mechanical Engineering Services	6 Years

Project No. 2:
NYS Office of General Service Construction Management Term Agreements (2004-2007) D0S0598, (2007-2010) D0S2859, and (2010-2013) D0S2841
Project Locations: Throughout New York State
Contact Reference: Bob Palmer, PE
Director, NYSOGS Division of Construction
([redacted]

PB, as the prime consultant, performed construction management services statewide on a call-in basis for various projects over two consecutive three-year terms. *PB was just awarded a third consecutive three-year term agreement with OGS*. Projects include New York State-owned facilities representing various State agencies and demand a broad range of services from pre-construction through construction and closeout services, similar to the requirements of the proposed agreement with the Authority. In total, 120 different personnel performed services on either a full-time or part-time basis for NYSOGS during these term agreements throughout New York State. Services included scheduling, estimating, civil inspection, mechanical inspection, electrical inspection, project management, project controls, office engineering and computer aided drafting and design (CADD). Examples of task assignments performed under this call-in agreement include:

Task Example No. 1 - CPM Schedule for Renovation of Bldg No. 34, Kingsboro Psychiatric Center, Brooklyn, NY.- Work Order No. 22 - PB assigned a Schedule Manager to create the scheduling systems and provided reports for multiple simultaneous projects including schedule development, progress reviews & analysis, forecasting and recovery recommendation (when appropriate to get projects back on track). The Kingsboro Psychiatric project involved the complete rehabilitation of a 3 story, psychiatric center including the installation of a new boiler and new air handling system.

PB aided in the rehabilitation of Kingsboro Psychiatric Center, Brooklyn, NY.

Task Example No. 2 - Renovation of Building 60-Creedmoor Psychiatric Center, New York State Department of Mental Health - Queens Village, NY – Work Order No. 50: PB provided the Construction Superintendent for renovation of the facility who managed the construction contractors' conformance with the design plans and verified that the approved schedule and budget were maintained. The project involved exterior and interior renovation that included new roofs, elevators, mechanical and electrical systems, and interior finishes. PB coordinated the work of the four Contractors in the facility and supervised the quality assurance program of a testing agency for concrete strength testing, field compaction, steel shop fabrication and field inspection.

PB provided the CS for renovation of Creedmoor Psychiatric, New York State Department of Mental Health, Queens Village, NY

Task Example No. 3 – Work Orders No.3 and 58 – PB provided a MEP Superintendent who assisted the OGS in inspection of fire protection projects throughout New York State. There are currently 50 separate fire protection projects ongoing ranging from under $10,000 to over $1 million.

Task Example No. 4 - W.O. #22 -Assist OGS Design and Construction Group for design and implementation of a Quality Management System that will comply with the requirements of ISO9001-2000. PB was the first construction management firm in the country to achieve ISO-9001 certification. In 2006 PB's Director of Quality Assurance, provided hands on assistance and guidance to OGS throughout the year and helped the Agency achieve ISO-9001 certification. This serves as an example of PB's ability to provide value added services

utilizing the breadth and depth of our staff on whatever need may arise during the 2011-2014 call in period. In addition to providing skilled personnel in typical construction management and inspection tasks, the Authority will have access to the full toolbox of PB resources at its disposal.

Project No. 3:
NYC School Construction Authority – Professional Construction Management Staffing Services (2004-2007), (2007-2010), and (2010-2013)
Project Locations: Various Locations in New York City
Client Agency and Contact Reference: Gordon Tung, P.E.
Chief Project Officer, NYCSCA – Construction Management
([redacted]

PB performed Construction Management services as the Prime Professional Staffing consultant for the NYCSCA. PB provided project team members working directly within the NYCSCA organization in various levels of project construction managers for a multitude of projects over a three-year term. Projects ranged from renovations and upgrades to construction of new facilities. PB employees performed a broad range of services from pre-construction through construction phase and closeout services similar to the requirements of this Request For Proposal. More than 40 PB personnel were assigned on a full-time basis to the SCA during this term agreement. As a preferred provider of CM services to the SCA, *PB was awarded on a third consecutive contract beginning in 2010*.

Task Example No. 1 - New Early Childhood Center (PS306) – Woodhaven, NY – PB personnel provided a full range of CM services for the construction of this new three story $21 million fully air conditioned, accessible school with a gross area of 47,000 s.f. for students in pre-kindergarten through the 3rd grade. Features include standard and special education classrooms, library, cafeteria, multi-purpose room and medical suite. There is also an 18,650 s.f. school yard which includes an early childhood playground.

Task Example No. 2 – PS 307 –Corona, NY – PB provided a full range of CM services for the construction of this $43 million fully air conditioned, accessible 5-story school with a gross area of 110,000 s.f. for students in kindergarten through the 8th grade. Features include standard and special education classrooms and a District 75 special education complex. Other features include a 300 seat auditorium, gymnasium, science labs, multi-purpose rooms, cafeteria with full service kitchen, music and art rooms and a medical suite. There is also a 6000 s.f. early childhood playground and a 7000 s.f. playground for older children.

At PS 307, Corona, NY, PB provided CS services for the construction of many new features including a 300 seat auditorium.

Task Example No. 3 – PS303 – Forrest Hills, NY – PB personnel provided a full range of CM services for this $11M new school constructed within the shell of an existing building. The school has an early childhood center and includes a cafeteria and kitchen, multipurpose-room, administrative and staff areas, pre-kindergarten classrooms, kindergarten classrooms, 1st, 2nd and 3rd grade classrooms, special education classrooms and a medical suite.

Task Example No. 4 – Elmhurst Educational Campus – Elmhurst, NY – PB personnel performed CM services for the $75 million conversion of four story factory with basement that will accommodate three high school organizations for students on grades 9 through 12 and a city wide special education section. The 201,081 s.f. building will be fully air conditioned and accessible and was designed with a complement of spaces to each of the separate organizations as well as spaces that are shared among them. Each floor also has an art studio, technology lab, resource room, 265 seat multipurpose space, administrative and staff areas, and parent coordinator room. The city wide special education section includes 8 classrooms, 2 resource rooms, 1 occupation and physical therapy room, an activity room, administrative spaces and a nurse's office. Spaces that will be shared by all occupants include a music suite, 4,000 s.f. library, a 1,000 s.f. staff development/literacy coach's room, a 450 s.f. student store, a 700 seat cafeteria, full kitchen, staff lunch room, and medical suite.

Project No. 4: GSA Task Order Contract for Various Office Buildings in New York – Interior Building Renovations 2002 – 2006 Contract value (total/assigned) $5,213,012
Client Agency and Contact Reference: Walter J. Moldovan
Contracting Officer – Project Manager
[redacted]

PB provided construction management services to the US General Services Administration (GSA) as the Prime Consultant under a Task Order Term Contract for Various Office Buildings renovation in New York and New Jersey. PB was responsible for design reviews, constructability reviews, project coordination, reporting, schedule management, cost control, contract administration, change order administration and quality assurance. The following are representative task assignments performed:

PB assisted the U.S. Court of Appeals, NY, in the complete renovation of its historic courtroom.

Task Example No.1 - The U.S. Court of Appeals NY - had a $2.75 million complete renovation to its historic courtroom. The original ceilings were restored and existing millwork was refurbished. Other work included a construction cost of over $9 million included renovation of existing courtrooms and offices to new appellate judges' chamber suites, new finishes, ceilings and lighting, a new sound system, new security devices and upgraded support areas.

Task Example No. 2 - 26 Federal Plaza, NY - This $30 million construction management assignment involved the renovation of 13 floors (270,000 square feet) of occupied space. The work included renovated and new courtrooms, security upgrades, mechanical and electrical upgrades, asbestos abatement, a new chiller, modernization of the fire protection and sprinkler system, and replacement of all plumbing fixtures.

PB was responsible for many of the renovations at Federal Plaza, NY.

Task Example No. 3 - The award winning African Burial Ground National Memorial – This is a unique project that the GSA entrusted PB to manage. The burial ground was rediscovered in 1991 when construction began on a federal office building in Lower Manhattan. As the largest and oldest African cemetery excavated in North America, the burial ground is one of the most significant archaeological finds in U.S. history. Remains were exhumed for analysis and then re-interned at the site. Following efforts to stabilize and preserve the site, a decision was made to build a Memorial as the symbolic marker for the larger burial ground beneath. The challenges for the construction of the Memorial were enormous; coordinating between the design-build team, two government agencies (GSA and NPS), building management, and the public was not an easy task. PB assisted the GSA from design review to final completion of the construction and memorial dedication. PB worked closely with the client and the design-build team to ensure quality work. Declared a National Monument by President Bush on February 27, 2006, the Burial Ground now enjoys a level of recognition as the newest National Monument. The monument was dedicated on October 5, 2007 in a ceremony presided by Secretary of the Interior Dirk Kempthorne, Mayor Michael Bloomberg and Poet Maya Angelou. PB and the client received industry wide recognition on both a state and national level from CMAA and ACEC for their efforts on this project.

Technical Resources

PB has immense depth and breadth of technical resources, capable of performing all services requested by the Authority. The firm employs more than 14,000 professionals worldwide with combined expertise in every specialized discipline. The PB resource pool in the New York/New Jersey area includes nearly 1,200 professionals available to serve the needs of the Authority.

PB believes that our people are our most valuable asset. From engineers to project managers and from international specialists to local experts, we offer the Authority a vast network of talent and experience. PB's wide range of in-house technical expertise has proven extremely valuable in meeting emerging issues and supports our construction management organization.

PB is equipped and prepared with locally available resources to meet every challenge that could emerge on any Authority project assignment. As a direct result of our extensive and diverse workload, we have superior construction management and support resources to assist the Authority on this call-in assignment including:

- Local Office Network includes locations in Newark, Princeton and New York City with project offices throughout New York City and New Jersey. The firm is solidly based with a local presence in every region of New York and New Jersey served by the Authority.
- In-House staff numbering nearly 1,200 local New York and New Jersey employees with collective expertise in every technical discipline, experienced in every phase of construction, and prepared for any project assignment.
- Specialized sub-consultants located in the Metropolitan region with expertise in both pre-construction and construction services with proven successes working with PB and the Authority.
- M/WBE partners include LPE, Hirani, JCMS and Maitra. PB has worked closely with these partners in servicing the Authority and other agencies.

MBE & WBE Subconsultants

Hirani Engineering & Land Surveying, P.C.
Hirani is an authorized and licensed professional engineering, land surveying and construction Management Company which provides services to public agencies and authorities in the New York/New Jersey Metropolitan area. The firm employs approximately 90 persons and is a fast growing regional consultant.

Uniquely qualified and experienced as a Call-in Consultant for the Authority. Hirani has received consecutive contracts as a prime consultant for Call-in Construction Management and Land Surveying services with the Authority, and has performed numerous engineering, surveying and construction support and inspection services on Authority facilities over the past fifteen years.

JCMS, Inc.
JCMS is headquartered in Mercerville, New Jersey with an office in New York City. With a staff of over sixty employees, have a well qualified pool of resident engineers, construction inspectors, office engineers, cost and scheduling engineers, cost estimators and document control specialists. JCMS is certified by the Authority as a MBE/DBE firm.

JCMS has a long association with the Authority having provided services both as direct consultant and subconsultant and have been providing professional Construction Management services for more than twenty five years for various types of infrastructure projects. In addition to inspection services through our Call-in CM services (MBE/WBE) contract, JCMS is also providing "Contract Submittal" Services and "Project Delivery" Services to the Authority. In 2009, JCMS won the "Call-in" contract for providing CM services to NJ Transit for the fourth consecutive 3-year period. JCMS has also provided "On-Call" services to Long Island Rail Road, SEPTA and Delaware River Port Authority.

Maitra Associates, P.C.
Maitra is a multi-disciplined engineering firm consisting of 44 professionals. They have has been continuously involved in construction management work on major metropolitan agency projects since its inception in 1982. Clients include The Port Authority of New York and New Jersey, Triborough Bridge and Tunnel Authority, New York City School Construction Authority, New York City Department of Design and Construction, New York City Transit, New York State, New York City and New Jersey Departments of Transportation and New Jersey Turnpike Authority.

Maitra is able to present a highly qualified group of construction professionals including Construction Managers, Resident Engineers, Office Engineers, Schedulers, Inspectors, Technicians and Surveyors who possess the requisite certifications and specialty training which the Authority justifiably expects from construction management personnel assigned to its projects. Over seventy percent of Maitra staff are graduate engineers. Inspectors hold certificates for OSHA Training, ACI Concrete Inspection, and Structural Steel Bolting.

Maitra is a certified MBE with the Authority. Currently they haves 20 people assigned to construction projects in the New York area, including 10 at various Port Authority facilities and over fifty percent of field staff has experience with the Authority. Maitra has the personnel who know the Authority's facilities and have hands-on experience gained over the years through their current assignments and previous assignments. The average years of experience of all construction personnel is 25 years.

LPE Enterprises Ltd.
LPE is a New York based WBE/DBE program management & construction management support services firm. LPE very ably meets the needs of construction management and engineering companies for skilled and experienced project-based personnel.

Through PB's implementation of an aggressive and proactive M/WBE participation program, we will meet the 12% MBE and 5% WBE goals for this call-in contract. The selected firms are professional quality service providers that are centrally located to the Authorities vast inventory of buildings and facilities in the New York/New Jersey area to offer the maximum opportunity for participation.

Management Personnel Experience

PB is led by some of New York's outstanding construction professionals, who have demonstrated superior skill in successfully managing similar contracts. PB is confident that we will exceed every expectation the Authority has for the performance of this agreement. All of our managers are available 24/7 to address the needs of the Authority. The following key personnel will oversee the individual task assignments:

Garry E. Nunes, Sr. Vice President and National Director of Construction Services, will serve as our Principal-In-Charge. Mr. Nunes has more than 30 years of progressive and proven successful experience in the construction industry having served on a diverse range of complex projects. *He has been responsible for managing many call-in agreements for the Port Authority* and other New York State agencies, and will be responsible for all project assignments under this agreement. Mr. Nunes is Principal in Charge for our existing Call-in/Term Agreements with the New York and New Jersey area clients including PANYNJ, NYSOGS, NYCSCA, and GSA. He clearly understands the call-In process and brings to the Authority our corporate commitment that all services will be performed to meet the requirements of the Authority.

Mr. Nunes will be responsible for managing our project managers, resource managers and support staff to assure the Authority is served in a timely manner.

Gerry Chi, Assistant *Vice President,* will serve as Project Manager. Mr. Chi has extensive experience in construction management, planning, design, operations and maintenance, and condition auditing of physical plants for educational facilities, commercial buildings, industrial facilities, power facilities, municipal properties, and bridges and tunnels. He has a proven record of managing projects, supervising multidisciplinary operations and completing projects under budget and within schedule and scope. Mr. Chi manages PB's Call-in agreements in New York/New Jersey. He mobilizes personnel for assignments, monitors their performance and acts as PB's representative for the employees. He will provide complete support to Mr. Nunes in the selection of candidates and management of staff.

PB management is fully committed to the PB staff and will be responsible for their professional actions while providing the support required for the success of each employee and project.

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H. MANAGEMENT APPROACH

Introduction

Parsons Brinckerhoff (PB) brings to The Port Authority of New York and New Jersey (Authority) a long history of successful experience as a professional service firm with outstanding construction management experience. We have served virtually every State and City agency in the region including the Port Authority, numerous Federal agencies and public clients worldwide. The contracting vehicles used by many of our clients have been as-needed service agreements, similar to this solicitation by the Authority. Under such agreements, *PB provides individuals or project teams for specific tasks working directly within the client organization*. In fact, we are currently providing CM services on a call-in basis to the Port Authority, the New York State Office of General Services (OGS) the New York City School Construction Authority (SCA) and the Long Island Rail Road. Our management approach to the performance of the services contemplated under this agreement is based on the many years of success in serving our client needs on call-in agreements.

Assignment of Personnel

Typically, PB employees are assigned to a particular project or office and work seamlessly within the Client organization. The PB personnel report directly to an Authority supervisor but remain the employee of PB. In addition to our Construction Management 2006 to 2010 Call-in agreement with the Authority, PB is also serving the Port Authority under a similar agreement in providing Program Management services for the $500 million Security Upgrade at all PA facilities. Under these agreements PB staff report directly to an Authority supervisor and the PB and Authority personnel operate seamlessly as a top to bottom integrated team.

PB is extremely familiar with the methodology of working as an extension of staff and is fully prepared to meet every expectation of the Authority in a timely fashion. Our management understands the importance of staffing individual assignments with personnel who have both the technical qualifications and interpersonal skills to work effectively within a client organization. Our personnel are prepared to work as a direct staff extension to the Authority. Some of the key issues that we address in the selection of personnel to be proposed for assignment to the Authority include:

- Technical qualifications and certifications
- Construction Management and inspection experience
- Prior experience on Port Authority assignments
- Prior experience on the specific Port Authority facilities
- Ability to function as a team member
- Specialized technical training
- Interpersonal skills – ability to work well with others
- Ability to work independently or in groups
- Work ethic
- Geographic location in relation to the proposed assignment
- Compensation

Upon receipt of a Consultant Call-in Agreement Request, the PB Project Manager will consult with the Principal-in-Charge and PB New York and New Jersey Area Managers to identify proposed candidates who best meet the needs of the Request. The Project Manager will simultaneously submit the Request to our MBE and WBE subconsultants to solicit potential candidates. After careful evaluation of all potential candidates the PM and PIC will submit qualified candidates that best meet the technical and managerial qualifications while offering the best value to the Authority.

When a Consultant Call-in Agreement Request involves the assignment of multiple staff to perform a specific task, PB uses the same process to develop the team. Efficient staffing of each position results in the most qualified team providing the best value to the Authority.

This approach to staff selection has proven to be highly successful for all of our clients that we serve under call-in construction management agreements. PB can confidently assert that we will provide added value to the Authority under this agreement.

Performance of the Tasks

The following represent the PB Management Approach to performance of the tasks listed in Attachment A of the Request for Proposals.

Task A: Constructability/Bidability and General Engineering Review

As an industry leader in construction management, PB has long been an advocate of integrating the construction perspective early in the design process. With our in-house engineering, design and construction management capabilities, PB can offer constructability reviews for every type of Authority facility including buildings, terminals, bridges, tunnels, air fields, ports, rail transit, and other projects. With our depth and breadth of professional resources we can quickly assemble a local team of reviewers with the full range of field experience and technical expertise to conduct an in-depth review of the documents. Our team will bring the insight and expertise of hands-on construction managers to our analysis.

When it comes to constructability the investment will be returned several times over in reduced project cost and time for performance, while minimizing exposure to claims for delays. Our review typically focuses on the following:

- Clearly defined contract interfaces between plan sets and existing structures to reduce disputes and claims
- Efficient and complete bid documents
- Agreement in the documents between various trades (e.g. review to identify physical conflicts between mechanical, structural and electrical plans)
- Staging and phasing issues
- Site access constraints and efficiencies
- Work hours, noise, vibration and environmental restrictions and other constraints that may impact the construction process and equipment usage.
- Coordination with facility operations.

We will prepare a comprehensive report for the Authority detailing our findings, comments and recommendations for enhancement to the project. The objective of these comments will be to reduce costs, enhance quality, maintain schedule, and minimize the number of potential for excessive RFIs, change orders, and extra work requests. The result will be a bidable, buildable and maintainable facility.

Task B: Construction Staging

With our many years of providing both design and construction management services for some of the most important and complex projects in the New York metropolitan area, PB knows the importance of a sound construction staging plan during construction. A recent example of the application of our approach to construction staging and phasing is the Fulton Street Transit Center in Lower Manhattan for the MTACC. PB, in joint venture, is providing Construction Management services to the MTA and New York City Transit for the Fulton Street Transit Center. This $1.4 billion project in Lower Manhattan is designed to provide for a new Transit Center, improvements to six subway stations serving twelve lines carrying several hundred thousand daily patrons and providing direct underground connection to the World Trade Center. The PB team developed the construction staging plans that provides the coordination of the multiple construction packages for this program, which includes extensive staged station reconstruction and rehabilitation while maintaining subway operations and continued patron access within the transit system during construction.

Some of the essential factors influencing construction staging that PB considers during a review of a design or of a contractor's plan include:

- Access during construction for personnel, materials and equipment. Movement of materials and equipment are essential in parallel with the cost and schedule.
- Laydown and storage availability
- Need for off shift and night work
- Need to maintain positive separation from air operations.
- Natural flow of work.
- Effects of adjacent construction on planned operations.
- Maintenance of Traffic Plan considerations if needed.
- Needs of the Authority and their Tenants

Each of the Authority's facilities has its own restrictions and conditions that will affect staging plans. Having experience in all the various types of Authority facilities allows PB to bring specific expertise to any project.

PB is also a pioneer in the development and use of 4D modeling, which integrates 2D or 3D models of a project with a time-scaled schedule. This allows instant visualization of the planned construction sequence and staging for even the most complex of projects. *4D modeling has been used very effectively on the Fulton Street Transit Center and World Trade Center Transportation Hub program to quickly and effectively identify and minimize construction conflicts* at the major interface points between the contract packages as well as the restraints to be imposed by ongoing system operations. We have the capability in house in our New York office to support the Authority with this powerful tool on any project assignment.

Task C: Schedule Development and Monitoring

We have in-house critical path method (CPM) scheduling experts who work with the Authority and PB technical staff to develop and/or review detailed construction schedules. Our professionals will address the adequacy, completeness, and suitability of the schedule for control of the project. During our development and/or review of schedules, we will focus on:

- Time frames for submittal/approval of shop drawings and samples
- Lead times for delivery of key materials and equipment
- Sequence and overall plan for performing the work, including identification of specific work plans necessary to interface with ongoing operations
- Staging and phasing of activities
- Adequacy of the duration of activities, including the need for additional work periods
- Those specific items of the project that will require input from either the Authority or tenants.
- Identification of mandatory and/or statutory inspections
- Identification of periods of non-work identified in the contract or mandated by local jurisdictions.
- Feasibility of the overall construction plan

A comprehensive report of our schedule analysis will be submitted to the Authority Resident Engineer and Engineer of Construction.

Our schedulers are fully trained in the use of all scheduling software products and are skilled in the use of Primavera P3 and P6. More importantly, our scheduling staff understands the construction process and applies that construction knowledge to the development or review of construction schedules. PB is currently providing scheduling services to the Port Authority in our extension of staff role on the Security Upgrade Program for all Authority facilities.

The initial baseline schedule can be developed by PB or by the construction contractor. Once the baseline schedule has been completed and accepted, the emphasis shifts to time control and reporting. This is an ongoing process that extends through project completion. Time control involves monitoring the progress of all activities against the baseline schedule, including shop drawing status reports, material status reports, and contractor construction progress. *Variances to the schedule are reported to project management for appropriate action of alternative plan development, thus averting potential problems and conflicts before they have been allowed to materialize.*

The cornerstone of project control is the Schedule Report. It includes an update of the master schedule. The report highlights monthly progress, lists goals to be achieved in the upcoming month, identifies potential schedule variances or conflicts, and charts individual contractor performance. For time critical projects, we usually prepare or require the contractor to provide a two week look-ahead schedule every week so more detailed monitoring can be achieved.

Task D: Quality Assurance Inspection

PB understands that our resident engineers and inspectors serve as the first line of quality assurance in the construction process on behalf of the Authority's Engineer of Construction and Resident Engineers. Quality

inspection requires both technical experience and the sound judgment of the qualified, competent team of PB and Authority inspectors. As a full service provider of engineering and construction management services, PB has the experienced inspectors available within the metropolitan area that have the project background in all trades required for building construction whether it be from the ground up, or a gut renovation and rehabilitation. On assignment to a project, our field staff will closely monitor the contractor's work in the field using the procedures established by the Authority. Resident engineers and inspectors will:

- Coordinate the contractor's daily work.
- Meet with the contractor to review daily work plans
- Confirm equipment, material and labor availability
- Observe and document conformance of materials with the contract documents and submittals
- Observe the performance of the construction contractor for conformance to the drawings, specifications, codes and standards on a daily basis.
- Document conformance and non- conformance of the work
- Verify and document corrective action of any non-conforming work
- Observe and advise the Authority of the contractor's compliance approved plans for safety and quality

The PB personnel are knowledgeable in materials testing programs and will easily adapt to implement the Authority's protocol to schedule, monitor and document all required material testing. Our Inspectors are trained to notify the Resident Engineer (whether Authority or PB) immediately upon witnessing any materials, erection or installation processes, or levels of quality that do not meet the requirements of the contract documents and which the contractor does not correct. All inspectors will submit an Inspector's Daily Report to the office engineer using Authority forms. PB will work seamlessly with Authority staff at all levels from assistant inspectors to resident engineers in delivering quality construction throughout the program.

Safety

PB is dedicated to maintaining the safest work environment possible for our employees. We strive to confirm that all prime contractors and subcontractors adopt a similar policy. We consider the safety and health of all project employees, facility patrons and the general public of critical importance. Our corporation's vision of "Zero Harm" is focused on setting the Safety performance criteria at the highest level.

PB will:

- Invest in what it takes to achieve this vision.
- As employees, be empowered to lead in making this vision real.
- Proactively work with all stakeholders including clients, owners, designers, contractors and the workforce to make this vision a reality.
- Own and act on our vision. This requires a mind-set intolerant of any injury or incident regardless of frequency or severity.

We believe:

- That working Incident and Injury-free is a choice and a basic human right.
- The leaders in our industry will be those who succeed in the transformation to making an incident and injury free industry, a given.

We recognize:

- That this vision is achievable if we are committed.
- This commitment to being incident and injury-free requires taking a personal stand, great courage and trust.

PB is committed to a safe and productive work site for our clients, owners, staff, visitors and contractors.

Task E: Contract Administration

PB resident engineers, office engineers and records management staff will manage the flow of documents among all project entities as defined and approved in the Authority Procedures Manual. They receive shop drawings, samples, catalog sheets, RFI's, pay requests, QA records, and all correspondence, and act on each promptly and according to the Procedures. Action shall include maintaining logs of all document flow, documented transmittal of documents, pre-review of certain shop drawings, and prescribed document storage. The staff will be fully trained in Authority software database such as CONTRAK and will be knowledgeable of the PACC process, T&M work and other administrative processes of the Authority. Our staff reviews the log and the engineering program to determine whether:

- The master construction schedule and all short term, look-ahead schedules contain critical submittal dates reflected in the logs
- Submittals from contractors, sub-consultants, suppliers and /or manufacturers are received by the design engineer on time
- Submittals are processed in a timely fashion by the design engineer and returned to the originator and that logs are updated
- Disapproved submittals receive prompt review by the design engineer, the contractor and the CS&I staff, and whether the client has been advised of any resulting impacts
- Shop drawings have been approved before associated work or manufacture has begun
- All submittals are maintained on file.

The PB staff will fully support the Authority in all other Contract Administration matters including participation in contract status meetings.

Task F: Cost Engineering/Estimating Services

PB will provide cost engineering and estimating throughout the design and construction process in accordance with the Authority's "Construction Estimating Guide". During the process we have the capability to prepare or review the individual engineer's estimates to be submitted with each bid package at the various stages of design. The phase submissions for each project design increase in level of detail and completeness and our efforts will be applied accordingly. We will take a contractor's approach/methodology to preparing or analyzing the estimate. Our approach to estimating is to work within the guidelines established for the project under the direction of the Program Manager and provide our independent review and recommendations for adjustments to unit costs and bid item breakouts where necessary. We will give consideration to recent cost results and trends, actual material/labor/equipment costs, quantity breakouts (cy, sy, lbs, lump sum), risk factors, constructability comments, and general conditions when determining the appropriateness of the unit costs provided in the design estimate.

We will concentrate on identifying major cost drivers and validating bid package strategies. Known cost drivers can be divided into 3 primary categories:

- *Labor* – Availability, wage escalation, and the ability to reduce through accelerated construction
- *Equipment* – Contractor (Availability, operating expense) Facility – Equipment (types and manufacturers)
- *Materials* – Trends and alternatives for cost drivers such as Structural Steel, Reinforcing Steel, Structural Concrete, copper wire, Conduit, etc.

For long term and larger construction projects, PB will review the most up to date national and local economic data available to verify that appropriate escalation rates are utilized. As the project progresses through the design phases towards 100% we will continue to verify that previous comments have been considered/incorporated and that the appropriate unit costs have been applied based on the updated designs and most recent cost data available.

Task G: Resources

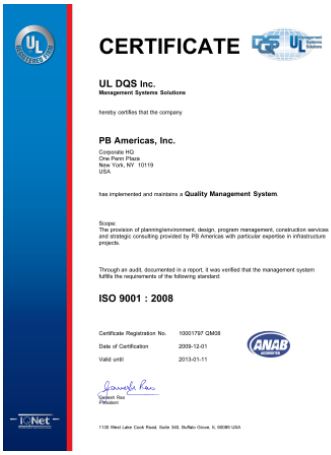
PB prides itself on the quality and integrity of our professional staff and their ability to integrate easily into the Authority's project organization. We have staffed numerous positions across the City and State under our existing agreements with the Authority, NYSOGS and NYCSCA and are prepared to continue to provide available resources where and when needed by the Authority. The organization chart and personnel resumes included in Section E represent some of the available professional resources that PB and our subconsultants have to offer.

The personnel identified represent a sampling of the resources available to serve the Authority in the various disciplines described in the Request for Proposals. These personnel not only reflect a diverse skill set but are currently based in the metropolitan area. The personnel resource table that follows reflects some of the available professional resources PB and our team members offer in the New York/New Jersey area. In addition to this resource pool, PB routinely taps professional resources from our other regions to meet specific project or client needs. The Authority can be assured that the PB team will provide the resources needed to support the Authority's needs:

	PB	Hirani MBE	JCMS MBE	LPE WBE	Maitra MBE
Discipline	**Number of Employees**				
Construction Management	98	7	8	16	2
Construction Inspection	120	18	16	9	15
Civil Engineering	236	7	-	-	4
Structural Engineering	120	6	-	-	4
Electrical Engineering	47	1	-	-	6

	PB	Hirani MBE	JCMS MBE	LPE WBE	Maitra MBE
Mechanical Engineering	49	-	-	-	5
Architectural Engineering	20	2	-	-	-
Scheduling	10	-	12	1	-
Estimating	7	1	8	3	-
Other Technical Disciplines	171	-	-	-	-

PB will provide the necessary skills, diligence and resources to verify that the construction work is performed in accordance with all construction documents and instructions, in conformity to all applicable requirements and in conformance to the project goals for quality. We will provide all due diligence and professional input to verify timely completion of the projects. PB will provide its skill and judgment in an expeditious and economical manner consistent with the interests of the Authority.


CERTIFICATE

UL DQS Inc.
Management Systems Solutions

hereby certifies that the company

PB Americas, Inc.
Corporate HQ
One Penn Plaza
New York, NY 10119
USA

has implemented and maintains a Quality Management System

Scope:
The provision of planning/environment, design, program management, construction services and strategic consulting provided by PB Americas with particular expertise in infrastructure projects.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2008

Certificate Registration No. 10001797 QM08
Date of Certification 2009-12-01
Valid until 2013-01-11

It is essential that the services meet all Authority requirements. This means that all contractual commitments are met, and all services are provided in a professional manner. PB's formal quality management system ensures that these objectives are met and the ISO 9001 process provides the assurance that our quality system works.

In addition to PB's extensive in-house capability, the firm employs a proactive affirmative action program, a major part of which is our M/WBE plan. Since the vast majority of our construction work is in the public sector, our M/WBE program is a priority at PB. We have excellent working relationships with many of New York/New Jersey's leading M/WBE firms. We are managing similar term agreements, as well as individual project construction management contracts, and we are proud to boast an excellent record of success in achieving our M/WBE goals.

Conclusion

PB management led by Garry E. Nunes, Sr. Vice President and Principal-in-charge and Gerry Chi, Project Manager are fully committed to successfully serving the needs of the Authority. They will apply every resource necessary to meet or exceed the expectations of the Authority.

The construction management personnel of PB are well prepared to work closely and cooperatively with the Authority, other consultants, and contractors. We recognize that effective and efficient communication between the client, facility management, designers, Authority staff, and contractors is critical to project success. Virtually all of our current construction management assignments involve interdependencies with owner's

representatives, design consultants, outside agencies and multiple construction contractors. We train our project personnel to manage and facilitate project communications in the best interests of our clients.

Because of our extensive term and task order agreement experience, the majority of our personnel are skilled in working within client organizations as an extension of their staff. That experience provides such individuals with an in-depth understanding of the important interdependencies between project participants. The PB Management team and our staff understand that our success can only be built on the success of the Authority.

PB is confident that its selection as one of your "Call-In" construction management firms will be mutually beneficial to the Authority and PB.

The ability of our personnel to integrate so successfully and efficiently within the Authority organization has been a key element of the success we have enjoyed on our many assignments with the Authority.

PB has the leadership and the technical resources necessary to fully support the Authority's every need and we genuinely look forward to continuing our highly successful relationship with the Authority.

BUSES
ONLY

I. PB AMERICAS AFFILIATES

Affiliates of PB Americas, Inc.*

*Effective October 27, 2009, Parsons Brinckerhoff Inc. and its subsidiaries were acquired by Balfour Beatty plc, a London based corporation. PB Americas, Inc. continues to operate as a wholly owned subsidiary of Parsons Brinckerhoff Inc.

Company	Relationship
Parsons Brinckerhoff-FG, Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)
PB Constructors, Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)
PB Services Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)
PB Consult Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)
Parsons Brinckerhoff Group Administration, Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)
Parsons Brinckerhoff Development Corporation	Affiliate (owned by Parsons Brinckerhoff Inc.)
Parsons Brinckerhoff Infrastructure Development Company Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)
ALLTECH, Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)
PB Energy Storage Services Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)
Parsons Brinckerhoff International Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)
PB Facilities Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)
PB Power, Inc.	Affiliate (owned by Parsons Brinckerhoff Inc.)

BUSES
ONLY

J. CONFLICT OF INTEREST

Neither PB Americas, Inc., nor any of its employees, agents, or subcontractors, is aware of any possible conflict of interest or appearance of conflict of interest relating to this project, as defined in Article 31 of the Standard Agreement attached to this Request for Proposals. If we become aware of a conflict, or the appearance of a conflict, we will immediately notify the Authority as required, giving full details thereof.

BUSES
ONLY

K. CONTRACT EXCEPTIONS

PB Americas, Inc. has reviewed the form of contract and its terms and conditions included with RFP Number 22094. PB Americas, Inc. takes no exceptions.

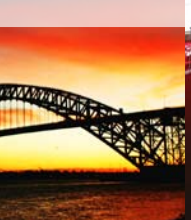
PB
125
YEARS

THE PORT AUTHORITY OF NY & NJ

PROPOSAL TO PROVIDE

RFP No. 22094

Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011 - 2014



URS Corporation – New York

URS

August 23, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, New York 10010
ATT: RFP Custodian

Re: Proposal for the Performance of Expert Professional Construction Management and Related Technical Services As Requested on a "Call-In" Basis during 2011 through 2014–RFP #22094

Dear Mr. Volonakis:

As an operator of critical regional transportation facilities and owner of properties throughout the Metro New York/New Jersey region, The Port Authority of New York and New Jersey (PANYNJ), requires construction management (CM) and related technical services to make sure that these facilities are maintained, protected, expanded and upgraded accordingly in order to take advantage of the latest technology and materials which would help it manage its properties more efficiently and cost-effectively.

The PANYNJ is seeking firms qualified to provide CM and other services, including inspections, constructability and design reviews, contract administration, and construction estimating and scheduling, and overall management of contractors, to assist the Authority in carrying out the construction and upgrades of these critical facilities. URS would be proud to continue to work closely with the Authority, as an extension of your staff, to provide the services that will be needed to ensure their optimum operation well into the 21st Century.

Extensive PANYNJ "Call-In" Experience

We believe URS is particularly well qualified to assist you, as we have been working collaboratively with the Port Authority for decades providing environmental, planning, design, security, inspection, program, and construction management services for your facilities, including for the past 10 years on several Call-In contracts, including construction management services. These projects included $2 billion worth of work at Newark-Liberty International Airport, including the new FAA control tower, a 4-story, 3,200 vehicle parking garage, a 6-story, 6,000 vehicle parking garage, the southern access roadway expansion project, a new administrative building, the northside cargo area redevelopment and the airport utility system upgrade.

During this time we have worked at virtually every Port Authority facility, on billions of dollars of maintenance, renovation, expansion and new construction projects for every Line Department. In addition, URS has provided expert program and project management services on as-needed basis to the PANYNJ Capital and Major Works Program on numerous aviation, tunnels, bridges and terminal projects.

In addition to the PANYNJ Call-In assignments, URS has served as your Program Manager for JFK

URS Corporation
One Penn Plaza, Suite 610
New York, NY 10119-0698
Tel: 212.736.4444
Fax: 212.629.4249
www.urscorp.com

International Airport since 1987. Through our decades of working with you on these assignments, we know your mission, your people, your culture, and your methods of operation. Perhaps most importantly, we know how to work as an efficient member of your team.

Call-In Assignments are the core of our CM Business

Approximately 60% of URS' regional assignments are Call-In assignments. Through this experience as we know how to respond quickly and effectively to any task that would be assigned to us. In addition to the PANJNY Call-In, we have provided Call-In services for over 20 LIRR projects and more than a dozen NYSOGS assignments.

Unlimited Resources to Address any Issue that May Arise

For most of this decade, Engineering News Record, ranked URS as the largest A/E/C firm in the nation. With a staff of approximately 42,000 professionals, we truly have a resource of technical expertise that is second to none and we will gladly make that expertise available to you to meet any need you may have during the execution of your 2011 – 2014 construction program. As required, we will assign professional engineers, and we far exceed your minimum requirements to assign ACI Concrete Construction Special Inspectors, ICC Structural Steel and Bolting Inspectors, and NACE Level I Coating Inspectors to any project.

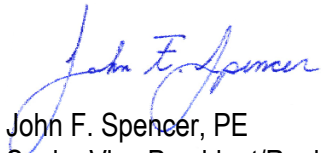
A Proven Project Executive and Staff with the Requisite PANYNJ Experience

To make certain we efficiently supply personnel who will provide you satisfactory service, we have assigned David Beckett, a URS Vice President, to oversee the execution of our work. Mr. Beckett has been the executive on numerous NY/NJ region Call-In assignments (including PANYNJ) and has always provided the right mix of professionals to successfully complete any construction project on time and within budget. In, addition, most of the staff we will provide to you will have either PANYNJ and/or local Call-In experience.

We look forward to continuing our long history of working successfully with you.

Very Truly Yours,

URS Corporation—New York



John F. Spencer, PE
Senior Vice President/Regional Manager

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SECTION A

Attachment B (AgreementonTerms of Discussion)

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt of discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated of exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Authority website at *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

URS Corporation – New York
(Company)

(Signature)

Senior Vice President
(Title)

August 22, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

SECTION B

Attachment C (Company Profile)

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #22094)

1. Company Name (print or type):

   URS Corporation – New York

2. Business Address (to receive mail for this RFP):

   One Penn Plaza, Suite 610

   New York, NY 10119

3. Business Telephone Number: 212.736.4444

4. Business Fax Number: 212.594.0680

5. Firm Website: www.urscorp.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 09 / 29 / 1934

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See attached listing of affiliated and subsidiary companies

9. Officer or Principal of Firm and Title:

   John F. Spencer, PE – Senior Vice President and Regional Manager

10. Name, telephone number, and email address of contact for questions:

    David Beckett, PE – Vice President – [redacted]

    [redacted]

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/WBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

URS' AFFILIATES AND SUBSIDIARIES

URS Corporation (a Nevada corporation), is licensed to provide services in the state of New Jersey. URS Corporation – New York is licensed to provide services in the state of New York. URS Corporation – New York is 100% owned by URS Corporation, the Nevada Corporation.

In addition to owning 100% of the issued shares of URS Corporation – New York, URS CORPORATION (a Nevada corporation) owns 100% (is the sole shareholder) of:

Forerunner Corporation (a Colorado corporation)
(FEIN [redacted] – owned from 10-23-09 to present

Geotesting Services, Inc. (a California corporation)
(FEI [redacted] owned from 10-14-85 to present

URS Construction Services, Inc. (a Florida corporation)
(FEI [redacted] owned from 12-14-99 to present

URS Corporation – Ohio (an Ohio corporation)
(FEI [redacted] – owned from 1-15-02 to present

URS Corporation Great Lakes (a Michigan corporation)
(FEIN [redacted] – owned from 1-15-02 to present

URS Greiner Woodward-Clyde Consultants, Inc. (a New York corporation)
(FEIN [redacted] – owned from 9-11-96 to present

URS International, Inc. (a Delaware corporation)
(FEIN [redacted] – owned from 4-15-91 to present

URS Architecture – Oregon, Inc. (an Oregon corporation)
(FEI [redacted] – owned from 9-16-03 to present

URS Alaska, LLC (an Alaska limited liability company)
(FEI [redacted] owned from 3-21-08 to present

LopezGarcia Group, Inc. (a Texas corporation)
(FEI [redacted] owned from 8-22-08 to present)

and owns:

33.33% of URS Architects/Engineers, Inc. (a New Jersey corporation)
(FEIN [redacted] – owned from 1-15-02 to present

33.33% of URS Corporation Services (a Pennsylvania corporation)
(FEI [redacted] owned from 12-28-01 to present

25% of URS Corporation AES (a Connecticut corporation)
(FEI [redacted] – owned from 12-28-01 to present

The principal executive address of all the above corporations (except URS Alaska) is:

600 MONTGOMERY STREET, 25TH FLOOR
SAN FRANCISCO, CA 94111
PHONE (415) 774-2700

The principal executive address for URS Alaska, LLC is:

911 WEST EIGHTH AVENUE
ANCHORAGE, AK 99501

SECTION C

Proposer Requirements Compliance

Section C

PROPOSER REQUIREMENTS COMPLIANCE

URS is well qualified to provide services under this "Call-In" contract as well as others, having done so for the past 20 years, establishing a long and distinguished track record not only with the Port Authority of New York and New Jersey (PANYNJ), but also with other agencies and authorities in the New York and New Jersey area.

Through our various Port Authority assignments, such as the Newark-Liberty International Airport Call-In Contract, Goethals Bridge Modernization Program, and the JFK International Airport Redevelopment Program, to name a few, we have an intimate knowledge of your procedures, project delivery systems, and organization, which will be advantageous for any assignment URS is tasked with.

In addition, URS is fully compliant with the qualification requirements outlined in the RFP documents. URS has a full-service, multi-discipline regional local office in mid-town Manhattan at One Penn Plaza with more than 600 professionals. In addition, URS has other full-service offices in New Jersey and numerous project offices throughout New York and New Jersey, with professionals numbering more than 3,000.

URS New York / New Jersey Personnel by Relevant and Applicable Disciplines			
39	Architects	86	Environmental Engineers / Scientists
55	CADD Technicians	136	Mechanical Engineers
134	Civil Engineers	57	Project Controls Specialists
62	Construction Engineers	200	Project Managers
106	Construction Inspectors	442	QA / QC Specialists
80	Construction Managers	28	Safety Engineers
38	Contract Administrators	30	Schedulers
55	Cost Engineers / Estimators	143	Structural Engineers
156	Electrical Engineers	13	Transportation Engineers

Approximately 35% of URS engineers and architects in the New York Office have Professional Engineering licenses or are Registered Architects in New York, New Jersey or other states. In the New York office alone URS has 32 multi-disciplined engineers who are certified ACI Concrete Construction Special Inspectors; 12 are ICC Certified as Structural Steel and Bolting Inspectors; and several are NACE Level 1 Coatings Certified.

Copies of URS Certificates of Authorization to practice Professional Engineering in the states of New York and New Jersey follow on the next page.

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

URS CORPORATION-NEW YORK
600 MONTGOMERY STREET
25TH FLOOR
SAN FRANCISCO, CA 94111-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0005938

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

NEW YORK STATE EDUCATION DEPARTMENT

EACH CORPORATION LAWFULLY PRACTICING THE PROFESSION INDICATED HEREON MUST CONSPICUOUSLY DISPLAY THIS CERTIFICATE IN ITS PRINCIPAL OFFICE AT ALL TIMES AS AUTHORITY TO PRACTICE DURING THE CURRENT PERIOD
(In the event of a change of address return this certificate for correction)

THIS IS TO CERTIFY THAT

URS CORPORATION-NEW YORK
600 MONTGOMERY STREET
25TH FLOOR
SAN FRANCISCO CA 94111-0000

HAVING MET THE STATUTORY REQUIREMENTS OF THE STATE OF NEW YORK IS REGISTERED FOR THE PRACTICE OF PROFESSIONAL ENGINEERING

Triennium Ends: October 31, 2012 Serial No. 99095

Signature of Chief Executive Officier

PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

Read instructions on reverse side

State of New Jersey

Division of Consumer Affairs

State Board of Professional Engineers and Land Surveyors

THIS CERTIFIES THAT

URS CORPORATION - NEW YORK
ONE PENN PLAZA, STE 610
New York NY 10119

Has met the requirements of the State Board of Professional Engineers and Land Surveyors and is hereby issued a

CERTIFICATE OF AUTHORIZATION

to offer the following services

Engineering & Land Surveying	***09/01/2008***	***08/31/2010***

Person in Responsible Charge JEFFREY D GUZY

For the names of other Responsible Charge Licensees, go to: http://www.njconsumeraffairs.com/pels/certrpt.pdf

Date: September 16, 2008
Certificate No. 24GA28095600
Expiration: 08/31/2010

Arthur Russo

Executive Director

SECTION D

Multiplier

Section D

MULTIPLIER

URS is proposing a multiplier of **2.10** times direct salary as the multiplier for the first line of subparagraph 9.A of the Standard Agreement found in the RFP. The multiplier breakdown and the factors that comprise the multiplier include direct technical labor, burden and fringes, overhead and profit, are summarized and provided in the following table. URS does not plan to utilize temporary employees on this project.

Direct Labor	**100%**
Total Burden and Fringe Benefits	**43.607% (**vacation, holiday, sick, workmen's compensation, medical and life insurance, employee welfare, FICA and unemployment insurance**)**
Total General Overhead	**70.465% (**indirect labor; supplies; administrative, financial and legal costs; rent, leases and repairs; utilities, travel and relocation; taxes; insurance and permits; postage and freight; general and administrative assessment; depreciation and amortization; and internal services**)**.
Profit	**5.6%** of direct labor, burden, fringe and overhead

Statement of Direct Labor, Fringe Benefits & Overhead

Year Ending January 1, 2010	Field Office
DIRECT LABOR	$125,882,022
FRINGE BENEFITS	
Vacation	$11,544,164
Sick	$3,733,214
Holiday	$5,998,804
Worker's Compensation Insurance	$293,708
Medical and Life Insurance	$14,159,896
Employee Welfare and Development	$3,900,676
Employers Taxes	$14,052,929
Unemployment and Disability Insurance	$1,209,426
(43.607%) Total Fringe Benefits	**$54,892,817**
GENERAL OVERHEAD	
Indirect labor	$42,319,544
Premium Overtime	$605,731
Operating and Reproduction Supplies	$519,264
Administrative, Financial and Legal	$4,997,467
Facilities Costs	$3,834,376
Other Rents and Leases	$479,999
Repairs and Maintenance	$548,572
Repairs, Maintenance, Rentals – Field Office	$79,129
Telephone and Utilities	$633,735
Travel, Entertainment and Relocation	$794,605
Advertising and Business Taxes	$1,181,072
Professional Activities	$558,213
Insurance and Permits	$3,929,172
Postage, Freight and other Expenses	$159,730
Corporate G&A Assessment	$5,207,842
Depreciation and Amortization	$1,454,801
Internal Services	$498,467
Gains / Losses; Bank Charges and Other	($65,540)
State and Local Taxes	$1,093,482
(70.465%) Total General Overhead	**$68,830,661**
(114.072%) Total Burden, Fringe and Overhead	**$123,723,478**

SECTION E

Resumes

Section E

RESUMES

In this section, we have provided a pool of resumes of URS' construction management staff proposed to help the Port Authority delivery its various 2011-2014 call-in projects.
In responding to your RFP, we have identified and proposed a pool of qualified individuals, who have worked successfully with the Authority and who collectively have experience on virtually every type of Port Authority Development Department projects. In fact, several of our employees have Port Authority experience that have spanned for decades, and many of them are currently working on Port Authority projects under the existing call-in CM contract.

We have also selected professionals who will be immediately available and able to meet any requirement you may have.

To make certain that we efficiently supply the most qualified personnel, we have assigned David Beckett, PE, a URS Vice President to oversee the execution of this work as Resource Manager, supported by Jack Spencer, PE, as URS Senior Vice President as Principal-in-Charge at the corporate level. Mr. Beckett has a lengthy history serving in different senior roles, including Project Executive, on numerous similar projects and assignments.

Subconsultants

Assisting URS with this program are three very experienced disadvantaged business enterprises: Maitra Associates, PC; LPE Enterprises, Ltd; and The Pentzke Group II.

Maitra Associates, PC

Maitra Associates, PC (Maitra), a certified MBE with the Port Authority of New York and New Jersey (PANYNJ), is a multi-disciplined engineering firm consisting of 44 professionals, which has been continuously involved in construction management work on major metropolitan agency projects since its inception in 1982. Among its clients are Port Authority of New York and New Jersey, Triborough Bridge and Tunnel Authority, New York City School Construction Authority, New York City Department of Design and Construction, New York City Transit, New York State, New York City and New Jersey Departments of Transportation and New Jersey Turnpike Authority.

Maitra is able to present a highly qualified group of construction professionals including Construction Managers, Resident Engineers, Office Engineers, Schedulers, Inspectors, Technicians and Surveyors who possess the requisite certifications and specialty training which PANYNJ justifiably expects from construction management personnel assigned to its projects. Over seventy percent of its staff is graduate engineers. Its inspectors hold certificates for OSHA Training, ACI Concrete Inspection, and Structural Steel Bolting.

The company has extensive PANYNJ experience with fifty percent of its staff having such experience. As a prime consultant, Maitra has provided engineering services for a multitude of projects for the PANYNJ through Call-In contracts since 1988.

LPE Enterprises, Ltd.

LPE Enterprises, Ltd., is a New York based WBE/DBE program management & construction management support services firm, is certified as a WBE firm with the PANYNJ, New York State, the New York State Department of Economic Development, and the New York City Department of Business Services.

The company identifies and serves the needs of construction management and engineering companies for skilled and experienced project-based personnel. The firm's staff members, all of whom are actively engaged on projects in the New York and New Jersey area, are full-time employees of LPE. The firm's staff, many of whom have been with the company since its founding in 1988, have extensive expertise in such areas as office engineering, architectural drafting, contracts administration, construction inspection, estimating, document controls, and technical administrative services.

LPE's reputation for reliable and professional service is best demonstrated by the length and closeness of its client relationships and by the frequency with which they are engaged for repeat assignments. LPE personnel have been providing Construction Management support to Port Authority facilities for many years. Specifically staff currently supporting the JFK, LGA, EWR and Teterboro Airport Resident Engineering offices under existing Call-In agreements.

The Pentzke Group II

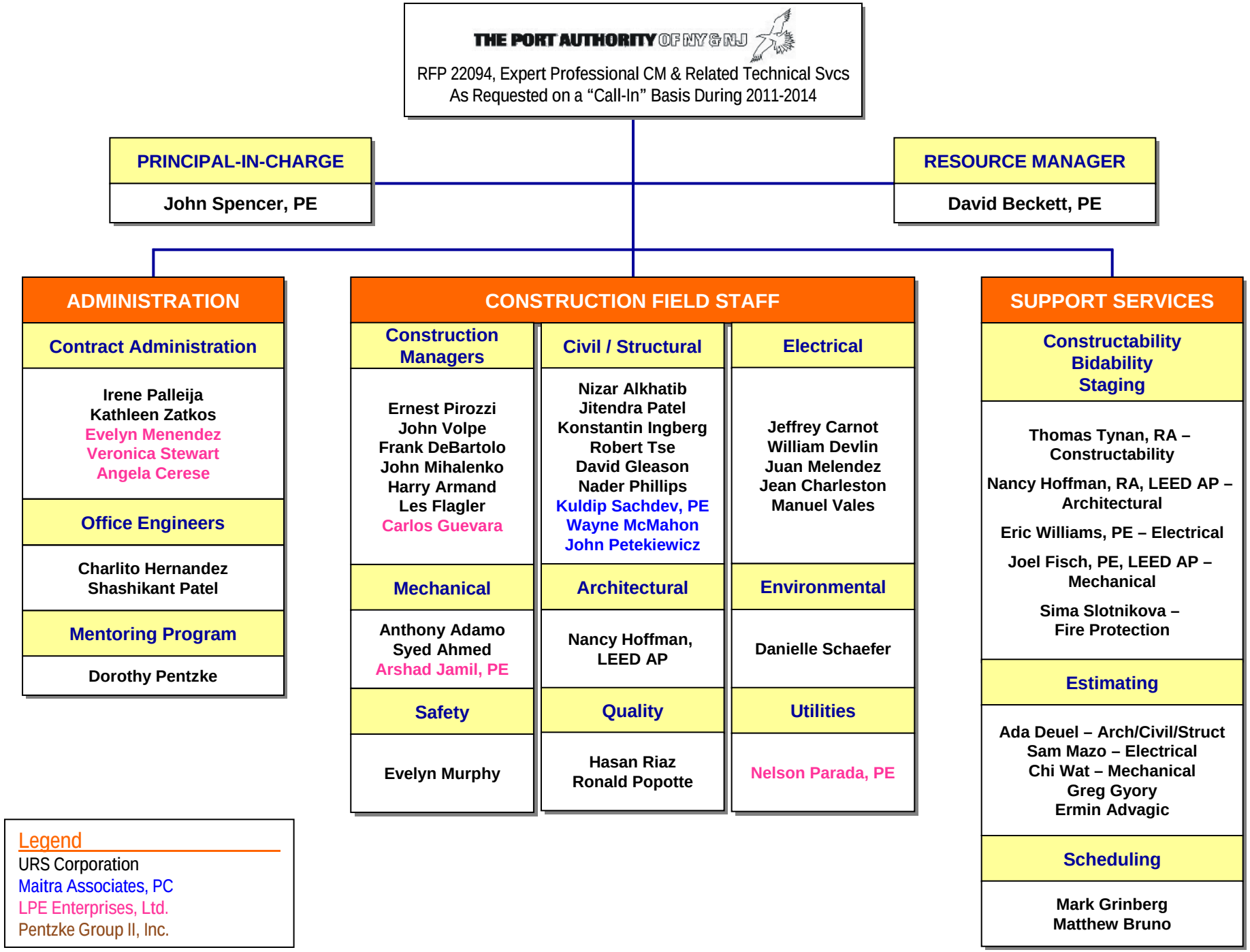
Pentzke Group, Inc is a consortium of professionals dedicated to the continual advancement of small business.

The Pentzke Group II, Inc has been in business for 10 years. It is registered with the Metropolitan Transportation Authority, The Port Authority of New York and New Jersey and the Empire State Development Corporation as a woman owned minority business. Since September 2001 the firm has served as the Program Manager for The Port Authority of NY & NJ's – Mentor/Protégé Program undertaken under the auspices of the PA's Engineering Department. More recently, since 2008 the firm has also undertaken the management, of the Building Trades Employers Association of New York City (BTEANYC) - union based - Mentor/Protégé Program. The company's only focus has been the management of Mentor/Protégé Programs. They have initiated contacts with other government and private entities that are interested in establishing mentor/protégé programs.

The primary focus of the company has been in the development of the New York / New Jersey Port Authority Mentor/Protégé Program and its management from inception in 2001 until today. Over the history of the program, the firm has consistently upgraded, and improved the components of the program based upon feedback from both the Authority and Participants in the Program – both Mentor input and Protégé input.

Organizational Chart

On the next page, we are providing the Organizational Chart illustrating our pool of proposed professionals. Following the chart, we have provided resumes of all individuals. Except for our corporate management staff, Principal-in-Charge and Resource Manager, who are placed first, all the other resumes are presented in alphabetical order.


THE PORT AUTHORITY OF NY & NJ
RFP 22094, Expert Professional CM & Related Technical Svcs
As Requested on a "Call-In" Basis During 2011-2014
PRINCIPAL-IN-CHARGE
John Spencer, PE
RESOURCE MANAGER
David Beckett, PE
ADMINISTRATION
Contract Administration
Irene Palleija
Kathleen Zatkos
Evelyn Menendez
Veronica Stewart
Angela Cerese
Office Engineers
Charlito Hernandez
Shashikant Patel
Mentoring Program
Dorothy Pentzke
CONSTRUCTION FIELD STAFF
Construction Managers
Ernest Pirozzi
John Volpe
Frank DeBartolo
John Mihalenko
Harry Armand
Les Flagler
Carlos Guevara
Civil / Structural
Nizar Alkhatib
Jitendra Patel
Konstantin Ingberg
Robert Tse
David Gleason
Nader Phillips
Kuldip Sachdev, PE
Wayne McMahon
John Petekiewicz
Electrical
Jeffrey Carnot
William Devlin
Juan Melendez
Jean Charleston
Manuel Vales
Mechanical
Anthony Adamo
Syed Ahmed
Arshad Jamil, PE
Architectural
Nancy Hoffman, LEED AP
Environmental
Danielle Schaefer
Safety
Evelyn Murphy
Quality
Hasan Riaz
Ronald Popotte
Utilities
Nelson Parada, PE
SUPPORT SERVICES
Constructability
Bidability
Staging
Thomas Tynan, RA – Constructability
Nancy Hoffman, RA, LEED AP – Architectural
Eric Williams, PE – Electrical
Joel Fisch, PE, LEED AP – Mechanical
Sima Slotnikova – Fire Protection
Estimating
Ada Deuel – Arch/Civil/Struct
Sam Mazo – Electrical
Chi Wat – Mechanical
Greg Gyory
Ermin Advagic
Scheduling
Mark Grinberg
Matthew Bruno
Legend
URS Corporation
Maitra Associates, PC
LPE Enterprises, Ltd.
Pentzke Group II, Inc.

JOHN SPENCER, PE

PRINCIPAL-IN-CHARGE

Years of Experience
With URS: 2 Years
With Other Firms: 35 Years

Education
MBA/1979/Fairleigh Dickson University
BCE/1970/Manhattan College

Registration/Certification
Professional Engineer
New York, 1975
New Jersey, 1975

OVERVIEW

Mr. Spencer has 37 years of engineering experience, which includes engineering design and construction programs in the New York/New Jersey Metro area. Prior to joining URS, he held senior positions with the Port Authority of New York & New Jersey (PANY&NJ) and the New Jersey School Construction Corporation (NJSCC), where he was responsible for the management and implementation of capital design and construction programs valued at $10-15 billion. Mr. Spencer is also familiar with the New York design and construction communities and is adept at forging the partnerships necessary to make a project successful.

As Senior Vice President and Regional Manager at URS, he is responsible for the Northeast operations, which includes a 600 person Program Management/Construction Management and Design Division with a portfolio of projects valued at approximately $10 billion.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Deputy Chief Engineer Newark, NJ (1970 - 2003)

Deputy Chief Engineer, directed the engineering/architectural design, project and construction management, quality assurance and general operations of the Engineering Department, which included a staff of approximately 700 engineers, architects, technical, and support employees and an equivalent staff of architectural, engineering and technical consultants and job shoppers. Engineering provided the professional services to deliver the Authority's $9 billion five-year Capital Program. In 2002, engineering awarded $1.2 billion in new construction contracts and placed $1.1 billion of construction in place. Major programs included:

- John F. Kennedy Airtrain
- Newark Liberty International Airport Monorail
- John F. Kennedy Redevelopment Program - A $3 billion redevelopment program including extensive roadway and terminal improvements.
- Newark Liberty International Airport - A $2 billion redevelopment program including Terminal B expansion, entrance and central terminal area roadway improvements and off airport access modifications.
- World Trade Center PATH Restoration including Exchange Place.

PANYNJ, World Trade Center Transportation Hub Project and Other World Trade Center Site Projects, New York, NY (2006 - Present)
Principal-in-Charge for the WTC Transportation Hub Project.URS, as part of a joint venture, is providing construction management services to the PANY&NJ for the World Trade Center Transportation Hub and other WTC site projects. The Hub is being built to replace the temporary PATH station that was constructed after the previous PATH station under the World Trade Center was destroyed on September 11, 2001. The PATH station is the major transportation hub that transports New Jersey commuters to lower Manhattan and visa versa.

Other World Trade Center projects include:

- Common Infrastructure Projects (vehicular security center, new streets and open spaces, and CH&RP)
- WTC Memorial, Memorial Museum, Performing Arts Center
- Freedom Tower, Tower 2,3 & 4, and retail development

Construction management tasks include QA/QC, inspection services, preconstruction phase services, support services, technical services, site safety monitoring, scheduling, cost management, document control, cost estimating, site construction, logistics, project closeout, environmental reporting and coordination with NYCDOT/NYSDOT, New York City Transit, Lower Manhattan Construction Command Center, NYC Department of Environmental Protection, Con Edison, FTA, and local businesses and communities.

New Jersey School Construction Corporation, Trenton, NJ (09/2003 - 09/2005)
As Chief Executive Officer, he was responsible for this $8.6 billion program to construct much needed quality schools throughout New Jersey. The program is the largest public construction program ever undertaken by New Jersey and one of the largest programs of its type in the nation. In 2004, the NJSCC:

- Initiated 47 design awards for 55 schools (renovation/new construction), worth approximately $835 million.
- Awarded 104 construction contracts valued at $930 million.
- Acquired 205 sites for 15 school projects worth $100 million.

Manager Engineering Management Services Division (1987 - 1994)
Managed human resources, environmental and construction permitting, construction contract estimating and management functions for the Engineering Department. Established project controls for schedule, budget and cost management, drawing management, CAD management and engineering information systems.

Program Engineer (1984 - 1986)
Managed the design efforts for economic and port development including engineering consulting, design and project management for capital construction projects. Major projects included Industrial Parks in Yonkers, NY; Bathgate,Bronx, NY; and Elizabeth, NJ, including site development, commercial industrial buildings and major renovations to existing facilities. Port projects included harbor dredging, wharf and pier rehabilitation and rail access projects.

Senior Engineer (1979 - 1983)
Developed a project management system to insure project delivery in scope, schedule and budget. Developed a professional services program including Requests for Qualifications, Requests for Proposals and consultant evaluation and selection.

Engineer (1970 - 1978)
Responsible for airport road and aeronautical improvement projects including civil design, contract preparation and estimating.

DAVID P. BECKETT, PE

RESOURCE MANAGER

Years of Experience
With URS: 22 Years
With Other Firms: 8 Years

Education
MS/1988/Civil Engineering/Brooklyn Polytechnic
BS/1980/Environmental Engineering/Syracuse University

Registration/Certification
NY/Professional Engineer/1988

OVERVIEW

David Beckett has more than 30 years of experience in program, project and construction management for both public and private clients, and in all phases of the project delivery process. This experience has included the management of cost, schedule, and quality on a wide variety of project types. He is currently the Deputy Manager of the New York Construction Management Group, overseeing more than $5 billion worth of projects in the New York area alone.

PROJECT SPECIFIC EXPERIENCE

Deputy Manager URS Construction Management Group, New York, NY

Deputy Manager directly supports the operations of a 400-person construction management group with a portfolio valued at more thatn $8 billion in construction projects. In addition, serves as the Project Executive on a number of significant projects such as: GSA Brooklyn Court Program - $450 million; Restoration of Federal Hall for the National Park Service - $12 Million; Upgrade of 911 Fire Call Centers for the New York City Department of Design and Construction - $70 Million; Remediation of petroleum contaminated sites for the New York City Department of Design and Construction - $75 Million; Redevelopment of JFK Airport - $12 Billion.

PANYNJ, John F. Kennedy International Airport Redevelopment Program, Jamaica, NY

As Project Manager, approved contract change orders and designer and construction manager budgets; chaired weekly status meetings with the designer and construction manager; provided direction to the contractor for issues that were not resolved by the construction manager; and reported project status to senior management. As Control Engineer, managed the cost and schedule of the $234 million People-mover system, a major component of the redevelopment program. Prepared and updated project schedules, monitored project budgets and prepared project status reports.

Department of Public Works, Nassau County, NY

Resident Engineer/Project Engineer/Claims Engineer for a large municipality under a federal consent order to complete capital improvements to wastewater treatment facility. As Resident Engineer, managed the construction of a $22 million expansion to the Bay Park Wastewater Treatment Plant. As Project Engineer, oversaw design consultants' preparation of contract documents. As Claims Engineer, handled approximately $6 million in construction claims.

Underground Storage Tank Program, New York, NY

Project Manager responsible for the design and construction of upgrades on this project, to bring New York City Department of Design and Construction's underground storage tanks and related piping systems at 25 sites into compliance with regulatory requirements. Previously performed the same role for URS's first contract, which involved 70 tanks at 26 sites.

New York City School Construction Authority Capital Improvement Program, New York, NY
Manager of Project Assessments for URS's Independent Program Review team. Reviewed cost, schedule, quality, and management performance of several of the program's 150 major projects.

Confidential Financial Services Client, New York, NY
As Project Manager he was responsible for all aspects of the design and construction of this 22-story, 525,000 sq. ft. interior renovation project. This project included the complete rebuilding of the base building infrastructure including: HVAC, electrical, telecommunications, plumbing, complete interior fit-out, and an addition of a new cafeteria and Wellness Facility.

Doral Inn, New York, NY
Project Manager for Starwood Lodgings $120 million renovation of a 75 year old hotel located in midtown Manhattan. Project included the renovation of 663 guest rooms, the addition of 59 rooms, a world class restaurant, ballroom and business center, while under continuous occupancy. URS services included project management, bid review, scheduling, budgeting, estimating, and change order management.

ANTHONY ADAMO

MECHANICAL INSPECTOR

Years of Experience

With URS: 11 Years
With Other Firms: 18 Years

Education

AAS/1985/HVAC-Mechanical/New York Technical College
Diploma in Computer Programming/1976/ Programming and System Institute
ACI Certified
Certified Project Manager

Specialized Training

Liebert Training School
Quality Fire Prevention Institute
ACI Certified
Certified Project Manager

OVERVIEW

Mr. Adamo is a seasoned Building Operation and Maintenance Manager and Construction Manager with 29 years of progressively responsible experience. His background includes a proven track record of implementing projects on time and within budget with knowledge of all construction trades. Mr. Adamo is well-versed in financial administration and project management and knows Federal, State and New York / New Jersey City Building Codes requirements and safety regulations

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark International Airport (EWR) Construction Management Services on a Call-In, As-Needed Basis, Newark, NJ (1999 - Present)
Assistant Resident Engineer and Inspector responsible for all TAA's at the Terminals A, B and C at the present and previously as Mechanical Engineer at Newark International Airport for the Port Authority of New York and New Jersey on URS's assignment. Construction manager for the Port Authority's capital program to maintain and upgrade the existing infrastructure, and construct new facilities at EWR. The Authority initiated a series of projects in the 1998-2002 timeframe to address the growth needs of EWR and also upgrade existing facilities with regard to safety, security and environmental requirements. Responsibilities as Mechanical Engineer included:

- $450 million extension of the on-airport People Mover (monorail) to the Northeast Corridor rail station to allow intermodal transfer from Amtrak and NJ TRANSIT trains to the EWR People Mover with direct access to each terminal.
- $120 million structural parking facility at long term lot E.
- $140 million Southern Access Roadway Expansion from NJ Turnpike Exit 13A to EWR.
- $70 million mechanical expansion including new cooling towers, 3 new chillers, 4 new HTWH generators, new substation, new sprinkler systems, new lighting and ceiling systems.

Brooklyn Federal Courthouse, Two Commercial Office Buildings, and Parts of Shea Stadium, Brooklyn, NY
Project Manager responsible for the management of mechanical maintenance contracts in New York City, including negotiating with vendors for supplies, services and special equipment maintenance and testing (e.g., electrical switchgear, generators and fire safety systems). Responsible for managing a $4.1 million operating budget. Supervision of on site staff with focus on efficiency, energy conservation, safety and cost reduction. On call 24 hours. Advised Federal Agencies on proper procedures to operate building systems for optimum efficiency.

Also responsible for inspecting other prospective sites to assess conditions of structural and mechanical equipment and propose to senior management. Responsible for compliance with OSHA, EPA, NFPA and ADA standards. Completed the separation of the entire electric service for the Federal Courthouse Federal Office Building with a new electric service exclusively for the Courthouse. Performed this cutover with a seamless change in power with minimal disruptions to the ongoing Courthouse operation.

Joseph Addabbo Federal Building, Jamaica, NY
Chief Engineer responsible for the supervision of mechanical, custodial and security staff with a $2 million operating budget. Also responsible for planning, scheduling and administering special projects valued at $0.5 million. Implemented energy conservation methods. Cost estimated projects and supervised progress through finalization. Directed operation and maintenance of 2300 tons of A/C, 750 kw generators, ATS switches, Landys & Gyr computerized building management system, hot water and steam boilers. Responsible for compliance with GSA, OSHA, DEP and EPA regulations.

Citibank, New York, NY
Assistant Chief Engineer responsible for the supervision of the mechanical staff for Citibank. Responsible for the operation and maintenance of 1,600 tons A/C, all steam systems, TSBA building management system, weekly testing of three 1500 kw Caterpillar diesel generators, ASCO ATS switches, six Liebert UPS modules (uninterrupted power for computers), computerized lighting system (Luminoptics), computerized work orders and preventive maintenance schedules. Provided training for and monitored performance of staff. Responded to emergency need for online satellite office during a major power outage at one major Citibank building. Restored A/C operation and provided technical support during this critical time for the bank.

Merrill Lynch, Pierce, Fenner and Smith, New York, NY
Shift Supervisor on this assignment managing maintenance staff, including engineers and mechanics, in the operation, maintenance and troubleshooting of all building equipment: two 160 ton Lithium Bromide absorbers, one 360 ton air cooled centrifugal unit, 130 Liebert package units for computer rooms, two 100 ton chillers for IBM CPU's and other ancillary equipment.

SYED AHMED

MECHANICAL INSPECTOR

Years of Experience
With URS: 11 Years
With Other Firms: 1 Years

Education
BS, Mechanical Engineering
NED University of Engineering & Technology, Karachi, Pakistan

OVERVIEW

Mr. Ahmed has more than 12 years of experience with URS, with the past 10 years as Mechanical Inspector on the PANYNJ Newark-Liberty International Airport Extensions and Modification Program. Work included baggage handling systems, sprinkler systems, roadways, bridges, parking lots, and exit plazas.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark International Airport Extension and Modification projects, Newark, NJ (2000 - Present)
Mechanical Inspector, involved in the inspections of overall installation of Baggage Handling System, HVAC System, Sprinkler System and Plumbing at Newark Liberty International Airport Terminal Building. Have also worked on construction of new roadways, bridge, islands and parking lots with new entrance and exit plazas that included complete Electrical, Communication, Sanitary, Sewer, and Water Main installations and writing of work permit requests. Also helped contractor in resolving design issues. Responsibilities included the coordination with relevant and completion of daily narratives. Have also been involved in managing the installations of luggage screening machines at EWR. And looked after the TAA concession work at the airport.

EZ-Pass System on Garden State Parkway and NJ Turnpike, NJ (1998 - 2000)
Responsible for providing construction management services for a multi-billion dollar project. Involved in complete erection of huge highway signs, and various styles of structure using Unistrust and other required hardware. Also involved in the installation of galvanized conduits to run power and fiber optic cables. LECs electrical panel boards, junction boxed and transformers. The work further involved installation of sewer pipes, water main, catch basins, manholes and street/roadway lighting works. This was a multi-agency project that involved extensive coordination activities with different city and utility agencies. Inspected complete enclosure set-up, including heating and cooling system for the facility. Prepared daily construction reports, determined quantities for payment, and processed contractor's payment application. Participated in safety meetings and assured contractors compliance with safety issues.

Pulmonary Management, Inc. (1991 - 1998): Supervised complete renovation of the warehouse facility, including electrical, HVAC, sanitary and drainage works. Responsibilities also included maintenance of the facility as well as durable medical equipment.

Herman Miller, Inc. (1988 - 1991): Supervised operation of hydraulic presses, drills, hammers and stitching machines for assembly and manufacturing of specially designed office furniture, including soundproof panels, swivel chairs and computer desks.

S.G. Rayon Limited, Karachi, Pakistan (1984 - 1988): As an Assistant Engineer, responsible for quality control, preventive maintenance and trouble shooting of complete plant equipment. Supervised and inspected installation/erection of extruders, centrifugal pumps, spinning machines, draw twisters, and 5,000 lb. capacity elevator (that consisted of hoist way, shaft cab, control panels and finishes) all according to specifications. Supervised and inspected construction of plant extension that included civil, mechanical, plumbing and electric works according to plans and specifications. Supervised installation of CCTV security system, and fire protection system that involved installation of horn strobes, sprinklers, etc. Supervised preventive maintenance of all mechanical installations, including escalators, machine room and boiler room.

Electrical & Mechanical Engineering Divisions, Pakistan Army: Supervised and inspected construction of large scale automobile and machine workshops that consisted of civil, mechanical, plumbing and electric works according to plans and specifications. Duties also consisted of supervision of operation of hydraulics lifts, cranes and other heavy equipment along with administration of staff.

NIZAR ALKHATIB

CIVIL / STRUCTURAL INSPECTOR

Years of Experience
With URS: 11 Years
With Other Firms: 10 Years

Education
Master of Engineering Science / Civil / Structural

Security Clearance
Airport Clearance

OVERVIEW

Mr. Alkhatib has more than 21 years of experience in the construction field with extensive experience as civil / structural inspector of all types of facilities particularly in the New York / New Jersey region. He is currently providing inspection services on the PANYNJ Newark-Liberty International Airport working on the terminal modernization program. Also responsible for inspection of the construction of new airport approach, including highway section, ramps, new bridges, and rehabilitation of existing bridges.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Newark, NJ (2001 – Present)
Inspector, presently working on the terminal modernization program which include, new ticketing offices steel framing and retrofitting existing steel, new elevators, baggage handling system, escalators, slab on grade, etc. Responsible for the construction of new airport approach, including highway section, ramps, new bridges, rehabilitate existing bridges, pile driving, new drainage system runs and retaining walls. Terminal works included new stainless steel frame elevators, drilling mini-piles, structural steel frame and new concrete slab on grade for the new entrance to the terminal. Major parking garage rehabilitation including slab removal, pile anchoring system and seismic bracing, new concrete slab and columns seismic reinforcement, new ceiling and lighting system and new demising walls. Terminal facade reconstruction involved spall and crack repairs, and painting all exterior facade.

PANYNJ, Newark-Liberty International Airport, Runway 22R-4L and Taxiways Reconstruction, Newark, NJ (1998 - 1999)
Inspector responsible for stabilizing sub grade for the new runway concrete slabs. New FAA Electrical and communication duct banks and transmission stations. New drainage and sub drain system. Milling and resurfacing runways and taxiways.

NYS Thruway, Tappan Zee Bridge Rehabilitation, Tarrytown, NY (1999 - Present)
Senior Inspector for the East Truss Deck Replacement Project for the New York State Thruway Authority. Project consists of providing full resident engineering/ inspection services for the NYSTAs busiest bridge. Work included installation of pre-fabricated exodermic concrete grid deck panels, asphalt membrane waterproofing, modular expansion joint system, resetting of finger joints, structural slab repairs, corrugated beam guide rail installation, complex maintenance and protection of traffic plan, and pavement striping. Project Labor Agreement governs this project.

NYS Thruway, Tappan Zee Bridge Structure Rehabilitation, Tarrytown, NY (1997 - 2000)
Chief Inspector on a $13 million substructure rehabilitation of this bridge. Supervised a field inspection staff of five personnel consisting three civil engineers and two NICET certified senior inspectors. Developed a computerized monitoring system of the partial and full depth concrete columns repair, and under water pile caps repair and upgrade bearing system for seismic loads.

NYS Thruway, Tappan Zee Bridge Deck Rehabilitation, Tarrytown, NY (1996 - 1998)
Senior Inspector on a $26 million west truss deck rehabilitation project at this bridge. Work involved upgrade of pedestals and bearing to the seismic load code. Installing additional longitudinal beams and diaphragms to increase rigidity for the structure. Identification of deteriorated concrete within four hours window once overlay was removed. Established efficient procedures using chain drag and hammer sounding to locate spalled and delaminated spots. Project also included jacking stringers under life load to replace concrete pedestals and anchor bolts.

Asphalt Concrete Reconstruction, Route 55, Poughkeepsie/La Grange, NY (1995 - 1996)
Senior Inspector on 2.5 miles, $24 million dollars asphalt concrete reconstruction, Route 55 in the Town of Poughkeepsie and La Grange. The project involved demolishing of bridge structures and building new structures; piles driving, pile caps, and box beam girders; adding new lanes in both directions; building new drainage structures along the 2.5 miles; and new pavement along the total length of the project.

Route 55 Reconstruction, Poughkeepsie, NY (1995 - 1996)
Senior Inspector on 2.5 miles, $24 million project, including railroad demolishing, bridge widening, constructing new bridges and pile driving, and addition of new lanes in both directions.

State Highway I-87 and I-287 Main and Local Interchange Reconstruction, NY (1994 - 1995)
Assistant Office Engineer on this project involving 3.5 miles of highway and 14 bridges between new and rehabilitation for the New York State Department of Transportation. Work included structure and highway plan review, planning operations schedules, preparing order on contract papers and quantities take off, including retaining walls and bridge concrete pavement construction supervision.

Department of Environmental Protection, NY (1989 - 1993)
Assistant Civil Engineer for the inspection and supervision of construction including dam reconstruction, reinforced concrete bridges, dam stability, anchoring, post tensioning and grouting. Supervised the rehabilitation of the NYC water supply building prepared payments, change orders and overruns. PCB decontamination clean up for a major water supply building and its reconstruction. Reconstruction of sewage treatment plants, filter beds, primary and secondary tanks. Developed construction flow charts for a variety of projects. Prepared different solution options for leaks investigation in dam.

HARRY ARMAND

CONSTRUCTION MANAGER

Years of Experience
With URS: 23 Years
With Other Firms: 4 Years

Education
BS/1982/Civil Engineering/Bradley University

Registration / Certification
NICET III (Highway Construction), NY

Specialized Training
Structural Steel ad Bolting Special Inspector, May 2010
Confined Space and Fall Protection Training, 2005
10-Hour OSHA Training, 2002
Safety Qualified Supervisor Training, 2002
Work Site Traffic Supervisor, New York, 1997
MTA Bridges & Tunnels; NYCT; Amtrak Safety Training
MTA Security Training, 2006

OVERVIEW

Mr. Armand has more than 27 years of experience in capital improvement construction on various infrastructure projects throughout the New York / New Jersey region. His chief responsibilities include construction management and inspection, coordinating construction supervision, community liaison, quality assurance, and safety supervision. Most recently he has been serving as Resident Engineer on the PANYNJ JFK International Airport, Runway and Access Improvements project, responaible for monitoring the $320 million widening of the Bay Runway to meet FAA standards.

PROJECT SPECIFIC EXPERIENCE

PANYNK, JFK International Airport, Bay Runway 13R-31L Reconstruction and Access Improvements, Jamaica, NY (2009 – Present)
Resident Engineer responsible for monitoring the $320 million widening of the Bay Runway, from 150-ft to 200-ft, to meet FAA standards. Performs construction management, coordination, and safety inspection for phased aeronautical runway construction. Provides oversight of the rehabilitation of runway pavement and associated intersecting taxiways, installation of new drainage system, re-grading of safety areas, relocation of thresholds, new electrical infrastructure guidance signs. Facilitates updates to As-built drawings.

Integrated Electronic Security System/Command, Communication and Control Centers (IESS/C3), Metropolitan Transportation Authority, New York, NY (2006 - 2009)
Resident Engineer for the installation, testing and implementation of an integrated electronic security system at various locations throughout New York City. Managed the project activities relating to MTA Bridges & Tunnels facilities and directed inspectors assigned to this portion of the work. Coordinated activities among client, designer and contractor. Monitored compliance of project activity with specifications and manages all change orders, along with development of project status reports and insuring updating of drawings and other project documentation.

Deck Replacement of the Harlem River Lift Bridge and Approach Truss Spans, Triborough Bridge, MTA Bridges and Tunnels, New York, NY (2004 - 2006)
Quality Assurance Supervisor on this $40 million project. Supervised orthotropic steel deck installation, structural steel bearing replacements and precast concrete panel installation. Critical to the project was direct coordination of Maintenance and Protection of Traffic, installation of traffic warning devices, oversight of vertical bridge lifts, audit of safety procedures and liaison among the

contractor, the owner and the CM Team. Also responsible for report preparation, quantity records, closeout punch list, and Liftspan balancing oversight.

Reconstruction of the Fort Hamilton Parkway between 78th Street and 37th Street, NYC Department of Transportation, Brooklyn, NY (1983 - 1985)
Inspection duties included the replacement of a 72-inch steel water main and combined sewer in common trench, traffic signals, street lighting, drainage structures, parkway malls, and sidewalks.

Reconstruction of McGuiness Boulevard from Meeker Avenue to Ash Street, NYC Department of Design & Construction, Brooklyn, NY (1998 - 2000)
Responsible for coordinating all water main shutdowns and replacement of distribution and trunk mains. Monitored the abandonment of existing 30-inch and 72-inch water mains, using cement/bentonite mixture. Inspected jacking procedures for the new 48-inch ductile iron water main through an existing 72-inch steel pipe by the slip lining method. Inspected the installation and welding of a new 60-inch steel water main, standard butterfly valve chambers and water pressure regulators.

Design/Construction Management of PW 348-17 Upgrading, Replacement and Decommissioning of Petroleum Product Storage Tanks, NYC Department of Design & Construction, New York, NY (1997 - 1998)
Responsible for coordinating pre-construction visits at designated New York City Fire Department station houses; prepared and submitted comprehensive reports for each site. Prepared construction change orders, reviewed design revisions, and processed subcontractor partial payments. Responsible for monitoring the progress of construction while maintaining constant communication with the NYFD personnel.

Reconstruction of Stuyvesant Street and East Ninth Street at Third Avenue, NYC Department of Design & Construction, New York, NY (1996 - 1997)
Served as the Chief Inspector for the construction of the Viewing Gardens in partnership with Cooper Union School of Engineering and NYCDDC. Inspection duties included repair of an existing elliptical brick sewer by gunite, the removal of abandoned trolley tracks and yokes, and the installation of new drainage facilities, water mains, concrete reinforced foundation wall, granite coping, and landscaping. Monitored the protection of all existing utilities under the Cost Sharing Agreement.

Reconstruction of Step Street at Bailey Avenue, NYC Department of Design & Construction, Bronx, NY (1996)
Responsibilities included the inspection of new concrete reinforced retaining walls, drainage structures, curb, sidewalk, handrails, street lighting and landscaping. Prepared monthly partial payment estimates and coordinated final acceptance by city agencies.

Reconstruction of Jamaica Avenue from Sutphin Boulevard to 170th Street, NYC Department of Transportation, Queens, NY (1985 - 1987)
Inspected installation of new brick pavers, drainage concrete base, and asphalt paving and was responsible for processing monthly partial payments, change orders, and contractor's final payment packages.

ERMIN AVDAGIC

ESTIMATOR

Years of Experience
With URS: 3 Years
With Other Firms: 22 Years

Education
B.S./1983/Civil Engineer/
University of Sarajevo, Europe

OVERVIEW

Mr. Avdagic has 25 years experience in estimating, construction planning and implementation of multi-million dollar construction projects, including buildings, airports, tunnels, bridges, fire and police stations, and educational. He has extensive estimating experience in the New York / New Jersey region, including on PANYNJ project such as LaGuardia Central Terminal Building Modernization Program, and the PATH Transportation Hub downtown Manhattan. Mr. Avagic is proficient with numerous industry software packages such as MC2, Success, GTCO Digitizer, Excel, Timberline, ACE, and Microsoft Office.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, LaGuardia Airport Central Terminal Building Modernization Program, Queens, NY (2008 - 2009)
Senior Civil Estimator developed cost estimates for elevated roadways, taxiways, and aprons. The main focus of the project is the $4 - $5 billion program to replace the 45 year-old Central Terminal Building (CTB) and its concourses to increase the types of aircraft that can be accommodated and to provide greater flexibility in adapting to programmatic changes of the airlines served by the facility. The program includes a new 1.2 million s.f. CTB and concourses with 38 gates; new CTB ramp; relocated taxiways; a new 6,000 space parking structure; and totally reconfigured roadway and utility systems. URS is also studying the operational and financial feasibility of a facility that will screen all deliveries to the airport to conform to TSA requirements.

PANYNJ, PATH Transportation Hub, New York, NY (2007 - 2008)
Senior Estimator for civil and structural trades, developed detailed and complex cost estimates. The $3 Billion Transportation Hub, equivalent in size to Grand Central Station, will be comprised of a new PATH subway station serving approximately 100,000 daily commuters with additional underground concourse connections to 13 NYC MTA subway lines, the Hudson River ferry, and the World Financial Center. The Hub will include 500,000 square feet of retail facilities.

PANYNJ, PATH Tunnels E&F Floodgates and Water Management System, New York, NY (2007 - Present)
Chief Estimator responsible cost estimates for architectural, structural, civil and electrical. Mr. Avdagic saved the client $17 million at only one (W.O. #25) of multiple estimates on this project.

PANYNJ, PATH 800 MHZ Trunked Radio Communication System, New York, NY (2007 - Present)
Senior Lead Estimator responsible cost estimates for civil, HVAC, plumbing and electrical. The scope of work included adding 800 MHz ITAC and 450 MHz UTAC channels to an existing 800 MHz simulcast site.

NJ Transit, New Jersey Light Rail Project, NJ
Senior Estimator - Saved NJLRT(New Jersey Transit) several million dollars and attended negotiating meetings as consulting expert and helped client to save huge amount of money.

NYCDDC, Central Park Police Precinct, New York, NY (2008 - Present) - $41,000,000: Chief Estimator for preparing change order cost estimate for all trades and supervising the work of other estimating team members. The project consists of the restoration and addition to the Police Precinct.

SUNY College at Old Westbury, New Academic Building, Old Westbury, Long Island, NY (2008 - Present) - $56,000,000: Chief Estimator responsible for preparing cost estimates for all trades. Based upon the bid results, URS' estimate was very accurate. Also performing and supervising change order review and negotiation. The scope of work includes the construction of a new 150,000 SF building, upgrades to boiler plant equipment in an adjacent building and demolition of existing space.

George Washington Bridge, NY Tower Base Improvements, New Jersey and New York (2007 - Present): Senior Lead Estimator responsible cost estimates for civil, HVAC, plumbing and electrical.

NYCDDC, FDNY Fire Station Rehabilitation Projects, New York, NY (2008 - 2009) - $90,000,000: Chief Estimator supervising all trade cost estimates for the rehabilitation of fire stations throughout New York. Also performing and supervising change order review and negotiation. The scope of work included full gut renovations of the kitchen/dining rooms and rehabilitation of new structural floor slabs/structural steel beams at apparatus floor, masonry repair, re-pointing and waterproofing, and roof replacements.

34th Street BRT Visualization, New York, NY (2009): Chief Estimator provided conceptual estimate for a Study to develop conceptual designs of a BRT corridor (4 blocks), including CADD plans and illustrative plans; visualization of this corridor, including still renderings and 3-D animation for use in presentations promoting NYCDOT BRT plans.

Harvard University's, Allston Development Group, Allston Science Complex, Cambridge, MA (2007 - 2008): Senior Lead Estimator responsible cost estimates for civil, HVAC, plumbing and electrical. The scope of work includes a 500,000 SF, state-of-the-art, research space above ground in four buildings linked by pedestrian bridges, with a large central open space between.

Dallas-Ft. Worth (DFW) International Airport, 20-Year Capital Improvement Program, Dallas, TX - KJM & Associates (2000 – 2007)
Senior Estimator provided estimating services including developing cost estimates and change order review and negotiation that were directly or indirectly related to the proposed new International Terminal D and the proposed Automated People Mover (APM). Individual project scopes to this point have ranged between $1 and $100,000 Million. The nature of projects at this airport is dynamic, and as a consequence, our basis of estimates range from highly conceptual estimates to estimates prepared from complete construction documents. Mr. Avdagic saved to the client over $6 million on the steel structure for APM.

MATTHEW C. BRUNO

SCHEDULING

Years of Experience
With URS: 2 Years
With Other Firms: 1 Years

Education
BS/Mechanical Engineering/Lehigh University/2007

Specialized Training
Primavera Project Planner 3.1 (P3) software

OVERVIEW

Mr. Bruno is a Scheduler and Officer Engineer, and has worked in the construction industry over the past three years. Mr. Bruno has worked extensively with Primavera Project Planner 3.1 (P3) software for critical path method (CPM) scheduling and schedule analysis. Prior to joining URS, Mr. Bruno worked for a construction consulting company, dealing heavily with schedule delay analysis in litigation and non-litigation related disputes. Mr. Bruno was also responsible for the review of key construction documentation. As a Project Scheduler, he has created and analyzed construction schedules on such projects as the PANYNJ E&F EDS, SUNY Stony Brook Advanced Energy Research and Technology Center; Fresh Kills Landfill Roads, and the Moynihan Station.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, PATH NY/NJ Tunnels E/F, New York, NY (12/2008 - 04/2009)
Project Scheduler, developed a schedule for work to be performed in two of the mass transit tunnels connecting New York and New Jersey. The scope in Tunnels E/F consisted of an emergency detection system to undergo a mitigation and restoration process.

Nassau County Correctional Center, East Meadow, NY (12/2008 - Present)
Project Scheduler. Nassau County Correctional Center, a maximum security prison, was renovated in Buildings A and B of the facility. The project involved solely electrical work associated with the outdated fire alarm and security systems, which were in need of modernization. Mr. Bruno was responsible for creating a project schedule on behalf of the Nassau County Department of Public Works while incorporating the schedule submitted by the contractor. He coordinated with the URS project manager to validate any discrepancies. Mr. Bruno was also responsible for monthly schedule updates.

SUNY Stony Brook AERTC Building, Stony Brook, NY (12/2008 - Present)
Project Scheduler. The Advanced Energy Research & Technology Center at Stony Brook University is expected to be the first LEED Platinum Rated building in New York State. Mr. Bruno analyzed and reviewed the contractors schedule, and advised on necessary changes to be made. These changes were incorporated into the baseline schedule as well as subsequent updates.

LaGuardia Community College, Queens, NY (01/2009 - 03/2009)
Project Scheduler responsible for the development of three separate schedules for this project. Mr. Bruno created a schedule each for a parking garage renovation, 4th floor dormitory renovation, and a dormitory elevator addition, based loosely off data from the contractor.

Fresh Kills Landfill, Staten Island, NY (12/2008 - 03/2009)
Project Scheduler, responsible for generating a schedule to go along with the estimating services being provided. The project was mainly comprised of roadway construction and renovations.

Trump-SoHo Hotel/Condominium, New York, NY (03/2008 - 09/2008)
Mr. Bruno was responsible for the analysis of delays as well as concurrent delays resulting from owner design changes and other stop-work orders for this multi-million dollar commercial hi-rise in the Soho neighborhood of New York City is comprised of 400 units classifiable as a condominium hotel. The 386,000-SF, 45-story building experienced several major delays, including the concrete collapse on the NE corner of the 42nd floor, resulting in the death of one worker. Mr. Bruno also reviewed and advised on proposed changes to the contractors schedule and subsequent schedule updates.

JEFFREY CARNOT

ELECTRICAL INSPECTOR

Years of Experience
With URS: 10 Years
With Other Firms: 10 Years

Education
1977/Electrical Technology
Certificate/Union County College

OVERVIEW

Mr. Carnot has more than 20 years of successful and progressive experience in diversified areas of electrical design/drafting. He has hands-on Senior Designer with extensive field experience, including inspection, liaison between engineers and construction crews. Experience working with complex schematics and electrical power systems, including CAD experience involving Intergraph and IBM Workstations.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Teterboro Airport, Teterboro, NJ (2001 - Present)
Electrical Inspector responsible for the following projects:

- Interim Maintenance Building for the $1,000,000 Teterboro Airport.
- Slurry Seal Application on Taxiway L with new taxiway pavement markings, and new runway lighting on Runway 1-19.
- Replacement of Airport perimeter fence and landscaping at Route 46 with a construction cost of $350,000.00.

Foster Wheeler, Clinton, NJ (1992 - Present)
Senior Design for designing above ground power installation details/cable tray systems and lighting. Checked drawings for construction.

Burns & Roe Industrial Services, Oradell, NJ (1989 – 1992)
Senior Electrical Designer performing all phases of electrical design including underground power, emergency power systems for hospitals and school systems. Responsible for the strategic demolition and removal of control and instrumentation wiring for the demilitarization of chemical munitions facility (U.S. Army Corps of Engineers).

On Board Chemical Corp, Edison, NJ (1985 - 1989)
Lead Electrical Engineer utilizing CAD and IBM Micro Station in the development of Power Distribution, Substation Layouts, Power Plans, Cable Tray Plans; complete lighting and fire protection systems, single line diagrams, Motor Schematics, PLC and DCS I/O Schematics involving DC Drives and variable frequency AC Drives, for the Textile and Fibers industry

Daidone Electric/Schiavone Construction Company, Secaucus, NJ (1984 - 1985)
Joint VentureElectrical Engineer for designing electrical systems involving hazardous area classifications. Projects included underground 15KV Power Distribution, 480 Volt Motor Control Centers, Cable Tray Systems, wiring of field instrument devices, lighting and PLC I/O Schematics.

Austin Company Engineers and Contractors, Roselle, NJ (1983 - 1984)
Electrical Engineer responsible for the design of lighting, grounding, conduit and field device installation details.

Airco Cryo Plant, Murray Hill, NJ (1982 - 1983)
Electrical Designer responsible for design/drafing of 490 Volt Motor Control Centers, Grounding, Underwater Power Duct Bank installations, Cable pulling calculations and area classifications in conjunction with NEC.

Davy McKee Corporation, San Mateo, CA (1977 - 1982)
Senior Draftsman responsible for the drafting and design of Motor Control Schematics, Equipment Arrangements, underground 15 KV Feeders and Substation layouts for the Mining industry.

ANGELA L. CERESE

CONTRACT ADMINISTRATION

LPE

Years of Experience
20 Years

Education
Bachelor of Science in Finance, St. John's University, Staten Island, NY, June 1990

OVERVIEW

Ms. Cerese has more than 20 years of experience in various administrative capacities including as Contract Specialist and Administrator. She has extensive experience on projects in the New York / New Jersey region including on PANYNJ programs such as Teterboro Airport and as a Financial Analyst for the Port Commerce Department.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Teterboro Airport, NJ
Senior Contract Specialist at the Resident Engineers Office:

- Preparing, Reviewing and Processing Payment Applications, Change Orders and Time & Material Desk Audits for Teterboro & Multifacility Contracts / Tenant Alteration Application projects/Tenant Maintenance projects
- Ensuring proper documentation is received from Contractors for all aspects of Contract.
- Scheduling Preconstruction, Progress and Safety Meetings
- Preparing Project Meeting Agendas and Minutes.
- Preparing monthly reports and general correspondence.
- Inputting information into PA programs such as SAP and WinTrak.
- Preparing Contract Close Out Documents and Final Payments

PANYNJ, Port Commerce Department, New York, NY
Senior Financial Analyst:

- Coordinated annual budget preparation and reporting
- Integration of the new SAP system to improve availability and accuracy of financial data
- Developed estimates/scenarios for potential Marine Terminal projects

PANYNJ, Port Commerce Department, New York, NY
Staff Financial Analyst::

- Administered the Bi-State Dredging Fund which involved preparing contracts, making payments and corresponding with staff at all levels
- Analyzed monthly activity of major construction programs and prepared corresponding reports and schedules as well as monthly journal entries
- Prepared Agenda Items to the Board of Commissioners for major projects

PANYNJ, Financial Accounting Division, New York, NY
Staff Accountant:

- Prepared Statements of Annual Net Revenue for all 3 airports
- Calculated in-lieu-of-tax payments to New York and Newark for leased airport property
- Assisted in City Rent lease negotiations in which hundreds of hypothetical rent scenarios were generated under strict time restraints

PANYNJ, Payroll Division, New York, NY
Junior Accountant:

- Organizing, reporting and allocating all employee payroll deductions including tax levies, support and garnishment payments

Summit Financial Resources, Inc., Fair Lawn, NJ
Administrative Assistant:

- Provide administrative and office support
- Maintain calendar, make appointments and field phone calls
- Assist in marketing objective to obtain many more potential clients which includes making cold calls, internet research and preparing Power Point presentations and direct mailings
- Organize, manage and file all incoming mail, as well as sensitive client information and boss's personal accounts

JEAN CHARLESTON

ELECTRICAL INSPECTOR

Years of Experience
With URS: 4 Years
With Other Firms: 15 Years

Education
BS/1993/Electrical Engineering/Pratt Institute
MS in process/Electrical and Electronic Engineering/New York Institute of Technology

Registration/Certification
NACE Level 1, Structural and Level 2, Advanced Structural Inspection OSHA 29 CFR 192.62

OVERVIEW

Mr. Charleston has more than 19 years of engineering, inspection, estimating and construction project experience in all types of infrastructure, including bridges, roadways and tunnels. He has extensive experience with projects in the New York / New Jersey region particularly with the Port Authority of New York and New Jersey, including the PATH Downtown Restoration Program, and the 800 MHz Trunked Radio Communication System.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, PATH 800MHz Trunked Radio Communication System, New York/New Jersey (2006 - Present)
Construction Coordinator for PATH 800MHZ trunked radio communication system cable and interface installation.

PANYNJ, Downtown PATH Restoration, New York/New Jersey (2002 - 2006)
Construction Engineer/Inspector. Duties included construction inspection of electrical and mechanical systems; communication and control systems; coordination of contractors work with Railroad Operational requirements; scheduling of contractors work; negotiating contract change orders with contractor; documenting meetings, contractors Requests for Information, shop drawings review, construction log, etc.; and writing letters to contractors for Resident Engineers signature. Projects include:

- Christopher Street Access Control & CCTV System
- Signal Relay Room Rehab Phase II
- Fare Collection Systems at all PATH Station Locations
- Reconstruction of Tunnels E and F from Exchange Place to WTC
- Rail Replacement at Dock Bridge

Various Tunnel Projects, New York, NY (2000 - 2002)
Senior Electrical Inspector. Rehabilitation of the mechanical and electrical ventilation monitoring systems and installations of new drainage systems for the Battery Park underpass, Park Avenue Tunnel, and First Avenue Tunnel. Construction work included replacement and upgrading of all exhaust fans, fan motors and associate duct work; installation of new programmable logic controller and control communication network; installation of electrical distribution panel switchgear, transformer vault and numerous architectural improvements.

NYCDOT, Various Electrical Projects, New York, NY (1998 - 1999)
Electrical Field Engineer. Various projects performed for the NYC Department of Transportation including installation of power distribution, electrical switchgear, and programmable logic controller.

NYCDOT, Various Electrical and Civil Projects, New York, NY (1997 - 1998)
Electrical Field Engineer. Projects included rehabilitation of Broadway, Wards Island, and Roosevelt Island Bridges; rehabilitation of mechanical and electrical systems for water bridges; traffic control device maintenance for similar structures; replacement of elevators and restoration of main and auxiliary counterweight ropes for Broadway, Wards Island and Roosevelt bridges; resurfacing project for Route 206, and section 13f. Inspection of roadway excavation, milling, 6 sub base, 6 DGA, 6 stabilized base course, and 2 asphalt wearing course.

Various Electrical Projects, Leroy Callender, PC, New York, NY (1996 - 1997)
Electrical Inspector. New York City Department of Transportation and various industrial projects including ventilation of fans, motors, lighting switchgear, power signal and control wiring. Supervised quality control of electrical work. Inspected and removed abandoned electrical equipment. Responsible for the installation of street lighting. Modified Con Edison manholes, inspected water main, sewer and drainage systems.

Various Electrical Projects, Hayden & Wegman Engineers, New York, NY (1993 - 1996)
Electrical Field Engineer. Responsible for the installation and inspection for the new fire protection system and substation switchgear, transformers, motor control centers, elevators, fiber optic and security systems.

Various Electrical Projects, EW Finley Constructing Engineers, New York, NY (1991 - 1993)
Electrical Inspector. Project responsibilities included: technical review of drawings and submittals and inspection of electrical switchgear, including automatic transfer switches, emergency generators, motor management relays. Process instrumentation and programmable logic controller.

FRANK DEBARTOLO

CONSTRUCTION MANAGER

Years of Experience
With URS: 12 Years
With Other Firms: 13 Years

Education
New Jersey Institute of Technology/ School of Architecture & College of Engineering
Englewood Cliffs College
Bachelor of Architecture and Civil Engineering

OVERVIEW

Mr. DeBartolo is a Project and Construction Engineer with more than 25 years of experience managing and inspecting all types of projects. He has extensive experience in the New York / New Jersey region, including substantial experience with the Port Authority of New York and New Jersey. He has provided services at LaGuardia Airport and has been involved at Newark-Liberty International Airport in various capacities since 1998.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Terminal B Connector Expansions (2007 - Present)

Lead Inspector, coordinates the efforts of the contractor in implementing the contract and liaison between the contractor, and the PANYNJ entities; Resident Engineer's Office, Operations, the tenants, and management concerns. Also function in the capacity of Owner's Representative monitoring compliance with the documents, code, and the various rules and regulations at the airport (PANYNJ's , FAA, Customs / DHS, FAR, etc.) As construction inspector, monitored for compliance and performs controlled (special) inspections (concrete, steel, masonry, electrical, etc.). The project entails taking the existing International Terminal and expanding the existing connector areas to accommodate larger and improved TSA screening and passenger queing. The expansions also included future concessions areas and airline lounge space that will generated a rental income to the PANYNJ. The work being performed also kept the Terminal, Air Train, service roadway, and the plane gates in full operation without impact. This project utilized many skills including my Architectural and Engineering skills along with interpersonal and coordination. The project is highly noticeable and has enhanced the function of the terminal with its exclusive building materials and attractive open spaces.

PANYNJ, Newark-Liberty International Airport, Terminal A Vertical Circulation (2010 - Present)

Lead Inspector, coordinates the efforts of the contractor in implementing the contract and liaison between the contractor, and the PANYNJ entities; Resident Engineer's Office, Operations, the tenants, and management concerns. Also function in the capacity of Owner's Representative monitoring compliance with the documents, code, and the various rules and regulations at the airport (PANYNJ's, FAA, Customs / DHS, FAR, etc.) As construction inspector, monitored for compliance and performs controlled (special) inspections (concrete, steel, masonry, electrical, etc.). The project has now embarked upon upgrading the ability of the airport patrons to be able to move though the terminal and bring the vertical movement into compliance with ADA requirements. The introduction of an opulent Elevator Core and area surrounding the vertical circulation enhancements will help to revitalize Terminal A and make it user friendly.

PANYNJ, Newark-Liberty International Airport, Switch House #3, Newark, NJ (2005 - 2008)
Project Engineer, for the construction of new building and network of lighting controls, distribution and updating of both electrical and fiber communication. Interfacing with operations, FAA, and maintenance. Work is both in the A.O.A. and landside infrastructure.

PANYNJ, Newark-Liberty International Airport, Newark, NJ (1998 - 2005)
Senior Airport Engineer to PANYNJ, responsible for field inspection and administration of architectural, civil, and electrical projects. Most recently, representing the resident engineer with the daily inspections and audit of all Central Terminal Area (CTA) construction site security efforts. Coordinate FAA mandated procedures, assure compliance or OSHA safety rules. Project involvement: Terminal A Relifing Project, Redundant Domestic Water Main utilizing Micro Tunneling, wet taps, line stops, and implementing critical field changes. Facilities Improvement Program Net Cost Contract GS Curve and Express Roadway Rehabilitation and Reconstruction, Runway 4-22 Extension Utilizing slip form and concrete on-stie batch plant. Water tank refurbishing at the Fuel Farm. Plan review for constructability and code compliance, training interns and trainees assigned to the redesign, assembly and construction of the CTA-REO modular office facility Building 74.Varied skills and abilities to interface with numerous internal Port Authority Departments and outside consultants, agencies, and utilities provide the REO and the Port authority with effective representation without hesitation.

PANYNJ, LaGuardia Airport, Queens, NY (1993 - 1998)
Engineering Consultant to the Port Authority of New York and New Jersey responsible for managing the office of 20 professionals. Developed and maintained project costs, accruals and computer records. Tracked and inspected architectural, civil, electrical, IR/RF communications, electronic security and FAA projects for code conformance. Assured quality and adherence to the construction documents for all capital and expense contracts.

CTA Frontage Roadway Improvements (2005)
During and keeping full operation of roadway and terminal access which keeping the impact to patrons, tenents and facility to an absolute minimum.

Program Construction and Development Services (1990 - 1993)
Responsible for developing designs with management of quality assurance issues, value engineering and permits. Administered and implemented contracts including all aspects of financing and property acquisition, property management and site planning.

Senior Project Manager (1987 - 1990)
Senior Project Manager representing the Clients interests to the architect, engineer, bank and governing bodies from inception to completion of project. Reviewed design drawings, bid and awarded contracts, produced change orders and managed payment process to subcontractors

ADA DEUEL

ARCHITECTURAL/CIVIL/STRUCTURAL ESTIMATOR

Years of Experience
With URS: 4 Years
With Other Firms: 28 Years

Education
BS/1982/Civil and Structural Engineering/Polytechnic Academy, Minshk, Belarus

Registration/Certification
1998/Cost Estimating, Ellana Professional School, New York

OVERVIEW

Ms. Deuel has more than 32 years of experience in general contracting cost estimating. Experience covers various facility types, including large commercial, institutional, industrial, and residential projects. She has extensive experience estimating projects in the New York / New Jersey region including estimating several projects for the Port Authority of New York and New Jersey, whose costs varied from $6 M to $25 M, from conceptual to 100% design drawings, in both NY and NJ. She also served as Senior Estimator on the LaGuardia Airport major renovation program.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, LaGuardia Airport, Queens, NY (2007 - Present)
Senior Estimator - Estimated cost from $1,700,000,000 to $3,100,000,000. Prepared series of preliminary conceptual estimates for different models for a major renovation of the existing space and building additional facilities to one of the key New City's airports.

PANYNJ, Several Port Authority Projects, New York and New Jersey (2006 - 2007)
Senior Estimator - Estimated cost varies from $6,000,000 to $25,000,000. Prepared various types of the estimates from conceptual to a 100% design drawings for a range of projects located in New York City and New Jersey.

Farley Moynihan Station, New York, NY (2008 - Present)
Chief Estimator prepared several conceptual estimate to establish the cost of different scenarios to renovate one of the NYC landmarks.

SUNY Stony Brook University: Advanced Energy Research and Technology Center (AERTC), Suffolk County, NY (2007 - Present)
Senior Estimator - Prepared several estimates based on progressing set of drawings to construct new Lab Building for one of the most recognized State of New York Universities.

SUNY Stony Brook University - Simons Center for Geometry and Physics, Suffolk County, NY (2009)
Chief Estimator prepared and supervised several estimates based on progressing set of drawings to construct new Science Building for one of the most recognized State of New York Universities.

World Trade Center Memorial Pavilion-Visitors Center (2009)
Senior Estimator prepared and supervised estimating team 100% Design Development set of drawings to construct one of New York City Landmarks.

121st Police Precinct, Staten Island, NY - Projex, Inc. (2008)
Senior Estimator - Prepared estimate based on 75% Construction Documents for out-of-the-ground Police Headquarters. Project utilizes innovative technology in all construction trades involved.

FDNY, Emergency Medical Dispatch Center, Brooklyn, NY (2008)
Prepared and supervised cost estimate to establish a cost for the final renovation phase of FDNY Brooklyn C.O. and Emergency Medical Dispatch, 2nd Site

Battery Park City Association, New York, NY (2007)
Estimator - Interior fit-out of four floors of mixed-use space including parking space, laboratories, and office space.

Harvard's Allston Science Complex, Cambridge, MA (2007)
Estimator - Prepared conceptual estimate for the complex of four new out-of-the-ground science buildings and underground plaza for the cutting edge biology research in one of the most famous universities.

Central Park Police Precinct, New York, NY (2006)
Estimator - Prepared an estimate based on Bid Set of drawings for total renovation of the Central Park Police Precinct located in historical landmark building. Project included total interior renovation of the facilities and exterior restoration of the building.

Ramirez Residence, New York, NY (2005)
Estimator for bidding and value engineering of the project of mixed use out-of-the ground building. Project included residential space for the Owner, trading floor, office space, and commercial space for renting.

Empire State Building Visitor Center and Observation Deck, New York, NY (2003 - 2004)
Estimator on 2 projects;
1. Estimated cost various from $25,000 to $800,000 bidding on rehabilitation/ renovation of various commercial spaces.
2. Bidding on $10 million Visitors Center Renovation. Project included a complete renovation/restoration of existing Visitors Center for Observation Deck located on the second floor of ESB and utilizing presently vacant back-of-house space.

Victoria Towers, Flushing, NY - DKS Construction (2003 - 2004)
Estimator - Developed 75% design development estimate and final bid estimate for out-of-the ground residential high-rise building, including residential swimming pool and residential/commercial garage.

Marriott Marques Hotel Lobbies Renovations, New York, NY (2002 - 2004)
Senior Estimator on two projects:
1. Eighth Floor Lobbies Renovation. Estimate included construction cost for complete lobby renovation including reconstruction/building new fountain, three new restaurants and a sushi bar.
2. Renovation of the "The View"; $6,750,000 for conceptual estimate of the complete renovation of The View Restaurant located on 46th, 47th, and 48th Floors of the Hotel.

WILLIAM J. DEVLIN

ELECTRICAL INSPECTOR

Years of Experience
With URS: 8 Years
With Other Firms: 32 Years

Education
St. Peters College and Adelphi University

Registration/Certification
State of New Jersey Electrical Contractor License [redacted]

OVERVIEW

Mr. Devlin has more than 40 years of experience in the construction industry, with extensive experience providing services on projects throughout the New York / New Jersey region. Most recently he has provided electrical inspections on a number of projects at Newark-Liberty International Airport since 2002.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark Liberty International Airport, Newark, NJ (2002 - Present)
Electrical Inspector on the following projects assuring compliance with project drawings and specifications and adherence to local and national electrical codes. Coordinate projects to avoid conflict with facility operations and patron activities. Schedule power shutdowns to assure contractor safety.

EWR 154.279 - Replacement of the Periheral Ditch Tide Gate - $3,500,000

EWR 689 - Improvement to Brewster Road between Bldg #95 and Tower Road - $1,800,000

EWR 154.322 - General Site Work Construction (via work order);
Switch House #1 sump pumps / pit installation - $250,000
Relocated back up computers for revenue and security systems to remote trailer site with 60 KW emergency generator - $195,000
Install 30,000 feet fiber optic cable for connectivity upgrade - $190,000
Grounding Air Train fencing at Northeast Corridor Station - $85,000
Install lighting protection Air Train Shed - $20,000
Install grounding protection at NJ Transit platforms - $20,000
Relocate traffic signals at Guard Post D - $50,000
Modification of remote controls for Gate #3 at Station Road - $30,000
Improvement of Restricted Vehicle Service Road at terminals - $175,000
Underground petroleum tank system upgrade - bldgs #46 & #76 - $200,000
Provide alternate power source to air train switch operation panel - $50,000

EWR 922.563 - General Site Work Construction (via work order)
Remote monitoring system for cathodic protection of terminal fuel lines - $400,000
Retrofit of runway deicing agent storage tank with inventory monitoring - $50,000
Milling and resurfacing of Taxiway U - $175,000
Repair motor vehicle damage to electrical service equipment at P-9 Lot - $25,000
Emergency pavement repairs to Taxiway D - $150,000
Reconfiguration of Taxiway Y ballpark deicing area - $50,000
Installation of bus shelters Terminal C HOV - $125,000

EWR 154.342 - Brewster Road Rehabilitation between bldgs #339 and #5 - $2,700,000

EWR 922.555 - Retrofit of Parking Lot P-6 Toll Plaza - $1,200,000

EWR 723A - Modification of Lift Stations 1, 1A, 3, 3A and Terminal B Triturator - $996,000

EWR 910.411 - Upgrade Fire Suppression System at Gas Station Pumps bldg 11 - $54,000

PANYNJ, Lincoln Tunnel, NY / NJ (1980 - 1988)
Tunnel System Controller, operated the control room at the Lincoln Tunnel. Responsible for the ventilation, traffic control, power and lighting, and dispatch of emergency equipment required for tunnel traffic operation.

PANYNJ, JFK International Airport, Queens, NY (1965 - 1980)
Electrician worked at Kennedy Airport, Staten Island Bridges, Port Newark, Newark Airport and the Lincoln Tunnel as an electrician.

PANYNJ, The World Trade Center, New York, NY (1985 - 2001)
Chief Maintenance Supervisor, oversaw the operation, maintenance and alteration of electrical and mechanical system of the Port Authority of NY & NJ. Manage 13 subordinate supervisions and indirect supervision of more than 150 electrical and mechanical craftsmen. Administration of service contracts valued in excess of $40 million. Monitor workload to assure timely execution, minimal backlog, and manpower efficiency. Preparation and presentation of yearly operating budgets and capital improvement proposals. Coordination of training programs to assure staff acquisition of technological advances. Publication of monthly customer service performance goal achievements and budget expenditure reports

PANYNJ, The World Trade Center, New York, NY (1990-1994)
Maintenance Unit Supervisor, supervised and monitor 60 maintenance and 35 construction electricians involved in maintenance and alteration projects, issue all work requests for Plants and Structures Division. Approve estimates, perform daily field inspections and monitor billing. Involved with bomb recovery programs including electrical restoration and new fire alarm system installation. Supervise electrical work necessary for holiday decoration, Participate in tenant customer service initiative visiting two offices a week to solicit satisfaction ratings Prioritize electrical work projects. Established a standard for tenant relamping program goals. Managed backlog work. Inspected electrical work for code compliance, productivity and safety standards. Attend final inspection of alteration projects and coordinate rectification of any deficiencies.

PANYNJ, The World Trade Center, New York, NY (1994-1997)
General Maintenance Supervisor, administration of the contract for the operation, maintenance and alteration of electrical systems for the Port Authority of NY & NJ. Review associated manpower scheduling, absence control, and payroll and benefit assessments. Plan, coordinate and supervise all special events, holiday decorations and shows involving electrical personnel. Monitor revenue enhancements, tenant electrical work and system upgrades. Provide technical support to contract staff conduct field inspection, and assure job performance. Participate in union negotiations and disputes.

PANYNJ, Staten Island Bridges, Staten Island, NY (1988-1990)
Maintenance Group Supervisor, supervised and scheduled a multi-craft maintenance unit of electrical, mechanical, structural and general maintainers. Inspect and administer a facility-cleaning contract. Coordinate and supervise snow removal operations on three bridges. Perform facility inspections. Initiate, plan and schedule required maintenance repairs.

JOEL FISCH, PE, LEED AP

MECHANICAL REVIEWER

Years of Experience
With URS: 6 Years
With Other Firms: 24 Years

Education
BS/1980/Mechanical Engineering and Physics/ Carnegie-Mellon University, Pittsburgh, PA

Registration/Certification

Professional Engineer
1987/New York [redacted]
1987/New Jersey
1987/Pennsylvania#
1988/Massachusetts#
2007/LEED Accredited Professional

Specialized Training
Port Authority of New York & New Jersey, Security Identification Display Area (SIDA), June 2004
Port Authority of New York & New Jersey, for URS Corporation - Issuing Officer EWR Security ID Badges

OVERVIEW

Mr. Fisch is Project Manager / Lead Mechanical Engineer with more than 30 years of experience in the consulting engineering field, with emphasis on HVAC systems analysis and design; including energy conservation, sustainability, facility assessment, central heating and cooling plants, data centers, corporate offices, hospitals, health care facilities, courthouses, schools and transportation facilities. He serves as the Chief Mechanical Engineer for URS in the New York City office.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Terminal B Connectors Expansion, Newark, NJ (2007 - Present)
Project Mechanical Engineer for design of expansions to the three connectors of Terminal B. The expansions provide approximately 150,000 square foot area for new passenger screening points as well as airline lounges. The design consisted of new air handling units, with smoke purge capabilities, distribution ductwork and tie-ins to central chilled water and heating hot water systems.

PANYNJ, Newark-Liberty International Airport, Terminal B Lower Level Expansion, Newark, NJ (2007 - Present)
Project Mechanical Engineer for design of a 75,000 square foot new domestic arrivals area and ancillary spaces in the existing unoccupied area of the lower level of Terminal B. Project consisted of new air handling units, with smoke purge capabilities, distribution ductwork and tie-ins to central chilled water and heating hot water systems.

PANYNJ, PATH Security and Control Center, Jersey City, NJ (09/2004 - Present)
Lead Mechanical Engineer for this project for the Port Authority of New York and New Jersey. Work included 40,000 sq. ft. renovation for new PATH train control center as well as Port Authority Police Facilities. Responsible for preparation of HVAC system selection study and specification of new HVAC units (both base-building and supplementary.)

PANYNJ, Newark-Liberty International Airport, Terminal B - New Lower Level Ticket Counters, Newark, NJ (04/2005 - 11/2005)
Lead Mechanical Engineer for this project for the Port Authority of New York & New Jersey's Program Management Division - New Jersey Airports. Work included construction of 50,000 sq. ft.

of new ticket counters, baggage screening facilities and supporting spaces, in previously abandoned covered parking area. Responsible for HVAC system design, including new air handling units, with smoke purge capabilities, distribution ductwork and tie-ins to central chilled water and heating hot water systems.

PANYNJ, Newark-Liberty International Airport, HVAC System Condition Assessment, Newark, NJ (08/2004 - 05/2005)
Project Manager / Lead Mechanical Engineer for this project for the Port Authority of New York & New Jersey's Program Management Division - New Jersey Airports. Work included mechanical condition assessment for fourteen air handling systems and primary and secondary hot water heating pumps at Newark Airport Terminal B. Responsible for preparing reports resulted in recommendations valued at approximately $10 million in required upgrades.

NYCSCA P.S. 279X HVAC System Upgrade/Smoke Purge, Bronx, NY (06/2009 - Present)
Project Manager and Mechanical Engineer-of-Record for this project for the New York City School Construction Authority. Work included Fire Alarm and Automatic Temperature Control upgrade for a 225,000 sq. ft. school. Responsible for HVAC system selection study, final system design and equipment selection, and preparation of smoke purge and automatic temperature control sequences.

DASNY, Medgar Evers College Pool Renovation Carroll Street Lobby, Brooklyn, NY (12/2008 - Present)
Mechanical Engineer-of-Record for this project for the Dormitory Authority State of New York. Work included a renovation of the existing indoor swimming pool, which had been out of commission for the past five years. Work included a new natatorium HVAC climate control / dehumidification system, with connections to existing steam, electrical and duct distribution system. Responsible for preparation of HVA load calculations, equipment selections and layout, specifications and automatic temperature control / ventilation sequences.

USMA, Eisenhower Hall Building Renovations, West Point, NY (06/2007 - Present) - $15,000,000: Mechanical Engineer-of-Record for this project for the United States Military Academy. Work included a comprehensive renovation of the lighting, fire alarm, sprinkler, exterior masonry and kitchen exhaust systems for the 190,000 sq. ft. theatre, the 2nd largest in NY State. Responsible for new kitchen exhaust system design and specification, including fan along with exhaust ductwork and new routing for ductwork to the roof.

NYCSCA, P.S. 23X HVAC DDC Control System, Bronx, NY (06/2009 - 09/2009) - $2,000,000: Project Manager and Mechanical Engineer-of-record for this project for the New York City School Construction Authority. Work included upgrade of the Automatic Temperature Controls to DDC for a 190,000 sq. ft. school. Responsible for sizing of VAV Boxes, control sequences, DDC controls for existing Air Handling Units.

Calabro Elementary School Renovation, Hoboken, NJ (08/2004 - 10/2005) - $10,000,000:
Lead Mechanical Engineer for this project for the New Jersey Schools Construction Corporation. Work included a complete renovation of this 35, 000 sq. ft., 4-story elementary school. Responsible for preparation of HVAC system selection study, equipment selection and design of new central boiler and chiller plants, 4-pipe fan coil unit system and rooftop outdoors air HVAC and distribution ductwork.

LES FLAGLER

CONSTRUCTION MANAGER

Years of Experience
With URS: 4 Years
With Other Firms: 17 Years

Education
Fiber Network Training Design & Installation/2005
NYU Electrical Systems Design Phase II,/2004
NYU Electrical Systems Design Phase I/2003
Electrical Theory Training Class/2002
Local 363 Union, Project Management, Estimating, Blueprint Reading/1997

OVERVIEW

Mr. Flagler has more than 21 years of professional experience in electrical engineering and inspection with expertise in management of intricate electrical systems requiring high maintenance. He has supervised installation and troubleshooting of fire alarm, communications, signaling and relay systems along with switchgear equipment and high voltage cabling. He has extensive experience with the PANYNJ, including PATH security, Newark-Liberty International Airport Northeast Corridor Monorail Extension.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Security Capital Program, Contracts #506 and #507, PATH, NY / NJ, (2006 - Present)
Senior Electrical Inspector, coordinated all phases of construction projects from start-up to completion and supervised the responsibilities of the lead inspectors for each project.

PANYNJ, Various Projects, NY / NJ (2002 - 2006)
Senior Electrical Field Inspector / Assistant Resident Engineer. Projects included:

- Christopher St. Access Control & CCTV System (Approx. $2 million)
- Access Control & CCTV System at Sub #7 & 8, Morton Street (Approx. $500k)
- Signal Relay Room Rehab Phase II (Approx. $2 million)
- WTC Station - PATH Restoration Project (Approx. $425 million)
- 800Mhz Cable Installation (Approx. $16 million)
- Diverse Fiber Project (Approx. $2 million)
- JSTC Hardening Project Phase I (Approx. $3 million)
- SOC/NOC Relocation Project (Approx. $1.5 million)
- JSTC Guard Booth Project (Approx. $3 million)
- JSTC CCTV & Access (Approx. $3 million)

Performed detailed inspections of all electrical installations including traction power, station fit-out, communications systems, fire protection systems, signal systems, signal relay rooms, corrosion control systems, RF communications, ductbank installations including, manhole and cable vault room construction, substation equipment installation, and HVAC control wiring in accordance with all codes and agency and industry standards.

PANYNJ, Newark Airport NEC Monorail Extension, NJ (2000 - 2002)
Superintendent/Senior Electrical Field Inspector. Supervised the installation of the public address, CCTV and fire alarm systems for the monorail extension. Conducted full inspections on all electrical installations. Responsibilities also included attending project meetings, coordination of trades, scheduling, requisitions, change orders, and direct interaction with owners and owners representative. Coordinated project team in meeting all deadlines and keeping costs to a minimum while providing the client with a quality product.

Canal Street, 59th Street & Lexington Avenue Subway Stations, New York City Transit, New York, NY (1989 - 1998)
Supervised installation of station lighting and message display signage and the rehabilitation of electrical closets. Implemented and negotiated sub-contract agreements. Coordinated in-house job costing and budgeting with owners. Reviewed fieldwork with general foreman. Processed all monthly requisitions. Created and tracked monthly requisitions, change orders and submittals. Responsible for MBE/WBE and subcontractor approval documentation.

Jamaica Water Pollution Control Plant at Kennedy Airport and the Coney Island Water Pollution Control Plant at Knapp Street, New York City Department of Environmental Protection, Brooklyn, NY (1992 - 1996)
Supervised all electrical installations from new switchgear equipment and power feeds and all communication systems. Implemented and negotiated sub-contract agreements. Coordinated in-house job costing and budgeting with owners. Reviewed fieldwork with general foreman. Processed all monthly requisitions. Created and tracked monthly requisitions, change orders and submittals. Responsible for MBE/WBE and subcontractor approval documentation.

DAVID GLEASON

CIVIL / STRUCTURAL INSPECTOR

Years of Experience
With URS: 4 Years
With Other Firms: 31 Years

Education
BS/1983/Civil Engineering, Polytechnic Institute of New York
Various Engineering Graphics & Construction Courses/1975-1977/NY Institute of Technology & SUNY at Farmingdale

OVERVIEW

Mr. Gleason is a civil site engineer with more than 35 years experience in engineering, inspection and construction management, serving the transportation, industrial, process, pollution control and power industries. He has extensive experience providing inspection services on projects throughout the New York / New Jersey region, including for the PANYNJ, at JFK International Airport having provided services on the relocation of Taxiway A North & South and the Rehab of Taxiways B & E; as well as the Cargo Building at Newark-Liberty International.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Relocation of Taxiway A North & South, Rehabilitation of Taxiways B and E, JFK International Airport, Jamaica, NY (2006 - 2008)
Civil/Structural Site Engineer performing inspection and construction administration as owners representative of large public works airfield construction in the maintenance and rehabilitation of taxiways, runways and aprons. Inspected, monitored and ensured code and contract compliance of work performed by heavy civil contractors. Administered net cost work, change orders, solved complex problems by proposing solutions arising from conflicts in contract documents, and signed off on payments to contractors. Administered and enforced safety and security issues. Tracked and recorded quantities; generated detailed narratives from which progress payments to contractors were certified and released. Consulted with and made recommendations to contractors as expert in asphalt and concrete construction, about new ways, means and procedures to ensure successful compliance with increasingly stringent contract requirements.

PANYNJ, Newark-Liberty International Airport, Cargo Building, Newark, NJ (2004 - 2006)
Site Engineer and Inspector for many diversified building construction projects including $30 million dollar cargo building with a footprint larger than two football fields, inside of which was a railroad for automated pallet handling. Detailed inspections included structural steel and reinforced concrete, HVAC and various other mechanical and building systems.

PANYNJ, Newark International Airport, Newark, NJ (1998 - 2006)
Civil/Structural Field Engineer. Performed civil/structural inspection of asphalt, concrete and steel installations at Newark Airport. Efforts involved the rehabilitation, relocation or new construction of aeronautical runways, taxiways and aprons in asphalt and concrete construction. Involved in six major aeronautical projects at Newark Airport, representing over 80% of the surface area of the airfield with a value of over $200 million. Considered expert in asphalt paving and general construction of aeronautical pavements. Monitored, inspected work of and advised heavy contractors during complex paving projects, while ensuring safety and conformance to contract documents. Ensured that construction work done by outside contractors was performed in accordance with contract documents, on schedule, and in compliance with rules and regulations

governing airfield projects. Work included massive installations of drainage and sanitary systems, fresh water piping and electrical systems. As lead field engineer trained many junior engineers and interns.

PANYNJ, Pipeline Installations at Newark-Liberty International Airport, Newark, NJ (2003 - 2004)
Project Administrator. Oversaw and managed the extreme challenges of safely and successfully installing and testing large diameter high pressure piping systems for fire control. In addition very large jet fuel pipeline installations were administered and inspected.

Commercial Construction Projects, HRH Atlas Construction, Inc., Wayne, NJ (1997 - 2000)
Site Engineer. Performed various design-build projects and coordinated work of the various trades to ensure uninterrupted flow of work to tight schedule. Designed shoring and bracing schemes for concrete work, maintained daily construction report, and Request for Information log, generated clarifying sketches of field condition situations and provided engineering guidance and equipment for hot and cold weather concreting. In addition, solved problems and mediated disputes arising from errors, omissions and discrepancies in the drawings, specifications, and building codes. Generated design and purchase orders for complex trusswork, interior and exterior windows and doors, hardware, and ensured compliance with fire, safety, and building codes. Assembled estimates for proposed projects. Performed detailed inspections of structural steel, reinforced concrete forms and structures, HVAC, piping, exterior cladding, roofing, interior finish and electrical work. Maintained detailed records of change orders, prepare and sort the related financial adjustments with an emphasis on cost containment. Projects included Alps Manor Nursing Home and Hospital for the Aged and a 40-story residential building in Manhattan.

Process Equipment Design and Manufacture, Ambient Engineering Inc., Matawan, NJ (1995 - 1997)
Systems Project Engineer. Responsible for bid, design, contract, schedule and oversight of construction of steel, reinforced concrete, fiberglass, and alloy structures, vessels, and ductwork for a diversified process equipment company engaged in the design, supply, manufacture and installation of all types of pollution control and process systems equipment. Instrumentation specification, selection, and integration into PLC and PC driven systems. Typical instruments included differential and static pressure transmitters, air and liquid flow measurement and control devices, load cells, temperature switches and transmitters, level controllers, automated valves, pH and orp controls. Also involved in strength of materials and stress calculations; piping system sizing and design; ductwork vacuum, flow, and pressure analysis and design; blower and pump selection and purchasing; material selection for corrosion and erosion; and purchasing of system components. Clients included McCormick Spice Co., International Fine Flavors and Fragrances Corp., and The New York Times.

MARK GRINBERG

SCHEDULER

Years of Experience
With URS: 20 Years
With Other Firms: 19 Years

Education
BS/1971/Electrical Engineering/City University of New York

OVERVIEW

Mr. Grinberg has more than 39 years of diverse experience on major engineering and construction projects, specializing in project controls and project management. He has worked on new construction and renovation and modernization projects of all types. Mr. Grinberg has extensive experience in developing, updating and analyzing CPM schedules on major design and construction projects utilizing the Primavera system. He also has extensive experience in preparing schedule critiques, as well as delay claim analysis

PROJECT SPECIFIC EXPERIENCE

Newark International Airport Monorail, Newark, NJ (6/1995 - 1/1996) - $143,000,000: As Senior Scheduling Engineer, scheduled and coordinated activities for the testing program.

PATH Exchange Place Station Improvement, New York, NY - $35,000,000: Project Controls Manager, managed planning, scheduling, cost control and contract administration functions on major transportation, industrial, and power projects. Developed and maintained cost, schedule and progress monitoring systems; prepared coordination schedules; evaluated claims and negotiated change orders.

Central Park Police Precinct, New York, NY (2009) - $40,000,000: As Project Manager, responsible for the complete renovation of the historic precinct building. Manage the work of four prime contractors in the construction of new interior slabs and walls, new roofing, HVAC, electrical and mechanical systems, as well as historic restoration of exterior facades.

Columbia University Capital Improvement Program, New York, NY (5/1997 - 12/2006) - $1,400,000,000: As Project Manager, had full management responsibility for several projects, from initial planning through design, construction and end user occupancy. Projects included: gut renovation of four floors (56,000 sq ft) of Law Schools faculty offices and seminar rooms; renovation and expansion of the Law library; gut renovation of seven lecture halls including new seating with data and microphones, new state-of-the-art audio-visual equipment, and new electrical, lighting and HVAC systems; adding a new floor containing faculty offices and seminar rooms to an existing building; new TV studio broadcasting facility; and renovation of Admissions and Career Services offices.

These were high-visibility projects on one of the largest college campus improvement programs in the U.S. Projects presented logistical challenges since they are in an urban area, within a tightly-spaced campus, with old, and in some cases, historically important buildings, and work must be performed around an active campus environment open year-round. Work has to be coordinated with facilities management and building tenants in order not to interrupt building operations.

Schedules are tracked very closely; dates cannot be missed because classes must start on pre-established dates.

New York Penn Station East End Concourse, New York, NY (5/1996 - 5/2000) - $125,000,000: Project Controls/Scheduling Engineer developed, analyzed and monitored project schedules and costs of all construction program elements for this five-year program to completely demolish and reconstruct all interior space of the New Jersey Transit Passenger Concourse. The project was phased and highly constrained to accommodate passenger services and to coordinate with all other users of this major Amtrak rail station. Scheduling was critical to the planning of contractor work on this active rail station in order to avoid any disruption to rail service within Amtraks New York Zone.

White Plains Elementary Schools, White Plains, NY (1/1991 - 12/1992) - $29,000,000: As Senior Scheduling Engineer, developed and maintained costs and schedules on this project to renovate and construct additions to five elementary schools in the school district.

Metropolitan Transportation Authority Capital Improvement Program, NY (7/1990 - 12/1992) - $17,800,000,000: As Project Review Manager, reviewed and analyzed schedules, budgets, project management functions and procedures, and made recommendations to Metropolitan Transportation Authority (MTA) agencies for several projects. Projects included the Astoria Line Rehabilitation, Herald Square Station Modernization and Jamaica Maintenance Shop construction.

New York City School Construction Authority Capital Improvement Program, NY (1/1990 - 7/1990) - $7,500,000: Senior Scheduling Engineer developed and maintained costs and schedules on this five-year program of renovation, modernization and new construction of New York Citys public schools.

Coney Island Car Maintenance Shop, New York, NY: Project Controls Manager, managed planning, scheduling, cost control and contract administration functions on major transportation, industrial, and power projects. Developed and maintained cost, schedule and progress monitoring systems; prepared coordination schedules; evaluated claims and negotiated change orders.

Metro-North Rail Road Park Avenue Tunnel Rehabilitation, New York, NY - $120,000,000: Project Controls Manager, managed planning, scheduling, cost control and contract administration functions on major transportation, industrial, and power projects. Developed and maintained cost, schedule and progress monitoring systems; prepared coordination schedules; evaluated claims and negotiated change orders.

CM Firms, New York, NY (12/1981 - 1/1990) - $1,500,000,000: As Project Controls Manager, managed planning, scheduling, cost control and contract administration functions on major transportation, industrial, and power projects. Developed and maintained cost, schedule and progress monitoring systems; prepared coordination schedules; evaluated claims and negotiated change orders. Projects included the $120 million MNRR Park Avenue Tunnel Rehabilitation, $35 million PATH Exchange Place Station Improvement, North River Water Pollution Control Facility, Long Island Railroad West Side Storage Yard, Coney Island Car Maintenance Shop and Multi Town Resource Recovery Facility.

CARLOS GUEVARA

CONSTRUCTION MANAGER

LPE

Years of Experience
20 Years

Education
Bachelors of Science Degree in Civil Engineering
Central University, Quito, Ecuador, South America, 1986
•Concentrated in Engineering steel and reinforced concrete structures
•Versatile in Infrastructure design, Site Layout planning and Land Development

OVERVIEW

Mr. Guevara has more than 20 years experience in the civil engineering field with extensive knowledge of construction, inspection, and engineering of steel and reinforced concrete structures, HVAC, ACCTV, Fiber Optic, Foundations, underground utilities (gas, water, sewer, electric), environmental , and high security projects at JFK, LGA and EWR airports with an extensive background in Civil design, Site and Land Development, Survey and planning, and monitoring for contract conformance to CPM schedules; Familiar with Port Authority systems, contract requirements, tenant construction, and procedures.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Resident Engineer's Office, at Newark-Liberty International Airport, Newark, NJ (2007)
Field Civil Engineer / Construction Inspector, managed, monitored, and responsible for various construction School projects in Newark, NJ area:

- Manage and responsible for several Schools Noise Abatement Program
- Responsible for construction and coordination between Architect as well as Contractor.
- Responsible to monitor the construction progress as well as monthly payments requisitions.
- Responsible for the budget and make sure that construction finished on time as per contract.
- Direct and manage the construction progress meeting.
- Review and approved with the architect of record schedule of values as well as the base line schedule.

PANYNJ, LaGuardia Airport, Queens, NY
Senior Civil Inspector, responsible for monitoring construction and inspection of:

- Fire Standpipe "and fire alarm system at Short Term Parking Garage.
- High Temperature Hot Water Generator No.1 and No.2 at CHRP in CTB.
- Foam Fire Suppression System Upgrade at concourse underpasses
- Fire alarm system upgrade and expansion at LGA Main Buildings

PANYNJ, JFK International Airport, Jamaica, NY
Senior Civil Inspector:

- Construction and inspection of runway and taxiway rehabilitations.
- Taxiway "A" Bridge Strengthening: Bridge No. J11/ Van Wyck Expressway Bridge No. J13/ JFK Expressway
- Responsible for demolition, reconstruction and inspection of Taxiway Alfa Bridges to accommodate New Large Aircraft (A380) at JFK International Airport.

- Responsible for construction and inspection of new building addition at JFK – (Building 145) Operations Control Center – Two floors.
- Woodpiles – concrete foundation - Steel Frame Structure - masonry work - Curtain Wall.
- Construction inspection of renovation and conversion of Building 141 to allow Multi-Tenant occupancy. Tasks involved: Steel work- concrete work – architectural work and civil (parking lot construction and drainage work).
- Construction inspection of new electrical substation perimeter security wall. (Pre-cast concrete panels).
- Responsible for monitoring and inspection of other projects such as: Pavement of Taxiway Bravo (widening); Runway 13-31 drainage and electrical construction; Terminal One installation of High Technology Scan Machine; Micro-Tunnel Final phase; and Limousine and charter bus parking lot.

New York School Construction Authority, Long Island City, NY
Project Officer, managed, monitored, and responsible for various school construction projects in Queens Borough including:

- Manage and responsible for the JHS - 198Q Noise Abatement Program
- Responsible for construction and coordination between Architect (and corresponding engineering disciplines) as well as Contractor.
- Responsible to monitor the construction progress and monthly payments requisitions.
- Responsible for the budget and make sure that construction finished on time as per contract.
- Direct and manage the construction progress meeting.
- Review and approved with the architect of record schedule of values and base line schedule.

Schor Depalma Engineers, Parssippany New Jersey
Senior Project Manager:

- Design and preparation of engineering plans per Codes and Regulations applicable to the site and Town jurisdiction.
- Duties included meetings with the clients and consultants involved in the project.
- Compliance with contracts, codes and standards for the corresponding local / state agencies.
- Coordinate with PM, consultants, and meet the deadlines and schedule for submissions and Town meetings. Attend and participate in Planning Board meetings.
- Supervised revisions and make all corresponding changes and maintain project schedule and budget until the project received final approval.

Greenberg Farrow Architecture Engineering
Project Manager Engineer, Development Assistant:

- Design Supervision and inspection of different private commercial and retail Civil Engineering projects including HOME DEPOT and BEST BUY.
- Coordinate work with PM, consultants and the design group.
- Insure that all plans, designs, and approval permits are in place before the planning board.
- Submit plans to the town and attend to planning board meetings.
- Supervise and coordinate all revisions for final submission.
- Maintain the budget and schedule until the project receives final approval.

CRAIG GYORY

ESTIMATOR

Years of Experience
With URS: 2 Years
With Other Firms: 20 Years

Education
BS/1993/Civil Engineering, University of Toledo, Toledo, Ohio

OVERVIEW

Mr. Gyory has more than eight years of concentrated experience in developing contractor relations, estimating and project managing in the commercial construction industry. At URS, he has been responsible for creating estimates for various types of projects, from new construction to extensive renovations to heavy civil projects. He has been involved with many different ongoing projects, performing takeoffs, providing backup, producing change order estimates, reviewing scope and meeting with client and contractor to reconcile change order amounts. In addition, he offers 14 years of progressively responsible, comprehensive experience in heavy highway and underground construction, including drainage and utility work.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, JFK, International Airport, Backflow Prevention Devices and Water Meter Upgrades - Phase II (2010)
Estimator for this project, to establish a cost estimate for the furnishing and installation of backflow prevention devices and water meter upgrades located at 16 different buildings throughout John F. Kennedy International Airport. Project to include civil (site) work in various areas where scope of work involved placement of new devices outside of buildings. Items include excavation, as well as restoration, through improved areas of the various sites. The project also includes the use of heated enclosures where devices are placed outside.

PANYNJ, PATH, Flood Mitigation & Gate Installation, Caisson One Upper Deck Tunnels A & B, New York, NY (2008)
Estimator for this $112 million project involving cast-in-place version to date. Assisted with take-offs and quantities, helped prepare preliminary spreadsheets for conceptual estimate.

NYCDDC/NYCDOT Fresh Kills Landfill, Staten Island Borough Presidents Office Roadway Alternative Evaluation, Staten Island, NY (01/2009 - Present) - $1,000,000,000:
Estimator for this perimeter roadway evaluation project in its conceptual design stage, at the Fresh Kills Landfill site in Staten Island. This project includes significant amounts of cut and fill, new bituminous pavement, as well as overlay of existing, drainage, bridges and culverts, various landfill-related structures to be relocated, required signage and lighting systems.

NYCDDC Central Park Police Precinct Renovation, New York, NY (06/2008 - Present) - $51,000,000: Lead Estimator in charge of all change orders for this major renovation project of the NYPD Central Park Precinct, located on 86th Street Transverse Road in Central Park (Manhattan, NY). This project includes estimates for stone wall underpinning, masonry and stone work, roadway work including underground electrical and drainage, many architectural/finish items, waterproofing of masonry walls, manholes and duct bank, as well as many other scopes of work.

SUNY College at Old Westbury, New Academic Building (06/2008 - Present) - $562,000,000: Estimator for a new, out-of-the-ground construction, consisting of three stories with a ground floor and a gross square footage of over 149,000 sf. Performed take-offs and helped prepare final estimate, including cost comparison with previous estimate. Currently involved with the estimating of change orders on the clients behalf.

NYCDDC/FDNY - Rehabilitation of Communications Offices, New York, NY (2008 - Present) - $82,000,000: Lead Estimator for all change orders involved with this restoration project at five borough communication buildings that house all emergency response electrical equipment and the FDNY Dispatchers. Typical restoration work at each site includes installation of interior architectural elements, new electrical, plumbing, HVAC systems and asbestos abatement, as required. Historic preservation and restoration of landmark status buildings. Exterior restoration project scope includes masonry restoration, concrete retaining walls, concrete sidewalk replacement, new window installation, Terra cotta roof replacement, copper roof replacement, ornamental wrought iron window grille and fence installation.

NYCDDC/NYCDOT Division of Infrastructure Bridge Engineering - Preliminary Evaluation of Belt Parkway Bridge over Ocean Parkway (2010) - $4,800,000: Estimator for this conceptual estimate to evaluate the cost of proposed structural and architectural modifications, including installation of a sleeper slab, jacking up of entire bridge deck for bearing replacement, median barrier wall removal and replacement, removal and replacement of parapet walls, new stone veneer on all wing walls, as well as sections of pavement replacement.

NYCDDC/FDNY - Renovation & Expansion of Engine Company 63, Bronx, NY (2009) - $7,400,000: Estimator for this project to establish a cost estimate for the renovation and expansion of FDNY Engine Company 63. This is a complete renovation, including new foundation, underpinning, structural modifications, new curtain wall, new roof and exterior wall cladding system, as well as a complete interior renovation with all new finishes.

NYCDDC/NYCDOT Division of Infrastructure - Bureau of Design Reconstruction of West 33rd Street (2009) - $36,000,000: Estimator for this project to develop a conceptual cost estimate for the reconstruction of West 33rd Street from 10th Avenue to 11th Avenue. The main focus of this project is to raise the elevation of West 33rd Street between 10th Avenue and 11th Avenue, along with all of its appurtenances, in order to accommodate plans for future development. Located immediately adjacent to the project's work limits, is a L.I.R.R. railroad yard. Because of the close proximity of this yard, certain restrictions will be imposed, affecting the constructability and duration of this project.

CUNY The City University of New York - Five Laboratory Renovations (2008) - $5,000,000: Estimator for CUNY for laboratory renovations at five different New York Colleges. Prepared several estimates based on progressing sets of drawings and/or specifications to renovate five laboratories, ranging in size from 1,100 sf to 2,000 sf. All labs are in an occupied facility with classes ongoing.

CHARITO HERNANDEZ

OFFICE ENGINEER

Years of Experience

With URS: 11 Years
With Other Firms: 19 Years

Education

Leyte Institute of Technology. B.S. Civil Engineering, Philippines, 1981

Specialized Training

Completed 10-Hour Occupational Safety and Health Training course in Construction Safety and Health.
Completed 40-Hour Hazardous Material (Haz-Mat) Waste training course under OSHA Regulation 29 CFR 1910.120.
Structural and Masonry Construction and Plan reading.
Structural and Bolting Special Inspector.

Registration/Certification

P.E. License expecting
NICET Level IV
Registered Professional Engineer Republic of the Philippines
Certified Inspector of Concrete and Asphalt by NYCDDC
Certified by OSHA 29 CFR 1926 for Construction Safety
ACI Certified- Grade 1
ACI Certified- Concrete Construction Special Inspector-Level 11

OVERVIEW

Mr. Hernandez has more than 30 years of experience in engineering and construction, with extensive experience providing professional services on projects throughout the New York / New Jersey region, particularly on PANYNJ projects such as Newark-Liberty Airport.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport. Rehab Parking Lot P6 & Gas Station Site (2009 - Present)

Lead Engineer, for this contract provide for the reconfiguration and rehabilitation of Parking Lot P6 and adjacent roadway, including: milling and repaving, demolition of existing toll plaza, construction of a new entrance/exit toll plaza, installation of new bus stops, utility improvements, pavement re-striping, relocation of lighting and new electrical service, as well as demolition of the Building 75 gas station and remediation of the site to comply with New Jersey Department of Environmental Protection regulations.

PANYNJ, Newark-Liberty International Airport. Rehabilitation of Runway 11-29, (2008 – 2009)

Lead Engineer, work consists mainly of removal and replacement of existing pavement wearing course by milling and paving, removal and replacement of existing runway light systems; runway edge lights; runway centerline lights; touch-down zone lights for runway 11-29, and exit taxiway center light system. Also new concrete run-up pad on Taxiway "W" between Taxiways "S and U."

- All work are being perform during nightly and weekend runway closures.
- Responsibility: Supervise the Asphalt paving operation using asphalt concrete design Mix 3 PG-64-22 with vestoplasts, and PG 76-22 modified. Supervise the testing of dense grade aggregate base course for density. (DGABC),and placement of Portland cement concrete using 7500 PSI. Flex concrete.

PANYNJ, Newark-Liberty International Airport. Terminal B-Rehabilitation of B2-B3 Apron, (2008)

Lead Engineer. Milling and Paving of existing wearing course. Installed new catch basins protection slabs.

- Responsible for maintaining constant communication within the Port Authority community at all times. The Transportation Safety Administration (TSA), PA Environmental Unit, Airlines Personnel, so as not to hamper Airlines operation.

PANYNJ, Newark-Liberty International Airport, Aircraft Parking and Taxiway Modifications (2006 – 2007)

Senior Inspector (from start to completion)

- **Project Size**: 3,330,915.00 Square Feet (76.5 Acres),
- Responsibility: My function was to insure that construction work done by contractor and sub-contractors was performed in accordance with the contract documents, on schedule, on budget and in compliance with rules and regulations governing highways, and airfield projects.
- Due to the complexity and inherent danger of Airside projects, consultation and communication within the Port Authority community had maintained at all times. The Transportation Safety Administration (TSA), PA Environmental Unit, Airlines Personnel, and Geo-Track (responsible for marking out to locate active underground utilities) were the primary links.
- I also directed the contractor and various sub- contractors to adhere to the Federal Aviation Administration's strict policies and procedures.
- **Type of work done**: Excavations and removal, milling of existing concrete and asphalt pavement. Installations of reinforced drainage piping throughout entire area, including size variations from 18" to 60" in diameter with a combined total of 15,511.00 Linear Feet. Installations of sanitary systems, ductile iron water piping, underground electrical system, taxiways lighting, force main, sanitary lift station, catch basins, manholes, manhole chamber, glycol manholes, and blast fence.
- As a certified concrete and asphalt technician by New York City Department of Design and Construction (NYCDDC). I personally oversaw and managed the placement of 99,570.00 cubic yard of 18" and 22"inches thick concrete pavement on 6"inches dense graded aggregate base course and 4"inches Plant Mix Macadam. Portland cement concrete used had 28-day Flexural Strength of 750 PSI.
- Supervised the Asphalt paving operation using asphalt concrete design mix of Mix1,2, and 3 (PG-64-22 and PG 82-22) respectively, with a combined total of 45,000.00 tons.
- Supervised the testing of dense grade aggregate base course for density. (DGABC)
- Checked material used for curing freshly mix concrete per ASTM requirements
- Computed volume of blast fence foundations, including steel reinforcement. Made determination to revised individual footings to spread footings whenever underground interference found in order not to hamper the work operation.
- Coordinated work of the various trades to ensure uninterrupted flow of work schedule
- Maintain daily narrative/construction report.
- Generate Change order from detailed narrative of junior engineer after verification of actual work condition and consultation on contract drawings and seek approval to senior Resident Engineer
- Generate clarifying sketches of field condition situations.
- Performed calculations for grade change, and various pipe invert.

NANCY HOFFMAN, RA, LEED AP

ARCHITECTURAL REVIEW

Years of Experience
With URS: 2 Years
With Other Firms: 20 Years

Education
AAS/Architecture/1981/The State University of New York
BS/Design & Urban Planning/1985/Arizona State University.

Registration/Certification
LEED Accredited Professional

OVERVIEW

Ms. Hoffman has more than 22 years of experience in architecture, design, urban planning and construction. She has extensive experience in the New York / New Jersey region particularly in the development of all phases of the construction process, including project management, contract documents, design work, schedule and the coordination of clients and consultants. Ms. Hoffman is a LEED Accredited Professional.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, JFK Airport Inspections, NY (1998)
Tenant deficiency summaries of six buildings totaling 500,000 s.f., including two hangars for the Port Authority of NY & NJ.

NPS Condition Assessments at 18 Schools, Newark, NJ (1997)
Condition assessments/surveys of building systems of 18 schools to determine upgrade requirements for Newark Public Schools. The beginning of Abbott verses Burke.

Stony Brook University, Advanced Energy Research & Technology Center (AERTC), Stony Brook, NY (2009 - Present)
LEED Coordinator on this $35 million project. The state-of-the-art, two-story, 42,000 s.f. facility is the second structure to be built on Stony Brooks new 245-acre Research and Development Campus. It will house new and expanded research and educational programs for the University as well as partnership programs with private incubator companies. During construction, a LEED report tracks the credits achieved during construction to make sure we are on target we to attain in the Construction phase also provided constructability reviews including LEED components.

Stony Brook University, Simons Center for Geometry and Physics, Stony Brook, NY (2009 - Present)
LEED Coordinator on this $27 million project. The Simons Center for Geometry & Physics will be a 35,000 gross square foot, six story faculty office building which will house a new research institute of the University devoted to theoretical physics and mathematics. The building will be constructed with private donation funding, with design, consulting and construction contracts held through the Stony Brook Research Foundation. During construction, a LEED report tracks the credits achieved during construction to make sure we are on target we to attain in the Construction phase also provided constructability reviews including LEED component.

MS 7; 60 Collard Street, Jersey City, NJ (2003 - 2007)
Project Manager, providing construction administration support on procurement, change orders, meeting minutes, shop drawing logs, and invoice requisitions for a new Middle School, providing 750 seats, Gymnasium, Auditorium, full cooking kitchen and cafeteria and playing fields. Construction completed July 2007.

MTA Bridges and Tunnels, On-Call Project (1999 - 2003)
Project Manager for various renovation assignments for an on call contract: Brooklyn-Battery Tunnel Ventilation Building Condition Assessments, Marine Parkway and Cross Bay Bridge Toll Booth Renovations, and Triborough Bridge Service Building Roof Replacement. Services included condition surveys and inspections, scope development, preparation of contract documents and construction administration. Responsibilities included: design reviews, value engineering, scheduling, pre-construction and design phase services and contractor procurement, construction phase services and post construction phase services.

PS 20, Ocean Avenue between New Street and Cantor Avenue, Jersey City, NJ (2004 - 2006)
Project Manager for pre-construction on this 120,000 s.f. new construction conforming to the DOE model for a K-5 school, capacity 700 students. Award Bid third quarter 2005 - 24-month construction schedule after environmental remediation. Special situations: land acquisition, building demo, remediation, street vacation, underground parking, major upgrade on municipal water line. Responsibilities included: design reviews, value engineering, scheduling, pre-development, land acquisition, site feasibility, pre-construction and design phase services, designer and contractor procurement.

PS 24, 220 Virginia Ave, Jersey City, NJ (2004 - 2006)
Project Manager for pre-construction on this 117,000 s.f. renovation; 30,000 s.f. addition; conforming to the DOE model for a K-5 school, capacity 775 students. Special situations: District owned land for the addition, utility upgrades; water, electric, and gas. Responsibilities included: design reviews, value engineering, scheduling, pre-development, land acquisition, site feasibility, pre-construction and design phase services, designer and contractor procurement.

PS 39, Plainfield Avenue between Duncan Avenue and Mallory Avenue, Jersey City, NJ (2004 - 2006)
Project Manager for pre-construction on this 104,000 s.f. renovation; 65,000 s.f. addition; conforming to the DOE model for a K-8 school, capacity 886 students. Award Bid first quarter 2006 - 24-month construction schedule. Special situations: land locked site, land acquisition, street vacation, and upgrades on municipal water line. Responsibilities included: design reviews, value engineering, scheduling, pre-development, land acquisition, site feasibility, pre-construction and design phase services, designer and contractor procurement.

PS3, MS4 Bright Street, Jersey City, NJ (2003 - 2000)
Project Manager, providing construction administration support on procurement, change orders, meeting minutes, shop drawing logs, and invoice requisitions for New middle school and new primary school build on the same lot, as separate buildings, housing 500 students for the primary school (grades PK thru 5th grade) and 750 students for the middle school grades 6th thru 8th) build at the same time with one General Contractor. Each building house full services for the schools including Gymnasium, Auditorium, Library, technology and full cooking kitchens and cafeterias.

KONSTANTIN INGBERG

CIVIL / STRUCTURAL INSPECTOR

Years of Experience
With URS: 11 Years
With Other Firms: 27 Years

Education
MS, Structural Engineering - State Regional Research Institute of Experimental Design, St. Petersburg, Russia, Post Graduate Study. Thesis: The Investigation of Resistance of Foundations on Piles to Lateral Loads in Col Regions
BS/Civil Engineering, Major Construction Management/The State College of Railway Engineers, St. Petersburg, Russia

OVERVIEW

Konstantin Ingberg has 38 years of experience in construction supervision and inspection, and design and structural analysis of steel structures. His experience includes providing inspection services for the Great Egg Harbor Bridge in New Jersey, the rehabilitation of anchorages at the Triborough Bridge, 12 bridges on Staten Island, and the Kosciuszco Bridge. He also provided inspection services at Newark International Airport for their six-year $800 million capital program that included the upgrade of existing airport infrastructure/facilities and the construction of new facilitie

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Call-In CM Services, Newark, NJ
Chief Inspector for Newark International Airport for the Port Authority. URS is serving as the construction manager for the Port Authoritys capital program to maintain and to upgrade the existing infrastructure and construct new facilities at EWR. The authority is embarking on a series of projects in the 1998-2003 timeframe to address the growth needs of EWR and also to upgrade existing facilities with regard to safety, security and environmental requirements. A number of capital projects have been identified and include:

- $450 million extension of the on-airport People Mover (monorail) to the Northeast Corridor rail station to allow intermodal transfer from Amtrak and NJ Transit trains to the EWR monorail with direct access to each terminal.
- $120 million structural parking facility at long term lot E.
- $140 million Southern Access Roadway Expansion from NJ Turnpike Exit 13A to EWR.

PANYNJ, Newark-Liberty International Airport, Newark, NJ
Chief Construction Inspector on URS As-Needed Basis Construction Management Services contract for the Port Authority of N.Y. & N.J. This six-year $800 million capital program included the upgrade of existing airport infrastructure/facilities and the construction of new facilities in accordance with new safety, security and environmental requirements. Project assignments included the construction of the $85 million Monorail Station E Parking Garage Structure, an RSR highway bridge and site work. Responsible for the construction management and inspections associated with caisson foundation construction, erection of a composite structural steel/precast, prestressed concrete superstructure, and structural steel and cast-in-place helix ramp system. Supervised the inspection team. Prepared change orders, estimates and reviewed Contractor cost proposals. Prepared monthly progress update reports. Coordinated field work with the Airport Facility Operational Personnel. Interfaced/reported to the Port Authoritys Senior Resident Engineer.

Farragat Road, Brooklyn; Putnam Avenue, North Bronx; Great Kills Harbor, Staten Island, Brooklyn/Bronx/Staten Island, NY: Construction Inspector for this project. The scope of inspection included construction of new and renovation of existing highways, and underground structures in the New York Metropolitan area. As Owners representative monitored site progress, materials evaluation and specifications compliance

Great Egg Harbor Bridge, NJ: Resident Inspector for the emergency repairs of the existing pin-and-link hanger system and retrofit of the wind bracing system for this Garden State Parkway Bridge for the New Jersey Highway Authority. The existing 3,700-foot-long structure comprises several pin-and-link hanger connections supporting three suspended spans throughout the bridge. When one of the original steel links failed an emergency repair program was immediately initiated. After subsequent inspection and ultrasonic testing of all of the pins and links was made, it was determined to replace four steel links. In addition, the structure was analyzed for the dynamic effects of wind and retrofit of the existing wind bracing was made.

Meeker Avenue/Brooklyn-Queens Expressway, Brooklyn and Queens, NY - $134,000,000: Construction Inspector for this $134 million rehabilitation and replacement of steel structures for this project for the New York State Department of Transportation. Monitored field operations, reporting and payments. Conducted in-depth inspection of existing steel structures in the preliminary stage.

Military Service, The Corps of Military Engineers, Urals, Russia: Staff Officer for the Department of Underground Structures.

Rehabilitation of 12 Bridges on Staten Island, Staten Island, NY - $20,000,000: Chief Structural Inspector for this $20 million project for the New York State Department of Transportation. Responsible for supervision of all field operations

Rehabilitation of Anchorages at the Triborough Bridge, New York, NY - $15,000,000: Chief Structural Inspector for this $15 million TBTA Project. Responsible for replacement of structural steel and concrete, anchor blocks post tensioning, strand prestressing and socketing, cable wire repair, replacement, of post?tensioning tendons, structural lifting operations, steel sheeting and pile driving, erection of pile concrete caps.

Rehabilitation of Kosciuszco Bridge, New York, NY - $20,000,000: Chief Structural Inspector for this $20 million project for the New York State Department of Transportation. Responsible for supervision of structural steel replacement, dock, pier repairs and M&P of Traffic.

State Bridge Construction Co., Northern Team #71: Project Engineer for the supervision of steel sheeting driving, concrete sectional piles driving, piers body erection and roll - on of 330 If long preassembled steel truss on construction of railroad bridge of 1.0 mile total length.

ARSHAD JAMIL, PE

MECHANICAL INSPECTOR

LPE

Years of Experience
48 Years

Education
BS Mech. Eng, 1960, METU
MS Mech. Engineering, 1961, METU-Ankara, Turkey

OVERVIEW

Mr. Jamil is a Professional Engineer in NJ and NY with over 48 years of combined multidiscipline, multinational (USA, Europe, S. Arabia, Turkey and Pakistan) experience in the areas of construction management, project management, design, plant engineering and technical writing - including inspection, safety, QA/QC, RFI, billing, CO, claim disputes, project development, design review, coordination, budgeting, planning & scheduling, bid packaging, reviews and awards; HVAC & MEP design, piping design, equipment selection, layout and installation.

EXPERIENCE SUMMARY

Construction Management & Inspection:

- Inspection and monitoring for progress.
- Certified Progress Payments.
- Processed shop drawings, submittals, RFIs, and Change Orders.
- Resolved Field Conditions and claims disputes.
- Monitored safety& QA/QC programs.

Construction Project Management for medium and large size projects, including commercial, institutional, residential, educational and public works, new and rehab projects. Handled all phases of construction from site development, concreting, steel erection, and framing, finishing work, Electrical works, Fire protection, plumbing & HVAC.

Project Management:

- Project management from planning stage to design and construction.
- Coordination with Clients, Architects, Consultants, Townships, and approving authorities.
- Design reviews, expediting, approvals processes and Construction management.

Projects from initial master planning to design and to construction. Facilities experience of academic buildings, hospital, sport complexes, housing, and utilities. Work experience of design reviews, packaging, bidding, contractors' selection, funding, payments, and progress monitoring. Extensive travels for project related work.

Miscellaneous Experience:

- Technical writing for O & M manuals, projections, flow charts, procedures and standards, & Quality Control programs. Produced project management reports and specifications,
- Some University teaching & Research work.

Construction Project Management & Inspection:

- Inspection and monitoring for QA/QC and progress. Certified Progress Payments. Processed shop drawings, submittals, RFIs, Change Orders, and resolved Field Conditions and claims disputes. Monitored safety program.
- Roy Kay Key Span, 8/00 – 1/01 - Heavy construction, Steel Structure & concrete works. Kings Hospital-Brooklyn, additions. (24 Million $ project)
- New York City Transit, 5/94 – 2/97 - Subway stations rehab work and new construction, involving heavy steel structures, concreting, block masonry, water proofing, tiling and other finish works; Work involved checking Rebar, concrete slump test and concrete sampling for testing. (15 + 24Million $)
- Own Consulting - Acted as GC for construction of 4 large residential buildings; Supervised all phases of constructions from excavation, to finish involving all trades; Concrete foundations and steel dunnage for NJ Turnpike.
- Permis Construction Co., 7/99 – 8/00 - Various construction jobs of housing, fan plant, & holding facilities, civil and finishing works. Brooklyn and Manhattan. Incld. New parapet walls for NY housing
- KAA Univ., Jeddah, 1977-93 - New Campus for 15,000 students. Multi-Million $$ Construction of academic blocks, housing, utilities. Examples: Student and Faculty staff housing-Precast. Large academic Block – own concrete batching Plant for hot weather concreting with chilled water. 3X2 million gallons water storage tanks and related water pumping station. 8,000 sq. m. Gymnasium tent
- Exxon Petro-Chem Plant, 1967-73 - Minor Construction works for additions and new facilities.
- Central chiller plant replacement of Samaritan Hospital, Troy – NY, for energy optimization.
- Construction of 3X2 million gallons water storage tanks and related water pumping station.
- Installation of Packaged sewage treatment plant.
- Shop inspection for plant and equipment.
- Project Engineering, refrigeration design, estimation, and proposals for large commercial cold stores, and refrigeration system for dairy plants, slaughterhouses, and pharmaceutical industries.
- Inspection and trouble shooting for interim facilities of HVAC, waste water treatment, and utilities for hospital, labs, academic buildings and housing.
- Project Engineering work for Petro-Chemical and other industries. De-bottlenecking studies, trouble shooting for gas turbine generation system, plant inspection. Worked on boiler Water treatment and chlorination facilities.
- Subway stations for 2nd. Ave., NY Transit. Project Engineering for Station HVAC and ventilation for 3 MW Traction Power Equipment room.
- NJ Transit's East End Concourse of Penn station, NY, HVAC design.
- Union Hospital, Union, NJ - HVAC system analysis for Phased upgrading and rehabilitation of the old HVAC system.
- Retrofit and replacement of heating plant at JFK airport hanger.
- HVAC design for MSO Pilot Plant for Merck, NJ.
- Various schools and DASNY facilities.
- De-bottlenecking studies, trouble shooting for gas turbine generation system, plant inspection.

SAM MAZO

ELECTRICAL ESTIMATOR

Years of Experience
With URS: 3 Years
With Other Firms: 20 Years

Education
BS/1971/ Electrical Engineering/ Polytechnic University, Minsk, Belarus

New York University/School of Continuing and Professional Studies.
- Telecommunication Systems Design (2 courses)
- Electrical Design (2 courses)
- Fire Alarm System Design

Bramson ORT Technical Institute, New York, NY
National & New York City Electrical Code

Professional Societies/Affiliates
Local Union #3 IBEW

OVERVIEW

Mr. Mazo has more than 23 years of experience in construction projects, specializing in design, cost analysis, value engineering, estimating, with leveling and evaluation of Electrical, Fire Alarm, Security, Telecommunication trades contractors for new construction and renovation projects. His background includes assignments in the field and home office for a broad range of projects. Mr. Mazo currently serves as a Senior Electrical Estimator, handling estimating and design functions as well change order evaluations/ negotiations for various construction projects. He also provides by client request independent review and evaluation of construction documents for Contractors Bid and Construction of Project applications

PROJECT SPECIFIC EXPERIENCE

PANYNJ, World Trade Center Transportation HUB, New York, NY (2007 - Present)
Senior Electrical Estimator responsible for providing review of design documents for constructability, value engineering, and cost estimate of electrical trades for multiple construction work packages. Reconciled the budget with Owner, Construction Management and Consulting. Trade cost is confidential at present time.

PANYNJ, Terminal 4, JFK International Airport, NY (1998 - 2001)
Participated in preparing Guaranteed Maximum Cost for Electrical trades work. Job was awarded for with-in the budget amount. Estimated and negotiated Change Orders with Subcontractors and Owners representatives. Performed cost analysis for alternate design proposals. Maintained and monitored project cost. Actively interfaced with contractors, designers and Owners staff on issues relating to value engineering and job progress.

PANYNJ, LaGuardia Airport, Central Terminal Building (CTB) Modernization Program, Queens, NY (2008 - Present)
Senior Electrical estimator provided conceptual cost estimate of electrical trade for several different conceptual design based on LGA Airport Reports and field investigation. Trade cost is confidential at present time.

Continental Airlines Terminal "C", Newark, NJ (2002)
Estimator, estimated and negotiated Change orders with Subcontractors and Owners representatives.

FDNY Dispatch Operations: Rehabilitation of Borough Communications (2008 - Present): Provided pre-construction electrical trades budget. Trade cost is confidential at this time.

WTC Memorial Pavilion (2008 - 2009): Construction Management and Consulting provided pre-construction electrical trade budget. Reconciled the budget with Owner, Job was awarded for with-in the budget amount. Trade cost is confidential at present time.

Chamber Street Complex Electronic Security System (2009): Provided pre-construction electrical trade budget. Trade cost is confidential at this time.

Goldman Sachs Headquarter Building, 200 West, New York, NY (2007 - 2008) - $85,000,000: Estimates include 6 Trading floors, 27 Office floors, 3 Executive Offices floors, Servery & Fitness Center floors, Conference Center. All Electrical packages were awarded for with-in the budget cost amount.

121st Police Precinct, Staten Island, NY (2008) - $5,500,000: Construction Management and Consulting provided pre-construction electrical trades budget. Reconciled the budget with Owner. Job was awarded for with-in the budget amount.

New York Times Headquarter Building (2005 - 2007) - $30,000,000: Participated in preparing Guaranteed Maximum Cost for Electrical trades work. Job was awarded for with-in the budget amount. Estimated and negotiated Change orders with Subcontractors and Owners representatives. Maintained and monitored project cost. Actively interfaced with contractors, designers and Owners staff on issues relating to value engineering, job progress, punch list.

Bridgewater Data Center Project, Bridgewater, NJ (2007) - $80,000,000: Provided pre-construction Guaranteed Maximum Cost of electrical trades for the Client. Reconciled the budget with Construction Management and Consulting. Job was awarded for with-in the budget amount.

Fashion Institute of Technology, New York, NY (2007) - $5,000,000: Provided pre-construction electrical trades budget for the Owner.

Queens Museum of Art Expansion, Flushing Meadows Corona Park, NY (2007) - $5,500,000: Electrical Estimator provided pre-construction electrical trades budget. Job was awarded for with-in the budget amount.

Museum of Modern Art, New York, NY (2002 - 2003) - $16,000,000: Participated in preparing Guaranteed Maximum Cost for Electrical trades work. Job was awarded for with-in the budget amount. Estimated and negotiated Change orders with Subcontractors and Owners representatives.

New York Stock Exchange, New York, NY (2002 - 2003) - $10,000,000: Estimated cost of Electrical, Communication work for alternate proposals and negotiated its with Subcontractors.

British Airways Terminal, JFK Airport, Queens, NY (2000 - 2002) - $10,000,000: Estimated and negotiated Change orders with Subcontractors and Owners representatives.

WAYNE MCMAHON

CIVIL / STRUCTURAL INSPECTOR

MAITRA ASSOCIATES, P.C.

Years of Experience
30 Years

Education
Community College of Brooklyn
Mechanics Institute of Technology

Registration/Certification
NICET IV
OSHA 10 Hour Certified
ACI Level 1 Certified, ACI Level 2
Concrete Construction Special Inspector Certified
ICC Structural Steel Bolting Certified

OVERVIEW

Mr. McMahon has more than 30 years of construction inspection experience in marine terminal, railroad, highway, bridge and transit projects. He is proficient at keeping daily records and reports. Mr. McMahon is familiar with Port Authority, New York City DEP, and New Jersey Turnpike systems and procedures.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Lead Inspector

- **Contract PN 354.042A - Berth 8 & 10 Wharf Rehab** - Demolished existing berth, installed new 18" steel pipe piles, precast & cast in place concrete panels. Installed new concrete deck, new 12" water line.
- **Contract PN 800.219 - Berth 36/63 Reconstruction** - Demolished existing berth, remove unsuitable material, dredge area, installed new 12" steel pipe piles. Installed cast in place concrete panels & deck, new 12" water line.
- **Contract EP 384.063 - Construction of Expressrail Tracks 9 thru 18 -** Installed (11) new rail tracks, concrete runways, high mast lighting & UG utilities.
- **Contract EP 384.045 - Design / Construction of Tracks 1 Thru 9 -** Installed (8) new rail tracks, Concrete runways, high mast lighting & UG utilities.
- **Contract MFP 654. 041 - Disposal of Hazard / Contaminated Material Via Work Order** - Removal of Unsuitable / Contaminated material from various work sites. (11/08 – Present)

PANYNJ, Marine Terminal Facility, Port Newark, Elizabeth, NJ
Senior Inspector, responsible for field inspection, including maintaining records of contract quantities, time and material records, coordinating with utilities and tenant requirements, negotiating invoices and change orders. Projects included new lead track for Expressrail Intermodal Facility, Tracks 9 and 10 to Maher Terminal, installation of security cameras and fencing, Bridge reconstruction involving abutment structures, asphalt pavement and relocating existing water main on bridge over Conrail; Installation of overhead flashing lights, signs and pavement markings at Port Street Railroad crossing; Installation of new 136# rail to service Sealand and Maher Terminal including new concrete crossings and railroad signals; Installation of new fire and domestic water pumping station with 2 new 1 million gallon water storage tanks and metering stations; and Repair of existing 136# railroad siding and installation of new concrete crossing; Berth 36/63 Wharf repair, Berth 8/10 Wharf repair, North Avenue/McLester Street curve realignment, disposal of hazardous materials, and pavement/utility rehabilitation work. (9/02 – 10/08)

Resident Engineer/Project Manager, **New Jersey Turnpike**, **Utility Installation** - Responsible for jacking and boring of 300 LY, of 72" dia. pipe casting under N. J. Turnpike. Maintained record of contract quantities, material certifications and coordinated all as-built drawings with client.

Project Manager, Metro Link -Responsible for installation of approximately 12 miles of new railroad track between Lancaster and Palmdale, California. Managed and coordinated all construction and field inspection, coordinated construction work schedules with contractors, negotiated change orders and invoices.

Resident Engineer/Deputy Construction Manager, NYCDEP - Responsible for the rehabilitation of the Fresh Kills Landfill site improvements (Final Cover and Closure) and related consent order work.

Resident Engineer, NYCDEP, **Clay Capping of 40 Acres** - Maintained records for clay cap certification, storm, water management including sedimentation basins and associated structures, wetland remediation and passive gas venting systems. All work conformed to NYSDEC regulation part 360.

Resident Engineer, New Jersey Highway Authority - Responsible for $10 million median barrier, guide rail and resurfacing project for Garden State Parkway between M.P. 38 to M.P. 52.

Resident Engineer, Garden State Parkway - Responsible for $13 million site improvement projects at Monmouth, Vaux Hall, Forked River and Montvale service areas. Projects included installation of new service station, fuel tanks with dispensers, expansion of parking areas, drainage, lighting and utilities.

Resident Engineer, Garden State Parkway, Widening and Repaving between M.P. 80 to M.P. 81 - Project included replacing existing shoulders with full depth pavement, repaving entire roadway, install new guide rail, lighting and landscaping.

Assistant Resident Engineer, Township of Hempstead - This $2.5 million road and drainage rehabilitation. Project included two miles of pavement reconstruction, drainage, storm sewers, retaining walls and lighting.

Construction Inspector/Designer, NYCTA, Bus Depots and Maintenance Shops - Work included inspection of mechanical and electrical systems, storm sewers, drainage and lighting at eight facilities.

Construction Inspector/Field Designer, Shorebani Nuclear Power Plant - Work included design and inspection of piping systems and pipe supports.

JUAN M. MELENDEZ

ELECTRICAL INSPECTOR

Years of Experience
12 Years

Education
Synergistic Computer Learning Center, River Edge, NJ
Computer Training Certificate, 1997 - 2000

OVERVIEW

Mr. Melendez has more than 12 years of construction engineering and field experience, most recently providing inspection services in the New York / New Jersey region, and for the PANYNJ at Newark-Liberty International Airport.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Newark, NJ

Electrical Inspector, conduct electrical inspections for Line Projects and Tenant Alteration Projects for the Port Authority of NY & NJ, at Newark Liberty International Airport. Projects included installation of new elevators, escalators, emergency generators, switchboards and construction of new tenant spaces. Projects also include installation of CCTV systems, FAA Air Traffic Control tower high-magnification cameras and the pilot program for the Sarnoff Video Flashlight system. This modern video surveillance and monitoring system incorporated the use of multiple cameras for object recognition, 3D exploitation and analysis

PANYNJ, Newark-Liberty International Airport, Newark, NJ

Assistant LAN Administrator/MIS Specialist, responsible for maintaining the Information Technology systems for the resident Engineer's Office at Newark Liberty International Airport. Responsibilities include the following:

- Computer systems support and maintenance for WAN, LAN and Windows NT/2000/XP Professional.
- Ordering computer/Printing equipment and network supplies as needed. Configuration of Dell, Compaq, Gateway and any IBM compatible PC Desktop.
- Set-up new Field Trailers with LAN/WAN connectivity VIA, T1/Fiber Optic/WIFI Products.
- Trouble shoot PC computer VIA Network or remote access by using Norton PC Anywhere Software application and or VNC.
- Recover PC computers immediately, in the rare event that the System Crashes, using Norton's Ghost Imaging software for making Images of hard drives.
- Partitioning hard drives using Partition Magic.
- Order, program, configure and repair Nextel Phone/Radios for the engineering and administrative staff.
- Created MS Access Database for inventory control on PC computers, Nextel Phones, News Bulletins and employee contact information.
- Configuration of Port Authority Network Standards on PC computers by Installing Operating System and MS Office Suite including Virus Protection, WEB Browsers such as MS Internet Explorer and Netscape.
- VTC Video Teleconferencing via Network, Phone line and WiFi.

IDT Telecommunications Corp, Hackensack, Nj.
Tech Support Representative
I provided first level support for the Internet Service provider. I configured and performed trouble-shooting with TCP/IP protocol, dial-up networking, Hyper Terminal, Unix Based operating systems, and commands, Telnet, troubleshooting and configuring: Microsoft Outlook 97, 98, MS Outlook Express, Eudora Lite for email. Netscape and Internet Explorer for Internet and Intranet Connections.

Synergistic Software Solutions Corp, River Edge, Nj
System Support Technician
My duties consisted of computer systems/network support, installation of software/hardware and providing Help Desk Support.

Honest Engine, Corp., Paterson, Nj
Manager of Engine Cylinder Head Department
I was in charge of all aspects of the production of engine cylinder heads. I managed the inventory, production control and quality assurance.

Line Chemical Corp, Paterson Nj
Assistant Manager of Inventory Control
I oversaw the Inventory Control Department. Duties included: weekly accounting and tabulation of all sales, deliveries and safe-keeping of all Material Safety Data Sheets (MSDS).

EVELYN MENENDEZ

CONTRACT ADMINISTRATION

LPE

Years of Experience
13 Years

Education
East Side High School, Newark, NJ, Secretarial Course, 1968 - 1972

Skills
Primavera Expedition

OVERVIEW

Ms. Menendez has more than 13 years of varied experience, with substantial contract administration and administrative positions working on PANYNJ properties such as Newark-Liberty International Airport.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Newark, NJ
Contract Specialist, responsible for a wide range of duties, which include:

- Support several Assistant Resident Engineers and field staff in the PANYNJ Engineering Department.
- Serve as back-up to the Senior Contract Specialist
- Maintain a high degree of confidentiality of time sensitive material for security contracts
- Maintain and update all Contract documents and files and maintain a follow-up system
- Prepare proposal and pre-construction packages and distribute to the proper individuals
- Archive closed-out Contract documents and files
- Issue temporary ID Badges to numerous Contractors working in the field
- Track all office vehicle records and maintenance
- Set-up equipment (projectors, laptops, polycom phone, etc.) and maintain office inventory
- Assist staff in troubleshooting computer problems
- Monitor daily calendar, distribute correspondence and web cast conferences literature, word processing, schedule meetings, etc.

PANYNJ, Newark-Liberty International Airport, Newark, NJ (Subcontractor to URS)
Contract Specialist, responsible for a wide range of duties, which include:

- Work for several Assistant Resident Engineers and field staff in the PANYNJ Engineering Department.
- Serve as back-up to the Senior Contract Specialist
- Maintain a high degree of confidentiality of time sensitive material for security contracts
- Maintain and update all Contract documents and files and maintain a follow-up system
- Prepare proposal and pre-construction packages and distribute to the proper individuals
- Archive closed-out Contract documents and files
- Issue temporary ID Badges to numerous Contractors working in the field
- Track all office vehicle records and maintenance
- Set-up equipment (projectors, laptops, polycom phone, etc.) and maintain office inventory
- Assist staff in troubleshooting computer problems
- Monitor daily calendar, distribute correspondence and web cast conferences literature, word processing, schedule meetings, etc.

PANYNJ, Newark-Liberty International Airport, Newark, NJ
Administrative Assistant, provided contact with the Engineer of Construction and Construction Management Consultant to the Port Authority of NY & NJ for the Redevelopment Program at Newark Liberty International Airport. Responsibilities include:

- Processing of confidential material
- Document controls
- Monitor daily schedules, word processing, scheduling meetings, screen telephone calls, phone coverage, maintain a follow-up system, , receive and distribute all incoming correspondence

JOHN MIHALENKO

CONSTRUCTION MANAGER

Years of Experience
With URS: 11 Years
With Other Firms: 15 Years

Education
MS Transportation/1991/New Jersey Institute of Technology
BS Engineering Technology/1983/New Jersey Institute of Technology
AAS Civil-Construction Engineering Technology

OVERVIEW

Mr. Mihalenko has more than 26 years of experience in construction, with extensive experience in the New York / New Jersey Region. For nearly 20 years, he has been involved with the URS CM team performing work at Newark-Liberty International Airport.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport - Redevelopment Program (1999-present), Newark, NJ
Part of the Construction Management team which handled construction projects in excess of $1 billion. Responsible for the coordination and inspection of the infrastructure for the Perimeter Intrusion Detection System, Perimeter Strengthening, Radio Communication Site Base Station, Airport Checkpoint Digital Closed Circuit Television, Perimeter Fence Upgrading and the new Salt and Sand Storage Building # 81 upon completion of the Automated People Mover leading to the NEC station. Involved in the construction of administration Building #1, parking lot P9, new tidal gates and the rehabilitation of Basilone Bridge/Road. Worked closely with various design, QA/QC and airport services personnel. Performed scheduling, cost control and contract administration tasks. Also, performed construction inspection/testing of structural steel welding & bolting, concrete, reinforcing steel, asphalt, fireproofing, paint, roofing systems, various materials for sub-base pavement, mechanical and electrical systems, gas lines, water mains and drainage.

PANYNJ, Newark-Liberty International Airport Redevelopment Program (1991-1999)
Involved in the foundations and terminal stations of the Automated People Mover and major highway connectors including a new 800 LF bridge structure, approach ramps, connecting I-78 with Newark Liberty International Airport. Supervised proper on-site fulfillment of construction contracts in areas of demolition, concreting, fireproofing, steel, foundations and piling, drainage, roads, bridges, traffic, asphalt, soils and utilities. Coordinated work of various on-site contractors, monitor construction progress, maintained quality assurance and quality control records, coordinated activities of lab and survey personnel, review submittals, engineering documents, construction estimates, change orders and schedules, monitor contractor safety and EEO compliance.

Ebasco Services Incorporated, Lyndhurst, NJ, Quality Control Inspector (06/1991 - 09/1991)
Supervised and managed the activities of Quality Control Inspectors on various construction projects in the New York Metropolitan area. Responsible for scheduling and supervising inspectors, reviewing and issuing reports, interfacing with and troubleshooting for clients, and performing special engineering studies.

New Jersey Institute of Technology, Newark, NJ - New Jersey Institute of Technology (09/1990 - 05/1991): Received grant to conduct research in the area of Urban Goods Movement while pursuing an advanced degree in Transportation Engineering.

Exchange Place Urban Renewal Associates, Jersey City, NJ - Ebasco Services Incorporated (09/1986 - 08/1990): Responsible for all phases of construction Quality Assurance and Quality Control. Coordinated the activities of the on-site and off-site construction inspection staffs, interfaced with on-site construction management personnel and reviewed and submitted QA/QC reports.

Squibb Pharmaceutical, Gilbane Building Co. - Research & Development Facility, New Brunswick, NJ - Ebasco Services Incorporated (06/1990 - 07/1990): Responsible for all phases of construction Quality Assurance and Quality Control. Coordinated the activities of the on-site and off-site construction inspection staffs, interfaced with on-site construction management personnel and reviewed and submitted QA/QC reports.

NYC Department of Sanitation - Greenpoint Incinerator, Brooklyn, NY - Ebasco Services Incorporated (04/1990 - 06/1990): Responsible for all phases of construction Quality Assurance and Quality Control. Coordinated the activities of the on-site and off-site construction inspection staffs, interfaced with on-site construction management personnel and reviewed and submitted QA/QC reports.

Hudson County Correctional Facility, Kearny, NJ - Ebasco Services Incorporated (12/1988 - 03/1990): 6-Story reinforced concrete prison responsible for all phases of construction Quality Assurance and Quality Control. Coordinated the activities of the on-site and off-site construction inspection staffs, interfaced with on-site construction management personnel and reviewed and submitted QA/QC reports.

US Navy, Construction of New Trestle and Pier #3 - Naval Weapons Stations EARLE, Leonardo, NJ - Ebasco Services Incorporated (08/1987 - 12/1988) - $45,000,000: Responsible for all phases of construction Quality Assurance and Quality Control. Coordinated the activities of the on-site and off-site construction inspection staffs, interfaced with on-site construction management personnel and reviewed and submitted QA/QC reports.

Exchange Place Center, Jersey City, NJ - Ebasco Services Incorporated (08/1987 - 07/1987): Responsible for all phases of construction Quality Assurance and Quality Control. Coordinated the activities of the on-site and off-site construction inspection staffs, interfaced with on-site construction management personnel and reviewed and submitted QA/QC reports.

NYSDOT, Greenpoint Avenue Bridge - Double Leaf Bascule Bridge, Brooklyn & Queens, NY - Hardestry & Hanover (10/1984 - 09/1986): Senior Construction Engineer responsible for quantity estimates; daily field recording; performed inspection of formwork, reinforcing steel and subsequent concrete placing; conducted tests on concrete and soil; inspected grading for roads and drainage; supervised and trained inspector trainees; maintained and updated as-built drawings; surveying; inspected structural steel and painting of bridges; placement of asphalt concrete and performed design changes to adapt to field conditions.

EVELYN MURPHY

SAFETY INSPECTOR

Years of Experience
With URS: 8 Years
With Other Firms: 25 Years

Education
Catonsville Community College, Baltimore, MD - Catonsville Community College (1986 - 1989): Occupational Safety and Health Program (under NIOSH).

City College of New York, New York, NY - City College of New York (1966 - 1968)

OVERVIEW

Ms. Murphy has more than 33 years of a long and distinguished career in the construction industry with a specification in safety. She has extensive experience in this area, and has served as Construction Safety Manager on the Newark-Liberty International Airport since 2003. She has also served in a similar role on the $6.3 billion Long Island Rail Road East Side Access Program and the $2 billion Tren Urbano in Puerto Rico. Also served as the Safety Superintendent for three WMATA projects and Safety Manager for the $3.2 million sq. ft. Ronald Reagan Building, one of the largest Federal buildings in the United States

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport and Teterboro Regional Airport, Newark and Teteboro, NJ (2003 - Present)
Construction Safety Manager responsible for the safety oversight of contractors working for the Port Authority of New York and New Jersey at both airports. Responsibilities include review and approve construction site safety submittals, written reports of contractors' safety performance when needed, daily site inspections, participate and assist in pre-construction meetings and in progress meetings to report on the safety performance of the contractors and their subcontractors and investigate accidents and provide the Engineering (PA) Division with recommendations on abatements. The types of projects the construction site manager oversee include: terminal modifications, roadways, drainage, bridges, airside projects such as taxiway extension (which involve extensive electrical work and deep excavations), airside access gates and tide gate improvement. There have been projects with serious fall exposures at the monorail roof improvement projects (working on sloped roofs and working monorail). At the fuel farm, we have done demolition of water tower and construction of a new tower (this work had scaffolding and confined space issues that had to be monitored closely).

MTA LIRR, East Side Access, New York, NY (2000 - 2003)
Safety Engineer for this $3.2 billion project for the MTA/LIRR to provide program management services for more than 20,000 linear feet of underground construction, including reconstructing 2,500 linear feet of tunnels within Grand Central Terminal, completing 8,600 linear feet of the existing 63rd Street-Queens Boulevard Connector Tunnels lower level, and designing more than 10,000 linear feet of new hard rock and soft ground tunnels in Manhattan and Queens. URS serves as the primary day-to-day manager for the LIRR and is responsible for supervising the General Engineering Consultant and Environmental Consultant.

Tren Urbano, San Juan, Puerto Rico
Manager/Safety Auditor for the Tren Urbano, a new urban rail line under construction in San Juan. This $2 billion project consists of 17.2 kilometers of rail and 16 stations for public transportation in

the metropolitan San Juan area. Worked under the DMJM+Harris consulting contract, which is for oversight of planning, design review, and construction of TU for the Puerto Rico Highway Transportation Authority. The job responsibilities include ensuring contract safety compliance, providing guidance and bilingual safety training (English/Spanish), field auditing, review and approval of construction safety submittals, writing monthly reports and updates on safety performance by each contractor and the project as a whole. Once a month presided only a project-wide safety meeting. Since January of 2000, responsibilities have expanded to that of Acting Manager. This includes participating in the weekly Contractor Managers Meeting with the owners representative and empowered to request holding contract payments when safety does not meet contractual requirements.

Director of Risk Management Integrated.com - Risk Management Integrated (1999 - 2000)
Managed and provided loss control services and workers compensation claims handling for a startup.com Human Resources firm.

Director of Loss Control Department, Injured Workers Insurance Fund of Maryland, MD - Worker Insurance Fund of Maryland (1996 - 1999)
Managed a department of 14 Loss Control Consultants. Responsible for over 20,000 policyholders with premiums in excess of $73,000,000. Re-engineered loss control department by developing cost effective solutions to improve the fund and policyholder profitability. This resulted in a reduction of the frequency rate by almost 70% within the first two years.

USF&G Insurance Company - USF&G Insurance Company (1994 - 1996)
Daily responsibilities include prospecting and servicing large multi-line construction accounts. Duties included conducting safety/OSHA seminars and training programs, implementing various safety and environmental programs, conducting site audits, developing and monitoring safety performance standards and early-return-to work programs.

Argonaut Insurance Company, Washington, DC - Argonaut Insurance Company (1991 - 1994)
Senior Consultant/Safety Management responsible for managing an Owner Controlled Insurance Program (OCIP) for the Ronald Reagan Building in Washington, D.C. This is the largest Federal Building since the Pentagon (3.2 million sq. ft.). The goal was to minimize losses through effective risk management techniques.

B. Frank Joy Company - B. Frank Joy Company (1989 - 1991)
Safety Director A Utility Contractor with a workforce of 400 and 60 jobsites. Instituted risk management, set up policies and procedures for a Drug Free workplace.

Herzog Contracting Corporation (1986 - 1989)
Safety Superintendent contracted by Washington Metropolitan Area Transit Authority (WMATA/OCIP) for three projects (Track Work 10, 11 and 12). Responsible for a workforce of 100 employees. These contracts involved heavy structural installation in tunnel, serial and at-grade track work. First Safety Superintendent, on track work, without a lost time accident in the history of WMATA.

IRENE M. PALLEIJA

CONTRACT ADMINISTRATION

Years of Experience
19 Years

Education
Berkeley College, AS in Business Administration; Graduated in 1991 with honors

OVERVIEW

Ms. Palleija is an Administrative professional with more than 19 years of experience providing Contract Administration, Project Accounting, and Financial Administrator. Most recently she has been serving as Contract Administrator on the PANYNJ Newark-Liberty International Airport, responsible for maintaining all cost accounting for several construction projects.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Newark, NJ
Contract Administrator responsible for maintaining all cost accounting for several construction projects. Responsibilities include multi tasking of active and non-active contracts such as:

- Attend pre-construction meetings and inform Contractor of the Port Authority policies and procedures as well as Government regulations including OSHA.
- Process Contractor payment applications through two Port Authority databases (SAP and Wintrak).
- Track monthly employment utilization reports.
- Review work authorization reports.
- Perform audits on Contractor billing.
- Perform closeout upon completion of contract.
- Evaluate proposals and quotations.
- Maintain critical filing information on contract requirements.
- Track cost and financial reporting using Port Authority database and Excel.
- Provide daily written and oral communication with the client and contractors.
- Review subcontractor approval requests and check references.
- Prepare Contractor performance evaluations.
- Participate in weekly progress meetings with the client and contractor.

PANYNJ, Newark-Liberty International Airport, Continental Global Gateway Project, Newark, NJ
Cost Engineer/Project Accountant responsible for daily monitoring and forecasting of project costs and total construction value. Worked closely with the Project Managers and Project Engineers on creating, monitoring and revising daily change orders, approval/award letters, purchase orders and contract updates. Additional responsibilities included:

- Research discrepancies within the accounting cost database and make adjustments accordingly.
- Monthly distribution of cost reporting.
- Review and audit subcontractor requisitions on standard AIA format.
- Review of payments to the subcontractors along with required back-up documents for processing.

Goodkind & O'Dea, Incorporated, Rutherford, NJ
Financial Administrator for an Engineering Consulting Firm where responsibilities included the coordination and supervision of billing inquiries for three branch offices. Detailed responsibilities included:

- Responsible for preparing and generating daily financial cost reports.
- Supervise a billing clerk.
- Assist the Sales Department in tracking increases on new and existing projects.
- Responsible for daily review of all project adjustments in the accounting database.

Merrill Lynch, World Financial Center, NY; Securities Pricing Service
Senior Specialist responsible for daily monitoring of stocks and bonds pricing based on Standard & Poors and Dow Jones Market ratings. Responsibilities included:

- Communicate daily with assigned Institutional Banks throughout the Eastern, Mid-Western and International regions on reporting securities pricing.
- Perform all account data maintenance and research client portfolios.
- Provide sales support to the Senior Sales Representatives.
- Participate in the overall marketing efforts of the firm, prepared fee proposals and attended off site client conferences to sell the securities pricing products.

Prudential Insurance Company of America, Newark, NJ
Financial Reviewer responsible for daily monitoring of futures and options pricing and high yield junk bonds, daily corporate and treasury bonds trade input, settlement of securities and reconciliation of transaction details with the Wall Street broker community. Responsibilities included:

- Maintain data discrepancies including all schedules pertaining to individual securities and external indices (Lehman Brothers and Salomon Brothers).
- Daily verification and monitoring of short term floating rate notes and money market mutual funds.
- Responsible for generating and distributing spread reports.
- Daily monitoring of futures and options wire transfers.

NELSON PARADA, PE

UTILITIES INSPECTOR

LPE

Years of Experience
30 Years

Education
New Jersey State Board of Professional Engineers and Land Surveyors
Professional Engineering Certification Awarded in Jan. 2010, P.E. Lic. #[redacted]

New Jersey Institute of Technology, Newark, New Jersey
Bachelor of Science in Civil Engineering & Construction Technology. (Awarded in May, 2000)

Central American Institute of Technology, El Salvador, Central America.
Advanced Associate of Science in Civil Engineering and Construction Technology. (Awarded in 1981)

Central American Institute of Technology, El Salvador, Central America.
Associate of Science in Civil Engineering and Construction Technology. (Awarded in 1979)

OVERVIEW

Mr. Parada has more than 30 years experience in the engineering and construction industry, with extensive New York / New Jersey experience particularly on PANYNJ projects. Most recently he has served as Site Utility Program Coordinator at Newark-Liberty International Airport.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Newark, NJ
Site Utility Program Coordinator

- Performed coordination of field and office activities in connection with the Utility Mapping Program and the Utility Damage Prevention Plan of EWR.
- Directed by-weekly utility coordination meetings and submitted weekly One Call Ticket status reports to over 150 PANYNJ representatives.
- Directed kick-off meetings, and performed inspection of field procedures in connection with underground utility exploration and One Call utility mark outs.
- Developed a field procedure manual called "EWR One Call Damage Prevention Plan Additional Requirements"

PANYNJ, Newark-Liberty International Airport, Newark, NJ
Utility Program Coordinator / CADD Assistant

- Reviewed final reports and CADD submittals of SUE and Surveying consultants engaged in the utility mapping program of EWR.
- Managed and maintained the Underground Utility Mapping and the One Call Ticket databases.
- Developed a manual called "PANYNJ Data Collection and Data Depiction Standards Additional Requirements"

Somerset County Engineering Department
Roadway & Highway Reconstruction Project Designer

- Performed design and preparation of reconstruction plans of municipal and capital roadway and highway reconstruction projects.

- Prepared and analyzed topographic maps, and digital terrain models to provide, an economical and safe reconstruction plan conforming to the design criteria of Somerset County Engineering Department.
- Performed Quantity Take-offs, and prepared Engineer's Estimates.

Medina Consultants, P.C.
CAD Technician/Engineer in training

- Prepared Cad drawings of Land Development and Highway design projects.
- Assisted Project Engineers in the design and storm drainage systems, site grading, and geometric design of roadways.

Metsky & Zuckerman
Junior Engineer

- Involved in the application of site engineering to the design and preparation of construction plans of Multi-Fuel/Car Wash facilities. Prepared grading plans, layout of storm water drainage systems and parking lot layouts.

Certified Engineering And Land Surveying, Inc.
Civil Engineering Technician

- Performed Survey Layouts and Coordinate Geometry calculations of Highway/Roadway, Bridge and Building construction.
- Conducted inspection of grading, and survey layout of highway, bridge, and building construction projects.
- Supervised Construction Survey Layouts performed by Local Union, and Staff surveyors.
- Reviewed and revised plans and designs of Land Development and Roadway Reconstruction projects.
- Attended Planning board meetings and coordinated with owners and township engineers to facilitate the approval process.

Shimel And Sor, Consulting Engineers
Construction Inspector

- Performed inspection of Reinforced Concrete construction, Foundations, Piles, Grading, and Soils.
- Prepared test reports and daily activity reports.
- Performed material sampling, field and lab testing of Geotechnical, Concrete, and other construction materials.

JITENDRA (JAY) N. PATEL

CIVIL / STRUCTURAL INSPECTOR

Years of Experience
With URS: 11 Years
With Other Firms: 24 Years

Education
BS/1975/Civil Engineering/Gujarat University, India
Graduate Level Engineering Courses/1984/New York Polytechnic
Piping Stress and Support Design Courses/1979/TMS School

Registration/Certification
ACI - I & II. 4/2009
10 hrs Masonry construction Inspection 5/2009
10 hrs Steel Bolting & weld Inspection 6/2009
AHA AED program 03/2009

OSHA (10 hours) 5/2006
Scaffold Safety, New York City Dept of Bldg 9/2005
OSHA Confined Space Entry Regulations 6/1999
Amtrak & Conrail on Track Safety 9/2000
EWR Monorail Safety 3/2000
URS Safety Certification in Hazard Communication, Fall Protection and Heavy Equipment 2003

OVERVIEW

Mr. Patel has more than 35 years of experience in construction, design and project management; project management / construction experience in construction of airports, highways, bridges, multi-facility building, parking facilities, power plants and resident engineering. Has performed constructability reviews, detail construction inspection, staging and traffic maintenance plans, coordination with airlines, FAA, airport operations, A/E, contractors and vendors. Most recently he served as Senior Construction Engineer on the Newark-Liberty International Airport, Terminal B project.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Terminal B, Newark, NJ (10/2006 - Present)
Senior Construction engineer for Bridges, roadway, drainage & Terminal buildings improvements project. Duties included field technical inspection of construction activities, coordination's with clients, general contractors, A/E, and PA police. Review submittals dwgs, progress payments & keep track of T & M and daily work progress.

PANYNJ, Newark-Liberty International Airport, Access Roadways Construction, Newark, NJ
Senior Field Engineer responsible for daily field construction activity of access roadways and bridges connecting airport and terminals facilities for the Port Authority of NY&NJ. Involved in 1,000 lf of poured-in-place concrete bridge from an airport roadway to Interstate Highway Route 78. Field construction supervision of terminals entrance and exit ramps and roadway modifications that includes bridge widening, erection of 100 ft. wide overhead sign structures and installation of a state-of-the-art closed-circuit TV/cameras systems for traffic/security monitoring.

PANYNJ, Newark-Liberty International Airport, Monorail Maintenance Control Facility Building, Newark, NJ
Senior Field Engineer responsible in all phases of construction from start to finish of this two-story multi-facility building, which houses high tech monorail command and control center, general administrative staff and monorail operations for the Port Authority of NY&NJ. Responsible in relocating underground utilities, pile driving operations, foundations, erection of structural steel,

masonry, roofing, plumbing, elevator, interior, doors, windows, panels, floors, exterior site work and soil disposal. Reviewed changed orders, progress payments, schedule and negotiation of change orders, punch list and close outs.

PANYNJ, Newark-Liberty International Airport, Elevated Monorail System Project, Newark, NJ
Senior Construction Inspector responsible in relocating underground utilities, pile driving operation, foundations, erection of structural steel girders of monorails, performed QA/QC testing on steel, piles and concrete materials for the Port Authority of NY&NJ.

PANYNJ, Newark-Liberty International Airport, Administration Building, Newark, NJ
Senior Field Engineer responsible for all exterior civil, mechanical, underground utility relocations and site work of this project for the Port Authority of NY&NJ. This project involved moving existing historical terminal building, which was the largest and heaviest building ever moved. The moved building was integrated into a newly constructed structure to house Newark Airports air rescue/fire fighting operations, air side/land side operations, police/security, high tech data center and general administration staff.

NJ Transit and Monorail Transfer Facility Stations, Newark, NJ (1998 - 2000) - $115,000,000:
Senior Field Engineer from PA to perform all construction QA audit tasks on design/build station facility by NJ Transit Authority/Port Authority of NY&NJ. Responsible for final system check for sprinkler pile, HVAC, water and fire alarm system. Reviewed documents, shop drawings, periodic payments applications, coordination and punch list.

NYCHA, Ocean Bay Apartments - Hope VI, Far Rockaway, NY (03/2005 - 09/2006)
Project Engineer for the NYCHA project involving the rehabilitation of 31 apartment building and utility upgrading at the Ocean Bay Apartments - Hope IV Revitalization. Duties included: field technical supervision of construction activity, like brick joint raking and point, parapet demolition, lintel removal and installation, CMU and brick wall parapets, coping stone, roof repair, modifying existing entrance lobbies, helical piles, structural steel, concrete foundations and asbestos abatement; review Q/A, Q/C program, shop drawings, specs, submittals, monthly progress payments, CO's and tenant issue resolution; coordinate with development managers, tenants, A/E, and client.

Rikers Island Facilities Project, Queens, NY (2004 - 2005): Construction Engineer for this project responsible for QA/QC testing for project & transfer documents to the Department of Corrections.

Woodbine Airport and Republic Airport, Cape May, NJ and Farmingdale, NY - Blauvelt Engineers (1990 - 1991): Resident Engineer responsible for planning, developing and execution of detailed runway, taxiway pavements, signage's, lightings and utility relocation in accordance with FAA to upgrade existing small aircrafts airports. Monitor construction progress, payments and close outs for the Port Authority of Republic Airport.

SHASHIKANT PATEL

OFFICE ENGINEER

Years of Experience
With URS: 29 Years

Education
S.P. University, BS, Civil Engineering, 1982
Essex County College, NJ, AutoCAD v12 and Micro Station v5.0, 1994

Certification
Asphalt Paving Technology Certificates, NJSAT 1996
NICET IV - Transportation Engineering Technology/Highway Construction 1997

OVERVIEW

Mr. Patel has more than 29 years of experience in supervision, inspection and office management of bridge, highway and structural steel construction and has served as an Office Engineer, Assistant Resident Engineer and Senior Inspector on a multitude of high profile projects, including at the PANYNJ Newark-Liberty International Airport.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Newark, NJ:

- Engineer/Senior Inspector for the $0.8 millions, Airtrain Guideway Column Protection including lightweight concrete foundations, and installation of steel beam anchoring in to concrete.
- Engineer/Senior Inspector for the $1.5 millions, Terminal "A" Frontage Roadway Arrival Level and Terminal "A" Frontage Express Roadway Mill and Overlay including waterproofing deck and asphaltic concrete pavements.
- Engineer/Senior Inspector for the $1.2 millions, Terminal "B" Upper Levels and Parking Level Bollards Protection At Terminal Frontage including removal of existing sidewalk and installation of bollards on steel plates w/reinforcements and waterproofing.
  Engineer/Senior Inspector for the $0.5 millions, Central Heating and Refrigeration Plant (CHRP) Sanitary Lines Upgrades, including existing drainage lining rehabilitation, and installation of new trenchless sewer line.
- Engineer/Senior Inspector for the $0.2 millions, Parking Garage P-4 Elevator Lobby Door, inkling installation of stainless steel door w/automatic controls.
- Engineer/Senior Inspector for the $0.8 millions, Reconstruction of steel Water Tank 350, 000 gallons including removal of existing steel water w/lead abetment & reconstruct including concrete foundations, erection of steel plate w/welding, painting and all electrical work including heat trace and reference electrode.
- Engineer/Senior Inspector for the $94.0 millions, Reconstruction of Garage "E", Garage was build earlier years but need some extra support to steel beam for stability, and final punch list to complete original contract.
- Engineer/Senior Inspector for Tenant authorization work for Nextel Satellite system in Garage P4 including installation of antenna.
- Engineer/Senior Inspector for Tenant authorization work for Allied Aviation in fuel farm to installation of basin filter to restrict fuel going to drainage system.
- Engineer/Senior Inspector for $4.5 millions, Central Terminal area rehabilitation of courtyards and frontage ramp including reconstruction of bus pad, curb, drainage system, milling repaving of asphaltic concrete including line striping and sensor loop in pavement for different signage for operation activities.

- Engineer/Senior Inspector for $1.3 millions, South Fuel farm soil remediation including extraction of fuel product, vapor and water from monitoring wells.
- Engineer/Senior Office/Office Engineer for the $48 million, CTA Bridge and At Grade Roadway Project at the Central Terminal Area at Newark. Work activities entail pile driving, construction of a new bridge and highway, E-Z Pass booth, Exit plazas, Entry Plazas, Architectural canopy, Architectural fence, realignment of parking field, lighting, Maintenance and Protection of Traffic (MPT), utilities (water, power, communication etc.), scheduling, maintenance of project records including time and materials records for payment.

Reconstruction of 14th Avenue, Queens, NY
Office Engineer for the reconstruction of the two-mile portion of 14th Avenue from College Point Boulevard to 150th Street in the College Point section of Queens for the New York City Department of Design and Construction. This $15 million project consists of the replacement of sewers, installation of catch basins, seepage basins, installation of water mains, replacement of sidewalks, curbs and roadway pavement. The critical aspects of the 14th Avenue project include Maintenance and Protection of Traffic (MPT), utility coordination, scheduling and sequencing of construction, archaeological concerns and community relations in this vocal northern Queens community.

Bridge and Highway Construction
Mr. Patel has served in various positions for a multitude of bridge and highway reconstruction. These positions included office management, field supervision and technical inspection. Typical work activities included:

- Inspection of structural rehabilitation of 23 overpass bridge in NYC
- Excavation in cutting and banking according to cross-section and grade
- Grading and landscaping of side slope and burns
- Installation of catch basins and catch basin connection
- Installation of water main, sewer drainage and storm drainage
- Inspection of televised repaired sewer line
- Installation of soil base course and cast base pavement concrete
- Asphalt paving base course and surface course
- Concrete sidewalk and curb construction, monitoring slump and air content
- Review and revised ADA grades of sidewalk and curb
- Installation of traffic light and street light
- Installation of traffic sign, street sign and traffic stripping
- Maintenance and protection of traffic during construction
- Construction bridges of box culverts as well as demolition of bridge
- Laboratory testing of asphalt, steel, soil and concrete samples
- Survey x-section of roadway as Party Chief as well as prepared spreadsheet
- Project correspondence with City DOT and contractor
- Check and record work progress payment as per MURK. Also check EEO requirements
- Create spread sheet for partial payment quantities as well as as-built quantities
- Prepared monthly work progress schedule using Primavera
- Prepared as-built drawing for final submission of project
- Computer related office work

DOROTHY PENTZKE

MEMTORING PROGRAM

Pentzke Group II, Inc,

Years of Experience
With Pentzke: 9 Years

OVERVIEW

As the founder of Pentzke Group II, Inc. Dorothy has provided countless opportunities minority and women-owned business enterprises (M/WBE's) to become stronger business owners. She has been responsible for establishing mentoring relationships between large and established construction companies and M/WBE's. Her programs are based on a continuous improvement model that provides flexibility to meet the needs of program sponsers as well as the Mentors and Protégé. Dorothy's Mentor/Protégé Programs are designed to provide opportunities that will enhance the abilities of M/WBE's construction contractors to achieve greater success at the highest level of competition. The objective is to facilitate relationships, nuture leadership, encourage creativity, enhance Protégé business acumen and create opportunties for collaboration and education.

PROJECT SPECIFIC EXPERIENCE

Port Authority of NY and NJ Program Management
Mentor/Protégé Program for minorities and women-owned business enterprises (M/WBE's). Responsible for establishing relationships between Mentor/Protégé. The Mentor/Protégé Program of the Port Authority of NY & NJ was created to enhance the chances of M/WBE's construction contractor to achieve success at the highest level of competition. The objective is to accomplish via mentoring the Protégés goals in refining their working process, management style, through providing workshops and encouraging collaboration between the major construction firm and the Protégé.

The Mentor Protégé Program of the Port Authority of NY & NJ increases the number of the Port Authority certified Minority and Women owned Business Enterprises M/WBE's contractors capable of bidding successfully on larger construction contracts with the Port Authority and other public and private organizations. The program seeks to improve the Protégés' management, organization and construction skills by teaching them new strategic tools to speed the growth of their businesses.

The program started as a pilot program in 2001, the full program was launched is 2002, this unique and innovative program represents a significant commitment that major construction companies have made to act as Mentors to Protégé firms, sharing their business and construction expertise, and providing crucial industry exposure. The first class of Protégé firms graduated in April 2005, successfully completing the inaugural three year Program, with many reporting increases in their businesses as a result of their participation. This program is one major example of how the Port Authority, working with public and private parties, helps strengthen the regional economy, creates new business opportunities and broader workforce partipation

Building Trades Employers Association - BTEA: New York's Alliance of Union Contractors:
Developed a Union Pilot Program - April 2008 to present for (MWBE's) and Women Contractors, members of BTEA, with a revenue volume between $2.5 million and $15 million.

The writer developed a survey to first analyze the needs of a Union Mentor Protégé Program and the interest by potential members of BTEA. Upon conclusion of analysis the writer submitted a comprehensive 12 month training program with seminars in construction related subjects, finance, business development, contract law and other IT seminars. Coordinated in the hiring of consultants for training and established a program where 18 protégés work on a "On the Job Training" format with a Mentor. This Program is underway.

Federated Department Stores
Project Manager - directed a major renovation at Paramus Park A&S. Reviewed contracts sent to bidders. Met with construction managers on a weekly basis in reference to the job progress and schedule. Work on store planning and coordinated projects between client and Architect.

BATUS Retail
Project Manager, for Saks Fifth Ave., oversaw renovation and new store development, as well as new stores plan preparation and dollar per square foot analysis for department Vice President. Coordination Nationwide for development of program "Fifth Avenue Clubs" managed Turn Key Construction from Design to completion, coordinated construction with local General Contractors. Construction renovation for stores more than 10 years old. For Marshall Fields, responsible for all phases of planning, merchandising, and coordination with Architects and Engineers. Responsible for Project Control and review of shop drawings.

Environetic International
Project Director, established relationships with Architects and Engineers, focusing on understanding the project requirements. Developed Feasibility Studies, and prepared supporting documentation for contract award. Responsible for contract selection and for the success rate of completion of Projects. Range of projects was from one million square feet to 5,000 square feet. Managed Projects in the National and International Arena. Work with International Clients in planning for relocation of BANAMEX, Mexico City, a One Million Sq. FT program, worked on TELMEX, Mexico City planning and preparation of feasibility report for construction.

JOHN PETEKIEWICZ

CIVIL / STRUCTURAL INSPECTOR

MAITRA ASSOCIATES, P.C.

Years of Experience
30 Years

Education
Queensboro Community College, Manhattan College, SUNY Purchase

Registration/Certification
OSHA 10 Hour Certified
ACI Level 1 Certified, ACI Level 2 Concrete Construction Special Inspector Certified
ICC Structural Steel Bolting Certified

OVERVIEW

Mr. Petekiewicz has more than 30 years of diversified engineering, estimating and construction experience with transit, high-rise buildings, tunnels, transportation, and power plant facilities. His experience covers inspection of civil, structural, mechanical, track, and electrical, including lighting, fire alarms, and public address systems. He has performed constructability review, inspected contractor's work and records to insure work complies with plans and specifications, coordinated with Port Authority operations, interfaced and coordinated with government agencies, managed change orders, generated and maintained punch lists and RFI's, and administered contract close out. He has training in Port Authority systems and procedures, Track Safety Awareness, Hazardous Materials Management, and Confined Space Entry.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, World Trade Center PATH Hub, New York, NY

Senior Construction Inspector, on this multi-billion dollar project consists of PATH facilities, PATH Terminal Building, underpinning of No. 1 Subway, Pedestrian connections, and LMDC facilities, infrastructure and tenant alterations to Tower No. 7. Performed daily inspections, site visits, prepared daily narratives and performed EIC duties for PATH Harrison yard. (6/06 – Present)

PANYNJ, PATH Projects, NY / NJ

Senior Construction Inspector / Construction Coordinator, providing upervision of construction projects during off peak hours including daily site visits and inspection and prepared daily narratives. Coordinated contractors and PATH Personnel for the following projects:

- ***Rail replacement at Dock Bridge*****,** Newark, NJ: Coordinated with trainmaster to remove tracks from service
- Oversaw removal of existing track rail and installation of new rail.
- ***Renovation of Journal Square Station*****,** Jersey City, NJ: Inspected erection of structural steel for support of new station ceiling. Supervised installation of new station lighting and sound system. Inspected replacement of new granite flooring for Eastbound and Westbound platforms Monitored installation of stainless steel cladding on station escalators, stairwells and columns as well as installation of lighting, fire alarm, and public address systems.
- ***Removal of existing turnstile system and installation of new Passenger Turnstile System*****:** Supervised installation of new turnstile and Fare collection systems at all Path station locations.

- ***Installation of New Handicap Elevator at Pavonia/Newport Station,*** Jersey City, NJ: Performed inspection of excavation and installation of new handicap elevator Monitored progress of project until activation of system
- ***Removal of Existing Boilers at One Path Plaza,*** Jersey City, NJ: Inspected removal of existing building boiler units and installation of new boilers.
- ***Rock Excavation and Installation of Precast Concrete Storm Drain Trenching at track section H-5***: Oversaw rock excavation and installation of storm drain trenching. Monitored installation of required concrete retaining walls. (1998 – 5/2006)

PANYNJ, Reconstruction of World Trade Center Station, Exchange Place Station, and Tunnels E and P, New York, NY
Senior Construction Inspector / Construction Coordinator, on this $360 million project consisted of PATH, tunnel systems, tunnel structures, and rail and road access to equipment. Inspected various phases of reconstruction post 9/11 of World Trade Center Temporary Station and rehabilitation of Exchange Place station. Monitored reconstruction of tunnels E and F from Exchange Place to the WTC. (4/2002 – 11/2003)

PANYNJ, Major Holland Tunnel Maintenance Building, NY / NJ
Senior Construction Inspector, performed construction inspection of various Holland Tunnel projects including daily site visits, preparation of daily narratives, coordination of contractors, management of change orders, and generation and maintenance of punch lists and RFI's.

- ***Structural and Architectural Renovation of Ventilation Buildings***: Construction of both the river and land ventilation buildings, NY side.
- ***Removal of Existing and Installation of New Slab on Grade at Holland Tunnel Maintenance Building***: Construction of slabs at both the NY and NJ maintenance garages.
- ***Installation of New Storm Drainage System in Holland Tunnel***
- ***Installation of Steel Grating Security System:*** Grading installation for Holland Tunnel, NY River Vent Building from dock level to Hudson River bed. (1996-1998)

Construction Estimator, Various Projects
Developed construction cost estimates, performed site visits, prepared change orders, and supporting documentation for various transportation projects including MTA, Long Island Railroad, Triborough Bridge and Tunnel Authority, New York State Department of Transportation, and New Jersey Department of Transportation. (1984 – 1995)

Construction Estimator, Various Projects
Prepared estimates and take offs for renovation and construction of new high rise buildings in New York City. Also worked on the development of Epcot Center at Disney World in Florida. (1980 – 1984)

NADER PHILLIPS

CIVIL / STRUCTURAL INSPECTOR

Years of Experience
With URS: 12 Years
With Other Firms: 24 Years

Education
BS/1972/Civil Engineering/Ain Shams University, Cairo

Registration/Certification
E.I.T./Delaware

OVERVIEW

Mr. Phillips has more than 36 years of Civil Engineering experience, in the construction, design and inspection industry, involving many types of infrastructure. He has substantial experience on projects throughout the New York / New Jersey region. Mr. Phillips has substantial PANYNJ experience having performed inspection services at Newark-Liberty International Airport.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Newark, NJ (07/2000 - Present)

Civil Inspector for various projects at Newark International Airport. Projects include:

- Terminal B Modernization Connector expansion
- Construction of overhead structure for access to Monorail HVAC unit
- Replacement of high Mast Light Towers
- Replacement of pipe Gallery metal panels
- Construction of A1 Bump out for UAL and construction of new Presidents Club for CAL; Terminal A Vestibule and Lighting Relifting – Inspector work included renewal of Mechanical Rooms, Fire Alarm System and Sprinkler Line Systems
- Fueling and Pavement Modification, A-2 Utilities Relocation - Inspector works including installation of new fuel pipelines, fuel hydrant, water main works and R. concrete pavement in Newark International Airport.
- Parking Structure in Lot E – Civil Inspector or R. concrete works steel pipes piles and steel structure works.
- RSR Bridge and Sit work in Lot E

PANYNJ, Design and Construction of a Cooling Tower System at Newark-Liberty International Airport, Newark, NJ (2002 - 2003)

Inspector for construction 8 Concrete Towers and all related work, connection to existing chiller, construction all required utilities and infrastructure works.

PANYNJ, Airline Modifications, Terminal A, Newark-Liberty International Airport, Newark, NJ

Inspector for construction A2 Bump out, Air Canada and TWA Baggage System, Replacement of jet bridges at terminal A.

Inspector/Office Engineer, New York, NY (07/1997 - 07/2000)

(Reconstruction of catch basin in Staten Island project, construction of combined sewers &water main projects in Surrey Place, Queens, and reconstruction of Carpenter Ave.project, Bronx). Responsible for reviewing projects plans and specifications. Supervised and coordinated construction inspection. Prepared partial and final contractors payments, project final cost analasis, project cost overrun, change orders and ensuring that projects remain on time and within budget.

Handle all site-engneering fuctions. Transmit and record all submittals. Keep engineering logs, records and as-built drawings.

Construction of Combined Sewers in Surrey Place, Queens, NY (1999 - 2000)
Office Engineer for the New York DDC. Works consist of installation of water mains and combined sewer box culvert.

Reconstruction of Carpenter Avenue A, Bronx, NY (1998 - 2000)
Office Engineer/ Inspector for the quarter mile portion of Carpenter Avenue in the Borough of the Bronx for the New York City Department of Design and Construction. Work consisted of installation of water mains, sewers, roadway and sidewalks.

Reconstruction of Carpenter Avenue, Bronx, NY (1998 - 1999)
Office Engineer for the New York DDC. Works consist of installation water mains, sewers, roadway and sidewalks.

Bayan Palace Project, Hard Landscape and Infrastructure, Kuwait (1995 - 1996)
Assistant Project Manager responsible for planning, directing and coordinating activities of works.

Replacement of Water Supply, Kuwait (1992 - 1995)
Superintendent for the project of replacement of water supply networks from asbestos pipes to D.I. pipes. Directed, supervised and coordinated all activities of workers which included design and installation of temporary network, excavation, removal of existing pipelines and installation of new D.I. pipelines with all the require valves and all house service connections.

Qurain Housing Project, Kuwait (1983 - 1985)
Project Engineer for this housing project supervising the execution of work plan and procedures for the construction of the site works for 700 houses which included road works, sanitary sewer drainage, storm water drainage, water supply networks and landscape works.

Sabah Al-Salem Housing Project, Kuwait (1983 - 1985)
Project Engineer for this housing project supervising the execution of work plan and procedures for the construction of the site works for 650 houses which included road works, sanitary sewer drainage, storm water drainage, water supply networks and landscape works.

Construction of Storm Water Culvert, Kuwait (1979 - 1983)
Project Engineer in the project of constructing storm water culvert and its outlet inside the Gulf. Supervised and directed the workers in its activities which included preparing shop drawings, earth works, dewatering, shoring works and reinforced concrete works.

ERNEST PIROZZI

CONSTRUCTION MANAGER

Years of Experience
30 Years

Education
New York University, Auto CADD Level 1 and 2
New York University, Micro Station Level 1 and 2

OVERVIEW

Mr. Pirozzi has more than 30 years of construction and inspection experience in the New York / New Jersey region, and substantial inspection experience at Newark-Liberty International Airport.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark Liberty International Airport, South Access Roadway Project I (2000 –2004)
Senior Construction Inspector for this $41 million urban highway for the South Access Roadway Project for new bridges N-45 N-46 widening of existing bridges N-14, N-15, N10 and N-11. Responsibilities involved:

- Inspection of steel pile driving to a design grade as per test piles for all bridges.
- Excavation of existing asphalt base courses and milling of asphalt concrete.
- Installation of pre cast concrete sewer line, pre cast storm drainage line, catch basin and manholes.
- Inspection steel reinforcement for cast in place bridge deck, abutment and wingwall.
- Inspection of existing bridge deck repair including waterproofing and replacement of existing bearing.
- Construction of 17 pre cast box culvert including manholes.
- Installation of encased electrical and communication duct bank including monitoring cable installation for electrical and communication.
- Installation of high mast light tower on pile foundation.
- Installation of new and relocation of roadway light.
- Installation of box beam guard rail at entrance and exit roadway
- Installation of overhead sign structural bridge including welding and performing welding test.
- Installation of ornamental fences around parking lot for revenue control.
- Installation of traffic light including cabling for light and communication.
- Maintenance of traffic including traffic attenuators.
- Installed pre cast and cast in place concrete barriers.
- Architectural landscaping and planting trees along roadway.
- Replacement of 6'w/8' chain link and ornamental fence as part of airport security measure.

PANYNJ, Newark International Airport, Newark, NJ
Senior Inspector for the SARP I project which includes $20 million expansion of the roadways accessing the airport from the New Jersey Turnpike and North Avenue and construction of a new bridge serving North Avenue. Responsible for reviewing and analyzing contract drawings and shop drawings, communication with the Project Engineer and Port Authority officials with respect to quality control, plans, specifications and estimated quantities. Estimated quantities for payments and

as-builts. Performed field concrete tests and maintained MPT on major roads and highways during construction. Preparation of daily reports.

PANYNJ, Newark Liberty International Airport, Security Enhancement, Newark, NJ (2004 –2006)
Senior Construction Inspector for this $10 million security enhancement project throughout the airport. Responsibilities include: reviewing and analyzing contract drawings and shop drawings, communication with the Project Engineer and Port Authority officials with respect to quality control, plans, specifications and estimated quantities. Performed field concrete tests and maintained MPT for airside gate access. Inspection of the installation of crash barriers, hardening of guard booths and security fences at all post locations.

PANYNJ, Newark Liberty International Airport for Lower level ticket counter (2006 –2007)
Construction Inspector team involved with: Excavation of existing parking lot under Terminal B; Placement of reinforced concrete slab; Building of separate room; 19 Ticket counters for British Airways; Installation of conveyor belt system.

PANYNJ, Newark Liberty International Airport for Inter-Line Baggage Screening (2007 - 2009)
Construction Inspector team involved with:

- Excavation at B-2 and B-3 connectors.
- Encasement of underground utilities
- Placement of concrete floor slab.
- Enclosed bottom portion of exterior walls with Metal panel system
- Framing and drywalls place for rooms
- Placement of CTX machines and conveyor belts
- Placement of concrete sidewalks and 18" reinforced tarmac

PANYNJ, Newark Liberty International Airport for Terminal B Replacement of AC 12 and AC13 hot water heating system pumps (2009- 2009)

- Placement of concrete foundation, curb walls, and floor slab North and South air-intake towers.
- Enclosed of exterior walls of North and South air-intake towers with Metal panel system

PANYNJ, Newark Liberty International Airport for counter modification Custom Border protection office (2009-2010)

- In charge of progress meetings
- Work scheduling with contractors and Sub contractors

PANYNJ, Newark Liberty International Airport for Terminal B – F.I.S. Emergency generator Capacity upgrade

- Demo, Excavation, mini pile and placement of reinforced concrete for generator

RONALD POPOTTE

QUALITY INSPECTOR

Years of Experience
With URS: 4 Years
With Other Firms: 7 Years

Education
BS/2002/Civil Engineering/City College of New York
BA/1998/Physics & Mathematics/State University of New York, Oswego

OVERVIEW

Mr. Popotte has more than 11 years of experience in civil engineering, construction management and field engineering in the transportation industry. His project experience includes construction management and inspection services for modifications to maintenance facilities, track work, and various mechanical and electrical upgrades. In addition, he has provided onsite support with project report management and has worked closely with various public and private agencies. He has substantial PANYNJ experience having served as Quality Inspector on the PATH Security Upgrades.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, PATH Security Upgrades, New York/New Jersey (2006 - Present)
Quality Inspector. Coordinates and conducts pre-construction meetings, bi-weekly progress meetings and final inspections. Oversees contractor duties and obligations with respect to Contract Drawings and Specifications. Schedules work with PATH personnel, in such a manner so as not to delay, endanger, or interfere with PATH train operations. Maintains and signs off on daily narratives, controlled inspection reports, payment requisitions, and change order estimates. Reviews and comments on contract and work order drawings before awarded for bid. Approves and signs off on equipment, time and material sheets. (Projects are confidential in nature.)

PANYNJ, PATH Construction Management Services, New York/New Jersey (2002 - 2006)
Construction Manager/Civil Engineer. Coordinated and conducted pre-construction meetings, biweekly progress meetings and final inspections. Oversaw contractor duties and obligations in respect to contract drawings and specifications. Scheduled work with PATH personnel in such a manner as not to delay, endanger or interfere with PATH train operations. Maintained and signed off on daily narratives, controlled inspection reports, payment requisitions, as builts, and change order estimates. Reviewed and commented on contract and work order drawings before awarded for bid and approved and signed off on equipment, time and material sheets. Projects included:

- Downtown PATH Restoration Program between Exchange Place and WTC. Construction modification to PATH Tunnels E and F between World Trade Center Station and Exchange Place Station. Construction work included removal of existing construction; asbestos removal; track including track support structure; duct bank, cables including high voltage traction power, communication and signals; and lighting, drainage, fire protection operation
- Consolidated Maintenance Facility at Waldo Yard, Miscellaneous Modifications. Upgrade of HVAC system. Work includes installation of ventilation equipment for rail, welding and carpenter shops: installation of access doors; replacement of miscellaneous air handling units; modification of air ducts, structural steel supports and electric service panels; caissons; foundations; and miscellaneous replacement of walls, ceilings and doors.

- Consolidated Maintenance Facility at Waldo Yard, Back Up Fare Control Center. Modification of existing office space for future installation of new back-up fare control center. Work included construction of partitions, operations desk, raised floor, acoustical ceiling, raised floor, electrical and fiber optic cable service, fire protection, and HVAC systems.
- Consolidated Maintenance Facility Back-Up Fare Control Center CCTV System. Security enhancements to Fare Control Room via Lenel Access Control System. Construction included installation of CCTV camera, biometric proximity card reader, and temperature and water sensors.
- Washington Street Substation #2 Emergency Diesel Generator Replacement. The contract provided for the installation of an emergency generator, including low voltage switchboard and controls at the Washington Street substation to replace the existing emergency generator, low voltage switchboard and controls.
- Signal Relay Room Rehabilitation. The work involved replacement of existing air conditioning and fire protection systems, which had reached the end of their useful life in 15 PATH signal relay and power rooms at various locations in New York and New Jersey.
- Waldo C Yard Stockroom Loading Dock Enclosure and Canopy. Replacement of existing loading dock and support foundation with hydraulic dock leveler and inflatable dock seal. Construction included canopy foundation, canopy framing, and roof deck installation.
- Hoban to MacMillan Bloedel Fiber Cable Installation. Furnishing and installation of approximately one mile of 144 fiber optic cable link between Journal Square Hoban Control Center and MacMillan Bloedel property.
- Backup Substation Portal Faade Restoration. The major work under this Work Order was the removal of lead-based paint on the surfaces of the existing steel structure, the installation of structural steel elements, the repainting of the existing steel structure, and the installation of architectural elements.
- Upgrade Underground Storage Tanks. The major work under this Work Order was the replacement of tank sump and equipment, slab removal and replacement, and 10,000 gallon tank upgrade.
- Waldo Yard-Hazardous Waste Storage Facility. The contract called for the erection of a 2,100 square foot modular Hazardous Waste Storage Building. Work included foundations, paving, perimeter fencing, utilities and installation of a closed-circuit video camera.
- Rehabilitation of Platforms at Waldo Yard Repair Facility. Installation of new acrylic decking on platforms and removal and installation of new bumpers.

PANYNJ, JFK International Airport, Monorail Access, Jamaica, NY (1999)
Field Engineer. Performed pile inspection. Set up and monitored vibration monitor and static load test according to NY building codes. Performed surface excavation test and pile dynamic analysis testing.

PANYNJ, Continental Airlines Terminal Expansion at Newark Airport, Newark, NJ (1999 - 2001)
Field Engineer. Performed welding inspection according to AWS standards through magnetic particle and ultrasonic testing. Monitored masonry, concrete, steel erection, metal decking, and fireproofing according to specs. Set up and monitored static and compression load test according to NY and NJ building codes. Clarified construction installation methods and procedures to be utilized in the field.

HASAN RIAZ

QUALITY INSPECTOR

Years of Experience
With URS: 4 Years
With Other Firms: 23 Years

Education
MS (Incomplete coursework)/1992/Civil Engineering/Manhattan College, NY
BS/1984/Civil Engineering /N.E.D.University of Engineering, Pakistan

OVERVIEW

Mr. Riaz has more than 28 years experience in engineering and construction inspection, including eleven years working with the Construction Management Division of the Port Authority of NY & NJ. He has extensive experience working with design and construction codes including, AASHTO, ASTM, the Highway Capacity Manual, ACI, and the UBC codes and standards. He has been serving as Lead Engineer and Inspector on the PANYNJ Marine Terminals, at the Elizabeth Marine Terminal, and for several Staten Island bridges.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Port Authority Marine Terminals, (2007 - Present)
Lead Engineer. Involved in demolition of buildings in Port Ivory Marine Terminal. Duties include assisting Resident Engineer in asbestos abatement and demolition of building structures in Howland Hook Marine Terminal.

PANYNJ, Port Authority Elizabeth Marine Terminal, (2006 - 2007)
Lead Engineer. Involved in construction of railroad bridge in Elizabeth Marine terminal. Duties included inspection of construction of pile foundations, pile cap, piers and abutment, construction of roadway and relocation of utilities.

PANYNJ, Port Authority Staten Island Bridges, (2005 - 2006)
Lead Engineer. Duties included inspection of bridges, performing field investigation of various structural members and supervising the work during construction phase. Assisted Resident Engineer in the office and the field.

PANYNJ, Construction Management Division, New York / New Jersey (1997 - 2005)
Construction Engineer/Inspector. Duties included construction inspection of high and low voltage electrical installations as well as communication and control systems; coordination of contractors change orders; documenting meetings, contractors Requests for Information, construction log, shop drawings review, etc; drafting letters to contractor for Resident Engineers signature; and reviewing pre-bid drawings and contractors payment applications. Worked as Lead Engineer in World Trade Center and PATH Construction on the following projects:

- WTC - Modification of Six Sub-Stations & HVAC Works
- WTC - 13.8KV Feeder Replacement
- WTC - B-1 Floor Deck Replacement
- JSTC - Upgrade Chillers & Pump replacement
- JSTC - Upgrade Boilers Replacement
- JSTC - Bus Lane Light Poles
- JSTC - Plaza Stairs Rehabilitation
- JSTC - Catwalks & Roof Access Ladders
- JSTC - Waterproofing of South Side Walk Area
- JSTC - Entrance Doors at Newsstand

- JSTC - Fiber Optic-Diverse Route to ATT Node at Journal Square
- Backup 480 V Feeder Substation # 5 to Consolidated Maintenance Facility
- JSTC - Sanitary Pit
- JSTC - PATHVISION Cooling
- JSTC - HVAC Improvements
- JSTC - 1st & 2nd Floor Bathroom Renovations
- Washington Street Substation # 2 Roof Replacement

Materials Testing for Various Building and Road Projects, NJ (1996 - 1997)
Senior Inspector. Responsible for inspection of various building and road projects. Tested materials in lab by using ASTM procedures including Proctor test, grain size distribution, liquid and plastic limit test followed by data reduction and report generation. Routine on-site inspection of rebar, soil compaction test using nuclear gage, inspection of concrete using ACI testing procedures.

Traffic Control Sign Inventory Project, New Jersey Department of Transportation, NJ (1993 - 1996)
Traffic Engineering Inspector. Inspected traffic control signs on the state highways and prepared as-built drawings of the Intersections. Verified existing traffic signs by Manual of Uniform Traffic Control Device and prepared the inventory of the signs by using grid-pad.

Superb General Contracting Inc., Brooklyn, NY (1993)
Field Engineer. Involved in supervision of school buildings and preparation of monthly payments.

Karachi Development Authority, Karachi, Pakistan (1986 - 1990)
Assistant Executive Engineer. Involved in construction of Qaldabad Overhead Bridge. Duties included inspection of new bridge from start to finish. Prepared bridge inspection reports and inspected geotechnical investigations. Inspected installation of stingers, diaphragms, bearings and concrete members such as deck slabs, piers, abutments, back walls, wing walls, and approaches. Inspected steel and concrete testing, construction of roads and embankments. Reviewed shop drawings and prepared construction schedule.

Various Residential and Commercial Projects, International Consultants Ltd.;, Pakistan (1983 - 1985)
Engineer. Designed and inspected construction of mat foundations, pilings, concrete structure of various residential and commercial projects. Carried out static and dynamic analysis of multi-storied buildings, seismic design of concrete shear wall framed building.

KULDIP M. SACHDEV, PE

CIVIL / STRUCTURAL INSPECTOR

MAITRA ASSOCIATES, P.C.

Years of Experience
30 Years

Education
M.S., Civil Engineering, University of Washington, Seattle, WA, 1970
B.S. Civil Engineering, 1966

Registration/Certification
Licensed Professional Engineer in the State of New York
ACI Level 1 Certified, ACI Level 2 Concrete Construction Inspector (CCSI) Certified
ICC Structural Steel Bolting Certified
OSHA 10 Hour Certified

OVERVIEW

Mr. Sachdev has over 30 years of engineering and construction inspection experience in transportation and industrial facilities, including over 25 years with New York City Transit. His experience includes construction management, supervision, inspection, design review, auditing, and planning for various New York City Transit Authority, Board of Water Supply, and NYC Department of Environmental Protection projects. He has inspected track, structures, concrete, paving, and ancillary railroad systems, electrical, and mechanical systems for compliance with plans, drawings, and specifications. He is familiar with NYC Transit and Port Authority systems and procedures.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Port Commerce Facilities, NY / NJ
Senior Construction Engineer / Inspector, inspected contractor's work related to intermodal facility at Port Ivory, Howland Hook and tenant alteration applications at Port Newark/Elizabeth, including modifications to Admin Building, emergency water main and track repair and tenant alterations at Teleport, involving new office space and utilities for various companies. Projects at Brooklyn Piers included fender repairs, pile repairs, dredging, emergency paving repairs, and security guard booth. (4/06 – Present)

PANYNJ, Restoration of PATH Service to Manhattan, NY / NJ
Senior Construction Inspector, inspected contractor's work connected with the $360 million project, including temporary PATH station at WTC, rehabilitation and expansion of Exchange Place Station, and rehabilitation of Tunnels "E" and "F". Verified compliance with plans and specifications. Prepared daily narratives and reports. Also responsible for coordination with train master for removal of blast material for new crossover tunnels, inspection of additional PATH projects including CCTV upgrade at South Street Yard, including new light poles, foundation excavation, and concrete placement; additional elevators at Pavonia Station; and chemical grouting at various locations. (4/02 – 10/05)

New York City Transit, Rehabilitation of New Lots Line, Brooklyn, NY
Resident Engineer, Construction supervision and coordination of Elevated Subway Line Project. The project involved replacing structural steel girders, seat brackets, column rehabs, track work, stair replacement, and mezzanine hanger repair, replacement of structural concrete and water proofing of thru-spans.

Resident Engineer, New York City Transit, Rehabilitation of Various Pump Rooms in Brooklyn and The Bronx, NY. The work involved providing new electrical service, pumps, discharge lines, valves, new structural slab, new doors and lighting, etc.

Resident Engineer, New York City Transit, Handicap Ramps for SIRTOA Stations, Staten Island, NY. The project consisted of providing over 500 feet of ramps over pile foundations at two elevated stations, Dongan Hills and Great Kills.

Resident Engineer, New York City Transit, Rehabilitation of Castleton Avenue and Yukon Avenue Bus Depot, Staten Island, NY. The projects involved new bus lifts, structural slab, new roll up doors, lighting, electrical service, oil separator tank and discharge pipes, paving, new parking lots and fencing.

Resident Engineer, New York City Transit, Structural Rehabilitation of SIRTOA, Right of Way, Staten Island. The project consisted of providing new retaining walls, crib walls, soil stabilization, riprap and sheet piling along SIRTOA right-of-way at various locations.

Resident Engineer, Parking Lots at Two SIRTOA Stations, Staten Island. Construction of parking lots at Dongan Hills and Annandale Stations including excavation, drainage, paving, and striping.

Engineer Auditor, New York City Transit, Engineering audit of various Transit Authority projects. Auditing of payments, material, and additional work orders.

Civil Engineer, New York City Transit, Planning, scope and property acquisition of various projects.

Assistant Civil Engineer, New York City Department of Environmental Protection. Sewage treatment plants at Ward Island and Port Richmond. Inspection of pile foundation and structural walls for sewage treatment plans.

Assistant Civil Engineer, New York City Board of Water Supply, Third Water Supply Tunnel. Design review and checking working drawing for the third water supply tunnel.

DANIELLE SCHAEFER

ENVIRONMENTAL INSPECTOR

Years of Experience
With URS: 13 Years
With Other Firms: 8 Years

Education
BS/2006/Business Administration/ SUNY/Empire State College

Registration/Certification
NYC/Certified Asbestos Investigator
NYS/Management Planner/1992
NYS/Project Designer/1992
NYS/AHERA Inspector/1992
NYS/Project Monitor/1992
NYS/Air Sampling Technician/1992
Connecticut Project Designer/1995
Connecticut Inspector/1995
Connecticut Project Monitor/1995
Pennsylvania Project Designer/2004
Sampling and Evaluation Airborne Asbestos Dust NIOSH 582/1988
NJ SSPC C-3 Supervisor/Competent Person
Training for the Deleading of Industrial Structures/2001
40 Hour HAZWOPER, 29CFR 1910.120(e)/1999
Certified Microbial Remediation Supervisor/2002
Certified Microbial Consultant/2003

OVERVIEW

Ms. Schaefer has more than 19 years of environmental consulting experience. She has extensive experience managing comprehensive asbestos surveys and designing abatement specifications for transit facilities, high-rise office buildings, government facilities, hospitals and educational facilities. She has successfully completed asbestos and lead-based remedial projects in New York and New Jersey. She has judiciously managed staff for a broad range of industrial hygiene services.

PROJECT SPECIFIC EXPERIENCE

Project Manager for Extensive United States Postal Service Contract (2001)
Coordinated asbestos and lead sampling, generated complete survey reports, and directed comprehensive worker training in 182 postal facilities within a five-month period. Member of hazmat group sampling postal facilities for anthrax in November 2001.

200 Park Avenue, 4 New York Plaza, 30 Rockefeller Plaza and 845 West End Avenue, New York, NY
Asbestos Project Monitor on projects of high visibility and extreme sensitivity at Collected and analyzed air samples, relayed construction information to the public, coordinated construction activities and oversaw project development.

Automotive Plant and Airplane Facility, OH
Asbestos Project Designer and Project Manager of industrial projects involving an abandoned automotive plant and an airplane manufacturing facility in Ohio. Performed site inspection to identify asbestos, developed technical specifications for abatement, conducted competitive bidding and handled subsequent project management.

Client contact for Guardian Life Insurance Company
Manages the indoor air quality program. Performs Phase I investigations. Provides other environmental services that include coordinating and monitoring the removal and disposal of regulated waste from the Manhattan facility.

ING North America Insurance Corporation, Hartford, CT
Project Manager - Generates asbestos survey reports, develops technical specifications for abatement, and directs all aspects of project. Performs annual awareness training for all employees in the Hartford area.

New York City Transit IQ Environmental Contract, New York, NY - $10,000,000
Project Designer and Task Order Manager on a $10 million environmental investigation and remediation project covering various facilities throughout the New York City Transit system in the five boroughs of New York City. Work included investigation of asbestos, lead, PCBs, mercury and other hazardous materials for incorporation in environmental remediation bidding documents. Projects include full subway station investigations, track signal investigations, tunnels, manholes, and escalators. Ms. Schaefers responsibilities for this contract also include Project Management for all abatement related projects to insure our field inspection staff is completing the required air sampling and oversight services consistent with the contract requirements.

NYCDDC Asbestos Management Capital Improvement Projects, New York, NY
Project Manager responsible for complete environmental consulting services for large capital improvement programs for seven New York City schools. Assisted construction manager with intense scheduling to complete off-hour abatement activities during summer months.

Yale University Comprehensive Asbestos Survey and Remediation Project, CT
AHERA Inspector, Project Manager and Project Designer Yale University. Performed site survey in accordance with renovation design to determine asbestos impacted by project. Assisted construction manager in developing a three-week project schedule for abatement of an entire wing, while avoiding disruption of daily activities.

VERONICA STEWART

CONTRACT ADMNISTRATION

LPE

Years of Experience
25 Years

Education
BS in Business Management, Boston College (Chestnut Hill, MA), 1977

OVERVIEW

Ms. Stewart has more than 25 years of experience in the engineering and construction industy. She has as solid record of success administering multimillion-dollar construction projects for government and private sector clients; knowledge of public financial process and administrative procedures; good oral and written communication skills, statistical analysis, computer application for financial problem solving and information processing. Ms. Stewart has extensive experience on PANYNJ, having service as Senior Administrator / Office Manage on substantial work at Newark-Liberty International Airport.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Newark, NJ
Senior Contract Administrator / Office Manager:

- Responsible for processing contract progress payment requests, provides summary level cost and schedule reports.
- Assure that databases are established and maintained for each construction contract, including cost data, schedule data and quality data when required.
- Review contractor monthly submittals
- Assist the Resident Engineer with Post Award Contract Changes (PACC).
- Review the justification of claims relating to progress; coordination and schedule of alleged deficiencies.
- Provide overall administration of and monitoring for contractor's performance for various contracts.
- Monitor office usage of supplies and reorders as needed.
- Handle associates complaints, grievances, questions and concerns; exhibit confidentiality when dealing with staff matters.
- Utilize a thorough knowledge of office equipment and software systems including word processing, spreadsheet and presentation software.

PANYNJ, Newark International Airport, Newark, NJ
Project Administrator:

- Responsible for processing contract progress payment requests, provides summary level cost and schedule reports.
- Assure that databases are established and maintained for each construction contract, including cost data, schedule data and quality data when required.
- Review contractor monthly submittals
- Assist the Resident Engineer with Post Award Contract Changes (PACC).

- Review the justification of claims relating to progress coordination and schedule of alleged deficiencies.
- Provide overall administration of and monitoring for contractor's performance for various contracts.

PANYNJ, Newark International Airport, Newark, NJ
Affirmative Action Manager:

- Responsible for the management of the Construction Management Division's MBE/WBE, DBE & SBE programs and Labor Force Program for construction contracts and tenant construction projects.
- Work with Engineers of Construction and Resident Engineers on implementation, auditing and reporting on contractors' performance in meeting goals.
- Develop and update Construction Contract data required to report to Executive Management on Contractor compliance with M/WBE and EEO/AA goals required by Contract terms.

PANYNJ Several Assignments
Contracts / Marketing Manager

- Responsible for monitoring monthly budget reports, reviewing contract documents, coordination of job cost reports and invoicing.
- Prepare cost estimates for Federal and State agencies.
- Liaison between Executive Managers and Project Managers.
- Supervise accounting department.
- Prepared monthly utilization reports for Federal and State agencies ad assist Principals with preparing cost proposals for Request for Proposals for various agencies.

ROBERT TSE

CIVIL / STRUCTURAL INSPECTOR

Years of Experience
With URS: 7 Years
With Other Firms: 0 Years

Education
BS/2003/Civil Engineering - University of Buffalo

Registration/Certification
NYS EIT, 2003
NYCT Track Training, 2007
ACI Level I, 2009
ACI Level II, 2009
ICC Structural Masonry, 2009
ICC Structural Steel Bolting, 2009
OSHA 10-HR, 2008

OVERVIEW

Mr. Tse has more than seven years of engineering and construction experience. He has solid experience in inspection of all types of infrastructure and has been serving in that capacity on the PANYNJ World Trade Center Transportation Hub.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, World Trade Center Transportation Hub, New York, NY (04/2007 - Present)
Responsible for Quality Control and Assurance for this project involves the construction of a new Transportation Hub at the World Trade Center site. It will replace the Port Authority Trans-Hudson (PATH) rail station that was destroyed in the attacks. Incorporating state-of-the-art safety and security features, the Transportation Hub will include a terminal for the PATH line, as well as new pedestrian connections that will significantly improve access to ferries and subways. Work included underpinning 975-foot long section of 1/9 Subway Line structure, demolition and excavation of East Bathtub from street level to bedrock, construction of East Bathtub perimeter Slurry and Jet Grout Walls, and construction of multiple support of excavation structures. Responsible for quality control and assurance for all various aspects of heavy Civil construction; minipiles, structural steel, slurry walls, jet grout walls, tiebacks, soldier piles, sheet piles, major earthwork, demolition, and reinforced concrete. Provided day-to-day field presence for the Owner; notified Resident Engineer of anticipated complications and provided solutions prior to their becoming an issue, ensured work performed complied with contract documents and PANYNJ specifications.

Franklin D. Roosevelt East River (FDR) Bridge, Reconstruction Project from E. 54th to E. 63rd Street, New York, NY (11/2003 - 4/2007) - $140,000,000: As Inspector for the FDR Drive Reconstruction Project from E. 54th Street to E. 63rd Street in Manhattan. This $140 million project will rehabilitate the 60 year old, three-level tiered FDR Drive structure between E. 56th and E. 63rd Streets. Work also includes repaving the at-grade (lower level) portion on the FDR Drive between E. 54th and E. 56th Streets, safety improvements to correct roadway geometry including the addition of an acceleration lane to the E. 63rd Street entrance, and new drainage, signage, and lighting systems. The three-level tiered section of the highway carries northbound traffic on the lower level and southbound traffic on the middle level with parkland and private gardens sitting on the roof deck. These open green spaces will be restored and improved as part of the Project as well. This project utilizes state-of-the-art construction methods and an innovative approach to the Maintenance and Protection of Traffic (MPT). This will allow the necessary work to proceed without reducing the number of available travel lanes or causing significant impacts to the traveling public and the local community.

Outboard Detour Roadway is being provided in the East River adjacent to the FDR Drive to replicate the traffic carrying capacity of the FDR travel lanes that must be closed during construction. This will allow for traffic to be shifted onto the outboard roadway leaving a clear and free work zone on the Drive so the contractor can work unimpeded on three empty travel lanes at a time. All exits and entrances are being maintained.

New York State Department of Transportation, Region 11, New York, NY: Transportation Construction Inspector Level II. Assisted in monitoring and inspecting FDR Drive rehabilitation project between 53rd and 63rd Street. Wrote daily inspection reports and made payments for work performed. Made sure work being done complied with the States specifications. Served as liaison between contractors and Engineer-In-Charge.

THOMAS TYNAN, RA

CONSTRUCTABILITY BIDABILITY STAGING

Years of Experience
With URS: 20 Years
With Other Firms: 6 Years

Education
BA/1984/Architect/Virginia Tech

Registration/Certification
Registered Architect
1987/New York State

OVERVIEW

Mr. Tynan has more than 26 years of experience in the design and production of all types of projects with an emphasis on technical coordination with structural, mechanical, and electrical engineers. Mr. Tynans has expertise in managing the pre-construction process including design reviews, constructability reviews, value engineering, bidability, staging, estimating, and scheduling. In fact, Mr. Tynan serves as the Senior Pre-Construction Services Manager for URS New York office.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Tunnel Hardening, NY / NJ
Pre-Construction Manager, providing cost estimating and preconstruction services for the development of structural hardening solutions to protect critical multi-billion dollar underground/underwater tunnel structures. URS is responsible for structural analysis, and preliminary and final engineering. The work includes the relocation of electrical and mechanical systems.

NYCDDC, Central Park Police Precinct, New York, NY (12/2006 - Present) - $41,000,000:
Senior Project Manager responsible for managing pre-construction services from project registration through bid. Project includes the restoration and addition to the police precinct, a national and New York City Landmark. The project will restore the building, accommodate a new larger program for the police, and allow for a modernized police precinct station house.

Westchester County Courthouse, White Plains, NY (2005) - $121,000,000: Design Phase Architect for this $121 million construction project for DASNY. The First Phase included the exterior rehabilitation of the existing 20-story Courthouse Tower. The work encompassed the removal and replacement of the Towers existing facade, windows, curtain wall system and roofing. This included the replacement of approximately 900 windows and the installation of nearly 190,000 square feet of new precast panels. The Second Phase involved the construction of a new three-story Courthouse Annex. The Annex provides an additional 265,000 square feet of Family and Criminal Courts as well as office support, Judges chambers and underground parking facility. Mr. Tynan provided design reviews with the structural and MEP designers and cost estimate reconciliation between URS and the Design Team.

DASNY, Fashion Institute of Technology, New York, NY (2004) - $19,000,000: Design Review Manager for this $19 million Expansion Program to the existing structure. The project encompassed the construction of two in-fill buildings located in the existing courtyard areas. The East Building includes conference area, exhibit space and offices. The West Building has a full kitchen, cafeteria space and serving area for the students. Extensive work was required to distribute the mechanical, electrical and plumbing systems from the existing structure to the new buildings. Mr. Tynan provided design reviews with the architectural teams structural and MEP designers. He

provided Certificate of Occupancy planning and project approach for the new buildings and cost estimate reconciliation between URS and the Design Team. He also prepared final bid documents including project specific supplemental conditions.

DASNY, Queens Civil Court, Queens, NY (1997) - $63,000,000: Project Manager for this new $63 million court facility for the Dormitory Authority of the State of New York (DASNY). The project involved the construction of a 190,377-SF building, housing 20 court parts and consolidated jury facilities. A connection was constructed between the new Civil Court Building and the existing Supreme Court Facility, located across the street. A 128,758-SF parking garage was also constructed below grade. The courthouse interior space assignments consist of a small claims court, jury selection rooms, landlord/tenant court, 13 civil courts, and four housing courts. Supporting areas consist of judges chambers, jury selection rooms, attorney conference areas, attorney and judges lounge areas, and various private offices. Mr. Tynan was responsible for all architectural finishes including masonry, windows and exterior curtain wall; and extensive interior finishes including wood paneling, floors and built-in finishes. He provided design reviews with the architectural teams structural and MEP designers. During the construction phase, he coordinated multi-prime Wicks Law contractors, prepared and developed change orders, and handled final closeout documents such as as-builts and punch lists.

DASNY CCNY Marshak Science Building and Vivarium, New York, NY - $40,000,000: Design Phase Manager for this new, one-story temporary vivarium facility will provide 5,000 SF of space to house and breed laboratory animals as well as research space for the various studies currently underway. The new facility is part of the phased plan for the rehabilitation of the Marshak Science Building built in 1971. The vivarium must be completed prior to the rehabilitation of the Marshak Building so that laboratory animals could be moved from the construction environment which will involve repairs to the existing building and its enclosure in a curtain wall structure. The facility will meet requirements of the Association for the Assessment and Accreditation of Laboratory Animal Care (AALAC), the first accredited animal research facility on the CCNY campus. Soundproofing will be critical as any noise and vibration can disrupt and negate the research. The rehabilitation phase will include upgrades to the science buildings exterior facade.

DASNY, Queens College for Molecular and Cellular Biology, Queens, NY - $35,000,000: Design Phase Manager for this $35 million new construction project for DASNY. URS provided construction management services during pre-construction and design phases for the state-of-the-art 32,000-square-foot Research Facility at Queens College. The facility is home for advanced molecular and cellular exploration, including infectious disease research. The building was designed to include a three-story cylindrical glass tower projecting upward, and the main structure to be set below grade and blend into the landscape with its sodded roof. Our services included working closely with the design team to provided constructability and design reviews. Mr. Tynan provided design reviews with the architectural teams structural and MEP designers. He provided Certificate of Occupancy planning and project approach for the new buildings and cost estimate reconciliation between URS and the Design Team. He also prepared final bid documents including project specific supplemental conditions.

MANUEL D. VALES

ELECTRICAL INSPECTOR

Years of Experience
With URS: 8 Years
With Other Firms: 26 Years

Education
BS/1975/Mechanical Engineering/Philippines

Registration/Certification
Professional Engineer, Philippines

Specialized Training
Safety Qualified Supervisor Training
10-hour OSHA Course
Safety Trained Supervisor (STS) Seminar
OSHA Construction Safety Training
LIRR Safety Training, 2006
NYCT Safety Training, 2006, 2007
Metro-North Safety Training, 2006
MTA Bridges & Tunnels Safety Training, 2007
Amtrak Safety Training, 2006
CPM Stand-down Training, 2008

OVERVIEW

Mr. Vales has more than 34 years experience in communication and mechanical engineering. He has extensive experience providing field inspection and testing of all types of projects particularly in the New York / New Jersey region. He is currently providing inspection services on the PANYNJ runway reconstruction and access improvement program at JFK International Airport, including the fire pump rehabilitation.

PROJECT SPECIFIC EXPERIENCE

Runway 13R 31L Reconstruction and Access PANYNJ, Improvement, JFK 916 Building 161 Fire Pump House Rehabilitation, JFK 948.144 Back Flow Prevention Devices and Water Meter Upgrade – Phase 1, Port Authority of New York and New Jersey, Queens County, NY (3/2009 – Present)

Inspector assigned to monitor and supervise various PA construction management projects. Responsible for ensuring that all electrical system specifications were followed based on design. Estimate change order work as required. Work with QAD on final testing of all complete projects.

Integrated Electronic Security System / Command, Communication and Control Centers (IESS/C3) Security Contract #CM-1324 C-52038, MTA Capital Construction, New York, NY (2007 - Present) - $300,000,000

Inspector assigned to project work related to security equipment, including conduits and electrical wiring. Participated in project work relating to underwater tunnels and working with rail traffic, and insuring that project activity had no impact on client operations. Supported project work on various MTA Bridge & Tunnel facilities. Oversees contractor personnel to ensure compliance with safety rules, and participates in the scheduling of work and track outages. Insures that contractor work reflects project design and specifications and updating of drawings.

Hudson-Bergen Light Rail Transit System (DBOM), New Jersey Transit, Hudson/Bergen Counties, NJ (1999 - 2007)

Construction Engineer & QA/QC.
- Staff Construction Engineer Systems. Oversaw systems inspection of signals, traction power, and communication controls. Responsible for ensuring that all engineering construction plans and specifications were followed. Performed all engineering tasks using standard engineering techniques, procedures, and criteria.
- QA/AC Engineer. Oversaw quality assurance for traction power, catenary system, signaling, and communication controls.

Tri-Met Westside Corridor Project, Portland, OR - Union Switch & Signal (1996 - 1998)
Quality Control Engineer/Inspector. Assisted Prime Contractor of cable transmission system installation. Also involved in the various communication system design and layout of cable transmission system (fiber optic), radio, public address and CCTV; layout and installation of equipment racks and cable trays at communication rooms/central control facility.

Norwalk-El Segundo Rail Transit Project, Los Angeles, CA - LS Transit Systems (1993 - 1996)
Senior Systems Inspector. Responsible for construction management inspection of communication contracts, including cable transmission systems (fiber optic), wayside intrusion detection, platform intrusion detection, and telephone systems. Monitored day-to-day contract compliance, materials, equipment, and construction management. Reviewed reports and documents. Supervised shop and field inspection and testing. Assigned to start-up teams for integration/system wide testing of trains.

Oakwood Beach, Sludge Dewatering Building, New York City Department of Environmental Protection, Staten Island, NY - Hazen and Sawyer (1991 - 1993)
Lead Mechanical Engineer. Assisted in the construction management function for the $78 million construction of the Sludge Dewatering Building at Oakwood Beach, Staten Island. Responsibilities included supervision and management of field engineer/inspector activities in the installation of HVAC system, plumbing and equipment. Interfaced with contractors and designers on change orders.

Contract Nos. S-32269 and S-6408, New York City Transit, New York, NY (1984 - 1989)
Project Engineer / Senior Inspector. On-site technical inspections of communication equipment expansions for the Public Address Systems.

Metro North Commuter Railroad Contract No. 7271, Metro-North Railroad, New York, NY (1984 - 1989)
Project Engineer/Senior Inspector. On site technical inspection of the Metro North Commuter Railroad contracts. Responsibilities included testing, splicing of communication and signal cables including fiber optics.

Station Security Program Contract No. C-3205, New York City Transit, New York, NY (1984 - 1989)
Project Engineer / Senior Inspector. Assisted in the design of transit stations security program. Responsibilities included cost estimating, specification writing, field inspection, overall design of stairway and passenger station lighting, anti-crime gates and enclosures.

Manhattan Civil Criminal Court and Family Court Buildings, New York, NY (1982 - 1984)
Designer. Prepared design and piping installation layout of sprinkler system for high-rise buildings. Prepared material quantity take-off and technical calculations.

Various Exxon Mobil Projects, Livingston, NJ (1981 - 1982)
Designer. Prepared design, layout, and sketches. Checked drawings. Prepared technical calculations on various Exxon projects.

JOHN M. VOLPE

CONSTRUCTION MANAGER

Years of Experience
With URS: 10 Years
With Other Firms: 4 Years

Education
B.S. Civil Engineering, January 1998
Rutgers University, College of Engineering
New Brunswick, New Jersey

M.S. Construction Management / Engineering, August 1999 - Present
Stevens Institute of Technology
Hoboken, New Jersey

OVERVIEW

Mr. Volpe has more than 14 years of experience in the engineering and construction industry particularly in the New York / New Jersey region. He has substantial PANYNJ experience having been involved on various Newark-Liberty International Airport projects for the past ten years.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport (2000 - Present)

Office Engineer / Field Inspector:

- Rehabilitation and Superstructure Building 1 ($48 M)
- Building 1 Foundation and Building 51 Relocation ($12.5 million).
- N25 Bridge Replacement and Reconstruction of Brewster Road South ($8 million).
- Reconstruction of Conrad Road ($4.5 million).
- Administration Building Landscaping and Irrigation. ($1.5 million).

Perform office engineer and field inspector duties on various projects with a combined value over ($75 million). Provide assurance that construction contracts are completed in accordance with contract drawings and specifications. Provide documentation, field reports and photographs for periodic reports to senior resident engineering staff. Coordinate technical and non technical submittals and request for information. Also involved in the implementation and negotiation of change orders; Ensure that the contractor's operations and construction methods follow the design intent and perform civil inspection

AMTRAK, New York, NY (1998 - 2000)

Senior Scheduler, assisted Project Leaders and Assistant Division Engineers in defining project scopes, estimates, and schedules. Prepared monthly cost and production reports for Capital Maintenance Projects.

- Provided support for the NJT, LIRR and Amtrak joint ventured Penn Station 20 year needs assessment program. Assisted in setting the foundation for the long term construction of the NY Life Safety Program.
- Developed database application for use in recording Force Account gang production.
- Researched emerging computer applications and technology and their possible utilization within the department.
- Provided CADD support when required.

CHI WAT

MECHANICAL ESTIMATOR

Years of Experience
With URS: 3 Years
With Other Firms: 3 Years

Education
BS/2004/Mechanical Engineering/Polytechnic University/ New York

Specialized Training
Lab VIEW, AutoCAD Lt. 2006, IDEAS-Master Series 8.00, Microsoft Office 2000, RoboLab, Solid EdgeV14, GIS
Structural System I & II, Dynamic Systems & Control I & II
Flow & Thermal Systems I & II, Computers in Mechanics
Senior Design I & II, Mechanical Engineering Lab
HVAC I, Manufacturing I

OVERVIEW

Mr. Wat, has more than six years of Mechanical Engineering and Estimating experience on construction projects, specializing in design, cost analysis, value engineering, estimating in HVAC, Plumbing and Fire Protection trades. His background includes assignments in the field and home office for a broad range of projects including transportation, commercial office, and universities, including green building design conception.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, World Trade Center Transportation Hub, New York, NY (10/2006 - 02/2007)
Junior Mechanical Estimator for new path station. Responsible for estimate plans and review specifications. Responsible for take-off of Mechanical systems and pricing information. Takeoff included piping, ductwork, and equipments.

Goldman Sachs Low Tier & High Efficiency Study Data Center Cost Analysis, Bridgewater, NJ (03/2007 - Present)
Mechanical Estimator Responsible for preparing Conceptual Budget Cost Estimate for Data Center. Work includes takeoffs & pricing of Mechanical Equipment, HVAC, Plumbing and Fire Protection.

School Construction Authority Mentor, Long Island City, NY (03/2007 - Present)
Project value less than $25,000. Estimator for SCA. - Responsible for change management tasks in compliance with SCA standards. Prepared change order for negotiation. Performed change order documentation in Expedition web base systems.

World Trade Center Museum Pavilion, New York, NY (03/2007 - Present)
Mechanical Estimator Responsible for pricing of HVAC Estimate for LEED rated state of art museum. Oversee Mechanical trades including Plumbing and Fire Protection.

American Express, World Financial Center, HSBC Banks, Chase Office Buildings - Clifford Dias Consulting Engineering (07/2005 - 10/2006)
HVAC Design engineer for various projects mentioned above - Performed load calculation, designed HVAC layout, sized equipments and markup shop drawings. During construction phase, attended job meetings and coordinate any conflict might have with contractors. Reviewed final construction and issued punchlist reports.

Bronx Botanical Garden, Bronx, NY - Earth Mechanical Corp (07/2004 - 07/2005)
Junior Estimator and Assistant Project Manager - Perform bids up to $500,000 and negotiated change order with general contractors. Coordinate all mechanical work with subcontractors and day to day activities. Responsible for companys in house sheet metal takeoffs. Prepared AS-Built drawing using AutoCAD.

Earth Mechanical Corp (07/2004 - 07/2005)
Junior Estimator and Assistant Project Manager Perform bids up to $500,000 and negotiated change order with general contractors. Coordinate all mechanical work with subcontractors and day to day activities. Responsible for companys in house sheet metal takeoffs. Prepared AS-Built drawing using AutoCAD.

121st Police Precinct, Staten Island, NY
Mechanical Estimator Responsible for preparing Cost Estimate for LEED silver rated police precinct. Performed takeoff and cost estimate of Mechanical system includes Fuel Dispensing system.

Goldman Sachs World Head Quarter, Battery Park, New York, NY
Mechanical Estimator Responsible for preparing Conceptual Budget Cost Estimate for Core and shell and Tenant Fit Outs building. Work includes takeoffs of Mechanical Equipment, HVAC, Plumbing and Fire Protection.

Stony Brook University, Advanced Research Technology Center, NY
Mechanical Estimator Responsible for preparing Cost Estimate for state of the art Research Center. Performed takeoff and provided cost estimate of Mechanical system includes Thermal Energy System.

Stony Brook University, Simon Center, NY
Mechanical Estimator Perform takeoff and provided cost estimate of Mechanical system includes sheetmetal ductwork and piping takeoff.

SUNY College of Old Westbury Campus Center Heating and Cooling Upgrades, Old Westbury, NY
Mechanical Estimator Responsible for Cost Estimate for Chiller and Boiler Plant. Performed field takeoff and cost estimate of Mechanical system includes relocating and installing of new Cooling Tower.

ERIC C. WILLIAMS, PE

ELECTRICAL REVIEWER

Years of Experience
With URS: 6 Years
With Other Firms: 14 Years

Education
BS/1989/Electrical Engineering,
Prairie View A&M University

Registration/Certification
Professional Engineer
2003/New Jersey

OVERVIEW

Mr. Williams has more than 20 years of experience in the design of electrical power distribution, lighting, telephone / communications and fire alarm systems for a variety of project types including commercial, educational, historical, pharmaceutical and industrial projects. He has extensive experience providing services in the New York / New Jersey region, particularly providing design and constructability reviews, and is extremely familiar with the PANYNJ having performed several assignments at Newark-Liberty International Airport.

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport Terminal B, Newark, NJ (2005 - 2006)
Project Electrical Engineer for a due diligence report and study on the existing electrical distribution systems. Study and report provided assessment of the existing distribution system and recommendations for distribution system upgrades for compliance with current codes and future expansion capabilities.

PANYNJ, Newark-Liberty International Airport Terminal B, In-Line Baggage Screening, Newark, NJ
Project Electrical Engineering design for at-grade level automated baggage screening system. Provided criteria for connecting new lighting and power distribution systems to accommodate baggage screening system and support spaces to existing electrical distribution system infrastructure.

PANYNJ, Newark-Liberty International Airport Terminal B, Public Address System Upgrade, Newark, NJ
Project Electrical Engineering design of public address system headend equipment upgrades including existing system condition assessment, coordination of various public address system devices designed under the various modernization projects interface with public address system vendors and specification of components.

PANYNJ, Newark-Liberty International Airport - Terminal B Connectors Expansion, Newark, NJ
Project Electrical Engineer for design of expansions to the three connectors of Terminal B. The expansions provide approximately 150,000 square foot area for new passenger screening points as well as airline lounges. The design consisted of new power distribution systems for the three connectors for lighting and power, mechanical systems, screening equipment as well as lightning protection system and fire alarm system and purge system which are connected to existing systems.

PANYNJ, Newark-Liberty International Airport - Terminal B Lower Level Expansion, Newark, NJ
Project Electrical Engineer for design of a 75,000 square foot new domestic arrivals area and ancillary spaces in the existing unoccupied area of the lower level of Terminal B. Project consisted of new power distribution system for new vertical circulation elements (new elevators and escalators), baggage carousels, passenger amenities and ground transportation center. The design also include replacement and upgrade of two substations which supplies power to Terminal B and the incorporation of two very large generators to provide back-up power for the terminal and a new fire alarm system and smoke purge system which are connected to an existing systems.

Newark International Airport Terminal B Lower Level Ticket Counter, Newark, NJ
Project Electrical Engineer for design of a new 50,000 square foot ticket counter area. The design consisted of a new local power distribution system for lighting and power, mechanical systems and baggage conveyor systems. The design also includes a new fire alarm and smoke purge system which is connected to an existing system.

United States Postal Service, Bronx P & DC, NY (01/2005 - Present)
Project Manager and Project Electrical Engineer for a mechanical, electrical, plumbing and fire protection condition assessment of the existing systems of this postage and distribution center mail facility for code compliance and conformance with current United States Postal Service design standards. Design of all required modifications, replacements and additions to the electrical distribution system, including all low-voltage systems such as telecommunications, CCTV and fire alarm follows the study and report

Brooklyn ECC at St. Thomas Aquinas, Brooklyn, NY (2005 - 2006)
Lead Project Electrical Engineer responsible for providing a new electrical distribution system for a complete renovation of an existing 30,000 square foot elementary school. The design included a new electrical service and distribution system, a new telephone system, a new LAN system, a new public address and sound system, new lighting and general receptacles, a new kitchen, and a new master-coded fire alarm system in compliance with New York City Fire Department.

Intermediate School 280 (2005 - 2006)
Project Electrical Engineer responsible for providing a renovation of an existing Media classroom. The Media classroom was equipped with 30 new computers with connections to the schools LAN system, a stage area with provisions for stage lighting fixtures to facilitate productions filming, and a video projection system for use in presentation and instructional lectures. Responsibilities included design of electrical and telecommunications requirements for the new computers and design of the electrical requirements for the stage and video systems.

Club Quarters at 51st Street, New York, NY - Joseph Loring and Associates (2004)
Project Electrical Engineer responsible for the design of the electrical systems for a new twenty-eight story high-rise hotel. Project consisted of a 240-room hotel, complete with a conference center and kitchen facility with lounge.

KATHLEEN M. ZATKOS

CONTRACT ADMINISTRATION

Years of Experience
With URS: 11 Years
With Other Firms: 0 Years

Education
B.A. Communications/Public Relations/ 1984/ Rowan University

OVERVIEW

Ms. Zatkos had more than 11 years of experience in engineering and construction. She has extensive experience providing Contract Administration and administrative functions, and she has extensive PANYNJ experience having performed at Newark-Liberty International Airport for more than 10 years. Her responsibilities have involved reviewing and expediting payments, processing and monitoring net cost and lump sum conversion agreements, processing and monitoring Post Award Contract Change (PACC) and change orders, repot monthly job activities, requesting and expediting additional money allocations, audit net cost invoiced and finalizing all required close out paperwork

PROJECT SPECIFIC EXPERIENCE

PANYNJ, Newark-Liberty International Airport, Terminal A Vertical Circulation Improvements, Newark, NJ (2010-Present)
This contract entails the construction of a new bank of elevators in Terminal A.

PANYNJ, Newark-Liberty International Airport, Mechanical and Electrical Upgrades Of The CTA Toll Plaza, Newark, NJ (2009-Present)
Contract provides for rehabilitation and upgrade of existing mechanical and electrical systems at the Central Terminal Toll Plaza.

PANYNJ, Newark-Liberty International Airport, Fuel Farm Roadway & Bridge Rehabilitation, Newark, NJ (2005 - 2010)
Contract includes replacement of the expansion joints, rehabilitation of Bridge N24, and the milling and paving of the fuel farm roadways.

PANYNJ, Newark-Liberty International Airport, Rehabilitation of Courtyards & Frontage Ramps, Newark, NJ (2004 - Present)
Contract includes milling, installation of asphalt concrete pavement, curb and deck repairs including the installation of steel-faced curb, joint reconstruction, waterproofing the elevated ramps, installation of Portland cement concrete curb and pavement in the courtyards and maintenance of traffic.

PANYNJ, Newark-Liberty International Airport, South Fuel Farm Water Tank B Replacement, Newark, NJ (2003 - Present)
Contract provides for the replacement of Water Tank B in the South Fuel Farm with a new 500,000 gallon tank and cathodic protection. The new tank is to be located at the same location, which will require the removal and lead abatement of the existing tank and a new foundation for the tank.

PANYNJ, Newark-Liberty International Airport, Fuel Farm Tank Rehabilitation, Newark, NJ (2002 - Present)
Contract requires the removal by blasting of existing interior lead based paint and re-coating the bottom plate and 2 high of the wall plates with a paint system that is appropriate for contact with jet fuel.

PANYNJ, Newark-Liberty International Airport, South Fuel Farm Subsurface Remediation, Newark, NJ (2002 - Present)
Contract includes installation extraction wells and construction of contaminated soil and ground water remediation system consisting of vacuum enhanced recovery units mounted on mobile trailers.

PANYNJ, Newark-Liberty International Airport, Monorail Station "E" Expansion, Newark, NJ (2001 - Present)
Contract provides for an expanded lobby area including the replacement of the existing elevator with two larger 6000 pound elevators, the relocation of the valet parking operation, public restrooms, passenger services kiosk, site work utility relocations, sidewalks and canopies.

PANYNJ, Newark Liberty International Airport, Parking Lot "E" Garage, Newark, NJ (1999 - Present) - $96,000,000: Contract provides for the construction of a six level parking structure, entrance and exit plazas, a Restricted Service Roadway Bridge, a permanent valet parking facility, roadway modifications, signage and relocation and installation of utilities.

PANYNJ, Newark-Liberty International Airport General Construction, Newark, NJ (1999 - Present) - $4,000,000: Contract Administrator; Review and expedite payments; process and monitor net cost and lump sum conversion activities; process and monitor post award contract change (PACC); Report monthly job activities; request and expedite additional money allocations; Audit Net Cost invoices; finalize all required close out paperwork

PANYNJ, Newark-Liberty International Airport Monorail Station "E" Expansion, Newark, NJ (1999 - Present) - $10,457,350: Contract Administrator; Review and expedite payments; process and monitor net cost and lump sum conversion activities; process and monitor post award contract change (PACC); Report monthly job activities; request and expedite additional money allocations; Audit Net Cost invoices; finalize all required close out paperwork.

PANYNJ, Newark-Liberty International Airport Parking Lot "E" Garage, Newark, NJ (1999 - Present) - $82,442,000: Contract Administrator; Review and expedite payments; process and monitor net cost and lump sum conversion activities; process and monitor post award contract change (PACC); Report monthly job activities; request and expedite additional money allocations; Audit Net Cost invoices; finalize all required close out paperwork.

PANYNJ, Newark Liberty International Airport, Parking Structure Landscaping, Newark, NJ (2001 - 2005) - $1,380,000: Contract required the installation of landscaping and irrigation for areas adjacent to Lot E Parking Lot and the Monorail Station E.

PANYNJ, Newark-Liberty International Airport Lot E Parking Structure Landscaping and Maintenance, Newark, NJ - $294,811: Contract Administrator; Review and expedite payments; process and monitor net cost and lump sum conversion activities; process and monitor post award contract change (PACC); Report monthly job activities; request and expedite additional money allocations; Audit Net Cost invoices; finalize all required close out paperwork.

SIMA ZLOTNIKOVA

FIRE PROTECTION REVIEWER

Years of Experience
With URS: 5 Years
With Other Firms: 32 Years

Education
Associate Degree in Industrial design, Odessa, Ukraine, 1968

OVERVIEW

Ms. Zlotnikova has 34 years of extensive experience in design and cost control construction of fire suppression systems including evaluation of Code requirements, project phasing, equipment selection, calculations, interaction with various local and state jurisdictions, preparation of all stages of the Design Documents, and construction services. Ms. Zlotnikovas past experience has included a wide variety of projects, and she has extensive experience on projects in and around New York City. She has a strong working knowledge of NFPA codes, New York City Building Code, State Codes, Factory Mutual requirements, and hydraulic calculation programs. During previous experience with sprinkler contractors companies based in New York City and New Jersey her responsibilities included development of cost effective and fully coordinated shop drawing, hydraulic calculations, field coordination with other trades and design engineers and construction supervision

PROJECT SPECIFIC EXPERIENCE

PANYNJ, JFK Buildings Backflow Prevention Stage II Study, Queens, NY (09/2008 - Present)
Project Manager for this project. The project is a design study to determine the feasibility of installing backflow prevention devices on all domestic & fire water services serving the buildings at JFK airport. Responsible for plumbing and fire protection mains study to ensure compliance with the New York State Health Code, New York City Backflow Prevention Regulations, and NFPA.

PANYNJ, JFK Irrigation Pits Stage II Study, Queens, NY (09/2008 - Present)
Project Manager for this project. The project is a design study to determine the feasibility of installing backflow prevention devices on all domestic water services serving the irrigation systems at JFK airport. Responsible for domestic water service study to ensure compliance with the New York State Health Code, and New York City Backflow Prevention Regulations.

PANYNJ, Newark-Liberty International Airport - Terminal B Connectors Expansion, Newark, NJ (2005 - Present)
Lead Senior Fire Protection Specialist for design of expansions to the three connectors of Terminal B. The expansions provide approximately 150,000 square foot area for new passenger screening points as well as airline lounges. The design consisted of complete new fire protection systems for the expansion and modifications to existing system within the existing buildings.

PANYNJ, Newark-Liberty International Airport - Terminal B Lower Level Expansion, Newark, NJ (2005 - Present)
Lead Senior Fire Protection Specialist for design of a 75,000 square foot new domestic arrivals area and ancillary spaces in the existing unoccupied area of the lower level of Terminal B. Project consisted of new fire protection systems for new vertical circulation elements (new elevators and

escalators), baggage carousels, passenger amenities and ground transportation center. The design includes replacement and upgrade of existing sprinkler and Fire Standpipe systems.

PANYNJ, Newark-Liberty International Airport - Terminal B Lower Level Ticket Counter, Newark, NJ (2005 - Present)
Lead Senior Fire Protection Specialist for design of a new 50,000 square foot ticket counter area. The design includes a renovation of existing systems to accommodate new expansion of the building.

PANYNJ, PATH Train Control Center (2004 - Present)
Lead Senior Fire Protection Specialist for this project for the Port Authority of New York and New Jersey. Work included new 25,000 square feet building. The design consisted of complete new fire protection systems for the building.

PANYNJ, Newark-Liberty International Airport - Terminal B, Newark, NJ (2005 - 2006)
Lead Senior Fire Protection Specialist for a due diligence report and study on the existing Fire Department Connections for Fire Standpipe and Sprinkler systems. Field survey, study and report provided assessment of the existing system and recommendations for system upgrades for compliance with current codes and future expansion capabilities.

PANYNJ, Newark-Liberty International Airport, Newark, NJ (1998)
Senior Fire Protection responsible for the design of automatic fire protection systems (water, foam, pre-action, gaseous, deluge) for various airport areas, including hydraulic calculations and specifications.

PANYNJ, Newark-Liberty Airport, Newark, NJ
Designed fire protection systems for major renovation work throughout the Terminal B: different type of sprinkler systems: wet, dry, and single-interlock pre-action system, water-foam system, FM-200.

Bronx Post Office, Bronx, NY (2005 - Present)
Lead Senior Fire Protection Specialist responsibilities included: survey existing facility, preparation of the design documents, meetings with architects, review project cost estimate followed by preparation of solicitation of documents for a design/build contract for this 40-yera old, 170,000 SF facility. The condition assessment portion included a comprehensive field survey of the existing mechanical and electrical systems, with associated cost estimated for various system and equipment repair and replacement options.

United Nations Dag Hammarskjold Library, New York, NY (2006 - 2007)
Lead Senior Fire Protection Specialist responsibilities included: survey existing facility, preparation of the construction documents, meetings with architect and construction management.

Public Schools #234, 212, 243, 254, 69, 107, 108, 204, 156, 58, 181, 195, 212, all Boroughs of New York City, New York, NY (1998 - 2002)
Project Engineer responsible for the design of sprinkler and FSP systems, calculations, specifications, shop drawing review and coordination with clients and contractors.

SECTION F

Hourly and Billing Rates

Section F

HOURLY AND BILLING RATES

Hourly Pay Rate for Staff Expected to Work on Project

The hourly rates for engineering and technical personnel, who may be assigned to perform any services requested, are presented below. URS would request the right to utilize additional personnel or staff with similar experience to those in the table below if the "call-in" assignment warrants it.

Title	Name	Hourly Pay Rate
Contract Administration	Irene Palleija (**URS**)	$42.24
Contract Administration	Kathleen Zatkos (**URS**)	$33.44
Contract Administration	Evelyn Menendez (**LPE**)	$24.45
Contract Administration	Veronica Stewart (**LPE**)	$49.17
Contract Administration	Angela Cerese (**LPE**)	$30.00
Office Engineer	Charlito Hernandez (**URS**)	$43.16
Office Engineer	Shashikant Patel (**URS**)	$43.00
Mentoring Program	Dorothy Pentzke (**TPG**)	$37.38
Construction Manager	Ernest Pirozzi (**URS**)	$39.80
Construction Manager	John Volpe (**URS**)	$52.56
Construction Manager	Frank DeBartolo (**URS**)	$49.88
Construction Manager	John Mihalenko (**URS**)	$52.64
Construction Manager	Harry Armand (**URS**)	$53.64
Construction Manager	Les Flagler (**URS**)	$52.40
Construction Manager	Carlos Guevara (**LPE**)	$56.00
Civil / Structural Inspector	Nizar Alkhatib (**URS**)	$41.76
Civil / Structural Inspector	Jitendra Patel (**URS**)	$42.52
Civil / Structural Inspector	Konstanti Ingberg (**URS**)	$50.56
Civil / Structural Inspector	Robert Tse (**URS**)	$33.28
Civil / Structural Inspector	David Gleason (**URS**)	$48.56
Civil / Structural Inspector	Nader Philipps (**URS**)	$38.08
Civil / Structural Inspector	Kuldip Sachdev, PE (**Maitra**)	$42.13
Civil / Structural Inspector	Wayne McMahon (**Maitra**)	$47.48
Civil / Structural Inspector	John Petekiewicz (**Maitra**)	$42.44
Electrical Inspector	Jeffrey Carnot (**URS**)	$48.60
Electrical Inspector	Jean Charleston (**URS**)	$37.80
Electrical Inspector	William Devlin (**URS**)	$47.84
Electrical Inspector	Manuel Vales (**URS**)	$51.12
Electrical Inspector	Juan Melendez (**URS**)	$33.44
Mechanical Inspector	Anthony Adamo (**URS**)	$56.00
Mechanical Inspector	Syed Ahmed (**URS**)	$38.20
Mechanical Inspector	Arshad Jamil, PE (**LPE**)	$48.30

Title	Name	Hourly Pay Rate
Safety Inspector	Evelyn Murphy (**URS**)	$53.88
Architectural Inspector	Nancy Hoffman, LEED AP (**URS**)	$48.32
Environmental Inspector	Danielle Schaefer (**URS**)	$45.48
Utilities Inspector	Nelson Parada, PE (**LPE**)	$45.50
Quality Inspector	Hasan Riaz (**URS**)	$43.88
Quality Inspector	Ronald Popotte (**URS**)	$38.68
Constructability	Thomas Tynan, RA (**URS**)	$85.72
Electrical Review	Eric Williams, PE (**URS**)	$61.44
Mechanical Review	Joel Fisch, PE, LEED AP (**URS**)	$68.68
Fire Protection Review	Sima Slotnikova (**URS**)	$59.44
Architectural / Civil / Structural Estimator	Ada Deuel (**URS**)	$64.08
Electrical Estimator	Sam Mazo (**URS**)	$65.92
Mechanical Estimator	Chi Wat (**URS**)	$41.20
Estimator	Greg Gyory (**URS**)	$38.36
Estimator	Ermin Advagic (**URS**)	$67.56
Scheduler	Mark Grinberg (**URS**)	$67.84
Scheduler	Matthew Bruno (**URS**)	$29.48

Billing Rates for Partners and Principals Expected to Work on Project

The billing rates for partners and principals expected to work on the project, are presented below.

Title	Name	Billing Rate
Principal-in-Charge	John Spencer, PE (**URS**)	$200.00
Resource Manager	David Beckett, PE (**URS**)	$200.00

Out-of-Pocket Expenses

Description	Quantity	Rate	Total
Mileage	10,000	$0.50	$5,000.00
Printing / Copying	LS	$5,000.00	$5,000.00
Shipping	LS	$5,000.00	$5,000.00
Miscellaneous	LS	$5,000.00	$5,000.00
Vehicle Rental	LS	$250,000	$250,000
		TOTAL	**$270,000.00**

SECTION G

RelevantExperience

Section G

RELEVANT EXPERIENCE

In this section, we have included a representative listing of relevant project descriptions which demonstrates URS' qualification and expertise to provide these services on any PANYNJ project which is likely to present itself under this Call-In contract.

URS has been a staple in the New York / New Jersey metropolitan area for many decades. In fact, the projects we have included in this section, represent just a small sample of the success, a representative listing of projects, we have performed for the Port Authority of New York and New Jersey, as well as our long and distinguished track record with other area agencies and authorities.

Through our various Port Authority assignments, such as the:

- Newark-Liberty International Airport Call-In Contract,
- LaGuardia Airport Central Terminal Building Modernization Program,
- Goethals Bridge Modernization Program, and
- JFK International Airport Redevelopment Program

to name a few; we have an intimate knowledge of your procedures, project delivery systems, and organization, which will be advantageous for any assignment URS is tasked with.

Also note that the projects included in this section demonstrate several important components that are likely to be similar to the 2011-2014 Construction Management initiative program, as follows:

- Call-In Assignments
- Project Management / Owner's Representative Assignments
- NY / NJ – local Assignments
- Interior and Fit-Out Projects
- Other Similar Facilities

In addition, the tasks outlines in the RFP are the essence of our work on most of these assignments, as follows:

- Constructability / Bidability and General Engineering Review
- Construction Staging
- Schedule Development / Monitoring
- Quality Assurance Inspection
- Contract Administration
- Cost Engineering / Estimating

Probably the three most important elements of the experience we bring to this assignment from other projects, are the "lessons learned", a minimal learning curves, and experienced staff. Some of our current or recent PANYNJ assignments include:

- Expert "Call-In" Professional Program Management Services, Capital Improvement Program
- Expert "Call-In" Professional Engineering and Architecture for Inspection of Airport Facilities
- Security Design Task Order for Various PANYNJ Facilities
- Outerbridge Crossing Highway Speed EZ-Pass Construction and Installation
- Express Rail Project, Elizabeth, NJ
- Marine Terminal Intermodal Transfer Facility

PANYNJ – NEWARK-LIBERTY INTERNATIONAL AIRPORT REDEVELOPMENT PROGRAM (CALL-IN CM)

NEWARK, NJ

Services
Project & Construction Management

Client
Port Authority of NY and NJ
Brian Hegarty, Engineer of Construction
(973) 772-2749

Project Value
$1.0 billion +

Dates
2001 – Ongoing

Since 2001, URS has provided on-call Project and Construction Management Services to the Port Authority of New York & New Jersey for construction work valued at over $2 billion at Newark-Liberty International Airport. Some of the scope included constructability / biddability, construction staging, schedule development and monitoring, quality assurance inspection, contract administration, and cost estimating.

Some of the projects included:

- New FAA Control Tower
- 4-Story, 3,200-Vehicle Parking Garage
- 6-Story, 6,000-Vehicle Parking Garage
- Southern Access Roadway Expansion Project
- New Administration Building
- Northside Cargo Area Redevelopment
- Airport Utility System Upgrade
- Perimeter Intrusion Detection System
- Parking Lot 6
- Salt Shed Replacement

FAA Tower - Newark-Liberty International Airport
URS provided construction management services for this $30 million new FAA Control Tower located behind the Marriott Hotel with the central terminal area. The Tower is approximately 320 ft. high with support facilities consisting of general offices, computer room and emergency generator. URS coordinated with the Port Authority in terms of general construction involving runway lighting, telephone, utilities, which had to be extended to the site. Access had to be coordinated between the FAA and General Contractor.

Lot C Garage – Newark-Liberty International Airport

URS provided construction management services for the $85 million New Lot C Garage, involving a four-story 3,200-car parking garage located in the central terminal area in front of Terminal C. Project includes two pedestrian bridges which links the upper three floors of the garage and the new at-grade arrival area. The garage is accessed by a new at-grade roadway and entrance plaza via a double helix. The garage is constructed of precast concrete and has two internal elevators, as well as escalators to expedite the flow of passenger traffic to the two new pedestrian bridges.

The garage was designed with an internal ramp in order to facilitate its early opening thus allowing use of the facility within one year of NTP. A second fast track project involved the addition of extra lanes as well as at-grade roadways at the front of Terminal C. Coordination of these two contracts was critical to both of their success. Included in the roadway package was extensive utility work, which included storm drainage, power, and communications.

Project/Global Gateway - P-4 Garage

URS also provided construction management services for the construction of this $95 million P4 Parking Garage housing over 6,000 vehicles. This project involved the construction of six (6) floor parking structure with lower floor being occupied, counter rotating helix ramps, entry ramps, and exit ramps clockwise. Project responsibilities involves field inspection, contract administration, ie, progress meetings, progress minutes, change orders, net cost, monthly payments, coordinate available areas for facility use, partial and final inspections, and field testing of various equipments.

Southern Access Roadway Expansion Project (SARP I)

URS provided construction management services for the $45 million redevelopment of the access road. The project involved increasing the entry wall and exit roadway capacity to constructing a new entry roadway system, widening existing bridge structures and building new bridge structures. Field inspection was coordinated to include controlled inspections, document control, payment requisitions, change orders and staging. Work was performed while maintaining access to the airport for an average of 18,000 vehicles per day, which required complex staging and aggressive scheduling. Elements of the project involved widening four bridges, two new brides (including structural steel and concrete), construction of South Directory Road, realignment and widening of Brewster Road.

Building 1 (New Administration Building)

URS provided construction management services for this $35 million New Administration Building. Project involved relocation and rehabilitation of a 65 year old, 35,000 square foot two-story national historic monument for adaptive reuse as Newark Airport's Administration Building plus construction of a 65,000 square foot structure housing Air Rescue, Fire Fighting, Airport Security and Airport Operations personnel and equipment. URS reviewed 30%, 60% and For-Bid contract documents, coordinated with airport's operations, law enforcement and maintenance personnel, and managed multiple construction contracts.

PANYNJ – EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES PROVIDED ON A "CALL-IN" BASIS

VARIOUS FACILITIES

Services
Program Management

Client
Port Authority of NY and NJ
Vinnie Antes
(973) 792-4680

Dates
2002 - Ongoing

URS is providing program and project management services on "as needed" basis for the Port Authority of New York and New Jersey Engineering Department for various projects within the Authority's Capital and Major Works Programs at the Authority's facilities, which started in 2002 and is still ongoing.

Our responsibilities included organization and management of the project design team, preparation, coordination and implementation of the management plans, monitoring of and reporting on the scope, schedule and budget until completion of the work for numerous Aviation and Tunnels, Bridges and Terminals projects.

The URS Project Managers were assigned to various TB&T, JFK and LGA projects and worked as extension of the Authority's staff. Our Project Managers' scheduled and attended project kick off and progress meetings, prepared Engineering Management Plans (E-0 and P-0) for approval by the various Line Departments, managed the design team, monitored the progress, maintained project documentation, reviewed Reports, Plans, Specifications and Construction Cost Estimates, recommended the method of procurement, work with Contracts Engineers to prepare the Contact Documents for bid, reviewed bid results and prepared documentation for the recommendation to award.

Our Project Managers worked with Resident Engineers during the construction stage of the project, processed and tracked submittals, attended construction meetings, responded to requests for information (RFIs), if necessary prepared post award contract changes (PACCs) and reviewed Record Drawings at the completion of the work.

During all Stages of the work on the various assigned projects our Project Managers utilized the Authority's project controls (Primavera, Expedition, CAPTRAK, PPW and MPR Summaries) to monitor and report on a monthly basis the status of these projects to the respective Engineers of Projects and Engineering Program Managers.

MTA LIRR – On-Call Construction Management and Associated Services

Multiple Locations Throughout LIRR Properties

Services
Construction Management

Client
Long Island Rail Road
Edward Hughey, Jr. – Director, Program Management
[redacted]

Contract Values
Four Contracts: 1-$3.6 M; 2-$3.6 M; 3-$5 M; 4-$5 M

Dates
2000 – 2009

URS has been providing the Long Island Rail Road with professional construction management, resident engineering, construction inspection, cost estimating and associated services on an on-call basis for system-wide capital improvement projects, providing constructability / biddability and general engineering reviews. URS has been awarded four distinct On-Call Construction Management Services Agreement, each for a five-year duration, with total estimated fees of $17 million. The technical scope of work for which the firm is responsible includes civil, structural, electrical, mechanical and environmental services. Project assignments consist of:

- Ronkonkoma Parking Improvements
- Richmond Hill Car Wash and Employee Facilities
- Simulator Facility Construction
- Huntington Station Rehabilitation
- Jamaica and Morris Park Underground Storage Tanks
- Babylon Welfare Facility
- Oyster Bay High Level Platforms
- Diesel Yard Improvements
- Speonk and Port Jefferson Yards
- Cost Estimator for Station Rehabilitation
- Richmond Hill Yard and Shop Improvements
- Restoration of Bayside Station
- Manhasset Station Reconstruction
- Capital Program Scope Development
- Nassau and Suffolk County Bridge Rehab
- Station Rehabilitation at Massapequa, Freeport, Baldwin and Rockville Centre
- Jamaica Station Rehabilitation
- Force Account Review Program
- Schedule Coordination for Engineering and Capital Program Departments
- Bellmore Station ADA Elevator Installation
- Amtrak/LIRR East River Life Safety Improvements
- Atlantic Avenue Complex Resident Engineering
- Cost Estimating, Engineering Department
- Railroad Bridge Replacement and Rehabilitation

Under this agreement, URS provides resident engineers, construction inspectors, office engineers and construction support personnel in every discipline on both short and long term assignments.

MTA Bridges and Tunnels – As-Needed Construction Inspection Services

Various Locations in New York City

Services
Construction Inspection

Client
Triborough Bridge and Tunnel Authority
[redacted]

Project Value
20 million

Completion Dates
2001

URS provided construction inspection services on an "as-needed" basis to the MTA Bridges and Tunnels (TBTA). Work under this contract included providing Resident Engineers, Assistant Engineers and Field Inspectors knowledgeable and experienced in construction involving general / structural steel and concrete work, heavy / highway, electrical and mechanical work. Services provided included construction staging, schedule development and monitoring, quality assurance inspection, contract administration, and cost engineering and estimating.

The following tasks were managed by URS:

- Boiler Rehabilitation at Queens Service Building, Midtown Tunnel
- Bronx-Whitestone Bridge Cable Strand Corrosion Protection
- Bronx-Whitestone Bridge Entry Ramp at Schley Avenue
- Bronx-Whitestone Bridge Main Cable Acoustic Monitoring
- Brooklyn Battery Tunnel Toll Booth Installation
- Conduit and Cabling for Cameras at East Ramp Auto Shop
- Henry Hudson Parkway Rock Stabilization
- Marine Parkway Bridge Lift Span Control Room Windows/Doors
- Marine Parkway Bridge/Queens Midtown Tunnel Lead Monitoring
- Queens Midtown Tunnel Air Rights Evaluation
- Queens Midtown Tunnel Sidewalks and Personnel Booths
- Queens Midtown Tunnel Toll Booth #7
- Relocation of ISD Equipment at Triborough Bridge
- Robert Moses Building Rehabilitation
- Roof Repairs at Robert Moses Bldg Variable Message Sign at Bronx-Whitestone Bridge
- Roof/Masonry Repairs at Queens Service Building, Midtown Tunnel
- Throgs Neck Bridge Emergency Lighting
- Throgs Neck Bridge Red Flag Repairs
- Throgs Neck Bridge Suspended Span Deck Rehabilitation

NYS OGS – Statewide Construction Management Term Agreement

Various Locations in New York State

Services
Construction Management and Related Administrative and Engineering Support Services

Client
NYS Office of General Services
Jack Audino – Division of Construction
[redacted]

Total Fee
3.0 million

Completion Dates
2003

URS provided construction management and related administrative and engineering support services to NYSOGS throughout New York State, including constructability and bidability reviews, construction staging, schedule development and monitoring, quality assurance inspection, contract administration, and cost engineering and estimating. A total of approximately 45 work task assignments were issued under this contract.

A sampling of task assignments under this on-call agreement include:

- Administrative Support Coxsackie/Greene
- Construction Inspection for Office of Mental Health, Various Facilities
- Construction Inspection at OGS, Albany
- Affirmative Action Officer at Sing Sing Correctional Facility
- Project Manager for the Office of Mental Health
- Construction Inspection of Roof Repairs, Kingston
- Resident Engineer for Highway Pedestrian Walkway, Albany
- Resident Engineer for Division of Military and Naval Affairs, Various Facilities
- Administrative Support OGS, White Plains
- Construction Inspection for Department of Corrections, Various Facilities
- Construction Inspection at Various Facilities within Districts #1, #2, and #3
- NYS emergency management renovation of major MEP equipment, Albany
- Project Management for the DEC headquarters, New Paltz
- Inspection for renovation at NYS Capital Building, Albany

PANYNJ – JFK INTERNATIONAL AIRPORT REDEVELOPMENT PROGRAM

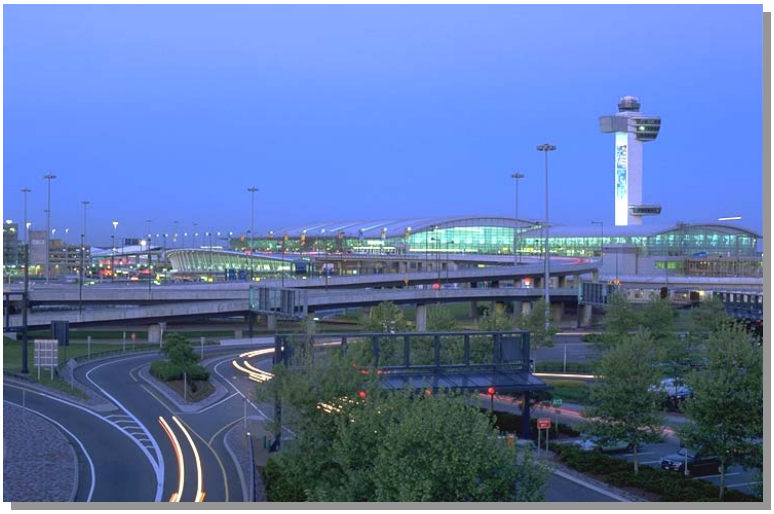
JAMAICA, NY

Services
Program and Construction Management

Client
Port Authority of NY and NJ
James Steven – Manager, JFK Redevelopment
(718) 244-4502

Total Program Value
9.4 billion

Dates
1987 – 2010



URS has served as Program Manager for the Port Authority (PA) of New York & New Jersey for the large and complex Redevelopment Program at John F. Kennedy (JFK) International Airport since 1987. The goal of the Redevelopment Program was to balance the capacity of the landside access system with the capacity of the existing airside system in order to improve passenger service levels, thereby reinforcing Kennedy's position as the nation's premier international gateway and contributing to the long-term economic growth and vitality of the region.

The needs of the landside access plan and infrastructure upgrade anticipated serving the projected 45-50 million annual air passengers passing through JFK by 2015. The improvements include roadways and utilities, terminal buildings, parking facilities and new AirTrain Light Rail System interface that optimize the movement of passengers, cargo, tenants and employees while maintaining on-going airport operations.

The program consisted of these major elements:

- A new Air Traffic Control Tower
- Terminal Improvements, encompassing new terminal construction and complete redevelopment
- Interfaces between Terminal complexes and the AirTrain Light Rail System (providing multiple access points to the regional mass transit system)
- New Parking Facilities
- Reconfiguration of Airport Roadways and Terminal Frontages
- Upgrade and Modernization of the Airport Utility Infrastructure
- A 90-Megawatt Cogeneration Plant
- Private Investment Projects

URS responsibilities included program management; developing and implementing a cost management system; monitoring program and project schedules; controlling cost, including estimating; developing budgets; developing and implementing program policies and procedures; developing and maintaining a records management system; project management; financial

Project Values (Approx.):

- **Air Traffic Control Tower**
  $60 million
- **Roads**
  $510 million
- **Utilities**
  $173 million
- **Cogeneration**
  $257 million
- **AirTrain**
  $1.9 billion
- **Garages**
  $270 million
- **Terminal 1**
  $435 million
- **Terminal 4**
  $1.4 billion
- **Terminal 5**
  $800 million
- **Terminal 8**
  $1.1 billion

management; developing public/private partnership and privatization procedures; and public information for the program.

URS' ROLE / INNOVATIONS

Document Control: Used as an important Program tool, the document control system is designed to capture all program documentation for legal, fiscal, administrative and historical purposes. This system provides a method of document storage and retrieval for program coordination and management. *The success of the document control system at JFK led URS to develop similar systems for managing projects at major airports in Boston, San Francisco and Fort Lauderdale.*

MIS Solutions: URS, through its program controls group, established a state-of-the-art computerized document archiving system that was utilized by the Port Authority and the various project team members. In addition to establishing and administering a Local Area Network, URS developed and implemented an innovative computerized executive level Management report system: Aviation Project Management System, a Microsoft Windows-based program geared specifically for project management reporting. This proprietary information-management software operated on a local area network that links more than 200 workstations. The retrieval of data was simplified by the ability of project team members to obtain cost, schedule and project information.

In addition, the interrelationship of data was developed through graphical displays, such as bar charts of budgeted-versus-actual costs. The system accessed a comprehensive range of information, from the status of a design contract to the costs expended on a multimillion-dollar construction contract. Users could access self-contained modules including: Schedule Management, Budget and Cost Management, and Project Reference Materials.

Complementing these performance measurement systems was the utilization of a CADD system which enabled personnel to graphically display the construction phasing and planning efforts that were necessary to meld the construction of new facilities into the existing airport while minimizing the impact on ongoing operations and passenger flow.

Utility Management System (UMS): A Utility Management System based on a Geographical Information System, AutoCAD and a relational database has been developed to facilitate ongoing design and construction activities and provide a comprehensive record of utility systems. Data collected from various sources is assessed and analyzed. Anomalies or information deficiencies are identified and researched. Upon verification, which may entail field surveys, data is confirmed, reviewed for accuracy and completeness, and then incorporated into the UMS. This system has documented previously overlooked or abandoned utilities and airport managers have also found it to be very useful in the operation and maintenance of the various utility systems, including avoiding damage during construction.

Construction Contract Audits: On-site construction contract audits, were performed to confirm that the contractors were in compliance with the management plans that established the scope, cost, schedule, and quality goals for the program.

Public Information: Public information bulletins are prepared by URS in conjunction with Port Authority staff to inform primary users (e.g. taxis, buses, tenants, etc.) of upcoming changes that affect landside operations. Presentations are prepared for diverse audiences, ranging from domestic and foreign airport authorities, to airlines, professional and civic organizations.

Working in Occupied Facilities and 24/7 Operations: Virtually all of the construction described above, involved either the reconstruction or replacement of utilities, roadways or buildings that were, in most cases, operating at or near capacity. This was accomplished with extensive planning to provide swing areas and temporary facilities to minimize the disruption to airport operations.

Hazmat Abatement: JFK's terminal buildings were constructed in the 1950's and 60's and therefore required complete asbestos abatement of fire proofing, insulation of mechanical equipment and piping, building partitions and roofing materials.

Complex MEP Program: Work in the CH&RP included the staged removal and replacement of all chillers and boilers in addition to the installation of cogeneration equipment. Since it was not feasible to construct a new facility, all of this work had to be accomplished while the plant was kept in continuous operation.

Management of Multiple Design and Construction Teams: The numerous individual projects comprising this program were achieved with the combination of Port Authority in-house engineering, Redevelopment Team design consultants, design and construction groups engaged by airlines and DBOM agreements negotiated by the Redevelopment Program.

Security of Operations: As the largest international airport in the US, the FAA included JFK in the select group of airports required to comply with the highest standards for security. This meant that security associated with airport construction had to be distinguished among three categories; public areas, aeronautical operations and federal control zones. Extensive planning and coordination was required as construction regularly spanned across security zone boundaries.

NEWARK-LIBERTY INTERNATIONAL AIRPORT, MONORAIL EXTENSION
NEWARK, NJ

Services
Construction Management

Client
Port Authority of NY and NJ
Brian Hegarty, Senior Resident Engineer
(973) 622-0800

Project Value
$250 M (Ph 1); $150 M (Ph 2); and $30 M (Ph 3)

Dates
1994 – 2001

As Newark-Liberty International Airport grows to meet its increasing passenger volumes, numerous projects have been undertaken to improve the airport's terminal area facilities. Ranked among the Top 5 busiest international air gateways to the U.S., Newark Airport handles approximately 33 million passengers annually. URS was part of this improvement effort, providing construction management and project controls services for terminal and transportation improvements from 1994 to 2001.

In service since November 2001, the Monorail – North East Corridor Extension connects rail services operated by the New Jersey Transit Corporation (NJ Transit) on its North East Corridor (NEC) with the existing airport monorail that connects airport terminals to long-term parking and car rental facilities. Air passengers and airport employees are provided with additional links to rail transit lines from New York City, North and Central New Jersey including Amtrak service.

URS provided project controls and construction management services for the construction, retrofit, and expansion of the airport's monorail system. This 3.5-mile dual track people mover transports airport passengers and employees from north and south long-term parking lots and the northeast corridor rail station to each of the airport's three passenger terminals. URS was brought in when the monorail project began to experience schedule and budget problems.

URS assisted in developing recommendations to prevent further delays and cost escalations. Our services included overseeing and scheduling the work of contractors, engineers, and technicians; instituting engineering changes; providing project controls, including scheduling and reporting; assisting in the development of testing and commissioning; and ensuring that all contractual obligations are met.

URS' success on the initial 2.5-mile (Phase I contract) led to additional work on the 1-mile extension (Phase II) and finally the $50 million Guideway Retrofit Program (Phase III).

SECTION H

Proposed Management Approach

Section H

PROPOSED MANAGEMENT APPROACH

Management Objectives and Overview

URS has a thorough understanding of the nature of "Call-In" / Task Order Contracts by virtue of our performance on similar contracts with the Port Authority of New York and New Jersey (PANYNJ), as well as other agencies and authorities. We are currently providing these exact same services for the Port Authority under our Construction Management Services on a Call-In basis for years 2006-2010.

Because of the quick turnaround required on these assignments, the Management of this contract requires an individual with a diverse technical background, a through understanding of Port Authority operations, and a very hands-on approach to getting the work done. The primary goals of the Principal-in-Charge, Mr. David Beckett, PE, for this contract is to quickly identify the technical needs for a given assignment, to mobilize the necessary staff in a matter of a few days.

It is critical that the appropriate staff be made readily available to provide the skills required for each assignment. URS has a large, diversified resource pool to draw from on this contract. Mr. Beckett will have access to nearly 500 construction professionals and support staff available, in the NY-NJ Metropolitan area. In most cases, it will not be difficult to mobilize the staff necessary for each assignment. However, he has the authority to re-assign staff, where necessary, for short periods of time, should the need arise. To date, **URS has never failed to deliver the appropriate level of staffing on any of our assignments to the PANYNJ or any other client, including on any of our "Call-In", "On-Call", and Term Contracts**.

We have proposed a significant number of experienced URS EWR-based employees, our largest presence of URS staff under the current call-in CM contract, to ensure a smooth transition into projects assigned under this contract.

Although the specific scope of the assignments is undefined, the URS Team, with our extensive Construction Management experience, has a clear understanding of procedures that must be followed to successfully complete these assignments. The scope of services for construction management of the Authority's projects is well defined and outlined in the RFP. The chief goals for the **Construction Management Consultant Team** are clearly understood by URS in association with our subconsultants. Through a well-organized, aggressive approach, URS will work closely with the Authority's Engineers of Construction and Resident Engineers in developing an integrated team to manage all activities of the respective contractors and subcontractors, as required by the Authority.

As the Authority's Construction Management Call-In Consultant, URS will be focused on providing all staff and services necessary to assist the Authority in managing all phases of the projects as required and directed by the Authority. This will consist of generally providing construction management and inspection personnel to all assigned contracts at various facilities, as necessary.

Under our current construction management agreement with the Authority, URS has developed a comprehensive understanding of the Authority's protocols, procedures, needs and approach. The Authority and URS have achieved and continue to achieve significant success in managing the existing construction management program. **A fundamental source of that success is our ability to develop a seamless construction management organization that virtually eliminates the boundary between URS and Port Authority in-house staff**. To other participants and stakeholders, including facility staff members, tenants, contractors and patrons, we are collectively regarded as the Port Authority Construction Management team. The result is an efficient construction management organization that is able to effectively manage any challenge. We have proposed a significant number of experienced URS employees with significant PANYNJ experience employees to ensure a smooth transition into projects assigned under this contract.

A fundamental source of our success on Port Authority contracts is our ability to develop a seamless construction management organization that virtually eliminates the boundary between URS and the Port Authority in-house staff.

Technical Approach / Performance of Tasks

The responsibilities and functional relationships have been graphically indicated in the Project Organization Chart, found in *Section E – Resumes*. The Principal-in-Charge is responsible for the entire project execution. The Principal, assisted by the Resource Manager, will oversee all contractual agreements and assure that the necessary resources are available.

The Construction Management and Inspection Staff typically report to the Construction Managers or directly to the Authority Resident Engineers. Specific duties will be assigned to the inspection staff based upon the project assignments and tasks being performed. Our proposed staff has the ability to develop innovative solutions to emerging project conditions in any technical area. Further, our construction managers possess the construction knowledge and management skills to identify potential problems and provide problem resolution before they can impact the project.

URS has successfully performed these same tasks numerous times for the Authority through our ten consecutive years providing call-in CM services on such projects as Newark-Liberty, LaGuardia, JF, and Teteboro airports.

URS has successfully performed these same tasks numerous times for the Authority through our ten consecutive years providing Call-In Construction Management Services on such projects as Newark-Liberty, LaGuardia, JFK and Teteboro airports.

The following reflects URS' technical approach for each of the Tasks identified in the RFP.

Task A – Constructability / Bidability and General Engineering Review

The staff of construction and engineering specialists that URS offers the Authority are the best combination of talent for this task. The Construction Managers will coordinate all submittal review activities to assure comprehensive evaluation of the constructability, bidability and feasibility of the detailed design. We will establish an expedient turnaround timetable

for all submittals to ensure that no delay will occur as a result of our review activities. Comments will be clear, concise and technically accurate.

URS, with its depth of staff, will provide seasoned construction professionals to review and present recommendations on all technical as well as construction-related issues such as phasing, staging and MPT. Our team of professionals has exceptional experience on Ports, Rail, Bridges, Tunnels, Terminals, and Aviation projects through the metropolitan region. Our constructability assessment will include reviewing details to determine their clarity to construct and comment on materials and products being considered by the design team. URS also has the unique ability to assign designers in all disciplines to provide the technical interface with the Port Authority. Past and present assignments will allow URS to offer a staff that has the hands-on experience in reviewing documents while recognizing the importance of knowing the culture of the Port Authority in all finalized scopes of work.

URS constructability assessment will include reviewing details to determine their clarity to construct and comment on materials and products being considered by the design team.

Our efforts to provide an overall constructability and bidability assessment will assist the contractors in gaining a clearer understanding of each assignment scope of work. This will also result in the elimination of contingencies and assumptions that are included in many contractors' costs due to uncertainty in the scope of work.

Task B – Construction Staging

URS will prepare an overall construction staging and sequencing plan. The plans will clearly indicate the necessary work sequence, staging areas, construction access and property available for construction during the project. Led by the Authority's Resident Engineer and our Construction Manager we will employ the services of our technical experts to devise creative approaches to the various elements of the work. Significant issues for staging involve the means, methods and timing of the work. Our objective is to develop an aggressive but realistic approach to the work. Utilizing the developed plans, specific contract language for interim milestone completion dates will be suggested for inclusion in the contract bid documents.

It will be the contractors' responsibility to develop and implement detailed Construction Staging and Work Plans in compliance with the contract documents. It is not intended that the staging plans be overly restrictive as to eliminate the creativity of the prospective bidders. In many instances, construction contractors have developed unique approaches to project execution, which have translated into cost and schedule savings. URS will work with the Authority, the contractor and the designer to ensure the most cost effective staging plan.

As Construction Managers, URS will draw upon the collective knowledge and experience of our site staff to review, assess and approve the contractor's proposed Work Plans. Should deficiencies exist,

we will work with the contractor to develop workable solutions, which comply with the contract while maintaining an efficient work site.

Some of the key issues which typically require significant attention in review include:

- Type, placement and usage of major construction equipment.
- Compliance with environmental issues, including water runoff and silt controls.
- Utilization of available property as prescribed without disruption to facility operations and patrons.
- Delivery, movement and storage of construction materials.
- Location and extent of temporary construction facilities.
- Staging of work along right-of-way, roadways, airfields, etc.
- Interface and staging of work.
- Implementation of dust control, noise control, and vibration control measures.

On the Southern Access Roadway Project at Newark-Liberty International Airport, work was performed while maintaining access of 18,000 vehicles per day, which required complex staging and aggressive scheduling.

Once acceptable Construction Staging Plans and/or Work Plans are agreed upon, URS field staff will monitor, verify and report compliance. During the course of construction, it may become necessary or desirable for the Authority and/or the contractor to initiate modifications to the staging and work plans. In such an event, the URS Construction Manager, under the direction of the Authority's Resident Engineer, will assist the contractor in developing acceptable alternatives for the approval of the Authority.

Our team of schedulers, engineers, and seasoned construction professionals will review each facility to determine the most effective and productive plan to execute the work. Consideration of each facility's operational requirements and restrictions will be carefully reviewed. Suggestions for the following components will be addressed for each assignment:

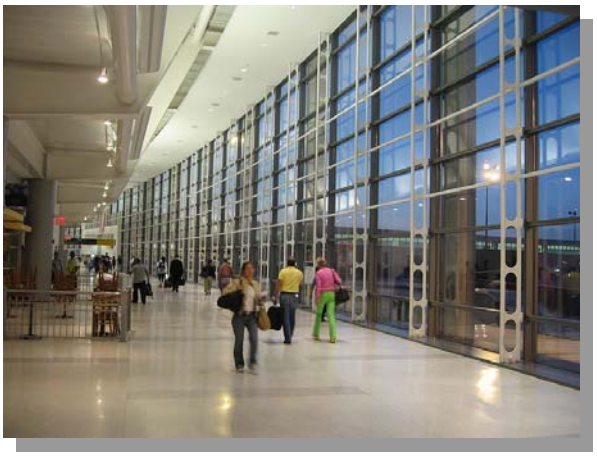
- Utility shutdown
- Track outages
- Swing space
- Accommodations
- Temporary construction
- Storage and staging areas
- Phased construction
- Access points
- Construction zones
- Emergency routes
- Security check points

These components indicate a few of the overall construction process elements that will be planned for each facility to limit the impact of construction on facility operations and the Authority's patrons.

URS will place a great emphasis on reviewing the characteristics of each Authority facility and evaluating the staging needs, as each facility will have its own special requirements.

Task C – Schedule Development and Monitoring

URS will support the Authority by developing a Project Construction Schedule indicating major components of work to be accomplished. With input from the Engineer of Record and the Authority, we will prepare a computer-generated schedule integrating the work for the entire contract period into the overall Project Construction Schedule in CPM format. This schedule will be submitted to the Authority for review and approval. It will not replace the construction contractors' schedule preparation and submittal requirements. It will, however, incorporate all requisite Port Authority and external agency reviews / approvals (e.g., permits, approvals), bid cycles for the contract packages, construction phasing, staging of all work activities, and temporary relocation/workaround activities.



By developing a CPM schedule with this level of detail, the Authority's Engineer of Construction and the Construction Management Team will possess the necessary information and tools to evaluate the contractor's schedule for accuracy, feasibility and completeness.

The scheduling on projects should be developed on at least two levels, a summary level in which various project milestones are accomplished and a detailed level in which each subcontract is examined and tied to the overall project schedule. The activities defined in each schedule will be coordinated so the impact of changes in the detailed network can be easily represented in the summary schedule.

At each phase, **schedules will be closely coordinated with project participants and stakeholders** in order to attain consensus on preliminary concepts, identify opportunities for schedule compression and fast-tracking and establish desirable contract durations.

Our scheduling projects have included projects involving all facilities such as airports, transit, ports, bridges, tunnels, terminals, and a multitude of building facilities.

The detailed CPM schedules submitted by the contractor for procurement, construction, and installation will form the basis for monitoring the progress of the work. We recommend bi-weekly meetings organized by Authority or our Construction Managers, under the guidance of the Authority's Resident Engineer, with the contractors to assess schedule progress and identify problem areas using the detailed schedules submitted by the contractor.

The construction contract documents will include the necessary language to require the contractor to prepare, maintain and update detailed progress schedules. Once a month, the contractor will be required to generate CPM analysis reports, which will then be reviewed against the summary project schedules to identify variances requiring the development of work-around of other corrective actions. URS will provide a

complete analysis of the contractor's monthly submittal for presentation to the Authority. Our staff will work closely with the contractor to develop alternative approaches to the work schedule, as situations require. We will assist the contractor in correcting any schedule deficiencies and expedite progress.

URS, with its team of schedulers, has been working on Port Authority projects throughout the metropolitan area. Our schedulers utilize Primavera CPM software on many of our projects, and it has successfully provided results as an effective management tool. Our scheduling projects have included projects involving all facilities such as airports, transit, ports, bridges, tunnels, terminals, and a multitude of building facilities. Our detailed project schedulers have included manpower allocations, cost loading, look aheads, and "what-if" scenarios to assist both our clients and their contractors in managing the network of construction activities required to achieve successful results.

URS, with our team of knowledgeable schedulers, will provide the necessary information and recommendations.

Task D – Quality Assurance Inspection

URS, as one of the largest A/E/C firm in the nation, has an enormous resource of technical knowledge. With nationally recognized experts in every discipline, we can meet any requirement, no matter how specialized. In addition, and, more importantly for this specific assignment, we have a workforce that is well in excess of 3,000 professionals in New York City and the immediate surrounding area. Therefore, we have, right here, resources that will be more than ample to meet the Authority's needs and we expect to be able to meet them by drawing exclusively on our local workforce. In all of our Port Authority assignments whether under call-in contracts or under contract for a particular project, URS has never failed to deliver the proper staffing levels necessary to deliver the project on time and within budget.

URS is fortunate to have worked successfully on Port Authority projects for more than 20 years.

URS also is fortunate to have worked successfully on Authority projects for over 20 years. During that time we have had multiple assignments at airports, rail facilities, port facilities, terminal facilities and both bridge and tunnel facilities, on projects that cover the full range of the Authority's transportation portfolio. Therefore we have a workforce that is specifically familiar, not only with the Authority's technical requirements, but also with the Authority's culture, protocols for project execution, control systems and all databases. This workforce has a history of working collaboratively and effectively with Authority personnel.

URS will provide comprehensive quality management and inspection services to encompass all construction management and contractor activities for the project effort. This effort will be in accordance with the Authority's program and QA / QC programs implemented by the contractor.

The Quality Management and Inspection program will cover all aspects of the project, from initial review of specifications and drawings through procurement of materials. This will include shop surveys and shop inspection for major components and critical items, and an on-site program of test, inspection, and documentation during the construction phase of the project.

Activities affecting quality will be clearly defined and accomplished under suitable controlled conditions. Responsibilities and authority for administration of quality assurance / inspection and completion of work along with the standards of quality to be applied will be clearly defined.

The major elements of the program will include the following:

- Performance (as required) of surveys, pre-production meetings, and source inspections on critical and long-lead-time equipment and material at seller's facilities and reporting on the progress of fabrication to provide current planning information.
- Document control verifications to ensure that the latest applicable design and working documents, including changes, are available and used.
- Daily and continuous inspections of work in progress to ensure compliance with specified requirements of quality and workmanship including maintenance and protection of traffic. .

- Monitoring of on site materials, including the inspection and testing of materials, to ensure compliance with specification requirements, referenced codes and standards, and approved submittals.
- Surveillance of traffic control and environmental program implementation.
- Identification, control, and resolution of unsatisfactory or nonconforming items and services to prevent their inadvertent or uncontrolled use or installation.
- A corrective action and quality accountability system which includes periodic contractor meetings to resolve problems affecting quality.
- Records retention for identification, collection, retention, and retrieval of required project quality records.
- Final inspections for system turnover.
- Review and verification of as-built construction drawing.

Of primary concern to the Authority, URS and the contractors will be the efforts to minimize exposure of workers and the public to health and safety hazards. There is no single issue that is more important to the successful execution of this project. Every element of project control, including quality, cost and schedule is enhanced by a safe work place. At URS, we consider "safety first" on all of our construction and construction management projects. Port Authority projects involve a wide array of safety issues because of work on and adjacent to active transportation facilities: airports, tunnels, bridges, terminals, ports, and rail. The URS Team will institute a proactive approach to ensure project safety compliance and lead the project through safe completion of all construction work activities.

There is no single issue that is more important than safety, for the successful execution of any projects, particularly since a significant portion of the construction activities is likely to take place adjacent to active transportation facilities: airports, tunnels, bridges, terminals, ports, and rail.

It is expected that the contractor will be responsible for the preparation and implementation of a comprehensive Health & Safety Program addressing every element of the work, including safety in design and construction. The Program must address safety as it relates to the long-term safe operations and maintenance of the projects. Safety during construction is paramount. A significant portion of the construction activities will be on or adjacent to active airports, bridges, tunnels, roadways, terminals, ports, and railroads. The contractor cannot allow the safety of the staff workers and the traveling public to be compromised for any reason. URS will review, evaluate and recommend approval of the contractor's Health & Safety Program in the initial stages of the project. During construction, we will monitor its implementation for compliance with the approved Program.

Task E – Contract Administration

A key element in the success of the Authority's construction projects will be controlled coordination of interfacing work activities between the contractors and all outside agencies. Coordination of the daily activities will be the chief duty of the Construction Managers on behalf of the Authority's Resident Engineer who will provide the one-to-one link with the specific contractors performing the actual work, and the inspection staff who will provide the Construction Managers with specific information regarding the detailed performance of the work of the contractors. The inspection staff will ensure that all work conforms to the applicable codes, specifications, and drawings.

URS will approach this task as "coordination" of the work, that is, serving as support to, as opposed to "doing" the work. We clearly appreciate the benefits of utilizing and relying upon experienced contractors to actually perform the work. Our staff has a keen understanding of direct construction as well as construction management and provides an advantage in coordinating and guiding the construction contractors. The individual who knows the contractor's side of the business has proven particularly capable of coordinating the work on behalf of a project's owner.

Our staff has a sharp understanding of direct construction as well as construction management and provides an advantage in coordinating and guiding the construction contractors.

Regularly scheduled meetings, on a biweekly basis, will be established with each contractor for purposes of ensuring the proper coordination of upcoming work, monitoring scheduled progress, updating the CPM network diagrams, monitoring equipment and material deliveries, developing input data for the monthly computer reports, and most importantly, detecting any schedule slippage at an early stage and developing recommended corrective action to be taken in support of project milestones.

Other meetings of involved participants will be scheduled on a case-by-case basis when determined necessary by the Construction Managers or the Authority's Engineer of Construction.

Purposes of these meetings would include:

- Coordinating interfaces between the Authority, the contractor/ subcontractors and outside agencies with pertinent jurisdictions
- Addressing schedule slippage

- Ensuring that requisite work quality is achieved
- Minimizing the impact of construction on the project environs
- Addressing any other issues or problems affecting the success of project

Accurate minutes will be recorded for each meeting to report the date, time, location, purpose, participants, discussions, and conclusions / agreements. When appropriate, the minutes will also include action items specifying the recommended courses of action and time frames agreed to by the meeting participants. The minutes will be reviewed by the participants, and copies will be distributed to the Authority and participants for follow-up as appropriate.

URS will utilize the Authority's procedures that assign responsibility and establish the level of authority for initiating, evaluating, accomplishing, and approving changes. These procedures are precise and provide for a full evaluation of the impact of the change, as well as emphasize the need to minimize changes.

After contract award, contract changes may be required due to items such as scope of work changes, specification of drawing revisions, changes in labor rates, or price adjustments. These changes will be reviewed and, if approved, will be formalized as part of the contract.

During all stages of our work on our as-needed PANYNJ for major works programs, URS Project Managers employed the Authority's Project Controls (Primavera, Expedition, CAPTRAK, PPW, and MPR summaries) to monitor and report on a monthly basis.

Prior to submitting a field change for review and approval, the construction manager will be required to identify the reason for the change, the schedule and cost impact, the revised payment schedule, resources (materials and manpower), and methods for accomplishing the change. All supporting documentation justifying the need for the change will then be forwarded with the change request to the Authority for review and approval.

The Construction Managers will work with the Authority staff and the contractor to develop an itemized breakdown of the construction cost elements consistent with the progress schedule. Sufficient detail will be established to ensure monthly payment applications by the contractors are representative of actual construction progress. On a monthly basis, the Construction Managers, with input from the field staff, will perform a quantitative assessment of actual progress and reach agreement with the construction contractor prior to submittal of the payment application. URS will support the Authority with:

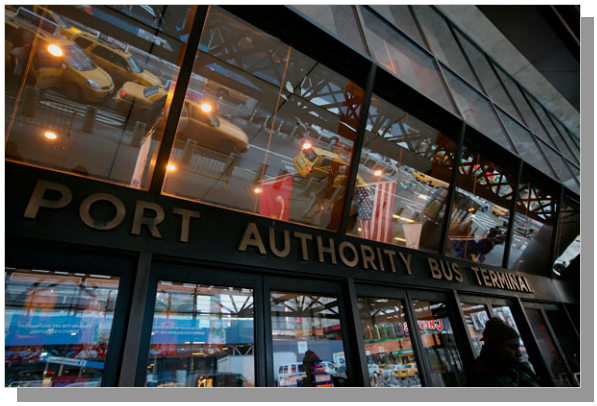
- Determination of completed work in place
- Accurate and complete supporting documentation
- The URS Team will comply with Port Authority procedures for the preparation, submittal, review, and approval of contractor invoices. The Construction Managers will review the vouchers for proper format. The team will review the quantities in place and/or percent complete as of the voucher date and will also check the material inventories if allowed for partial payment.

The Construction Manager will check for supporting documentation such as certified payrolls, paid invoices for stored materials, subcontractor releases and waivers. They will also check deductions for retainage, previous payments, and other reserves prior to recommending payment of contractor requisitions. Monthly cost reports will be updated to reflect the value of work completed by the contractors and the value of additional work to be performed.

Our Office Engineer will be responsible for the maintenance of the project files and general office administration. Working with our Construction Managers, the Office Engineer will establish a detailed correspondence log, which will provide the Construction Managers and the Authority with a complete status of all contractual correspondence. We will utilize Expedition software package as the document control system. In addition to correspondence management the system provides for shop drawing management, request for information control, budget tracking and control, change order administration, etc. making this system the management information system of choice for URS.

Task F – Cost Engineering / Estimating Services

URS is fully prepared to provide all required cost estimating services needed for the Authority's projects. We have a team of professional cost estimators who have successfully completed numerous transportation projects in the New York / New Jersey metropolitan area. They are experienced in all aspects of cost estimating, from pre-design conceptual to material take-offs and unit price estimating. URS will avail itself of all the latest technology in the industry to assure the Authority of the highest quality cost estimating services.



Other resources that URS typically provides on our construction management assignments include:

- Material testing services
- Surveying services
- Field office/trailer complex

Task G – Resources

URS is currently providing the resources necessary to support the current construction management activities at EWR. In addition, we are also providing supplemental construction management staff at JFK, PATH and Teterboro Airport.

On behalf of the Authority, and as an extension of its staff, URS:

- Provides OSHA 10 hour training to all field staff
- Provides staff training in Concrete, Steel Bolting and Masonry Special Inspection
- Leases job vehicles
- Obtains and administers cellular phone and radio communications services
- Provides and/or maintains other services as may be required

All such resources require the specific authorization of the Authority and are provided as a direct expense with no mark-up.

Summary

The URS Team offers the Authority an ideal combination of technical, managerial and administrative talent for this Call-In Construction Management and Related Technical Services contract. We are enthusiastic about this opportunity to continue to serve the Authority and the public on its ambitious program to improve its facilities and properties. URS will provide every resource that may be required to assist the Authority in assuring that the PANYNJ projects are an unconditional success. We look forward to our selection as your continued Construction Management Consultant.

SECTION I

URS Affiliates

Section I

URS AFFILIATES

URS Corporation (a Nevada corporation), is licensed to provide services in the state of New Jersey. URS Corporation – New York is licensed to provide services in the state of New York. URS Corporation – New York is 100% owned by URS Corporation, the Nevada Corporation.

The companies listed below, also owned by the Nevada Company, are also affiliates of URS Corporation – New York.

Geotesting Services, Inc. (a California corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEIN [redacted]

URS Construction Services, Inc. (a Florida corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEIN: [redacted]

URS Corporation – Ohio (an Ohio corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEIN [redacted]

URS Corporation Great Lakes (a Michigan corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEIN: [redacted]

URS Greiner Woodward-Clyde Consultants, Inc. (a New York corporation)
600 [redacted]reet, 25th Floor – San Francisco, CA 94111
FEI [redacted]

URS International, Inc. (a Delaware corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEIN [redacted]

URS Architecture – Oregon, Inc. (an Oregon corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEIN [redacted]

URS Alaska, LLC (an Alaska limited liability company)
911 West Eighth Avenue – Anchorage, AK 99501
FEI [redacted]

LopezGarzia Group, Inc. (a Texas corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEIN [redacted]

In addition, the Nevada Corporation is the partial owner of the following:

URS Architects / Engineers, Inc. (a New Jersey corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEIN [redacted] 33.33% ownership – owned from 1.15.02 to present

URS Corporation Services (a Pennsylvania corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEI [redacted] 33.33% ownership – owned from 12.28.01 to present

URS Corporation AES (a Connecticut corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEIN [redacted] 25% ownership – owned from 12.28.01 to present

Advatech, LLC (a Delaware limited liability company)
1428 [redacted] A – Chattanooga, TN 37402
FEIN [redacted] 60% ownership – owned from 7.15.02 to present

URS Corporation – New York itself owns 100% (is the sole shareholder) of the following subsidiary:

E.C. Driver & Associates, Inc. (a Florida corporation)
600 Montgomery Street, 25th Floor – San Francisco, CA 94111
FEIN: [redacted]

SECTION J

Conflicts of Interest

Section J

CONFLICTS OF INTEREST

URS Corporation

URS Corporation (URS) has no conflicts of interest or potential unmanageable conflicts of interest.

To the best of our knowledge, URS or any of its affiliates or parent (or any officers, directors, principals or key employees thereof); or any other entity, by whom URS, is employed, under contract with or otherwise provides service to, has personal, business or financial interest which is adverse to or otherwise in conflict with any interest of the Port Authority of New York and New Jersey and / or subsidiaries and affiliates, as well as with this project under RFP #22094.

URS will seek to avoid any and all potential conflicts of interest between and among URS, its associated firms for this project, and contractors who are performing or will be selected to perform services for the Port Authority of New York and New Jersey. URS will keep the Authority informed of any potential conflicts of interest that may arise and provide complete disclosure to the Authority, which may create such conflicts of interest.

URS is committed to serving the Port Authority of New York and New Jersey, in such a manner that work performed at the project site will not be compromised, and that URS will maintain its independence and dedicated service to the Authority during the term of the contract.

SECTION K

AgreementExceptions

Section K

AGREEMENT EXCEPTIONS

Exceptions taken by URS Corporation – New York to the PANYNJ Standard Agreement included as part of this RFP #22094, are outlined in a separate letter, as instructed in the RFP. The letter containing the exceptions follows on the next page, for your convenience.

URS

August 23, 2010

Tim Volonakis
Manager, Professional Technical and Advisory Services Division
Procurement Department
The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, New York 10010

Re: Exceptions to the Standard Agreement related to RFP#22094
Performance of Expert Professional Construction Management and Related Technical Services
As Requested on a "Call-In" Basis during 2011 through 2014

Dear Mr. Volonakis:

We have reviewed the contract language and request that the following changes be considered:

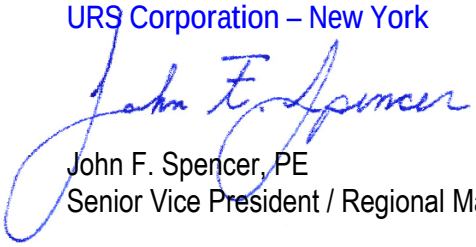
1. Insurance provisions (as provided by our insurance broker):
   Section 26. A 1.: Insert "and Workers' Compensation & Employers' Liability" after "Professional Liability" in parentheses in the fourteenth line. Delete the second to last sentence in its entirety. (URS has an ISO Commercial General Liability policy). It is written on form CG 00 01 10 01. It, like all other ISO General Liability policies, contains many exclusions other than the exclusion for Professional Services. The ISO General Liability policy is a base form. Exclusions and endorsements are added to the policy to tailor coverage to a particular insured in a particular industry. It is not possible to provide an unendorsed ISO General Liability policy form.)
   Section 23. D. 1.: Delete "including the provisions establishing premiums." URS does not release its premium information to third parties.

2. Indemnification provisions
   Section 25, first paragraph: Delete "or willful intentional".
   Sections 22A and 22B: Insert "Consultant's or Subconsultants' negligent" before "performance".
   Section 22D: Insert "bodily" before "injuries" on second line. Replace "of any kind whatsoever arising in connection with the performance," with "to tangible property to the extent arising or alleged to arise out of or in connection with the Consultant's or Subconsultants' negligent performance."

3. Somewhere within the Agreement, URS would like to include the following language:
   "Furthermore, the Contract Documents shall require Contractor to name the Authority and Consultant as Additional Insureds on the General Commercial Liability and Automobile Liability Insurance Policies obtained by Contractor."

We are available to discuss these requested changes at your convenience.

Very Truly Yours,
URS Corporation – New York



John F. Spencer, PE
Senior Vice President / Regional Manager

URS Corporation
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Tel: 212.736.4444
Fax: 212.629.4249
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URS

AECOM Transportation

Proposal **October 21, 2010**

Submitted to
The Port Authority of
New York and New Jersey

Submitted by
AECOM USA, Inc.
In association with
Tishman Construction Corporation

Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014

RFP No. 22388

AECOM
605 Third Avenue
New York, NY 10158
www.aecom.com

212.973.2900 tel
212.972.0682 fax

October 21, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

Attention: RFP Custodian

Re: Performance for Expert Professional Program Management Services
As Requested On a "call-in" Basis During 2011, 2012, 2013, 2014, RFP No. 22388

Dear Sir/Madam:

AECOM USA, Inc. (AECOM) is pleased to submit our proposal in response to the subject request for proposal. **AECOM** is an industry leader locally, nationally and globally in the provision of program management services for large complex transportation projects, and we have provided Project and Program Management support services to the Port Authority of New York and New Jersey ("the Authority") on an extension of staff basis since the inception of this organizational business model in 1997. At present, we are providing Project Management and support staff under the third "Call-in" contract, which was issued in 2007.

The ongoing efforts of the Authority to invest in their facilities and infrastructure are critically important to the regional economy. AECOM has been a committed partner to the Authority in their efforts and we are delighted to be currently providing professional; project management and controls staff all of whom are assisting in implementing projects for the various Line Departments. We assure you that **AECOM** possesses the proven ability to continue providing quality Project and Program Management services as needed by the Authority for this next series of assignments. To provide continuity from our current services and for your anticipated future needs. **Mr. John Azzaro, PE,** who is well known to the Authority and served as our Program Coordinator previously, will serve as Officer in Charge under this engagement. Mr. Azzaro brings over 30 years of professional engineering and project management experience, much of it on Authority projects, including his new involvement with Terminal A Redevelopment at Newark Airport. John will provide oversight and continue to ensure that the full and most appropriate resources of AECOM are available to respond to any assignment and that the Authority's needs are being met.

Our contract and as requested "call-in" support services will be led by **Program Coordinator, Mr. Kevin Pierce, PE**, who has over 25 years of experience in project and program management for large-scale infrastructure projects, including ports and harbors, dredging and marine facilities, transportation infrastructure, commuter rail, freight rail, site developments and security programs. Mr. Pierce is very familiar with the Authority's business practices and has worked closely with Authority staff over the past 10 years in provision of as needed "call-in" engineering services for Newark Airport Redevelopment, the high profile Security Capital Program as well as the World Trade Center Vehicle Security Center and Global Container Terminal at Port Jersey. Mr. Pierce will provide the necessary coordination functions to administer the contract and coordinate the activities to deliver and support high quality Project Management candidates working closely with the Authority to deliver the Capital Plan.

AECOM's Project Managers have successfully delivered hundreds of projects under the leadership of the Authority's Program Managers to support the strategic objectives of the Authority. As an extension of staff, we fully embrace the Authority's recent organizational changes and have a clear understanding of the new project delivery model. Our current on-site team of eight Project Managers and Project Controls staff who are being proposed to continue their assignments have a full understanding of the reorganization and are ideally suited

to continue to support the Authority's efforts. AECOM's available Project Manager pool includes high quality individuals with experience in all types of transportation and infrastructure projects, including highways, bridges, tunnels, rail, transit, aviation, marine and other public facilities. Our extensive experience in program management makes us an effective partner to the Authority on many regional transportation capital programs. AECOM is providing program management services on numerous regional facilities and transportation programs including the Tappan Zee Bridge, Belt Parkway Bridges Replacement, Lincoln Center Redevelopment, Yankee Stadium and Delaware River Joint Toll Bridge Commission. The Authority will benefit from this experience - especially with regard to lessons learned, industry best practices, and through access to AECOM's network of program management experts.

Our Team is composed of local knowledgeable and experienced management professionals with a strong New Jersey/New York presence that are proven service providers to the Authority. AECOM USA, Inc. will act as the prime consultant, with the following subconsultant firms having extensive experience and capabilities in the planning, design and construction transportation facilities. Specifically, the AECOM Team is comprised of:

Tishman Construction – construction cost estimating, scheduling and constructability
Ellana, Inc. (WBE) – cost management and value engineering
G2 Project Planning – cost estimating, project scheduling and value management
Industria (MBE) – project management and document control
NIA Technologies Corporation (MBE) – cost control, document management and control

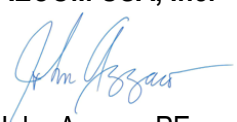
In short, the AECOM Team brings:

- **Technical knowledge and understanding** of all the Authority's facilities
- **Flexible staff resources** to manage complex projects
- **A depth of local NJ/NY-based talent** with extensive project management expertise **A national reputation** for program management excellence
- **A proven record of working closely with the Authority** on similar integrated project team assignments
- **Key personnel with directly relevant experience** and established Authority working relationships
- **Continuity of unmatched project and program management services**

Our team has been structured to provide the Authority with the full professional services necessary to provide program and project management services as defined in the RFP. We take pride in our success in having established a long working relationship on many of the Authority's significant programs. The Authority has always been, and will continue to be, our firm's top priority.

Please do not hesitate to contact me at ([redacted] if I may be of additional assistance. In the event that you wish us to make a presentation, please contact John Azzaro at [redacted] I can truly say we have the best experience, the best team, and the strongest desire to support you on this project. We have proven this over the last twelve years as we have assisted you in the design and construction process under this project management assignment.

Very truly yours,
AECOM USA, Inc.



John Azzaro, PE
Vice President

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Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014
RFP No. 22388

Section A. Attachment B

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

AECOM USA, Inc.
Company

Signature

John Azzaro, PE, Vice President
Title

October 21, 2010
Date

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY. DO NOT RETYPE.

AECOM

Section B.
Attachment C

Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014
RFP No. 22388

Section B. Attachment C

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   AECOM USA, Inc.

2. Business Address (to receive mail for this RFP):

   605 Third Avenue

   New York, New York 10158

3. Business Telephone Number: 212.973.2900

4. Business Fax Number: 212.972.0682

5. Firm website: www.aecom.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 05 / 03 / 1980

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See Section H Affiliates.

9. Officer or Principal of Firm and Title:

   John Azzaro, PE, Vice President

10. Name, telephone number, and email address of contact for questions:

    John Azzaro, PE, Vice President, 732.564.3304; email: John.Azzaro@AECOM.com

    Kevin Pierce, PE, Vice President, 917.647.3775; email: Kevin.Pierce@AECOM.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

AECOM

Performance of Expert Professional
Project Management Services
as Requested on a "Call-In" Basis
During 2011, 2012, 2013 and 2014
RFP No. 22388

Section C. Qualifications and Experience of Staff

Section C. Qualifications & Experience of Staff

AECOM has assembled a team of seasoned professionals that are highly proficient in the project management of rehabilitation and new construction of all types of transportation facilities and infrastructure. We have provided Project and Program Management support services to The Port Authority of New York and New Jersey (PANYNJ) on an extension of staff basis since the inception of this organizational business model in 1997. Over the course of the past 13 years, we have provided over 30 qualified project management candidates to the PANYNJ for multiple assignments. At present, we are providing Project Management and support staff under the third call-in contract awarded in 2007.

Serving as the Officer-in-Charge will be **Mr. John Azzaro, PE**, who brings over 30 years of professional engineering and project management experience with much of this experience on PANYNJ projects. He will ensure that the full and most appropriate resources of AECOM are available to respond to any assignment and that the PANYNJ's needs are met.

Mr. Kevin Pierce, PE, our proposed Program Coordinator, has significant experience in project management, civil engineering, and construction for large-scale projects, including ports and harbors, dredging and marine facilities, transportation infrastructure, commuter rail, freight rail, site developments and security programs. Among his extensive program management experience, Mr. Pierce's PANYNJ experience includes: New Jersey Airports Engineering Services on an "As-needed" Basis; Security Capital Program; and Global Container Terminal, Port Jersey and the World Trade Center Vehicle Security Center. As Project Coordinator, Mr. Pierce will act as liaison between the PANYNJ and the AECOM Team. Mr. Pierce is a well known and accomplished Project Manager and has delivered many complex, high quality projects for the PANYNJ under its capital programs as well as other major port and agency clients.

In support the strategic objectives of the PANYNJ, the AECOM Team Project Managers have successfully delivered hundreds of projects for the PANYNJ over the past 12 years under the leadership of the PANYNJ's Program Managers. As an extension of staff for the PANYNJ, we fully understand and have the first-hand in-depth knowledge of the PANYNJ's organization and its project delivery model. Our current on-site team of Project Managers and Project Controls staff are being proposed to continue their commitment to supporting the PANYNJ's project delivery needs. Our team consists of more than 40 well versed Project Managers. Due to the RFP page limit, we have highlighted the relevant project experience of key staff that are currently supporting the PANYNJ on-site or who have supported the PANYNJ in the past. Below are profiles of some of our Project Managers, followed by a Summary Matrix of project experience of all proposed staff. (** denotes their years of experience in the relevant field*)

Detailed resumes of our key peronnel are included in the end of this section.

Paul Giovanelli, PE, Project Manager			***37 yrs****
PANYNJ	Brooklyn Cruise Terminal Shore Power	$15M**	2010
PANYNJ	Port Street Capacity Improvements	$70M	2009-2010
PANYNJ	McLester Street Widening (Phase 4 – PE Roadway Improvement Program)	$20M	2007-2010
PANYNJ	North Ave/McLester Street Curve Realignment (Phase 3 – PE Roadway Improvement Program)	$15M	2006-2010
PANYNJ	ExpressRail Second Lead Track and South Bay Ave	$20M	2003-2009
Edward Hammond, PE, Project Manager			***34 yrs***
PANYNJ	LGA Rehab of CTB Air Handler Units	$4.4M	2008-2010
PANYNJ	LGA Upgrade HVAC in CTB East	$1.4M	2009-2010
PANYNJ	LGA Rehab of Sanitary Ejector Pits at CTB	$8.4M	2008-2010
PANYNJ	LGA Upgrade HVAC for Hangar 7 Maintenance	$2.4M	2008-2010

**M=Million; B=Billion

Paul Adams, PE, Project Manager			***30 yrs***
PANYNJ/ PATH	PATH Tunnels E & F Interior Strengthening	$60M	2007-2010
PANYNJ	Security Capital Program Livelink Development & Support	n/a	2004-2007
Jerry Allerdings, PE Project Manager			***30 yrs***
PANYNJ	EWR Fire Alarm Upgrade		2009-2010
PANYNJ	EWR Rehab of Satellite B3 Feeders & Switchgear	$2.55M	2009-2010
PANYNJ	EWR Replacement of Hot Water System Pumps	$11.5M	2009-2010
PANYNJ	EWR Rehabilitation of Switch House No. 2	$2.8M	2008-2010
Pascack Valley Hospital	New Ambulatory Services Wing	$28M	2005-2008
Fredrick Eilinger, Jr., PE, Project Manager			***32 yrs***
PANYNJ	EWR Terminal B Fire Alarm Upgrade and Replacement	$1.95M	2009-2010
PANYNJ	EWR Terminal B Rehab. of Mechanical and Electrical Systems	$11M	2010-2012
PANYNJ	Upgrade of Electrical infrastructure for Runway Switch House #2	$2.8M	2008-2010
PANYNJ	Lincoln Tunnel Ventilation Bldgs Structural Rehab.	$1.5M	2003-2006
PANYNJ	Upgrade of Fire Sprinkler System for Lincoln Tunnel	$2M	2003-2006
PANYNJ	Lincoln Tunnel Traffic Control Center	$2M	2003-2006
PANYNJ	Lincoln Tunnel/PABT Automated Traffic Advisory Signage System	$1.5M	2003-2006
L. David Conger, PE, Project Manager			***19 yrs***
PANYNJ	JFK 13R-31L "Bay Runway" Reconstruction and Rehabilitation	$348M	2008-2010
NJ TRANSIT	Access to the Region's Core Mass Transit Tunnel	$8.7B	2007-2009
PANYNJ	JetBlue Airways, Terminal 5 Airside Improvements	$700M	2005-2008
NY Mets	Citifield Stadium (site and utilities)	$600	2005-2008

Indhira A. Figuereo, Project Manager			***11 yrs***
American Airlines	Terminal 8 Reconstruction	$1.4B	2007-2009
Lincoln Center	Lincoln Center Harmony Atrium Revitalization	$15M	2005-2010
The City of Glen Cove	Ferry Terminal Water Borne and Site Improvements	$15M	2008-2009
USACE	West Point DOL Motor Pool Relocation	$50M	2007-2008
LAJH	UN Libya Mission Bldg. Renovation	$48B	2007-2012
Mike Garbolski, PE, Project Manager			***29 yrs***
PANYNJ	WTC VSC and Tour Bus Parking Facility	$TBD	2009-1010
PANYNJ	EWR Terminal B Bollard Protection	$6.8M	2007-2009
PANYNJ	Perimeter Strengthening, LaGuardia, JFK and EWR Airports	$25M	2007-2009
PANYNJ	Port Ivory ExpressRail	$27M	2003-2007
Kenneth Bobetsky, PE, Project Manager			***28 yrs***
PANYNJ	AirTrain Program	$1.9B	1998-2003
PANYNJ	New York Airport Access Program	$400M	2007-2009
FTA	South Ferry Terminal Station, PM Oversight	$500M	2007-2009
FTA	Fulton Street Transit Center	$1.4B	2007
George Greenberg, PE, Project Scheduling			***38 yrs***
PANYNJ	JFK 13R-31L "Bay Runway" Reconstruction and Rehabilitation	$348M	2007-2010
PANYNJ	JFK Schedule for Replacement of the Bay Runway	$348M	2007-2008
PANYNJ	EWR - Airside Master Program Schedules	$500	2007-2008
PANYNJ	EWR – Terminal B Construction Projects Schedule Updates	$150	2007-2008
PANYNJ	EWR – Terminal B Mid and Upper Levels	$40M	2007-2008
PANYNJ	LGA Airside Paving Project	$50M	2007-2008

Borys Kekish, PE, Project Manager			35 yrs
PANYNJ	Delta JFK Redevelopment Program, Terminal 4 Headhouse Expansion and Renovation	$350M	2010
PANYNJ	Various JFK projects: Substation Upgrade; Airport Fueling System Upgrade; Roadway Rehab; Security Improvement; Parking Garage Elevators/Canopy; EMAS; Traffic Safety Improvements; Emergency Airline Feuling Shut Down, etc.	$250M	1998-2010
PANYNJ	LGA Projects: 102 St. Bridge Water Main; New Airport Roadway/ Pedestrian Signing; CTB Concourse Modernization; Runway Deck Protection/ Preservation, etc.	$50M	1998-2003
Mark Linkowski, PE, Project Manager			**14 yrs**
PANYNJ	JFK 13R-31L "Bay Runway" Reconstruction and Rehabilitation	$348M	2008-2010
Lou Rondinello, PE, Project Manager			**25 yrs**
PANYNJ	Perimeter Strengthening, LaGuardia, JFK and EWR Airports	$25M	2007
PANYNJ	JFK Guard Post Hardening	$10M	2005-2008
PANYNJ	EWR Guard Post Hardening	$10M	2003-2007
PANYNJ	JFK, LGA, EWR Perimeter Intrusion Detection System (PIDS) Planning	$120M	2004-2011
PANYNJ	JFK & LGA Security Buoys and Piles	$1M	2002-2005
PANYNJ	EWR Pipe Gallery Security Fence	$5M	2003-2004
PANYNJ	EWR South Fuel Farm Security Fence	$2M	2003-2004
Gerald Alston, Project Support			**13 yrs**
PANYNJ/ PATH	PATH Tunnels E & F Interior Strengthening	$60M	2007-2010
PANYNJ	Security Capital Program Livelink Development & Support	n/a	2004-2007

Frank Grande, PE, Project Manager			34 yrs
NYSDOT	Tappan Zee Bridge	$16B	2002-2012
NYSDOT	LIE Rehabilitation	$135M	2001-2005
WVDOT	Shawnee Highway	$12M	2003-2008
Elizabeth Marcantonio, PE, Project Engineer			**8 yrs**
DSNY	CSS DSNY Marine Transfer Stations	$950M	2010
NYSDOT	Program Management for Route 9A Reconstruction	$250M	2006
PANYNJ	West Midtown Redevelopment	$500M	2008
PANYNJ	Vehicular Security Center	$500M	2007-2008
NYSDOT	Tappan Zee Bridge	$16B	2004t-2012
William Meister, PE, Project Engineer			**28 yrs**
PANYNJ	Holland Tunnel Catwalk & Handrail Rehabilitation	$13M	1988
PANYNJ	Harrison PATH Station Platform Extension	$6M	1987
PANYNJ	George Washington Bridge Tower	$11M	1986
Alexander (Sandy) Murphy, PE, Project Manager			**28 yrs**
NYSDOT	Undercliff Avenue Bridge Design and Construction Support Services	$13.2M	2004-2010
NYSDOT	Route 9A Reconstruction	$12M	2006-2010
NYSDOT	East River Park Construction Support	$60M	2006-2010
PANYNJ	LGA Terminal Building Expansion	$50M	1988
Donald Quast, PE, Project Manager			**26 yrs**
PANYNJ	JFK 13R-31L "Bay Runway" Reconstruction and Rehabilitation	$348M	2008-2010
American Airlines	Airside Construction	$65M	2005-2008
American Airlines	Landside Construction	$50M	2005-2008

Summary of Key Personnel Project Experience

Name	Project Role	Project/ Program Mgmt		Marine		Aviation		Tunnels		Bridges		Terminals		Rail	
		# of projects	Project Costs	# of projects	Project Costs	# of projects	Project Costs	# of projects	Project Costs	# of projects	Project Costs	# of projects	Project Costs	# of projects	Project Costs
AECOM															
Azzaro, John, PE	Officer-in-Charge	10	$2.7	2	$45M	3	$55M	n/a	n/a	6	$48M	2	$38M	2	$5M
Pierce, Kevin, PE	Program Coordinator	15+	$2B+	6	$500M+	6	$500M+	n/a	n/a	n/a	n/a	2	$500M	5	$500+
Niro, Achille, PE	QA/QC	11	$21.5B	2	$800M	2	$3.3B	3	$750M	1	$16B	1	$500M	2	$600M
Adams, Paul, PE	Project Manager	58	$1B	4	$20 M	4	$100 M	2	$80 M	40	$400 M	4	$300M	4	$100M
Allerdings, Jerry, PE	Project Manager	n/a	n/a	n/a		22	$40M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Alston, Gerald	Project Manager	58	$1B	4	$20 M	4	$100 M	2	$80 M	40	$400 M	4	$300M	4	$100M
Chong, Sue Anne	Project Manager	9	$45M	n/a	n/a	2	$5M	n/a	n/a	n/a	n/a	1	$1.4B	n/a	n/a
Bobetsky, Kenneth, PE	Project Manager	100+	$1B+	3	$25M	100	$750M	n/a	n/a	4	$160M	1	$400M	3	$50M
Benosky, Christopher, PE	Water Resources Engr.	88	$500M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Chu, Francis, PE	Project Manager	6	$3B+	n/a	n/a	4	$2.8B	1	$8.7B	n/a	n/a	1	$2.4B	n/a	n/a
Conger, Dave, PE	Project Manager	1	$348M	n/a	n/a	1	$348M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Eilinger, Fred, PE	Project Manager	32	$160M	n/a	n/a	12	$92M	19	$64M	n/a	n/a	1	$5M	n/a	n/a
Figuereo, Indhira	Project Engineer	1	$3M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	$3M
Garbolski, Michael, PE	Project Manager	46	$124M	20	$26M	20	$33M	n/a	n/a	n/a	n/a	4	$15M	2	$50M
Giovanelli, Paul, PE	On-Site Coordinator	37	$755M	2	$15M	n/a	n/a	3	80M	n/a	n/a	1	$70M	12	$280M
Grande, Frank, PE	Project Manager	17	$140M	3	$25M	n/a	n/a	n/a	n/a	7	$105M	n/a	n/a	n/a	n/a
Greenberg, George, PE	Project Scheduler	8	$1B+	n/a	n/a	7	$500M	n/a	n/a	n/a	n/a	1	$500M	n/a	n/a
Hammon, Edward, PE	Project Manager	11	$55M	n/a	n/a	11	$55M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Hand, Joe, AIA	Project Manager	2	$400M	1	$4M	n/a	n/a	n/a	n/a	n/a	n/a	1	$2.2B	3	$30M
Hapkiewicz, John, PE	Project Manager	3	$25M	n/a	n/a	n/a	n/a	n/a	n/a	1	$15M	n/a	n/a	n/a	n/a
Kekish, Borys, PE	Project Manager	34	$1B+	n/a	n/a	34	$1B+	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Lai, Chee, PE	PM, DM, Lead Structural Engr.	21	$1B+	3	$510M	3	$2M	1	$5M	11	$850M	1	$45M	2	$3B
Lavallee, Andrew, RLA	Sr. RLA/Project Manager	24	$349M	2	$125M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Linkowski, Mark,EIT	Project Manager	4	$376M	n/a	n/a	4	$376M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Marcantonio, Elizabeth, PE	Project Engineer	2	$8Bill	1	n/a	n/a	n/a	n/a	n/a	4	$160M	n/a	n/a	n/a	n/a
Matarazzo, Joe, PE	Project Manager	1	$70M	1	$4M	n/a	n/a	2	800M	9	$150M	n/a	n/a	n/a	n/a
Mazumdar, Azim, PE	Project Manager	n/a		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Meister, William, PE	Project Manager	22	$265 M	n/a	n/a	2	$22M	2	110 M	45	$316M	3	$110 M	9	$52M
Minkley, Mark, RLA	Sr, RLA/Project Manager	27	$350M	n/a	n/a	n/a	n/a	n/a	n/a	1	$3M	n/a	n/a	n/a	n/a
Murphy, A. (Sandy), PE	Project Manager	18	$171M	1	$60	4	$63	2	20	9	$196	6	$25M	n/a	n/a
Parnes, Jerry, PE	Project Manager	3	$16B+	n/a	n/a	1	$1B+	n/a	n/a	n/a	n/a	1	$3.2B+	n/a	n/a
Peraza, Ana, PE	Project Manager	1	$250M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	$250M	n/a	n/a
Quaranta, Thomas	Project Manager	2	$1B+	3	$40M	1	$200M	n/a	n/a	4	$350M	n/a	n/a	4	$225M
Quast, Donald, PE	Project Manager	2	$362M	n/a	n/a	2	$362M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Rondinello, Lou, PE	Project Manager	22	$550M	n/a	n/a	20	$500M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Rosciglione, Antonio, PE	Project Manager	14	$6B+	n/a	n/a	1	$1.4B	n/a	n/a	n/a	n/a	n/a	n/a	1	$4.6B
Schneidt, Len, PE	Project Manager	14	$1B+	n/a	n/a	n/a	n/a	1	$4M	9	$725M	n/a	n/a	2	$175M
VanSickels, James, PE	Project Manager	n/a		n/a	n/a	3	$3M	n/a	n/a	n/a	n/a	2	$1.5M	n/a	n/a
Woo, Tom, PE	Project Manager	3	$3B+	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	$3B
Zhao, Shaoling, PE	Project Manager	22	$2.B+	n/a	n/a	3	$40M	n/a	n/a	20	$2.25B	n/a	n/a	1	$75M
Tishman Construction															
Calabrese, Jennifer	Estimator (In-house)	1	$270M	1	$100M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
DaCruz, Rosana	Estimator (In-house)	n/a	n/a	1	$20M	1	$14M	n/a	n/a	1	$16M	n/a	n/a	1	$23 M
Rodriguez, Frank	Project Manager	n/a	n/a	n/a	n/a	6	$150M	n/a	n/a	n/a	n/a	1	$15M	n/a	n/a
Schmitt, Gary	Project Manager	n/a	n/a	n/a	n/a	2	$40M	n/a	n/a	n/a	n/a	1	$663M	n/a	n/a
Seliga, Chris	Scheduling (In-house)	5	$500M	3	$50B	10	$300M	1	$7B	n/a	n/a	3	$1B	3	$180M
Ellana, Inc.															
Ahuja, Rohit	Scheduler	3	$500M	n/a	n/a	4	$1B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Chin, Henry	Sr. Project Cost Mgr.	6	$2.7B	1	$100 M	12	$3 B	n/a	n/a	2	$25M			1	$300M
Fitzer, Walter	Chief MEP Estimator	6	$2B	n/a	n/a	1	$500 M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
G2 Project Planning															
Glavasich, Christine	Sr. Cost Estimator/Mgr	n/a	n/a	n/a	n/a	2	$150M	1	$16B	n/a	n/a	1	$60	15	$200M
Harlow, Brett	Sr. Cost Estimator	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12	$100M
Mainella, Michael	Sr. Cost Estimator	n/a	n/a	n/a	n/a	2	$250M	1	$100M	1	$20M	2	$120	20	$300M
Industria															
Collins, Christine	Assistant Project Manager	3	$55 M	n/a	n/a	2	$125M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Daniels, Sheketa	Sr. Administrative Assistant	3	$2 B	n/a	n/a	3	$500M	n/a	n/a	n/a	n/a	3	$100M	n/a	n/a
Madonia, Joseph	Sr. Project Manager	4	$3.5 B	2	$3M	n/a	n/a	n/a	n/a	1	$3M	n/a	n/a	n/a	n/a
Quinn, Sharon	Project Manager	1	$400 M	n/a	n/a	6	$1.6B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Wittrock, Kathleen	Sr. Administrative Assistant	2	$250 M	n/a	n/a	5	$350M	n/a	n/a	1	$35M	1	$500M	1	$75M
NIA Technologies Corporation															
Fox, Linda	APM/Expedition Specialist	22	$18M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fraser, Desiree	Contract Mgr/Expedition	12	$28.2M	n/a	n/a	n/a	n/a	3	$4.5M	3	$5.2M	3	$8.5M	3	$10M
Smith, Jim	APM/Project Coordinator	12	$21.6M	n/a	n/a	n/a	n/a	3	$7.2M	3	$2.4M	n/a	n/a	n/a	n/a

Resumes of Key Personnel
AECOM

John Azzaro, PE

Project Role: Officer-in-Charge

Education

BE, Civil Engineering, Stevens Institute of Technology, New Jersey, 1980

Registrations

PE: NJ, 1987, Registration No.: [redacted]

Professional Associations

American Society of Civil Engineers (ASCE)

American Society of Highway Engineers (ASHE)

Society of American Military Engineers (SAME)

Experience

Years with AECOM: 25
Years with other firms: 5

Employment History

1985-present: AECOM, Civil Project Manager/General Operations Manager

1980-1985: Stone & Webster Engineering Corp.

Mr. Azzaro has more than 30 years of experience in design, management and construction for both civil and structural disciplines. His areas of expertise include highway planning and design, construction staging and maintenance of traffic, airport planning, design and construction, infrastructure design and construction, site development and parking facility planning, design and construction. He has worked with clients in both the private and public sectors and has a good understanding of client needs, having functioned as a client himself.

EWR Terminal B Roadway and Drainage Improvements, Port Authority of New York and New Jersey (PANYNJ), Newark International Airport, New Jersey: Assigned to the PANYNJ to serve as the project manager responsible for this contract valued at $35 million (construction cost). The contract provided for relocation of the existing HOV lanes to a new 24-foot-wide frontage, with steel and glass canopies designed to match the facilities already in place. The existing frontage will be used for passenger pickup, and the inner frontage will be used for overflow. The project also required construction of five new traffic lanes: two for HOV use, two through-lanes, and one taxi lane. The northbound steel bridge was widened with a one-lane structure. This entailed salvaging the existing precast fascia panels for reuse; constructing at-grade asphalt pavement and ramps; and building approximately 2,000 feet of concrete retaining walls. Bridge N7 (a steel plate girder bridge) was rebuilt through staged removal and replacement with a new structure, while maintaining two lanes of traffic at all times. The underpass was reconstructed and widened to two lanes. The high-mast light towers were relocated; new overhead and ground-mounted sign structures were installed; and some existing signs were relocated. Power and communications systems were also installed, along with hardscape, fencing, and frontage amenities (such as stainless steel bus shelters and taxi dispatch booths). Parking lot entrances were reconstructed as well. The project also required construction of three stormwater pump stations, each containing three pumps and new 30-inch and 36-inch steel force main piping that was tied into an abandoned 36-inch piping and outfall system.

EWR Airfield Lighting Electrical Switch Houses, Port Authority of New York and New Jersey (PANYNJ), Newark, New Jersey: Project manager responsible for the design and construction of two electrical switch houses at Newark Liberty International Airport at a construction cost of approximately $30 million. Scope of work at each of the two locations consisted of building a 95-foot-long by 60-foot-wide steel framed structure with interior block walls and exterior

John Azzaro, PE, continued

precast concrete panels. These buildings house a power substation that feeds constant current regulators and distributes power to airfield lighting circuits associated with runways and taxiways, FAA equipment, and building system loads. A separate switch house is dedicated to each Runway; 4L-22R and 4R-22L. An existing switch house will be refurbished in the future and is dedicated to Runway 11-29. Electrical and communication ductbanks were constructed airside for the new feeder cables. A 1,000 kw emergency diesel generator in each building will supply 100 percent backup power to the two incoming PSE&G 13 kV feeders. The building includes a control room that houses the ALCS equipment, a SCADA system to monitor all electrical equipment, and a building management system to monitor all mechanical and HVAC equipment.

EWR Central Terminal Area Roadways, Bridge, and Parking Plazas, Port Authority of New York and New Jersey (PANYNJ), Newark International Airport, New Jersey: Project manager assigned to the PANYNJ, responsible for this contract valued at $52 million construction cost. It included construction of a new steel bridge with retaining walls and ramps; on-grade CTA and frontage roadways at terminals A and B; four parking entry and three parking exit plazas; 1,200 feet of steel and glass canopies at terminals A and B; signage, sign structures, and utilities. Entry and exit plaza work included overhead canopy structures, stainless steel toll booths, ticket issuing machines, revenue control system equipment, as well as EZPASS Plus equipment.

EWR Southern Access Roadway Project (SARP), Port Authority of New York and New Jersey (PANYNJ), Newark International Airport, New Jersey: Project manager assigned to the PANYNJ, responsible for the $189 million SARP Program. It consisted of three major roadway and bridge construction contracts, which included five new steel bridges (1 curved welded-plate girder bridge with steel box transfer girder and 1 new concrete bridge, and the widening and rehabilitation of five existing steel and concrete bridges) for a combined construction cost of $106 million. Duties include the planning, design, and construction phases of this program. The team consisted of a composite staff of PA in-house disciplines, consultants, and subconsultants. The projects involved coordination with the NJTA for the tie-in to interchange 13A; as well as with the NJDOT. Responsible the design of the McClellan Street interchange, consisting of mainline roadways, ramps, retaining walls, and the staged replacement of a steel bridge for NJDOT over the Route 1/9 corridor. Obtained the required right-of-way parcels, freshwater wetlands fill permits, stream encroachment permits, and soil conservation and sediment control permits from two districts. Coordinated with the NJTA, NJDOT, and Union County for the proposed North Avenue corridor improvements, as well as the on-airport section of the future NERL-Elizabeth segment, a design-build public/private partnership project.

JFK Redevelopment Program, Port Authority of New York and New Jersey (PANYNJ), Jamaica, New York: Project manager assigned to the PANYNJ on its $1.8 billion redevelopment program for John F. Kennedy International Airport. Worked as the owner's representative with duties including planning for the central terminal area roadway, utility, parking and frontage improvements. Coordinated between facility staff aviation department and engineering department, managed a multi-million dollar field verification program for underground utilities, managed the design contracts which were bid for construction to assure proper technical content, constructibility and maintenance of airport operations. During construction, oversaw the construction management effort for control of costs, compliance with contract documents, construction staging, control of change orders, and airport operations.

JFK 2000 Master Functional Plan, Port Authority of New York and New Jersey (PANYNJ), New York: As civil engineer, prepared layout and conceptual engineering plans for remote, long-term parking facilities at JFK, part of the $3 billion renovation of the world's busiest international airport. The long-term parking facilities were located at the Howard Beach connection and included provisions for stations along the passenger distribution system, which will carry passengers to the central terminal area.

Kevin Pierce, PE

Project Role: Program Coordinator

Education

MS, Civil Engineering, Rutgers, the State University of New Jersey, 1991

BS, Civil Engineering, Old Dominion University, Norfolk, VA, 1988

Registrations

PE: WA, 1999, Registration No.: [redacted] (Civil)

PE: CA, 1993, Registration No.: [redacted] (Civil)

Professional Associations

American Society of Civil Engineers (ASCE)

American Council of Engineering Companies of California (ACEC-CA), formerly Civil

Engineers and Land Surveyors of California (CELSOC)

Construction Specifications Institute (CSI)

Western Dredging Association (WEDA)

Experience

Years with AECOM: 23
Years with other firms: 2

Employment History

1988-present: AECOM, Project Director/Program Manager

1985-1986: Virginia Port Authority, VA

1986-1987: R.G. Mooreland Development Co.

Mr. Pierce has 25 years of experience in project management, civil engineering, and construction for large-scale projects, including ports and harbors, dredging and marine facilities, transportation infrastructure, commuter rail, freight rail, site developments and security programs. His experience includes numerous project management positions for design and implementation of capital projects with budgets up to $750 million. After working for a public port authority and private land developer, Mr. Pierce has serviced public and private clients while with AECOM, including transit agencies, private railroads, port agencies, and the U.S. Navy on both the east and west coasts of the United Sates. Over the past 10 years, he has managed over $100 million on consultant contracts for over $2 billion in capital construction projects.

Capital Security Program, Port Authority of New York and New Jersey (PANYNJ), New York and New Jersey: Program Manager for $15 million contract for implementing highly sensitive and confidential security capital projects at all major port authority facilities including airports, seaports, tunnel and bridges, authority bus terminal, and PATH. Initially, the program was funded at $500 million for the years 2003 to 2007, but it is anticipated that the program funding levels will eventually exceed $1 billion. Mr. Pierce provided management and oversight of all work, including development of project approaches, scope, procurement strategies, preparation of design and contract documents, cost estimates, and construction support services.

World Trade Center Vehicle Security Center, PANYNJ: AECOM Project Director for concept through final design for complex vehicle screening and parking facilities. Work includes concept through final design over $800 Million in capital construction as part of the WTC redevelopment. Work includes slurry walls, excavation, structural and concrete design, HVAC, communications, screening equipment and highly sensitive design criteria. Construction is scheduled for completion in early 2013.

New Jersey Airports Engineering Services on an "As Needed Basis, Port Authority of New York and New Jersey (PANYNJ), New Jersey: Program Manager for $10 million professional services contract to provide engineering services in support of facility capital projects at Newark Liberty International Airport and Teterboro Airport in New Jersey. Responsible for the overall task program management in response to PANYNJ request for stage I through stage IV services for a variety of civil infrastructure and facility improvements. Project capital costs ranged from several hundred thousand dollars up to $3.5 million. Over 50 separate projects have been assigned, including a new stockroom

Kevin Pierce, PE, continued

building, terminal B control center, CTA frontage roadway rehabilitation, and various terminal facility modifications and improvements.

Sounder Commuter Rail Project, Burlington Northern Santa Fe Railroad (BNSF), Tacoma to Seattle, Washington: Project Director for advanced planning through final design for commuter rail improvements in the BNSF freight corridor between Seattle and Tacoma. Total design budget was $3.5 million. The project consisted of adding a third and forth track, and relocations/reconfiguration of existing yards, freight leads, and facilities in the 50-mile corridor between milepost 10 north of Seattle and milepost 40X in Tacoma. Total capital cost was over $350 million. Services included track and ROW design, grade crossings, new railroad bridges, modifications of overhead bridges retaining walls, property acquisition, utility relocations, and track design to accommodate proposed commuter rail stations.

Global Container Terminal, Port Jersey, New Jersey: Project Director and officer in charge for master planning, security planning, and design consultation services for the Port Jersey Container Terminal. Services included terminal throughput analysis, terminal layout and planning, transportation planning, capital program development, and cost forecasting for phased capital improvements, including new permitting, design, and procurement documents, and construction oversight services for this $25 million wharf extension. Successful in obtaining federal funds for the execution of a comprehensive vulnerability assessment for the only privately owned and operated container terminal in New York Harbor.

Metrolink Commuter Rail Project, Phases I and II, Southern California Regional Rail Authority (SCRRA), Los Angeles, California: Task Manager and design engineer for a new commuter rail system in Southern California. Provided project engineering, and coordination and development of new technical and procurement specifications for SCRRA (who had no standard procurement or construction specifications). Completed bid packages for the initial three capital project construction contracts totaling over $100 million. The project included over 60 miles of new and rehabilitated railroad, new bridges, retaining walls, signal systems, grade crossings culvert and drainage improvements, and other miscellaneous ROW improvements.

Pier 400, Port of Los Angeles (POLA), San Pedro, California: Project Manager responsible for geotechnical concept through final design for a 22 million-cubic-yard hydraulic dredging and landfill project to create 528 acres of manmade land in the Port of Los Angeles. This is the largest single land reclamation project in the United States. The project included extensive retaining structures and foundation remediation studies. The total project was over $300 million for phases I and II.

Oceanside Escondido Rail Line, San Diego County, California: Deputy Project Manager in charge of all design work for the advanced planning scope of work. The project was divided into 14 tasks totaling over $3.5 million in fees. The project capital estimate was $250 million.

Pier T, Port of Long Beach (POLB), Long Beach California: Project Manager for the design of dredging and disposal to provide deep draft navigation improvements at the proposed container terminal in the West Basin of the Port of Long Beach. Dredging was carried out to -50 feet MLLW at the turning basin and approach channel; the berths were dredged to minus 55 feet MLLW; the shoreline was dredged to minus 59 feet MLLW to construct a new rock revetment and container wharf. Construction cost for the project was $70 million.

Channel Dredging at Naval Air Station North Island, Naval Facilities Engineering Command (NAVFAC) Southwest Division, MCON P-706, NAVFAC, San Diego, California: Project Manager for dredging 10 million cubic yards to provide a deep draft approach and navigation channel into NAS North Island for nuclear class aircraft carriers. The total project budget was $50 million and included design and permitting for near shore and on-shore disposal of beach suitable materials. Coordinated all aspects of dredge and disposal design, including hydrographic surveys, geotechnical investigations, cost estimating, permitting support, and preparation of PS&Es.

Achille Niro, PE

Project Role: QA/QC

Education

BS, Civil Engineering, New Jersey Institute of Technology, 1971

Registrations

PE: NJ, Registration No.: 2[redacted]

PE: NY, 1976, Registration No.: [redacted]

Professional Associations

Project Management Institute (PMI)

National Society of Professional Engineers (NSPE)

New Jersey Society of Professional Engineers (NJSPE)

Society of American Military Engineers (SAME)

Construction Institute (CI) of ASCE

Experience

Years with AECOM: 5
Years with other firms: 34

Employment History

2005-present: AECOM, Civil Program Manager

1971-2005: Port Authority of New York and New Jersey, New York

Mr. Niro is a highly accomplished engineer, having extensive experience in design and construction with an emphasis on program management and construction management. He was formerly the assistant chief engineer for program management at the Port Authority of New York and New Jersey, where he was responsible for the delivery of the agency's capital and operating programs from preliminary design through construction completion. In this capacity he implemented a number of key programs to efficiently manage the cost and organization of the agency's programs.

O'Hare Modernization Program, City of Chicago, Illinois: As the transition program manager for the O'Hare Modernization Program (OMP), maintained continuous program and project management services for the city, while restructuring the program management team. Responsibilities included managing the client relationship with senior executives from the city; providing guidance and oversight to a team of 40 professional and technical staff; and ensuring coordination and advancement of program activities with the construction management and multiple engineering design firms.

Tappan Zee Bridge/I-287 Corridor Environmental Review Project, New York State Thruway Authority (NYSTA), Orange, Rockland, and Westchester, New York: As the program manager for the project sponsors, which included the NYSDOT, NYSTA, and MTA Metro-North Railroad, served in the lead role for the management and oversight of the consultant team performing the public outreach, the environmental planning and analysis, and the preliminary engineering. Responsibilities included the coordination of activities between the project team and agencies at the federal and state levels; the development and implementation of a comprehensive public outreach strategy; navigating the DEIS process to consensus on a locally preferred alternative, and attainment of a successful "record of decision;" development of a sound project financial plan, including new and nontraditional funding sources; and the implementation of an effective procurement strategy that manages risks, phases construction, and has construction industry support.

Lincoln Center Development Program, Lincoln Center Development Project, Inc., New York, New York: Developed construction phasing and logistics plans for the expansion and modernization program of the multiple cultural venues at Lincoln Center.

Main Line Corridor Improvement Project Environmental Impact Statement, Long Island Rail Road (LIRR), Nassau County, New York: Program manager for

Achille Niro, PE, continued

the development and preparation of the EIS for the main line corridor improvements that included modifications and additions of bridges, station enhancements, signal bridges, substations, signal towers, trackwork, power, and communications and signals. The project also includes separation or closure of five roadway at-grade crossings. Responsibilities included managing client relationships on multiple levels; directing the activities of the project team; providing strategic advise to the client on public and agency outreach activities; and meeting project goals and objectives with high quality work products that will lead to a successful "record of decision" from the FTA. Port Authority of New York and New Jersey: Assistant chief engineer of program management responsible for the delivery of the agency's capital and operating programs from preliminary design through construction completion. This included the management of planning, A/E design, and construction management services, as well as program definition, budgeting, forecasting, and procurement of professional A/E and construction services. Directly supervised a staff of 170 professional, technical, and administrative personnel. Managed an annual budget of approximately $70 million, including outsourcing of engineering, architectural and technical services, and the procurement and award of over 100 construction contracts per year with an average annual value of $500 million.

John F. Kennedy International Airport (JFK) and Newark International Airport (EWR) Access Programs: Engineering program manager for the planning and preliminary design of the JFK Airport Access Program (AirTrain) and the extension of the EWR AirTrain extension to the Northeast Corridor (NJ Transit and Amtrak). Responsibilities included ridership analysis, environmental planning, alignment design, geotechnical/environmental investigations, preliminary design, oversight of the community and airline outreach program, contract negotiations, and construction phase oversight.

JFK Redevelopment Program: Program manager of design and engineering involved in key elements of the redevelopment program including the air traffic control tower, roadway and utilities, baggage handling system, pedestrian distribution system, Terminal 4, and the JFK cogeneration facility. Responsibilities included preliminary and final design, environmental mitigation, procurement of construction, and construction phase support and oversight.

Goethals Bridge Twinning Program: Manager of design for the planning, environmental impact assessment, and preliminary design for the construction of an additional span parallel to the Goethals Bridge as well as the rehabilitation of the existing bridge, Responsibilities included preliminary design, design development, geotechnical/ environmental investigations, wetlands and hazardous waste mitigation, coordination with other public agencies, and development of procurement strategies.

Port Authority of New York and New Jersey, Tenant Construction Unit: As unit manager, led organizational and process changes for the Port Authority's in-house building department, which was responsible for the review and approval of all tenant construction on Port Authority facilities. Improved the on-time performance of the plan review process from approximately 30 percent to over 90 percent without increasing staff. Performed approximately 1,000 plan reviews annually with an estimated value over $1 billion.

PATH Station Improvements Program: Project manager for the redevelopment and upgrade of stations throughout the PATH network. Responsibilities included preliminary design, final design, procurement and award of construction contracts, and construction phase support services.

JFK, EWR, LGA Aviation Programs: Project manager responsible for various projects at the airports ranging from aeronautical paving to new buildings and alterations, environmental remediation, and roadway and bridge projects.

Paul Adams, PE

Project Role: Project Manager

Education

MS, Structural Engineering, University of California at Berkeley, 1976

BS, Civil Engineering (with honors), University of California at Berkeley, 1975

Registrations

- PE: NJ, 1991, Registration No.: [redacted]
- PE: CA, 1979, Registration No.: [redacted] (Civil)
- PE: NY, 1991, Registration No. [redacted]
- PE: PA, 1990, Registration No.: [redacted]
- PE: CT, 1992, Registration No.: [redacted] (Civil) -
- PE: FL, 1992, Registration No.: [redacted] (Civil)

Professional Associations

American Society of Civil Engineers (ASCE)

Urban and Regional Information Systems Association (URISA)

Society of American Value Engineers (SAVE)
New York Building Congress (NYBC)

American Society for Industrial Security (ASIS)

Experience

Years with AECOM: 14
Years with other firms: 23

Employment History

1996-present: AECOM Transportation

Mr. Adams has extensive experience in the fields of transportation engineering design, project management, technology management, data security, and construction management. Mr. Adams has served as Resident Engineer, Construction Manager, Project Manager, Structural Department Manager and Division Manager for transportation authorities and consulting firms and as Technology Director, Program Technology Manager, and Officer in Charge on numerous multidiscipline transportation projects.

Port Authority of New York and New Jersey (PANYNJ), Security Capital Program, New York, and New Jersey: On assignment with PANYNJ as the project manager for PATH tunnel strengthening program, responsible for developing the budgets and schedules for these efforts. Instrumental in obtaining board approval to proceed with this $800 million effort. Also Responsible for developing the budgets and schedules for these efforts and was instrumental in obtaining Board approval to proceed with this $800 million effort. He progressed the project through final design, completion of a pilot construction program, and construction contract award and is now managing the Stage IV construction efforts utilizing multiple collaborative solutions to expedite the turnaround of RFI's and Submittals. Other responsibilities for this program have included developing and operating a program extranet for this critical security capital program. Substantial consideration was given to data security due to the sensitive nature of this program. Responsibilities included design, testing, implementation, training, and administration of the website, as well as participation in weekly project meetings for multiple projects. In addition, development and monitoring of information security policies and workflow processes were defined and built into the website operation. This website has pioneered numerous business processes for the Port Authority, including the first use of Livelink to issue a major RFP, maintaining all RFP documents, addenda, bidders' questions, and responses on the secure website. In addition, for the first time, the website was used to exchange RFI's and submittals of confidential and privileged security information/SSI.

Also served as the GIS program manager with the Port Authority, developing and implementing GIS solutions for the highly visible Capital Security Program. For the four PANYNJ airports and other critical facilities, applications have been developed to facilitate real-time data collection using backpack GPS receivers and rugged tablet PCs. The most current orthophotos and CAD files are loaded on the PC's and data is verified/updated in the field, eliminating the need to transfer field notes once back in the office. In addition he is working with NYPD, NYC OEM, NJOIT and other GIS agencies, and developing information sharing arrangements.

Port Authority of New York and New Jersey (PANYNJ), Downtown Restoration Program (PATH), New York, New York: Responsible for

Paul Adams, PE, continued

the development and management of the WTC GIS utility and infrastructure system for PATH and the permanent site development. The system is being created using Autodesk MapGuide and will contain all utility and infrastructure data in a GIS format. The system is being developed for use in the planning, design, and facility maintenance of the PATH system and any future facilities that will be developed on the site. Data is being collected from other agencies, and a standard GIS database will provide information for the Port Authority and cooperating agencies.

Port Authority of New York and New Jersey (PANYNJ), Port Ivory Intermodal Container Transfer Facility, Staten Island, New York: Responsible for the development and management of the Port Ivory pilot GIS utility database. The system was created using Autodesk MapGuide and will contain all utility and infrastructure data in a GIS format. The system was developed for use in the planning, design, and facility maintenance of all port commerce facilities. Data is being collected from other agencies, and a standard GIS database will provide information for the Port Authority and cooperating agencies.

Port Authority of New York and New Jersey (PANYNJ), Goethals Bridge Modernization Program: Developed and implemented a program extranet for the Goethals Bridge Modernization Program. This Web site was developed in a manner that will allow the program management team and the design team to essentially manage their own areas of the program Web site, with a common area that both teams can use for collaboration. Concentrated on the website topology design and training of select advance users.

Port Authority of New York and New Jersey (PANYNJ), Enterprise-wide Project Websites, New York: Engineering program Web sites manager provided website developing and implementing additional project websites for the Port Authority engineering department. Standardized website templates were developed to allow for implementation of numerous Web sites at minimal cost. All Web sites utilize the same database and will be integrated with the Port Authority electronic document center, thus allowing the project work-in-progress data to be incorporated into archived facility data, as part of the engineering department knowledge management model.

Port Authority of New York and New Jersey (PANYNJ), PATH Downtown Restoration Program, Manhattan, New York: As Web site manager, developed and implemented a program extranet for the highly visible PATH Downtown Restoration Program. Included in that effort was the implementation of a CAD standard for engineering and consultants. Responsibilities included design, testing, implementation, training, and administration of the Web site, as well as participation in weekly project meetings for multiple projects.

Port Authority of New York and New Jersey (PANYNJ), Electronic Document Management and CADD Management Call-In: Project manager for on-call services providing expertise and production in the areas of CADD standards, operating procedures, document archiving, document conversion, business process modeling, facility program management Web sites, GIS, and other applied technology.

Port Authority of New York and New Jersey (PANYNJ), Program Management on an As-Needed Basis: Served as consultant and task manager to provide services to the engineering management services division. Supervised a team of five people in the process of collecting active drawings and entering the information into a drawing file database. Designed and tested the drawing file database.

American Airlines, Terminal Redevelopment Program, JFK International Airport, Queens County, New York: Served as technology director for this $1.3 billion design and construction project providing all CAD management and project Web site development and management. The project involved over 200 team members, including planning, design and construction people from multiple firms in locations throughout the United States.

Jerry Allerdings, PE

Project Role: Project Manager

Education

MS, Civil Engineering, New Jersey Institute of Technnology, 1984

BS, Civil Engineering, New Jersey Institute of Technology, 1981

Registrations

PE: NJ, 1985, Registration No.: [redacted]

PE: PA, 1990, Registration No.: [redacted]

Professional Planner: NJ, 1990 Registration No. [redacted]

Professional Associations

American Society of Civil Engineers (ASCE)

Experience

Years with AECOM: 3
Years with other firms: 27

Employment History

2007-present: AECOM, Civil Project Manager

Mr. Allerdings has extensive experience in the management, design, and construction supervision of civil engineering projects, including roads, bridges, parking and toll facilities, buildings, municipal engineering, land development, dams, site plans, subdivisions, stormwater management, and utilities for public agencies and private clients, as well as supervision of staff and business development activities (proposal preparation and client contact).

Port Authority of New York and New Jersey (PANYNJ), JFK International Airport, Jamaica, New York, and Newark, New Jersey: Project manager at JFK International, Newark Liberty International (EWR) and Teterboro Airports. Responsible for overseeing the implementation of capital and operating projects, including runway, taxiway, roadway, and bridge rehabilitation; utility upgrades; parking garage improvements; and building assessments and rehabilitation. Specific assignments include mechanical and electrical rehabilitation of the CTA toll plaza building, priority bridge and building repairs, data center design, and pumping station upgrades at EWR; installation of backflow preventers at Teterboro Airport; and runway 4L-22R and taxiway J upgrades at JFK. Daily activities include overseeing the activities of Authority staff and consultants engaged in the planning, design, and construction supervision of projects; coordinating all aspects of the project from inception through final closeout; and coordinating activities among stakeholders (including project controls, engineering, airport operations, aviation planning, technical services, properties, procurement, and environmental). Additional tasks include the procurement of goods and services; monitoring project schedules and budgets with software (such as Primavera Planner, InCaps, Wintrak, and Expedition); and dissemination of project data to the project management office.

Hatch Mott MacDonald, New Jersey: Senior construction engineer responsible for overseeing construction services for the New Jersey market, including proposal preparation, staff supervision, budgeting and scheduling, and project management. Specific duties included providing professional construction coordination, engineering, and inspection services to clients (including scheduling and staging of work, monitoring safety programs, cost control, claims management, and supervision of construction contractor services). Responsible for business development for construction management and construction inspection services. Project management duties involved staffing, budgeting, scheduling, client contact, accounts receivable, supervision and scheduling of staff, and ensuring compliance with the corporate quality assurance and safety program. Prepared technical and fee proposal documents. Ensured representation at political and industry functions. Negotiated joint venture and subconsultant agreements. Prepared construction schedules and staging documents, as well as site-specific safety plans.

Jerry Allerdings, PE, continued

Conducted constructibility reviews and provided technical support to field personnel.

The Louis Berger Group, Inc., New Jersey: As project manager, reported to the director of program management for the Newark Airport Redevelopment Program. Responsibilities included overseeing the design and construction of roadways, bridges, toll facilities, and parking lot upgrades at the airport. Prepared and monitored project schedules and budgets; coordinated with other projects underway by the Port Authority of New York and New Jersey (PANYNJ), airlines, and other tenants. Served as PANYNJ's liaison in dealing with other agencies such as New Jersey Department of Transportation (NJDOT), Turnpike Authority, and the New Jersey Department of Environmental Protection. Prepared jurisdictional and maintenance agreements with other agencies; Negotiated a joint funding agreement with NJDOT to share costs for improvements to Routes 1&9, and managed contracts with equipment vendors. Oversaw the activities of design consultants and construction managers to ensure timely delivery of a project that is in compliance with PANYNJ's program goals for the redevelopment of the airport, and engaged in conflict resolution between different parties, troubleshooting problems as they arose.

New Jersey Turnpike Authority (NJTA), New Jersey: Project manager for the planning, design, permitting, and construction of transportation projects. Procured permits from the NJDEP, DCA, NJDOT, and other regulatory agencies. Prepared conceptual designs, environmental assessments, traffic studies, and revenue analyses, as well as monitoring budgets and schedules for capital improvement projects. Prepared status reports and made presentations to the executive director and commissioners. Prepared requests for proposals and administered professional service contracts in compliance with state guidelines. Directed the efforts of consultants engaged in the design and construction supervision of transportation projects, and oversaw the award of professional service contracts and the bidding of construction contracts for compliance with state regulations. Managed construction activities to ensure compliance with contract documents, Authority standards, and regulatory requirements. Coordinated Authority projects with other agencies (such as the NJDOT and the PANYNJ), and conducted public hearings.

Sparta Engineering and Land Company, New Jersey: Project engineer/municipal engineer responsible for overseeing local road improvements in accordance with New Jersey Department of Transportation (NJDOT) local aid guidelines. Performed engineering analysis and design of drainage systems, roadways, dams, septic systems, water and sewer utilities, and other tasks associated with residential and commercial subdivisions and site plans. Prepared permit applications and support documentation for submittal to the New Jersey Department of Environmental Protection, NJDOT, soil conservation districts, planning boards, and other agencies having jurisdiction over land development. Scheduled and supervised work performed by engineers, draftsmen, surveyors, and clerical staff. Made presentations before planning and zoning boards, and assisted the planning board and municipal engineers with their duties.

Jersey City Housing Authority, New Jersey: As construction manager, oversaw preparation of plans and specifications for the rehabilitation of multifamily residential structures, site work, utilities, and a new community center. Monitored construction activities associated with improvements to residential buildings and associated site work to ensure compliance with contract documents. Worked with architects, engineers, and contractors to solve problems, control costs, and maintain schedules. Maintained project files for all design, permitting, and construction activities. Prepared change orders; recorded as-built data; responded to requests for information; reviewed and approved invoices, shop drawings, and material certifications. Conducted job meetings with contractors, designers, and site managers, and coordinated construction activities with utility providers, site managers, and tenant representatives.

Jerald Alston

Project Role: Project Manager

Education

BS, Civil Engineering, North Carolina Agricultural and Technical State University, 1997

Professional Associations

American Society of Civil Engineers (ASCE)

Experience

Years with AECOM: 12
Years with other firms: 1

Employment History

1998-present: AECOM, Civil Engineer

Mr. Alston is a civil engineer with more than 10 years of experience in the related field. He possesses extensive project experience managing the open Text/Livelink Project Website for the PANYNJ Security Program Management Contract.

PANYNJ, Open Text/Livelink Project Website Administrator, Security Project Management, Jersey City, NJ:

Manages Secure Collaborative Project Website, including:

- Architecture, formatting, structure and troubleshooting
- Per project needs assessment
- User account creation and content permissions
- Content and user audit reports as well as custom reports as needed

Administers Security and Website use training for all users:

- Familiarizes users with agency protocols
- Develops training materials and manuals
- Sets up custom work processes and workspaces as needed
- Instructs all users in website access, use and capability
- Reinforces responsibility to protect sensitive information

Provides Policy and Procedure Development:

- Expansion of Security policies for electronic content
- Research and implementation of hardware/software solutions for increased security protection (Digital Rights, etc.)
- Creating Security Manual for electronic content to be expanded agency wide

Security Information Management

- Manages legal documentation
- Polices security policies for department

Controls Secure Information Distribution

- Produce materials for presentation to all internal and external parties (agency, NYC, state, federal)
- Direct senior and mid-level management in presentation methodology
- Create all graphical representation for information for presentation and distribution

Other responsibilities include:

- On-site IT/Helpdesk support for SPM Department:Various research and reporting for Senior Management
- Website and graphics design work
- Audio/Visual technician
- Audio/Video production/editing

Newark Liberty International Airport Security Enhancements, Newark, NJ: Served as Principal Project Engineer. Developed Plans for work order contracts to enhance security measures at Newark Airport which included security patrol roads, fencing and underwater sewer protection.

Jerald Alston, continued

PANYNJ Engineering Support Consultant, Program Management Division, Newark, NJ: Created formal presentations for the Chief and Deputy Chief Engineers which include presentations for all construction award approval from the Board of Directors of the PANYNJ. Maintained database and develop reports tracking multi-million dollar construction contracts and awards for the Engineering Division. Also prepared weekly newsletter to highlight significant events and progress of on-going construction

Route U.S. 1 & 9, New Jersey Department of Transportation (NJDOT), New Jersey: Designed various aspects including right-of-way documents, vertical and horizontal alignments, construction plans, cross sections, typical sections, drainage and utility facilities, grading, and traffic control. Coordinated with various New Jersey Department of Transportation personnel to assist in the optimization and design. Assisted senior engineers in administrative aspects of the project.

Route 27/Amtrak Rail Project, Edison, NJ: Served as Principal Traffic Engineer. Resolved NJDOT comments and provided Value Engineering support. Developed Right of Way documents.

Industrial Avenue/Raritan Center Road Extension Project, Edison, NJ: Served as Principal Project Engineer. Developed Technical Report for Middlesex County and Facility. Created contract plans including Construction Plans, Profiles, Grades, Typical Sections and Cross Sections.

Rhode Island Federal Rail Improvement Project (FRIP), Rhode Island: Developed Construction Plans, Cross Sections and Earthwork Quantities.

Meadowlands Mills Project, Meadowlands, NJ: Developed Engineer's Estimate for traffic interchange.

NJ Turnpike Guide Rail Replacement Project, New jersey: Designed guide rail for the entire Turnpike.

Helen Street Extension Project, South Plainfield, NJ: Developed cost estimates for various design alternatives.

Route 10 Viaduct/Cranston Road Project, Boston, MA: Developed Cross Section earthwork quantities.

Cherry Hill Extended Stay America, Cherry Hill, New jersey: Surveyed land for proposed construction site.

Linden Train Station Improvement Project, Linden, NJ: Developed earthwork quantities.

Kenneth P. Bobetsky, PE

Project Role: Project Manager

Education

BS, Civil Engineering, The City College of New York; 1982

Associate of Applied Science, Civil Technology, State University of New York at Farmingdale, 1977

Professional Registrations

PE: NY, 1995. Registration No. [redacted]

PE: NJ, 1999. Registration No. [redacted]

Professional Associations

American Society of Civil Engineers
Society of American Military Engineers
American Society of Highway Engineers
Women in Transportation Seminar

Total Years of Experience:

years with AECOM: 20
years with other firms: 8

Employment History

present: AECOM, Civil Project Manager - Terminated 04/29/05
2002-2003: Urbitran Associates, Inc., New York, New York, Vice President/Chief Highway Engineer
2000-2001: James, LaSala & Associates, Melville, New York, Senior Director
1992-2000: Port Authority of New York and New Jersey, New York, New York, Program Manager
1989-1992: STV/Seelye Stevenson Value & Knecht, New York, New York, Project Manager/Civil Design Engineer
1982-1989: Vollmer Associates, New York, New York, Project Manager/Civil Design Engineer
1979-1982: Gibbs & Hill, Inc., New York, New York, Structural Draftsman/Designer

Mr. Bobetsky has 28 years of experience in transportation engineering management with an emphasis on project delivery and growth. His expertise includes program management, implementation, staff supervision, mentoring, intuitive, creative and efficient problem-solving, along with a strong sense for prioritizing, urgency and decisiveness.

Program Manager for Program Controls and Administration: Responsible for developing, managing and coordinating the $1.9 billion JFK AirTrain program's cost control and scheduling system, project plan review, application for payment and change order processes. Led a team of project control specialist including schedulers, cost and financial analyst and document control. Provided financial reporting to the Program Director.

Engineering Projects for Priority Capital Programs and Aviation Department Facilities of the Port Authority of NY& NJ: Project Manager responsible for the management of engineering projects in support of Priority Capital Programs and Aviation Department Facilities of the Port Authority of NY& NJ Responsibilities included:

- Supervising engineering efforts encompassing studies, field data collection, planning, conceptual and preliminary design and preparation of contract documents.
- Defining and setting project scope and schedule as developed through meetings, field investigations and evaluation of client department needs.
- Preparation of Board Items and presentations to obtain Project Authorization from the Commissioners.
- Establishing project budget and control of staff charges against authorized budgets.
- Resource staffing and coordination of engineering disciplines along with material testing and construction supervision and inspection as well as out-sourcing to design consultants.
- Preparing and evaluating of RFQ/RFP's, contract bidding and awards.
- Expediting design support services during construction and implementing post-award contract changes.

Projects included:

- New York Airport Access Program – AirTrain Terminal at Jamaica Station intermodal complex (in conjunction with the LIRR - $400 million).
- Land Access Project at Newark Airport – Southern Access Roadway Package ($100 million).
- LaGuardia Airport – Central Terminal Building – Center Section Modernization (70,000 SF).
- Newark Airport – Repairs to the 15,000 linear feet of 36-inch condenser water intake pipe.
- Installation of 1,300 aeronautical guidance signs at the three PA airports to meet new FAA criteria.
- Design of automotive repair shop at JFK Airport.
- Design of a cooling tower system to service the three terminals at Newark Airport.

Kenneth P. Bobetsky, PE, continued

- Project planning for a program to protect and preserve the pile-supported concrete deck at LaGuardia Airport to safely accommodate the introduction of the Boeing 767-400ER.
- Terminal B Modernization Program - Newark Liberty International Airport, which included significant upgrades to the facility, connector structures, baggage handling and security.
- Project Manager/Civil Design Engineer
- Responsibilities under the "JFK 2000" Program included: overseeing development, coordination (among four design teams) and completion of design documents for the baggage handling system contract; development of civil/site design and construction staging documents for the east and west parking garages, central terminal building, roadway development and passenger distribution system and construction support services for the installation of main power feeder duct-banks, which included micro-tunneling under active runways.

Task Order Manager (TOM) providing Project Management Oversight (PMO) for three FTA projects under the Lower Manhattan Redevelopment Recovery Program: Responsible for managing the team, including sub-consultants, in providing PMO services for these federally financed projects. Led the team in oversight of the grantee-prepared documentation and activities including: project management plans, planning and NEPA compliance, program methodology, public outreach efforts, design, procurement, project controls (including cost, schedule and QA/QC), real estate, constructability, risk assessment and mitigation and construction management (conducting site visits and reports, change order monitoring, maintenance and protection of traffic and impacts to local community). Responsibilities include managing staff in attending project meetings and providing reports, reviewing NYSDOT & MTA's design work and project delivery plan and preparing reports on the findings with conclusions and recommendations; and working closely with the client (FTA) while nurturing a trusting relationship with the grantees (NYSDOT & MTA).

Chief Highway Engineer responsible for the operation and production of the civil/highway department: Directed and provided technical supervision during the preparation of preliminary and final design plans developed for such clients as the NYCEDC, NYCDDC, NYSDOT and MTA-MNR, along with site development for architects and private developers. Responsibilities also include business development activities; meeting with clients and preparation of competitive design and management proposals.

Other positions held:Project Manager/Civil Design Engineer:

Responsibilities under the "JFK 2000" Program included: overseeing development, coordination (among four design teams) and completion of design documents for the baggage handling system contract; development of civil/site design and construction staging documents for the east and west parking garages, central terminal building, roadway development and passenger distribution system and construction support services for the installation of main power feeder duct-banks, which included micro-tunneling under active runways.

Project Management responsibilities included overseeing design and construction support services for NYSDOT highway projects (including the LIE/SOBE Interchange, BQE and the Nassau Expressway - also requiring coordination with the Port Authority of NY & NJ), NYCDOT assignments (including several street rebuilding programs and a seawall) along with service main installation contracts for the gas companies: Design responsibilities included major urban highways, private site roadways and utility systems layout and hydraulics, civil design of utility systems, right-of-way engineering (including development of acquisition and easement maps for agreements between NYSDOT and the Port Authority), specification writing and development of Engineer's Estimates. Also prepared and participated in public hearings and public information meetings.

Christopher Benosky, PE, CFM

Project Role: Project Manager

Education

MS, Civil Engineering, Ohio State University, 1992

BS, Civil Engineering, Ohio State University, 1991

Professional Registrations

PE: NY, 1996, Registration No.: [redacted]
PE: NJ, 1997, Registration No.: [redacted]
PE: PA, 1999, Registration No.: [redacted] DE, [redacted]
PE: FL, 19967, Registration No.: [redacted],
PE: LA, (Pending)

OSHA 40hr. HAZWOPER Health & Safety
OSHA 8hr. HAZWOPER Health & Safety Annual Refresher
ASFPM Certified Floodplain Manager [redacted]

Rosgen Level I - IV

Professional Associations

American Society of Civil Engineers, Member

Total Years of Experience:

years with with AECOM: 22
years with other firms: 1

Employment History

2008-Present: AECOM
2004-2008: CMX
2002-2004: The Louis Berger Group, Inc.
1993-2002: URS Corporation (formerly Woodward-Clyde)
1992-1993: The Reynolds Group, Inc.
1991-1992: The Ohio State University
1987-1991: Johnson Engineering, Inc.
1985-1986: Donald H. Stires & Associates, Inc.
1981-1985: PAB & Associates, Inc.

Mr. Benosky has over 23 years of experience in wetland and stream restoration design and construction, hydrologic and hydraulic analyses, stormwater management system design, dam engineering, geotechnical engineering, construction cost estimation, and construction management. He was involved in the restoration of more than 10,000 acres of wetlands throughout the Atlantic coast of North America.

New Jersey Turnpike Wetland Construction Observation, Sections 5 through 9: AECOM is providing full time Resident Engineering and inspection services for Contract 001 of the NJ Turnpike 6 to 9 widening project. This portion of the contract consists of four freshwater mitigation sites that require construction oversight and field inspection to ensure that the work is in compliance to the approved plans and specifications, as well as NJDEP regulatory permit requirements. The four sites total 93 acres of wetland restoration and reforestation, construction of vernal pools, upland and wetland planting, invasive species removal, and the creation of new ecological habitat. Mr. Benosky is the full time resident engineer for the wetland mitigation sites for the entire duration of the project, with responsibilities including daily coordination with the construction contractor; approval of change order requests, responses to RFIs, and review of shop drawings; and oversight of field inspectors.

Estuary Enhancement Program Tidal Wetland Construction, New Castle, DE and Cape May, NJ: As Project Field Engineer, Mr. Benosky oversaw construction for this project which consisted of the construction of more than 10,000 acres of tidal wetlands. The field engineering responsibilities included implementing field design changes; design and inspection of earthen cofferdams and tide gates to prevent tidal inundation during construction; quality control including depth soundings for dredged channels and overseeing field and laboratory soil testing; coordinating with site manager to plan daily work activities and manage subcontractors; and facilitating weekly progress meetings and monthly Community Involvement Committee meetings. Project was funded by Public Service Electric and Gas.

Dam No. 40 Rehabilitation, West Milford, Passaic County, NJ: As Project Field Engineer, Mr. Benosky oversaw the rehabilitation construction of the 190-ft long and 15-ft high earthen embankment dam known as No-Name Dam No. 40, impounding the Algonquin waters in West Milford, New Jersey. The rehabilitation construction consisted of increasing the length of the existing spillway while maintaining the crest elevation, raising the embankment to prevent overtopping, installing a new low-level outlet and constructing a berm along a low lying area on the shoreline. Project was funded by the Town of West Milford.

Sussex County Landfill Closure, Lafayette, NJ: As Project Field Engineer, Mr. Benosky oversaw the construction of the closure of a portion of the Sussex County Municipal Utility Authority landfill in Sussex County, New Jersey. The closure construction included the installation of the landfill cap, leachate management system,

Christopher Benosky, PE, CFM, continued

gas collection system, and stormwater management system. Field engineering responsibilities included implementing field design changes; quality control; overseeing field and laboratory soil testing; coordinating with site manager to plan daily work activities and manage subcontractors; and facilitating weekly progress meetings with the owner. Project was funded by Sussex County MUA.

Project Management Plan, Ecosystem Restoration Study, Hackensack, NJ: As Project Engineer, Mr. Benosky was responsible for preparing the feasibility study cost estimate for the Hackensack Meadowlands Project Management Plan for the USACE. The purpose of the management plan was to determine the feasibility of environmental restoration and protection projects relating to water resources, wildlife habitat, and sediment quality within the Hackensack Meadowlands District (HMD), located within the Port of New York and New Jersey. This included creating extensive, individual cost estimate spreadsheets for over 80 engineering and technical subtasks, merging the spreadsheets into summary tables that detailed calculated inflation rates, costs over four fiscal years based on chronology of tasks, and cost apportionment by responsible parties. Detailed description of tasks and subtasks required to produce products and deliverables, analyze alternatives, and determine restoration feasibility under the management plan were also created. The project also required the compilation of a list of relevant existing environmental data and reports pertaining to the Hackensack Meadowlands District. Existing data and reports were inventoried, including available historical and current mapping, at the New Jersey Meadowlands Commission (NJMC) / Meadowlands Environmental Research Institute (MERI) library, published environmental report lists were obtained from various federal and state agencies, and selected relevant publications from the MERI's internet database.

Pennington Farm Park, Delanco Township, NJ: As the Hydraulics and Hydrology Task Master, Mr. Benosky was responsible for the Pennington Farm Park's overall stormwater management system design. Funded by Burlington County, the project consisted of the preparation of an overall Master Plan of proposed recreation and site improvements and the preparation of construction cost estimates, final construction documents and contract drawings, and construction administration services for this 140-acre site that will be developed as a county park facility along the Rancocas Creek. The site presently exists of agricultural fields, woodlands, creeks, and freshwater wetland areas and will be developed as a passive recreation facility with an emphasis on wildlife, reforestation, and environmental awareness. The improvements include the design of passive recreation areas, walkways, picnic areas, playgrounds, bikeways, parking facilities, restrooms, scenic overlooks, nature trails, and aesthetic landscape improvements through the use of native plant materials, reforestation areas, wildflower meadows and the design of a bio-retention swale to address stormwater quantity and quality requirements.

Mountain Creek Dam, Vernon Township, Sussex County, NJ: As Project Manager, Mr. Benosky was responsible for the hydraulic and hydrology modeling including dam break modeling using ACOE HEC-RAS analyses in conjunction with the DAMBRK software to define the downstream Inundation Mapping limits and assess the hazard classification of the dam. The data will be used for the rehabilitation design of the dam and spillway. Also involved in the regular dam inspection and preparation of an Operations and Maintenance Manual in accordance with NJDEP Dam Safety Standards. Project was funded by Mountain Creek Resort.

Sue Anne Chong

Project Role: Project Manager

Education

Bachelor of Architecture with Distinction, Carleton University, Ottawa, Canada, 1994

Professional Associations

2000 American Feng Shui Institute

Total Years of Experience:

years with AECOM: 12
years with Other Firms: 0

Employment History

1998-present: AECOM, Designer- Architecture

Sue Anne is an experienced Architect and Project Manager on large complex projects for private and public clients in New York and the region. Sue Anne is an excellent communicator, skilled at scheduling and project organization. She participates in client meetings, design development, construction administration, construction drawings, coordination with engineers and planning boards, building department submittals, zoning computations for various sites, site visits, document research; and is fluent in AutoCAD.

The Port Authority Trans-Hudson World Trade Center Transportation Hub, New York, NY: Project Manager for first construction package of the new $3 billion permanent Port Authority Trans-Hudson (PATH) terminal at the World Trade Center (WTC) site in Lower Manhattan. Lead design coordinator for the New West Street Concourse designed by Santiago Calatrava. A complex multi-level construction project integral with the Freedom Tower and connecting to the World Financial Center. Ms. Chong leads a team of architects and engineers.

New American Airlines JFK Terminal, New York, NY: On-site Project Coordinator for construction administration services on 3 phasing stages of $1.1 billion. The project consisted of new construction for a 1,500,000 sf building.

New York City Department of Corrections, New York, NY: Project Manager for system-wide correctional facility kitchen renovations and building additions, The project involved $45 million in renovations of six facilities for NYC Department of Design and Construction.

55 W Church Street, Orlando, FL: Project Manager for a 31-story high rise and 12-story parking structure. The mixed-use facility cost $74M for a 1,500,000 sf building.

Florida International University, Marine Biology Building, Key Biscayne, FL: Project Manager for a new $9.7M marine biology service center and laboratory.

US Attorney's Office, Silvio Mollo Federal Building, New York, NY: Project Manager/Construction Administration for a 30,000 sf renovation of existing space.

Hard Copy, New York, NY: Designer Architect. Supervised the team that completed a complete inventory of machinery, layout, and design during the renovation of 2 floors (6,000 sf) in a printing facility with a retail outlet.

RiteAid Drug Stores Regional Task Order Contract, New York and New Jersey: Designer Architect. Supervised the surveying of multiple sites for the chain, coordinating with surveyors and geotechnical engineers, compiling information for ICIP forms (which provide tax incentives when filed with the building department) and providing other services required for a complete tenant fitout. Executive Summary Reports were prepared for all projects, explaining zoning code requirements and unusual conditions needed for tenant fitout for each particular site. A partial listing of projects includes:

- 154-158 West Tremont Avenue, Bronx, NY
- Renovation of 11,700 sf theatre to create a supermarket and pharmacy

Sue Anne Chong, continued

- 222-238 Bloomfield Avenue, W. Lake Street, Highland Avenue, Newark, NJ
- 11,000 sf new pharmacies
- Reiss Retail Center, East Rutherford, NJ
- 30,000 sf supermarket conversion into 14,000 sf pharmacy and 26,000 sf open laundromat
- 70 Bloomfield Avenue, Glen Ridge, NJ
- 11,000 sf new pharmacy
- Route 10 & Mt. Pleasant Avenue, East Hanover, NJ
- Conversion of 13,000 sf existing garage into 12,000 sf pharmacy

Systemwide Correctional Facility Kitchen Renovations, New York, NY: Designer Architect. for $45M (total) renovations to kitchens at six New York City correctional facilities in the Bronx, Brooklyn, Staten Island, and Queens for the NYC Department of Design and Construction.

Francis W.F. Chu, PE, LEED AP

Project Role: Project Manager

Education
BS, Civil Engineering - Structures, University of Connecticut, 1984

Registrations
PE: NY, 2007, Registration No.: 084776

PE: CT, 1990, Registration No.: [redacted]

LEED Accredited Professional: US, 2009, Registration No.: [redacted]

Professional Associations
American Society of Civil Engineers (ASCE)

Structural Engineering Institute (SEI)

American Institute of Steel Construction (AISC)

U.S. Green Building Council (USGBC)

Green Building Certification Institute (GBCI)

Experience
Years with AECOM: 21
Years with other firms: 3

Employment History
1989-present: AECOM, Project Manager

Mr. Chu is a registered professional engineer and LEED accredited professional with extensive experience in project management, planning, design, and construction of new and rehabilitated transportation facilities, and the inspection and analysis of existing buildings and bridges. His extensive experience in both public and private sectors has led to successful completion of a wide variety of major building facility, parking structure, single and multi-span elevated roadway and bridge projects.

Port Authority of New York and New Jersey (PANYNJ), World Trade Center Transportation Hub Port Authority Trans-Hudson (PATH), Manhattan, New York: Project and package manager of the Downtown Design Partnership responsible for the final design and construction of the 650,000-square-foot permanent PATH terminal in association with renowned architect Santiago Calatrava. Major design elements include site preparation, site stabilization, PATH facilities (tracks, platforms, and mezzanine), as well as elements of the terminal building (oculus, pedestrian connections, security, sustainable design, vertical transportation, and conveyances and public wayfinding systems). Extensive design and construction phasing coordination and onboard reviews were conducted with the multiple design teams; various city, state, and federal agencies; stakeholders; utilities; fabricators; and contractors to expedite the completion of multiple design packages in order to facilitate staged construction and accommodate site conditions.

JetBlue Airways (JB), Terminal 5 Airside and Landside Improvements, John F. Kennedy International Airport, Jamaica, New York: Project manager in charge of the preliminary design through TAA submission of the airside and landside design packages on a fast track delivery schedule. Early works packages were strategically engineered and expedited through the PANYNJ rider review process to facilitate the commencement of asbestos abatement, building demolition, and utility relocation. Other major design elements include the frontage arrivals and departures roadways, utilities, apron pavement and drainage, and the hydrant fueling system, to support the 635,000-square-foot terminal with 26 gates. Extensive coordination efforts were undertaken amongst the design teams and various agencies on environmental permitting and historical preservation of the landmark Saarinen terminal building and its flight wings.

American Airlines (AA), Terminal 8 Redevelopment Project, Landside and Airside Tunnel, John F. Kennedy International Airport, Jamaica, New York: Project manager responsible for the overall design and construction of the airside tunnel, landside frontage elevated departures, at-grade arrivals roadways, and the associated utilities. The 25 percent-stage contract documents were advanced on an accelerated schedule to 100 percent and completed within a four-month period, which included an interim review by the PANYNJ. Roadway designs were tailored and modified to site-specific requirements through close coordination with the AirTrain light rail system project, underground utilities relocation, terminal building demolition and construction, temporary facilities installation, maintenance and protection of traffic, and construction staging and phasing.

Francis W.F. Chu, PE, LEED AP, continued

Radiant Aviation Services, Inc. (RAS), InfraTek® Radiant Energy Deicing Facility, Newark International Airport, Newark, New Jersey: Project manager in charge of design and construction services for the construction of a chemical-free InfraTek® aircraft pre-flight deicing facility. This 34,000–square foot, 60-foot-high aluminum pre-engineered arch structure houses an array of the state-of-the-art computerized gas-fired radiant energy process units for deicing aircraft up through B-757 size jets. This was the first of its kind erected within a major commercial airline (Continental Airlines) leasehold at an international airport. The final contract documents of this fast track project were generated in three weeks, and the actual construction took just two months to complete. Liaison efforts included initiating and expediting three separate PANYNJ tenant alteration applications and review processes for phased construction purposes to facilitate the accelerated construction schedule.

Continental Airlines, Inc., Terminal C Expansion, Central Terminal Area and Frontage Roadways Reconstruction and Rehabilitation, Newark International Airport, Newark, New Jersey: Design manager on the $1.5 billion Global Gateway Program, responsible for conceptual design, programming, feasibility study, peer review, and value engineering for concourse expansion, terminal renovation, FIS and baggage facilities, parking structure, central plant, and associated interim facilities; reconstruction and rehabilitation of the central terminal area roadways, frontage roadways, and associated temporary bypass structures. Also served as technical liaison on behalf of Continental Airlines between PANYNJ and multiple design consultants.

American Airlines (AA), Frontage Arrivals and Departures Roadways and Airside Tunnel, JFK Terminal Redevelopment Project, John F. Kennedy International Airport, Jamaica, New York: Project manager responsible for the overall design and construction of the airside tunnel, landside frontage elevated departures, at-grade arrivals roadways, and the associated utilities. Advanced the 25 percent contract documents to the 100 percent stage on an accelerated schedule – completed within a four-month period, which included an interim review by the Port Authority of New York and New Jersey (PANYNJ). Roadway designs were tailored and modified to site-specific requirements through close coordination with the light rail system project, underground utilities relocation, terminal building demolition and construction, temporary facilities installation, maintenance and protection of traffic, and construction staging and phasing.

Lincoln Center Development Project, Inc., Lincoln Center Promenade Project, New York, New York: Project manager in charge of the redevelopment in transforming the front entrance of the world's greatest center for the performing arts through its sense of transparency and openness, enhanced circulation and use of public spaces, a new iconic fountain and renovated plaza, a new grand stair with flanking state-of-the-art glass canopies, a new depressed Columbus Avenue frontage drop-off roadway and improvements to all the concourse spaces between Columbus Avenue, the New York State Theater, Avery Fisher Hall, and the New York Metropolitan Opera. Extensive coordination efforts were undertaken amongst the design team, 13 constituents on campus and various agencies for design review and permit approval; and logistics planning to maintain access and emergency egress for all the venues during construction.

MTA Metro-North Railroad (MNR), Grand Central Terminal Train Shed and Brick Arches Rehabilitation, New York, New York: Team leader in charge of the emergency inspection of various train shed areas supporting Park Avenue. Performed condition survey and structural evaluation for interim repairs.

Connecticut Department of Transportation (ConnDOT), Bradley International Airport Jet Bridge Relocation, Windsor Locks, Connecticut: Project manager in charge of multi-disciplinary design associated with the relocation of an existing jet bridge and an interim two-story stairwell. The project included site investigation, preliminary and final designs, and construction phase services.

L. David Conger, PE

Project Role: Project Manager

Education
BS, Civil Engineering, University of Vermont, 1992

Registrations
PE: NY, 2002, Registration No.: [redacted]

PE: VT, 2000, Registration No.: [redacted] Civil)

Professional Associations
American Society of Civil Engineers (ASCE), New York Metro, Air Transport Group Co-Chair

Experience
Years with AECOM: 9
Years with other firms: 10

Employment History
2001-present: AECOM, Civil Project Manager

1991-1991: Chittenden County Regional Planning Commission, Essex Junction, VT, Assistant Traffic Engineer

1991-1992: Trans Op, Inc., Williston, VT, Traffic Technician

1992-1994: FitzPatrick-Llewellyn, Inc., Willliston, VT, Design Engineer

1995-1996: FitzPatrick-Llewellyn, Inc., Willliston, VT, Project Manager

1996-2000: DuBois & King, Inc., Williston, VT, Project Manager

Mr. Conger has considerable experience in transportation, environmental and general civil engineering projects. He has managed many assignments involving aeronautical design, roadway design, site and utility designs, traffic impact studies, and construction inspection for multiple public agency contracts including Port Authority of New York and New Jersey, Metro-North Railroad, and New York City Department of Environmental Protection.

Port Authority of New York and New Jersey, JFK 13R-31L "Bay Runway" Reconstruction and Rehabilitation, JFK International Airport, Queens, New York: Project manager for the $348 million design and reconstruction of JFK's longest runway. The Bay Runway was widened to accommodate new large aircraft and surfaced with concrete instead of asphalt to provide for a 40-year useful life of the runway by surfacing. Construction included delay reduction improvements to taxiways for Runway 13R-31L to increase operational efficiencies and reduce air traffic delays of approximately 10,485 hours annually. This project will result in approximately $55.36 million of annual savings in aircraft operating costs and the value of passenger time based on FAA modeling. Lighting and electrical infrastructure was also upgraded. Minimized customer impacts by working closely with JFK operations, the FAA and airlines on the detailed construction staging and operating plans. These plans included scheduling the runway closure during the non-peak travel season, using different runway configurations to better utilize existing capacity and flight schedule adjustments by the airlines.

NJ Transit & Port Authority of New York and New Jersey, Access to the Region's Core (ARC) Mass Transit Tunnel - Conceptual Design (formerly Trans-Hudson Tunnel), New Jersey & New York: Civil lead for the conceptual design of the $8.7 billion NJ Transit's new dual railway tunnel. The tri-venture team developed conceptual design to obtain a positive Federal Transit Administration Record of Decision. Responsible for civil design group that developed alignment, grading, drainage, and site utilities for this 9-mile-long dual track alignment including nearly 18,000 linear feet of tunnel track, mid-day storage yard, New Jersey station, and Manhattan station. Work included oversight of utility location and drilling subcontractors, as well as providing information on existing utility that potentially were affected by the track and tunnel alignment or geotechnical investigation. The civil designs were used to develop permanent and temporary ROW takings for several hundred properties affected by the proposed alignment. The civil group also provided environmental impact statement and New York City Uniform Land Use Review procedures support with reviews of wetland, landfill impacts, contaminated soils and property environmental reviews along the alignment.

JetBlue Airways, Terminal 5 Airside Improvements, John F. Kennedy International Airport, New York: Project manager for airside/landside improvements associated with the construction of a new terminal 5 for JetBlue Airways. Project work included all civil and electrical airside/landside design, overall site drainage, aircraft

L. David Conger, PE, continued

fueling systems, access roadways and structural roadway ramps to accommodate the new terminal building and aircraft operations. Apron areas adjacent to the JetBlue terminal and along relocated taxi lanes are being rehabilitated with new concrete pavement. The site drainage and sanitary sewer designs incorporate both gravity and pressure systems with new pump stations.

Port Authority of New York and New Jersey, Perimeter Intrusion Rapid Deployment Program, JFK International Airport, Queens, New York. Project Engineer: Work included investigation and design for the perimeter security route for approximately 2.1-mile airside/landside boundary; field inspection to determine the perimeter routing conditions and unanticipated problems; review of airport operations; as well as FAA and tenant requirements. Additionally, new perimeter fence designs were developed for portions of the bayside perimeter where there was no existing fence. The fence types adjacent to Runways 4L-22R and 4R-22L were coordinated with the FAA due to infringements of height and frangibility restrictions of the runway object-free areas.

Port Authority of New York and New Jersey, Stormwater Pump Station Outfalls, LaGuardia Airport, New York: Project manager for the rehabilitation of riprap at stormwater pump station outfalls. Work involved hydraulic analyses of the stormwater outfalls and preparation of rehabilitation alternatives. A gabion basket rehabilitation alternative was developed to protect the riprap outfalls from scour associated with the pump discharge points. Design work included temporary construction to provide access over the airport perimeter berm, outfall bed grading, and the gabion basket details and specifications.

Port Authority of New York and New Jersey, Utilities Rehabilitation, LaGuardia Airport, Queens, New York: Project engineer for the rehabilitation of underground utilities and water mains. Project involved investigation, design, and construction support services for underground utility improvements under three separate contracts in conjunction with other major site and roadway improvement projects to minimize construction impacts to airport operations. Project work included the utility upgrades required to meet new roadway alignments and grades, taxi stand, restroom, and FAA control tower buildings. Utility construction staging was designed to maintain the existing water and sanitary systems until final transfer of services was complete. The design utility layouts were developed to both meet proposed roadway conditions and to minimize MPT conflicts.

NJ Transit & Port Authority of New York and New Jersey, Access to the Region's Core (ARC) Mass Transit Tunnel - Conceptual Design (formerly Trans-Hudson Tunnel), New Jersey & New York: Civil lead for the conceptual design of the $8.7 billion NJ Transit's new dual railway tunnel. The tri-venture team developed conceptual design to obtain a positive Federal Transit Administration Record of Decision. Responsible for civil design group.

Port Authority of New York and New Jersey, Perimeter Intrusion Rapid Deployment Program, JFK International Airport, Queens, New York: Project Engineer. Work included investigation and design for the perimeter security route for approximately 2.1-mile airside/landside boundary; field inspection to determine the perimeter routing conditions and unanticipated problems; review of airport operations; as well as FAA and tenant requirements.

Port Authority of New York and New Jersey, Utilities Rehabilitation, LaGuardia Airport, Queens, New York: Project engineer for the rehabilitation of underground utilities and water mains. Project involved investigation, design, and construction support services for underground utility improvements under three separate contracts in conjunction with other major site and roadway improvement projects to minimize construction impacts to airport operations.

Port Authority of New York and New Jersey, Van Wyck Expressway Lighting Phases I and III, JFK International Airport, Queens, New York: Project engineer for the installation of a new duct bank of Van Wyck Expressway lighting.

Frederick J. Eilinger, Jr., PE

Project Role: Project Manager

Education

BS, Civil Engineering, Structural/ Civil Engineering, Stevens Institute of New Jersey, 1978

Registrations

PE: NJ, 1986, Registration No.: [redacted]

PE: DE, 1988, Registration No.: [redacted] Civil)

Experience

Years with AECOM: 3
Years with other firms: 29

Employment History

2008-present: AECOM Transportation, Buildings Project Manager

2005-2008 Pascack Valley Hospital, Westwood NJ, Director of Engineering

2002-2005 Port Authority of New York and New Jersey, Newark, NJ Project Management Consultant

2001-2002 Troast Management Group, Inc. Paramus, NJ Project Management Consultant

2000-2001 St. Joseph's Hospital and Medical Center, Paterson, NJ Manager Facilities Construction

1989-2000 Lipton Inc. Englewood Cliffs, NJ Manager, Corporate Facility Engineering

1979-1989 Chiquita Brands, Inc, Montvale, NJ, Project Engineer

Mr. Eilinger has extensive experience in the management, planning, design and construction of a broad range of projects associated with industrial, commercial, healthcare, foods and business facilities. Work experience includes structural, mechanical electrical and environmental work.

Port Authority of New York and New Jersey, Newark, NJ: Project Manager at Newark Liberty International Airport. Responsible for all facets of project management as related to MEP based projects associated with the Central Terminal Area and the Terminal B Modernization Program. Projects include:

- Terminal B Fire Alarm Upgrade and subsequent Fire Alarm Replacement,
- Rehabilitation of Mechanical and Electrical Infrastructure for Terminal B Satellite Operations,
- Installation of Emergency Generator
- Capacity Upgrades for Federal Immigration Services Hall,
- primary Chilled Water Booster pump system
- Upgrade of Electrical infrastructure for Runway Switch House #2.

Port Authority of New York and New Jersey, Newark, NJ: Consultant, Project Management. Engaged in project management of diverse facility improvements related to tunnels, bridges and terminals within the jurisdiction of the Port Authority. Responsibilities included coordination of all phases of project development and design from concept to close out. Projects included:

- Lincoln Tunnel ventilation buildings structural rehabilitation (both Manhattan and New Jersey sides),
- New service garage for NJ toll plaza of the Lincoln Tunnel,
- Upgrade of Fire sprinkler system for Lincoln Tunnel,
- New Traffic Control Center for Lincoln Tunnel,
- Automated traffic advisory signage system for New York approach roads for Lincoln Tunnel including Bus Terminal approaches.

Pascack Valley Hopsital, Westwood, NJ: Director of Engineering. Responsible for supervision of 15 plant maintenance staff. Provided for the orderly closure of the facility under guidance of the Bankruptcy Court. As Project Manager provided project and management services for diverse infrastructure improvement projects including four story 100,000 SF Multi-use Addition, Restroom Renovations, Computer Room Expansion, Medical Surgical Care Unit Renovations, Cardiac Telemetry System Upgrade and Orthopedic Office build out. Responsible for space planning, construction budgets and maintenance staff with on-call rotation.

The Troast Management Group, Inc., Paramus, NJ: Consultant, Project Management. Provided project management and construction management services for commercial and industrial projects for clients such as Movado Group, Stevens Institute of Technology and Cendant Corporation. Responsibilities include estimating, bidding, purchasing, construction supervision and billings. Projects

Frederick J. Eilinger, Jr., PE, continued

included: New cafeteria, 1200 sq. ft., for Movado Group, Paramus, Office space conversion/build out in Stevens Institute Campus library, Assisted management in bidding process for Commerce Bank, Home Depot and Home Expo projects, Directed construction of numerous projects for Cendant Corporation, Parsippany, NJ, Renovation of the Century 21 Department Store in Morristown, NJ.

St. Joseph's Hospital & Medical Center, Paterson, NJ: Manager of Construction for all phases of health based facilities capital improvements. Overall responsibilities include functional design through completion and commissioning. Projects included: construction of 50,000 Sq.-Ft. Out-Patient Dialysis Center valued at $12.5 million, Developed conceptual designs for Labor & Delivery Expansion, Cardiac Rehabilitation, Pediatric Sub-specialties office and other long-term initiatives, Directed construction of numerous smaller projects including an 8,000 Sq. Ft. Imaging Center; 7,000 Sq. Ft. Women's Medicine Suite, 5,000 Sq. Ft. Pediatric Emergency Services Area and 1000 Sq. Ft. Surgical Waiting Green house Area.

Chiquita Brands Co., North America, Montvale, NJ: Project Engineer: Designed construction documents for new construction and rehabilitation of corporate facilities. Basic construction management responsibilities included cost control, contract administration and on-site supervision. Projects included:

- Designed containerized cargo terminals in several states. Sites included a 12 Acre terminal in Gulfport, MS, 20 Acre terminal in Wilmington DE and a 25 Acre site in Rensselaer, NY. Scope included geo-technical stabilization, site infrastructure improvements, structural, plumbing and electrical design work, construction drawings and specifications.
- Directed and designed the renovation of waterfront facilities to convert existing break bulk discharge operations to unitized cargo facilities.
- Performed complete structural analysis and redesign of 450 feet long finger pier in Panama to allow conversion from rail based break bulk to truck based containerized cargo operations.
- Created and maintained a worldwide refrigerated vessel database for charter use by company including discharge characteristics for port of use evaluation.

LIPTON, Englewood Cliffs, NJ (now UNILEVER Best Foods): Manager, Corporate Facilities Engineering: Project manager and coordinator for all phases of plant/facilities engineering activities for thirteen production sites. Provided in-house engineering consulting services and ensured compliance with applicable codes and regulations. Assured facilities reliability through implementation of corporate standards and initiatives. ($28 million Annual Capital Budget).

Project work included: technical consulting and advisory services to senior management for long term planning and strategic initiatives; initiated national strategy and preferred vender program for roof replacement and repairs resulting in a 30% reduction in reactive roof maintenance expenditures; created database to assess manufacturing plant conditions to align budgets, reduce maintenance costs and diminish facility failures; negotiated prototype effort for compressed air efficiency evaluation, which resulted in a 25% reduction in related energy use at the alpha site and was applied corporate wide; selected, justified company CAD system for Facilities department resulting in a productivity improvement of 15%; developed and completed 2400 HP steam plant replacement project resulting in fuel cost savings of $250,000 annually and reduced manning requirements; directed the design and construction of a 120,000 CFM HVAC replacement with critical humidity control requirements; provided for a future intranet/ internet connection of all production sites for engineering documentation; reassessed West Coast production sites including physical inventory and asset replacement cost calculations resulting in an internal savings of $20 million; directed design and constructed new lobby, offices and cafeteria at primary production facility while assuring continued operations, phased construction and scheduling issues were paramount, project completed in budget and ahead of schedule.

Indhira A. Figuereo

Project Role: Project Engineer

Education

BS, Engineering Geology, The City College of New York, 2001

Professional Associations

Women's Transportation Seminar (WTS)

American Society of Highway Engineers (ASHE)

National Society of Professional Engineers (NSPE)

Professional Women in Construction (PWC), Former Member

Society of Hispanic Professional Engineers (SHPE), Chair, Advisors Roundtable

American Society of Civil Engineers (ASCE),Metropolitan New York Section, President, Younger Member Forum

Experience

Years with AECOM: 11
Years with other firms: 0

Employment History

1999-present: AECOM, Civil Engineer

1999AECOM, New York, NY, Civil Engineer

Ms. Figuereo has considerable experience providing civil engineering design and management services for various site development, highway, aviation, facilities, transit, and structural projects. Her experience includes the management of high-occupancy/ utilization spaces, agency and stakeholder coordination, state grants funding compliance, construction management and phasing, and coordination of ongoing construction with operations and utility relocations. Her experience also includes the development of technical reports, feasibility studies, detailed plan preparation in all phases of design (including logistics plans), environmental impact analyses, and quantity and cost estimating. Ms. Figuereo is also experienced in the use of the various technical/design computer programs, such as AutoCAD, MicroStation, StormCAD, SewerCAD, Adobe, and Microsoft Office (including Project, Access, Publisher, and Visio).

Port Authority of New York and New Jersey (PANYNJ) and New York City Economic Development Corporation (EDC), Forest Avenue Improvements, Staten Island, New York: As project engineer, coordinated and assisted in performing engineering design services and preparing final design and contract documents, and performing post award services for the proposed improvements at Forest Avenue. Duties include the design of the roadway resurfacing and widening, drainage improvements, new overhead sign structure, permitting submissions to NYCDEP and NYCDOT, and construction cost estimates and technical specifications.

American Airlines, Terminal 8 Reconstruction, JFK Redevelopment Project, John F. Kennedy International Airport, Jamaica, New York: As the design engineer, worked on the engineering design and construction for civil landside design elements for the complete reconstruction of Terminals 8 and 9. Provided construction administration assistance and civil engineering design for a new elevated departure roadway. Designed utility relocations in coordination with the new terminal and airside facilities. Other responsibilities included responses to shop drawings and RFIs.

Lincoln Center for the Performing Arts, Inc., Project Management Services for the Harmony Atrium Revitalization Project, New York, New York: Project manager in charge of the renovation of an 11,000–square foot privately owned public space, The David Rubenstein Atrium at Lincoln Center. This US$25 million facility will serve as a central information center and visitor services hub for Lincoln Center and community organizations in the surrounding neighborhood. The space will feature free-to-the-public performances/events, food service, restrooms, and Wi-Fi access. As project manager, duties include acting as owner's representative regarding the design, procurement, and construction of the project; monitoring the work of technical/design consultants; and review and approval of project payments and project schedule. Responsible to review and reconcile cost estimates; lead the preparation, negotiations, and award of contracts and contracts close-out; prepare cost reports; and preside on project management meetings and lead value engineering review meetings. In addition, managed agency and stakeholder coordination to procure and obtain various approvals for the design and construction phases of the project.

Indhira A. Figuereo, continued

Approvals include Public Design Commission, Community Board 7, City Planning Commission, Department of Environmental Protection, Department of Buildings, and Fire Department of New York. Also procure and obtain agency approvals for funding from the Department of Design and Construction and Dormitory Authority of New York. Obtaining funding compliance with these agencies was significant in order to obtain reimbursement. Also, oversee compliance of LEED requirements from the designer and construction manager.

Port Authority of New York and New Jersey (PANYNJ), Program Management - Engineering Department, Newark, New Jersey: Consultant engineer responsible for the development of metrics to allow the engineering department to gauge progress and performance. Also managed and prepared information for the chief engineer to present to the board of commissioners of the port for approval of several mega-projects in the States of New York and New Jersey.

Port Authority of New York and New Jersey (PANYNJ), CTA Frontage Roadway Improvements at Newark Liberty International Airport, New York: As design engineer, developed the maintenance of traffic plans for the rehabilitation of the departures frontage ramps for terminals A and B. Duties included the final design of plans, details, and cross sections.

Port Authority of New York and New Jersey (PANYNJ), CTA Frontage Roadway Improvements at Newark Liberty International Airport, New York: As design engineer, developed the maintenance of traffic plans for the rehabilitation of the departures frontage ramps for terminals A and B. Duties included the final design of plans, details, and cross sections.

Port Authority of New York and New Jersey (PANYNJ), Cyclical Condition Survey of Pier Sheds at Piers 6 and 8, New York Marine Terminal, Brooklyn, New York: As engineer, prepared a condition survey report describing deficient conditions in multiple warehouse facilities.

Port Authority of New York and New Jersey (PANYNJ), LaGuardia Airport Improvements Project, New York: As engineer, assisted in traffic and transportation studies. Conducted field investigations and traffic data collection (such as vehicle volumes and dwell times). The City of Glen Cove, Glen Cove Feery Terminal Water Borne and Site Improvements, Glen Cove, New York: As lead engineer, coordinated and assisted in the design, cost estimate, and specifications preparation for The Glen Cove Ferry Terminal site, located within the City of Glen Cove. This US$14 million terminal is a new transportation facility to be constructed on a former brownfield site. The facility will provide the docking and passenger terminal for two commuter ferries.

National Infrastructure Development Company, Lt., Causeway from Mucurapo to Chaguaramas in Trinidad, Trinidad and Tobago: As project engineer, prepared the preliminary design documents for the construction of a causeway from Mucurapo to Chaguramas in the southwest end of the Island of Trinidad. The proposed causeway, approximately 7 kilometers long, will run parallel to Western Main Road to alleviate traffic congestion along Western Main Road and provide a fast and direct connection between Carenage and Fore Shore Lookout. Duties include the development of the design alternatives and order of magnitude construction cost estimates.

MTA Metro-North Railroad (MNR), Design and Construction Services for Yankee Stadium Train Station, Bronx, New York: As civil task lead, prepared and designed the drainage system, utility relocation plans, and details for the track realignment and the new station. Duties included the development of design-build drawings, cost estimates, and coordination with utility owners.

New York City Department of Sanitation (DSNY), Seven New Marine Transfer Stations, New York City, New York: As the design engineer, designed the ramps structures drainage, drainage calculations, and developed drainage details for the conversion of seven marine transfer stations into containerized, intermodal facilities. The project allows DSNY to containerize garbage for the placement into barges for transport to various locations.

Michael Garbolski, PE

Project Role: Project Manager

Education
BSc, Civil Engineering, University of Connecticut, 1980

Registrations
PE: CT, 1985, Registration No.: [redacted]
PE: FL, 1999, Registration No.: [redacted]
PE: MA, 1996, Registration No.: [redacted](Civil)
[redacted]istration No.: [redacted]
PE: NY, 1994, Registration No.: [redacted]

Professional Associations
American Society of Civil Engineers (ASCE)

Experience
Years with AECOM: 17
Years with other firms: 12

Employment History
1993-present: AECOM, Civil Project Manager
1978-1978: Fuss & O'Neill Engineers, Manchester, CT, Survey Rodman
1979-1979: Fuss & O'Neill Engineers, Manchester, CT, Survey Rodman
1980-1981: Kasper Associates, Inc., Vernon, CT, Survey Rodman
1981-1982: Hayden, Harding & Buchanan, Inc., East Hartford, CT, Project Engineer
1982-1985: Town of Simsbury, Simsbury, CT, Project Engineer
1985-1986: A.R. Lombardi Associates, Inc., Vernon, CT, Project Engineer
1986-1993: Ed Lally & Associates, Inc., Windsor, CT, Project Manager

Mr. Garbolski is a senior project manager with extensive general civil engineering experience. He has recently focused on project management, implementation, and coordination of marine, transportation, and public infrastructure projects. He has worked on major facilities such as marine and container terminals, airports, and federal and state installations and correctional facilities, with a special focus on site development, grading, paving, drainage and utilities. His experience includes field investigations, study reports, preparation of contract documents, construction administration, and public presentations. Mr. Garbolski is also experienced in the preparation of environmental permit applications pertaining to land improvement. More recent experience includes physical security measures such as perimeter strengthening and guard post hardening at major airports and other facilities.

Vehicle Security Center and Tour Bus Parking Facility, World Trade Center (WTC), New York, New York: Lead civil engineer for design and construction phase services for secure vehicle access facility to WTC basement areas and tour bus parking for the WTC Memorial, including anti-ram vehicle barriers and guard post hardening.

Terminal B At-Grade and Terminal Bollard Protection at Terminal Frontage, Newark Liberty International Airport, Newark, New Jersey: Project manager and project engineer for multi-discipline, fast-track schedule effort producing contract documents for an anti-ram vehicle barrier system at terminal arrivals, departures, and at-grade frontages involving structural and utility elements on both terminal structure and at-grade facility.

Perimeter Strengthening, LaGuardia Airport, John F. Kennedy International Airport, and Newark Liberty International Airport, New York, and New Jersey: Project manager for the design and construction-phase services for a vehicle crash protection barrier and fencing on the aviation operations area perimeter at New York metropolitan area airports, managing civil, structural, electrical and traffic elements.

City of Bridgeport, Emergency Operations, Dispatch Center, and Vehicle Storage Building, Bridgeport, Connecticut: Lead civil engineer for this challenging construction of the city emergency facility and public works complex on an industrial brownfield site involving site preparation, drainage, and utilities.

Port Ivory Express Rail, Howland Hook Marine Terminal, Staten Island, New York: Project manager for design and construction services for an 11-track on-dock intermodal rail yard; multi-discipline effort on a brownfield site with considerable soils, grade, utility, and boundary challenges. The project involved environmental permitting as well as city and state permits for three lead-track grade crossings of NYC Streets.

Elizabeth Port Authority Marine Terminal, Elizabeth, New Jersey: Project manager and lead civil engineer responsible for the technical direction and production of this project. Responsible for inspection and structural evaluation of specialty utility structures and drainage discharge studies.

Michael Garbolski, PE, continued

Port Authority of New York and New Jersey (PANYNJ), Port Newark, Newark, New Jersey: Project manager responsible for the technical direction and production of the container terminal upland paving and utilities, water main replacement, access roadways, and pavement rehabilitation. Services included field investigations, design, preparation of contract drawings and specifications, and construction cost estimates.

Elizabeth Port Authority Marine Terminal, ExpressRail, Elizabeth, New Jersey: Stage I study, design-build contract documents and construction-phase services. Project manager and lead civil engineer for preparation of preliminary design and documents for an 18-track on-dock intermodal yard.

New Ferry Terminal sanitary sewer and water service connections, Battery Park City, New York, New York: Project civil auditing engineer assigned by the Port Authority to audit civil design effort by consultant.

Port Authority of New York and New Jersey (PANYNJ), Brooklyn Marine Terminal, Brooklyn, New York: Project manager for pier 7 upland paving and utilities, as well as pier 6 cocoa storage tents. Services included field investigations, design, preparation of contract drawings and specifications, and construction cost estimates.

U. S. Federal Aviation Administration (FAA), National Airport Pavement Testing Machine Facility, Atlantic City, New Jersey: Project civil engineer responsible for site, drainage, and utilities design and pinelands permit.

U. S. Immigration and Naturalization Service, Federal Detention Facility, Batavia, New York: Project manager responsible for site, drainage, and utilities design on this design-build project.

Port Authority of New York and New Jersey (PANYNJ), Lincoln Tunnel, New York, New York: Project manager and civil engineer for the replacement of bus ramp drains, and for a study of existing sewers and emergency sanitary sewer repair. Conducted a study of existing sewers and emergency sanitary sewer repair.

Port Authority of New York and New Jersey (PANYNJ), Newark International Airport Tenant Parking Pavement Rehabilitation, Newark, New Jersey: Project manager for parking pavement rehabilitation, responsible for preparation of contract documents for repair and rehabilitation of tenant parking.

Port Authority of New York and New Jersey (PANYNJ), Holland Tunnel, New York, New York. Project manager for drainage improvements, responsible for developing custom drainage solution directly above tunnel portal structure.

Port Authority of New York and New Jersey (PANYNJ), JFK International Airport, New York, New York. Project manager for fuel truck parking pavement rehabilitation, responsible for preparation of contract documents for repair and rehabilitation of fuel truck parking. Project Name: Pat ilis num vulputpat lore voloreet utem quisim quam velent lorper se min hendit venit velit velisis augue tat. Duis nosto ea feum zzriurem acip ex exeriureet luptat at nisim vendit lore commodo dolobor alissequat praesequisi.

Paul F. Giovanelli, PE

Project Role: Project Manager

Education

MS, Industrial Administration (Business), Purdue University, NY, 1983

ME, Environmental Engineering, Manhattan College, NY, 1973

BS, Chemical Engineering, Manhattan College, NY, 1972

Registrations

PE: NJ, 1995, Registration No.: [redacted]

PE: NY, 1984, Registration No.: [redacted]

Experience

Years with AECOM: 19
Years with other firms: 18

Employment History

1991-present: AECOM, Transportation and Program Manager

1988-1991: Metcalf & Eddy, New York, NY, Sr. Project Manager

1982-1988: Oneida County, Utica, NY, Administrator & GM Oneida County Sewer District

1973-1982: USEPA, New York, NY, Project Manager

Mr. Giovanelli has extensive program and project management experience on a broad range of planning, design, and construction projects. He managed roadway improvement, commuter transportation, intermodal facility and energy projects with high visibility (WTC Restoration - PATH Exchange Place Station) and of a "mission critical" nature (Port Elizabeth ExpressRail Intermodal Transfer Facility). Additional experience includes hazardous materials remediation and wastewater treatment at the federal, state, and local levels. In the design-build arena, he has managed projects from both the contractor and the client perspective.

In his current assignment, Mr. Giovanelli has spent ten years "on site" in the Engineering and Port Commerce Departments of the Port Authority of New York and New Jersey. Here he completed his most critical project: the overhaul, restoration, and tunnel extension of PATH's terrorist-damaged Exchange Place below-grade commuter rail station and trans-Hudson tunnels. As the only non-PA Program Manager, he oversaw and directed the development of $70 million in projects involving 15 major contract task orders and 12 design consultants.

In the last ten years, his client, the Port Authority chose only Mr. Giovanelli to serve as the Manager on every roadway and intermodal facilty project in Port Elizabeth. Between the 4 phases of the widening, realignment and grade separation of the major Port arterial and the 5 phases of the new 18-track ExpressRail Intermodal facility he successfully managed from planning to conclusion over $200 million in capital works. In this role he met the competing needs of client and users (Port Commerce, Port Redevelopment Capital Projects, Maher Terminals, APM Terminals, CONRAIL, and private property owners).

Demonstrating his versatility, Mr. Giovanelli now manages the Shore Power (cold ironing) Project at the PA's Brooklyn Cruise Terminal. This first-of-its-kind on the East Coast, $15 million sole source, USEPA Grant funded project enables docked ships to run on shore-based electricity instead of on-board, diesel engines reducing significantly the carbon footprint.

Brooklyn Cruise Terminal Shore Power, Port Authority of New York and New Jersey, Brooklyn, New York: Project Manager for the design and engineering services during construction of a new $15 million Shore Power (cold ironing) Project at the PA's Brooklyn Cruise Terminal. This first-of-its-kind on the East Coast, USEPA Grant funded project enables docked ships to run on shore-based electricity instead of on-board, diesel engines significantly reducing the terminal's carbon footprint.

Port Street Capacity Improvements, Port Authority of New York and New Jersey, Port Newark, New Jersey: Project Manager for the planning for a $70 million complete re-configuration of the Port Newark/Port Elizabeth north entrance roads. Sharp turns, flooded roadbeds, six grade crossings and capacity limits drive this significant overhaul. The challenge: reduce costs and complete the work while keeping the traffic flowing.

McLester Street Widening (Phase 4 – Port Elizabeth Roadway Improvement Program), Port Authority of New York

Paul F. Giovanelli, PE, continued

and New Jersey, Port Elizabeth, New Jersey: Program Manager for the planning, design and engineering services during construction for a $20 million widening of a section of the main N/S arterial through Port Elizabeth Marine Terminal. This is the final roadway project to upgrade the Port Elizabeth roadways to handle the expected increased truck container traffic.

ExpressRail Second Lead Track and South Bay Avenue (Phase 2 – Port Elizabeth Roadway Improvement Program and Phase 5 – Port Elizabeth Intermodal Facility Replacement), Port Authority of New York and New Jersey (PANYNJ), Elizabeth, New Jersey: Program manager for the planning, design and engineering services during construction for the $15 million second, parallel, "lead" track from the main line into the new ExpressRail intermodal transfer facility. The second of four roadway projects upgrading Port Elizabeth roadways and the fifth and final phase of the new ExpressRail Intermodal facility, the project is critical to handling the projected needs of the terminal's intermodal operations by adding and separating the lead tracks for the newly constructed ExpressRail facility from a major roadway.

ExpressRail Tracks 11-18 (Phase 4 – Port Elizabeth Intermodal Facility Replacement), Port Authority of New York and New Jersey, Elizabeth, New Jersey: Program Manager for the design and engineering services during construction for the $16 million Phase 4 of the new 18-track intermodal transfer facility. The project must incorporate the experiences and decisions made on Phases 1 and 2 of this project. The project schedule is on critical path for the transfer of 85 key acres of terminal lease space. Project construction must be staged to comply with tenant lease conditions and on-going port operations.

ExpressRail Tracks 9 & 10 (Phase 3 – Port Elizabeth Intermodal Facility Replacement), Port Authority of New York and New Jersey (PANYNJ), Elizabeth, New Jersey: Program Manager for the design and engineering services during construction for the $20 million Phase 3 of the new 18-track intermodal transfer facility. The project must incorporate the experiences and decisions made on Phase 1 of this project. The project schedule is on critical path for the transfer of 85 key acres of terminal lease space. Project construction must be staged to comply with tenant lease conditions and on-going port operations.

Design-Build of Intermodal Transfer Facility: Tracks 1 to 8 (Phase 2 – Port Elizabeth Intermodal Facility Replacement), Port Authority of New York and New Jersey (PANYNJ), Elizabeth, New Jersey: Program Manager for the $30 million design-build of Phase 2 of an 18-track intermodal transfer facility. The project includes automated turnouts, and accommodations for transferring 80-ton containers between railway flat cars and tractor trailers with 120-ton rubber-tired gantry (RTG) cranes, straddle carriers, and reach stackers. The project schedule is on critical path for the transfer of 85 key acres of terminal lease space.

ExpressRail Lead Track Relocation Over McLester Street Depressed Roadway (Phase 1 – Port Elizabeth Roadway Improvement Program and Phase 1 – Port Elizabeth Intermodal Facility Replacement), Port Authority of New York and New Jersey, Elizabeth, New Jersey: Program Manager for the engineering services during construction of a new $25 million "lead" track from the main line into the new ExpressRail intermodal transfer facility. The first of four roadway projects upgrading Port Elizabeth roadways and first of five intermodal facility replacement projects, the project included the construction of a 100 by 300-foot slurry-wall "bathtub" and depressing a major terminal artery so that traffic could flow unimpeded under a new lead track.

Removals and Paving and Utilities at Former ExpressRail Facility, Port Authority of New York and New Jersey (PANYNJ), Elizabeth, New Jersey: Project manager for the planning, design and engineering services during construction for the $5 million demolition of the existing Authority's Port Elizabeth ExpressRail and the subsequent resurfacing and utility strengthening to accommodate the container staging and storage needs of the terminal's leased operations. The project schedule is on critical path for the transfer of 85 key acres of terminal lease space. Project construction must be staged to comply with tenant lease conditions and on-going port operations.

Frank Grande, PE

Project Role: Project Manager

Education

BS, Civil Engineering, Polytechnic Institute of New York, 1978

Registrations

PE: NY, 1989, Registration No.: [redacted]

PE: NJ, 2007, Registration No.: [redacted]

PE: WV, 2008, Registration No.: [redacted]

Professional Associations

American Society of Civil Engineers (ASCE)
American Society of Highway Engineers
Municipal Engineers of the City of New York

Experience

Years with AECOM: 14
Years with other firms: 20

Employment History

1996-present: AECOM, Transportation Group Manager

1978-1979: URS/Madigan - Praeger, New York, NY, Project Manager

1979-1990: Basil-Morrissey, New York, NY, Project Manager

1990-1993: OPA Engineers, New York, NY, Project Manager

1993-1996: Rust E&I, New York, NY, Project Manager

1996-2008: Earth Tech, New York, NY, Transportation Group Manager

Mr. Grande has more than 30 years of experience in management, planning, design and construction inspection of highways, municipal streets, bridges, buildings and marine structures. He has been actively involved in all aspects of planning, design, estimating, construction management and supervision of field inspections. He is currently transportation group manager for the highway/bridge group in New York City. He has serves served as senior project manager, designer and resident engineer on many projects and is proficient at coordinating the technical and administrative efforts on multidisciplinary projects and the preparation of contract documents and proposal materials. His areas of expertise include evaluation, rehabilitation, design, and construction management for highway and street improvements; bridges; buildings; marine structures.

Palisades Interstate Parkway Connector Ramp Stage 3; Port Authority of New York and New Jersey, Bergen County, New Jersey: Project manager for revising and updating the 2004 contract documents to accommodate the revised ramp profile and update the structural designs to the current structural codes for two bridges and retaining walls supporting the new connector ramp to the lower level of the George Washington Bridge. The project also included the redesign of a simple span bridge over Hoyt Avenue. The elevated ramp structures include a 28.5-foot widening of an existing 373-foot-long, 5-span continuous/simple span bridge over the GWB approach; a 35 feet 9 inches wide by 280 feet long, 3-span continuous curved ramp bridge over Hudson Terrace; a 200-foot-long by 35-foot-high retaining wall, and strengthening of 200 feet of existing 25-foot-high retaining wall with rock bolt tie backs.

Tappan Zee Bridge and I-287 Corridor Environmental Study; New York State Department of Transportation, New York State Thruway Authority and Metropolitan Transportation Authority, Rockland and Westchester Counties, New York: Engineering task manager for development of conceptual engineering designs for highway and transit improvement alternatives for the study to address the mobility needs of the 30-mile corridor from Suffern in Rockland County to Port Chester in Westchester County. The study goals are to identify the best comprehensive alternative for improving mobility in the corridor and to determine its environmental impacts. Alternatives considered include rehabilitation of the existing bridge, a new bridge and/or tunnel across the Hudson River, highway improvements to a 12-mile Thruway corridor in Rockland, and implementation of new transit modes to the corridor including bus rapid transit and commuter rail. AECOM is providing the AA/EA/EIS services that will include all planning forecasts and environmental analysis required for intermodal alternative planning and development.

Blackfork Bridge Construction Support Services; West Virginia Department of Transportation, Parsons, Tucker County, West Virginia: Project manager for construction support services for construction of the Blackfork Bridge over the Cheat River (Bridge No. 1587) on Route No. 219. Managing review of shop drawing submittals for steel girders,

Frank Grande, PE, continued

steel diaphragms splices details, and elastomeric bearings and response to contractor's requests for information.

Blackfork Bridge; West Virginia Department of Transportation, Parsons, Tucker County, West Virginia: Project manager for the $7 million replacement of the Blackfork Bridge, a 585-foot-long structure over the Blackfork of the Cheat River and approach roads. Managed span arrangement studies, type size and location studies, and final design. Managed approximately 2,000 feet of roadway reconstruction, right-of-way plans, hydraulic and scour studies, and geotechnical investigations. The AASHTO LRFD Code was used for the design.

Shawnee Highway; West Virginia Department of Transportation, Raleigh County, West Virginia: Project manager for the study, design and preparation of construction contract documents for a 1.8-mile section of a new two lane arterial from the I-77 Ghent Interchange to the Raleigh/Mercer County Line. The project includes the reconstruction of one mile of CR 48 and an at-grade intersection with the proposed highway. The project won the 2005 Engineering Excellence award for roadway design from the WVDOT Division of Highways.

NYCDEP Combined Sewer Relocation Study, Arup & New York City Transit Capital Planning Division, Nostrand Avenue and Avenue H, Brooklyn, New York: Project manager for a feasibility study to relocate a NYCDEP pile-supported, twin 180-inch combined sewer that is in direct conflict with a proposed extension of the subway tunnel at the Flatbush Avenue Station Terminal. An inverted siphon that met NYCDEP design criteria was designed to pass beneath the proposed subway tunnel. The study determined the feasibility of constructing the 40-foot-wide by 160-foot-long facility 45 feet below grade while maintaining the flow capacity of the combined sewer with bypass piping. Adding to the complexity were site constraints of existing buildings along both sides of a narrow utility-filled right of way within a highly congested commercial area. The study included preparation of conceptual level plans and typical sections that demonstrated the means, methods and materials to remove the existing sewer, provide temporary bypass piping, maintain the existing utilities, and construct the inverted siphon and subway tunnel over the siphon while maintaining both pedestrian and vehicular traffic on the streets above. The estimated total project cost was $25 million with an estimated construction time of 18 months.

Bellew Avenue Reconstruction; City of Watertown, Watertown, New York: Project manager for the design of the reconstruction of a minor arterial on an accelerated schedule. The project includes preparation of design report, preliminary plans and construction documents in 12 months. Design elements included pavement design, a new water main, rehabilitation and conversion of the existing combined sewer into a sanitary sewer and providing a new storm sewer.

Coalfields Expressway; West Virginia Department of Transportation, Raleigh County, West Virginia: Project manager for design of a 3-mile section northwest of Sophia connecting to Route 16 in Raleigh County for the West Virginia Department of Highways. Coalfields Expressway is a controlled-access divided arterial consisting of four 12-foot lanes with a 46-foot-wide median and a design speed of 65 mph. A direct connection is provided to existing 5-lane Route 16 at the northern terminus of the project. At the expressway crossing over Route 54, a diamond interchange is provided with twin 3-span bridges. Five separate construction contracts were prepared including complete Right-of-Way Plans.

Reconstruction of I-287 from the Tappan Zee Bridge, to Interchange 8; New York State Thruway Authority, Westchester County, New York: Project engineer for planning and design for the reconstruction and widening of this 1.8-mile section, which handles 140,000 vehicles per day. Includes dual 2,000-foot viaducts to widen roadway across the Talleyrand Swamp and a major interchange redesign.

Rehabilitation of the Long Island Expressway, Queens Midtown Viaduct to Grand Central Parkway; New York State Department of Transportation - Region 11, , Queens, New York: Senior engineer in charge of overhead sign structure designs, retaining wall designs and sound barriers for the rehabilitation of 5.5 miles of roadway and the rehabilitation/replacement of 27 bridges.

George Greenberg, PE

Project Role: Project Scheduling

Education

MS, Industrial Engineering, New York University, 1968
BE, Electrical Engineering, City College of New York, 1967

Registrations

PE: NY, 1973, Registration No.: [redacted]

PE: NJ, 1978, Registration No.: [redacted] Civil)

Experience

Years with AECOM: 11
Years with other firms: 27

Employment History

1999-present: AECOM, Scheduler

1972-1979: Burns & Roe
1979-1996: Bainbridge Building and Construction Services

1996-1999: Linde U.S.A., division of Linde Chemical Company

Mr. Greenberg has extensive experience in preparing, upgrading, and analyzing engineering, procurement, construction, installation, and start-up CPM schedules and cost reports. His assignments have included subway and commuter railroads, tunnels, roadways, power plants, and buildings. He was the senior scheduling engineer responsible for project control, scheduling, cost reporting, and document control for a five-year period on both the Atlantic Avenue and 72nd Street Station construction projects. He served from construction start-up through completion and acceptance by NYCT. Both projects included significant electric and electronic elements, including lighting, fare entry, token booths, gates, and CCTV cameras. His additional rail/transit experience with electrical and electronic equipment and security components includes the WTC PATH Terminal and the NJT Re-electrification projects, consisting of lighting, signals and communications, control centers, fencing, barriers, public address systems, and CCTV systems.

World Trade Center PATH Terminal, Port Authority of New York and New Jersey (PANYNJ), New York: Construction scheduling for alternate phasing and design for a permanent passenger terminal at the World Trade Center site, including the Calatrava terminal hall and station. The approximate construction cost is $2.2 billion.

Newark Airport, Terminal B, Newark Airport: This project is intended to upgrade Terminal B at Newark International Airport. Prepared integrated Level 1 and Level 2 schedules for Terminal B upgrade. The Level 2 schedules were prepared with the engineering Project Managers and integration of schedules provided by others. Schedules were for engineering, procurement, and construction, through acceptance and encompassed the entire scope of work including tenant relocations. Schedules were developed and updated, working closely with the operations staff and other key members. Site visits to Terminal B were frequent to maintain communications. Extensive interaction with Port authority staff was involved in gathering data, assessing progress, and mitigating problems.

Various Projects for The Port Authority of New York and New Jersey from June 2007- Jun 2008: Provided planning and scheduling support to the Project Management department for multiple aviation projects at EWR, TETERBORO, JFK and LGA airports. This included preparation and updating of Master Program schedules for all projects at each airport and individual project schedules for projects from conceptual design, design development and Final Design phases thru procurement, contract award and construction. In addition, prepared construction feasibility schedules ranging from $150M Runway Rehabilitation to the installation of transformers to meet critical completion deadlines. Various detailed schedules for engineering design services were also prepared.

These Schedules allow the PA to schedule all aspects of the project delivery process i.e. to design, procurement and construction efforts, for greater alignment with the PA Board approval schedules process.

Examples of the most recent schedules

George Greenberg, PE, continued

prepared for JFK Airport were:

- Master Schedule for JFK airside projects;
- Project Schedule for replacement of the Bay Runway, the longest runway at JFK Airport, to accommodate the A380 Airbus (14,000 feet long, 250 feet across);
- construction schedules for poured-in-place concrete, slip form concrete, asphalt, runway lighting and electric duct; and
- the program schedule for the New Delta Terminal Complex.

Other Schedules prepared include:

- Teterboro - Runway 19 EMAS Installation and the Relocation of Redneck Ave.;
- Teterboro – Airside Master Program Schedule;

Other Port Authority of New York and New Jersey projects:

- EWR - Various projects at North Area and Transformer Installations;
- EWR - Airside Master Program Schedules;
- EWR – Terminal B Construction Projects Schedule Updates (Roads, Connectors, Lower Level Expansion, Baggage Handling.);
- EWR – Terminal B Mid and Upper Levels – Updating Phasing Plans and Schedules; and
- LGA Airside Paving Project .

The Port Authority of New York and New Jersey JFK Runway Project: Responsible for project scheduling for the design and reconstruction of JFK's longest runway($348 million). The Bay Runway was widened to accommodate new large aircraft and surfaced with concrete instead of asphalt to provide for a 40-year useful life of the runway. Construction included delay reduction improvements to taxiways for Runway 13R-31L to increase operational efficiencies and reduce air traffic delays of approximately 10,485 hours annually. Lighting and electrical infrastructure was also upgraded. Minimized customer impacts by working closely with JFK operations, the FAA and airlines on the detailed construction staging and operating plans. These plans included scheduling the runway closure during the non-peak travel season, using different runway configurations to better utilize existing capacity and flight schedule adjustments by the airlines.

72nd Street Station, Metropolitan Transit Authority (MTA) - New York City Transit, New York: Senior scheduling engineer for expanding the tunnel to allow for a wider platform (track realigned). This project rehabilitated station platforms, provided new electric service, constructed a new entrance house (including two elevators), constructed a plaza, and rehabilitated the historical entrance house. The cost was approximately $36 million.

PATH Permanent Station & Termina: As Project Scheduler, prepared initial Level 1 and Level 2 Project schedules. This project is intended to replace the temporary PATH Station constructed after events of September 11, 2001. It consists of a Terminal Entrance Hall through an oculus of steel and glass above grade with a Memorial Hall below grade. At a level below is the Station Mezzanine and below that 6 tracks for the PATH System World Trade Center Station. This Terminal and Station were designed by Santiago Calatrava as part of the program to rebuild the World Trade Center. The Construction Cost is estimated at approximately $1.3 B.Schedules were for Engineering, Procurement, Construction, thru Acceptance and encompassed the entire scope of the project.

PANYNJ, Design and reconstruction of JFK's Bay Runway: responsible for project scheduling. The Bay Runway was widened to accommodate new large aircraft and surfaced with concrete instead of asphalt to provide for a 40-year useful life of the runway. Construction included delay reduction improvements to taxiways for Runway 13R-31L to increase operational efficiencies and reduce air traffic delays of approximately 10,485 hours annually. Lighting and electrical infrastructure was also upgraded. Minimized customer impacts by working closely with JFK operations, the FAA and airlines on the detailed construction staging and operating plans. These plans included scheduling the runway closure during the non-peak travel season, using different runway configurations to better utilize existing capacity and flight schedule adjustments.

Edward D. Hammond, PE

Project Role: Project Manager

Education

MS, Civil Engineering, Massachusetts Institute of Technology, 1972

MS, Economics, Massachusetts Institute of Technology, 1972

MBA, Business Administration, Long Island University, NY, 1978

BS, Civil Engineering, U.S. Military Academy, West Point, 1968

Registrations

PE: VA, 1976, Registration No.: [redacted]

Professional Associations

MassPort Designer Selection Panel, External Member

Society of American Military Engineers (SAME) Fellow

SAME, Boston Post Treasurer
American Society of Civil Engineers

Experience

Years with AECOM: 4
Years with other firms: 30

Employment History

2006-present: AECOM, Senior Project Manager

Mr. Hammond is a registered professional engineer with extensive private and public program management experience. He managed a five-year capital program of $643 million involving over 150 projects at Logan International Airport. Served as the project manager for the $45 million multifaceted design/construct program at the 110-acre Michigan Superfund site. He was deputy division engineer for a series of design/construct civil works and military-funded projects with the Corps of Engineers. Mr. Hammond supervised up to 150 professional personnel; managed various annual programs totaling over $120 million. He demonstrated the ability to apply CERCLA, RCRA, NEPA, OSHA, state regulations, and the New England Corps of Engineers permit program as managing director of the environmental impact statement for the $14 billion Central Artery/Tunnel project in Boston. He was also responsible for key approvals allowing the project to receive funding and proceed.

Port Authority of New York/New Jersey, LaGuardia Airport, Queens, New York: Senior project manager for infrastructure improvement projects, including passenger terminal heating and cooling system upgrades, domestic and high pressure water system improvements, and sanitary ejector system improvements in terminal facilities. Managed projects from project definition through design and construction.

San Diego International Airport, San Diego, California: Senior project manager, for key capital improvement projects, including passenger terminals fire alarm system, electrical upgrade and capacity improvement, and restroom expansion and upgrade. Developed project definition, schedules, budgets, and contract documents for on-going projects, and for new projects being added to the capital program.

TSSC-III, Federal Aviation Administration (FAA) New England Region, Various Locations: Resource administrator providing technical services support for the Federal Aviation Administration, New England Region. Supervised engineering staff in execution of projects for FAA airways facilities program. Responsible for technical, financial, and administrative supervision of engineering services supporting the FAA design, installation, construction supervision, contract procurement, and cost estimating

Capital Programs, Logan International Airport, Boston, Massachusetts: As program manager, executed design and construction of the Logan landside capital program, which included managing a five-year capital program budget of $643 million involving more than 150 projects. Developed scope, schedules, cost estimates and justification. Directed five project managers, and numerous consultants and contractors in execution of terminal, cargo building, roadway, parking garage, and utility projects at Logan International Airport, Hanscom Field, and Worcester Regional Airport. Analyzed alternatives for additional parking at Logan. Obtained approval to construct additional floors on the central garage. Performed utilities and roadway coordination and project integration for multi-million dollar terminal projects. Coordinated the design of a $140 million new addition to Terminal B, as well as Massport approval process

Edward D. Hammond, PE, continued

of American Airlines schematic design for a $330 million addition. Supervised the Massport approval process of a new Terminal A design. Supervised the $78 million Massport budget component of this $475 million project. Responsible for reducing Massport's exposure from $90 million to $78 million, and for enabling issuance of $500 million of bonds for the project. Managed the purchase of the Framingham Logan Express site; and supervised the Peabody site acquisition process and Framingham parking garage design.

Rose Township Superfund Site, Detroit, Michigan: Program manager responsible for all design and construction activities for this complex, highly contaminated 110-acre Superfund site in suburban Detroit. Completed fast track incineration of 33,800 tons of PCB-contaminated soil in less than one year at $6 million under projected "record of decision" costs. Managed the design, installation, and startup of a soil vapor extraction system in a six-month period. Conducted treatability studies for a 400 gpm groundwater treatment plant to meet cleanup levels for VOCs, lead, and arsenic in the groundwater. Expedited pre-design studies, design procurement, installation, operation, and maintenance of an interim groundwater treatment system. Conducted on-site pilot tests for soil vapor extraction, UV oxidation, and air stripping for VOCs in the soil and groundwater. Conducted an on-site open house and supported public meetings to satisfy concerns about on-site incineration.

Boston Central Artery Tunnel Project, Boston, Massachusetts: As manager for environmental services, directed completion of the environmental impact statement for the multi-billion dollar Central Artery/Tunnel Project in Boston. Successfully negotiated with EPA regulators in region I and in Washington on the application of environmental regulations. Completed the EIS as scheduled; the document withstood multiple challenges from parties interested in this highly visible and publicly sensitive project. Developed an innovative disposal plan for 11 million cubic yards of soil to be excavated from congested urban areas. This removed the last key obstacle to project approval. Managed the investigation, sampling, and analysis to characterize contaminated materials for excavation and disposal.

Joseph Hand, AIA, LEED AP

Project Role: Project Manager

Education

BArch, Syracuse University
Diploma in Construction Management, New York University

Registration

RA: NJ, HI

Professional Associations

American Institute of Architects

Employment History

1996-present: AECOM, Architect- Architecture

Mr. Hand is an architect with over 25 years of experience in the design and construction of public, high-rise, and commercial buildings. His expertise is in managing teams of architects and consultants for large and complex projects typically over 200,000 sf. He is experienced in the design and coordination of advanced building technologies with expertise in exterior wall systems.

The Port Authority Trans-Hudson World Trade Center Transportation Hub, New York, NY: Working in collaboration with Santiago Calatrava, Mr. Hand is the architecture manager for the Permanent PATH Station reconstruction at the World Trade Center. He is responsible for the development of designs, details and documents for the new $3 billion transit station and public concourses.

Rawabi, Palestine: Rawabi is the first Palestinian master planned community. It will accommodate a population of over 30,000, promote sustainable, urban living and provide home ownership for the emerging Palestinian middle class. The city will provide one million 5000 residential units in various sizes and configurations. The city is crowned by the 1.8 million sf Town Center including 300,000 sf of retail, entertainment restaurants, and a 200 room business class hotel.

Brooklyn Federal Courthouse, New York: Project Architect for the Exterior wall design and detailing which incorporated security upgrades for the 19-story stone clad federal courthouse and office building , a joint venture project with Caesar Peli Associates and HLW International.*

Honolulu Rapid Transit , Honolulu, HI: Designed 3 stations for the 17 mile transit system, with community participation. Developed pricing documents for a vendor proposal for transit stations and facilities along with Public Private development proposals to fund the project. An AECOM project

New York Times Building, New York, NY: Working in collaboration with Renzo Piano Building Workshop, Mr. Hand was the project architect for this 1.5 million sf 52-story office tower. His responsibilities included the development of designs, details and documents for the high-rise. The building was designed to contain a ground level auditorium, cafeteria, function space, retail and restaurants in Midtown Manhattan.

1540 Broadway, New York, NY: Known as one of the most prestigious corporate addresses, 1540 Broadway is a 42 story commercial high-rise building located in Times Square, New York City. As Project Architect Mr. Hand was responsible for developing construction documents and oversaw the construction of the post-modern glass curtain wall. In addition to office space, the building has cinemas, a retail atrium and food court.

Alii Place Office Tower, Honolulu, Hi: Lead Designer and Project Architect for a class A 25-story 340,000 square foot office tower with retail and 1000 car parking garage in downtown Honolulu adjacent to the Historic Iolani Palace. The project incorporated composite design of concrete for parking and steel for the office tower along with its innovative use of high quality precast concrete façade delivered on a just in time basis from the Colorado fabricator. Project won an AIA Merit Award and the Honolulu Building of the Year Award.

Joseph Hand, AIA, LEED AP, continued

Morgan Stanley's Information Technology Operations Center, New York, NY: Site representative guiding interior construction of a 340,000 sf information technology operations center, a project with Studios Interior Architects and HLW.

Alii Place Office Tower, Honolulu, HI: Mr. Hand designed this "Honolulu Building of the Year" and AIA Merit Award winning 25- story office tower and parking Project Name: Pat ilis num vulputpat lore voloreet utem quisim quam velent lorper se min hendit venit velit velisis augue tat. Duis nosto ea feum zzriurem acip ex exeriureet luptat at nisim vendit lore commodo dolobor alissequat praesequisi.

The Majestic Plaza, Honolulu, HI: The Majestic Plaza is mixed-use complex featuring a 40-story luxury condominium with commercial space and a 16-story affordable housing tower. Mr. Hand was the designer for this project.

Chifley Plaza, Sydney, Australia: Mr. Hand coordinated development of core services for a 1.1 million sf 42-story mixed-use tower in Sydney, Australia. The Chifley Plaza houses multiple fine dining facilities, high-end retail boutiques, an arcade and a convention center.

Ottoville Center, Pago Pago , American Samoa: A schematic design and development proposal for a 200 room hotel, convention center and retail mall adjacent to the main airport on the island of Tutuila.*

Korean Army Pension Fund Building, Seoul, South Korea: Mr. Hand served as project architect for the exterior wall of this 36-story, 500,000 sf mixed-use office and retail high-rise.

Morgan Stanley's Information Technology Operations Center, New York, NY: Site representative guiding interior construction of a 340,000-square foot information technology operations center, a project with Studios Interior Architects and HL.

Sultan Bin Abdulaziz City for Humanitarian Services. Riyadh, Saudi Arabia: Lead architect for a 1.1 million-square foot project consisting of 25 major buildings, including the master plan, design and construction documents for a 400-bed rehabilitation hospital, ambulatory care center with medical Laboratory outside the capital city.

John T. Hapkiewicz, PE

Project Role: Project Manager

Education

BS, Civil Engineering, Tufts University, Medford, MA, 1993

Registrations

PE: CT, 1998, Registration No.: [redacted]

PE: NY, 2009, Registration No.: [redacted]

PE: MA, 2000, Registration No.: [redacted] Civil)

Professional Associations

American Society of Civil Engineers (ASCE)

Experience

Years with AECOM: 9
Years with other firms: 8

Employment History

2001-present: AECOM, Transportation Project Engineer

Mr. Hapkiewicz is a structural engineer with considerable experience in structural engineering related to the design and construction of highway/railway bridges, transportation-related structures, and buildings and facilities. He previously worked for the Connecticut Department of Transportation Bridge Design Unit. He is responsible for the design, development, and preparation of intricate project plans for various structural designs. He has prepared design materials for complete bridge replacements, building facilities, bridge widenings, the replacement of bridge superstructures, the replacement of bridge decks, and various types of bridge and structure rehabilitations.

New Vehicular Bridge over Metro-North Railroad at Commerce Drive Rail-road Station, Fairfield, Connecticut: Project engineer for a new vehicular bridge providing access over a local road, a kiss-and-ride, and Metro-North tracks as part of the new railroad station. The proposed superstructure is a two-span (each 128 feet) continuous steel plate girder structure supporting a concrete deck. The substructure consists of full height abutments and a multi-column pier. A detailed erection procedure was required to launch the girders over the Metro-North catenary wires and under the overhead wires. The design is in accordance with the 2004 AASHTO LRFD bridge design specifications.

I-84 Short Term Interchange Improvements, Danbury and Newtown, Connecticut: Design engineer for the design of structural aspects for improvements to I-84 at interchanges 5, 6, and 11. This involved several bridge widenings, removal of bridge structures (including deconstruction plans), and construction of retaining walls. The preliminary design has been completed, and included the preparation of rehabilitation study reports.

Route 25 over Long Island Railroad, Town of Southold, Suffolk County, Long Island, New York: Lead project engineer for the complete replacement of a three-span bridge. The proposed structure is a 33-meter single-span bridge with a superstructure consisting of steel plate girders supporting a composite concrete deck. The fascia girders are haunched to add aesthetic appeal. The superstructure is supported on full-height pile-supported abutments. Also included in the design were tie-back sheet pile walls and geosynthetic walls. Additional architectural items are pylons located at the front corners of each abutment and a modified picket-style handrail. The design is in accordance with the 2004 AASHTO LRFD Bridge Design Specifications.

Metro-North Railroad over the Saugatuck River (Saga Bridge), Westport, Connecticut: Project manager for the Saga Bridge that carries four railroad tracks across the river. The project consists of the replacement of the Scherzer rolling lift moveable span and rehabilitation of the fixed approach spans. Other aspects of the design include seismic analysis, substructure retrofit, bearing replacement, a waterway fender system, a pedestrian walkway, and a new operator house.

Route 9 - Briarcliff-Peekskill Parkway – Bay Street to Route 6 (Main Street), New York State Department of Transportation (NYSDOT), City of Peekskill, Westchester County, New

John T. Hapkiewicz, PE, continued

York: Project engineer for engineering services for eight new retaining walls as part of the 1.3-kilometer reconstruction/widening of Route 9. The walls for all locations were cast-in-place cantilevered type walls. The wall heights vary up to 10.5 meters. Due to the high rock line in the area, tied-back soldier pile and lagging walls were designed to temporarily support Route 9 during the construction of the proposed walls. Close coordination with NYSDOT was required as several walls terminated at bridge wingwalls, which were designed by NYSDOT. Architectural details will be incorporated into the walls by utilizing stone masonry.

Culvert Replacement Over Mill Creek on Route 27, NYSDOT, Town of Southold, Suffolk County, New York: Project Engineer for the structural design for the extension of the culvert crossing at Mill Creek. Design elements included wingwall design, cofferdam design and timber bulkhead design.

Evaluation and Strengthening of the Taxiway "F" Bridge for Airbus A380 Aircraft in Orlando, Florida: Analysis and evaluation of a taxiway bridge at Orlando International Airport in conjunction with a project to upgrade the airport to accommodate the 1,240,000-pound Airbus A380. The six-span bridge consists of two simple spans and a four-span continuous extension that supports a continuous concrete slab. The superstructure was rated for the Airbus A380 wing gear pattern in conformance with the AASHTO manual for condition evaluation of bridges and the substructure was analyzed in accordance with the AASHTO standard specifications (load factor design). A report was compiled that presented the results of the analysis along with strengthening recommendations, associated costs, and construction staging issues. After approval of the report, AECOM was retained to prepare plans, specifications, and estimate for the strengthening.

Reconstruction of Bridge No. 01979, U.S. Route 6 over East Meadow Brook, Woodbury, Connecticut: Project engineer for the complete replacement of bridge No. 01979. The new superstructure is a concrete deck supported on steel rolled beams supported by pile-supported integral abutments.

New U.G. Bridge 5.83 over Overpeck Creek, CSX Transportation, Ridgefield Park, New Jersey: Design engineer for the complete replacement of the approaches to an existing swingspan railroad bridge. The seven-span south approach is 248 feet long, and the three-span north approach is 105 feet long. This project included the design of a pile supported substructure and a superstructure that consisting of a steel deck plate on rolled beams. The design was done in accordance to the AREMA manual, including seismic loading.

Bridge on Route 64 over Route 156, Henrico County, Virginia: Design engineer for this complete bridge replacement. The new bridge consists of a two-span (95 feet each) continuous steel plate girder superstructure. The new bridge was required to accommodate two additional travel lanes in each direction.

Interchange Improvements at Routes 12/184/I-95, Including Replacement of Bridge No. 00659, Connecticut Department of Transportation (ConnDOT), Groton, Connecticut: Design engineer for the complete replacement of Bridge No. 00659 and the construction of a soil nail wall in Groton. Work included removing the previous concrete arch structure and replacing it with a three-span continuous steel girder superstructure. The new substructure consisted of pile supported integral abutments and pier bents. The project also included the construction of a soil nail wall in front of a bridge abutment to allow for ramp traffic to pass through an area that was previously embankment fill.

Borys Kekish, PE

Project Role: Project Manager

Education

MBA, International Business, Pace University

MS, Civil Engineering, New York University

BCE, Civil Engineering, City College of New York

Registrations

PE: NJ, Registration No.: [redacted] Civil)

PE: NY, 1970, Registration No.: [redacted]

Professional Associations

National Society of Professional Engineers (NSPE)

American Society of Civil Engineers (ASCE)

Experience

Years with AECOM: 12
Years with other firms: 23

Employment History

1998-present: AECOM, Field Office Engineer

1969-1996, PANYNJ

1963-968, USACE

Mr. Kekish is a manager with over 30 years experience and a proven record of accomplishments in program management; construction management; facility planning, operations and management; customer service; engineering; field construction supervision; and administration. Dedicated and highly motivated professional with excellent interpersonal, technical, and leadership skills, and the ability to direct and focus the efforts of diverse technical and operational teams to the successful completion of large and complex projects.

Delta JFK redevelopment Program, Terminal 4 Headhouse Expansion and Renovation: Managed pre-construction activities associated with the Headhouse Expansion Element of Delta JFK Redevelopment Program Phase I. Prepared CPM documents for Construction Manager (CM) Services for the Headhouse. Reviewed contractor proposals as a member of CM selection Committee and other committees for On-call contract services. Maintained liaison with the Port Authority of New York and New Jersey Engineering and JFK Operations and facility staff. Reviewed and provided input on design and construction staging plans. collaborated with other project element managers associated with the Pase I Program.

Consultant to the Port Authority of New York and New Jersey, Engineering Department, performing project management duties in the Engineering Program Management Division, NY Airports: Project Manager. Managed projects, from inception to completion, at J. F. Kennedy International (JFK) and LaGuardia (LGA) Airports. Facilitated and coordinated the implementation of a new airport-wide pedestrian signing and wayfinding system (color-coded/Schiphol Airport concept) at LGA and JFK. Successfully managed the completion of the LGA Deck Protection and Preservation study with the identification and installation of cathodic & material protection systems which are currently being evaluated and tested for performance under actual marine conditions. Other projects: LGA Water Distribution Improvements; LGA CTB Concourse Modernization Program; CTB Garage and Terminal Signing Program; JFK Central Substation and 5 KV Distribution System Upgrade; JFK Central Taxihold Expansion; JFK East Parking Garage & Customer Service Improvements and new Canopy; JFK Passive Recreation Area conceptual and Stage I Study. Member of Project Management System Team on the development of an Enterprise Project Management System (EPMS) that will track all Capital and Operating Projects. Successful application of the Expedition Tracking System to projects.

Port Authority of New York and New Jersey, British Airways Terminal Expansion Program: Project Manager. Managed projects on new roadways and site improvements; utility systems upgrading; new garage structure. Coordination of work on new Airtrain Station and guideway at the British Terminal. Developed project master plan and schedule. Coordinated construction staging with PA Airport Operations and Redevelopment staff. Prepared and negotiated contract for roadways and site work.

The Port Authority of New York and New Jersey, JFK International Airport

Borys Kekish, PE, continued

and Aviation Planning Division: Project Manager. Directed consultants, engineering, planning, operations, and construction management staff toward on-time and on-budget completion of multi-million dollar projects; e.g., new Cogeneration Facility for the Airport; new computerized Parking Revenue and Inventory Control System (RCS) at the three New York metropolitan airports; new and upgraded terminal facilities; infrastructure improvements; computerized Aircraft Rescue and Fire Fighter Training Facility; and the first aircraft arrestor bed at an airport to improve the safety margin in the event of an aircraft overrun.

Aviation Department Customer and Marketing Services: Manager. Directed staff and consultants in the development and implementation of new services and merchandising enhancements for the three New York metropolitan airports.

U. S. Army, Corps of Engineers Captain - Asst. Director of Engineering and Chief, Eng. Troop Ops., Camp Drum, NY: Responsible for facility maintenance, construction, master planning and training programs.

Captain - Commanding Officer, Engineer Construction Company, Vietnam: Directed a 220-man organization in construction of various facilities and operations.

Lieutenant - Staff Officer/Operations Officer, Germany and Vietnam: Directed a staff of civilian and military engineers, architects and technicians in the preparation of plans and specifications for base camps, airport facilities, roads, bridges and other infrastructure elements.

JFK Airport Maintenance Services Division: Manager. Directed a staff of 300 engaged in all aspects of facility maintenance, construction, airport operations and administration.

Sr. Airport Engineer(Aviation) and Sr. Research Analyst (Tunnels, Bridges & Terminals): Managed multiple projects under the Aviation Capital and Major Work Programs; e.g., JFK International Arrivals Terminal Expansion; new Eastern Shuttle and new Delta Airlines Terminals at LaGuardia Airport. Directed research and system development programs and planning studies.

Assistant to Manager, World Trade Center Planning Division: Responsible for coordination of engineering, design, tenant construction and administration.

Construction Management Engineer, World Trade Center: Responsible for development of CPM networks and schedules and for the administration of architectural and paving/utilities contracts.

Construction Engineer, New York Passenger Ship Terminal: Supervised construction of viaduct, pier extension and new terminal facilities.

Chee K. Lai, PE

Project Role: Project Manager

Education

MS, Civil Engineering (Structures), Texas Tech University, 1987

BS, Civil Engineering (Structures), Texas Tech University, 1985

BS, Civil Engineering (Construction), Ungku Omar Polytech, Malaysia, 1979

Registrations

PE: NY, 1994, Registration No.: [redacted]

Professional Associations

American Society of Civil Engineers (ASCE)
- ASCE MET Section
International Group, former Chair
American Society of Highway Engineers (ASHE)

Experience

Years with AECOM: 12
Years with other firms: 16

Employment History

1998-present: AECOM, Structural Discipline Manager

Mr. Lai has extensive experience in transportation engineering projects that includes bridges, highways, railroads and buildings structures. He has successfully managed and participated in various bridge design projects involving complex MPT and construction staging in the New York metropolitan area. He is very familiar with NYSDOT, PANY/NJ, and MTA design procedures and practices. Mr. Lai has worked very closely and coordinated with various NYC agencies (PANY/NJ and NYSDOT) and staff in regions 8, 10, and 11.

Port Authority of New York and New Jersey (PANYNJ), Jet Blue Airways Terminal 5, Terminal Redevelopment, JFK International Airport, New York: Group director responsible for the review and quality control for the structural design effort for an elevated departure roadway system. The scope of work encompasses conceptual to final design of the departure ramps connecting to the terminal building. The departure ramps include two long curved ramps at each side that connect the departure frontage to the arrival level roadway. Key project issues included consideration of the existing landmark structure and the surrounding features (blast fence, Air Train connectors, and nearby roadway intersection for Terminal 6). The construction support services may be included in the scope at a later date. The design incorporates all Port Authority standards, as well as AASHTO and NYCDOT seismic criteria.

Port Authority of New York and New Jersey (PANYNJ),– Port Ivory New Intermodal Container Transfer Facility (formerly Howland Hook Marine Terminal), New York: Group director responsible for stages I to IV (phases I-VI) design and support services for the Port Ivory Intermodal Transfer Facility. The project scope included the conceptual design and layout for 11 tracks, survey, site development and drainage, facility lighting, and final bridge design. The bridge is designed for the crossing of a rubber tire gantry (RTG) crane (45 feet wide by 80 feet long in cross travel configuration).The selected structure consists of adjacent pre-stressed concrete box beams superstructure with cast-in-place integral abutments supported on drilled caisson foundation. Also provided construction support service and responses to RFIs.

Port Authority of New York and New Jersey (PANYNJ), Staten Island Railroad (SIRR) Connection to Chemical Coast Line, New York: Project manager responsible for the preparation of a final design of the south connector connecting the SIRR track to Conrail's Chemical Coast Line. Responsible for the design of substructures, retaining walls, and construction support services, including the review of shop drawings.

Port Authority of New York and New Jersey (PANYNJ), Staten Island Railroad (SIRR) Connection to Chemical Coast Line, New York: Provided quality review for the feasibility study of the construction of a connector between the SIRR and Conrail. Five alternative alignments were identified and developed, and a structure type study was performed. A report was prepared recommending further assessment of one layout that includes a 4,000–foot long viaduct joining the two railways. Preliminary design and cost estimates were performed for each alignment.

Chee K. Lai, PE, continued

American Airlines, JFK Terminal Redevelopment Project, New York: Senior structural engineer responsible for the redesign of drainage structures due to field changes, and the review of shop drawings. Also involved in providing technical reviews and support for the design of the elevated viaduct structure for the terminal. The elevated structure includes two curved ramps and a tangent section to provide access to the upper level of the terminal. The design will utilize steel superstructures framed to steel cap-beams supported on concrete columns.

New York State Department of Transportation (NYSDOT), Route 120, Route 22 and I-684 Improvements, Westchester County, New York: Group director responsible for phase I-VI structural design for the reconstruction project of Route 120. The project includes bridge replacement, new ramp and retaining structures, roadway widening, utility relocations, traffic signal modifications, and alignment and safety improvements for a 3-mile section of Route 120, and Interchange improvements/ reconstruction along I-684 at exits 2 and 3. The design utilizes multi-steel girders for the two curved ramp structures, and pre-stressed adjacent box beams for a structure over a creek. These structures will be supported on reinforced concrete substructures. Retaining structures will be comprised of MSE walls and cast-in-place cantilever walls. The construction cost is $42 million.

New York City Department of Sanitation (DSNY), Marine Transfer Station Ramp Structures, New York: Group director responsible for the design of six ramp structures leading to land- and water-based marine transfer stations. The design included curved bridge structures on sharply curved alignments consisting of twin connected box girders and single multi-cell box girders. Detailed activities included an integrated analysis using GT-STRUDL for the structure and CONBOX software for the design. The seismic analysis was carried out using a multi-mode response spectra method as per AASHTO and NYSDOT blue pages, considering complete interactions of super-structure, substructure, and foundation. The construction cost is $50 million.

New York State Department of Transportation (NYSDOT), Reconstruction of 2 kilometers of Route 25 and bridge replacement, Southold, Suffolk County, New York: Project manager responsible for the final design (phases V-VI) for the realignment of 2 kilometers of Route 25. The project included realignments, reconstruction and resurfacing, bridge replacement, retaining walls, MPT, and construction staging. The construction cost was $16 million.

New York State Department of Transportation (NYSDOT), Rehabilitation of Cantilevered Structures, Grand Central Parkway, Queens County, New York: Project engineer responsible for the preparation of SSM/DAD and final design (ADP and PS&E) plans for the rehabilitation of 2.4-kilometer. service roads cantilevered structures. The scope of services included the inspection, structural deck repairs, masonry repairs, deck joint replacement, concrete overlays, and the resurfacing of both service roads.

New York City Transit Authority (NYCTA), Rail Rapid Transit Access to LaGuardia Airport, New York City, New York: Project scope included the identification and the conceptual design for the preferred alignment to provide rail access to LaGuardia Airport as an extension of the existing BMT Broadway-Astoria subway line (N service) and preparation of the environmental impact statement. Senior engineer responsible for the conceptual design of superstructure, substructure, and foundations for the elevated subway structures along the two possible alignments included in the alternative alignment report. The evaluation included the structure type and section, material used, constructibility, geometric, and aesthetics to arrive at the recommended alternative alignment.

New York State Department of Transportation (NYSDOT), Rehabilitation of Seven Bridges Over Van Wyck Expressway, Queens, New York: Senior engineer responsible for inspection, load rating, development of repair details, and preparation of contract bid documents for replacement and retrofit of bridge bearings, deck joints, traffic railings, resurfacing each bridge, and maintenance and protection of traffic.

Andrew Lavallee, RLA

Project Role: Project Manager

Education

MLA, University of Massachusetts, Amherst, MA, 1989

Bachelor of Arts, Art History, Trinity College, Hartford, CT, 1986

Registration

Registered Landscape Architect: 1992 CT, Registration N [redacted]

Registered Landscape Architect: 1993, NJ, Registration N [redacted]

Registered Landscape Architect: 1995 NY, Registration No [redacted]

Council of Landscape Architectural Review Boards (CLARB: 1991 Certification [redacted]

Construction Specification Institute: 2000 Certified Document Technician [redacted]

Professional Associations

American Society of Landscape Architects (ASLA)

Years of Experience: 21

Years with AECOM: 3
Years with other firms: 18

Employment History

Nov 2007-Present AECOM Associate Principal
Oct 1995-Nov 2007 Mathews Nielsen Landscape Architects PC, Senior Associate
Nov 1994-Oct 1995 Stantec Assistant Project Manager
May 1992-Nov 1994 Global Consult Group, Director of Design
Dec 1989-May 1992 Balmori Associates, Project Designer/ Manager
Jan 1989-Dec 1989 Jack Curtis & Associates,Project Designer/ Manager

Andrew Lavallee is a registered landscape architect who specializes in the design of technically challenging projects. Over the past 21 years, he has designed and managed a broad range of public, private and institutional landscapes throughout the United States and abroad. Mr. Lavallee has also served as a construction manager and owner's representative on several large public park projects in New York City giving him a unique understanding of the challenges involved in building successful landscapes.

Mr. Lavallee has led and managed design efforts for clients from design conception and community outreach through construction. His work has included the design of landscapes for academic and cultural institutions, urban and waterfront parks, roof gardens, sports facilities, urban streetscapes and plazas, brownfield restoration rojects and large scale residential evelopments.

In 2008 Mr. Lavallee was appointed as a Park Design for the 21st Century Fellow with the Design Trust for Public Space in New York City. He is currently a co-author of the Park Design for the 21st Century: High Performance Landscape Guidelines scheduled for publication in May 2010.

Prior to joining AECOM, Mr. Lavallee was responsible for the design and management of the of the $100 million Tribeca Neighborhood Segment of Hudson River Park. Mr. Lavallee is a member of the Construction Specification Institute. He is a frequent speaker at landscape conferences and has authored more than thirty articles on a variety of technical subjects ranging from sports facility design to the development of economically sustainable parks.

Route 9A Construction Administration, New York, NY: AECOM is providing construction administration and resident landscape architecture services for the reconstruction of Route 9A in Lower Manhattan. This complex area has numerous challenges, including extensive below-grade structure, highly detailed planting beds with tightly controlled soil median specifications, and the highest quality finish materials. Project was funded by the New York State Department of Transportation (NYSDOT). Mr. Lavallee served as the Construction Inspector on this project.

World Trade Center Public Realm Master Plan, New York, NY: Project Manager for the project, which comprises the streets, plazas and parks within 'Ground Zero,' will unify and complete a 16-acre redevelopment project that includes five world class skyscrapers, a performing arts center, a regional multi-modal transportation hub and a state-of-the-art vehicle security center. The project involves significant coordination and consensus building with diverse stakeholders, high-end design resolution and integration of all aspects relating to pedestrian movement, transport, security and retail into a cohesive public realm.

Bush Terminal Piers 1 to 5, Brooklyn, NY: Sponsored by the New York City Economic Development Corporation (NYCEDC), City of New York Parks and Recreation. Master planning and design of a 23 acre brownfield waterfront site meeting the needs of a diverse and vocal community with goals as wide-ranging as softball and soccer

Andrew Lavallee, RLA, continued

fields and preserving bird watching opportunities at this abandoned site that nature had reclaimed. Park and recreation elements were developed in concert with the remediation consultants so that surface treatments, such as synthetic turf for fields, are a part of the brownfield remediation. Mr. Lavallee served as the Project Manager and Lead Landscape Architect for the project.

High Performance Landscape Guidelines, New York, NY: Mr. Lavalle is the co-author and researcher on this project which involves the research and writing of a design manual for use by the New York City Department of Parks staff. The focus of the manual will be the development of sustainable guidelines and best management practices for new park construction or renovation. This project is sponsored by Design Trust for Public Space and New York City Department of Parks & Recreation.

PlaNYC Reforestation Initiative, New York, NY: The PlaNYC 2030 goal of replanting forest on 2,000 acres of New York City public land by 2017 provides a unique opportunity to significantly improve the quality of the urban environment and to address issues of public health and climate change. AECOM, teamed with a selection of expert academic consultants, worked to establish measurable goals, objectives, planting design methodologies and timelines for the action items of site selection, site assessment and site construction. Mr. Lavallee is serving as the technical advisor. The scope of the project includes developing a protocol for site selection of 2000 acres, categorizing sites and evaluating their reforestation suitability, and developing a range of reforestation details and specifications. The team assessed existing woodland areas, open spaces, natural areas and publicly-owned lots suitable for reforestation. The goal of the implementation plan is to develop a cookbook of approaches that can be applied to a wide variety of sites throughout the five boroughs. This initiative is sponsored by New York City Parks Department / Natural Resources Group.

Fort Totten Park Master Plan Value Engineering Workshop, Fort Totten, NY: Mr. Lavallee served as part of a a multidisciplinary team that was asked to review master plan documents for an historic 49.5 acre site that has been designed to accommodate a future park and training center for the New York city Fire Department. The VE Team was asked to evaluate the potential impact to the environment, including the shoreline, views, and historical implications. Proposals to coordinate, improve, and/or modify the baseline designs will be made to maximize the value of the projects for the City from a functional as well as cost-benefit perspective including initial and life cycle costs. Approximate project budget: $400 million. Mr. Lavallee was the Landscape Architecture Specialist. Project was successfully delivered for the New York City Office of Management and Budget (OMB), in conjunction with the New York City Department of Parks and Recreation (DPR) and the Fire Department of the City of New York (FDNY).

New York City Police Academy Value Engineering Workshop, New York, NY: Mr. Lavallee served as part of a multidisciplinary team that was asked to review the project design design documents for both the master plan and schematic design phases of a future training facility for the New York City Polic Department The 3 million squre foot, multi-building campus complex is located on a 35 acre site in College Point, Queens. The focus of the VE study was to review the pre-schematic and schematic design phase documents developed by the consultant firms, and to make recommendations on the various aspects of the design with a goal of increasing value to the project by improving functional operations, reducing costs, or improving reliability and security. Approximate project budget: $1 Billion. Mr. Lavallee was the Urban Campus/ Parking Expert Specialist.

Mark Linkowski

Project Role: Project Manager

Education

BS, Civil Engineering, University of Connecticut at Storrs, 1996

Registrations

EIT: NY, Registration No.: [redacted]

Experience

Years with AECOM: 8
Years with other firms: 6

Employment History

1998-2005: AECOM, Civil Project Engineer

2009-present: AECOM, Civil Project Engineer

Mark Linkowski has over ten (10) years of experience in Civil and Transportation Engineering projects specifically in the transit, highway and aviation sectors. Mr. Linkowski's management experience includes over five (5) years of oversight of Project Controls, specifically on the Transportation/Highway/Site Development sector. Mr. Linkowski's design experience includes horizontal and vertical alignments, grading and drainage, stormwater management, utilities, signing and striping, quantity and cost estimating, and construction support services. In addition, Mr. Linkowski's responsibilities have included managing small to medium size construction projects and managing engineering office activities including the design and drafting of site engineered plans, legal land documents, and construction inspection.

Port Authority of New York and New Jersey, JFK 13R-31L "Bay Runway" Reconstruction and Rehabilitation, JFK International Airport, Queens, New York: Project manager for the $348 million design and reconstruction of JFK's longest runway. The Bay Runway was widened to accommodate new large aircraft and surfaced with concrete instead of asphalt to provide for a 40-year useful life of the runway by surfacing. Construction included delay reduction improvements to taxiways for Runway 13R-31L to increase operational efficiencies and reduce air traffic delays of approximately 10,485 hours annually. This project will result in approximately $55.36 million of annual savings in aircraft operating costs and the value of passenger time based on FAA modeling. Lighting and electrical infrastructure was also upgraded. Minimized customer impacts by working closely with JFK operations, the FAA and airlines on the detailed construction staging and operating plans. These plans included scheduling the runway closure during the non-peak travel season, using different runway configurations to better utilize existing capacity and flight schedule adjustments by the airlines.

American Airlines, JFK Redevelopment Project, Terminal 8 Reconstruction, John F. Kennedy International Airport, Jamaica, New York: Civil Engineer responsible for engineering design and construction for civil landside design elements for complete reconstruction of existing Terminals 8 & 9. Providing construction administration assistance and civil engineering design for new elevated departure roadway, utility relocations, and coordination with new terminal and airside facilities. Unique features include coordination with new Light Rail System (AirTrain) and improvements to double passenger capacity for American Airlines facilities. Estimated construction cost is $1.3 Billion to be completed 2007.

The Port Authority of New York and New Jersey JFK Redevelopment Program (PANYNJ), Cargo Parking Assessment outside the Central Terminal Area of John F. Kennedy International Airport, New York: Civil Engineer responsible for field data collection of all cargo area parking locations surrounding the airport. Included tenant survey, identifying existing parking conditions, and a supply/demand analysis for different sectors outside the airport.

The Port Authority of New York and New Jersey, Continental Airlines, Global Gateway Program, Newark International Airport, NJ: Civil

Mark Linkowski, continued

Engineer performing engineering review and design of a radiant heat Deicing Facility adjacent to the active taxiways and runways.

MTA Bridge & Tunnels Authority (TBTA), Throgs Neck Bridge Fendering for Queens Anchorage & Approach, NY: Civil Engineer responsible for developing a site restoration plan for construction staging for fender systems to protect the bridge's Queens anchorage and the adjacent approach piers from ship collisions.

Transportation Security Agency (TSA) Implementation of Explosive Detection Devices and Systems in the Nation's Airports, Richardson, TX: As part of the Civil/Architectural Task force based in Richardson, TX , coordinated design plans implementing explosive detection devices for baggage handling systems at over 200 of the nation's airports. Fast paced, high intensity team atmosphere under a stringent timeline for planning, design, construction and implementation to enhance airport security post -9/11.

New York State Department of Transportation (NYSDOT), State Route 120/22, Town of North Castle, NY: As Engineer, assisted in developing detailed stormwater management plans for a state road and interstate highway interchange. Special designs were implemented for areas of the site within the New York City drinking water watershed. Designed drainage layout and performed drainage calculations, all within local and state regulations and with regard to Best Management Practices (BMP), New York City Department of Environmental Protection (NYCDEP) seminars, and the Army Corps of Engineers regulations. Duties included developing storm sewer plans, detention basins, and routing storm hydrographs through existing and proposed conditions. Assisted in writing the Stormwater Pollution Prevention Plan (SPPP) which documents the environmental effects of the proposed construction in the Kensico Reservoir watershed. Designed New York State Department of Transportation Bridge Data Packages for multiple bridges over Interstate 684. Assisted in compiling a Preliminary Cost Estimate of $70 million using NYSDOT software. Investigated the study and implementation of Roundabouts inside the corridor. Performed a 7-year Accident Analysis Study for the Project.

New York State Department of Transportation (NYSDOT), Staten Island Expressway Resurfacing and Rehabilitation, Richmond County, NY: As Engineer, developed detailed plans for the rehabilitation of 10.6 km of the Staten Island Expressway. Duties included cross-sections, profiles, and a high occupancy vehicle lane. Provided construction support services which involved reviewing shop drawings and responding and advising on field issues.

Stonebridge Estates, Town of New Fairfield, CT: Designed horizontal alignments and vertical profiles for 1500 linear feet of roadway for this 16-lot subdivision. Responsibilities included storm sewer layout design, determining locations for drainage manholes, design of grading for residence lots, determining foundation location, design of septic system and leaching fields for residence lots, determining locations for well and utilities and development of a quantity and cost estimate.

Candlewood Lake Shore Estates, Town of Brookfield, CT. Responsibilities for this 24-lot subdivision design included: design of horizontal and vertical profiles for 1000 linear feet of roadway, design of storm sewer layout, determining locations for drainage manholes and foundations, design of grading for residence lots, design of septic system and leaching fields for residence lots, determining locations for well and utilities and development of quantity and cost estimate.

Towns of New Fairfield, New Milford, Brookfield, Sherman, and City of Danbury, CT. Single lot parcel design ranging from 1 to 10 acres. Responsibilities included: design of horizontal alignments and vertical profiles for 1000 linear feet of roadway, design of storm sewer layout, determining locations for drainage manholes, determining foundation location, design of grading for residence lots, design of septic system and leaching fields for residence lots, determining locations for well and utilities, and development of a quantity and cost estimate.

Elizabeth D. Marcantonio, PE

Project Role: Project Engineer

Education

MS, Civil Engineering/Structural, Manhattan College, Riverdale, NY, 2005

BS, Civil and Environmental Engineering, Villanova University, PA, 2002

Registrations

PE: NY, 2008, Registration No.: [redacted]

EIT: PA, 2002, Registration No.: [redacted]

Professional Associations

American Society of Civil Engineers (ASCE), Treasurer (in college), Younger Members Forum

Women's Transportation Seminar (WTS)

American Institute of Steel Construction (AISC)

Society of Women Engineers (SWE), Treasurer (in college)

Experience

Years with AECOM: 8
Years with other firms: 0

Employment History

2002-present: AECOM, Structural Engineer

Ms. Marcantonio is a highly skilled structural engineer offering broad experience in the engineering field. Her relevant experience includes the design of dunnage, floors, and framing systems to support mechanical and electrical equipment for industrial and institutional buildings, bridges, overhead sign structures, and various retaining walls. She has also developed detailed specifications for the various aspects of structural design, and compiled all related documents, including cost estimates, for various bid packages. In addition, she has developed design task protocols (DTP), which are detailed scopes of work created at the beginning of a project, detailing applicable codes, standards, testing, and all related parties for coordination.

Tappan Zee Bridge I-287 Environmental Review, New York State Department of Transportation, New York State Thruway Authority, and MTA-Metro North Railroad, New York: Member of the project management team working to address the highway, bridge, and transit needs within a 30-mile corridor. Structural engineer responsible for the day to day coordination with the design consultant developing various technical documents, and various management level reports. Working closely with the client group as they address procedural issues for the bridge design development, developing a tiered approach to address highway and bridge components.

West Midtown Redevelopment, Port Authority of New York and New Jersey (PANYNJ), New York: Project engineer to PANYNJ in developing a comprehensive strategy for maximizing the potential value of their properties on the west side of Midtown Manhattan. PANYNJ operates two major transportation facilities on the west side of Midtown Manhattan, the Port Authority Bus Terminal and the Lincoln Tunnel. In conjunction with its transportation responsibilities, PANYNJ owns or controls about 19 acres of property on 15 parcels, most of which are adjacent to the transportation infrastructure. As structural engineer for the project, responsible for analyzing the existing structural, geotechnical, utilities, and traffic conditions in order to formulate recommendations on column and foundation placements for building potential developments on these properties, and for developing a comprehensive technical report according to PANYNJ standards.

In-Depth Inspection of the Commodore Hull Bridge over the Housatonic River, Shelton, Connecticut: Design engineer responsible for the inspection of gusset plates on the Commodore Hull Bridge and the access ramps that carry Route 8 over the Housatonic River (Bridge Nos. 00541A, B, and C) in Shelton. These inspections are the first phase of a rehabilitation project that will address structural elements found during the inspection. Access to the deck trusses over the river for the in-depth inspection was provided by a self-propelled barge equipped with a 60-foot man-lift. This provided complete access to portions of the bridges without the need for lane closures.

Vehicular Security Center for Freedom Towers, Port Authority of New York and New Jersey (PANYNJ), New York, NY: Structural engineer for the preliminary design of a three-tier

Elizabeth D. Marcantonio, PE, continued

framing structure underground. There is a park and a church on top of the structure. The whole structure will be designed to sustain the blast loading. The structure is founded on sound rock.

Route 9A Program Management, New York State Department of Transportation (NYSDOT), New York: Responsible for the redevelopment of Route 9A. Primary activities included project management and controls, construction contract coordination, constructibility reviews, graphic/visual aids, community outreach, and staff support for NYSDOT.

Westchester Avenue Bridge Rehabilitation, New York City Department of Transportation (NYCDOT), Bronx County, New York: Structural engineer responsible for the rehabilitation design of the substructure, superstructure, and deck replacement for the Westchester Avenue Bridge.

Route 120 (Ramp H Southbound Entrance Ramp and Ramp K Southbound Exit Ramp) over I-684, New York State Department of Transportation (NYSDOT), New York: Prepared abutment calculations for the proposed curved steel I-girder two-span bridges.

Jetblue T5 Redevelopment, Jetblue Airways: Structural engineer responsible for analysis and design of overhead sign structures (both cantilever and span types) throughout the airport. Also responsible for all drawings associated with the overhead sign structures.

2004 and 2005 Biennial Inspection of La Guardia Airport, Port Authority of New York and New Jersey (PANYNJ), New York: Structural integrity engineer for the biennial inspection of the central terminal building, all hangars, and other airport facility buildings. Also provided immediate response to structural emergencies and provided recommendations to stabilize the situation.

Metro-North Railroad over the Saugatuck River (Saga Bridge), Westport, Connecticut: Design engineer for this project. The Saga Bridge carries four railroad tracks across the river. The project consists of the replacement of the Scherzer rolling lift moveable span, and rehabilitation of the fixed approach spans. Other aspects of the design include seismic analysis, substructure retrofit, bearing replacement, waterway fender system, pedestrian walkway, and a new operator house.

Times Square Station Rehabilitation, MTA New York City Transit (NYCT), New York: Structural engineer for the conceptual and preliminary design for the rehabilitation of Times Square Station for the Shuttle Line.

Joseph B. Matarazzo, PE

Project Role: Project Manager

Education

MS, Civil Engineering, Polytechnic Institute of New York, 1990

BS, Civil Engineering, Polytechnic Institute of New York, 1979

Registrations

PE: NY, 1984, Registration No.: [redacted]

PE: NJ, 1987, Registration No.: [redacted]

PE: PA, 1997, Registration No.: [redacted]

Professional Associations

American Institute of Steel Construction
American Engineering Alliance
Municipal Engineers of New York

Experience

Years with AECOM: 14
Years with other firms: 17

Employment History

1996-present: AECOM, Project Manager
1979-1981: NYC Department of Transportation, New York, NY, Assistant Civil Engineer
1981-1986: Pavlo Engineering Co., New York, NY, Structural Designer
1986-1988: Greenman Pederson Inc., New York, NY, Senior Construction Inspector
1988-1992: Pavlo Engineering Co., New York, NY, Resident Engineer and Structural Engineer
1992-1993: Gannett Fleming, Inc., New York, NY, Resident Engineer
1993-1995: OPA Engineers, Inc. (formerly Pavlo Engineering), New York, NY, Project Manager
1995-1996: A&H Engineers, PC, New York, NY, Vice President
1996AECOM - Earth Tech, New York, NY, Project Manager

Mr. Matarazzo is an engineer experienced in the planning, design and construction inspection of bridges and highways and other facilities. He has directed the rehabilitation of existing facilities as well as the development of new ones. Bridge types he has dealt with include long-span, high level, major river crossings as well as viaducts and grade separation structures. He is an accomplished project manager and resident engineer skilled in technical and administrative project development. His combination of bridge design and construction experience makes him particularly well suited for a leadership role in constructibility initiatives.

US Agency for International Development – Afghanistan Infrastructure and Rehabilitation Program, Bamyan to Dushi Road, NH-07, Segments 1 and 2: Senior Bridge & Structures Engineer for Value Engineering Study for this 85 km road, which includes three bridges, approximately 500 culverts, stone retaining walls, and stone guard walls. The study identified $2.5 Million in possible savings on this $90 Million project.

New York State Department of Transportation - Region 11, Rehabilitation of Major Deegan Expressway, Bronx County: Lead Structural Engineer. Assisted with the development of preliminary plans for the deck replacement and superstructure rehabilitation of this 1200 meter long, 6 lane viaduct.

New York State Department of Transportation - Region 11, Seismic Vulnerability Assessments for Various Bridges, New York City: Project manager for the assessment of 834 bridges for vulnerability to seismic events. These bridges are located on and over various emergency access corridors in the five boroughs (counties) of New York City. Manages screening of each structure to establish its seismic risk classification and an empirical assessment to determine overall vulnerability to seismic events. Field verification of existing conditions is performed as required. For a limited number of structures, an analytical assessment involving capacity/demand ratios and "push-over" analyses was performed to compare the analytical results with the empirical results. The final product is a recommended course of action for seismic retrofit in relation to the vulnerability and importance on a structure-by-structure basis.

New York State Department of Transportation - Region 11, Route 9A Lower Manhattan Redevelopment Project Office, World Trade Center Site Reconstruction, New York City: Deputy project manager for miscellaneous structural engineering associated with the reconstruction of Route 9A adjacent to the World Trade Center site. Work elements included demolition of the temporary pedestrian bridges at Vesey Street and Rector Street and reconstruction of approximately 60 feet of the approach structure ("bathtub") to the West Street Tunnel. The approach structure is being reconstructed due to the proposed alignment of Route 9A. Relocation of the east pier of the Liberty Street pedestrian bridge and design of a new center pier. The new piers are necessary due to the proposed alignment of Route 9A. Design of a $5 million, 140-foot-long architecturally enhanced pedestrian bridge that connects to the existing

Joseph B. Matarazzo, PE, continued

Liberty Street Pedestrian Bridge. The bridge is necessary in order to maintain pedestrian circulation through the World Trade Center site during construction. Reviewed plans, specifications, and calculations prepared by others for the construction of a pedestrian concourse below Route 9A, and ventilation and egress structures for the PATH subway tunnels, which are below the highway.

New York State Department of Transportation - Region 11, Route 9A Lower Manhattan Redevelopment Project Office, Short Tunnel Bypass, New York City: Deputy project manager for scoping and preliminary design for an 1100-foot, 4-lane tunnel adjacent to the World Trade Center. Responsible for the day-to-day administration and technical work, which included development of 10 structural/geotechnical tunnel construction concepts that involve elements such as slurry walls, diaphragm walls, and secant pile walls. The invert of the tunnel was to be approximately 35 feet below grade; the invert for various utility rooms to support ventilation and fire protection systems would be approximately 60 feet below grade. Coordinated construction staging, utility relocations, and maintenance and protection of traffic with the overall Route 9A redevelopment plan. Ensured that the design incorporated protection of existing above and below ground structures during construction. Managed preparation of construction schedules for the various tunnel concepts. Managed extensive hydraulic analyses and dewatering studies due to the high water table in the area. Managed design of a tunnel ventilation system involving either a semi-transverse or jet fan system; design of a ventilation system for the PATH tubes located below the proposed tunnel; design of a pedestrian concourse below the tunnel to connect the new World Trade Center with the World Financial Center; surveillance and security systems; fire protection systems; defensive measures against weapons of mass destruction.

NYSDOT Region 9A Lower Manhattan Redevelopment Project Office, Vesey Street Temporary Pedestrian Bridge, New York City: QA/QCmanager for the design and design support during construction for a $10 million temporary pedestrian bridge across Route 9A at Vesey Street adjacent to the World Trade Center. Responsibilities included review of plans and calculations and preparation of specifications. The bridge provides safe access for 6,500 pedestrians per hour to the World Financial Center, on the west side of Route 9A, from the temporary PATH station at the WTC. The facility includes east and west touchdown structures including elevators, escalators and staircases, canopies and roof, architectural treatments, lighting, prefabricated superstructure. Design and construction was done on a fast track basis: six months from project inception to bridge opening. I/D clauses were added for major project elements. Intensive coordination with city and state agencies and stakeholders was required.

New York State Department of Transportation - Region 10, Wantagh Parkway over Goose Creek, Nassau County New York: Project manager for preparing PS&E package for the replacement of the bascule and flanking spans with a three-span continuous precast, prestressed concrete superstructure, 26 meters wide and 52 meters long. The substructures consist of cap beams supported on 1.3-meter-diameter drilled shafts.

NYSDOT Region 11, Rehabilitation of 14 Bridges on or spanning the Cross Bronx Expressway, Morris Avenue to the Sheridan Expressway, Bronx, New York: Project manager for the preliminary design for rehabilitation and/or replacement of 14 bridges on or spanning the Cross Bronx Expressway from Morris Avenue to the Sheridan Expressway. Structures include 4 steel rigid frames, 4 concrete rigid frames, a concrete arch, an 18-span viaduct, a 9-span multi-girder bridge and 3 simple-span bridges at a cost in excess of $90 million. Managed preliminary design documents, in-depth inspection, deck evaluation, design approval documents (DAD), calculation of as-built and as-reconstructed load ratings, and seismic analysis for each structure. Directed various studies: traffic, accident, utility, and environmental (hazardous material mitigation). Prepared maintenance and protection of traffic schemes and construction schedules. Directed a study for various widening alternatives.

Asim K. Mazumdar, PE

Project Role: Project Manager

Education

MS, Structures, University of Pennsylvania, 1974

BS, Civil Engineering, University of Calcutta, India, 1969

Registrations

PE: NY 1997, Registration No.: [redacted]

Professional Associations

Structural Engineering Institute (SEI)

American Society of Civil Engineers (ASCE), Treasure

American Institute of Steel Construction (AISC), Member

Experience

Years with AECOM: 11
Years with other firms: 30

Employment History

1999-present: AECOM, Structural Project Manager

1999AECOM, New York, NY, Structural Project Manager

Mr. Mazumdar has extensive experience with managing projects involving design engineering, along with construction support services to various facilities (such as highway and railroad bridges), including subway systems and railroad stations, commercial and industrial buildings, nuclear and fossil power generating stations, parking garage structures, and underground structures. Mr. Mazumdar is also skilled in the preparation of contract documents.

Port Authority of New York and New Jersey (PANYNJ), World Trade Center, Transportation Hub, Manhattan, New York: Package manager responsible for total design, developing contract documents, coordination with the Port Authority project management team and the contractor. Providing construction support services for early works packages. The various design packages involve design with consideration for blast loads and seismic loads over and above normal gravity loading conditions. The New York City Building Code and the International Building Code are used in the design. Blast analysis is performed based on criteria set by the U.S. Army. Detailed description of this project is confidential.

Jet Blue Airways, Terminal 5 – Elevated Roadway System, JFK International Airport, Jamaica, New York: Lead structural engineer responsible for total structural design effort for the elevated departure roadway concrete structure. The scope of work included conceptual and final design of the departure ramps connecting to the terminal building. Two long curved ramps at each side connected the departure frontage to the arrival level roadway. Performed the conceptual design with consideration of the existing landmark structure and the surrounding features (like blast fence, Air Train connectors, and nearby roadway intersection for terminal 6). Services also included site survey, conceptual design, preliminary cost estimate, final design, specifications, and engineer's estimate. Construction support services may be included in the scope at a later date. The design will consider all Port Authority standards, and AASHTO and NYCDOT seismic criteria.

Jet Blue Airways, Terminal 6 – Widening of Arrival Roadway, JFK International Airport, Jamaica, New York: Lead structural engineer responsible for inspection, analysis, and load rating of the structure supporting the arrival roadway. The load rating was performed with consideration of an additional lane to arrival frontage roadway to improve vehicular traffic flow and passenger movement. Developed contract documents with details of sidewalk demolition and construction phasing with consideration to maintaining terminal operation. In addition, provided construction support services.

Port Authority of New York and New Jersey (PANYNJ), Perimeter Intrusion Detection System for New York Airports, New York: Lead structural engineer responsible for the design of different systems mounted on the ground or on structures to detect moving objects with or without provisions of detecting hazardous materials. Systems include CCTV, intelligent fence, crash gate protection system, etc. This work is classified and further discussion is not permitted.

American Airlines, Terminal

Asim K. Mazumdar, PE, continued

Redevelopment – Elevated Roadway System, JFK International Airport, Jamaica, New York: Lead structural engineer responsible for the total structural design effort for a 160–foot wide and 800–foot long elevated roadway system in front of the new terminal building. Two 400–foot long curved ramps at each side connect the elevated structure to the arrival level roadway. The construction documents for this viaduct structure were completed on a fast track schedule of four months. The pedestrian/passenger overpass connecting the Air Train station to the terminal building runs under this structure, and consideration was given to avoid interference between structural elements. Performed the structure study, and final design was performed with consideration of maintaining the terminal facilities during construction. Performed the complete design, developed contract documents, and assisted in bid preparation and finalization of the construction contract. The design considered AASHTO and NYCDOT seismic criteria. Also provided construction support services.

Newark Liberty International Airport (EWR), Call-In Contract, Newark, New Jersey: Lead structural engineer for different task order assignments. Assignments included design of high mast towers and toll plazas, rehabilitation of buildings, as well as repair work of roadways, including replacement of roadway joints for elevated departure roadways.

Rehabilitation of Seven Bridges on or Crossing the Cross Bronx Expressway, Bronx, New York: Project engineer for phases I-IV, rehabilitation design for seven bridges from Bronx River Parkway to Castle Hill Avenue on or spanning the Cross Bronx Expressway. The work included a condition survey, load rating, bridge deck evaluation, and identifying substandard features. Developed preliminary plans with MPT scheme. Performed steel vulnerability and seismic assessment of existing structures, and calculation of quantity/cost with life cycle cost analysis for different rehabilitation alternatives for these bridges.

Reconstruction of the New England Thruway, Larchmont, New York: Project engineer for construction support services during reconstruction of 5 miles of New England Thruway, including rehabilitation of six bridges. Responsible to assure correctness and conformance of the construction documents to NYSDOT standard specifications and NYS Thruway Authority criteria. The work involved coordination between the contractor, Thruway Authority, Metro-North Railroad, and the project field office. Work also involved construction sequencing with consideration for railroad traffic on the New Haven line of MNR.

Concrete Vulnerability Assessment of 450 Bridges in New York City under Bridge Safety Assurance Program, New York State Department of Transportation (NYSDOT) Region 11, New York, New York: Task manager, working along with project manager to coordinate the entire work between subconsultants and in-house staff. One of the major responsibilities was to give engineering interpretation of three state manuals to assure the correctness of the coding scores assigned by each member of the team. Additional responsibilities included preparation of work schedules along with generation of progress reports and overall checking of the work.

Upgrade of Several New York City Bridges, New York City Department of Transportation (NYCDOT), New York, New York: Project engineer during the design phase. This design and construction support services project is under the bridge component rehabilitation program of NYCDOT. Bridges involved included FDR drive at 58th Street, four bridges over Grand Central Parkway, part of Jackie Robinson Parkway, Belt Parkway over Ocean Parkway, and some city street bridges crossing Long Island Railroad and Conrail tracks.

Strengthening of the Ramp Structures Joining Lincoln Tunnel to Port Authority Bus Terminal, Manhattan, New York: Project engineer for preparation of a study report with load rating analysis for the ramp structures carrying commuter and long-distance buses in and out of the Lincoln Tunnel. The study was performed to accommodate 45-foot-long buses with heavier axle loads. Construction phasing with night work was an integral part of the design.

Bill Meister, PE

Project Role: Project Manager

Education
BS, Civil Engineering, Virginia Polytechnic Institute and State University, 1982

Registrations
PE: NJ, 1993, Registration No.: [redacted]

EIT: VA, 1982, Registration No.: [redacted]

Professional Associations
American Society of Civil Engineers (ASCE)
The North American Society for Trenchless Technology (NASTT)

Experience
Years with AECOM: 21
Years with other firms: 7

Employment History
1989-present: AECOM, Structural Project Manager

Mr. Meister has extensive and diversified engineering experience in the management, design, inspection, and construction of numerous civil and structural projects. His project involvement has included fixed and movable bridges, air terminals, bus maintenance facilities, highways, tunnel design and rehabilitation, retaining walls, viaducts, horizontal drill projects, sign structures, drainage systems, lighting, and special structures.

George Washington Bridge Tower Survey, Port Authority of New York and New Jersey (PANYNJ): Project engineer for the complete structural survey of the main span towers. Included was the in-depth field inspection of the towers and the preparation of a structural condition report.

Holland Tunnel Catwalk and Handrail Rehabilitation, Port Authority of New York and New Jersey (PANYNJ): Project engineer for the $13 million catwalk and handrail rehabilitation, including stainless steel nosings on both tunnel walls of all three tubes. Obtained pertinent field information, prepared design drawings, attended progress meetings, reviewed contractor performance and reviewed all shop drawings. Project utilized as prototype for future repairs at Lincoln Tunnel.

Harrison PATH Station Platform Extension, Port Authority of New York and New Jersey (PANYNJ), Harrison, New Jersey: Project engineer for the preparation of preliminary design drawings for the extension of the station platforms.

Route 29 Tunnel, Sections 10C and 11B, PKF/NCI Design Build for New Jersey Department of Transportation (NJDOT), Trenton, New Jersey: Project structures coordinator for the $71 million design-build, cut-and-cover facility along the Delaware River in Mercer County. The project involved roadway rehabilitation south of the historic Amtrak bridge crossing Route 29 and extending south to the Riverview Cemetery. Included was a 700-meter cut-and-cover section that separates four lanes of highway traffic and the local residential, historic area of Lamberton; access and egress ramps to southbound/northbound Route 29 traffic; two pedestrian bridges for access to a landscaped park on top of the cut-and-cover section; and various retaining walls providing grade separation, and to accommodate the depressed Route 29 highway. The project was under full federal oversight due to complex geotechnical issues and tunnel construction.

Replacement of Daniel Road Bridge over Manalapan Brook, New Jersey Department of Transportation (NJDOT), Middlesex County, New Jersey: Project manager for the roadway realignment and the replacement of a two-span timber bridge with a single-span widened prestressed concrete structure. Responsibilities included alignment studies to minimize wetlands impacts and correct substandard stopping sight distance; preliminary roadway designs; preliminary cost estimates, and preparation of final contract documents. Mr. Meister subsequently provided shop drawing review and consultation services during construction.

Old Corlies Avenue over Jumping Brook Bridge Replacement, Monmouth County, Neptune, New

Bill Meister, PE, continued

Jersey: Project manager for the reconstruction of Monmouth County Bridge No. N-5 on County Route 17, Old Corlies Avenue over Jumping Brook in the Township of Neptune for the County of Monmouth. Project involved the development of construction documents for the replacement of a two-lane, 22-span bridge with a three-span, prestressed, precast concrete bridge. Mr. Meister was responsible for the coordination of survey and topographic mapping, hydraulic and geotechnical analyses, the procurement of all necessary permits, the structural and approach roadway designs, and the development of right-of-way and utility plans.

Variable Message Signs Milepost 0 to Milepost 122, New Jersey Turnpike Authority (NJTPK), New Jersey: Task manager for the design of the variable message sign system for the full length of the NJ Turnpike. The system included 19 LED signs with walk-through cabinets and a central computer system linked to the local controllers at each sign with a lease line communication system. The contract included the special design of the overhead sign structures to accommodate the walk-through cabinets, all civil site work, and maintenance of traffic. Concentrated coordination was required between the New Jersey Turnpike, New Jersey Department of Transportation, and cabinet vendors for appropriate implementation of VMS components and system.

Bordentown Road over South River Bridge Replacement, County of Middlesex, East Brunswick, New Jersey: Project manager responsible for the complete structure replacement of the Bordentown Road Bridge over South River and the associated roadway widening and improvements. Project included development of contract plans and specifications, from conceptual formulation through final advertisement and bid evaluation. Project also included the application of all required environmental permitting and State Historic Preservation Office coordination. Existing roadway traffic is to be maintained on the bridge throughout new construction.

U.S. Route 1 & 9 Bridge Replacement, New Jersey Department of Transportation (NJDOT), Woodbridge, New Jersey: Task manager for the design of the replacement structure within the historic cloverleaf intersection of U.S. Route 1&9 over Route 35. Included was the preparation of an SHPO analysis, and design of a 130-foot single-span structure while maintaining traffic and all turning movements on both major roadways. Additional work included complete replacement of a new flyover structure for US Route 1 northbound over US Route 9 southbound, and design of various proprietary walls.

U.S. Route 1 Traffic Signal Contract #10, New Jersey Department of Transportation (NJDOT), New Jersey: Task manager for the final structural contract documents for the design of a traffic control system for Route 1 from Woodbridge to Trenton, including branch systems along Routes 18, 95, and 295. The project consisted of the installation of 70 miles of fiber optic cable over structures, variable message signs on overhead structures, 14 surveillance cameras, coordination of 44 signalized intersections, 2 highway advisory radio systems, and design of a traffic control center.

Movable Bridge Operator Manual Development, Northeast Corridor, Amtrak: Project manager for the development of movable bridge operator manuals for various bridges along the Northeast Corridor from Jersey through Connecticut, including the Portal swing, Spuyten Duyvil swing, Connecticut River bascule, Niantic River bascule, Shaw's Cove swing, and the Mystic River swing bridge. The project included the complete procedural evaluation of the bridge operation for incorporation and development of an operator manual specifically tailored to the operations of each individual bridge. The manuals included standard policies, safety elements, general bridge information, operating procedures, navigational issues, and bridge operation under unusual conditions.

Mark Minkley, RLA

Project Role: Project Manager

Education

Bachelor of Landscape Architecture (BLA), 1994, Texas Tech University, Lubbock, Texas

Professional Registrations

Registered Landscape Architect, New York

Total Years of Experience:

years with AECOM: 15
years with Other Firms: 2

Employment History

2006-Present: AECOM (formerly EDAW, Inc.)

2001-2005: Thomas Balsley Associates

1995-2001: EDAW, Inc.

1994-1995: Moore Icafano Goltsman

1993: EDAW, Inc.

With fifteen years of experience, Mark Minkley has extensive experience working on complex projects with sensitive environmental conditions and existing built constraints. He has led and managed design efforts for clients from design conception through construction on projects ranging from public parks and urban plazas to resorts and private residences. His design and construction experience make him a key member of the design team.

World Trade Center Public Realm, New York, NY: AECOM is creating the public realm for the World Trade Center (excluding the Memorial) in vibrant Lower Manhattan, catering to millions of tourists, visitors, commuters and residents. The project, which comprises the streets, plazas and parks within 'Ground Zero,' will unify and complete a 16-acre redevelopment project that includes five world class skyscrapers, a performing arts center, a regional multi-modal transportation hub and a state-of-the-art vehicle security center. The project involves significant coordination and consensus building with diverse stakeholders, high-end design resolution and integration of all aspects relating to pedestrian movement, transport, security and retail into a cohesive public realm. Mr. Minkley served as the Senior Landscape Architect for this project.

Kew Gardens Interchange, Kew Gardens, NY: As part of the widening and rehabilitation of nine bridges on the Van Qyck Expressway, AECOM is providing strategies to connect and restore the urban forest through the Briarwood Community of Queens. Our reforestation strategies improve the planting and visual context of the expressway frontage and its function as a transportation gateway from JFK Airport into Manhattan. This project also provides for green linkage from the expressway frontage to existing parkland and open space; increasing greenway corridors and providing larger viable forest areas to improve the urban environment and address issues of public health and climate change. This initiative, combined with a complimentary greening effort on Queens Boulevard, will increase street tree planting and the green streets program to contribute to achieving the PlaNYC goal of 30% canopy cover citywide by 2030. Mr. Minkley was the Project Manager and Landscape Architect. The project was funded by the New York State Department of Transportation (NYSDOT).

Reconstruction of the Pike Allen Street Malls, New York, NY: Sponsored by the New York City Department of Parks & Recreation, the reconstruction of the Pike and Allen Street Malls will create an enhanced and unified corridor for pedestrian and bicycle movement. The design will also generate a series of green, social and neighborhood spaces that respond to the Lower East Side and Chinatown neighborhoods. As a part of the East River Waterfront Framework Plan, this green corridor strives to create connections between the upland, city and the East River Waterfront. This project presents an opportunity to expand parkland by widening and possibly doubling the footprint of the malls with integrated park, bikeway and planted medians. Mr. Minkley served as the Project Manager and Landscape Architect.

PlaNYC Schoolyard Initiative, Brooklyn, Queens, Staten Island, NY: New York City Department of Parks & Recreation is sponsoring the redesign of 40 NYC standard schoolyards to make them more educational, more playable and greener. Our work included design

Mark Minkley, RLA, continued

days with teachers, administrators and students. These schoolyards will be open to the public after school hours and on weekends as part of the Mayor's PlaNYC 2030 plan to have a public park within a ten-minute walk of all New York residences. Mr. Minkley served as Project Manager and Landscape Architect.

Downtown Brooklyn Streetscape, Brooklyn, NY: Redesign of the streetscape of one of the main entries to Brooklyn via the Manhattan Bridge to make it into a pedestrian-friendly boulevard, to support the rezoning for the area. As the prime consultants, the team is also coordinating the work of civil engineering and traffic planning. Sponsored by New York City Economic Development Corporation (NYCEDC) with Mr. Minkley serving as Project Manager and Landscape Architect.

East River Greenway, New York, NY: As part of the New York City Economic Development Corporation East River Bikeway and Esplanade Master Plan and the PlaNYC 2030 1,800-mile Bike Master Plan, the East River Greenway provides an important missing link in realizing a continuous bikeway and esplanade. The schematic design utilizes existing caissons installed in 2004 as part of the Outboard Detour Roadway for the rehabilitation of the tri-level FDR Drive. These existing structures will support the new two-lane bikeway and pedestrian esplanade between East 53rd Street and East 59th Street. Sustainable design elements are integral to the new link. Green roof shade structures are self-sustaining collectors of rain water that is reused through a rain barrel irrigation system. Fitration gardens catch stormwater, filtering it through a linear plant system that cleans the water through a biofiltration system. The palette for lighting, public seating, waterfront railing, and paving systems connect the new esplanade to the larger East River system. Mr. Minkley serves as Project Manager and Landscape Architect.

MTA LIRR 50th Street Open Space, New York, NY: As part of the LIRR connection to Grand Central Station, the 50th Street Open Space envisioned a new urban oasis, building upon the existing pocket park network, including Paley Park and Greenacre Park, in midtown Manhattan. The park will feature an illuminated glass water wall, an understory forest planting, green walls and a planted trellis. Stone benches and moveable tables and chairs will provide for an active open space for business people, residents and visitors. Mr. Minkley served as the Project Manager and Landscape Architect. The project was sponsored by the Metropolitan Transportation Authority of the State of New York.

Fulton Mall Streetscape, Brooklyn, NY: As the cornerstone of the 2004 Downtown Brooklyn Plan, the redesign of the Fulton Street Mall focuses on place-making and connects the street to the surrounding cultural, civic and residential communities. AECOM's redesign incorporates cultural and event programming to draw and capitalize on nearby cultural and educational resources, expanding the user group of the mall by creating a local and regional destination. The streetscape creates a palette for lighting, expands the public space at the heart of Albee Square, introduces historical signage, areas for public seating, and incorporates new NYCDOT street furniture elements. AECOM explored ways to incorporate sustainable design components, including porous paving, continuous tree trenches utilizing structural soil and the use of appropriate plant species. Mr. Minkley served as Project Manager and Landscape ARchtiect. The project was sponsored by the New York City Economic Development Corporation (NYCEDC).

164 Kent Avenue, Brooklyn, NY: Sponsored by RD Management with Mr. Minkley as the Project Manager and Landscape Architect, this residential complex includes affordable housing and luxury condominiums on the East River. It will be one of the first buildings to be designed and built under the new Greenpoint Williamsburg Zoning Resolution which mandates public access to the waterfront. We are developing the prototypes for design to meet the very detailed requirements, and are coordinating the design with the New York City Department of City Planning.

Jacob J. Javits Federal Building, New York, NY: Created a complex balance between the federal government's First Impressions program to create vibrant open spaces and to comply with heightened security standards for federal facilities, a new plaza, entrance pavilion and raised terraces welcome visitors on Broadway. Information kiosks, cafes and seating activate the public space.

Sandy Murphy, PE

Project Role: Project Manager

Education
MS, Civil Engineering, City University of New York, 1992
BS, Civil Engineering, Union College, 1982

Registrations
PE: NY, 1987, Registration No.: [redacted]

PE: CT, 1994, Registration No.: [redacted]

Professional Associations
American Society of Civil Engineers (ASCE)
ACE Mentor Program of CT, Treasurer
ACE Mentor Program of CT, Board of Directors

Experience
Years with AECOM: 22
Years with other firms: 6

Employment History
1988-present: AECOM, Senior Project Director

Mr. Murphy provides management, technical direction, and quality assurance with expertise in conceptual and preliminary designs and the preparation of contract plans for transportation and major site development projects. Mr. Murphy specializes in highway design, including highway alignment design, traffic studies, grading and paving, construction sequencing, and maintenance of traffic during construction.

The Port Authority of New York and New Jersey, Call-In Engineering Services, New York, New York: Project manager for an indefinite quantity contract. Managed pavement condition surveys and the design of alignment, grading, and drainage improvements on airport vehicle service roads and apron areas.

The Port Authority of New York and New Jersey,Central Terminal Building Expansion, LaGuardia Airport, Flushing, New York: Project engineer for civil works, responsible for the roadway design, maintenance of traffic, and construction sequencing for a $50 million central terminal building expansion.

New York State Department of Transportation, Bridge Preventive Maintenance Construction Inspection, Islip and Brookhaven, New York: Project manager for construction inspection services for various bridge repair operations including structural lifting, concrete bridge seat and pedestal replacement, bearing replacement, removal and replacement of armored bridge joints, various concrete repairs to remaining abutments and pier caps, and milling and paving existing asphalt overlay. The two locations are the Sagtikos Parkway over LIRR and Pine Aire Drive in Islip and the LIE service roads over Nicolls Road in Brookhaven.

New York State Department of Transportation - Region 10, CI Priority Surface Treatment Construction Inspection, Hempstead, Brockhaven, and Smithtown, New York: Project manager for construction inspection for 4.2 km of pavement reconstruction (asphalt concrete milling and resurfacing) on Routes NY 25A, NY27, and Sunken Meadow Parkway exit ramp.

New York State Department of Transportation - Region 11, Route 9A Promenade (Battery Place to Chambers Street) Construction Support Services, New York, New York: Project manager for construction support services for reconstruction of Route 9A (West Street) from Battery Place to Chambers Street. Managing work associated with modifications to the Liberty Street pedestrian bridge including the temporary Cedar Street extension, modifications to the Rector Street pedestrian bridge and the adjacent West Street underpass, and deconstruction of the Vesey Street temporary pedestrian bridge. Managing response to unanticipated and changed field conditions, review of construction methods proposed by the contractor, and review of shop drawings and contractor submittals for consistency with contract documents.

New York State Department of Transportation - Region 11, Vesey Street Temporary Bridge East End Deconstruction Construction Support, New York, New York: Project manager for construction support

Sandy Murphy, PE, continued

services on the bridge east end deconstruction project.

New York State Department of Transportation, Route 9A Reconstruction, New York, New York: Project highway engineer responsible for construction staging and maintenance and protection of traffic for two major reconstruction contracts in the vicinity of the World Trade Center – the creation of a promenade extending from south of the World Trade Center site to the southern terminus of West Street and Battery Place (the Promenade South contract and reconstruction of Route 9A at the World Trade Center site, potentially including a 1,000-foot-long bypass tunnel structure. Also, project manager responsible for administering construction support services for the Promenade South contract.

New York State Department of Transportation, Undercliff Avenue Bridge, Cross Bronx Expressway, Bronx, New York: Project highway engineer for preliminary and final design of the reconstruction of a two-span structure over the Cross Bronx Expressway (CBE). The project includes reconstruction of the structure to eliminate the center pier and accommodate widening of the CBE.

New York State Department of Transportation, Cross Bronx Expressway Bridge Rehabilitations, Bronx, New York: Project highway engineer for preliminary and final design (Phases I-VI) of 14 bridges on or spanning the expressway from Morris Avenue to the Sheridan Expressway including redesign of the Sheridan Expressway (I-895) interchange. Other elements of the contract include traffic studies for the development of construction staging and maintenance and protection of traffic plans, accident study, utility study, and environmental study (hazardous material mitigation).

New Jersey Department of Transportation, I-80/I-95 (Sections E & J) Rehabilitation and Operational Improvements, Bergen County, New Jersey: Project engineer responsible for construction staging for the proposed improvement to 2.5 miles of I-80 and I-95, including the I-80/I-95 interchange. The project involves the redistribution of traffic lanes and pavement rehabilitation on I-80 eastbound, I-95 southbound, and the interchange connecting these two interstates, as well as the design of noise barriers located within the I-80/I-95 corridor from the Hackensack River to Route 46.

New Jersey Department of Transportation, Route 1&9 Improvements, Hudson and Bergen Counties, New Jersey: Project engineer responsible for construction staging for a 6.2-mile section of Route 1&9. The project includes restoring, rehabilitating, and updating the roadway section to current standards, as well as signage and other existing highway appurtenances. The design requires full depth pavement reconstruction and the replacement of the existing drainage system.

New Jersey Department of Transportation, I-80 (Section I) Westbound Rehabilitation and Operational Improvements, Bergen County, New Jersey: Project engineer in charge of construction staging and scheduling of the proposed 1.5-mile widening of Route 80 westbound local roadway, which includes the addition of 850 feet of noise walls beyond the project limits.

New Jersey Department of Transportation, Route 1&9 Elizabeth River Viaduct, Elizabeth, New Jersey: Technical reviewer of construction staging for the replacement of the existing 2,000-foot-long viaduct.

New York State Department of Transportation,Wantagh Parkway Bridge over Sloop Channel (Phase I-IV), Nassau County, New York: Reviewed alternatives as highway engineer for the replacement of the 576-foot-long, 18-span, 70-year-old Sloop Channel Bridge.

New York State Department of Transportation, Avenue C Viaduct, FDR Drive, New York, New York: Project highway engineer for the final design of the rehabilitation and realignment of a 46-span viaduct. The project included the complete rehabilitation of the viaduct structure, alignment and operational improvements, the replacement of drainage and lighting systems, repairs, reconstruction, and an extension of riverfront fill-retaining structures.

Jerry Parnes, PE

Project Role: Project Manager

Education

BA, Civil Engineering, City College of New York, 1972

Registrations

PE: NY 1981, Registration No.: [redacted]

PE: NJ 1981, Registration No.: [redacted] Civil)

Professional Associations

Concrete Industry Board (CIB)
- President, 2002 to 2004
- Advisory Board, President

American Society of Civil Engineers (ASCE)

National Society of Professional Engineers (NSPE), Former Member

Structural Engineers Association of New York (SEANY), Former Member

Prestressed Concrete Institute (PCI), Former Member

American Concrete Institute (ACI) Fellow
- ACI Committee 201 - Concrete Durability, Associate Member, 1995
- ACI Committee 214 - Strength Evaluations, Voting Member and Secretary, 1995

Experience

Years with AECOM: 9
Years with other firms: 0

Employment History

2001-present: AECOM, Structural Engineer
1972-1973: Hazen and Sawyer, Resident Inspector
1973-1973: AECOM (Metcalf & Eddy), Civil Engineer
1973-1974: James Owen Power, Designer/Draftsman
1974-1997: Hazen and Sawyer, P.C., Vice President, Head of Structural Department
1997 Desman Associated, Inc., New York, New York, Chief Structural Engineer

Mr. Parnes has extensive experience in structural design and construction supervision of transportation projects, as well as water/wastewater facilities. He has completed numerous designs involving reinforced and prestressed concrete, structural steel, masonry and wood for many public works facilities. Types of structures designed include power generation facilities, solids handling and incineration buildings, main equipment handling and maintenance buildings, process buildings and tanks, pumping stations, rigid frames, cofferdams, reservoir diversion tunnels, intake structures and access bridges, tunnels, pipe support towers, outfalls pipelines, and transportation related facilities. All designs conformed to the latest requirements of the ACI Code, AISC Structural Steel handbooks, ANSI and other applicable codes. Techniques used include matrix method computer analysis, STAAD and STRUDL analysis, PCA moment distribution, seismic and finite element analysis.

He has performed investigations of structural defects such as cracking, deterioration and corrosion of concrete and steel for and reported on probable causes and methods of repair for many upgrade and rehabilitation projects. During various engineering investigations, he developed concepts for rehabilitation of historic public works projects.

Mr. Parnes has served as team captain and participant on structural value engineering teams performing life-cycle cost analysis and design reviews for various treatment plant facilities. His findings and recommendations have resulted in substantial savings in costs to the owners.

As a volunteer, Mr. Parnes recently completed his second year as President of the Concrete Industry Board of New York, which is a non-profit organization comprised of over 120 Architecture/ Engineering/Construction firms in the New York region. Mr. Parnes was instrumental in obtaining New York State approval for the Concrete Industry Board to serve as an authorized provider of Professional Engineering courses required to maintain a NYS PE license. He presently serves on the Board of Directors and is also a Director on the Concrete Industry Foundation which focuses on awarding scholarships for students involved in Design and Construction related curriculum.

PANYNJ World Trade Center Transportation Hub (PATH), Port Authority of New York and New Jersey (PANYNJ), Manhattan, New York: Chief structural engineer on the World Trade Center HUB project for the PANYNJ. Under the Joint Venture of AECOM's legacy company DMJM Harris and STV, called the Downtown Design Partnership, overseeing the structural design of the new PATH Station, managing the efforts of over 90 structural engineers from various joint venture firms, and responsible for the signing and sealing of the structural documents.

American Airlines New Terminal Construction, JFK International Airport, Queens, New York: Project director and engineer of record on this project that open its first phase on August 24, 2005. Responsibilities included liaison with the client and Port Authority of New York and New Jersey, managing a design office on site, inter-company back office coordination,

Jerry Parnes, PE, continued

and obtaining permits from the Port Authority.

Second Avenue Subway, MTA Capital Construction/New York City Transit, New York: As concrete and waterproofing specialist and structural team leader for the tunnel portions, provided services for preliminary engineering.

Croton Water Treatment Plant for the New York City Department of Environmental Protection, New York: Led the design team on this project.

Paerdegat Combined Sewer Overflow Facilities, Brooklyn, New York: Led the design team on this project.

Sludge Dewatering Facilities, New York City Department of Environmental Protection (NYCDEP), New York: Provided construction support for this project.

Hemlocks Water Treatment Plant for Bridgeport, Connecticut: Provided construction support for this project.

Brooklyn Navy Yard Outfall and Cooling Water Intake Tunnel, Brooklyn Cogeneration Partnership, Brooklyn, New York: Provided construction support for this project.

City of New York Sludge Management Program, New York: Project manager responsible for staffing and leading structural engineers and draftsmen of a joint venture of several firms in designing and providing field support for this that project encompassed design and construction of facilities to dewater sludge at various sites, estimated at $750 million. In order to meet 1992 consent decree deadlines to stop ocean dumping of sludge, contracts were phased to enable fast track construction. Computer aided design and drafting were fully utilized.

Bay Park Water Pollution Control Plant, Nassau County, New York: Concurrently served as structural project manager for design and construction of facilities. This project involved design and construction for various buildings and process tanks for a 70 million-gallon-per-day wastewater plant upgrade.

Unlined Tunnel, Charleston, South Carolina: As resident engineer, supervised construction of a 2.5-mile unlined tunnel through marl. A world's record for seven-day TBM advance was set.

Ana Peraza, PE

Project Role: Project Manager

Education

BS, Civil Engineering, 2001, New Jersey Institute of Technology

Professional Registrations

PE: NJ, 2006, Registration No.: [redacted]

Professional Affiliations

American Society of Civil Engineers (ASCE)
American Society of Highway Engineers (ASHE)

Experience

Years with AECOM: 10
Years with other firms: 1

Employment History

2001-present: AECOM, Project Engineer

Ana Peraza has more than ten years of professional design experience on highway projects. Tasks range from local roadway work to state highways u-0sing New Jersey Turnpike Authority, New Jersey Department of Transportation and ASSHTO standards. Project experience includes the design and coordination of engineering efforts in the development of highway geometry, design of roadway-roadside safety devices, construction estimates, specifications, design and construction schedules and the development of plans for right of way, construction, grading, pavement markings, signing and maintenance and protection of traffic. Ms. Peraza is experienced in the use of New Jersey Department of Transportation's Transport System, Primavera Project Planner, Highway Capacity Software, AutoCAD, AutoTurn, Microstation and InRoads.

Port Authority of New York and New Jersey, Path Yard, Hudson County, NJ: Project Engineer/Civil Task Leader. Responsible for the preliminary and final design phases of the design to improve circulation through the Path Yard. Tasks included the coordination of multiple disciplines such as surveying, geotechnical engineering, track work, civil/site work, structural engineering, lighting and signal design. Also, developed specifications, evaluated utility impacts, prepared roadway details, preliminary grading and drainage design.

New Jersey Department of Transportation, Route 23 Improvements, Sussex, NJ. Project Engineer and Civil Task Leader for intersection improvements along Route 23 in Hardyston Township: Tasks include coordinating subconsultants, utility accommodations, assessing right of way and access impacts, preparing and reviewing documentation to acquire right of way and access rights, developing horizontal and vertical alignments and preparing contract documents for final design.

Middlesex County, Ernston Road and Bordentown Avenue Intersection Improvements, Borough of Sayreville and Township of Old Bridge, NJ: Project Engineer. Responsible for task associated with finalizing design for the replacement of the existing Conrail Bridge over Ernston Road. The overall intersection improvements will relieve extensive traffic congestion; reduce excessive vehicular accidents; eliminate bridge and roadway deficiencies; and increase pedestrian mobility and safety. The proposed railroad bridge is the focus of the intersection improvements providing for increased vehicular circulation and widening of the present Ernston Road constriction. 2009

New Jersey Department of Transportation, Roff Avenue over Route 46, Bergen County, NJ: Deputy Project Manager and Project Engineer for a stimulus project to replace the superstructure of the Roff Avenue Bridge over Route 46. Tasks include coordinating subconsultants, utility accommodations, maintenance and protection of traffic and vertical alignment and grading on this fast-track project.

Casino Reinvestment Development Authority, Bader Field Preliminary Design Assessment, Atlantic County, NJ: Civil task leader responsible for developing conceptual alternatives to connect the Bader Field property to Atlantic City and adjacent highways via

Jerry Parnes, PE, continued

ramps and structures. Developed horizontal and vertical alignments and preliminary cost estimates to evaluate the benefits of the different alternative access points.

City of Newark, McClellan Street Underpass, Essex County, NJ: Civil task leader responsible for a scoping study to repair, widen or replace the existing McClellan Street Underpass carrying the Amtrak Northeast Corridor Line in the City of Newark. Investigated several alternatives to address the substandard vertical clearance at the underpass maximizing economy for the roadway link, while alleviate the existing flooding problems and improve traffic operations and safety in the project area.

New Jersey Department of Transportation, Millstone River Bridge Replacement, Mercer County, NJ: Project Engineer and Civil Task Leader for the breakout project from the NJDOT Route 1 Penns Neck project. The project consists of replacing the existing deficient 3 span structure with a new bridge. The bridge cross section is being designed to accommodate the final roadway cross section as outlined in the Penns Neck EIS. The design presents a challenge in that it is necessary to establish right of way and retaining wall locations based on the conceptual design as outlined in the EIS, in preparation for the future Penns Neck Contract. Preliminary and Final Design Tasks are being prepared in accordance with the NJDOT Procedures Manual. Tasks include design of vertical and horizontal geometry, signing and striping, guide rail, and maintenance and protection of traffic in accordance with the NJDOT Roadway Design Manual, Right of Way Manual, and MUTCD. Prepared a final design submission including construction plans and specifications (special provisions). Managed and coordinated subconsultant utility and survey tasks.

Middlesex County, Blair Road over Woodbridge Creek, Woodbridge Township, NJ: Project Engineer and Civil Task Leader for the Final Design of the bridge replacement of Blair Road over Woodbridge Creek and its approaches. Tasks included the preparation of final plans and specifications. Project included replacement of the adjacent Bridge over the Woodbridge Creek, roadway re-profiling and cross sectional development, drainage design, and meeting the requirements of the adjacent Conrail grade crossing embodied within the project roadway work. 2007

New Jersey Department of Transportation, Route 139 Contract 3, Hudson County, NJ: Project Engineer for all Civil Engineering Tasks for Final Design of 1.2 miles of Route 139 in Jersey City. Final Design of this work consisted of finalizing design-construction plans, grading plans, drainage design, environmental plans, utility plans, traffic control, specifications (special provisions) and construction staging plans, design of 7 temporary and 5 permanent traffic signals. This work required coordination of two separate construction contracts within the project scope as well as adjacent projects by separate agencies.

New Jersey Turnpike Authority, Driscoll Bridge Rehabilitation, Middlesex County, NJ: Project Engineer responsible for the project coordination and design of the approaches of the $200 million rehabilitation of the approximately 4,400-foot long, high-level Garden State Parkway (GSP) Bridge over the Raritan River. The project also includes substantial approach work including the widening of the GSP. Task included researching the use of contrast striping (white on black) on the new concrete deck and hydromilling as a method of compound removal. The rehabilitation will entail substantial maintenance and protection of traffic including providing a contraflow lane on the newly constructed southbound bridge, to provide seven northbound lanes and six southbound lanes at all points during the rehabilitation of the existing bridges. Several staging alternatives were developed to illustrate the preferred method of rehabilitating the existing bridges while minimizing the traffic impacts to the heavily traveled corridor. The maintenance and protection of traffic requires the design of alignments, profiles, temporary drainage, and signage. Extensive coordination was required with NJHA, Joint Venture partners and subconsultants.

Tom Quaranta

Project Role: Project Manager

Education

MS, Construction Management, Columbia University, 1980
BS, Civil Engineering, Columbia University, 1976

Professional Associations

Construction Management Association of America (CMAA) Fellow
- CMAA Past President (Nationally), 2000-2001
- CMAA Advisory Board, Metro NY/NJ Chapter, Fellow
Industry Advisory Board (Construction Engineering & Management), Columbia University

Experience

Years with AECOM: 7
Years with other firms: 27

Employment History

2003-present: AECOM, Quality Assurance Manager
1976-2003: Parsons Brinckerhoff

Mr. Quaranta has extensive construction management experience at staff and project levels on both foreign and domestic projects. A nationally recognized leader in construction management, he was elected president of the Construction Management Association of America (CMAA), a national organization dedicated to education and representation. He was also appointed to the Industry Advisory Board for Construction Engineering and Management, Department of Civil Engineering at Columbia University. He is a lecturer at Columbia University, Pratt Institute, and Lehigh University.

Terminal One, JFK International Airport, Terminal One Group Associates, Jamaica, New York: Contract Principal responsible for overseeing program management services on behalf of Terminal One Group Associates, for the construction of a new terminal servicing Air France, Lufthansa, Japan Airlines, and Korean Air.

LaGuardia Airport Redevelopment Program, Port Authority of New York and New Jersey (PANYNJ), Flushing, New York: Contract principal as sub-consultant for oversight of program management services.

Fire and Life Safety Program, Amtrak, Metropolitan New York, New York: Officer in charge of three construction management contracts for tunnel ventilation facilities in Manhattan and Long Island City, New York, and Weehawken, New Jersey.

Tappan Zee Bridge, New York State Department of Transportation (NYSDOT)/New York City Transit Authority (NYCTA)/MTA Metro-North Railroad (MNR), Westchester and Rockland Counties, New York: Program controls manager for stage 2 environmental studies for $10 billion in improvements to the 30-mile I-287 corridor between the I-287/I-87 interchange at Suffern, New York, and the I-287/I-95 interchange in Port Chester, New York. The project involves major improvements to the Tappan Zee Bridge, including potential linkage to existing commuter rail lines in three counties.

Cardinals Stadium Due Diligence, Lexington Insurance Company, Phoenix, Arizona: Project manager responsible for conducting project evaluations in conjunction with professional liability insurance coverage. The project goal was to minimize risk by ensuring that the design-build contractor was performing satisfactorily. Services included a review of the lift plan procedures for the retractable roof, the heaviest lift ever undertaken in North America. Also reviewed scheduling and safety controls. The lift was completed without incident, and the $355 million stadium was completed in time for the 2006 National Football League season.

Indiana Stadium Due Diligence, Lexington Insurance Company, Indianapolis, Indiana: Project manager responsible for conducting project evaluations in conjunction with professional liability insurance coverage.

DC Major League Ball Park Stadium Due Diligence, Lexington Insurance Company, Washington, DC: Project manager responsible for conducting project evaluations in conjunction with professional liability insurance coverage.

Tom Quaranta, continued

Third Avenue Bridge, New York City Department of Transportation (NYCDOT), New York, New York: Principal in charge for resident engineering and inspection services.

Tomlinson Bridge Replacement, Connecticut Department of Transportation (ConnDOT), New Haven, Connecticut: Principal in charge for construction engineering and inspection services.

North Channel Bridge, New York State Department of Transportation (NYSDOT), Queens, New York: Principal in charge for construction inspection services.

Newport Bridge, Rhode Island Turnpike and Bridge Authority, Newport, Rhode Island: Field engineer for annual physical condition inspections.

I-80 Bridges, New Jersey Department of Transportation (NJDOT), New Jersey: Field engineer for structural inspection of 102 highway and railroad bridges.

Somerset County Bridges, County of Somerset, Somerset County, New Jersey: Field Engineer for structural inspection of 35 concrete arch steel stringer and truss bridges.

Manhattan Bridge Reconstruction, Contract #6 & #10, New York City Department of Transportation (NYCDOT), New York, New York: Principal in charge for resident engineering and inspection (REI) sub-consultant services.

Brooklyn Queens Expressway, 25th Avenue to Broadway, New York State Department of Transportation (NYSDOT), Queens, New York: Principal in charge for construction inspection services.

I-287 Viaduct Replacements, Westchester Co., New York State Department of Transportation (NYSDOT), New York: Principal in charge for construction inspection services.

I-95 Rehabilitation, Connecticut Department of Transportation (ConnDOT), Guilford, Connecticut: Principal in charge for construction inspection services.

Westway Highway Project, New York State Department of Transportation (NYSDOT), New York City: Project controls engineer responsible for cost and schedule reporting.

South Street Seaport Redevelopment, New York City Public Development Corporation, New York City: Project manager responsible for project control services for this $350 million project, and construction manager for the rehabilitation of Pier 17 streetscape and the Fulton Fish Market buildings rehabilitation. (1983/1983/NA)

Aquaculture Project, El Abbasa, Egypt: Scheduler for construction of fish farming units, drainage system, roadways, and housing complexes.

Seatrain Lines Shipping Pier, Seatrain Lines, Weehawken, New Jersey: Inspector for dredging operations.

Underwater Surveyor on the following facilities: Cove Point Marine Facilities, Maryland; Virginia Port Facilities, Norfolk, Virginia; Nacote Creek Bridge, Atlantic County, New Jersey; Elizabeth River Tunnels 1 & 2, Portsmouth, Virginia.

Stamford Rail Yard Rehabilitation, Connecticut Department of Transportation (ConnDOT), Stamford, Connecticut: Principal in charge of construction engineering and inspection (CEI) services.

Meadows Rail Equipment Maintenance Facility, NJ Transit, Kearny, New Jersey: Served on the construction management joint venture board of control for the construction of $100 million rail maintenance facility.

Times Square Subway Complex Reconstruction, Park Tower Realty, New York City, New York: Project manager for a private developer responsible for logistics, value engineering, constructibility review, and cost estimating as part of preconstruction phase services.

Donald E. Quast, PE

Project Role: Project Manager

Education

MS, Geotechnical Engineering, Syracuse University, 1983
BS, Civil Engineering, Syracuse University, 1981

Registrations

PE: NY, 1992, Registration No.: [redacted]

Experience

Years with AECOM: 24
Years with other firms: 2

Employment History

1984 to 1986 PRC Harris, Inc. Geotechnical Engineer

1986 to 1988 Parsons Brinckerhoff, Inc. Geotechnical Engineer

1988 to 1994 Frederic R. Harris, Inc. Geotechnical Engineer/ Resident Engineer

1994 to 2001 DMJM + Harris, Inc. Geotechnical Department Manager

2001 to 2008 DMJM + Harris, Inc. Project Manager, American Airlines

2008 to 2010 AECOM USA, Inc. Project Manager, Port Authority of NY and NJ

Mr. Quast has been serving as a project manager at the JFK Bay Runway Reconstruction Project for the Port Authority of New York and New Jersey (PANYNJ) since 2008. Prior to that, he was project manager at the American Airlines Terminal Project for all civil-related work and for building foundations, serving on that project since 2001. Mr. Quast's current duties include serving as acting program manager for the day-to-day construction activities on the Runway Project, in support of the PANYNJ. For American Airlines, he acted as a Project Manager and the Engineer of Record for both airside and landside work, along with overseeing all foundations on the project. He also has specialized experience in geotechnical analysis, subsurface investigations and construction inspection of various projects. His professional experience encompasses work on airports, buildings, highways and bridges, pavements, piers, ports and harbors, as well as dams and landfills.

Bay Runway Reconstruction Project, PANYNJ, JFK International Airport, Queens, New York: Program/project manager in charge of a small team in support of the PANYNJ in the supervision, oversight and monitoring of day-to-day construction activities. The authorized Total Project Cost of the Bay Runway is $376 million. Responsibilities included oversight of the project from 50% design up to completion of the main construction phases including 100% design drawings, presentation to the Board for authorization and award, and project management services during the construction. Project involved coordination among many team members including the different operating groups of the Port Authority, the FAA, the Airlines, and the Community. The main phase of the construction was a 120 day period in which 11,900 feet of runway was totally reconstructed and returned back to service both ahead of schedule and under budget.

American Airlines, JFK International Airport, Queens, New York: Project manager and engineer of record for civil airside and landside contracts, for construction of the new Terminal 8. Responsible for coordinating design between office and field operations and for ascertaining that all work done in the field is in accordance with design documents and Port Authority standards and guidelines. Responsible for review and negotiation of change orders, over-seeing the on-site inspection and office staff, and coordinating and advising American Airlines of on-going design and construction. Assisted American Airlines in the construction of the GSE Building built adjacent to the active Air-train, construction of the Suspect and Left over Bag Room, and modification of the Gates in Terminal C to accept the Regional Jets.

Was also the lead Geotechnical Engineer, responsible for all geotechnical work on the project including the design, construction, and inspection of over 8,000 - 30 ton timber, piles for the building structure, 400 steel pipe piles for the tunnel between concourses and over 500 – 180 ton taper-tube piles for the elevated frontage roadway. Also coordinated the construction of the 600 foot cut and cover tunnel that transports passengers from the Main Terminal to Concourse C, all Airside pavement work, Lighting

Donald E. Quast, PE, continued

Structures, Over-head Signs, and a reinforced earth wall for the bridge abutments.

The Port Authority of New York and New Jersey, Port Ivory New Intermodal Container Transfer Facility (formerly Howland Hook Marine Terminal), Container Transport Technology, Staten Island, New York: AECOM was authorized to investigate the upland areas of this facility to determine the reason for excessive settlement, and to recommend a solution that would minimize disturbance to the active facility. The site was underlain by various types of fill, and soft organic deposits. As geotechnical engineer, responsible for field investigation, geotechnical analyses, and preparation of soils report.

President Club, Continental Airlines, Newark Airport, New Jersey: Geotechnical engineer involved in the planning and the layout of the subsurface exploration program. Coordinated communications with Port Authority, Continental, and the drilling subcontractor. Also involved in preliminary foundation design and the preparation of the geotechnical report.

Marine Division, Whitehall Ferry Terminal, New York City Department of Transportation (NYCDOT), New York: Prepared, coordinated and inspected the field exploration program for the driving of a fender pile system. Prepared foundation report summarizing findings. Also addressed the feasibility of using the "Tubex" system for rock drilling and socketing of piles.

Maumee Bay Lighting Structures, Lake Erie, U.S. Coast Guard, Toledo, Ohio: Assisted in preparing and inspecting subsurface investigative program for the construction of permanent lighting structures along the Great Lakes Shipping Channel. Also assisted in analyses, design and the preparation of the report.

General Dynamics, Aberdeen, Maryland: Assisted in the analysis and design of a sheetpile bulkhead, a pile foundation for a concrete slab upon which a crane was to operate, and a deep pond for submarine hull testing. Also assisted in the preparation of the geotechnical report.

Rye Playland Pier, Westchester County, Rye, New York: As geotechnical engineer, prepared, coordinated, and provided inspection of a field exploration program. Performed analysis of timber pile foundation for existing pier, and designed new pipe pile foundation for the construction of a floating marina. Design and analyses included axial capacity of pile in tension and compression, and lateral load computations.

Noble Street Pier, New York City Department of Sanitation (NYCDOS), Brooklyn, New York: As geotechnical engineer prepared subsurface investigative program and subcontractor documents. Selected laboratory testing, and performed geotechnical analysis and design for a new pier and a bulkhead. Also prepared preliminary design report related to the geotechnical aspects of the project.

Kings Bay Magnetic Silencing Facility, United States Navy, Kings Bay, Georgia: Responsible for the coordination and inspection of field investigation to determine subsurface conditions in a channel for the purpose of installing magnetometers to record the magnetic signature of Navy vessels. Developed report summarizing findings and presenting recommendations.

Homeporting for Battleship Surface Action Group (SAG), Naval Station, Naval Facilities Engineering Command (NAVFAC) Northern Division, Staten Island, New York: As geotechnical engineer, supervised offshore boring program and laboratory testing. Also assisted in the pile and bulkhead design.

Trident Tender Mooring Facilities, Naval Facilities Engineering Command (NAVFAC), Kings Bay Naval Submarine Base, Georgia: As geotechnical engineer, assisted in pile inspection and testing. Designed foundations, wick drains and surcharge for onshore facilities.

Throgs Neck Bridge Toll Plaza and Approach Design: As lead geotechnical engineer, developed subsurface program to determine soil conditions for reconfiguration of the toll plaza. tunnel or overpass to provide employees access to toll booths.

Lou Rondinello, PE

Project Role: Project Manager

Education
BS, Civil Engineering, Rochester Institute of Technology, NY, 1990

Registrations
PE: NY, 2003, Registration No.: [redacted]

Professional Associations
American Society of Civil Engineers (ASCE)

Experience
Years with AECOM: 18
Years with other firms: 7

Employment History
1992-present: AECOM, Civil Project Engineer

1990-1994: F.R. Harris, New York NY

1994-1997: TAMS Consultants, Inc., New York NY

1997-2002: B-A Engineering P.C., New York, NY

Mr. Rondinello has significant experience as a project manager and senior civil engineer whose technical background encompasses a wide range of experience with the production of plans, specifications, and reports that includes the planning, analysis, and design of perimeter detection security systems, perimeter vehicle crash barrier protection systems roadway networks, drainage systems, and site/parking lots. He has worked for governmental and private agencies on projects from conceptual through final design phases for airport airside and airside operations areas, airport terminal/circulation roadways, and airport parking. He has successfully implemented significant security improvement to both landside and airside operations. Mr. Rondinello is also experienced with highway/expressway roadways, and railroad parking facilities and station improvements.

Airside Perimeter Strengthening, Port Authority of New York and New Jersey, John F. Kennedy International Airport, LaGuardia Airport, Newark Liberty International Airport, and Teterboro Airport: Prepared a stage I reports for implementing crash protection along the airside operations areas perimeter for both the Port Authority and tenant-owned areas at JFK, EWR, LGA, and TEB airports for compliance to Department of State (DOS) and Department of Defense (DOD) approved crash rated vehicle barriers. Performed industry literature and product search to determine all suitable proprietary products and their associated cost and installation requirements, and a zone by zone analysis of the perimeter areas requiring vehicle crash protection to determine maximum vehicle speed possible based on physical geometry of roadway and pavement surface areas. Evaluated alternatives for proprietary products or other means to provide the required crash protection based on Port Authority-determined criteria.

Guard Post Hardening and Security Improvements, Port Authority of New York and New Jersey (PANYNJ), John F. Kennedy International Airport, New York: Project manager and senior civil engineer for security improvements to seven guard booth and guard posts accessing the airside operations areas. Prepared and coordinated preliminary through final contract documents. Assisted the Port Authority in developing guard post security improvements, including the installation of a prototype ballistic-rated guard booth, vehicle-rated crash barriers, card readers, and various other state-of-the-art technologies.

Guard Booth Hardening and Security Enhancements, Port Authority of New York and New Jersey (PANYNJ), Newark Liberty International Airport, New Jersey: Project manager and senior civil engineer for security improvements to seven guard booth and guard posts accessing the airside operations areas. Responsibilities included working with the multi-discipline design team in preparing and coordinating draft through final contract documents. Assisted the Port Authority's engineering and technology services departments in developing guard post security requirements.

Perimeter Intrusion Detection System (PIDS) Planning Documents Upgrade, Port Authority of New York and New Jersey, John F. Kennedy International Airport, LaGuardia Airport, Newark

Lou Rondinello, PE, continued

Liberty International Airport, and Teterboro Airport: Deputyproject manager for a perimeter security improvements project around 60 miles of aircraft operations area and landside areas of the airports. Responsible for overseeing, designing, preparing, and coordinating security up-grade plans utilizing both ortho photography and topographic mapping. The security upgrade plans will be utilized by a design-build contractor in the preparation of the bid proposal, and will establish the basis for the design and implementation of a layered perimeter security system encompassing the airside operations area.

Security Buoys and Piles, John F. Kennedy International Airport and LaGuardia Airport, New York: Project manager and senior civil engineerfor the installation of buoys and piles on the United States Coast Guard 200-yard exclusion zone surrounding the airport shorelines. Designed, prepared, and coordinated draft through final contract documents of security buoy and timber pile layouts. Thurston Basin Water Barrier, John F. Kennedy International Airport, New York: Project manager and senior civil engineer for the installation of a 300-foot prototype security floating barrier across Thurston Basin. Designed, prepared, and coordinated draft through final contract documents for site design and floating barrier details.

Wantagh State Parkway Safety Improvements, New York State Department of Transportation (NYSDOT) Region 10, New York: Project manager for an interim safety improvement project of six interchanges on the Wantagh State Parkway. Prepared a draft white paper report to identify and prioritize a series of ramp and safety improvements to the six interchanges based on safety benefits.

Pipe Gallery Security Fence, Port Authority of New York and New Jersey (PANYNJ), Newark Liberty International Airport, New Jersey: Project manager and senior civil engineer for the installation of 2,700 feet of ornamental fence on top of the pipe gallery wall separating the landside and airside operations areas of terminals A, B, and C, and for the installation of fencing around the pipe galley electrical cabinets. Responsibilities included designing, preparing, and coordinating draft through final contract documents for site design and fencing details. Attended design meetings, evaluated and processed shop drawings, and prepared cost estimates and specifications lists.

Installation of Security Fences and Barriers, Port Authority of New York and New Jersey, Newark Liberty International Airport, New Jersey: Project manager and senior civil engineer for the installation of 2,000 feet of security fence and barriers and guide rail along the airside operations areas of parking lot P6, parking lot F, and Brewster Road. Responsibilities included designing, preparing and coordinating draft through final contract documents for site design, fencing details, and parking lot pavement markings.

South Fuel Farm Security Fence Replacement, Port Authority of New York and New Jersey, Newark Liberty International Airport, New Jersey: Project manager and senior civil engineer for the replacement of approximately 4,000 feet of security perimeter fence around the main jet fuel storage south fuel farm and adjacent peripheral ditch.

FAA Control Tower Security Fence Replacement, Port Authority of New York and New Jersey, Newark Liberty International Airport: Project manager and senior civil engineer for the replacement of 200 feet of ornamental security along the FAA control tower adjacent airport exit and recirculation roadways.

Airside Patrol Road and Security Fence, Port Authority of New York and New Jersey, Newark Liberty International Airport, New Jersey: Project manager and senior civil engineer for design of an airport operations area airside patrol road and security perimeter fence along runway 22L. Responsibilities included designing, preparing and coordinating draft through final contract documents for site design and grading and drainage.

Pedestrian Overpass ADA Rapms Van Wyck Expressway Inbound at JFK International Airport, Port Authority of New York and New Jersey, New York: Project engineer and senior civil engineer for the redesign of the existing pedestrian bridges over Van Wyck Expressway in compliance with ADA standards.

Antonio J. Rosciglione, AIA

Project Role: Project Manager

Education
BA, Architecture, New Jersey Institute of Technology - School of Architecture, 1992

Registrations
RA: NY, 2005, Registration No.: [redacted]

NCARB

Professional Associations
American Institute of Architects (AIA)

Experience
Years with AECOM: 7
Years with other firms: 0

Employment History
2003-present: AECOM, Architect

2003AECOM - DMJM Aviation, New York, NY, Architect

Mr. Rosciglione has over eighteen years experience in the construction, architectural/engineering and construction management industries. This includes experience in project/ construction management, quality assurance (QA) inspection, contract and code compliance, problem resolution, contract document interpretation, cost estimation, schedule and cost control, contract administration and agency/ designer coordination. Mr. Rosciglione holds confined space certification and is OSHA certified.

John F. Kennedy International Airport, American Airlines Terminal Redevelopment, Jamaica, New York: Project architect for $1 billion program to construct and commission the new American Airlines terminal at John F. Kennedy International Airport. Oversaw every facet of new construction and associated life safety systems with review by Port Authority of New York and New Jersey. Working closely with the lead architect, was responsible for architectural design and construction and building commissioning at JFK International Airport. Coordinated site-related architectural/engineering coordination with other disciplines and American Airlines; architectural design of changes due to site conditions and client requests; architectural and engineering site inspection services, including responding to contractor requests for information; and life-safety and building code interpretation. Responsibilities included extensive interaction with contractor and subcontractor for on-site resolution/clarification of design.

World Trade Center PATH Station Reconstruction: Deputy project controls manager for $2.4 billion project to reconstruct and commission transportation hub at the World Trade Center site. Coordinate various design disciplines for timely delivery of design packages to Port Authority of New York and New Jersey for issuance to contractor for phased construction of new transportation hub as designed by Santiago Calatrava. Establish and monitor milestones for deliverables. Coordinate interdisciplinary responses to submittals and request for information. Review phasing and constructability of designs with Port Authority and contractor. Perform services during construction for submittal and request for information coordination amongst client, designers and contractor.

New York City Transit, 8 Escalators at Bowling Green Station, New York, New York: Construction manager for $13 million New York City Transit construction project to remove and replace eight escalators with associate upgrades to the communication, fire suppression and detection.

Long Island Rail Road, Ronkonkoma Automated Train Wash Facility, New York: Assistant project manager for $8 million LIRR project to construct a new train wash facility. Monitored schedule, budget, safety and quality for the Long Island Railroad.

New York City Transit, Atlantic Terminal, Brooklyn, New York: Construction coordinator for NYCT. Acted as liaison and facilitator between design consultant and various MTA, NYCT, and LIRR departments to aid in the design process, conformance with scope, constructibility, value engineering and packaging of the Reconstruction of Atlantic Terminal. Performed General Order forecasting, value engineering

Antonio J. Rosciglione, AIA, continued

and proposed materials evaluation. Monitored design consultant's progress and expenditures.

New York City Transit, Canal Street Station Complex Rehabilitation, New York: As resident engineer/architect, served as the owners' representative responsible for project management, quality assurance, cost and schedule control, and contract administration on this $31 million rehabilitation of the Canal Street Station Complex. Rehabilitiation involved architectural, structural, electrical, mechanical and communications. Responsibilities included management and supervision of field personnel, constructibility reviews and the development of site-specific solutions to construction/coordination issues; coordination with in-house departments including design group, MTA/Arts for Transit, station programs and R.T.O.; coordination with city agencies; preparation of estimates for both base contract work and proposed contract modifications; change order evaluation, preparation, negotiation and implementation; review, approval and processing of contractor's payment requisitions; and contractor evaluation. Mr. Rosciglione is knowledgeable in all aspects of Transit Authority contract specifications, procedures and requirements. (07/1994 to 04/1998/??/NA)

Pfizer Peapack Campus Garage Investigation, Peapack, New Jersey: As project manager, performed survey of two multistory garages and one below grade multilevel garage for condition survey assessment. Produced design documents and assisted in bid analysis and award of contract.

North Maple Inn, Pfizer, Inc., Basking Ridge, New Jersey: Project manager for envelope survey of corporate hospitality and learning center. Produced design documents, and assisted in bid analysis and award of contract.

American Express Tower Facade Restoration, Trammel Crow: Project manager for $3.5 million exterior rehabilitation. Coordinated bid documents, process, and award. Performed construction administration services. Coordinated between owner and general contractor. Approved payment requests and review schedule for conformance.

Pfizer World Headquarters, Pfizer, Inc.: Project manager for facade failure investigation and restoration. Analyzed and investigated localized curtain wall failure. Documented findings, created investigation program, and monitored contractor's progress. Coordinated and created design for reconstruction of failure area of curtain wall.

New York School Construction Authority, PS 36, Bronx, New York: Project manager for $3.6 million SCA exterior rehabilitation and window replacement for turn-of-the-century public school. Developed scope report, submitted SHPO report, and produced bid documents.

New York School Construction Authority, PS 108K, Brooklyn, New York: Construction manager for $2.4 million SCA exterior rehabilitation of 1800s National Historical Register School with a construction schedule of 12 months.

Dormitory Authority of the State of New York, State University of New York, Buffalo-Amherst, Ellicott Dormitories, New York: Project manager for $4.7 million DASNY exterior rehabilitation of 14 mid-rise dormitories and emergency repairs to 28 mid-rise dormitories with a construction schedule of three months.

Dormitory Authority of the State of New York, Baruch College and Hunter College, New York: Project architect for $3.5 million DASNY exterior facade rehabilitation. Analyzed scope and created construction documents. Performed construction administration duties, including site inspections, shop drawing review, and submittal review, and conducted progress meetings.

Leonard J. Schneidt, PE

Project Role: Project Manager

Education
BS, Civil Engineering, Cooper Union, NY, 1962

Registrations
PE: NY, 1967, Registration No.: [redacted]

PE: NJ, Registration No.: [redacted] XPIRED

Professional Associations
American Society of Civil Engineers

Institute of Transportation Engineers

Society of American Military Engineers

New York Association of Consulting Engineers

Experience
Years with AECOM: 5
Years with other firms: 30

Employment History
2005-present: AECOM, Senior Civil Project Manager

1998-2005: Parsons, Vice President , Roads and Highways

1965-1998; Andrews & Clark, Inc (BAC Killam) Vice President

1963-1965; US Army- COE Waterway Experiment Station

1962-1963: Federal Aviation Agency- ALS/ILS

For the past 35 years, Mr. Schneidt has held leadership positions as project manager, chief engineer, office manager and principal for consulting firms in the New York Metropolitan Area. In these roles he has managed multi-disciplinary staffs and has participated on projects involving planning and environmental assessments, as well as preliminary and final design of highways, arterial streets, transit, and rail freight facilities.

Mr. Schneidt actively supports AECOM (as Urbitran) project managers with technical and management direction and oversight. During the course of his career, he has managed many high profile projects, including planning and design of the Long Island Expressway; planning and design for the South Bronx Oak Point Rail Link; and planning and reconstruction design of Eastern Parkway in Brooklyn, which was originally developed by Fredrick Law Olmstead

NYC Department of Transportation, School Safety Engineering Project, NY: Mr. Noupin was AECOM (as Urbitran) Engineering Manager for this work. The project involved creating abbreviated NYCDOT Preliminary Design Investigation Reports for 32 schools that were selected for capital improvements from 135 priority schools identified in a previous project phase. The project included investigating the existing roadway conditions at identified intersection, obtaining traffic patterns and surveying and mapping information, and designing preliminary roadway improvement to improve pedestrian safety. The preliminary roadway improvements included geometric improvements, provision of pedestrian ramps with detectable warning surfaces, and corner neck-downs (bump outs) to calm traffic and shorten crosswalk lengths. Additional roadway improvements included modifying the signing and striping and modifying or upgrading the bus pads. Coordination with City and private utilities and agencies was included in the work.

New York City Department of Transportation, Peter Minuit Plaza at the Staten Island Ferry Terminal in Lower Manhattan : Project Manager for the planning, design and construction support services for the $20 million plaza which includes a concrete pavement bus loop, a bikeway, curb replacement, plantings, park furniture, 100 K-12 bollards, drainage and lighting. The project required extensive coordination with NYCDOT, NYCDPR, MTACC as well as NYCDEP.

NYC Department of Transportation, Roosevelt Avenue Viaduct over Van Wyck Expy and Flushing River: Mr. Schneidt is Project Manager of a JV for the deck replacement and steel repairs of this 1500 foot viaduct which also support NYCT's # 7 line above. The span over the Van Wyck and River is a bascule span which is locked in place. The work included seismic evaluation, the study of nine alternatives, staging and M&PT, the preparation of a BRPR and preliminary plans.

NY State Department of Transportation, Major Deegan Expressway-Macombs Dam Bridge to E.138th Street: Mr. Schneidt is project principal for this project which involves the rehabilitation, widening, and realignment of the Major Deegan Expressway (MDE) between E. 138th Street and the Macombs Dam Bridge to improve physical conditions of the

Leonard J. Schneidt, PE, continued

deck and structural steel of the MDE Viaduct, and to improve poor geometric, operational and safety conditions on the mainline and at ramp junctures and adjacent intersection termini. Highlights include the development of a replacement E.138th Street Ramp on structure, staging concepts for MP&T to maintain six lanes of traffic at all times, traffic simulation , in-depth inspection, seismic and fatigue analyses and the preparation of Design Approval Documents including environmental assessments in accordance to NYSDOT's Design Phases I-IV process.

NYC Department of Design and Construction, Ely Avenue : Givan Avenue to 222nd Street: Mr. Schneidt is project principal for the $25 million reconstruction of approximately 15, 700 linear feet of streets in the Ely Avenue area of the Bronx, New York. The project involves complete street design, full depth pavement reconstruction, curb and sidewalk reconstruction, street lighting and traffic signal design, private utility coordination, the repair/ replacement of water mains and sewer lines, and the reconstruction of a concrete retaining wall.

NYC Department of Transportation, Engineering Services Agreement: Mr. Schneidt is overall project manager for this multi-task three year agreement. To date tasks have included: study and conceptual design of city wide step streets; construction inspection on the Rikers Island Bridge including design of concrete repairs; localized emergency repairs for the Belt Parkway; traffic and intersection studies in the Sherman Creek community; and traffic studies and concept design for Arthur Kill Road.

NYC Transit Indefinite Quantity Engineering Services: Mr. Schneidt was Project Manager for a five year, $7 million fee task order contract which included the inspection, including load ratings, of 27 bridges and a viaduct carrying the Staten Island Railway, the design of the Stillwell Ave Portal Building, design for ADA access to the elevated Junction Blvd Station, as well as several Security tasks involving all NYCT facilities including yards, tunnels and bridges.

NYS Department of Transportation, Design Phases I-IV of Pilgrim State Inter-Modal Facility, Islip, NY: As Project Principal, Mr. Schneidt was responsible for the development of a rail - truck inter-modal facility on the Pilgrim State Hospital grounds.

NYS Department of Transportation, Design Phases I-VI, Kew Gardens Interchange-Van Wyck Expressway, Queens, NY: Mr. Schneidt was Project Principal for the study of this major interchange as sub-consultant for highway/ traffic design.

MTA Triborough Bridge and Tunnel Authority, "On-Call" Engineering for Services for TBTA: Project Manager for a two year, $2 million fee contract which entailed task orders varying from toll booth replacement/ repairs, building structural inspections, miscellaneous structural work and the design of a $4 million lane use signal and VMS Contract for the BBT. He also provided construction support services on several contracts.

NYS Department of Transportation, I-87 Multi-Modal Corridor Study, NY: Project Principal for this comprehensive study for NYSDOT to identify and assess initiatives for improving transportation services along the 1-87 corridor from Westchester to Montreal. Included are studies of high speed rail, airports, waterfront services, highway travel and inter-modal facilities.

Arterial Needs Study-LI Rest Area, Design Phases I-IV, Suffolk County NY: Project Principal for the development of a $35M rest area including a travel and information center vicinity of LIE Exit 51.

NYS Department of Transportation, Regional Design Services Agreement, Region-11, NYSDOT: Mr. Schneidt was Project Manager for tasks including Constructibility Review of the FDR Drive Avenue C viaduct construction documents; an inventory of guide rails and drainage facilities on bridges; and Phases I-VI. This also included construction support services for a $9 million drainage improvement at 30 locations along the Belt Parkway. 1995 - 1998

Throgs Neck Bridge Interchange Study, Queens, NY: Mr. Schneidt was Project Manager for feasibility study of ramps to and from Cross Island Parkway west for TBTA.

James F. Van Sickels, PE

Project Role: Project Manager

Education
BS, Civil Engineering, Brooklyn Polytech Institute, 1989

Registrations
PE: NY 1995, Registration No.: [redacted]

Professional Associations
American Society of Civil Engineers (ASCE)

American Society of Highway Engineers (ASHE)

Chi Epsilon Honor Society

Experience
Years with AECOM: 21
Years with other firms: 0

Employment History
1989-present: AECOM, Project Manager and Senior Highway Engineer

1989AECOM - Earth Tech, New York, NY, Project Manager and Senior Highway Engineer

Mr. Van Sickels has experience in the management, planning, design, and inspection of civil works and highway projects, including site investigation and data collection, alternative design development and evaluation, construction cost estimating, design team leadership, construction engineering services, and the preparation of contract documents and proposal materials.

The Port Authority of New York and New Jersey, Grade Unpaved Areas along Runway 11-29, West of Taxiway "S," Newark International Airport, Newark, New Jersey: Project manager and project engineer responsible for management of the civil engineering services contract under which this work was conducted. Managed design work for the regrading of 14 acres of grass areas on either side of Runway 11-29 to restore positive drainage away from the runway and adjacent taxiways, as well as the adjustment of vertical obstruction heights of manholes, drainage inlets, and concrete sign foundations to within FAA requirements.

The Port Authority of New York and New Jersey, Widening of CTA Perimeter Service Road Ramp, JFK International Airport, Jamaica, New York: Engineer responsible for the design of the widening and resurfacing of an asphalt concrete pavement service road ramp. Work included site investigation and pavement condition surveys, soil boring plan development for the verification of subsurface structure locations, correction of substandard ramp alignment and superelevation and design of grading over a 400-foot length of the ramp, various drainage structure additions and modifications, and roadside protection and signage improvements. Critical concerns included construction phasing and maintenance of airport support and emergency vehicle movements through the site.

The Port Authority of New York and New Jersey, Grading and Drainage Improvements, LaGuardia Airport, Flushing, New York: Engineer responsible for the design of a full depth flexible pavement for an airside emergency vehicle staging area and a flexible pavement overlay for a vehicle service road at the central terminal building. Work included site investigations, pavement condition surveys, and design of grading for a positive draining asphalt concrete pavement. Critical concerns included construction phasing and maintenance of aircraft and service vehicle movements.

The Port Authority of New York and New Jersey, JFK Redevelopment Program, Central Terminal Area, JFK International Airport, Jamaica, New York: Prepared final utility removal drawings at the future central terminal complex and west parking garage sites. Conducted as-built records research and coordination of drawings with the joint venture design firm's new utility work.

The Port Authority of New York and New Jersey, Pavement and Utility Rehabilitation, Pier 9A, Red Hook Marine Terminal, Brooklyn, New York: Project manager and project engineer responsible for management of the civil engineering services contract under which this work was conducted. Managed design work for the renovation of 12 acres of container handling facility pavement at the upland

James F. Van Sickels, PE, continued

areas of Piers 9A and 9B. Managed pavement inspection, the utility casting inspection and upgrade for container operation loading requirements, and the grading design for a new heavy-duty asphalt overlay to increase pavement strength and correct drainage problems. Work at on this task also included the evaluation of 30-year-old underground sewer structures and the design of modifications to existing structures and the design of replacement structures to carry the current loading conditions imposed by the container handling operations.Project Name: Pat ilis num vulputpat lore voloreet utem quisim quam velent lorper se min hendit venit velit velisis augue tat. Duis nosto ea feum zzriurem acip ex exeriureet luptat at nisim vendit lore commodo dolobor alissequat praesequisi.

New York City Department of Transportation, Engineering Services Agreement, Task 00DR8, Shore (Belt) Parkway Bridge over Paerdegat Basin Upland Mitigation Planting Final Design, Brooklyn, New York: Project manager for field condition observations and preliminary and final design of final upland mitigation planting along a 4,900-foot-long segment of the six-lane Shore Parkway corridor. Managing coordination with NYCDOT as well as New York City Department of Parks and Recreation and landscape architects for the abutting project segments along the parkway corridor.

New York State Thruway Authority, MTA, and Metro-North, Tappan Zee Bridge/I-287 Corridor EA/EIS, Rockland and Westchester Counties, New York: Senior highway engineer responsible for development of conceptual ramp and local street configuration improvements at two existing interchanges (10 and 11) and one proposed new interchange (14X) in Rockland County. Also participated in review of full-length corridor 1:300 scale design plans of Alternative 3, 4A, 4B, and 4C and comment preparation with regard to detail of design information developed and presented as compared to detail of design information required for DEIS preparation. This project is being undertaken to perform and document a comprehensive environmental review process to address infrastructure and safety, operations and congestion issues and improvements in the 30-mile-long I-287 corridor between Suffern in Rockland County and Port Chester in Westchester County, including the Tappan Zee Bridge over the Hudson River. The alternatives include rehabilitation of the existing bridge, construction of a new bridge and/or tunnel, intermodal transportation for vehicles and mass transit (commuter rail, light rail, or guided busway), as well as transportation system management options.

New York State Department of Transportation, West Shore Expressway Access Improvement, Expanded Project Proposal, Preliminary Design and Phases V-VI, Richmond, New York: Project manager responsible for the technical coordination and fiscal performance of a multidisciplinary design team during the development delivery of expanded project proposal and preliminary design documents for the geometric, safety, access and operational improvements at six interchanges along the 8-mile-long West Shore Expressway corridor between the Korean War Veterans Memorial Parkway and the Staten Island Expressway.Most recently, project manager responsible for preparing the draft DAD of the preliminary design that identifies the need for further alternative development needed to evaluate wetland and property acquisition avoidance methodologies and their impact on project construction cost.

New York City Department of Transportation, Replacement of Shore (Belt) Parkway Bridge over Fresh Creek Basin, Brooklyn, New York: Project manager for the final steps of this 15-year long design project for replacement and widening of the existing 6-lane Shore (Belt) Parkway Bridge over Fresh Creek Basin in Carnarsie with a new 6-lane, 3-span, 310-foot-long bridge.

New York State Department of Transportation, I-287 Cross Westchester Expressway Viaducts, Westchester County, New York: Engineer responsible for the design of maintenance and protection of traffic signage plans for highway and ramp improvements and the reconstruction of the bridge structure over the Saw Mill River Parkway along a 2,200-foot length of I-287, affecting 10 ramps.

Bruce T. Williams, EIT

Project Role: Project Manager

Education
MS, Civil Engineering, Northwestern University, 1984

BS, Civil Engineering, University of Virginia, 1982

Registrations
EIT: VA

Professional Associations
Institute of Transportation Engineers (ITE), Associate member

Experience
Years with AECOM: 26
Years with other firms: 4

Employment History
1984-present: AECOM, Senior Transportation Manager

Federal Reserve Bank of

Chicago, Chicago, IL, Research Analyst

Mr. Williams is a senior consulting manager specializing in statewide/intercity and urban transportation planning, with an emphasis on travel forecasting, market analysis, model development and application, survey design and analysis, and financial analysis. He has conducted many statewide/intercity transportation planning studies for state departments of transportation (DOTs) and Amtrak; prepared ridership and revenue forecasts for proposed conventional rail, high-speed rail, and magnetic levitation technology services in several intercity corridors in North America; developed and applied integrated intercity travel demand models that addressed both modal shares and total travel volumes, including induced demand, for several intercity corridors and statewide study areas; and he has conducted urban transportation planning activities for a variety of proposed transit, highway, and parking improvements in many urban areas. Mr. Williams has developed urban travel demand models and forecasting procedures to support regional, corridor, and subarea planning activities and forecast travel volumes, vehicular traffic, transit ridership, and operating revenue for existing and proposed transportation systems and facilities

MTA New York City Transit (NYCT), LaGuardia Airport Subway Access (LASA) Study, New York: Project manager on this study of subway access to LaGuardia Airport from Manhattan. As part of a multidisciplined team, AECOM was tasked with developing new airport access mode choice models for trips to and from LaGuardia. This included designing new surveys of air travelers and employees to estimate both market size and potential diversion to new modes of access to LaGuardia Airport. These databases and modeling tools were used to evaluate a range of future airport access modes and alternatives.

National Railroad Passenger Corporation (Amtrak), Nationwide Ridership/Revenue Forecasting Support: Led AECOM's continuing nationwide intercity passenger rail ridership and ticket revenue forecasting support to Amtrak over the past decade and a half. In related tasks, AECOM has developed ridership and ticket revenue forecasting models for the Northeast Corridor (NEC), Amtrak's long-distance train services, and other intercity rail corridors nationwide. Amtrak has also contracted with AECOM to maintain and apply these models to assess the ridership and revenue implications of proposed service initiatives developed within Amtrak and by Amtrak's state partners. AECOM has prepared forecasts for Acela Express high-speed and regular train service in the Northeast corridor; proposed changes in long distance train services throughout the US; and service improvements in other short distance corridors, including state-supported corridor service in the Northeast (Maine, New York, Pennsylvania, and Vermont), Southeast (North Carolina), Midwest (Illinois, Michigan, Missouri, and Wisconsin), and the West Coast (California and Washington). These forecasts have been used by Amtrak and its state partners to plan and budget for intercity passenger rail services throughout the U.S.

Virginia Department of Rail and Public Transportation, Intercity Passenger Rail Market Studies, Virginia: Directed several studies of intercity

Bruce T. Williams, EIT, continued

and high speed rail service in Virginia. Responsible for preparing all ridership and revenue forecasts associated with a number of different alternatives for serving the Washington-Richmond-Hampton Roads and Washington-Charlottesville-Lynchburg corridors. These ridership/revenue forecasts were supported by new survey market research and a revised travel demand model system based on earlier model development for Virginia and North Carolina, updated to reflect current market and service conditions. AECOM was responsible for the design, oversight, and analysis of several rounds of new market research, including surveys of existing highway travel in key segments along I-95, I-64, US 29 and US 460. These studies have supported the development of a phased implementation plan for new and improved passenger rail services in Virginia beginning with the first state-funded intercity rail service, which is expected to begin operation in late 2009.

National Railroad Passenger Corporation (Amtrak), New Class of Service Research, Amtrak Consumer Research and Forecasting: Directed the market study addressing proposed new classes of service for Amtrak's longer-distance trains. The study objectives were to evaluate demand characteristics (i.e., price and market appeal) of these existing and new coach and sleeper classes if offered in different bundles on specific train routes. Also examined the impact of specific on-board amenities/services, including in particular the level of meal service provided (e.g., full dining versus informal cafe/lounge car service). Amtrak management used the study results to direct future planning, design, and implementation of potential new classes of service and amenity offering on long distance trains throughout the national network.

North Carolina DOT Rail Division, Southeast High Speed Rail (SEHSR) and Corridor Market Studies, North Carolina: Directed continuing ridership and revenue forecasting support to the North Carolina DOT's rail division in several intercity and high-speed rail corridor markets over the past decade. This has included preparing new forecasts for various SEHSR alternatives serving Charlotte, Raleigh, and Richmond/Washington, with through service from New York; proposed passenger rail service between Raleigh and Asheville, North Carolina; and proposed passenger rail service to Wilmington, North Carolina. These recent studies follow earlier assignments for North Carolina and neighboring states in the Southeast, focusing on intercity and new high-speed rail corridor markets. The NCDOT and its neighboring state partners have used the forecasts to support ongoing planning and environmental assessment of the SEHSR system.

Washington State Department of Transportation (WSDOT), Ridership and Revenue Forecasts in Support of the Cascades 20-Year Plan Update, Washington: AECOM project manager on a multi-disciplined team responsible for identifying and analyzing future corridor service levels and improvements as part of Washington's 20-year Cascades corridor plan update. Responsible for preparing ridership and revenue forecasts associated with different future Cascades service alternatives. The study team addressed specific service options for 2008 and 2023, in addition to sensitivity analyses for station locations in Vancouver, BC and future fare increases. The station location analysis examined the impact of moving the Vancouver, BC station over the Frasier River to the Scott Road Sky Train station in Surrey, BC.

Florida Department of Transportation (FDOT)/ Florida High Speed Rail Authority, Florida High Speed Rail Investment Grade Ridership Study, Tampa-Orlando, Florida: Project manager on this study that developed investment grade ridership and revenue forecasts for proposed high speed rail service in the Tampa-Orlando corridor. Provided one of two independent forecasts of future high speed rail ridership and ticket revenue in the corridor. These forecasts were based on models and data developed from new market research, including stated preference surveys conducted along the I-4 corridor. The forecast results were used in their request for proposals to design/build/operate/maintain the first phase of a high speed rail system within Florida.

Thomas Woo, PE

Project Role: Project Manager

Education

Bachelor of Architecture, University of Tennessee, 1975

Bachelor of Fine Arts, Berea College, 1971

Registration

RA: NJ

Professional Associations

American Institute of Architects, Member

Total Years of Experience:

with AECOM: 5
with Other Firms: 26

Employment History

2008-present: AECOM, National Technical Leader

Mr. Woo has over 30 years of experience on both national and international projects. He has worked on a variety of building types including health care facilities, research and development facilities, commercial office buildings, justice facilities, financial facilities, and laboratories. Mr. Woo has worked very closely and coordinated with various NYC agencies, including the Port Authority on the PANYNJ World Trade Center Transportation Hub (PATH).

The Port Authority Trans-Hudson World Trade Center Transportation Hub, New York, NY: Senior architectural team leader in association with renowned architect Santiago Calatrava, to design the new $3-billion permanent Port Authority Trans-Hudson (PATH) terminal at the World Trade Center (WTC) site in Lower Manhattan. The team is responsible for final design for the terminal building, pedestrian connections, security, sustainable design, vertical transportation and conveyances, and public wayfinding systems. All design is being performed with the best state-of-the-art practices for sustainable design.

Presbyterian Hospital, New York, NY: Project Manager for a new 6-story, 120,00 sf Ambulatory Care Facility and renovation of Inpatient Facility. Mr. Woo was responsible for construction documents, project specifications and bid documents.

Jacobi Medical Center, Bronx, New York: Project Management for construction documents, bid documents, project specifications, and construction document production for the fast track construction of a new 4-story Ambulatory Care Facility of 135,000 sf, and renovation of 90,000 sf of Inpatient facility.

Bellevue Hospital, Ambulatory Care Facilities,
New York, NY: Project Manager for a new 210,000 sf, 5-story Ambulatory Care Facility, renovation of 80,000 sf Inpatient Facility, 45,000 sf Critical Care Unit, and Infrastructure MEP facility. Responsible for construction documents, bid documents, project specifications, and construction document production for fast track construction and construction administration.

The Wiesner Building/Massachusetts Institute of Technology, Cambridge, MA: Designer for a 5-story gateway building between the west and the east campuses at MIT. Major components included exhibition galleries, a 200-seat auditorium, an experimental theater, media laboratories, classrooms, offices, siteworks and installations. Projects totaled 111,430 sf including curtain wall package documentation and construction administration.

Queens Family Court and City Agency Facilities, Jamaica, Queens: 5-story court facilities and 4-story city agency facilities including 25 court and hearing rooms, court support quarters, judges' chambers, information and service agency, juvenile justice and correction, and legal aid. Responsible for 300,000 sf and project manager on construction document phase, project specifications, and construction administration.

Westchester County Courthouse, Westchester, NY: Project specifications for construction documents on a 5-story new courthouse building. Project included construction of 207,000 sf and renovation of 293,000 sf of an existing

Thomas Woo, PE, continued

courthouse tower in downtown White Plains, New York.

Bank of China, Hong Kong: 72-story regional headquarters for the Bank of China with tenant offices and water gardens. Major components include banking hall, 15-story bank atrium, VIP apartment suites, dining, 17th floor and penthouse lounges, and underground parking for 370 cars.

Alfindo Office Tower Anggana Danamon - (Phase III), Lot 10, Jakarta, Indonesia: Project Manager and Project Specifications for a 300,000 sf, 30-story office tower on an eight story parking podium.

Sheraton Hotel and Luxury Apartments Anggana Danamon - (Phase II), Lot 2, Jakarta, Indonesia: Project Manager responsible for project specifications for a 57-story tower. The hotel contains a 10,000 sf column free ballroom, main lobby, banquet facilities, restaurant, retail and 3 levels of below grade parking. Total project area is 1,500,000 sf.

Shining Tower (Hyatt Hotel), Taichung, Taiwan: Project Manager responsible for project specifications on a 60-story, 975,000 sf mixed-use tower. Includes retail, meeting rooms, ballroom, a 250-room hotel, 25,000 sm of office space, an executive membership club and below grade parking for 480 cars.

Anggana Danamon (Phase I), Jakarta, Indonesia: Performed shop drawings review for twin 32-story office towers and 3-story Banking Pavilion, a mixed-use development with 3 levels of below grade service facilities, utility/mechanical space and parking for 1,200 cars.

Suntec City, Singapore: A mixed-use development including Convention and Exhibition Center, four 30-story and a 15-story office towers, connecting retail blocks, central fountain plaza with indoor/ outdoor restaurants and project site basement parking of 2,700 cars. Project Administration and Management from schematic design through construction document and fast-track project construction.

Tianjin Merchants International Maritime Commercial Center, Tianjin, China: Project Architect and Project Manager for a 26-story office building with retail podium and basement parking.

IMC Interior Design/Build in IMC Tower Penthouse, Kuala Lumpur, Malaysia: Project Manager and Construction Administration for the IMC Headquarters Office/ Executive Suite Interior Design and Construction in Penthouse.

IMC Tower, Kuala Lumpur, Malaysia: Project Manager and Construction Administration for a 29-story Headquarter Office Building with Basement Parking and Adjoining Parking Structure.

IBM Corporate Office Building, Purchase, NY: Corporate Office Building on a 47- acre (19 hectare) site with a parking structure for 850-cars. Mr. Woo was responsible for project details and coordination with the design team for a total size of 475,000 sf.

Shaoling Zhao, PE

Project Role: Project Manager

Education

MS, Civil Engineering, City University of New York, 1989

BS, Civil Engineering, City University of New York, 1987

BS, Civil Engineering, Wuhan Iron and Steel School, China, 1980

Registrations

PE: NY, 1991, Registration No.: [redacted]

Professional Associations

American Society of Civil Engineers (ASCE)

National Society of Professional Engineers (NSPE)

American Society of Highway Engineers (ASHE)

Society of American Military Engineers (SAME)

International Chinese Transportation Professional Association (ICTPA)

Chinese American Association for Engineering (CAAE)

Experience

Years with AECOM: 2
Years with other firms: 24

Employment History

2008-present: AECOM, National Technical Leader

Mr. Zhao is a seasoned technical leader who has extensive planning and design experience on major transportation projects. His expertise includes project management, QA/QC, scheme development/evaluation, geometric design, traffic control, drainage design, roadway signage, and specifications. He has been a lead transportation engineer on many New Jersey and New York State highway projects.

Port Authority of New York and New Jersey (PANYNJ), Downtown PATH Restoration Program Phase 1, World Trade Center and Exchange Place Stations, Manhattan, New York: Civil design manager responsible for QA/QC, design decision making, coordination, technical support, and design team management for the civil portion of the World Trade Center temporary station restoration and Exchange Place station expansion projects. The WTC project involves assessment of existing underground facilities, grading/paving of the WTC sites, study/design of drainage system, design of sanitary system and water supply system, and pump stations. Designed and prepared the construction documents for the east of Bathtub Site, Bathtub Site, various field change bulletins, as well as permit applications for sanitary sewer, storm sewer, and water main tapping, The Exchange Place project involved track clearance assessment of the proposed tunnels, design of the drainage system, and relocation of utilities.

Port Authority of New York and New Jersey (PANYNJ), Traffic Engineering On-Call Services, New Jersey: QA/QC engineer and technical advisor for the traffic standard details update assignment, which required researching and evaluating the latest technology/devices/applications that are available for traffic control and incorporating them into the traffic standard details.

Port Authority of New York and New Jersey (PANYNJ), Newark International Airport Call-In Assignments – Building 51 Relocation, New Jersey: QA/QC engineer responsible for plan review for the relocation of the historic Building 51. Plans reviewed covered the proposed site work, maintenance of traffic for the relocation path, grading and drainage, utilities, and temporary signage, as well as the temporary shoring/separation plans prepared by sub-consultants.

New Jersey Turnpike Authority (NJTA), NJ Turnpike Widening, Section 2, Interchange 7, New Jersey: Project engineer responsible for the final design (phases A to D) for section 2 of the New Jersey Turnpike widening program. The project involves new construction of two three-lane outer roadways from milepost 52.3 to milepost 56.5, including construction of two 1,500–foot long viaduct structures and 11 bridges; over 8,000 feet of retaining walls and 3,000 feet of noise walls; and reconstruction of Interchange 7, County Road 528, and Ward Avenue. The $180 million section 2 widening consists of three separate construction contracts. Responsibility includes overseeing all design tasks, providing technical guidance, performing technical review, managing work performed by sub-consultants, monitoring project schedules, and coordinating with NJTA, the program management consultant, the environmental consultant, and the constructibility consultant.

MTA Bridges and Tunnels, Feasibility

Shaoling Zhao, PE, continued

Study for Implementation of Two-Way and Open Road Tolling at the Verrazano Narrows Bridge, New York: Principal civil engineer responsible for developing design plans and evaluating alternate toll plaza and open road tolling concepts. Established design criteria; developed horizontal and vertical alignments for approach roadway systems and toll plazas; determined lane use requirements based on traffic forecasting and facility operations; evaluated design alternatives and estimated capital cost for each alternative; prepared a study report; and participated in the presentations. Also responsible for integrating design concepts into MicroSimulation models of tolling options.

Borough of Manhattan, MTA-NYCT Design of Flood Mitigation Measures at Three Locations, Manhattan, New York: Design supervisor responsible for the $150,000 analysis and design of flood mitigation measures at the 79th, 86th, and Chambers Street stations of the Broadway Line. Responsibilities included assessment of site conditions, determination of reasonable topographic survey limits for the hydraulic analysis, establishment of hydrological criteria for the hydraulic analysis, provision of technical guidance, performance of QA/QC on the analysis and report, establishment of methodology for pedestrian analysis, and evaluation of the pedestrian analysis and hydraulic analysis results to determine the feasible mitigation alternatives. Management responsibilities included establishment of design schedule, development of detailed task scopes, and assignment of staff to meet the accelerated project schedule.

MTA Bridges and Tunnels, Miscellaneous Design Services on an As-Needed Basis for Project GFM-419B, New York: Project manager for the $1.2 million three-year on-call design services project and directly involved in the project coordination/ management, technical design and construction document preparation for various assignments, including the electrical substation D platform bracing at the Throgs Neck Bridge, replacement of the grade slab at the toll plaza of Marine Parkway Bridge, replacement of the navigational lights and signs at the Marine Parkway Bridge, enclosure for electrical substation A at the Throgs Neck Bridge, construction support services for rehabilitation of towers lower strut and installation of curb plate at the Verrazano-Narrow Bridge, rehabilitation of bridge bearing plates/ fixed-movable joints/top piers at the Throgs Neck Bridge, TBTA deicer testing program, installation of electric/communication conduits at Queens Midtown Tunnel, all toll plaza painting, fender system repair at Marine Parkway Bridge, VE for Henry Hudson Bridge toll plaza replacement, VMS replacement at Queens Midtown Tunnel and Brooklyn Battery Tunnel, VE for orthotropic deck replacement at the Verrazano-Narrow Bridge, and clean and paint steel members at the Queens and Ward's Island Anchorages.

New York City Department of Transportation (NYCDOT), Belt Parkway Six Bridges Reconstruction, New York: Project manager for the $220 million reconstruction of the Belt Parkway Bridge over Mill Basin and overall project coordination/management of the reconstruction of six Belt Parkway bridges in the corridor. Responsibilities include coordination/management of the wetland and upland mitigation for six bridges; preparation of the environmental evaluation report and final design report; development/evaluation of various design concepts; solicitation of arborists; management of subconsultants for topo survey, trees survey, habitats assessments, wetland impacts assessments, permit applications, traffic modeling, soil investigation/ surcharging, New York State Department of Transportation (NYSDOT) Region 11 (Region 11 RDSA), Hillside Avenue and Jamaica Avenue Bridge Over Van Wyck Expressway, New York: Civil design manager responsible for the $900,000 preliminary and final design for the reconstruction of the Hillside Avenue and Jamaica Avenue Bridges, and the widening of 1 mile of Van Wyck Expressway. Services included QA/QC and technical supervision in the geometric design, design report preparation, MPT scheme development, traffic study, and the grading and drainage design. Also provided technical supports on issues that arose during construction. Construction cost was $38 million.

Resumes of Key Personnel
Tishman Construction Corporation

Frank Rodriguez

Project Role: Project Manager

Firm
Tishman Construction Corporation of New Jersey

Education
BS/Architecture, City College of New York

Professional Associations
OSHA 30-hour certified

Total Years of Experience
Tishman: 11
Other Firms: 26

As Project Manager, Mr. Rodriguez is responsible for budgeting, scheduling, logistics planning, client interfacing, and ensuring that all members of the team perform in their designated capacities. Mr. Rodriguez oversees contract administration inclusive of contractor requisitions, weekly project meetings, and overall schedule and cost control. He is responsible to review, estimate, and negotiate change orders and contractor claim submissions.

His duties also include administration of Tishman's on-site field staff, conducting inspections for quality control, adherence to contract documents, and implementing a project's site safety program. Mr. Rodriguez coordinates contractor shop drawing submittal review with the architect and engineers, and responds to contractors' requests for information (RFI). During pre-construction, he is responsible for bid document development and review. He has been in the industry for a total of 26 years, including 11 with Tishman.

Port Authority of New York and New Jersey, Continental Airlines at Newark Liberty International Airport: Mr. Rodriguez served as Project Manager for various Continental Airline Projects at Newark International Airport including:

- **Material Stores Building 101:** Mr. Rodriguez served as Project Manager for a new 70,000-square-foot warehouse facility. The project called for approximately 550-tons of structural steel and 400 steel piles. Work included installation of new mechanical, electrical and plumbing to serve new administrative offices and storage spaces and relocation of existing storm and sanitary lines.
- **Breakroom Renovation, Phase I:** As Project Manager, Mr. Rodriguez oversaw the interior renovation of 12 employee breakrooms throughout Terminal 'C' of Newark International Airport. Renovations included new pantry millwork, new flooring, painting, suspended ceilings and supervisor offices. New MEP systems included a fire alarm system, new and relocated sprinkler heads, new and relocated ductwork and plumbing and all new electrical circuitry.
- **777-200 Holdrooms:** Mr. Rodriguez served as Project Manager overseeing the interior retrofit of the holdrooms at 10 gates, addition of hydrant fuel pits at Gate 98, removal and relocation an existing jet bridge and addition a new jet bridge to Terminal 'C' at Newark International Airport.
- **United Airlines A-1 Bump-out:** As Project Manager, Mr. Rodriguez managed the addition of office and aircraft maintenance space to the existing A-1 Connector at Terminal 'A' of Newark International Airport. Work consisted of a new fit-out of two floors, totaling approximately 6,500 square feet. Additional work included precast, glazing façade, low voltage switchgear and new HVAC and electrical system.
- **Airlines Modification A-2 Bump-out:** Mr. Rodriguez was Project Manager for the addition of two new fit-outs for the new baggage handling system spaces to the existing A-2 Connector at Terminal 'A' of Newark International Airport. The project consisted of two new fit-outs: a new President's club

Frank Rodriguez, continued

and office spaces. Both fit-outs consisted of new precast, glazing façade, HVAC and electrical systems.

- **Hydrant Fueling Modification:** As Project Manager for the modification and addition to the Hydrant Fueling and Underground Utilities to Terminal 'A' of Newark International Airport, Mr. Rodriguez oversaw the addition of hydrant fueling pits and repair of pavement to nine existing gates. The project also included the relocation of electrical duct banks and water and sanitary lines.

Atlantic City Bus Terminal, Atlantic City, NJ: Mr. Rodriguez served as Project Manager for a new 25,000-square-foot bus facility. The project consisted of two phases. The first phase consisted of constructing a new passenger drop-off/pick-up canopy. Phase two consisted of the demolition of the existing canopy to allow for the construction of the new terminal. The project also included installation of new mechanical, electrical and plumbing to serve the new administrative offices and public spaces. Careful coordination was conducted with New Jersey Transit because all construction, deliveries and installation of underground utilities was performed while the existing terminal operated 24 hours a day.

Revel Hotel and Casino, Atlantic City, NJ: Tishman is managing the construction of a new beachfront resort with a 53-story, 2,000-room hotel tower. Two concrete mat foundations with approximately 35,000 cubic yards of concrete will be installed as a base for the new tower and a second future tower. Phase one of the project also includes a five-story structural steel podium that will house a 200,000-square-foot gaming area, event and conference space, entertainment areas, restaurants, a full service spa with indoor and outdoor pools, and a large three-story nightclub with additional lounges and a coffee shop. In January 2009, Revel Entertainment announced that it would continue work on the structure and exterior of the project, but delay the interior work due to current economic conditions. Mr. Rodriguez served as Project Manager.

North Beach Asbury Park, Asbury Park, NJ: Tishman provided Construction Management services to Paramount Homes for the construction of a new residential development totaling 920,000 square feet. The 157-unit residential development is located in North Asbury Park at the New Jersey Shore and is the only condominium community being sold with direct beach access. The development includes two eight-story buildings and one four-story luxury building. The development includes a level of parking underneath each building, accommodating 225 cars. Between the buildings and above the parking structure is a plaza with landscaping and hardscaping, a pool and sundeck. Other amenities include a state-of-the-art fitness center and on-site concierge service. As Project Manager, Mr. Rodriguez was responsible for all interior trades, managing the construction schedule, change orders, RFI's and coordinating with all MEP trades. He was also responsible for maintaining communication with the owner and designer team.

Gary Schmitt

Project Role: Project Manager

Firm
Tishman Construction Corporation of New Jersey

Education
AAS/Civil Engineering Technology, Union County College

Coursework/BSET, Civil and Construction Technology, New Jersey Institute of Technology

Professional Associations
OSHA 10-hour certified

Total Years of Experience
Tishman: 10
Other Firms: 29

Mr. Schmitt has more than 29 years of industry experience. As Project Manager, he is responsible for pre-construction and construction phase services including scheduling, budgeting, value engineering, bidding and contract award, cost control, claims analysis, control administration and close-out. He has served as a superintendent, estimator and project manager on a wide range of development and construction projects including multi-unit residential, commercial, industrial, institutional and transportation sector projects. He also managed his own construction and consulting business for several years.

World Trade Center VSC, New York, NY: The Vehicular Security Center (VSC) Projects is being developed to protect new public investments at the WTC Site by using the latest in proven technologies, including a vehicle scanning system, vehicle arrest devices, control gates, security booths, CCTV surveillance system and an Operations Office to provide off-street screening of vehicles entering the WTC Site in Lower Manhattan. The VSC will accommodate an estimated 5.5 million visitors annually to the WTC Memorial, which translates to 130 tour buses on an average weekday. The entrance/exist is located on the south side of Liberty Street between Route 9A and Washington Street. Tour buses transporting visitors to the Memorial Complex would drop the passengers off adjacent to it and then would proceed to the VSC entrance. Other vehicles will enter the facility through the same entrance. Mr. Schmitt is serving as a Project Manager on this project.

Continental Airlines Global Gateway Project, Newark Liberty International Airport, NJ: As Project Manager for the $40 million renovation and new construction for Terminal A Modifications, Phase II, which includes a 10,000-square-foot, two-story addition as will a new Presidents Club, four new passenger loading bridges, security checkpoint, additional restrooms, a canopy over the connector, hold room, back office space, 12 ticketing positions, and the build out of an additional seating area. Existing ticketing areas and offices were relocated. Mr. Schmitt was responsible for phasing/logistics, purchasing and daily administration of multiple general contractors and airline's vendors (asbestos, communications, furniture and specialty equipment).

Hangar #109, Jet Aviation/Port Authority of New York and New Jersey, Teterboro, NJ: Mr. Schmitt served as Project Manager/Estimator for a 40,000-square-foot hangar and 20,000 square feet of office space. The scope of work included site work, foundations, metal building erection, MEP and a high-density foam fire suppression system on a lump sum basis.

Hilton Grand Vacation Club, New York, NY: Tishman served as Construction Manager for a 27-story, 150,000-square-foot Hilton Grand Vacation Club (HGVC) located on 57th Street near Sixth Avenue, two blocks from Central Park. The HGVC is hotel and timeshare with 161 available units. Some units are studios and some have a living area and a bedroom. Mr. Schmitt served as a Project Manager on this project.

Gary Schmitt, continued

The Link, 310 West 52nd Street, New York, NY: Tishman managed the construction efforts for this 264,000-square-foot, 41-story, 210-unit new residential construction project, built on the west side of Manhattan. The apartment building features an extensive roof garden, a gymnasium and the apartments have unobstructed views of the Hudson River. The exterior facade features architectural pre-cast panels at the columns. Mr. Schmitt served as Project Manager.

Plaza Hotel Redevelopment, New York, NY: Tishman served as Construction Manager for the complete renovation and partial conversion of the historic Plaza Hotel. The completed 930,000-square-foot building consists of 150,000 square feet of commercial/retail space and 150 transient hotel rooms and 150 hotel condo rooms, with the balance of the building converted to residential condominiums. Tishman oversaw the enlargement of the building by infilling certain courtyard areas and a partial expansion of the building's upper floors. Mr. Schmitt served as Project Manager for temporary construction (hoists and scaffolding), interior infrastructure (concrete, misc. iron, fireproofing, metal and wood stairs) and vertical transportation trades (traction elevators, hydraulic elevators & lifts) for this large scale project involving condominium, hotel, restaurant and retail elements for El-Ad Properties.

New Jersey Schools Construction Corporation, Trenton NJ: Mr. Schmitt was a Pre-Development Project Officer on this project where Tishman served as an extension of the NJSCC's staff and provided development and Design/Construction management services. Mr. Schmitt also coordinated the day-to-day activities of Tishman's staff of 25 individuals within the SCC to ensure uniform procedures to help them meet the needs of our client in four regional offices throughout the state. His responsibilities included managing engineering and architectural consultants, providing property acquisition due-diligence services and evaluations of existing school buildings for reuse or expansion. Results of these studies were then routed thru the regulatory process and Mr. Schmitt continued coordination environmental issues during the design and construction process.

Jennifer Calabrese

Project Role: Estimator

Firm
Tishman Construction Corporation of New Jersey

Education
Legal Administrative Program, Katherine Gibbs School of Business

Total Years of Experience
Tishman: 3
Other Firms: 11

Ms. Calabrese has 11 years of experience in the construction industry, and 10 years of experience with construction estimating. She joined Tishman after serving as an Estimator for several quality construction firms. At her last firm, Ms. Calabrese served as a Senior Estimator in charge of the architectural group and reported directly to the Director of Estimating. Her duties involved coordination of all estimating tasks between all the architectural estimators, including quantity take-offs, subcontractor descoping and levelizing, clarifications, value engineering and ensuring that all checks and balances are implemented in the estimating process. She also led the architectural group in coordination with the mechanical and electrical trades and the civil and structural trades. She handled both design development estimates and lump sum bid estimates.

As an estimator for Tishman, Ms. Calabrese provides accurate quantity surveys of materials and labor for all CSI trade categories, from conceptual through working drawings, during pre-construction and construction phases of the project. Her responsibilities include performing quantity take-offs and pricing for various project types, from the concept design stage to the working document stage; obtaining all necessary information from the consultants to complete the estimate; verifying unit cost pricing for each trade through historical data or vendor contract; checking local markets for man-power and material availabilities; reviewing, quantifying and pricing cost savings/value engineering opportunities; analyzing and comparing bids with projected budget costs; and continually checking the work product for accuracy and completeness.

165 Halsey Street, Newark, NJ: Tishman is currently serving as Construction Manager for the renovation/fit-out of 16,000 square feet of new data center space on the ninth floor of an existing historic building. The installation of all new finishes as well as new cooling equipment, normal and emergency power, fuel oil tank and delivery systems and pre-action fire systems are all part of the work. Tishman is managing the pre-construction, building planning, scheduling, budgeting, and construction. Ms. Calabrese is currently providing estimating services.

Pennsylvania Convention Center Expansion, Philadelphia, PA: Tishman is serving as Construction Manager for the expansion and renovation of the existing Pennsylvania Convention Center. The 965,000-square-foot expansion includes a lobby, meeting rooms, exhibit halls, offices, ballroom, new kitchen and new mechanical room and associated utility and support spaces. Tishman will renovate the existing convention center by demolishing and reconstructing approximately 30,000 square feet of the back-of-house support spaces without any disruption to the day-to-day activities of the Center. Tishman will also provide services to receive and monitor the installation of all furniture, furnishings and equipment. Ms. Calabrese is currently serving as Estimator.

Philadelphia Schools Capital Improvements Program, Philadelphia, PA: Tishman is serving as Construction Manager for a major piece of the School District of Philadelphia's Capital Improvement Program, which aims to service and construct more than

Jennifer Calabrese, continued

315 academic facilities. Our initial assignment encompasses renovation and new construction projects at eight different locations throughout the city. These projects range in size from a 65,000-square-foot elementary school renovation project to the new construction of a 105,000-square-foot elementary and middle school at G Street & Hunting Park Avenue. Many projects involve staging the work around the operations of the school. Tishman is providing all pre-construction and construction services including estimating, scheduling, design review, bid development, procurement, project administration, cost control and quality control. Ms. Calabrese served as Estimator.

Hilton Grand Vacation Club, New York, NY: Tishman is currently serving as Construction Manager for a 27-story Hilton Grand Vacation Club (HGVC) located on 57th Street near Sixth Avenue, two blocks from Central Park. The HGVC will be a hotel and timeshare with 161 available units. Some units will be studios and some will have a living area and a bedroom. Amenities such as a lounge, spa and public terrace are planned as well. Ms. Calabrese served as Estimator.

Kennedy Meadowlands Golf Hotel, East Rutherford, NJ: Tishman assisted developers with a $270-million, 1.15-million-square-foot mixed-use project with two structures on a 10-acre site. The scope includes a 350-room hotel with amenities and 250 condo units all master planned by Robert AM Stern along with Jensen Fey of Seattle. Ms. Calabrese served as Estimator.

Stowe Mountain Resort, Stowe, VT: A 570,000-square-foot space consisting of a ski lodge, hotel, spa and underground garage. The total project amount was $200 million.

The Turning Stone Casino Resort, Verona, NY: A 20-story high-rise hotel, approximately 200,000 square feet with 300 guest rooms including VIP suites and restaurants. There is approximately 60,000 square feet of casino and gaming space in the Winter Garden area with all associated amenities. This project also includes a multi-purpose sports event center, approximately 140,000 square feet with a maximum seating capacity of 5,000. The contract amount was $110 million.

Owner Confidential, Atlantic City, NJ: Ms. Calabrese worked on the pre-construction phase of a $1.7-billion project consisting of two 40-story towers, gaming, spa, and garage.

Trump Marina Retail Entertainment Promenade, Atlantic City, NJ: Ms. Calabrese worked on the pre-construction phase of a three-floor addition above an existing facility; new atrium addition; interior fit-out with casino hall; restaurants, large multipurpose room; retail; elevator renovations; club renovations; health club and spa; and new parking deck with retail spaces. The contract amount was $100 million.

Rosana DaCruz

Project Role: Estimator

Firm
Tishman Construction Corporation of New Jersey

Education
BS,Civil Engineering, New Jersey Institute of Technology

Professional Associations
OSHA 30-hour certified

Total Years of Experience
Tishman: 1
Other Firms: 12

Ms. DaCruz recently joined Tishman and brings with her 12 years of experience in the construction industry. As Estimator/Assistant Project Manager for Tishman, Ms. DaCruz provides accurate quantity surveys of materials and labor for all CSI trade categories, from conceptual through working drawings, during pre-construction and construction phases of the project.

Her responsibilities include performing quantity take-offs and pricing for various project types, from the concept design stage to the working document stage; obtaining all necessary information from the consultants to complete the estimate; verifying unit cost pricing for each trade through historical data or vendor contract; checking local markets for man-power and material availabilities; reviewing, quantifying and pricing cost savings/value engineering opportunities; analyzing and comparing bids with projected budget costs; and continually checking the work product for accuracy and completeness.

Prior to joining Tishman, she served in a similar role for a major construction company in Bedminster, NJ and New York, NY.

Centra 1, Iselin, NJ: Tishman is currently serving as General Contractor for the complete renovation of an 112,500-gross-square-foot, four-story, Class-A office building. As part of the project scope, there is a planned 8,500-square-foot addition to the fourth floor, complete MEP systems replacement and a new exterior curtain wall. The build also has a LEED Gold certification set as its goal. Ms. DaCruz is currently providing estimating services.

165 Halsey Street, Newark, NJ: Tishman is currently serving as Construction Manager for the renovation/fit-out of 16,000 square feet of new data center space on the ninth floor of an existing historic building. The installation of all new finishes as well as new cooling equipment, normal and emergency power, fuel oil tank and delivery systems and pre-action fire systems are all part of the work. Tishman is managing the pre-construction, building planning, scheduling, budgeting, and construction. Ms. DaCruz is currently providing estimating services.

Major Construction Company, Bedminster, NJ and New York, NY: As Estimator/Assistant Project Manager, Ms. DaCruz prepared and submitted for review conceptual estimates, design development estimates, guaranteed maximum price estimates, and competitive lump sum estimates based upon a complete understanding of the contract documents. She attended pre-bid meetings, inspected project sites and evaluated site conditions. She also supervised and/or prepared detailed cost budgets on successfully bid projects; performed drawing take-offs on all construction related systems; downloaded information into historical database; acted as lead estimator in selected projects; and built relations with the subcontractor community and requesting bids, detailed scoping of their contracts and understanding their specialties and capabilities.

Rosana DaCruz, continued

Major Construction Company, Bedminster, NJ: As Assistant Project Manager/Project Manager, Ms. DaCruz assisted in field supervision of construction crews; administered contracts, submittals and RFIs; executed change orders and managed subcontractors; coordinated site meetings between architect, contractor, and engineer; assisted the project manager in preparing monthly reports for the owner and upper management; executed project close-outs and coordinated same with subcontractors; and managed and helped implement an affirmative action plan for the projects.

E.E. Cruz & Company, Inc., Holmdel, NJ: As Project Engineer, Ms. DaCruz assisted in field supervision of construction crews; aided foremen in interpreting construction plans; implemented field drawings with elevations; updated as-built plans; submitted daily Hot Work and Confined Space Entry permits; ordered construction materials and supplies; prepared monthly invoicing estimates; and performed quantity take-offs for bid preparation.

Metropolitan Transit Authority, New York, NY: Ms. DaCruz served as Assistant Project Engineer, responsible for CAD work related to contract drawings for the Structural Civil Engineering department.

Other project experience includes:

- NJ Transit Stations Rehabilitation, South Orange, NJ: $23 million
- NJDOT Route 1 and 9 Merge, Woodbridge, NJ: $16 million
- Rutgers Business School, Newark, NJ: Lump sum bid $38 million
- MSU Panzer Athletic Center, Montclair, NJ: Lump sum bid $6 million
- College of New Jersey, Trenton, NJ: Lump sum bid $25 million
- Rutgers Proteomics, Piscataway, NJ: Lump Sum Bid $26 million
- Hoboken YMCA, Hoboken, NJ: Lump sum bid $13 million
- Red Bull Park, Harrison, NJ: GMP $175 million
- Red Bull Training Facility, Hanover, NJ: GMP $32 million
- Ernst & Young Office Building, Secaucus, NJ: Lump sum bid $20 million
- Liberty Health MOB, Jersey City, NJ: GMP $14 million
- West Lake MOB, Neptune, NJ: GMP $20 million
- Newark Liberty International Airport Taxiway Z, Newark, NJ: $14 million
- Southern Access Road Bridge, Newark, NJ: $25 million
- Claremont Corporate Center, Summit, NJ: GMP $17 million
- Ernst & Young Office Fit-out, Secaucus, NJ: Lump sum bid $4.5 million
- Ernst & Young Office Fit-out, Iselin, NJ: Lump sum bid $6 million

Chris Seliga

Project Role:Scheduling

Firm
Tishman Construction Corporation of New Jersey

Education
BS, Construction Management, Wentworth Institute of Technology

Total Years of Experience
Tishman:12
Other Firms:21

Mr. Seliga is the Scheduling Director for Tishman's eastern region projects. He oversees a seven-person Scheduling department, which serves as a core resource for project and regional scheduling staff. The department is responsible for computer support, project scheduling, manpower charts, cash flow projections and all other scheduling materials required for a project. Additional responsibilities include the development and authoring of corporate scheduling policies and procedures.

The Scheduling department also provides graphic interpretations for site logistics and site safety plans during the course of a project. For any given project, a first estimate of the timing of the project is developed in bar chart format showing the major components and milestones of the project, from commencement of pre-construction through project completion. Summary and schedule reports, generated by Mr. Seliga's department, provide an overview of project status, both by milestone event and trade activity.

One World Trade Center, New York, NY: Tishman Construction is serving as Construction Manager for 1 World Trade Center, the 70-story, 2.6-million-square-foot tower that will reclaim the downtown skyline and enhance lower Manhattan's standing as a preeminent business district. Reaching a height of 1,776 feet, the building will incorporate the latest innovations in life safety systems, structural engineering and environmental responsibility. The project is striving to achieve LEED Gold certification through the use of renewable energy sources, low energy HVAC solutions, high performance façades, non-ozone-depleting chemicals, sustainable materials and rainwater collection and recycling systems. Mr. Seliga is providing scheduling services.

World Trade Center Transportation Hub, New York, NY: Tishman, in a Joint Venture with Turner Construction, has been contracted by the Port Authority of New York and New Jersey to complete the construction of the new World Trade Center PATH Terminal, designed by world-renowned architect Santiago Calatrava. The prior contractor was removed by the agency. The WTC HUB will include sub grade pedestrian connections that will connect the PATH system with the New York City Transit (NYCT) subway system, surrounding site development, and other transit facilities. These connections extend from the WTC site into the World Financial Center's Winter Garden on the west; the planned MTA/NYCT Fulton Street Transit Center on the east; 7 World Trade Center and TriBeCa to the north; and Wall Street and the Financial District on the south. Mr. Seliga is providing scheduling services.

World Trade Center VSC, New York, NY: The Vehicular Security Center (VSC) Projects is being developed to protect new public investments at the WTC Site by using the latest in proven technologies, including a vehicle scanning system, vehicle arrest devices, control gates, security booths, CCTV surveillance system and an Operations Office to provide off-street screening of vehicles entering the WTC Site in Lower Manhattan. The VSC will accommodate an estimated 5.5 million visitors annually to the WTC Memorial, which translates to 130 tour buses on an average weekday. The entrance/exist is located

Chris Seliga, continued

on the south side of Liberty Street between Route 9A and Washington Street. Tour buses transporting visitors to the Memorial Complex would drop the passengers off adjacent to it and then would proceed to the VSC entrance. Other vehicles will enter the facility through the same entrance. Mr. Seliga is providing scheduling services.

150 Greenwich Street – Tower 4, New York, NY: Tishman Construction is serving as Construction Manager at Risk for this 2.3-million-square-foot, 64-story tower that will be the fourth tallest skyscraper at the World Trade Center site at 975 feet from street level. With offices beginning at 139 feet above street level, the building will include 56 office floors, one-third of which will be occupied by the Port Authority of New York and New Jersey. Mr. Seliga is providing scheduling services.

Continental Airlines Global Gateway Project, Newark Liberty International Airport, Newark, NJ: Mr. Seliga served as Project Manager for this assignment. Over a span of four years, Tishman constructed projects for Continental consisting of renovations at Terminal A, a new baggage facility at Terminal C, and new maintenance facilities including an aircraft hangar at the North Area Expansion. All projects had to be constructed without affecting daily airport operations.

Marina Commercial Tower, Saadiyat Island, Abu Dhabi, UAE: Tishman Construction has been contracted by the Abu Dhabi Tourism Development & Investment Company to provide project management and cost management consultancy services for the planned Saadiyat Island Commercial Building, which is designed by Frank Gehry. Mr. Seliga is providing scheduling for this commercial building that will contain approximately 700,000 square feet of space over 40 stories and also contain a three-story subgrade garage.

Fiterman Hall, New York, NY: Tishman served as Construction Manager for the demolition of the 238,668-square-foot Fiterman Hall. On September 11th, 2001 Fiterman Hall sustained structural, electrical and mechanical damages from debris from the collapse of the WTC Towers. Demolition of Fiterman Hall has proven to be a longer process than originally planned due to findings and air quality at the site. To prepare Fiterman Hall for demolition and to protect the structure from contamination, Tishman restored electrical work, elevator systems and water to the building. Mr. Seliga served as the Lead Scheduler.

One Bryant Park, Bank of America, NY: Tishman Construction is serving as Construction Manager for One Bryant Park, a 55-story, 2.1-million-square-foot office tower in New York City, jointly developed by The Durst Organization and Bank of America. It is the first skyscraper in the world to achieve LEED Platinum Certification and includes a 4.6-mega-watt cogeneration plant, ice storage plant, extensive gray water retention and recycling system, green roof areas and water free urinals. Mr. Seliga served as Head Scheduler for development of the baseline schedule.

Coliseum Bus Depot Superstructure, Bronx, NY: Mr. Seliga served as Project Manager for construction of this state-of-the-art bus maintenance and storage facility for the New York City Metropolitan Transportation Authority. Tishman was selected after the original general contractor had fallen more than eight months behind schedule. Tishman's role as Construction Manager was to institute a corrective program to ensure that the previously installed substandard and damaged work was completed as originally specified. A concentrated scheduling effort was required to complete the remainder of the project, allowing for three months of commissioning, testing, and training.

Metro-North Restoration, Grand Central Terminal, New York, NY: Mr. Seliga served as Superintendent for this historic restoration of the exterior limestone. He monitored day-to-day construction of the stone masons and was responsible for site safety and traffic coordination. As Construction Consultant, Tishman was involved in the renovation of this historic beaux-arts terminal. Renovation involved the main waiting room, exterior cornice and the Vanderbilt Avenue entrance.

Resumes of Key Personnel
Ellana, Inc.

Rohit Ahuja

Project Role: Senior Scheduler

Firm
Ellana, Inc.

Education
MS, Industrial and Systems Engineering, Rutgers University, New Brunswick, NJ, 1986

BS, Mechanical Engineering, Panjab University, 1984

Total Years of Experience:
with Ellana: 4
with Other Firms: 16

Employment History
2006-Present, ELLANA, Inc., Senior Scheduler

1980-2006, Hanscomb/Faithful and Gould, Scheduler

Rohit Ahuja, Senior Scheduler, has more than 24 years of experience in CPM scheduling, construction management, project and program management, project controls, claims analysis, resource/cost management, strategic and organizational planning, business process reengineering, and performance improvement. Clients include both private and public organizations in the fields of construction, transportation, pharmaceutical, process, finance, real estate, and information systems. Responsibilities include developing, updating, analyzing, and reporting on detailed cost/resource loaded CPM schedules using Primavera.

PANYNJ, Newark Terminal B Renovations (Mid Level/Upper Level/Meeter-Greeter), Newark, NJ: Senior Scheduler. Responsible for providing CPM scheduling services for modifications to Terminal B at Newark Liberty International Airport. Services include Stage III - Final Design and Contract Documents and Stage IV – Post Award Services for the new mid and upper levels meter/greeter areas and related infrastructure. Work includes conversion of the domestic baggage claim hall to a domestic ticketing hall; improvements to the meter/greeter and Interline baggage re-check areas; relocation of existing ticket counters; and the addition of a new mezzanine level, among other tasks.

MTA, Construction of Rail Control Center , NY, NY: Scheduler. Responsible for developing the detailed schedule for the construction of the three-story building as well as the installation and testing of the equipment. In addition to the baseline schedule, schedule updates and reporting were also done on a monthly basis. The project included installation of high-tech computerized rail control equipment, electrical generators, security systems, computers, etc., on the third-floor of the building.

PANYNJ, World Trade Center, New York, NY: Scheduler. Responsible for developing the PANYNJ team CPM schedules and strategies to restore the entire WTC following the terrorist attack in February, 1993. Claims preparation for the insurance companies as a result of the blast were done using Primavera.

PANYNJ, Continental Airlines Terminal Expansion, Newark Liberty International Airport, NJ: Scheduler. Responsible for developing, managing, updating and analyzing detailed CPM schedules for this Continental Airlines terminal expansion project. Responsibilities included developing and maintaining detailed resource and cost-loaded CPM schedules. for the North Air Cargo Building at Newark Airport. Also responsible for performing time-impact analyses and making presentations to clients.

PANYNJ, North Cargo Building Facility – Newark Liberty International Airport, Newark, NJ: Scheduler. Responsible for developing, managing, updating and analyzing detailed CPM schedules for North Air Cargo Building. Responsibilities included developing and maintaining detailed resource and cost-loaded CPM schedules. Also responsible for performing time-impact analyses and making presentations to clients.

15 Central Park West, New York, NY: Senior Scheduler. Responsible

Rohit Ahuja, continued

for review of the construction schedule prepared by another firm for this high-rise residential tower at the Mayflower Hotel site. The development consists of 2 buildings built over 2 full block cellar levels. The ground floor contains retail space below the Broadway building, and the main lobby entrance for both towers is through the Central Park West building with a connector walkway to the Broadway building. Services entailed: review 2 detailed CPM schedules for each tower; review project specifications, drawings, and CPM scheduling specifications; analyze schedules to evaluate construction logic, critical path, resource allocation, and cost allocation; review build-out strategy for the 2 buildings and to ensure that the schedules conform to this strategy and logic; identify opportunities for shortening the construction schedule; implement any shortening sequence / opportunities in the schedule and evaluate impacts; provide recommendations.

'21' Club Hotel and Residences, New York, NY: Scheduler. Responsible for developing, managing, updating, and analyzing the detailed CPM schedules for this project that includes the following scope of work: demolish existing Donnell Branch of the NYPL; build a 170- to 200-room luxury hotel with spa and approximately 40 to 60 finished, but unfurnished, luxury condominiums contained within a separate 27- to 35-story tower above the hotel footprint. The hotel will house spa and wellness facilities and expanded banquet and dining space for the '21" Club, which backs onto the library; the 2 buildings will be connected. A rebuilt Donnell Library will be housed inside the hotel footprint and structure.

New Brooklyn Detention Center, Brooklyn, NY: Manager of Project Controls responsible for developing cost and resource-loaded project plans and CPM schedules for the Brooklyn Detention Center. Also updated project schedules; provided resource and cost analysis and critical path analysis; and wrote project update and status reports with mitigation strategies and recommendations. Ran project status meetings for the project team, project managers, and superintendents.

Princeton University Capital Program, Princeton, NJ: Scheduler responsible for supporting CPM scheduling services for the Princeton University Capital Redevelopment Program. This is a multimillion-dollar capital improvement program that includes construction of new buildings as well as renovation of existing buildings.

Long Branch Elementary School, Long Branch, NJ: Scheduler. Responsible for the initial CPM schedule preparation and schedule updates for the construction of a new school.

232 East 63rd Street, New York, NY: Senior Scheduler. Responsible for preparation of the initial CPM schedule for this $4 million project; review of proposed contractor's schedule and logistics; preparation of the final CPM schedule, and monitoring/updates during project duration

415 Greenwich Street, New York, NY: Scheduler, working with a surety company as a part of a team to construct a multimillion-dollar apartment building in the Tribeca section of Manhattan. Responsibilities included developing, updating, and maintaining detailed CPM schedules (using P3 and P6), as well as time-impact analyses.

Sands-Venetian Hotel and Casino, Las Vegas, NV: Scheduler. Responsible for developing, managing, and updating detailed CPM plan (design, preconstruction, procurement, construction) of the $1.4-billion Sands-Venetian Hotel and Casino in Las Vegas as well as performance of risk analysis. Prepared monthly project status reports for clients and executive management describing status, cost, and schedule performance. Recommended mitigation strategies.

Henry Chin

Project Role: Senior Project Cost Manager

Firm
Ellana, Inc.

Education
BS in Architecture, New York Institute of Technology, 1985

Professional Registrations
Licensed Architect in the State of New York, [redacted]

Total Years of Experience:
with Ellana: 7
with Other Firms: 18

Employment History
2003-Present, ELLANA, Inc., Senior Project Cost Manager

1985-2003, Morse Diesel, Senior Estimator

Henry Chin, Senior Project Cost Manager, has more than 25 years of experience in architectural design and construction cost estimating, specializing in conceptual project budgeting and detailed cost estimating at various stages of design and construction. Mr. Chin has a unique combination of estimating knowledge and sensitivity to architectural design and costs. Prior to joining ELLANA, he was the lead estimator with a major construction management firm for many high-profile New York City and national projects. His project experience includes construction cost estimating and master planning of high-rise office buildings, hospitals, museums, research facilities, airports, schools, residential developments, hotels, and alteration and renovation of existing buildings for adaptive reuse. Project Name: Pat ilis num vulputpat lore voloreet utem quisim quam velent lorper se min hendit venit velit velisis augue tat. Duis nosto ea feum zzriurem acip ex exeriureet luptat at nisim vendit lore commodo dolobor alissequat praesequisi.

PANYNJ, World Trade Center Tower One, New York, NY: Senior Project Cost Manager responsible for cost estimating and project cost control services for the 3-million square-foot Tower One at the World Trade Center site. Services include assisting the Project Program Manager with independent estimate preparation for trade bid packages; bid reviews; estimate preparation for bulletins, addenda, and change orders; and tracking and updating budget costs.

PANYNJ, Architectural, Engineering, and Interior Design Services for Offices at 4 World Trade Center, New York, NY: Senior Project Cost Manager responsible for cost estimating and scheduling services for the new corporate offices of the Port Authority of NY & NJ, consolidating about 1,700 Port Authority staff from multiple buildings in Manhattan and New Jersey in one central location at 150 Greenwich Street in Manhattan. The offices will cover approximately 15 to 20 contiguous floors, 1 podium floor (approximately 35,000 square feet located on the retail level to include a cafeteria, conference center, and an emergency command post), and 1/3 of the subgrade space in the new World Trade Center - Tower 4 Building. In compliance with current PANYNJ sustainability objectives all office buildings will comply with the World Trade Center Sustainable Guidelines, leading to a LEED gold rating.

PANYNJ, Redevelopment of jetBlue Terminals 5 & 6 at JFK International Airport, Queens, NY: Senior Project Cost Manager responsible for assisting the design team with the cost estimating of various design options for the proposed new terminal and roadways. These studies include design options for the terminal exterior walls, and roofs, drop-off area, and new canopy.

PANYNJ, TWA Building 60 Interior Adaptive Reuse / Exterior Improvements JFK International Airport, Queens, NY : Senior Project Cost Manager responsible for providing initial planning, design development, and construction-document cost estimating services to the design team throughout the interior/exterior renovations of this iconic TWA Terminal

Henry Chin, continued

(Building 60), designed by Eero Saarinen, at JFK.

PANYNJ, World Trade Center Vehicle Security Center and Tour Bus Parking Facility, New York, NY: Senior Project Cost Manager responsible for providing construction cost estimating services for the 4 story 295,700 sf vehicle and tour bus parking and screening facility.

PANYNJ, USAir Terminal at LaGuardia Airport, Queens, NY: Lead Estimator responsible for the cost estimates for this $200-million, 300,000-square-foot, two-story airline terminal with a total of 12 gates. The project also included managing the construction of the taxiway realignment and access roads.

PANYNJ, New International Arrivals Building/ Terminal Four at JFK International Airport, Queens, NY - Lead Estimator responsible for providing cost estimates from the schematic level of design to GMP for the new $400-million International Arrivals Building. The total terminal and concourses area is 1.4 million sf.

PANYNJ, Terminal One at JFK International Airport, Queens, NY: Lead Estimator for this two-level structure with a partial third level, totaling 660,000 sf. The new terminal was constructed on the site of the former Eastern Airlines Terminal, which was demolished as part of this project. Also included in the project are a retail and food gallery; new boarding lounges; and an airline club level on the airside of the security checkpoint. Construction value - $205 million.

National September 11 Memorial & Museum at the World Trade Center, New York, NY: Senior Project Cost Manager responsible for schematic and design development estimates for the WTC memorial and museum complex. Services include various cost studies of proposed design options, structural systems, and slurry wall supports.

PATH/Christopher Street-9th Street Station Entrances, Jersey City, NJ: Senior Project Cost Manager responsible for cost estimating services to the design team at the conceptual design stage for the preparation of an analysis report for both stations and conceptual design for a new station entrance at the 9th Street Station through the Fontana Center building. The logistically-challenging proposed new 9th Street Station entrance includes an underground mezzanine tunnel over the existing PATH lower-level platform tunnel. The scope involved extensive utility relocation; maintenance and protection of traffic; NYSOGS, Life Safety Services Term Contract, State of New York (S3014): Senior Project Cost Manager will be responsible for providing cost estimating services as-needed on this statewide life-safety term contract.

NYC School Construction Authority Cost Estimating Services On-Call Contract, New York, NY: Senior Project Cost Manager responsible for cost estimates at all stages of design for this on-call cost estimating prime contract, including new school construction projects, renovations, mechanical system upgrades, construction of new, 5-story, 97,000-square-foot intermediate school, feasibility study for 4-story, 49,000 sf. high school, and 4-story, 72,000-sf K-5th grade school.

New York City Housing Authority Term Contract, New York, NY: Senior Project Cost Manager responsible for providing cost estimating services for this requirements contract for various buildings throughout the New York City Area. Projects generally include exterior restoration of the existing facades, mechanical and plumbing upgrade, interior kitchens and finishes replacement, and site/ landscape/playground development

MTA, Design and Technical Services for Security Capital Program On "Task Order" Basis, New York, NY: Senior Project Cost Manager responsible for the provision of cost estimating services for engineering design and technical services for the MTA security improvement capital program. Services include risk and vulnerability assessments, development of a security program and security design guidelines, engineered solutions for threat mitigation, cost/benefit analyses of alternative mitigations, conceptual design, design development, final design, contract document preparation including drawings and specifications, preparation of project phasing plan and cost estimates, value engineering, and pre- and post-construction contract award services for a variety of security projects.

Walter Fitzer

Project Role: Chief MEP Estimator

Firm
Ellana, Inc.

Education
AAS, HVAC and Refrigeration, State University of Agricultural and Technical Institute at Farmingdale, NY

Professional Registrations
Certified Specialist in HVAC - American Society of Heating, Refrigeration and Air Conditioning Engineers, Inc.

Total Years of Experience:
with Ellana: 4
with Other Firms: 33

Employment History
2006 – Present, ELLANA, Inc., Chief MEP Estimator

2001-Present, Independent Consultant

1993-2001, Accu-cost Construction Consultants, Inc., Principal-Chief Mechanical Engineer

1973-1993, Federman Construction Consultants, Inc., Chief Mechanical and Electrical Engineer

Walter A. Fitzer, Chief MEP Estimator, has more than 30 years of experience in mechanical/electrical design, field supervision, and cost budgeting and estimating. He has a wide range of project experience and is responsible for MEP estimate preparation from the conceptual through construction document phases, as well as coordination of MEP scopes and costs with the architectural trades. He is fully involved in value engineering sessions and project cost analyses, estimates, presentations, cost reconciliations, and negotiations.

Mr. Fitzer's project experience encompasses educational facilities for such public institutions/agencies as the New York City School Construction Authority (NYCSCA), State University of NY (SUNY), and City University of NY (CUNY), as well as private schools; transportation projects for MTA NYCT, MTA Metro-North, MTA LIRR, NJ Transit, and Port Authority of NY & NJ (PANYNJ). He has also provided his expertise for healthcare, hospital, and R&D facilities; commercial construction and office buildings including NYC's World Financial Center and World Trade Center; courthouses and correctional facilities; as well as alterations and renovations for a variety of clients.

PANYNJ, Architectural, Engineering, and Interior Design Services for Offices at 4 World Trade Center, New York, NY: Chief MEP Estimator responsible for cost estimating and scheduling services for the new corporate offices of the Port Authority of NY & NJ, consolidating about 1,700 Port Authority staff from multiple buildings in Manhattan and New Jersey in one central location at 150 Greenwich Street in Manhattan. The offices will cover approximately 15 to 20 contiguous floors, 1 podium floor (approximately 35,000 square feet located on the retail level to include a cafeteria, conference center, and an emergency command post), and 1/3 of the subgrade space in the new World Trade Center - Tower 4 Building. In compliance with current PANYNJ sustainability objectives all office buildings will comply with the World Trade Center Sustainable Guidelines, leading to a LEED gold rating.

PANYNJ, Path Christopher Street and 9th Street Station Entrances, Jersey City, NJ: Chief MEP Estimator responsible for cost estimating services to the design team at the conceptual design stage for the preparation of an analysis report for both stations and conceptual design for a new station entrance at the 9th Street Station through the Fontana Center building. The logistically-challenging proposed new 9th Street Station entrance includes an underground mezzanine tunnel over the existing PATH lower-level platform tunnel. The scope involved extensive utility relocation; maintenance and protection of traffic; Fontana Building substructure and structural work; as well as vertical ingress/egress elements.

PANYNJ, World Trade Center Final Streets and Surfaces, New York, NY: Chief MEP Estimator responsible for providing design-development cost estimating services for the construction the Final Streetscape for the entire World Trade Center Site.

Walter Fitzer, continued

PANYNJ Architectural Call in Services for 2007-2010, New York, NY: Chief MEP Estimator responsible for providing cost estimating and scheduling services for the fit-out of Authority offices located at 115 Broadway and 116 Nassau Street in Manhattan.

MTA/Design and Technical Services for Security Capital Program On "Task Order" Basis, New York, NY: Chief MEP Estimator responsible for cost estimating services for engineering design and technical services for the MTA security improvement capital program. Services include risk and vulnerability assessments, development of a security program and security design guidelines, engineered solutions for threat mitigation, cost/benefit analyses of alternative mitigations, conceptual design, design development, final design, contract document preparation including drawings and specifications, preparation of project phasing plan and cost estimates, value engineering, and pre- and post-construction contract award services for a variety of security projects.

PANYNJ, World Trade Center Tower One, New York, NY: Chief MEP Estimator responsible for cost estimating and project cost control services for the 3-million square-foot Tower One at the World Trade Center site. Services include assisting the Project Program Manager with independent estimate preparation for trade bid packages; bid reviews; estimate preparation for bulletins, addenda, and change orders; and tracking and updating budget costs.

PANYNJ Architectural Call-In Services, NY/NJ: Chief MEP Estimator responsible for providing cost estimating services on an on-call basis for this "call-in" contract for PANYNJ. Tasks included the renovation of the Goethals Bridge Administration Building for which existing documents and assessment report were reviewed; assisted in determination of initial SF cost for alternatives; reviewed 50% and 100% drawings and prepared construction cost estimates, including list of unit price items with estimated quantities.

PANYNJ, World Trade Center Towers 1 and 2, New York, NY: Chief Mechanical/Electrical Estimator responsible for change-orders for MEP tenant work and lobby finishes.

PANYNJ, 7 World Trade Center, New York, NY: Chief Mechanical/Electrical Estimator responsible for provision of present-day replacement costs of HVAC, plumbing, and fire protection work for core and shell and tenant fit-out for insurance purposes.

PANYNJ, JFK International Airport, Queens, NY: Chief Mechanical/Electrical Estimator responsible for complete MEP requirements at new arrival gates at Terminals 1 and 4, including all conveyor systems.

NYSOGS, Life Safety Services Term Contract, State of New York (S3014): Chief MEP Estimator responsible for providing cost estimating services as-needed on this statewide life-safety term contract.

NYC Metropolitan Transportation Authority, Amtrak, and NJ Transit Rail Transit Experience, NY and NJ: Chief Mechanical/Electrical Estimator responsible for cost estimates for the following:

- MTA LIRR, Air Conditioning Upgrades
- MTA LIRR, Ventilation Studies, Track Level
- MTA NYCT, 72nd Street Subway Station - Site Utilities and Interior Upgrades
- MTA Metro-North, Grand Central Terminal Building Modifications - Interior and Track Work
- NJ Transit, Montclair Connection, New Light Rail
- Amtrak, James A. Farley Post Office Building/ Penn Station Redevelopment, NYC

Resumes of Key Personnel
G2 Project Management

Christine Glavasich

Project Role: Senior Cost Estimator

Firm
G2 Project Planning

Education
MBA, Baruch College, Zicklin School of Business, CUNY, New York, NY, 1997

BA, Monmouth University, West Long Branch, NJ, 1984

Professional Associations
New York Building Congress
Association of Real Estate Women

Experience
Years with G2: 12
Years with other firms: 14

Employment History
1998-present: G2 Project Planning, Inc., President/Sr. Estimator/Project Manager

1988-1998: Hanscomb Associates (Currently Faithful & Gould), New York, New York – Sr. Estimator/Project Manager

1984 – 1988 – NICO Construction Company, New York, New York – Estimator/ Assistant Project Manager

Christine Glavasich has over 20 years experience providing construction estimating and scheduling services to Architects, Engineers, Construction Managers and Owners. Her experience includes comprehensive construction cost management, scheduling, and value management. Her project cost consulting experience is comprehensive. Prior to founding G2, Ms. Glavasich was employed by Hanscomb Inc., where she provided construction cost management and consulting services to architects, engineers and owners on a wide variety of projects in the public and private sectors.

Ms. Glavasich also gained considerable experience in the construction contracting environment while engaged in detailed cost estimating, competitive bidding, purchasing, project accounting and administration, project controls, and project management for a large general contracting and construction management firm. She is versed in working on behalf of the Owner/ Architect and with major construction management and contracting firms --- providing estimate reconciliation between Owner/Architect and CM, as well as costing out alternative solutions when designs exceed budgetary limitations.

Her relevant project experience includes, but are not limited to:

Amtrak Arrivals Concourse Extension, Washington Union Terminal, Washington, D.C.

St. George Ferry Terminal/Intermodal Station Rehabilitation, Staten Island, New York

MTA/NYC Transit:

- Manhattan East Side Transit Alternatives Study (2nd Avenue Subway), Phase 2
- Rehabilitation of the Times Square Subway Station
- Rehabilitation of Three Elevated Stations on the Jerome Ave. Line, Bronx, NY
- Rehabilitation of the 14th Street and 7th Avenue Subway, New York, NY
- Columbus Circle Stations, Hearst Corporation ADA and Circulation Improvements
- 3-Year Indefinite Quantity Contract, Functional Planning and Engineering for Miscellaneous Engineering Projects

MTA/Metro-North Railroad

- Croton-Harmon & Peekskill Station Improvements
- Rye & Portchester Station Improvements
- Grand Central Terminal Water Conveyance Utility Improvements
- Grand Central Terminal Kit Room Expansion
- Site Assessment – New Office Space within Grand Central Terminal
- Upper Harlem Line Station Improvements

Christine Glavasich, continued

- New Parking at West of Hudson Stations
- New Parking at Irvington, Greystone and Sputen Duyvil
- Grand Central Terminal, Elevator Upgrade Project
- New Penn Station/James Farley Building Restoration/New Penn Station, New York, New York
- Grand Central Terminal Restoration Project, New York, New York – Change Order Review on behalf of Owner and Developer (MTA/Metro-North Railroad and Jones Lang LaSalle)

Brett Harlow

Project Role: Senior Cost Estimator

Firm
G2 Project Planning

Education
Fairleigh Dickinson University, Teaneck, NJ

Master of Science Mechanical Engineering 1990

Bachelor of Science in Applied Sciences and Engineering, United States Military Academy at West Point,1979

Registrations
New Jersey Master Plumbers License – Various States and Localities, including NY, NJ and VT
Professional Engineer Certificate State of Virginia (1984)
Engineer Officer Advanced Course

Experience
Years with G2: 12
Years with other firms: 11

Employment History
2000-present: G2 Project Planning, Inc., Sr. Estimator

1994 to 2000: Sordoni Skanska, Parsippany, NJ – Chief Mechanical Estimator

1993 to 1994: Bonland Industries, Wayne, NJ – HVAC Estimator

1984 to 1993: D'Onofrio Plumbing and Heating Corporation, Spring Valley New York – Project Manager

1979 – 1984 – U.S. Army, Achieved rank of Captain, U.S. Army Corps of Engineers

Brett Harlow has over 30 years experience as an estimator and project manager for Plumbing, Fire Protection and HVAC trades. In addition, he has owned a mechanical contracting firm and is a licensed plumber in the states of New York, New Jersey, Vermont and New Hampshire. He received his P.E. license in 1984 in the state of Virginia.

Brett graduated from the United States Military Academy at West Point with a B.S. degree in Applied Sciences and Engineering and went on to receive a M.S. in Mechanical Engineering from Fairleigh Dickenson University in New Jersey.

His representative project experience includes, but is not limited to:

- SUNY Old Westbury: New Academic Building, Student Center Renovation, and New Central Plant Alternatives Analysis
- Bronx Community College, Boiler Replacement Alternatives Analysis
- William Patterson University, Science Complex Renovation
- SUNY Albany, Mechanical Systems Upgrade
- SUNY Downstate University Hospital, Renovation & Addition Master Plan
- Rockefeller University, Welch Hall Renovation
- Museum of Natural History, New Graduate Center
- MTA/Metro-North Railroad, Grand Central Terminal Water Conveyance Utility Rehabilitation
- Alpharma R&D Suite Renovation, Piscataway, New Jersey
- Summit Medical Building, Summit, New Jersey
- Ramapo College Athletic Center, Mahwah, New Jersey
- Sanofi Aventis Bldg 400 Fitout, Bridgewater Crossings, New Jersey
- Garfield Middle School, Garfield, New Jersey
- Fairfield Municipal Bldg. Fairfield, NewJersey
- Kean University Nancy Thompson Library Institute for Human Rights, Union, New Jersey
- Rutgers College of Nursing, New Brunswick, New Jersey
- South Jersey Technology Park, Glassboro, New Jersey
- Teaneck Community Charter School
- Kean University Wilkins Theater, Union, New Jersey

Michael Mainella

Project Role: Senior Cost Estimator

Firm
G2 Project Planning

Education
BS, Electrical Engineering, State University of New York at Buffalo, 1987

Registrations
PE: NY, 1991, Registration No.: [redacted]

PE: Maine, Registration No: [redacted]

Professional Associations
IEEE
NFPE

Experience
Years with G2: 12
Years with other firms: 11

Employment History
1998-present: G2 Project Planning, Inc., Sr. Estimator

1995-1998: Action Electric, Queens, New York, Estimator/ Project Manager

1990-1995: Cashin Engineers, Plainview, Long Island, NY, Estimator/Project Manager

1987-1990: Levinson Electrical Contractors, Electrician

Mr. Mainella is a registered Professional Electrical Engineer who has gained substantial field, design and estimating experience during his career. His expertise has been obtained through working for both electrical contracting organizations as well as engineering consulting firms. His skills include conceptual and detailed cost estimating for electrical work, CPM scheduling, change order and progress payment negotiation, feasibility studies, value engineering, claims analysis, as well as design reviews and constructability analysis. In addition, his experience as an electrical engineer has included design of electrical systems and the preparation of contract documents for renovation and new construction of office and judicial complexes, service buildings, garages, and health care facilities.

His representative project experience includes, but is not limited to:

- MTA/NYC Transit, Grand Central Station – Power and Lighting Upgrade, New York, New York
- MTA/NYC Transit, Power and Lighting Upgrade Projects at Various Subway Stations, NY, New York
- MTA/Metro-North Railway, Grand Central Terminal Water Conveyance Utility Rehabilitation
- MTA/Long Island Rail Road, Maintenance Facility Project, New York, New York
- Century Condominium – Electrical System Upgrade, New York, New York
- JFK Airport, International Arrivals Building Electrical Rehabilitation Project, New York, New York
- Poletti Power Plant Rehabilitation, Queens, New York
- Con Edison Power Plant Rehabilitation, 14th Street, New York, New York
- Nassau County Sewage Pump Stations and Peekskill Raw Water Pumping Station, Peekskill, New York
- AT&T – Bedminster, NJ – Corporate Fit-out with extensive data requirements
- IBM – Rochester, New York – Data Center
- IBM – Armonk, New York – New Corporate Headquarters
- IBM – Poughkeepsie, New York - Computer Room Hardening

Resumes of Key Personnel
Industria

Christine Collins

Project Role: Assistant Project Manager

Firm
Industria

Education
Bergen Community College, A.A.S. Degree, Awarded May, 2007

Gibbs College, Montclair, NJ, Executive Assistant Certificate, Awarded 1998

Experience
Years with Confidential: 2
Years with other firms: 12

Employment History
2008- Present: Accounts Payable/Receivable

Ms. Collins is a problem solving Assistant Project Management who is a self-starter and works well with others, possessing extensive knowledge in construction management administration on a variety of successful public and private projects with a focus in bidding, insurance procurement, cost control, shop drawing/submittal management using Primavera Expedition, AIA software and QuickBooks software with a proven track record of working well with others in a high stress project environment.

Company Confidential, Lyndhurst, NJ: Accounts Payable/Receivable Specialist: Collecting cost data from the field and subcontractors to assemble and process payment applications and invoicing. Responsibilities include insurance procurement and management of records, accounts receivable and assisting in accounting input for company projects.

Candor Construction Group, Inc., Elmwood Park, NJ: Assistant Project Manager/Contract Administrator: Responsible for purchasing, bidding, procuring bonding and establishing on-site facilities for project management team working with senior Project Managers. Directly responsibilities included managing project RFI's, preparing and processing sub-contacts, invoicing, meeting minutes, support weekly "critical action items list" review, negotiated change orders/work orders, processed T & M tickets and punch list review and resolution as well as followed up on all project documentation and maintaining standard procedures.

RSM Construction Services, Inc., Lodi, NJ: Assistant Project Manager: Worked on a variety of interior fitout retail projects providing support to the company President/CEO working as liaison between company senior executives and client, subcontractor principals and associated venders. Responsibilities included change order control and processing, contract maintenance and enforcement, estimating/bidding, material purchase and logistical support for project site deliveries and equipment installation through project closeout and final payments.

$ 50 Million United Airlines Cargo Transfer Facility, Newark Airport Newark, NJ: Sr. Administrative Assistant: Directly responsible for contract administration and general office support to the Project Management Team on a fast-track cargo facility. Responsibilities included budget cost control and change order management, shop drawing submittals, assisted in the development and monitoring of the MBE/EEO plans, schedule submittals, meeting minutes and worked closely with Project Executive and client's representative, including the United maintenance and ground personnel during construction, through phased move-in to ensure an operational facility during turnover phase.

$830 Million Continental Global Gateway – EWR Terminal C Expansion: Assistant Project Manager: Responsible for assembling and managing numerous bid packages for processing on fourteen (14) projects at Newark Airport in coordination with subcontractors, project architects and engineers, in addition to processing shop drawings, technical submissions and payment applications, and

Christine Collins, continued

monitored MBE/WBE/EEO requirements with subcontractors. The project was performed on a fast-track basis working in a high pressure environment.

SGS Control Services, Rutherford, NJ: Branch Manager Assistant: Worked with Branch Manager in support of sales and marketing team, processed marketing reports and formulated monthly financial analysis preparing client cost reports.

Sheketa M. Daniels

Project Role: Senior Administrative Assistant

Firm
Industria

Education
Taylor Business Institute

Registrations/Certifications
Executive Secretarial Science

Experience
Years with Team Support Services, Inc: 7
Years with other firms: 21

Employment History
2001- present: – Sr. Administrative Assistant

Ms. Daniels has formal executive training and has extensive experience working for a variety of high level executives in a Fortune 500 company prior to working in the same capacity on large scale construction programs on Port Authority facilities. She possesses the knowledge coupled with her experience on how big dollar programs operate and has demonstrated her ability to team with departments within a large organization to efficiently bring critical items to focus for executive review and action on a daily basis. In addition, she is proficient in MS Word, Excel, Power Point, Publisher, Outlook and the Internet.

Various PANYNJ Projects: Newark Redevelopment Program, Newark Liberty International Airport, Newark, NJ

Senior Administrative Assistant/ Office Manager: Reported directly to the Port Authority Program Director, Assistant Program Director and Program Managers on the $3.7 Billion Newark Redevelopment Program. Responsible for administrative project management support, project correspondence and records, extensive calendar management, and coordination of content for report publishing, assisted with presentation preparations, preparation of security clearances for the issuance of airport security ID's and maintaining confidential files. Processed project invoices for submission to Port Authority Accounts Payable. High degree of accountability, accuracy and attention to detail essential in this position. Assisted with special projects and ad hoc requests as needed.

General Motors Corporation, Cadillac Motor Car Division, Parsippany, NJ

Senior Administrative Assistant, Product Distribution: Responsible for the administration of the company vehicle inventory (approximately 1,100 vehicles annually). Responsible for assigning/rotating/disposing of company vehicles for GM executives, GM Board of Directors, GM Field Employees and Celebrity promotional placements. In addition, responsible for coordinating the rotation, plating and maintenance of Cadillac Courtesy Vehicles assigned to Newark Liberty International Airport. Assisted Marketing Director with all Marketing, Special Events and Promotional activities (New York Auto Show, U.S. Open, PGA, NFL Golf, Fashion Week, and other promotional events in the Northeast Region). Responsible for administering the Employee Purchase Program in the Northeast Region. Prepared correspondence, reports and presentations using MS Office software. Responsible for coordinating Regional Distribution activity with the General Motors field staff.

Cadillac Motor Car Division, General Motors Corporation, Parsippany, NJ

Mediation Specialist: Responsibilities included the coordination and scheduling of all mediation/arbitration activity with area Better Business Bureaus, American Arbitration Associations, GM attorneys, GM District Sales and District Service Managers for the Northeast Region. This required direct telephone and written contact with retail customers for problem

Sheketa M. Daniels, continued

resolution. I was the liaison for General Motors Dealers, Central Office staff, GM attorneys and outside mediation/arbitration associations to resolve complaints and/or complete arbitration/mediation awards within required time limits in accordance with company policy. Responsible for maintaining the Regional Calendar of Hearings for the Northeast Regional Field Staff. Responsible for generating checks for monetary settlements/awards, in addition to coordinating repair awards with GM dealerships. My duties included all related correspondence and records maintenance.

Cadillac Motor Car Division, General Motors Corporation, Parsippany, NJ

Secretary to Customer Relations Manager – June 1984 – January 1986

Responsible for maintaining the open complaint database and interacting with the field staff of District Service Managers and District Sales Managers to achieve customer satisfaction and timely case closings. Responsibilities included publishing Regional itineraries for all office and field personnel. Routinely assisted management with quarterly status meetings by making travel arrangements, selecting the menu, arranging ground transportation, assisting in preparing the presentations and handouts, and auditing and paying the bills. Maintained detailed work schedules, vacation/attendance records and confidential files. Responsible for all word processing and records maintenance for the department. Assisted with special projects and assignments as needed.

Joseph A. Madonia

Project Role: Senior Project Manager

Firm
Industria

Education
BS, Civil Engineering - Marquette University, 1982

Professional Associations
American Society of Civil Engineers (ASCE)

Project Management Institute (PMI)

General Contractor Association (GCA)

Experience
Years with Industria: 3
Years with other firms: 23

Employment History
2007- present: Industria, Inc. – Sr. Project Manager/Chief Estimator

Mr. Madonia is a Civil Engineer with extensive experience in Project and Construction Management of new and rehabilitated public and private buildings as well as transportation facilities and bridges. His extensive experience as a Project Manager and Chief Estimator in both the public and private sectors, as well as his work experience overseas, has led to the successful completion of a wide variety of major highrise/lowrise corporate office and condominium buildings, public buildings (i.e., schools, park facilities, parking structures, libraries), and industrial and transportation projects.

Berger Design Studios, Mondial River West; 910 West Huron Street, Chicago, Illinois: Sr. Project Manager. Responsible for preparing the schematic and detailed cost estimates and baseline schedule for the hard bid $40 Million, 15 story, 142 unit condominium complex with parking garage, including 2000 SF of retail space. Responsibilities included preconstruction services through construction/closeout, including contract buyout, sub-contract preparation and execution, cost control/payment invoicing, schedule development and monthly update submissions, change order/claims negotiation and resolution through successful project turnover.

Richard Goldman & Associates, Union Point Condominiums, Milwaukee, Wisconsin: Division Manager/Sr. Project Manager. Responsible for a $9.5 Million multi-use, 71 unit condominium complex that included 2 levels of enclosed parking and five (5) levels of condominium units and 15,000 SF of ground floor retail space. Responsible for project development through construction including subcontractor buyout and coordination, management of overall budget and schedule sequence for early phased turnover of residential units in coordination with Owner's leasing plan.

USA Navy, Great Lakes Naval Station Farragut Avenue Bridge, Great Lakes, Illinois: Sr. Project Manager on the $3.2 Million 300 ft steel bridge project that included the demolition of the existing bridge. Directly responsible working with the design team and Navy personnel in the planning and execution of the project including all site work, utilities, signage, environmental protection methods through the construction of the bridge foundations (cofferdams), steel superstructure and roadway work.

Multiple Selective Projects

As Vice President/Operations Manager for Buckeye Construction direct responsibilities included hiring staff to manage the projects listed below from bidding and proposing on work (sales), to setting up staff to manage simultaneous ongoing projects for various owners. Key responsibility for company division payroll, insurances, construction equipment leasing, and company project staff in the division, in addition to overseeing the below listed projects.

- **$2.2 Million, 20,000 SF, 2 story facility:** Boys & Girls Club, Chicago, Ill.
- **$2 Million Pace/UPS Bus Terminal w/200 ft canopy:** Pace Trans/UPS, Chicago, Ill.
- **$5 Million, 30,000 SF University of Chicago facility renovation:** UIC, Chicago, Ill.
- **$250,000, 1,500 SF University of**

Joseph A. Madonia, continued

Chicago In Patient Dialysis Unit: UIC, Chicago, Ill.

- **$4 Million, 50,000 SF University of Chicago School of Art Bld:** UIC, Chicago, Ill.
- **$700,000, 5,000 SF View Optical Center (high end build out):** UIC, Chicago, Ill.
- **$3 Million, Morton College Exterior Renovation:** Morton College, Chicago, Ill.
- **$500,000, 10,000 SF Mossner Blue Printing facility:** Mossner, Chicago, Ill.
- **$1 Million, 5,000 SF Addition/45-day fast-track renovation:** Sunnydale Elementary School
- **$700,000, 15,000 SF fast track renovation:** Bartlett Elementary School

Multiple Selective Projects

Vice President of the Construction Division for G. F Structures, Chicago, Ill., with direct responsibilities including managing staff on a variety of projects listed below from bidding/proposing on work (sales), to developing and oversight including budget and estimates, bidding and purchasing, scheduling, processing of payment applications, change order management, claims control and mitigation through the project closeout process.

- $2 Million, 40,000 SF Office Complex Expansion: City of Chicago, Chicago, Ill.
- $2.8 Million, 20,000 SF Chicago Public School Yates Annex: Chicago, Ill.
- $3 Million, 3 Chicago Public School Science Lab Renovations; Chicago, Ill.
- $3.8 Million, 11 Chicago Campus Parks: Public Building Commission, Chicago, Ill.
- $2 Million, Seward Park Reconstruction: Chicago Park District, Chicago, Ill.

Multiple Selective Projects

As a Sr. Project Manager for Schal Bovis managed a staff of (6) Project Managers and five (5) superintendents for the oversight and direct Management of new construction projects using constructability reviews, cost control, scheduling, phasing and logistical planning and other appropriate tools to balance cost, schedule and quality. Primary responsibilities include preparing detailed project budgets, at all levels of documentation, with Value Engineering services to ensure owner/ architect budgets are maintained throughout the preconstruction process, bidding of new projects, document control, cost control, safety, scheduling and project closeout.

- $1 Billion new construction capitol improvement program for Chicago Public Schools
- $350 Million Sears Merchandise Group Headquarters
- $150 Million Harold Washington Library
- Perform Assessments for code and licensing of 100 Head Start and 50 Homeless
- Shelters for City of Chicago Department of Human Services.
- Construction Management for 6 new City of Chicago Public Libraries
- Construction Management of Head Start and homeless shelter renovations for City of Chicago Department of Human Services.

Multiple Selective Projects

Played a key role as Project Manager with Pepper Construction with direct responsibilities for conceptual estimating, pre-construction cost models and budgets, design development estimating, value engineering and lump sum bidding, subcontractor awards, project scheduling, document control, cost control risk management, safety and project close-out.

- $25 Million 300,000 sf 5 story Embassy Suites Hotel Parsippany NJ.
- $95 Million fast track renovation of Chicago Hilton and Towers
- $2 Million, 2M gallon per/day chilled water treatment plant Saudi Arabia
- $1 Million women's clinic Saudi Arabia
- $2 Million 40,000 sf renovation of Skill Corporate Headquarters

Sharon Quinn

Project Role: Project Manager

Firm
Industria

Education
BS, Business Administration – Bloomfield College, NJ

Professional Associations
Project Management Institute (PMI)

Construction Management Association of America (CMAA)

Experience
Years with Bovis Lend Lease: 7
Years with other firms: 23

Employment History
2003- present: Bovis Lend Lease – Sr. Project Manager/Chief Estimator

Ms. Quinn possesses 28 plus years of Project Management experience working in a variety of significant roles on large scale projects that includes Project Manager, Risk Manager and Project Closeout Manager with a focus primarily in Risk Management on high risk projects, during the past several years. She played a key role in the initial set up and essentially the final closeout of high profile construction development programs, collaborating closely with the Project Team including clients/owners, subcontractors, venders, sureties, attorneys, insurance representatives, including workman's compensation and disability representatives, union representatives, medical professionals, successfully establishing a strong reputation in Project/Risk Management on highly complex and large dollar/volume construction programs.

PANYNJ World Trade Center Transportation Hub, New York, NY ($1.5 B): Risk and Closeout Project Manager: Instrumental In developing various Joint Venture project Management Standard Practices and Procedures that included contracting, risk, insurance, bonding, records and information management and project turnover/closeout processes in collaboration with PANYNJ policies and procedures on the new WTC Transportation Hub. Directly responsible for the daily operation and management of the Project Risk and Closeout Departments.

GSA-US Federal Courthouse, Brooklyn Cadman Plaza Project, NY ($750 M) & GSA-US Post Office Facility-, Brooklyn Cadman Plaza, NY ($625 M): Developed, implemented and managed the Standard operating Procedures for contracting, records and information management, risk, bonding, insurance and closeout in coordination with GSA (FAR) Federal Requirements including review of all project SOP's to identify and mitigate potential contract and operational risk, addressed insurance requirements in conjunction with project scope, certificates of insurance, managed onsite OCIP, CCIP, wrap-ups and offsite insurance programs, claimant case management, coordination with Safety Team requirements and compliance guidelines. Project management responsibilities included pre-construction, contract administration, budget, schedule and cost control support, subcontract payments, change order processing, review/monitor submittals, shop drawings, RFI's, change order proposals and facilitate subcontractor closeout working with a project staff.

Continental Global Gateway Program ($950 M), Newark Liberty International Airport, Newark, NJ: Sr. Project Manager: Established Project Procedures manual for Risk Management, insurance, bonding, project turnover and closeout and records and information management. Directly responsible in developing procedures and guidelines that complied with airport operational concerns and FAA, while working with PANYNJ and Continental Airlines policies and procedures.

Asia Society Project,Columbia University Project, Lenfest Hall Project, NYU Palladium, NY: Sr. Project Manager: Developed Corporate Standard Operating Procedures for a variety projects for Program

Sharon Quinn, continued

Management, Risk Management, Closeout performing monthly audits on all contracts working with program management team to confirm and enforce global compliance of Corporate Standard Programs.

Plati Sanitation Waste Management – South Hackensack, NJ: Chief Executive Officer: Developed a sustainable waste management corporation responsible for implementing a strategic business plan meeting the inherent challenges of the waste industry. Responsible for every facet of the business that included marketing, overall business operations and processing all company financials working with CFO. Directed and developed a Materials Separation Plant that enhanced internal and external business operations of the company that was recognized as a major milestone that increased profitability of the company and reputation within the industry as a full service waste company.

PANYNJ Newark International Airport, Newark, NJ: Facility Property Representative. Responsible for the coordination and management of airport wide Tenant Alteration Applications (TAA's) working with individual tenants performing condition surveys and of facility leased premises throughout the terminals. Responsibilities included negotiation of spaces with new and existing tenants, PA Board item preparation and turnover of new spaces with PA Construction Division.

Kathleen Wittrock

Project Role: Senior Administrative Assistant

Firm
Industria

Education
Union County College

Experience
Years with St. John: 5
Years with other firms: 12

Employment History
2005 – Present - John the Apostle School – Administrative Assistant

Ms. Wittrock is a Sr. Administrative Assistant with strong organizational skills and possesses a proven ability to effectively manage multi-task responsibilities complimented by strong interpersonal and communication skills. With significant experience on past program and construction management projects, she is knowledgeable of Port Authority procedures and protocol, and is proficient on the computer with a focus on Microsoft Word, Excel, Power Point, Access and File Maker.

PANYNJ, Redevelopment Program & Capital Projects, Newark Liberty International Airport, Newark, NJ: Administrative Assistant to Aviation Department: Responsible for prioritizing and organizing daily work load, coding and processing a high volume of correspondence, updating weekly and monthly reports, maintaining files, processing confidential information, calendar management, processing monthly payment applications on a variety of airport contracts, coordinating efforts and responsibilities with other airport engineering field offices.

St. John the Apostle School: Secretary to the Principal. Performed various secretarial duties for the Principal and teachers, including student and facility daily attendance, monthly calendar management for school activities, prepared archdiocese annual reports, maintain annual and new student registration, worked closely with Parent Facility Guild, organized and prepared school supply orders in addition to other clerical duties.

Federal Aviation Administration, Federal Aviation Association Credit Union, Clark, NJ: Board Liaison/ Secretary. Performed various secretarial duties for the Chief Officer, Board of Directors and Staff. Responsibilities included organization of board meetings, schedules and correspondence coordinating among different branches.

Hosokwa Micron Powder Systems, Summit, NJ: Administrative Assistant. Position required comprehensive typing assignments in a demanding work environment. The work also included working as an Assistant to the Manager of Domestic Sales responsible for coordinating project activities; maintenance of interdepartmental communications; organization of management meetings and preparation of presentation materials, travel arrangements, etc.

United States Gypsum Company, Clark, NJ: Human Resource Secretary/ Accounts Payable Clerk/Secretary-Receptionis. Held three (3) positions during a three (3) year period, in addition to general secretarial duties including scheduling of interviews, processing employee payroll, coordinating employee health benefits, processing of shipping and receiving invoices, and extensive organizational activities.

Resumes of Key Personnel
NIA Technologies Corporation

Linda Fox

Project Role: APM/Expedition Specialist

Firm
NIA technologies Corporation

Education
Construction Project Manager Certification Program - New York University in 2000

Construction Methods and Materials for Building Interiors Course in 2006

OSHA 10 Hour Construction Course in 2007

Total Years of Experience:
years with NIA: 3
years with Other Firms: 7

Employment History
2007-present, NIA, Project Supervisor

2003 – May 2004, Outsource Consultants, New York, New York

July 2002 - Feb.-2003, Code, LLC- New York, New York

Ms. Fox has more than 10 years of experience in project APM and expedition. She possesses excellent communication and organizational skills and always pays attention to detail and follow through to meet deadlines. Ms. Fox is a problem solver and always able to develop creative solutions. She has strong Primavera Products Experience

Her relevant experience includes:

Project Supervisor December 2007 – February 2009:

Fully accountable for the timely completion of final punch lists by all sub contractors

- Conducted walk throughs with property owners, The O'Connor Group, for sign offs of approved units
- Co-ordinate with the property owners the completion dates for units, for client closings
- Responsible for meeting with all sub contractor foreman to discuss progress on completing units
- Fully responsible for all aspect of a 10-unit upscale condo building in Brooklyn, NY
- Directing and overseeing all work performed by all sub contractors
- Responsible for providing to building owner all financial information for bank loans
- Point person for all inspectors through all aspects of building inspection process
- Manage and co ordinate all suppliers delivery timing for ordered materials
- Interior Supervisor & Project Coordinator
- Managed all aspects of two 16- unit condo buildings and one 53-unit condo building, taking it from the interior construction through all inspections including the Certificate of Occupancy.
- Assisted in supervising interior work in one 82-unit condo building and one 52-unit building, also to its completion.
- Conducted clients walk throughs and completed units to their satisfaction.
- Responsible for punch listing all areas of the building and ensuring completion of all work from all sub contractors.
- Excels in management of in house diverse labor force with proven positive results.

Outsource Consultants, New York, New York, Nov. 2003 – May 2004

Project Expediter

Responsible for attending appointments with Department of Buildings Examiners to get required initial project approval.

Perform all daily Department of Buildings related tasks.

Conduct project walk thru's for client (architect / engineer) for final sign off.

Attend court appointments at Environmental Control Board to negotiate violations against property dismissed.

Co-ordinate all project aspects to obtain a Certificate of Occupancy

Code, LLC- New York, New York,July 2002 - Feb.-2003

Linda Fox, continued

Project Manager, Certificate of Occupancy

- Co-ordinate all project aspects to obtain a Certificate of Occupancy.
- Preparation of Certificate of Occupancy applications and all related forms required by the Department of Buildings.
- General CO research including violation dismissal and filing of Post Approval Amendments required for sign off
- Conduct project walk thru's and building inspections with clients and Department of Buildings personnel.
- Follow up with the construction, plumbing and elevator divisions at the Department of Buildings, and contact with the Bureau of Electrical Control, for releasing required signoffs.
- Maintain regular contact with client, (architect / engineer) regarding project progress

Fonti & Associates, LTD – New York, New York
Dec. 2000 - Nov 2001

Project Co-Coordinator at Trump/New World

- Create and update punch lists for interior details of Hudson Waterfront and Trump / New World jobsite.
- Responsible for interior project completion for all owners including high end / celebrity clients.
- Monitor interior work progress of general contractor.
- Project Manager responsible for the timely completion of Tenant's Lounge and renovated various existing apartments.
- Work with and provided Architectural staff with necessary design modifications of interiors.

The Stegla Group – New York, New York
Feb. 2000- Oct. 2000

Project Coordinator

- Responsible for client/project finalization and satisfaction.
- Oversee sub-contractors in the completion of punch list items for various construction projects.
- Handle project closeout procedures.
- Maintain client and sub-contractor communication and co-ordination of change orders, submittals, material lead-time, delivery, manpower requirements and job site meetings

Desiree Fraser

Project Role: Contract Manager/Expedition

Firm
NIA technologies Corporation

Education
Brooklyn College, Certificate Program/Continuing Education: Administrative Assistant

New York City Technical College / CUNY: 300 Hours Certificate Program for Word Processing Specialist

Total Years of Experience:
years with NIA: 7
years with Other Firms: 3

Employment History
6/2007 - 12/2009, The Louis Berger Group –Expedition Specialist

10/2004-8/2006, J M. Brown Associates, Inc. – Project Administrator/Office Manager

Ms. Fraser has more than 10 years of experience in project administration and expedition. Being detail-oriented and with strong organizational skills, she can effectively handle multiple tasks simultaneously. She also possesses in-depth and hands-on experience with computer software such as, Primavera Products, Strong Expedition (Pos, COR's, PCO's OCO, CO;s Trend, RFI's, RFP's & Microsoft skills, LiveLink.

Her relevant experience includes:

The Louis Berger Group –Expedition Specialist, 6/2007 - 12/2009

Document Control Department/General Office duties

- Stamp and record via Expedition all correspondence received
- Generate correspondence received transmittal via Expedition
- Distribute to Program Managers/ Project Managers copies of all correspondence received
- Prepare transmittal via Expedition for all correspondence sent out.
- Generate Inter-Office transmittal via Expedition for all Memorandums
- Monitor, file all DDP/PM RFI responses when closed.

Builders Group – Project Administrator, 8/2006-5/2007

- Assistant to the President, Vice President & Project Manager
- Processing Proposals, Contracts, Bid Documents and correspondences
- Answer phones, Generate AWA's, RFP's, Purchase Orders etc
- Generate Requisition for payment (Expedition & Excel), Filing etc
- Communicate with Subs with reference to projects
- Prepare monthly status report for Client
- Assist with Job Training in Expedition
- Scanned and filed through Expedition & DocuWare

J M. Brown Associates, Inc. – Project Administrator/Office Manager,10/2004-8/2006

- Assistant to Project Executives, Project Managers & Asst. PM's
- Process Owner Contracts via Expedition
- Prepared Subcontractor Contracts via Expedition
- Distributed Contract Cost Documents
- Generated PCO/CP via the Expedition Change Management Module
- Generated OCO through Change Management
- Process Trends
- Typed meeting minutes, letters, etc.
- Communicated with Subcontractors re: Insurance documents & project requirement.
- Assisted with job training for Expedition use.

Desiree Fraser, continued

Builders Group – Administrative Assistant, 6/1997-2004

- Assistant to the President, Vice President & Project Manager
- Typed Proposals, Contracts, Bid Documents and Letters
- Provide Telephone Assistance, Generated AWA's, RFP's Purchase Orders etc.
- Generated AIA Requisition for payment utilizing Expedition & Excel
- General Office duties
- Communicated project related document requirements with Subcontractors
- Prepare monthly status report for client
- Assisted with Job Training for Expedition use

H.P Builders Inc. - Senior Administrative Assistant, 11/1992-6/1997

- Supervise staff of 7
- Prepared job estimates and contracts
- Prepared Project reports, Business letters
- Prepared weekly payroll and bookkeeping

Jim Smith

Project Role: APM/Project Coordinator

Firm
NIA technologies Corporation

Education

Master of Science, Civil Engineering, Geotechnical Engineering/Construction Management, New Jersey Institute of Technology, Newark, New Jersey, 2006

Bachelor of Science, Civil Engineering, New Jersey Institute of Technology, Newark, New Jersey, May 2000

Licensure & Affiliations
Member of the American Society of Civil Engineers

American Water Association

Certified Municipal Engineer for the State of new Jersey.

10 Hour OSHA certificate.

Total Years of Experience:
years with NIA: 1
year with Other Firms: 10

Employment History
6/2004-4/2009,Assistant Project MEP, Manager/ Superintendent

5/2000-6/2004, PMK Group, Inc, Consulting & Environmental Engineers, Kenilworth, NJ, Staff Engineer,

Mr. Smith has 11 years of experience in civil engineering. His expertise includes: Auto Cad Land Development, Constructware, Primavera P3, MS office and Prolog.

His relevant experience includes:

Bovis Lend Lease LMB, Inc New York, NY

- Assistant Project MEP, Manager/ Superintendent, 6/04-4/09
- Responsible for successfully assisting in the development, review, approval and implementation of project budgets, schedules and contract bid documents.
- Assist with project control, contract administration, quality assurance, cost estimating.
- Monitor construction functions for MEP Systems, to ensure appropriate execution in accordance with contract specifications, schedule and budget.
- Responsible for identifying potential delays and taking appropriate action to eliminate or minimize their cause and impact to the project.
- Ensure that accurate and timely project documentation is maintained over the construction project life cycle.
- Responsible for ensuring contract compliance with technical, safety and administrative equipments of the contract.
- Negotiate, prepare, and execute change orders (proposals) between Bovis and owners and Bovis and subcontractors. Prepare CE's to the original budget as a result of changes and revisions to the work.
- Prepare technical reports detailing findings, recommendations and determinations.
- Assist with the monthly owner's progress reports, monthly pay applications, schedules and cost reports.
- Assist with the supervision and responsibility that the total construction effort is constructed in accordance with design, budget and schedule. Includes becoming familiar with client, owner, engineer, local authorities, building inspectors, and trade/subcontractor representatives.
- Attend progress meetings with contractors to help determine appropriate construction delivery systems and the most cost-effective plan and schedule for completing the project.
- Follow up with owner, architect, engineer, and trade/subcontractor to facilitate activities. Record meeting minutes at scheduled project coordination meeting.
- Have working knowledge of building systems and design. Able to understand contracts, plans, and specifications. Knowledgeable about construction methods, materials, and regulations.
- Responsible for site safety orientation..
- Assist with inspections for TCO, commissioning and closeout process.

Jim Smith, continued

- Assist with planning, coordinating and supervising of onsite functions (scheduling, engineering, material controls, etc), supervision of all MEPS trades and providing technical assistance (interpretation of drawings, recommend construction methods and equipment, etc). Constantly review field production, analyze and improve where necessary.

PMK Group, Inc, Consulting & Environmental Engineers, Kenilworth, NJ, Staff Engineer, 5/00-6/04

- Responsible for project documentation, interfacing with clients, local officials, engineers, contractors and other professionals.
- Responsible for site design and planning for residential and commercial developments, including residential subdivisions, shopping centers, office parks and age restricted apartments.
- Responsible for design of sanitary sewer systems, water distribution systems, storm water management facilities, land grading, roadway design, soil erosion control, and individual sewage disposal systems.
- Prepared lot calculations, vertical and horizontal roadway alignment (LDD), technical specifications, earthwork volume calculations, engineering reports, estimates, and quantity take-offs.
- Responsible for the preparation and approval of Federal, State, County and local regulatory agencies applications for environmental permits.

AECOM

Performance of Expert Professional
Project Management Services
as Requested on a "Call-In" Basis
During 2011, 2012, 2013 and 2014
RFP No. 22388

Section D. Relevant Experience

Section D. Relevant Experience

AECOM is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 51,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation, and technical excellence in delivering solutions that enhance and sustain the world's built, natural, and social environments. A Fortune 500 company, AECOM serves clients in more than 100 countries and had revenue of $6.3 billion during the 12-month period ended June 30, 2010.

Many of our assignments have been performed on a call-in, as-needed, task order basis. Our approach to such assignments has been to mobilize quickly, assess the exact nature of the project, determine what is necessary to perform the work and carry out the assignment on-time and on-budget to the client's satisfaction. AECOM is currently providing project management and support services to the Authority for the delivery of projects in the Capital Plan. AECOM staff has worked on a wide variety of assignments throughout the Authority, including all of the bridges and tunnels, and PABT. All of this experience, along with our current design effort for the WTC Transportation Hub and construction management support, gives AECOM an unrivalled familiarity with the Authority's facilities. Brief descriptions of the projects that summarize AECOM and Tishman Construction's relevant experience are presented below. Experience of our other subconsultants can be found in Section G M/WBE Participation.

PANYNJ Newark Liberty International Airport, Terminal A Program Management

Client: PANYNJ
Contact Person: James Heitmann
Title: Manager, Airport Facilities & Redevelopment
Phone/email: (973)961-6205; jheitmann@panynj.gov
Project Start/End: 2010-2013
Project Cost: $2.2 to $2.7 Billion

AECOM/Tishman has been selected by the PANYNJ to provide On-Call PM Services for the new Terminal A at Newark Liberty International Airport. The facility will be a state-of-the-art domestic facility that will be incrementally developed in response to forecasted demand. Phase I will be comprised of 33 Group III gates configured and sized to flexibly handle Group IV and V aircraft. Forecasted passenger demand for the Terminal is 11 Million Annual Air-Passengers (MAAP) in 2018. It is anticipated that the terminal will grow to a maximum of 45 Group III gates in two subsequent incremental expansions to meet the forecasted ultimate demand over the life of the terminal.

The estimated cost of the overall Phase I Program, which includes: a 33-gate domestic terminal; all required roadways; a 3000-space parking garage; all required utilities and infrastructure and associated enabling projects, is currently estimated at between $2.2 and $2.7 billion.

PANYNJ LaGuardia Airport Program Management and Planning

Client: PANYNJ
Contact Person: Warren Kroeppel
Title: General Manager
Phone/email: (718) 533-3401; wkroeppel@panynj.gov
Project Start/End: 1998-2003
Project Cost: $800 Milliion

AECOM's legacy company, DMJM Harris, was responsible for planning and program management of an $800-million program to modernize LaGuardia Airport. Major elements of this program included: new concourses in the Central Terminal Building; remain overnight aircraft parking positions; central heating and refrigeration plant, central electric substation; new facilities for maintenance of aircraft and ground service equipment; a consolidated cargo facility; an aircraft hydrant fueling system; an on-airport circulatory

roadway system; and a parking garage. As the prime consultant of a multidisciplinary team, DMJM Harris was responsible for:

- Establishing programmatic requirements for modernized concourses and replacement facilities
- Developing and evaluating conceptual design options for the concourses, including accommodation of passenger screening, in-line baggage screening, enhanced retail facilities and improved passenger circulation
- Maintaining a partnership with airlines at LGA through periodic program updates and presentations
- Developing construction cost estimates
- Preparing construction phasing plans
- Developing program implementation schedules
- Preparing an environmental processing strategy for each component of the program
- Conducting financial analyses

AECOM's legacy company DMJM Harris was instrumental in preparing program briefings to the Port Authority's Board of Commissioners, which resulted in the approval of Planning Authorization to advance this program.

We assisted in the management of the following projects:

- Police, Crisis Command Center and Aircraft Rescue and Firefighting (ARFF) Facility
- East End Roadway Improvements
- Roadway Improvements West of the CTB
- Variable Message Signs Upgrade
- Replacement of 102nd Street Water Main
- Parking Demand Study.

Tappan Zee Bridge Program Management

Client: NYSDOT
Contact Person: Michael Anderson
Title: Program Director
Phone/email [redacted]

Project Start/End: 2002-2012
Project Cost: $16 Billion

AECOM has been providing program management to the NYSDOT, the NYSTA, and Metro-North Railroad for major improvements to a 30-mile long transportation corridor centered on the Tappan Zee Bridge over the Hudson River. We are working closely with other consultants as an extension of the clients' staffs, coordinating and managing the programs' primary elements:

- Alternatives Analysis, Draft and Final Environmental Impact Statement (per NEPA/SEQRA),
- Engineering support activities, and
- Communication with project stakeholders and the public.

As Program Management Consultant, we are responsible for a wide range of engineering and management services for this program, including:

- Development of the project management plan
- Review of other consultants' work progress
- Quality management
- Project Controls/Scheduling
- Change management
- Property acquisition support
- Public outreach and participation

Chicago Transit Authority
Capital Construction Program Management Services, Chicago, IL

Client: Chicago Transit Authority
Contact Person: Christopher Bushell
Title: Chief Infrastructure Officer
Phone/email: [redacted]

Project Start/End: 2005-2010
Project Cost: $2.65 Billion

AECOM's legacy company, DMJM Harris, led a joint venture assisting the Chicago Transit Authority (CTA) in managing an extensive five-year capital construction program. This multibillion-dollar investment will renew existing CTA facilities, bringing them

to a state of good repair, and provide added capabilities to transit service. The construction program requires integration of multiple projects involving all elements of the CTA system.

Our role is to recommend proper management of the construction program, including identifying potential projects, prioritizing needed improvements, establishing individual project costs and implementation schedules, and integrating multiple projects into a coordinated implementation schedule.

Belt Parkway Bridges Program Management and Resident Engineering/Construction Inspection Services, Brooklyn, NY

Client: New York City Dept. of Transportation
Contact Person: Dan Hom
Title: Engineer-in-Charge
Phone/email [redacted]
Project Start/End: 2004-2011
Project Cost: $700 Million

AECOM's legacy company, DMJM Harris, is in joint venture to provide program management, resident engineering and construction inspection services to the NYCDOT for the reconstruction of seven bridges on the Belt Parkway in Brooklyn. AECOM legacy company, DMJM Harris, performed constructability reviews, scheduling, design, and construction and the implementation of a community outreach program. The resident engineering and construction inspection services will focus on overseeing the actual construction, to ensure the delivery of a quality project. Other important aspects of the project include environmental monitoring, such as lead and asbestos abatement and removal, and landscaping. The single most critical feature is the utilization of multi-stage construction, with the final horizontal alignment basically matching the existing highway alignment.

As such, the Maintenance and Protection of Traffic will be absolutely essential during construction.

Lincoln Center Redevelopment Program Management

Client: Lincoln Center Development Project, Inc.
Contact Person: Peter Flamm
Title: Director & Chief of Staff
Phone/email: [redacted]
Project Start/End: 2005-2009
Project Cost: $500 Million

In advance of the construction start in 2006, AECOM's legacy company, DMJM Harris, provided project management services to the Lincoln Center Development Project, Inc., for the $500 million redevelopment of the prestigious performing arts complex. The project included major improvements to surrounding roadways, utilities, and pedestrian access, as well as new and modernized auditoriums, plazas, and administrative/ support areas. The work included the development of strategies for risk management, construction contracting, staging, and sequencing to satisfy stringent client, agency, and community concerns.

PANYNJ Program Management Services on an As-needed Basis

Client: PANYNJ
Contact Person: Vincent Antes
Title: Senior Program Manager
Phone/email: (973) 961-6172;vantes@panynj.gov
Project Start/End: 2001-2006 (contract 2)
Project Cost: $500 Million

AECOM's legacy company, DMJM Harris, continued to provide Program/Project Management services to assist the PANYNJ in managing their ongoing Capital Program and other major projects. Services included providing project managers as an extension of staff on-site, responsible for the day-to-day management of projects. Project Managers were provided to work with the various Line Businesses, including Aviation, TB&T, Port Commerce, PATH, World Trade Center, and Economic

Development. Some of the projects we managed include:

- Bayonne Bridge Deck Rehabilitation
- Holland Tunnel Architectural and Structural Rehabilitation
- Outerbridge Crossing Deck Rehabilitation
- JFK Central Substation Upgrade
- JFK Central Taxi Hold Expansion
- LGA Interim Improvements to Concourses A, B, and C
- LGA Deck Protection and Preservation Study
- LGA Pavement Rehabilitation of Taxiway A
- PATH Restoration of Exchange Place Station - Post 9/11
- ExpressRail at Port Elizabeth
- Ports - Multi-Facility Maintenance Dredging
- EWR Southern Access Roadway Project - 3 Contracts
- EWR CTA Roadway & Parking Lot Improvements
- EWR P4 Parking Garage & Monorail Station Expansion

PATH Logistics Planning & Program Management

Client: PANYNJ
Contact Person: Wilfredo Guzman
Title: Project Manager
Phone/email: (201) 216-6804; wguzman@panynj.gov
Project Start/End: 2007-2007
Project Cost: $4.5 Million

AECOM was retained by the PANYNJ to provide as-needed program management and oversight services for PATH. AECOM is assisting PATH with logistics planning for its $3.3-billion Capital Program, the largest in its history.

Task Order 1 PATH Capital Program Logistics: AECOM's efforts to support this program initially began with a thorough analysis of the various components of the Capital Program, including schedule, staffing, and budgets. Additional analyses were conducted with respect to identifying essential internal PATH efforts required to support the Capital Program, including Facility Force requirements, equipment requirements (Work Trains), and staging facilities requirements (existing yards). Track capacity was analyzed with respect to the availability of time slots during which work can be scheduled. Collectively, this effort culminated in a Comprehensive Logistics Plan, which identified several key recommendations to facilitate the Capital Program work, including creation of a dedicated Capital Program Logistics Group to coordinate the various elements of the Capital Program.

Task Order 2 PATH Logistics Planning Support Services: The Logistics Planning Group coordinates with PATH's Transportation, Way and Structures, and Power, Signal and Communications Divisions, as well as project managers from the Construction Management Division and the World Trade Center project, to prepare master monthly and weekly track usage plans, identify and mitigate potential conflicts, and monitor the day-to-day implementation of scheduled field activities. Additional responsibilities included: planning for new rail storage facilities at Harrison and D yards; construction phasing oversight for the signals program; coordinating track usage and facility force support for the tunnel hardening program; and construction phasing support planning for the WTC projects that require PATH support. Furthermore, AECOM furnishes daily status reports each morning to the PATH Project Manager and to the PATH Assistant Director of Capital Programs, as well as monthly reports to the Executive Director of PATH and the PANYNJ Executive Director.

Program Management Services for O'Hare International Airport Modernization Program, Chicago, Illinois

Client: City of Chicago, Department of Aviation
Contact Person: Christopher Arman
Title: Project Manager
Phone/email: [redacted]
Project Start/End: 2007-2011
Project Cost: $24.4 Million

AECOM is providing program management services for the first phase of the O'Hare Modernization Program (OMP) at O'Hare International Airport in Chicago – the world's second busiest airport. Our aviation specialists will reconfigure O'Hare's intersecting runways into a more modern, parallel layout to increase efficiency and capacity. The first phase—worth 2.9 billion in construction dollars—will design and construct three runways, relocate 3 miles

of Union Pacific Railroad tracks, relocate the water detention basin on the south airfield, and numerous other projects required to enable completion of the full OMP.

Yankee Stadium Redevelopment Program Management Services, New York, New York

Client: NYC Economic Development Corporation (NYCEDC)
Contact Person: Dmitri Konon
Title: Senior Vice President
Phone/email [redacted]
Project Start/End: 2007-2010
Project Cost: $9 Million

The centerpiece element in a major economic redevelopment plan for the South Bronx is the creation of a New Yankee Stadium. The new $800-million open-air facility with a capacity for 54,000 spectators will replace the existing outdated stadium. The project also includes the construction of four new parking garages containing approximately 4,735 spaces and the development of new and replacement recreational park facilities within the vicinity of the proposed stadium.

A Tishman-AECOM joint venture is handling program management for the Yankee Stadium redevelopment. This complex initiative, which includes multiple projects being built in close proximity to each other, requires close coordination with respect to schedule, staging, logistics, maintenance and protection of traffic, material deliveries, utility relocations and other work. The program management team will provide the services necessary to ensure the safe, effective, efficient and timely completion of all design and construction activities for the overall stadium redevelopment effort.

Delaware River Joint Toll Bridge Commission, Program Management, Pennsylvania & New Jersey

Client: Delaware River Joint Toll Bridge Commission
Contact Person: George Alexandridis
Title: Phone/email: [redacted]
Project Start/End: 2008-2009
Project Cost: $600 Million

The Delaware River Joint Toll Bridge Commission (Commission) operates seven toll and 13 toll-supported bridges between PA and NJ over the Delaware River. In 2001 the Commission embarked on an ambitious capital improvement program to both enhance its existing facilities and to expand capacity to meet projected increased traffic demands. AECOM has held three program management contracts over the past 5 years and has played an integral role in assisting in implementing the capital program.

JFK Airport, Runway 13R-31L Reconstruction

Client: PANYNJ
Contact Person: James Steven
Title: Manager Physical Plant & Redevelopment
Phone/email: [redacted]
Project Start/End: 2008-2011
Project Cost: $348 Million

This is a $348-million design and reconstruction of JFK's longest runway. Construction included delay reduction improvements to taxiways for Runway 13R-31L to increase operational efficiencies and reduce air traffic delays of approximately 10,485 hours annually. This project will result in approximately $55.36 million of annual savings in aircraft operating costs and the value of passenger time, based on FAA modeling. Lighting and electrical infrastructure was also upgraded. Minimized customer impacts by working closely with JFK operations, the FAA and airlines on the detailed construction staging and operating plans. These plans included scheduling the runway closure during the non-peak travel season, using different runway configurations to better utilize existing capacity and flight schedule adjustments by the airlines.

JFK Airport Rehabilitation of Taxiways "R", "SB", "SC" and "SD"

Client: PANYNJ
Contact Person: James Steven
Title: Manager Physical Plant & Redevelopment
Phone/email: (718)244-4502; jsteven@panynj.gov
Project Start/End: 2011-2013
Project Cost: $13.5 Million

Taxiway R Pavements, including shoulders and erosion pavements from T/W B to T/W S, show signs of distress and require rehabilitation. Presently the turning radii at Taxiways SB and SC are too small to accommodate the new large aircraft and widening is required. The scope of work generally consists of milling and overlaying with a nominal 3" of Asphalt concrete on the existing taxiways and shoulders; full depth roadway pavement removal and replacement where required for fillet improvements; and adjustment of existing drainage structures, castings and any associated piping if required.

JFK Taxiway C Rehabilitation & Associated RVSR

Client: PANYNJ
Contact Person: James Steven
Title: Manager Physical Plant & Redevelopment
Phone/email: (718)244-4502; jsteven@panynj.gov
Project Start/End: 2011-2013
Project Cost: $15 Million

The rehabilitation of the pavement for Taxiway C and associated RVSR as identified in the 2007 – 2013 Pavement Management Plan is required due to deteriorating pavement. The work will consist of the milling and overlaying of the existing taxiways, shoulders and RVSR, fillet improvements, drainage improvements, pavement marking, lighting, and signage.

LaGuardia Airport, Rehabilitation of Sanitary Ejector Pits at Central Terminal Building

Client: PANYNJ
Contact Person: Robert Armocida
Title: Program Manager
Phone/email: (718)533-3519; rarmocid@panynj.gov
Project Start/End: 2007-2010
Project Cost: $13 Million

This project replaced the sanitary lift station tanks and pumps for the Central Terminal Building Concourse and Terminal areas. It also replaced the force main piping from the tanks to the connections with the city sewer system outside the building.

LaGuardia Airport, Upgrade of the HVAC System for Hangar 7 South Maintenance areas

Client: : PANYNJ
Contact Person: Robert Armocida
Title: Program Manager
Phone/email: (718)533-3519; rarmocid@panynj.gov
Project Start/End: 2008/2010
Project Cost: $4.1 Million

This project upgraded the air handling units and added an external Chiller unit to improve the HVAC system for maintenance areas, meeting rooms, and locker rooms in Hangar 7 South.

LaGuardia Airport, Replacement of CTB Concourse HVAC System

Client: : PANYNJ
Contact Person: : Robert Armocida
Title: Program Manager
Phone/email: (718)533-3519; rarmocid@panynj.gov
Project Start/End: 2007-2010
Project Cost: $14.8 Million

This project is removing 19 Air Handling units from the roofs of the Concourses in the Central Terminal Building. The units are being replaced with upgraded air handlers with improved filters and controls so that air quality in the Concourses and the efficiency of the heating and cooling systems will be improved.

LaGuardia Airport, Removal of Low to High Pressure Crossover Connections

Client: : PANYNJ
Contact Person: Robert Armocida
Title: Program Manager
Phone/email: (718) 533-3519; rarmocid@panynj.gov
Project Start/End: 2007-2011
Project Cost: $2.6 Million

This project removed five crossover connections between the Low Pressure and High Pressure water lines. In conjunction with the new Pumping Station, this allowed the High Pressure system to be isolated from the New York City Low Pressure system on the airport, reducing future maintenance and testing requirements. The project also added or replaced six backflow prevention devices at the water entrance to the Authority buildings.

Newark Liberty International Airport, Construction of Data Center

Client: PANYNJ
Contact Person: Chandu Patel
Title: Program Manager
Phone/email: (973) 961-6178; chpatel@panynj.gov
Project Start/End: 2008-2010 (Project on hold)
Project Cost: $7.4 Million

This project provides for the construction of a Data Center in existing office space on the Mezzanine level in Building 157. The proposed center will serve as back up to the existing data center located at the Teleport facility. The scope of this project includes furnishing and installation of IT, electrical and mechanical systems; upgrade and modifications of structural and architectural building components and systems; and upgrading of utilities. The project will include a connection to the EWR fiber optic cable backbone; construction of a UPS/Battery room at grade level abutting the north face of Building 157; and a 750 kW stand by generator. The building's electrical power will be upgraded with a new feed to be provided by PSE&G.

Newark Liberty International Airport, Mechanical and Electrical Upgrades of the CTA Toll Plaza

Client: PANYNJ
Contact Person: Chandu Patel
Title: Program Manager
Phone/email: (973) 961-6178; chpatel@panynj.gov
Project Start/End: 2005 – 2011
Project Cost: $9.4 Million

The existing CTA Toll Plaza Administration Building requires substantial upgrades to remain operational. This project will provide for the replacement of chillers, boilers, piping, and HVAC controls in the Administration Building, tollbooths, and adjacent heating plant. Electrical and communications systems upgrades, installation of a backup generator, upgrading of sprinkler system and fire alarm system to current standards, removal of asbestos, installation of an overheight vehicle detection system and architectural upgrades are also included in the project. Temporary office space will be constructed for the toll plaza administrative staff adjacent to the existing toll plaza so that toll plaza operations will be unaffected during construction.

Newark Liberty International Airport, Priority Repair of Building Nos. 11, 46, 175 and 178

Client: PANYNJ
Contact Person: Chandu Patel
Title: Program Manager
Phone/email: (973) 961-6178; chpatel@panynj.gov
Project Start/End: 2008-2011
Project Cost: $600K

This included repair of a split wood purlin in the Autoshop Building 11; structural reinforcement and concrete encasement of columns in the CHRP Building 46; repair of cracks and spalls in the P-4 Garage Building 175; and installation of expansion joints in the railings and repair of damaged railings in the C Garage Building 178. Work in the parking garages requires coordination with Landside Operations to maintain a safe environment for airport patrons.

Teterboro Airport, Installation of Backflow Prevention Devices

Client: Port Authority of New York and New Jersey
Contact Person: Chandu Patel
Title: Program Manager

Phone/email: (973) 961-6178; chpatel@panynj.gov
Project Start/End: 2008-2013
Project Cost: $2.9 Million

The PANYNJ is mandated by NJDEP, Bureau of Safe Drinking Water, to provide protection of the public water supply source and its own water supply network from potential contamination by installing backflow prevention devices at Teterboro Airport.

This project addresses the domestic and fire protection water services at Buildings 27, 72, 73 & 121; at two irrigation services; and at two existing meter pits located along Moonachie Avenue.

PANYNJ "EDM Call-In" Consulting Services, PATH Downtown Restoration Program, WTC GIS Utility Database

Client: PANYNJ
Contact Person: Paul Pietropaolo
Title: Project Manager
Phone/email: (212) 435-5563; ppietrop@panynj.gov
Project Start/End: 2002-2006
Project Cost: $202,752

In order to better support the restoration of the World Trade Center site, AECOM recommended the establishment of a Geospatial Information System. The system was developed utilizing the geospatial data model developed for the JFK GIS program, resulting in significant initial savings. The system was created using AutoDesk MapGuide and contained all utility and infrastructure data in a GIS format. The system was developed for use in planning, design, and facility maintenance of the PATH system and any future facilities that will be developed on the site. Data is being collected from other agencies and a standard GIS database will provide information for the Port Authority and cooperating agencies.

AECOM advised thePANYNJ on various next steps including Building Information Modeling (BIM) and the inclusion of Facility Maintenance capabilities to provide the same level of information management for the buildings that they have for the utilities.

PANYNJ "Security Capital Program, PM Consulting Services" Security Program Website Development & Support Relating to Livelink, Project Management for PATH Tunnel Strengthening

Client: PANYNJ
Contact Person: Michael Valletta
Title: Program Director
Phone/email: (201) 595-4748; mvallett@panynj.gov
Project Start/End: 2002 - Present
Project Cost: $2.5 Million

AECOM has been contracted to provide project management staff for the PATH Tunnel Strengthening Program, Program Website Development and Support, and Information Security as it relates to the use of the PANYNJ's secure website, Livelink. The scope also includes assisting in training staff and consultants on the use of Livelink and on Security Program protocols as they relate to document control and the handling of Confidential and Privileged Security Information and Sensitive Security Information.

In addition, development and monitoring of information security policies and workflow processes are being defined and built in to the website operation. This website has pioneered numerous business processes for the PANYNJ, including the first use of Livelink to issue a major RFP, maintaining all RFP documents, addenda, bidders' questions and responses, etc., on the secure website. In addition, for the first time we are using this website to exchange RFIs and submittals of Confidential and Privileged Security Information/SSI. This is being worked in conjunction with Primavera Expedition to efficiently manage both the RFI/Submittal status as well as the documents themselves.

PANYNJ Electronic Document Management Call-In New York, NY

Client: PANYNJ
Contact Person: Peter Zipf
Title: Deputy Chief Engineer
Phone/email: (212)435.6430; pzipf@panynj.gov
Project Start/End: 2000-Present
Project Cost: $4.5 million

AECOM has provided technology conceptual development and planning services, as well as staff to implement many of the Engineering Department's Technology Initiatives, as follows:

Centralized Electronic Storage of Contract Drawings

This initiative will eventually obviate the need for the optical scanning of archived drawings. It involves having the design engineers and architects electronically transmit contract drawings from their desktop from the "Port Authority Review" stage through the "Drawing of Record" stage, with all drawings and transactions being centrally stored and backed up. AECOM personnel have worked with the Port Authority to develop and implement this initiative.

Electronic Document Center (EDOC)

In 1999 an initiative was implemented to address the backlog of as-built drawings. This work included inventorying and consolidating all active contract drawings in each of the Engineering Program Management units. Approximately 65,000 drawings were inventoried and entered into the new database system. One result was the discovery that approximately 1,100 of those drawings were of no value because they were duplicates, working drawings, etc., and they could be discarded. The Port Authority decided to call the final version of the drawings, including the final changes from construction, "Drawing of Record" rather than As-Built. As a result of this, the Electronic Document Center (EdoC) was put into operation on the 72nd Floor of the 1 World Trade Center in June 2000. The objective of the EDoC Center was to centrally manage the storage of contract drawings, both in Mylar and electronic format, for all active contract drawings. Because of EDoC's existence at the time of the World Trade Center disaster, documents that had been processed through the EDoC were saved as a result of offsite backup of the database as well as the offsite storage of originals. Within two weeks of the disaster the EDoC Center was up and running at another PANYNJ location.

Terminal B Replacement of AC12, AC13 and Hot Water Heating System Pumps,Newark Liberty International Airport

Client: PANYNJ
Contact Person: James Heitmann
Title: Manager, Airport Facilities & Redevelopment
Phone/email: (973) 961-6205; Jheitmann@panynj.gov
Project Start/End: 2006-2011
Project Cost: $16.5 Million

This mechanical upgrade contract provides for the replacement of the existing HVAC central mechanical equipment serving the B-3 Satellite of Terminal B, both passenger and ramp levels, and the outer half of the B-3 connecting corridor as well as the associated hot water heating system pumps and distribution VAVs. The existing pneumatic controls were replaced with more responsive Direct Digit electronic controls (DDC). The system was upgraded to provide for economized operations and a fully integrated fire smoke purge system was added.

Terminal B FIS Substation Emergency Generator Capacity Upgrade, Newark Liberty International Airport

Client: PANYNJ
Contact Person: James Heitmann
Title: Manager, Airport Facilities & Redevelopment
Phone/email: (973) 961-6205; Jheitmann@panynj.gov
Project Start/End: 2008-2011
Project Cost: $5.8 Million

This project's goal was to increase the total back-up generator capacity of the F.I.S. Substation and to ensure that all Code required Life Safety Systems, Customs and Border Patrol screening functions and other Operational Priority loads are nominally independent of the utility power grid. The project included a new diesel emergency generator, 2,250 KW in size, to supplement the existing generator. Enclosed in a separate enclosure, including HVAC, ventilation, lighting, fire alarm and suppression, above-ground storage tank and fill port leak detection, etc. All systems are integrated into the central building

systems. The existing "kirk-key" transfer system will be replaced with automatic transfer capability with a manual over-ride and have an automatic re-transfer capability.

Terminal B Rehabilitation of Satellite B-2 Mechanical and Electrical Systems, Newark Liberty International Airport

Client: PANYNJ
Contact Person: James Heitmann
Title: Manager, Airport Facilities & Redevelopment
Phone/email: (973) 961-62055; Jheitmann@panynj.gov
Project Start/End: 2008-2012
Project Cost: $14.5 Million

This project will replace in kind the existing Electrical and HVAC systems serving Satellite B2. All systems were remediated/updated to comply with present code considerations such as fresh air intake capacity, air changes, etc. Specific scope objectives included:

- Replace the paired power feeders and distribution switchboards for the B2 Satellite.
- Satellite B2 switchgear room will be upgraded for code compliance for fire rating and egress.
- Replace all local VAV boxes in the distribution system in kind on both the passenger and ramp levels. Jetway fans and integrated controls to be rehabilitated for code compliance.
- Replace the existing pneumatic controls system with a Direct Digital Control system from either Honeywell or Trane.
- Integration of In-Line Baggage Conveyor HVAC equipment controls will be included.
- Replace existing hot water heating system pumps with variable frequency drives.

PANYNJ Capital Security Program

Client: PANYNJ
Contact Person: Alex Flores
Title: Senior Resident Engineer
Phone/email: (201) 656-0086; aflores@panynj.gov
Project Start/End: 1/2007-5/2011
Project Cost: $230 Million

Tishman is presently serving the PANYNJ as Construction Manager/General Contractor for their Security Capital Program. This program incorporates more than 30 projects at multiple PANYNJ facilities, including all three metropolitan airports, PATH tunnels and stations, several of the area's bridges and tunnels and the PABT.

Multiple work orders were completed as part of this project, including strengthening the GWB Tower Base, crash barriers and CCTV systems throughout the Journal Square Transportation Center, CCTV systems at the NJ Marine Terminal and the Auto-Marine Terminal at Port Newark/Elizabeth, and installation of back-up 800 MHz Radio system at the GWB, PABT, LaGuardia Airport, and Newark Airport, and bollard protection at Terminal B at Newark Airport.

PANYNJ Port Authority bus Terminal (PABT) Air Rights Development, New York, New York

Client: PANYNJ
Contact Person: Joanne Kozel
Title: Architect Program Manager
Phone/email: (212) 435-6519; jkozel@panynj.gov
Project Start/End: 2008-Ongoing
Project Cost: $700 Million

Tishman was engaged by the PANYNJ to assist in the private development of an office tower over the existing PABT. The project included mixed-use retail and various public improvements within the North Wing of the facility. The existing terminal accommodates approximately 200,000 daily commuters and provides access to connecting transportation services, including bus, subway and taxi systems.

Tishman was contracted to represent the PANYNJ; supervise the program; ensure continued efficient operation of the PABT during the design and construction periods; provide program management for the relocation of PANYNJ services and tenant relocations; cost estimating, prepare and negotiate leases and construction contracts; community relations; design review; traffic and pedestrian analysis; phasing and logistics review; constructability review; budget evaluation; management and document control; submittal and comment processing; meetings; safety; scheduling/cost control; inspection/quality control; and progress reports.

AECOM

Performance of Expert Professional
Project Management Services
as Requested on a "Call-In" Basis
During 2011, 2012, 2013 and 2014
RFP No. 22388

Section E. Management Approach

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I. Background

Over the past few years, The Port Authority of New York and New Jersey ("the Authority") has evaluated and reviewed every aspect of its organizational structure, resources, processes and procedures for the implementation of its capital investments. To ensure effective and efficient delivery of the Capital Plan, the Authority created the Project Management Office (PMO), which provides consistent project management support services to project management staff in the Line Departments. In providing this consistency, the PMO applies state-of-the-art methodologies such as enhanced project tracking and controls (Monthly Capital Performance Reports), risk management (Project Risk Register), streamlined procedures (pending Project Management Manual), and enhanced integration with facility operations (co-located project management staff). It is within this framework and in order to meet periodic surges in workload that from time to time the Authority requires expert professional project management services from professional engineering firms such as AECOM, organizations that possess experience in managing Authority capital projects.

II. What AECOM brings to the Authority

We are proud to have provided expert professional project management staffing to the Authority over the past twelve years, working side by side with agency staff. We are confident that AECOM is the "Organization of Choice" to continue to work with the Authority. We are ready to provide dedicated teams of qualified professional staff, depth of resources, extensive project experience, and in-depth knowledge that can be transferred to the Authority.

Our team will be led by Mr. **Kevin Pierce, PE**, who will serve as **Project Coordinator** and act as liaison between the Authority and the AECOM team. Mr. Pierce will be AECOM's main point of contact, coordinating the day-to-day activities, as well as performing the internal project management responsibilities for the contract. Having provided program and project management services for many PANYNJ capital programs over the past 10 years, Mr. Pierce is intimately familiar with the PANYNJ's way of doing business. Mr. Pierce's PANYNJ experience includes the Security Capital Program, Newark Airport Redevelopment, Global container terminal and the WTC Vehicle Security Center.

Our **Officer-in-Charge** will be Mr. **John Azzaro, PE**, who has served in the capacity of Project Coordinator under the existing "As-Needed" contracts during the past four years. Mr. Azzaro will be coordinating closely with Mr. Pierce, and will be providing the corporate oversight for the successful performance of the contract – both functionally and financially. He is a well known and accomplished Project Manager and has delivered many complex high quality projects for the Authority. Mr. Azzaro has over 30 years of professional engineering and management experience, with half of those years spent on Authority projects.

To complement our in-house resources, we have engaged the services of the following subconsultants for the performance of the assignment:

- **Tishman Construction** will provide construction cost estimating, scheduling and constructability reviews.
- **Ellana, Inc.** is a certified WBE, providing cost management and value engineering.
- **G2 Project Planning** is a certified WBE, providing cost estimating, project scheduling and value management.
- **Industria** is a certified MBE, providing project management and document control.
- **NIA Technologies Corp.** (NIA) is a certified MBE, providing budget and cost control, and document management and control.

III. How AECOM will manage the Contract

To effectively manage this contract, we will concentrate on the following:

- Screening and providing Project/Program Managers
- Managing the tasks on as "As-Needed" basis
- Coordinating the integration of staff
- Ensuring the Project Managers have the tools they need

Each of these elements alone is important, and when combined, they will assure a high quality level of service.

Screening and providing Project/Program Managers

Responding to the Authority's request for staff support in a fast and efficient manner that provides the most appropriate individuals is our key objective. We have demonstrated our depth of resources by placing experienced project managers, project controls and other support staff in key roles with the Authority. In his role as Project Coordinator, Kevin Pierce will be in charge of this function.

During the last 12 years, working closely with the Authority, AECOM has developed an effective approach which addresses the Authority's requests by delivering experienced staff in the shortest time possible. Our key to success in this area has been our focus on prescreening our staff to match the expertise of the individual with the specific requirements of the position.

AECOM identifies candidates throughout our team and performs an internal screening process prior to identifying any candidate to the Authority. This process ensures that we minimize the time to fill the position, and it minimizes any inconvenience to the Authority. **As a measure of our successful approach, we are extremely proud that nearly every one of our candidates interviewed by the Authority has been accepted.**

Managing the tasks on as "As-Needed" basis

AECOM's home office role does not stop upon placement of staff. **Kevin Pierce** will be responsible for the client coordination of the contract, as well as addressing staff related issues. This role includes:

- Task Order Development/Approvals
- Overall Contract Coordination
- Monthly/Cumulative Cost Control
- Invoice Preparation
- Staff Training and Development
- Quality Assurance/Quality Control
- Periodic Client Interviews for Review of Staff Performance

The prompt processing of task orders, and maintaining the project financial records, are important functions that ensure both the Authority and AECOM have complete information on the status of the contract. We have developed tracking spreadsheets that allow us to monitor the monthly costs for each Task Order, as well as cumulative costs to date, by tracking each invoice submitted. In addition, we maintain a summary spreadsheet that tracks all Task Orders, their start and end dates, Purchase Order Numbers and approved Budgets – this allows us to keep the Authority informed as to when renewals of Task Orders will be required. At times we have funds remaining in a Task Order budget, requiring only a time extension without additional funding.

Coordinating the Integration of staff

A key indicator of the success of AECOM's service will be our ability to assign staff who are enthusiastic about their project management role with the Authority. Our staff must be fully integrated not only into the AECOM organization, but into the Port Authority organization as well. This is important to ensure that we are truly able to function as an "Extension of PA Staff." Based on the success of the ongoing contract, it is apparent that the Authority and AECOM, working together, have been very successful in integrating our Project Managers and Support staff.

We must also ensure that our staff members understand their importance in our own organization. This is accomplished by ensuring that communication with and about the firm is maintained on a regular basis. Kevin Pierce, as the primary liaison with our staff, will ensure this objective is met on issues such as:

- Coordination with on-site staff and the Authority
- Reconciliation of AECOM and Authority timesheets
- Distribution/Approval/Submission of monthly task order invoices
- Communications between home office and on-site staff
- Guidance to staff on Authority project management standards and procedures

To keep assigned staff updated on the AECOM organization, periodic lunchtime meetings will be held to discuss current AECOM issues, such as Human Resources updates, company policies and procedures, or simply to discuss current corporate activities.

Ensuring the Project Managers have the tools they need

Our Project Managers are trained to prepare project-specific Project Management Plans for each project they manage. They are required to do this whether they are in their home office or on assignment in a client's office. To assist in preparing these plans, they are provided with guideline documents developed exclusively for AECOM, which give them reminders of all the processes required for producing successful projects, and checklists for completion of deliverables. The Authority's Project Management Plan protocols are similar to those used by AECOM. For this assignment, our Project Managers will use their AECOM experience in conjunction with the Authority's protocols to ensure compliance with the Authority's requirements.

Task A - Project Initiation Services

Experienced and effective Project Managers understand the importance of developing a comprehensive Project Management Plan at the beginning of the project. As indicated above, AECOM has a comprehensive project management plan format that our Project Managers apply based on the relative size and complexity of the project. The AECOM team can combine our expertise and the familiarity with the Authority's current administrative and project management procedures to ensure successful project start-up.

Our extensive expertise is an important asset in providing effective project management for the Authority's projects. Furthermore, our staff's intimate knowledge of Port Authority processes, procedures, facilities, and stakeholders will assure that the Authority's Capital Plan can be delivered in the upcoming years. In addition, our staff has extensive experience in managing the design and construction of major infrastructure projects where public access needs to be maintained during construction. These include all modes of transportation infrastructure including airports, bus terminals, bridges, tunnels, buildings, transit facilities and systems, and sites involving concessionaires and tenants. Maintaining operations, and avoiding delays or interruptions of services is essential.

Our management approach will be applied to the selection of experienced Project Managers, and to defining the key project elements including scope definition/owner requirements, budget development, schedule development, and preparation of deliverables, as described below:

Scope Definition/Owner Requirements

The first and fundamental requirement in the control of any project is to define the scope and define the owner and user requirements. The Authority divides the project delivery process into four stages:

- Stage I - Project Development
- Stage II - Preliminary Design
- Stage III - Final Design/Contract Documents
- Stage IV - Construction

All Authority projects are administered and budgeted using this breakdown. At the beginning of the project, the Project Manager must work with the project stakeholders to define the scope and end user requirements of the project and what is to be included. For example, for a building project, size,

space program, occupancies, together with equipment, systems and furnishing requirements must be defined. For infrastructure projects, the geographic limits, connections to existing services, as well as paving, utilities, landscaping, traffic controls and exterior lighting requirements must be defined.

Once these parameters are established, the Project Manager must work with the Lead Engineer/Architect (LEA) and the design disciplines to include all the investigative work that will be needed. Depending on the stage, this work may include topographical and utility surveys, geotechnical and environmental investigations and review of record drawings.

Budget Development

Our Project Managers will first develop a total project budget, including construction cost, planning and engineering (E-0 or P-0 forms), general and administrative, project contingency and financial expense utilizing a Project Cost Pro-Forma form. Working with the project team, they will establish the detailed project budget, broken down by stages (I to IV) and by Organization Units. As each of the stages is completed, the design budgets are reviewed, and adjusted for scope and schedule revisions as appropriate.

Schedule Development

Working under the guidance of the Authority's Program Directors and key project stakeholders, schedules will be developed, using Primavera, to reflect the input of technical, construction and facility operational staff. The schedule will establish a direct correlation between scope budget and time and will facilitate the taking of corrective action when unforeseeable circumstances arise.

Among the schedule management tools utilized by both AECOM and the Authority are multi-level CPM schedules; detailed Work Breakdown Structures (WBS); master (milestone) and detailed schedules; and "look ahead" schedules, all of which are continuously reviewed and updated to reflect the progress of the project. A periodic schedule review assists in identifying areas where corrective action is required and ensures the project is progressing according to the baseline schedule.

Deliverables

The Project Management Plan will clearly outline the project deliverables from inception to commissioning and closeout. The Project Manager will ensure that the production of the necessary deliverables takes place with the input and subsequent review of approving stakeholders.

These project management methods have long been utilized by our staff in delivering successful projects, and it is this disciplined approach to project delivery that has allowed our staff to be so effective in the management of the Authority's projects. While working at the Port Authority currently, and under the proposed contract, our staff will follow all Authority procedures and protocols to ensure project delivery success.

Task B – Project Implementation Services

The preparation and development of the Project Management Plan is one of the most important elements of a successful project. Once the Plan has been completed, reviewed and approved by the Authority's Program Director and other key stakeholders, it must be communicated to all project participants. The steps that the Project Manager will then take to implement the project will include the following: Kick-off and Progress Meetings.

The Project Manager will schedule the initial project kick-off meeting with the project team and set the stage for development of the Project Definition Statement (PDS) by the LEA and the engineering design team using the elements developed in the Project Management Plan. All actions and activities performed by the project team will be as prescribed in the Plan, and any deviations or adjustments will be measured against it.

The Project Manager will discuss the process and procedures to be followed during the execution of the project, including communication protocols among team members and stakeholders. Once developed and approved, particular attention will be given to identification and communication of variances from the PDS in scope, schedule and budget.

Consultant Coordination

We are experienced in managing projects for the Authority in which consultants perform the work as an extension of staff. Although state-of-the-art technological communication tools are utilized extensively, regular face-to-face meetings with consultants and staff are held to ensure that up-to-date information is made available as planned and is being utilized to meet the project goals.

Coordinate Bidding and Award of Construction Contracts

An important element of the design phase is the bidding and awarding of the construction contract. Many steps must be successfully completed to reach this stage. Among the key tasks that the Project Manager must perform and coordinate include:

- Preparation of a procurement strategy that is appropriate for the project, such as whether to perform the project under a Work Order Contract,CM/GC contracts, publicly advertise, or perform a prequalification of bidders. More global procurement option decisions, such as design-build, will be made early in the project in order to define the appropriate level of design to be performed.
- Ensuring that bidders receive all bid documents on the date advertised and subsequent questions, if any, are answered and Addenda are issued on a timely basis.
- Evaluation of bids against the Engineer's Estimate to determine variances and the ability of the contractor to perform the work at the bid price. This will support a recommendation to award the contract on the basis of the contractor's responsibility and understanding of the contract requirements.
- Preparation of project briefing materials for items that are required to be Board authorized. The brief will contain a summary of supporting documentation and financial information to show a project's scope of work, basis of need, budget information, Engineer's Estimate Summary, bid analysis, M/WBE analysis, prior authorizations and Draft Authorization documents such as Policy Review Memorandum of Justification (PRMJ), Memorandum of Justification (MJ), or Memorandum of Authorization (MA) as appropriate.

Post Award Services

The Project Manager will be responsible to coordinate with the Construction Management Division (CMD) of the Engineering Department immediately upon award of the contract to ensure a timely pre-construction meeting with the contractor.

During this phase the Project Manager will attend regular progress meetings with the contractor and will ensure the timely review of shop drawings, Requests for Information (RFI), Post Award Contract Changes (PACC), act as liaison with facility operations and manage third party relations with other non-Authority stakeholders.

Task C – Project Monitoring and Reporting Services

Critical elements of the Project Management Plan are the communications protocols that establish the methods of sharing and providing information among the project team, Authority senior management staff and other project stakeholders.

Reporting

The Project Manager must be vigilant and informed about the progress of the project team through email, regularly scheduled progress meetings, memoranda and telephone calls. This continuous exchange and the review of objective data provided by project controls staff such as schedules, budget and cost control data, will provide the basis for analyzing the status of the project progress and creating effective reports under the Authority's Monthly Capital Performance Reports (MCPR) for each capital project.

This monthly executive summary report provides Authority senior management with the overall status of the project, monthly project accomplishments, current issues, fundamental variance analysis of budget and schedule and planned mitigation actions.

Schedule Management

AECOM employs the use of Primavera scheduling to serve as each project's controlling document. Using the latest release of Primavera and Contract Manager Software, we prepare and update the schedule with links to all project activities, which identify tasks and milestones for major actions. These schedules can be cost and manpower loaded to assist in total project planning. This makes our Project Managers well-suited to work with the Authority's Present and Planned Workload (PPW) and Primavera systems to establish and maintain the project design and construction milestone schedules.

Cost Control and Reporting

AECOM Project Managers understand cost control reporting is the key to managing the overall cost of a project. The MCPR system used by the Authority not only identifies costs to date, but forecasts the costs at the end of the project, including any identified contingency funds, approved changes, etc. In Primavera, budgets are monitored on a regular basis against expenditures. These reports will enable our Project Managers to measure progress against the cost and schedule data. Earned value is determined and reported to the Program Directors.

The Project Manger monitors all costs of the project including soft costs, payments to contractors and contingency. This helps control costs against the approved project budget.

Task D - Program Level Management Services

Under the current project management agreement, AECOM has provided a highly dedicated and experienced team of Project Managers for the JFK Bay Runway Reconstruction Program. This unique program assignment utilized our team to develop the program-level schedules for the construction services and the activities of the many stakeholders supporting the program. Our Project Managers were very successful in coordinating the activities of the stakeholders to support the aggressive contractor schedule with continuous coordination and communication among the project team. A program newsletter was developed for the project team, including senior Authority staff, to keep everyone fully informed of the schedule, achievements, and to give a look ahead on the program. This program is the best example of how high-profile, mission-critical projects should be managed to ensure success for all participants. AECOM looks forward to future opportunities to provide fully integrated project teams for key projects and programs.

M/WBE Subcontractor Goals

The Port Authority remains a leader in its set-aside goals and its policy of offering participation opportunities for minority and women-owned business enterprises in all procurements. Our on-site Project Managers are uniquely familiar with the set-aside goals in construction contracts.

As part of their responsibility during the formation of the contract documents for a project, each Project Manager, in consultation with the Construction Management Division, will prepare an analysis of the subcontracting goals that can be achieved in each construction contract. Once approved, these goals become part of the contract that the low bidder must achieve on a good faith basis.

Task E - Program Management Services

AECOM has capably provided program management support staff to the Authority on-site during the current As-Needed contract. Members of our staff have provided support for the preparation of materials necessary for Board of Commissioners meetings, such as PowerPoint presentations, Policy Review Memorandum of Justifications (PRMJs) Memorandum of Justification (MJs) and Memorandum of Authorizations (MAs), analyses of contract awards and construction in place (CIP) data and preparation of performance metrics. This information is used to communicate overall Capital Plan performance to key stakeholders in the Authority.

Bidability/Constructability Reviews

Bidability and constructability reviews are critical components in the process of building projects. The objectives of such reviews are to: review the contract documents that will be provided to the bidders to determine if the design is well coordinated between the various design disciplines; assure that the scope of the contract is clearly defined; establish that the contractor can build the project as designed; look for potential procurement problems, such as material availability; and review the site availability, staging requirements and operational restrictions, which may impact the bids and subsequent execution of the work. AECOM can provide experienced Senior Program and Construction Managers to perform such reviews on an independent basis for projects critical to the Authority.

Drawings of Record (DOR)

The Authority has made a major commitment to document the final construction, as constructed for future use in new projects and by operations and maintenance staff at the various facilities. The task of ensuring that DORs are prepared is the responsibility of the Project Manager, working in concert with the Construction Manager and the Design Engineer. In accordance with the latest Authority policy, the last set of Contract Drawings, as revised by the last Post Award Contract Change (PACC), shall be considered the Drawings of Record. As stated earlier, the Project Manager participates in this process by ensuring that all changes are documented with proper PACCs, including the distribution of properly authenticated revised drawings. This set, along with Shop Drawings and Utility Record Drawings, complete the DORs. Once the DORs are prepared, they are electronically archived for future use by the Engineering Management Services Division (EMSD) of the Engineering Department.

Project Management Manual

Over the last four years, with the evolution of the project management at the Authority into its current format in direct support of the Authority's facilities, the role and the protocols of project managers have changed. So too has the Project Management Manual, as the latest new draft nears completion. The purpose of this document will be to provide a consistent standard for the project management practice that the Authority will follow. It represents the body of knowledge that all Project Managers can easily follow during the performance of their respective projects from inception to completion.

Given the tremendous organizational changes that have taken place to streamline organizational structures, processes and procedures aimed at ensuring greater effectiveness in the delivery of the Capital Plan, this updated document will communicate the new standard of practice to Project Managers. AECOM can assist in the updating of the Project Management Manual with senior project and program managers. Our approach would be to utilize an interactive process of meetings, interviews, procedures, documentation, review, and final editing of the manual under the direction of the senior project management leadership.

Document Control

The Authority has adopted Contract Manager as the Document Control system. The on-site AECOM Project Managers are familiar with this system and utilize it on their respective projects. In addition, our subconsultants are all familiar with Contract Manager and also have supported the Authority with this system. To be fully responsive to the Authority's requests for highly qualified Contract Manager experts, we have assembled a team of five subconsultants to quickly provide these staff members.

In addition, the Authority has been utilizing the in-house Livelink technology infrastructure to capture information and documents developed for select projects and programs such as the Security Capital, Goethals Bridge Replacement and WTC Programs. The Livelink application integrates document management, search capabilities and project collaboration to give project team members the necessary information to perform their work and make timely and informed decisions. This web-based work environment allows project participants to find information, work together, share information, prepare documents, submit them for the required review and approval process and make them accessible to anyone that has been granted appropriate permission

Regardless of which system the Authority deems to be the most appropriate to implement, AECOM Project Managers have experience and knowledge in the utilization of both systems.

Project Control

Project Control by timely and effective management action consists of three basic elements: schedule control, cost control, and document control. AECOM has developed a Project Control Manual for specific use on capital projects and programs. The manual includes detailed procedures covering these three basic elements and other control functions required for the successful completion of projects.

Technical Presentation and External Communications

AECOM has provided program support staff for the preparation of business and technical presentations for external and internal use by all levels of staff including the Board of Commissioners. Our staff is skilled in developing and preparing presentations using PowerPoint, the accepted standard medium for internal and external communications.

To further assist the Authority in interagency coordination, the AECOM team brings a thorough understanding of Authority, State, City and Local Agencies and utility company procedures and permit processes. We have worked very closely with these agencies and understand the importance of coordinating and communicating with them frequently during the life of a project.

Project Management Training

The Authority has made a significant commitment to the training and development of Project Managers. AECOM Project Managers that are currently on-site have participated in these training sessions to ensure that their level of knowledge and understanding is consistent with the expectations of senior project management staff.

AECOM can provide assistance to the Authority in the structuring of ongoing training and development programs, providing instructors and training programs in select areas of interest. We can organize seminars and webinars on diverse topics and "lessons learned" from our portfolio of national and international projects. This approach will facilitate the procurement of external training services and also allow the transfer of knowledge to Authority staff.

Quality Control/Quality Assurance

AECOM has a longstanding commitment to quality; it has been part of the company's legacy for more than 70 years. This commitment is demonstrated by the company's recent certification to the new ISO 9001:2000 quality management standard. AECOM has been certified as an ISO-9001:2000 firm and has company-wide procedures in place to monitor and audit quality and to ensure consistent and correct work product preparation and archiving. All of our Project Managers have had trainings for project quality controls. With the continual training and compliance practice, the AECOM Team will assure that the PANYNJ's Quality Procedures are followed for the particular projects they will be managing.

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Section F. Hourly Rates & Multipliers

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Firm	Home Office			
	Direct Labor	Overhead	Profit	Multiplier
AECOM	1.00	1.36	7.5%	2.54
Tishman[1]	1.00	1.3936	0.2394 (10%)	2.63
Ellana[2]	1.00	2.09	0.25 (12%)	2.34
G2[3]	1.00	1.00	0.20 (10%)	2.20
Industria[4]	1.00	1.20	0.20 (9%)	2.40
NIA[5]	1.00	1.247	0.152 (6.75%)	2.399

Firm	Field Office			
	Direct Labor	Overhead	Profit	Multiplier
AECOM	1.00	1.03	7.5%	2.18
Tishman[1]	1.00	1.3057	0.20 (0.10%)	2.20
Ellana[2]	1.00	1.80	0.22 (12%)	2.02
G2[3]	1.00	0.95	0.20 (10%)	2.15
Industria[4]	1.00	1.09	0.19 (9%)	2.28
NIA[5]	1.00	1.09	0.123 (5.90%)	2.213

Please note:

AECOM is committed to proving the highest level of service to Port Authority at the most competitive price. AECOMs current home office overhead is 158 percent and profit of 10 percent. Due to the current economic conditions and funding situation for capital projects at Port Authority, AECOM is lowering its overhead to 136 percent and profit to 7.5 percent for this contract engagement with a resulting multiplier of 2.54. We look forward to providing high quality staff and services to Port Authority at this very competitive rate.

Likewise for our field multiplier, our current overhead is 118 percent and profit of 10 percent. AECOM is lowering its overhead to 103 percent and profit of 7.5 percent

Multipliers of AECOM, Tishman, Ellana, G2, Industria, and NIA, include vacation, holiday, sick pay, worker's compensation, insurance, office rent, and profit.

[1]: Tishman Construction | [2]: Ellana, Inc. (WBE) | [3]: G2 Project Planning, Inc. (WBE) | [4]: Industria, Inc. (MBE) | [5]: NIA Technologies Corporation (MBE)

Hourly Rates

Name		Project Role	Firm	Hourly Rates
AECOM				
Azzaro, John, PE	PE	Officer-in-Charge	AECOM	*
Pierce, Kevin, PE	PE	Program Coordinator	AECOM	$225.00**
Niro, Achille, PE	PE	QA/QC	AECOM	$225.00**
Quaranta, Thomas		Project Manager	AECOM	$225.00**
Adams, Paul	PE	Project Manager	AECOM	$100.70
Allerdings, Jerry	PE	Project Manager	AECOM	$67.90
Alston, Gerald		Project Manager	AECOM	$41.90
Chong, Sue Anne		Project Manager	AECOM	$44.92
Bobetsky, Kenneth	PE	Project Manager	AECOM	$74.10
Benosky, Christopher	PE	Project Manager	AECOM	$79.20
Chu, Francis	PE	Project Manager	AECOM	$73.94
Conger, Dave	PE	Project Manager	AECOM	$68.98
Eilinger , Fred	PE	Project Manager	AECOM	$66.15
Figuereo, Indhira		Project Manager	AECOM	$46.22
Garbolski, Michael	PE	Project Manager	AECOM	$56.60
Giovanelli , Paul	PE	Project Manager	AECOM	$78.23
Grande, Frank	PE	Project Manager	AECOM	$75.51
Greenberg, George	PE	Project Manager	AECOM	$59.17
Hammond, Edward	PE	Project Manager	AECOM	$69.30
Hand, Joe	AIA	Project Manager	AECOM	$74.97
Hapkiewicz, John	PE	Project Manager	AECOM	$56.61
Kekish, Borys	PE	Project Manager	AECOM	$70.29
Lai, Chee	PE	Project Manager	AECOM	$79.80
Lavallee, Andrew	RLA	Project Manager	AECOM	$59.50
Linkowski, Mark	EIT	Project Manager	AECOM	$48.62
Marcantonio, Elizabeth	PE	Project Manager	AECOM	$38.85
Matarazzo, Joe	PE	Project Manager	AECOM	$70.22
Mazumdar, Azim	PE	Project Manager	AECOM	$65.02

*: As Officer-in-Charge, will not be billing on project.

**: Billing Rate.

Meister, William	PE	Project Manager	AECOM	$73.08
Minkley, Mark	RLA	Project Manager	AECOM	$49.34
Murphy, Alexander (Sandy)	PE	Project Manager	AECOM	$70.74
Parnes, Jerry	PE	Project Manager	AECOM	$84.12
Peraza, Ana	PE	Project Manager	AECOM	$47.16
Quast, Donald	PE	Project Manager	AECOM	$81.43
Rondinello, Lou	PE	Project Manager	AECOM	$73.89
Rosciglione, Antonio	AIA	Project Manager	AECOM	$54.96
Schneidt, Len	PE	Project Manager	AECOM	$77.53
VanSickels, James	PE	Project Manager	AECOM	$70.46
Woo, Tom	PE	Project Manager	AECOM	$73.53
Zhao, Shaoling	PE	Project Manager	AECOM	$84.30
Tishman Construction				
Calabrese, Jennifer		Estimator (In-house)	Tishman	$61.62
DaCruz, Rosana		Estimator (In-house)	Tishman	$51.35
Rodriguez, Frank		Project Manager	Tishman	$85.65
Schmitt, Gary		Project Manager	Tishman	$62.32
Seliga, Chris		Scheduling (In-house)	Tishman	$91.03
Ellana, Inc.				
Ahuja, Rohit		Senior Scheduler	Ellana	$62.50
Chi,n Henry		Senior Project Cost Manager	Ellana	$72.11
Fitzer, Walter		Chief MEP Estimator	Ellana	$69.71
G2 Project Planning				
Glavasich, Christine		Sr. Estimator (General Construction)/ Scheduler	G2 Project Planning	$45.00
Harlow, Brett		Sr. Estimator - Mechanical	G2 Project Planning	$45.00
Mainella, Michael		Sr. Estimator – Electrical	G2 Project Planning	$45.00
Industria				
Collins, Christine		Assist Project Manage	Industria	$36.00
Daniels, Sheketa		Sr. Administrative Assistant	Industria	$30.00
Madonia, Joseph		Sr. Project Manager	Industria	$78.00
Quinn, Sharon		Project Manager	Industria	$48.00

Wittrock, Kathleen		Sr. Administrative Assistant	Industria	$28.00
NIA Technologies Corporation				
Fox, Linda		Contract Management Specialist	NIA Tech	$30.00
Fraser, Desiree		Contract Management Specialist	NIA Tech	$31.00
Smith Jim		Scheduler/Contract Management Specialist	NIA Tech	$38.00

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Section G. W/MBE Participation

Section G. M/WBE Participation

AECOM has a tradition of encouraging W/MBE participation. We selected the following subconsultants not only based on their M/WBE status but also their technical merit and a long history of collaborating with AECOM in serving the Port Authority of New York and New Jersey.

Ellana, Inc. (WBE)

Incorporated in 1998, ELLANA, Inc. is a certified Woman's Business Enterprise National Council (WBENC), Women-owned Business Enterprise (WBE) and Disadvantaged Business Enterprise (DBE) construction consultant firm that provides a suite of design and construction phase services as a primary consultant to owners/developers, as well as a subconsultant to design teams and construction mangers/general contractors. ELLANA brings extensive cost estimating experience for on-call projects such as PANYNJ, NYCSCA, NYCHA, NYSOGS, and DASNY.

The firm's PANYNJ project experience includes:

- PANYNJ World Trade Center Tower One, New York, NY
- PANYNJ, Architectural, Engineering, and Interior Design Services for Offices at 4 World Trade Center, New York, NY
- PANYNJ, TWA Building 60 Interior Adaptive Reuse/ Exterior Improvements JFK International Airport, Queens, NY
- PANYNJ, World Trade Center Vehicle Security Center and Tour Bus Parking Facility, New York, NY
- PANYNJ, USAir Terminal at LaGuardia Airport, Queens, NY
- PANYNJ, New International Arrivals Building/ Terminal Four at JFK International Airport, Queens, NY
- PANYNJ/Redevelopment of jetBlue Terminal, JFK International Airport, Queens, NY

The firm's on-call project experience includes:

- National September 11 Memorial & Museum at the World Trade Center, New York, NY
- NYCSCA, On-Call Cost Estimating Services Contract, New York, NY
- NYSOGS, Life Safety Services Term Contract, State of New York
- NYCHA, Cost Estimating Requirements Contract, New York, NY
- DASNY, Architectural/Engineering Term Contract, New York State
- NYSOGS, Term Contract to Review Fire Safety Program Standards and Requirements, Various DCS Facilities, Statewide

The firm's representative detailed project experience includes:

PANYNJ, Newark Liberty International Airport A/E Services, Terminal B Modifications

Client: URS Corporation
Contact Person: Michael R. Collins, AIA
Title: Project Manager
Phone/email: [redacted]
Project Start/End: 2008-2009
Project Cost: $5 Million

ELLANA provided CPM scheduling services for modifications to Terminal B at Newark Liberty International Airport. Services include Stage III - Final Design and Contract Documents and Stage IV – Post Award Services for the new mid and upper levels meter/greeter areas and related infrastructure. Work includes conversion of the domestic baggage claim hall to a domestic ticketing hall; improvements to the meter/greeter and Interline baggage re-check areas; relocation of existing ticket counters; and the addition of a new mezzanine level, among other tasks.

PANYNJ, World Trade Center Vehicle Security Center and Tour Bus Parking Facility

Client: Tishman Construction Company
Contact Person: Douglas Troast
Title: Project Director
Phone/email: [redacted]
Project Start/End: 2009-2011
Project Cost: Confidential

ELLANA is providing construction cost estimating services for the four story 295,700sf vehicle and tour bus parking and screening facility. The structure which is a mix of structural steel and concrete on deck with cast in place walls is being built to the standards for all the buildings at the WTC site. One of the tasks we were assigned with is to keep the overall cost split into East and West because the Deutsche Bank occupies half of the site and construction cannot get started until the building is finally demolished. Due to the complex nature of the project, the estimating team has spent extra effort in coordinating the trades and various design aspects of the project as the design has evolved. In addition, when complete the Project site will be landscaped to become Liberty Park, since the majority of the building is below grade, and contained within the WTC "bathtub".

PANYNJ, Headquarters at 4 WTC

Client: Studios Architecture
Contact Person: Adrianne Cartelli
Title: Associate Principal
Phone/email: [redacted]
Project Start/End: 2008-2012
Project Cost: Confidential

ELLANA is responsible for the project cost estimating and scheduling services for the new corporate offices of the Port Authority of NY & NJ, consolidating about 1,700 Port Authority staff from multiple buildings in Manhattan and New Jersey in one central location (approximately 450,000sf) at 150 Greenwich Street in Manhattan. The offices will cover approximately 15 to 20 contiguous floors, 1 podium floor (approximately 35,000 square feet located on the retail level to include a cafeteria, conference center, and an emergency command post), and 1/3 of the subgrade space in the new World Trade Center - Tower 4 Building. In compliance with current PANYNJ sustainability objectives all office buildings will comply with the World Trade Center Sustainable Guidelines, leading to a LEED Gold rating.

G2 Project Planning(WBE)

G2 Project Planning Inc. is a certified Women's Business Enterprise (WBE) that provides high quality and responsive Construction Cost Management Services to Architects, Engineers, Developers, Owners and Construction Contractors. The firm's experience and expertise in cost planning, management and consulting includes projects in the healthcare, transit and transportation, corporate, laboratory, educational, and judicial/Courthouse sectors.

The firm's clients and project experience include:

- Amtrak: Arrivals Concourse Extension, Washington Union Terminal, Washington, D.C.
- NYCDOT: St. George Ferry Terminal Intermodal Station Rehabilitation, Staten Island, New York
- MTA/NYC Transit:
  - Manhattan East Side Transit Alternatives Study (2nd Avenue Subway), Phase 2
  - Rehabilitation of the Times Square Subway Station
  - Rehabilitation of Three Elevated Stations on the Jerome Ave. Line, Bronx, NY
  - Rehabilitation of the 14th Street and 7th Avenue Subway, New York, NY
  - Columbus Circle Stations, Hearst Corporation ADA and Circulation Improvements
  - 3-Year Indefinite Quantity Contract, Functional Planning and Engineering for Miscellaneous Engineering Projects
- MTA/Metro-North Railroad:
  - Grand Central Terminal Kit Room Expansion Site Assessment – New Office Space within Grand Central Terminal
  - Upper Harlem Line Station Improvements
  - New Parking at West of Hudson Stations
  - New Parking at Irvington, Greystone and Sputen Duyvil

- Grand Central Terminal, Elevator Upgrade

- New Penn Station/James Farley Building Restoration/New Penn Station
- Grand Central Terminal Restoration Project, New York, New York – Change Order Review on behalf of Owner and Developer (MTA/ Metro-North Railroad and Jones Lang LaSalle)

The firm's representative detailed project experience includes:

NYCT, Rehabilitation of the Times Square Shuttle Station

Client: NYCT – DMJM+Harris/Gruzen
Contact: Person:Robert Pinghero
Title: Vice President
Phone/email: [redacted]
Project Start/End: 2005 - 2007
Project Cost:$90 Million

This highly complex project included extensive structural reconstruction, including removal and relocation of existing columns at Times Square, removal of the existing roof structure up to street level, construction of significant temporary structures, new subway walls, new street stairs in new locations, as well extensive work associated with Maintenance and Protection of Traffic. Rehabilitation of the Times Square Shuttle Station at 42nd Street in Mahattan. Project includes major structural modifications to the station.

LIRR, Bill of Materials for the Babylon Yards Reconfiguration

Client: LIRR – Edwards & Kelcey(Jacobs)
Contact Person: Michael Kennedy
Title: Vice President
Phone/email: [redacted]
Project Start/End: 2004-2006
Project Cost: $15 Million

The Babylon Yards Reconfiguration project required the preparation of a Bill of Materials (BOM) for general construction work (site work) as well as new trackwork, signals, and general electrical.

NYCT, Rehabilitation of Three Stations on the Jerome Avenue Line

Client: NYCT – HOK
Contact Person: D. Kent Turner
Title: Vice President
Phone/email: [redacted]
Project Start/End: 2004-2005
Project Cost:$45 million

This project was for the rehabilitation of three elevated subway stations on the Jerome Avenue Line in The Bronx. Stations included were 167th Street, Fordham Road and Woodlawn Avenue. Project included recladding of existing stations, structural enhancements and MEP upgrades.

Comprehensive Redevelopment, Phases I, II, III and IV, Kings County Hospital Center

Client: DASNY/SOM
Contact Person: Gaetano Punzi
Title: Vice President
Phone/email: [redacted]
Project Start/End: 2000-2004
Project Cost:$150 Million

Project Manager and General Construction estimating for this multi-phase rehabilitation of Kings County Hospital in Brooklyn, New York. Phase I was the construction of a new 250 bed patient tower; Phase II was a new diagnostic and treatment facility; Phase III was the conversion of existing office space into an ambulatory care facility; Phase IV is a new Mental Health Facility. From Phases I through III, G2 worked with the architect in developing design phase estimates. At each design phase of each project, G2 was required to a comprehensive reconciliation between their estimate and estimates prepared by the Construction Manager. In Phase IV, the Mental Health Facility, G2 was retained by the New York City Office of Management and Budget to prepare an independent estimate as a check on the architect's estimate. G2 also provided cost estimating services for the 40-hour VE workshop, costing out alternatives to improve the project developed by an outside team of experts.

Industria, Inc. (MBE)

Celebrating its 17th Anniversary, Industria, a PANYNJ certified MBE, provides professional General Contracting and Construction Management Services for clients such as PANYNJ, Midway International and O'Hare International Airports, Chicago Public Schools, Chicago Park District, Chicago Housing Authority, and Chicago Transit Authority.

The firm's expertise includes: coordinating the project staff and on-site activities; organizing and overseeing job-site construction administration and supervision; managing the procurement of contractors and suppliers; managing schedules, quality of work, coordination of trades and payment requests; developing, monitoring, updating and communicating the schedule and its progress; establishing and maintaining communication of project with owner, architect and contractors; applying construction management tools and techniques for successful project completion; and conducting program management tasks regarding progress documentation and document control.

The firm's representative project experience includes:

Terminal B Modernization, Newark Liberty International Airport

Client: PANYNJ
Contact Person: Jim Heitmann
Title: Manager of Physical Plant & Infrastructures
Phone/email: (973) 961-6206; jheitmann@panynj.gov
Project Start/End: 2007-2010
Project Cost: $200 Million

The work provides for construction of a new domestic claim hall with four (4) baggage carousels and passenger amenities, 2-new 4-stop elevators, five (5) new escalators, and reconstruction of the North & South Power Substations supported each by new 2.8 MW Generators. The work includes all new architectural finishes, mechanical, electrical, plumbing, HVAC and fire sprinkler/protection upgrades in the Lowe Level Claim Hall, and 18 check-in counter positions at the B2 lower level core.

Three connectors were expanded to accommodate four (4) new TSA Passenger Screening Lanes, post concessions at each connector, and space for future airline lounges at the INS Level of the B2 Connector. The work includes all new MEP upgrades, an etched glass panel wall system (interior), backlit onyx walls and skylights at various locations.

The Terminal B Roadway System was reconstructed to accommodate the Terminal B conversion from a 2 level to three level terminal. The work included the reconstruction of a new bridge (N-7), and widening and reconstruction of another bridge (N-8) and associated ramps to provide an International Departures Level (top level), Domestic Departures (Mid Level) and new at-grade Lower Level Arrivals to accommodate the new Baggage Claim Level for expanded use and increased capacity/higher level of service for Terminal B. The work included all new infrastructure upgrades, 2 Taxi-Booth operations, 500 foot long canopy increasing the lane capacity from 5 lanes to 9 lanes, signature landscape and irrigation system.

Newark Redevelopment Program/Continental Global, Newark Liberty International Airport

Client: Port Authority of NY & NJ
Contact Person: Jon Weston
Title: Deputy Director
Phone/email: (212) 435-3840; jweston@panynj.gov
Project Start/End: 1998-2003
Project Cost: $275 Million

The overall contract consisted of two (2) parking structures (Terminal C Parking Structure, P-4 Parking Structure), Monorail Station P-4 expansion, and an entire reconstruction and expansion of the Terminal C Frontage Roadway System that was expanded with additional curb frontage and modified to accommodate the conversion of a two level terminal into a three level Terminal C. The work was highly complex in terms of staging and phasing to construct all portions of new work, while keeping pedestrian traffic, operational on the frontage of the existing terminal and parking

areasl, during the 4 to 5 years of construction. The work included all new infrastructure systems/utilities servicing the new state of the art parking facilities and frontage roads, lighting, hardscape/landscape, etc.

Newark Redevelopment Program/ Continental Global, Newark Liberty International Airport

Client: PANYNJ
Contact Person: Herman Ret
Title: Manager of Electrical Maintenance
Phone/email: (973) 961-6144; hret@panynj.gov
Project Start/End: 2000-2007

Provided licensed electrical senior linesman for high tension power sources working as a consultant to the PA Electrical Maintenance Division. Work. The work included construction inspections and consulting on airside power switchhouses, terminal switchgear, new substation inspection and approval/turnover and acceptance on several airport facilities, including all three terminals, parking structures and Monorail Stations.

NIA Technologies Corporation(WBE)

Nia Technologies is a Port Authority certified MBE Company located in Mount Arlington, New Jersey. The firm provides support services in the following areas:

- Computer Network Administration and Computer Desktop Support
- Information Technology Consulting
- Applications Specialists in AutoCAD, Primavera Scheduler and Expedition
- Document Control
- Telecommunications Specialists
- Construction Management Support
- Budget Control Support

NIA Technologies Corporation is proud to have contributed to the Port Authority since its inception in various support roles including technology services, Primavera implementation and server support services as well as application specialization and document distribution and support.

NIA's PANYNJ experience includes:

- Newark AirTrain Project
- JFK AirTrain and Jamaica Station Projects
- Engineering Departments TB&T
- PATH
- NJ Airports
- Security Program
- Downtown Restoration Program
- NY Airports

AECOM

Performance of Expert Professional
Project Management Services
as Requested on a "Call-In" Basis
During 2011, 2012, 2013 and 2014
RFP No. 22388

Section H. Affiliates

Section H. Affiliates

Name of Submitting Vendor: AECOM USA, Inc.

Submitting Vendor's EIN/SSN/TIN: 13-5511947

Submitting Vendor's Parent Company: AECOM Technical Services, Inc.
Type of Business: For Profit
EIN/SSN/TIN: [redacted]
Address: 515 South Flower Street, Los Angeles, CA 90071
Main telephone number: (213) 593-8000
Main fax number: (213) 593-8730

Submitting Vendor's Additional Affiliates

AECOM Services, Inc.
For Profit
[redacted]
Address: 515 South Flower Street, Los Angeles, CA 90071

AECOM, Inc.
For Profit
[redacted]
Address: Two Technology Park Drive, Westford, MA 01886

EDAW
For Profit
[redacted]
Address: 150 Chestnut Street, San Francisco, CA 94111

Economic Research Associates (California)
For Profit
[redacted]
Address: 515 South Flower Street, Los Angeles, CA 90071

Earth Tech/Archer Western, LLC.
For Profit
[redacted]
Address: 515 South Flower Street, Los Angeles, CA 90071

Earth Tech WE Holding, Inc. (Delaware)
For Profit
[redacted]
Address: 515 South Flower Street, Los Angeles, CA 90071

Cass Water Engineer, Inc. (Delaware)
For Profit
[redacted]
Address: 515 South Flower Street, Los Angeles, CA 90071

Tishman Construction Corporation
For Profit
[redacted]
Address: 666 Fifth Ave, 38th Floor
New York, NY 10103

AECOM

Performance of Expert Professional
Project Management Services
as Requested on a "Call-In" Basis
During 2011, 2012, 2013 and 2014
RFP No. 22388

Section I. Conflict of Interest

Section I. Conflict of Interest

AECOM and our proposed project staff do not have, and will not give the appearance of, a possible conflict of interest for RFP No. 22388 for the Performance for Expert Professional Program Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014.

AECOM

Performance of Expert Professional
Project Management Services
as Requested on a "Call-In" Basis
During 2011, 2012, 2013 and 2014
RFP No. 22388

Section J. Contract Exceptions

Section J. Contract Exceptions

October 21, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

Attention: RFP Custodian

Re: Performance for Expert Professional Program Management Services As Requested On a "call-in" Basis During 2011, 2012, 2013, 2014, RFP No. 22388

Dear Sir/Madam:

Per Article II(J) SUBMISSION REQUIRMENTS of the subject RFP, AECOM respectfully requests the Port Authority of New York and New Jersey consider the following revisions to the standard agreement terms and conditions:

1. Article 6 – As professionals, we perform our services according to a standard of care. We request that this standard of care be included in the agreement as follows: "Notwithstanding the foregoing, in the performance of its professional services, Consultant will use that degree of care and skill ordinarily exercised under similar conditions in similar localities and no other warranties, express or implied, are made or intended by Consultant."

2. Article 16 – Since the Authority will own all documents or materials prepared or compiled under this contract, as well as have the right to use or permit such documents and materials for any purpose it sees fit, the following language is requested regarding such future use :"Any reuse of Consultant prepared documents, except for the specific purpose intended hereunder, will be at the Authority's sole risk and without liability or legal exposure to Consultant or its subconsultants." after the first sentence.

Very truly yours,
AECOM USA, Inc.

John Azzaro, PE
Vice President

About AECOM

About AECOM
AECOM is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 51,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation, and technical excellence in delivering solutions that enhance and sustain the world's built, natural, and social environments. A Fortune 500 company, AECOM serves clients in more than 100 countries and had revenue of $6.3 billion during the 12-month period ended June 30, 2010. More information on AECOM and its services can be found at www.aecom.com.

AECOM USA, Inc.
605 Third Avenue
New York, NY 10158
212.973.2900

www.aecom.com

Proposal for the Performance of Expert Project Management Services as Requested on a Call-In Basis during 2011, 2012, 2013 and 2014

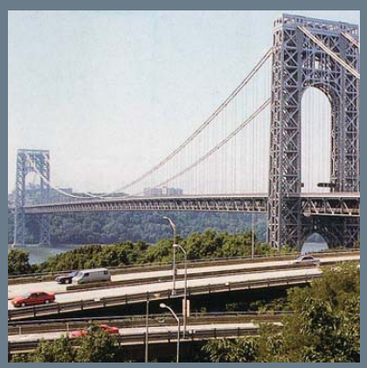
RFP #22388

Submitted to:
Port Authority of
New York and New Jersey

Submitted by:
HNTB New York Engineering & Architecture, PC
An affiliate of HNTB Corporation

October 21, 2010

HNTB



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October 21, 2010
The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
ATTN: RFP Custodian

Re: Proposal for Performance of Expert Professional Project Management Services as Requested on a "Call-in" Basis During 2011, 2012, 2013 and 2014 – RFP #22388

RFP Custodian:

To best serve the Port Authority of New York and New Jersey (the Authority) on your Project Management Call-in agreement, you need an experienced team that has intimate knowledge of your facilities, extensive experience on large-scale program management contracts, and brings local success with on-call contracts. **The HNTB Team is that team.** We will apply our successful project experience and valuable lessons learned to address the goals of this contract. *Specifically, there are three key benefits to selecting HNTB:*

- **Experienced Project Director. Project Director Phil Collin, PE,** will apply his 21 years of experience by being fully engaged, responsive and focused on the best interest of the Authority. Phil leads HNTB's Program Controls and Construction Management Department in New York. He has worked on many of the region's most critical infrastructure projects, such as New Jersey Turnpike Authority Secaucus Interchange, the MTA – New York City Transit's Times Square Station Rehabilitation, and the MTA – Bridges and Tunnels' Robert F. Kennedy (Triborough) Bridge Rehabilitation (TB-63). In addition, Phil will be supported by a team of seasoned program and project managers. **We are committed to providing the Authority with the right team of experts that can successfully deliver comprehensive project management services to meet your goals.**

- **National Experience in the Program Management of Major Facilities.** HNTB is one of the nation's preferred providers of program management services to major transportation agencies. Our key staff has provided comprehensive program management and project implementation services on billion-dollar capital improvement programs. HNTB has provided these services on numerous large-scale program management projects, such as the $2 billion New Jersey Turnpike Interchange 6 to 9 Widening Program, the $6.3 billion Illinois State Toll Highway Authority Program Management and Project Controls Program, and the $7 billion North Texas Tollway Authority Program Management Office/General Engineering Contract, just to name a few. For *Engineering News-Record's* annual listing of the Top 500 Design Firms, HNTB is consistently ranked in the top ten in each of the separate categories of mass transit and rail, airports and bridges – all services lines relevant to your project. **Our team will apply our national program management, reporting, asset management and project control expertise to provide you with the most comprehensive program management service – ultimately saving you time and money.**

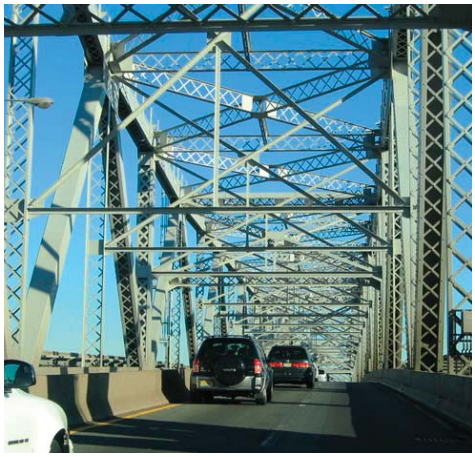
- **Extensive Authority Experience.** HNTB has held many call-in contracts with the Authority, such as the Call-in Security Improvements at Authority Facilities, Civil/Rail Call-in and Structural Call-in, and has a thorough understanding of your processes, procedures, requirements and standards. Our staff has worked extensively on the PATH, World Trade Center, the Lincoln Tunnel approaches, as well as Goethals, Bayonne and George Washington Bridges. This means that there is virtually no learning curve for the technical team, from engineer to CAD technician, who have used Authority design standards, CAD standards, and technical specifications on previous assignments. **Our combination of experience on similar projects and knowledge of your procedures enables us to provide you with responsive services and solutions that meet your expectations.**

Additionally, *Roads & Bridges'* August 2010 issue ranked **HNTB as one of the the top three "go-to" firms in five of six categories including road and highway, mass transit, bridges, airports, stormwater systems and design-build projects. Among firms delivering mass transit projects, HNTB ranked number one.** HNTB looks forward to continuing our relationship with the Authority and offers you our proven expertise, subject matter experts and intimate knowledge that will prove essential during any and all identified task orders. Should you have any questions, please do not hesitate to contact me or Project Director Phil Collin, PE, at (212) 594-9717.

Respectfully submitted,
HNTB New York Engineering & Architecture, PC
An affiliate of HNTB Corporation

Thomas Potts, PE
Vice President/Principal-in-Charge

TABLE OF CONTENTS



A. Attachment B

B. Attachment C

C. Qualifications and Experience of Staff

D. Firm Experience

E. Management Approach

F. Salary and Multipliers

G. M/WBE Participation

H. Firm Affiliates

I. Conflict of Interest

J. Terms and Conditions

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf,* not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

HNTB New York Engineering & Architecture, PC
An affiliate of HNTB Corporation
(Company)

(Signature)

Vice President, Northeast Division
(Title)

10-15-10
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

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Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

Halcrow, Inc.
(Company)

(Signature)

SENIOR VICE-PRESIDENT
(Title)

OCTOBER 8, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type): HNTB New York Engineering & Architecture, PC
   An affiliate of HNTB Corporation

2. Business Address (to receive mail for this RFP):
   5 Penn Plaza, Floor 6, New York, NY, 10001

3. Business Telephone Number: (212) 594-9717

4. Business Fax Number: (212) 947-4030

5. Firm website: www.hntb.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 11 / 04 /1992

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):
   See following page

9. Officer or Principal of Firm and Title:
   A. William Rutherford, PE, Vice President

10. Name, telephone number, and email address of contact for questions:
    A. William Rutherford, PE, Vice President
    (212) 594-9717 brutherfor@hntb.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

ATTACHMENT C (continued)

8. Name, Address, and EIN of Affiliates or Subsidiaries

- 1914 Holding Company [redacted] This entity is the ultimate parent of the HNTB Companies. Address: 715 Kirk Drive, Kansas City, MO 64105
- HNTB Holdings Ltd [redacted] This entity is 100% owned by 1914 Holding Company and owns 100% of the following 3 subsidiaries. Address: 715 Kirk Drive, Kansas City, MO 64105
- HNTB Corporation [redacted] This entity is 100% owned by HNTB Holdings Ltd. Address: 715 Kirk Drive, Kansas City, MO 64105
- HNTB International Corporation [redacted] This entity is 100% owned by HNTB Holdings Ltd. Address: 715 Kirk Drive, Kansas City, MO 64105
- HNTB Design/Build In [redacted] This entity is 100% owned by HNTB Holdings Ltd. Address: 715 Kirk Drive, Kansas City, MO 64105
- HNTB Corporation (a Massachusetts Corporation) [redacted]). This entity is 100% owned by Robert E. Sutton, a shareholder of HNTB New York Engineering & Architecture, PC. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Pennsylvania, Inc. [redacted]). This entity is 50% owned by John G. Finn, a shareholder of HNTB New York Engineering & Architecture, PC. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Alabama Inc. [redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Arkansas, Inc. ([redacted]. Address: PO Box 412197, Kansas City, MO 64141
- Howard Needles Tammen & Bergendoff California Architects PC [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Connecticut Architecture, PC [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB District of Columbia Architecture, PC [redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB District of Columbia, PC ([redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Georgia, Inc ([redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Idaho, PA ([redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Illinois, Inc. ([redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Indiana, Inc. ([redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Iowa, Inc. [redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Louisiana Architecture, Inc. [redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Maine, Inc. [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Maryland, Inc. ([redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Michigan, Inc [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Mississippi Architecture, PC [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Montana, Inc [redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Nevada, Inc. [redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB New Jersey Architecture, Inc. ([redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB New York Engineering & Architecture, PC. ([redacted] Address: PO Box 412197, Kansas City, MO 64141.
- HNTB New York Architecture, PC [redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB North Carolina, PC [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB, PC [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Ohio, Inc. [redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Oklahoma, PC. ([redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Oregon Architecture, PC. ([redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Rhode Island, Inc. [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Virginia Architecture, Inc. ([redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Vermont Engineering, PC. [redacted]). Address: PO Box 412197, Kansas City, MO 64141

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   Halcrow, Inc.

2. Business Address (to receive mail for this RFP):

   22 Cortlandt St
   New York, NY 10007

3. Business Telephone Number: 212-608-3990

4. Business Fax Number: 212-566-5059

5. Firm website: www.halcrow.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 11 / 18 / 2004

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):
   HPA Engineers, PC, 22 Cortlandt St., New York, NY 10007, EIN 20-1964427;
   Halcrow Engineers, PC, 22 Cortlandt St., New York, NY 10007, EIN 20-1964391

9. Officer or Principal of Firm and Title:

   Michael Della Rocca, President

10. Name, telephone number, and email address of contact for questions:
    Jonathan Goldstick, [redacted]

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

C. QUALIFICATIONS AND EXPERIENCE OF STAFF

THE HNTB TEAM

HNTB is a preferred provider of program management services to major transportation agency clients nationwide. **HNTB's track record as a pioneer in program management assignments** includes services to agencies in New Jersey, Pennsylvania, Washington, Texas, Missouri, Illinois and Minnesota to name just a few. Our expert program management staff continuously takes best practices and lessons learned in the evolution of the industry and applies them to gain time- and cost-efficiencies for our clients. HNTB employs nearly 4,000 professionals in more than 64 locations nationwide, including nearly 400 in the New York/New Jersey metropolitan area. Our resources are more than adequate to complete your on-call projects within your timeframe and budget.

The key to success on any project relies on a team of well qualified staff. The HNTB Team assembled for this 'call-in' project will be led by **Project Director Phil Collin, PE.** Phil brings more than 20 years of experience, including serving as manager for construction inspection/management service contracts for clients such as the New Jersey Turnpike Authority, New York City Department of Transportation (NYCDOT), New York City Economic Development Corporation, and MTA Bridges & Tunnels. His recent experience includes the $630 million NYCDOT Replacement of the Willis Avenue Bridge, as well as schedule manager for the $7.8 billion East Side Access Program.

Phil will be supported by a team of talented program managers who bring extensive experience on large-scale programs. The chart at right shows their management experience on projects over $100 milion in the past five years.

Principal-in-Charge Tom Potts, PE, has more than 36 years of experience and has provided his expertise on projects across the country, including supervising structural engineering 'on-call' contracts for the Authority. Additionally, **QA/QC Manager Joe Englot, PE,** will apply his more than 38 years of experience working on Authority projects, making sure your project is delivered to your standards.

HNTB is One of the Nation's Top Go-To Firms

Roads & Bridges' August 2010 issue ranked HNTB among the top three "go-to" firms in five of six categories, including road and highway, mass transit, bridges, airports, stormwater systems and design-build projects. **HNTB ranked number one among firms delivering mass transit projects.** The listing is significant as it is a survey of appointed and elected officials and engineers in state, county, city, township, municipal, federal and special road districts.

The organization chart included on page C.4 highlights the staff resources we will assign to your on-call project.

Halcrow, Inc.

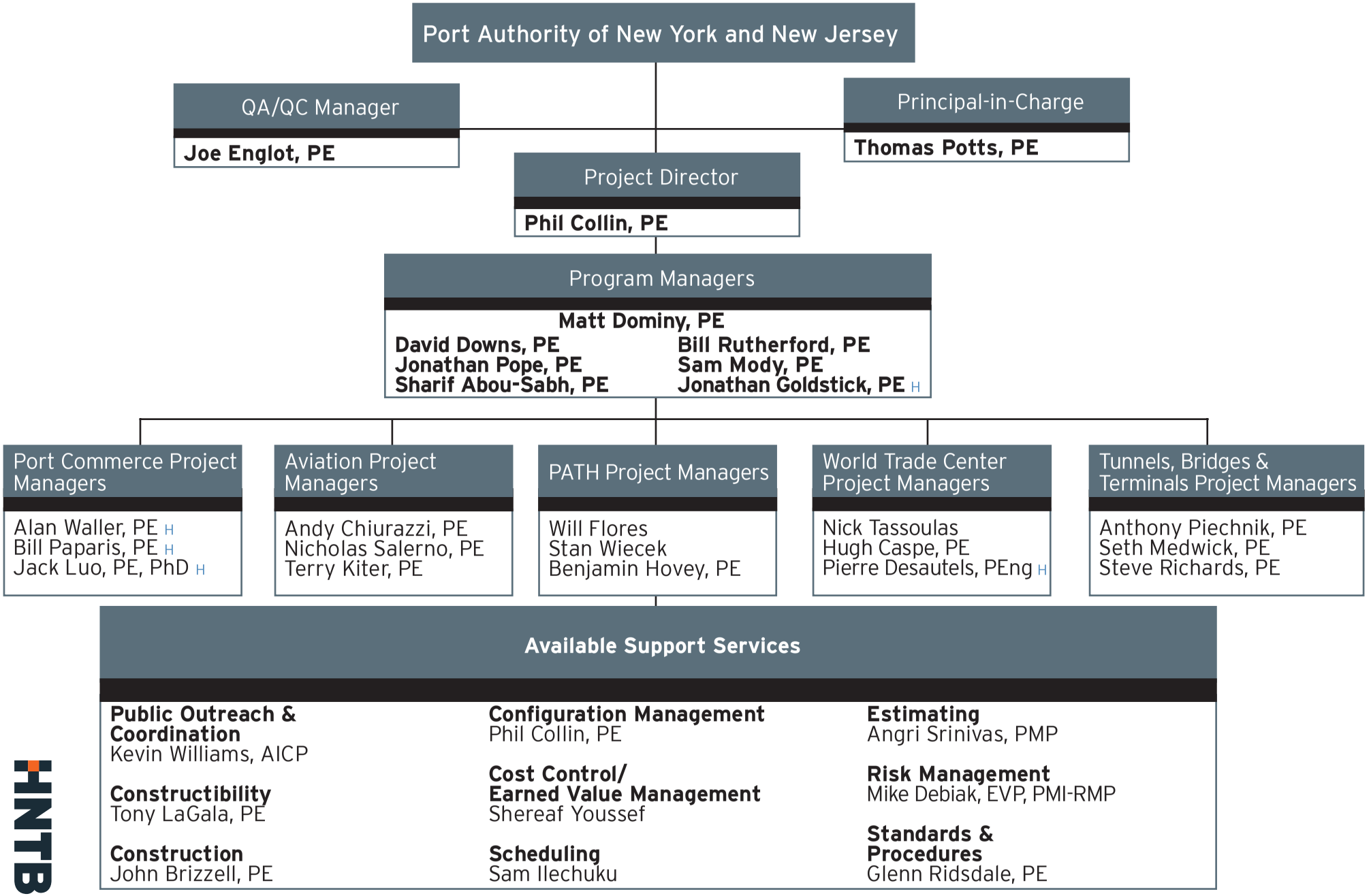
Halcrow, Inc. (Halcrow), is a global multi-discipline engineering firm, employing more than 6,000 people in more than 80 offices in 70 countries throughout the world. With more than 500 staff in 24 offices in North America, Halcrow's international, national and local experience enables them to deliver global thinking and local know-how to projects in the New York metropolitan area and beyond. **Halcrow has carried out more waterfront projects than any other consulting engineering firm in the New York region.** The firm works with all of the Port Authority of New York and New Jersey's (the Authority) line departments and divisions and currently holds "on-call" contracts for the design of waterfront structures, the inspection of waterfront structures, port planning and asset management, and is currently undertaking the Runway Safety Areas Improvement Analysis at LaGuardia Airport, the New York Regional Goods Movement Plan, and the Interagency Study of Regional Private Passenger Ferry Services in the New York Metropolitan Area.

Beginning on page C.2 is a table showcasing our key personnel's experince relevant to your project. Resumes begin on page C.5.

C. QUALIFICATIONS AND EXPERIENCE OF STAFF

Phil Collin, PE Project Director Years of experience: 21 Approximate total number of projects: 40	• MTA - Capital Construction, East Side Access Program, NY (Program Value: $7.8 billion) • NJ Transit, Preliminary Design Services for the Portal Bridge Capacity Enhancement Program, NJ (Construction Value: $1.5 billion) • NYC Economic Development Corporation, East River Waterfront Esplanade and Piers, Phase 1, NY (Construction Value: $150 million) • NJTA, Secaucus Interchange and Seaview Drive Extension, NJ (Construction Value: $220 million) • MTA, Blue Ribbon Panel, Master Scheduling and Labor Demand Modeling, NY (Program Value: $120 billion) • New York City Water Board, Coordination of Tunnel No. 3 Construction and Hudson Yards Redevelopment Program, Project Controls, New York, NY (Program Value: $1.3 billion) • TBTA, On-Call Construction Inspection (GFM-417) Contract, New York, NY (Construction Value: $30 million) • Chicago Transit Authority (CTA), Brown Line and Clark Junction Rehabilitation, Construction Management, Chicago, IL (Construction Value: $537 million) • MTA - NYCT, Times Square Station, Complex Rehabilitation, Phases I and II, Construction Management, New York, NY (Construction Value: $180 million)
Thomas Potts, PE Principal in Charge Years of experience: 37 Approximate total number of projects: 50	• PANYNJ, On-Call Structural Engineering Services, NY/NJ ($1.5 million/year) • PANYNJ, Lincoln Tunnel Helix Structural Rehabilitation and Repaving – Inspection, Stage II, and 50-percent Stage III, NJ ($478,000) • PANYNJ, Goethals Bridge and Outerbridge Structural Repairs and Painting Contracts, NY/NJ ($550 million) • PANYNJ, Design and Technical Services for Security Capital Programs on a "Call-In" Basis, NY/NJ (cost confidential) • NYSDOT, Lake Champlain Bridge Replacement, Crown Point, NY ($70 million)
Joseph Englot, PE QA/QC Manager Years of experience: 38 Approximate total number of projects: 35	• PANYNJ, The George Washington Bridge – Main Span Upper Level Structural Steel Rehabilitation, NY/NJ ($140 million) • PANYNJ, Capital Security On-Call AE Services, NJ (cost confidential) • PANYNJ, Bayonne Bridge Lift Concept, NY ($240 million) • PANYNJ, Lincold Tunnel Helix Structural Rehabilitation, NJ ($50 million) • PANYNJ, Seismic Retrofit Program for Tunnel, Bridge, and Bus Terminal Facilities, New York, NY ($100 million)
Matthew Dominy, PE Program Manager Years of experience: 40 Approximate total number of projects: 24	• DDOT, Anacostia Waterfront Improvement Implementation, Washington, D.C. ($2 billion) • MoDOT, Veterans Memorial Highway (Route 21) Relocation, MO ($120 million) • Alachua County, Florida, Public Works Director/County Engineer, FL ($1 million) • NTTA, Eastern Extension of President George Bush Turnpike, TX ($1 billion) • NTTA, Southwest Parkway, TX ($944 million) • NTTA, Lewisville Lake Toll Bridge, TX ($68 million) • Better Jacksonville Plan, Countywide Roadway and Rapid Transit Improvements Projects, FL ($1.02 billion)

David Downs, PE Program Manager Years of experience: 28 Approximate total number of projects: 20	• RTD/CDOT, Transportation Expansion Project (T-REX), CO ($1.7 billion) • UDOT, I-15 Reconstruction Project, UT ($3.5 billion) • WDOT, I-405 Project, WA ($1 billion) • MoDOT, Design-Build Program, MO ($800 million) • UDOT, I-15 CORE, UT ($1.75 billion)
Jonathan Pope, PE Program Manager Years of experience: 28 Approximate total number of projects: 10	• PANYNJ, Newark Liberty International Airport, Terminal A Modernization Program, NJ ($2.8 billion) • PANYNJ, Newark Liberty International Airport, Redevelopment Program, NJ ($780 million) • City of Chicago Department of Aviation, Operations Studies & Capital Improvement Projects, IL ($650 million) • Metropolitan Washington Airports Authority, Planning Task Management, Washington, D.C. ($400 million)
Sharif Abou-Sabh, PE Program Manager Years of experience: 34 Approximate total number of projects: 30	• Illinois Tollway Program Management Office, IL ($6.1 billion) • MTA, Stations Rehabilitation Program, New York, NY ($1.9 billion) • U.S./IL/Chicago Departments of Transportation, Metra, Amtrak, CREATE Program Manager, IL ($3 billion) • CTA, Capital Improvement Program Manager, IL ($2.4 billion)
Bill Rutherford, PE Program Manager Years of experience: 40 Approximate total number of projects: 45	• PANYNJ, Security On-Call A/E Services, NY/NJ (cost confidential) • NYCDOT, Willis Avenue Bridge, NY ($650 million) • PANYNJ, Newark International Airport, On-Call A/E Services, NJ ($20 million) • LIRR, Atlantic Avenue Viaduct Design-Build Phases I & II, NY ($69 million) • Ocean County, Mantoloking Bridge Replacement, Mantoloking, NJ ($22 million) • NJTA, Hudson County Extension Bridge Deck Repair, NJ ($10.8 million)
Sam Mody, PE Program Manager Years of experience: 27 Approximate total number of projects: 60	• NJDOT, Alexander Road Bridge Replacement over Amtrak Northeast Corridor, NJ ($24 million) • PennDOT, S.R. 4006, Section 76S, Reconstruction of City Avenue, PA ($15 million) • SJTA, Widening of Atlantic City Expressway, NJ ($30 million) • NJDOT, Reconstruction of Route I-295 Interchange 18, NJ ($17 million) • NJDOT, Route 133, Hightstown Bypass (D/B Project), Mercer County, NJ ($75 million) • NJDOT, Bypass (D/B Project), NJ ($75 million)
Jonathan Goldstick, PE Program Manager Years of experience: 30 Approximate total number of projects: 27	• PANYNJ, "On-Call" Waterfront Condition Surveys, NY/NJ ($1 million/year) • PANYNJ, "On-Call" Marine Structural Engineering Services, Engineering Division, NY ($750,000/year) • PANYNJ, Regional Private Ferry Study, NY/NJ ($475,000) • BNYDC, Brooklyn Navy Yard Rehabilitation, NY ($21 million) • HRPT, Hudson River Park Parkwide "On-Call", NY ($1.8 million) • National Parks Service, Battery Park Pier A, NY ($100,000) • NYCEDC, "On-Call" Marine Engineering Services, NY ($1 million/year)



The HNTB Team

HNTB New York Engineering and Architecture, PC *(an affiliate of HNTB Corp)*

Halcrow, Inc. H

PHIL COLLIN, PE

Role:
Project Director

Configuration Management

Firm:
HNTB

Education:
MS, 2002, Engineering Management, New Jersey Institute of Technology

BS, 1990, Civil Engineering, University of Massachusetts at Lowell

Registrations:
Professional Engineer:
NY/1996,
NJ/1995,

Affiliations:
Construction Management Association of America

NY General Contractors Association

American Society of Civil Engineers

Years of Experience:
21

Phil has had a focused career working on Northeast United States' largest, most complex projects in progressively responsible roles for over 20 years. He has spent most of that time advancing, improving upon and teaching project controls methodologies for large capital programs as part of construction management services. **He has been intimately involved, from a project controls perspective, in completing such notable projects as the NJTA Secaucus Interchange, Times Square Station Rehabilitation, Triborough Bridge Rehabilitation (TB-63), Stamford Station Center Island Platforms & Parking Garage and the I-87/I-287 Interchange 8 Reconfiguration. All of these projects demonstrated a very successful approach to project controls through contemporaneous schedule management, claims mitigation, proactive change order evaluation/ negotiations and document control.** Phil has also managed construction inspection/management service contracts for clients such as the New Jersey Turnpike Authority, New York City Department of Transportation, New York City Economic Development Corporation, and MTA Bridges & Tunnels. Phil is fully committed to providing the highest level of service to his clients by being fully engaged, responsive and focused on the best interest of the owner. His project experience includes:

Metropolitan Transportation Authority Capital Construction, East Side Access Program, New York, NY

Schedule manager for the $7.8 billion East Side Access Program for the New York City MTACC. The project is designed to improve mobility within the Long Island Transportation Corridor, specifically commuter rail access between Long Island and the East Side of Midtown Manhattan. East Side Access (ESA) relieves capacity constraints at Penn Station by connecting the Main Line and Port Washington Branches of the MTA LIRR to the existing lower level of the 63rd Street Tunnel beneath the East River, and continuing down Park Avenue in Manhattan to Grand Central Terminal (GCT). The program includes multiple contract packages for tunneling, systems, yards, facilities, stations and other works. Packages include third party contracts as well as LIRR and Amtrak Force Account work scopes. Phil's responsibilities include managing and coordinating the implementation, maintenance, reporting and change management for the program schedule. Reporting on this complex program includes monthly and quarterly cost and schedule reports through an Integrated Program Schedule (IPS) to the FTA and MTA and for ARRA requirements.

New Jersey Transit Corporation, Preliminary Design Services for the Portal Bridge Capacity Enhancement Program, NJ

Risk management services leader for the tri-venture team as part of the overall preliminary and final design services for New Jersey Transit. The project scope includes design of all aspects of the project in accordance with the EIS including the construction of two new rail bridges, track work, systems and environmental concerns to allow increased capacity through this critical portion of Amtrak and New Jersey Transit's Northeast Corridor. Phil organized the risk management work plan and facilitated the baseline risk workshops identifying 80 quantifiable project risks, mitigation measures and action plans. Phil continues to coordinate and manage the risk register and mitigation measures on a regular basis through the risk management team.

PHIL COLLIN, PE (CONTINUED)

Employment History:
2008 - Current
HNTB Corporation

2006 - 2008
Carter & Burgess

1990 - 2006
CTE Engineers, Inc./
AECOM

1988 - 1990
Camp, Dresser & McKee

Additionally, in final design a complete quantification of risks for both cost and schedule impact will be performed including Monte Carlo simulations, analysis of findings and final report presentation.

New York City Economic Development Corporation, East River Waterfront Esplanade and Piers, Phase 1, PM/Construction Management Services, New York, NY

Project manager for construction management services for the East River Waterfront Esplanade and Piers project, Phase 1. The $150 million project includes improvement and redevelopment of a two-mile portion of the East River Waterfront extending from the southern tip of Manhattan to the East River Park on the Lower East Side. Major scope components include reconstruction of South Street, installation of utilities and drainage, construction of new pile-supported, multi-use piers, and construction of new park elements including pavilions. The CM services contract included early involvement in the project to perform preconstruction efforts for this multi-contract, multi-discipline project. Preconstruction services included development of a master program schedule, detailed estimates, complex staging plans and contract packaging. Construction management services will include contractor oversight for multiple contracts, resident engineering and inspection, project controls and administration, and closeout/commissioning.

Metropolitan Transportation Authority, Blue Ribbon Panel, Master Scheduling and Labor Demand Modeling, Consulting Services, NY

Project transportation lead performing analysis of the projected $120 billion of construction forecasted for New York's five boroughs for the period of 2007 through 2012. Phil developed and coordinated the pro-forma model that was used to create global key resource estimates for the entire period. The results of this comprehensive analysis became a focused agenda item at the Blue Ribbon Panel meetings. Phil led the transportation efforts for the project and presented the findings and final conclusions to the Blue Ribbon Panel.

MTA Bridges and Tunnels (TBTA), On-Call Construction Inspection (GFM-417) Contract, Construction Management, Various Facilities, NY

Project manager who managed construction inspection staff and sub-consultants for 28 individual task orders for facility upgrades, repairs and system maintenance at the Triborough Bridge, Bronx-Whitestone Bridge, Throggs Neck Bridge, Queens Midtown Tunnel, and Verrazano Bridge. Responsibilities included project startup, client response, staffing, budgeting and schedule management. Scope of work elements for multiple concurrent projects included bridge joint replacement/deck repairs at the Manhattan toll plaza, administration building mechanical/electrical systems improvements, concrete crack injections and other structural repairs. Phil provided client response, staff selection, project startup and overall quality control.

THOMAS POTTS, PE

Role:
Principal-in-Charge

Firm:
HNTB

Education:
BS, 1973, Civil Engineering, Drexel University

Graduate Structural and Foundation Courses, New Jersey Institute of Technology

Registrations:
Professional Engineer:
NY/2007, #[redacted]
NJ/1977, #[redacted]
PA/1992, [redacted]

Affiliations:
American Society of Civil Engineers

American Concrete Institute

Years of Experience:
37

Employment History:
1973 - Current
HNTB Corporation

Tom is the office leader and a senior structural engineer in HNTB's New York office and has more than 37 years of bridge design, inspection and rehabilitation experience. He has provided his expertise on projects across the country, including supervising structural engineering 'on-call' contracts for the Port Authority of New York and New Jersey (PANYNJ), bridge and rail general engineering contracts for the New Jersey Transit (NJ Transit), and for the I-95/I-296 Interchange project for the Pennsylvania Turnpike Commission (PTC). Tom's project experience includes:

Port Authority of New York and New Jersey, On-Call Structural Engineering Services, Various Locations, NY/NJ

Project manager responsible for a variety of on-call assignments, including preparation of contract plans for the rehabilitation of the main span, eastbound, expansion tooth joint assembly at the NY tower of the George Washington Bridge. The joint rehabilitation was a prototype for rehabilitating the expansion tooth joint assemblies on the entire upper level of the GW Bridge. Modifications were made to the joint assembly and the end dam to incorporate redundancy in the event of a failure of the hold-down bolt. Additionally, HNTB was responsible for evaluation of roadway widening at the Bayonne Bridge as well as preparing preliminary and final design plans. Tom supervised rating of the existing structure for additional dead load, preliminary design of stiffening structures for the floor system and assessment of the hanger and connection assemblies for the additional loads. A final report outlining the findings, preliminary designs, cost estimates, and recommendations was prepared. Plans have also been developed for the bridge and roadway improvements.

Port Authority of New York and New Jersey, Lincoln Tunnel Helix Structural Rehabilitation and Repaving – Inspection, Stage II, and 50-percent Stage III, Weehawken, NJ

Principal-in-charge responsible for developing Stage II contract documents for the rehabilitation of bus terminal ramps at the Lincoln Tunnel. The project included the repair of reinforced concrete decks, replacement of deck expansion joints, replacing the deck wearing surface, and repair or replacement of accessible components of the deck heating system. Construction staging and MPT schemes had to be carefully developed.

Port Authority of New York and New Jersey, Goethals Bridge and Outerbridge Structural Repairs and Painting Contracts, Staten Island, NY and Elizabeth, NJ

Project manager/bridge team leader responsible for the inspection, structural rehabilitation and painting of the main span structural steelwork for the Goethals Bridge and the inspection, structural rehabilitation and painting of the approach span steelwork associated with the Outerbridge Crossing for the Port Authority of New York and New Jersey. Additionally responsible for the development of details for the rehabilitation of the tooth damn deck joints of both the George Washington Bridge and the Goethals Bridge.

THOMAS POTTS, PE (CONTINUED)

Port Authority of New York and New Jersey, Design and Technical Services for Security Capital Programs on a "Call-In" Basis, NY/NJ

Structural team leader for architectural and engineering services on an "as-needed" basis for the Capital Security Program projects at various Authority facilities throughout the Port District. The required services may include: conceptual design, design development, final design, system design and development, contract document preparation and post award services for a variety of security projects.

Port Authority of New York and New Jersey, On-Call Facility Condition Survey Services, NY/NJ

Project manager for the 2007 in-depth inspection of the 6,000-foot Bayonne Bridge, including a 1,675-foot, main-steel, arch-truss spans with suspender ropes. The work involved extensive traffic control coordination and use of UB60 and UB30 over-the-side inspection vehicles as well as lift trucks and man-lifts ranging in size from 35 to 158 feet. Extensive tethered climbing was required for inspection of the upper and lower arch trusses, suspender ropes at lower socket connections, and both open steel tower anchorages. Extensive coordination with the Authority and U.S. Coast Guard was also required for the inspection of the main span. Marine radios were utilized during the inspections to provide continual daily communication with USCG Vessel Traffic Services due to low navigational clearances over the main shipping channel. The project also involved submittal of a detailed condition survey report highlighting the status of previous and current priority and safety repair recommendations as well as submittal of biennial inspection reports for both the NYSDOT and NJDOT.

Port Authority of New York and New Jersey, On-Call Facility Condition Survey Services, NY

Project manager for the 2006 Biennial Inspection of 16 LaGuardia Airport bridges. These inspections required special access with lift trucks, traffic control and nighttime inspections. Job also included preparation of an Authority Condition Survey Report, an individual NYSDOT Bridge Inspection Report for each bridge, and load ratings for a recently rehabilitated bridge (L4) over the Grand Central Parkway.

New York State Department of Transportation, Lake Champlain Crown Point Bridge Crown Point, NY to Chimney, VT

Project manager for this historic, steel truss bridge, 2,184 feet in length from Crown Point, NY to Chimney, VT. HNTB was originally contracted to begin services in project scoping, with the intention of moving toward either rehabilitation of the existing structure or complete design of a new bridge. However, investigations into the existing pier conditions in fall 2009 led to closure of the bridge with both New York and Vermont declaring emergencies. HNTB submitted a safety assessment report that concluded the bridge too unsafe for repair and recommended controlled demolition. HNTB was asked by NYSDOT to develop the demolition plan for the existing bridge, as well as perform design and construction services for a new bridge. Due to the nature of the emergency situation, the demolition, new design, and construction are on an extremely expedited schedule with a goal to open the new bridge by summer 2011.

JOSEPH ENGLOT, PE

Role:
QA/QC Manager

Firm:
HNTB

Education:
MS, 1972, Civil Engineering, Polytechnic Institute of Brooklyn

BS, 1972, Civil Engineering, Polytechnic Institute of Brooklyn

Registrations:
Professional Engineer: NY/1978, [redacted]

Affiliations:
American Society of Civil Engineers (NY Met Section)

Structural Engineers Association of NY

NYC Municipal Engineers Society

National Society of Professional Engineers

National Fire Protection Association

Years of Experience:
38

Employment History:
2005 - Current
HNTB Corporation

1972 - 2005
Port Authority of New York and New Jersey

Joe has more than 38 years of experience in the design of transportation facilities and the management of large projects, including 21 years of relevant project management experience. Joe oversees projects that reduce the vulnerability of bridges, tunnels, and transit facilities to malevolent acts through the use of physical hardening, surveillance, and incident management, as well as, projects to rehabilitate and retrofit structures against the effects of natural hazards and general structural deterioration. He also has extensive experience in damage assessment and disaster recovery of transportation facilities due to acts of terrorism, ship collision, truck collision and storms. Joe directed damage assessment and disaster recovery projects for the 9-11 destruction of the World Trade Center, the 1993 bombing of the World Trade Center, and was also a member of the FHWA/AASHTO Blue Ribbon Panel that developed the report Recommendations for Bridge and Tunnel Security published in September 2003. His project experience includes:

Port Authority of New York and New Jersey, The George Washington Bridge – Main Span Upper level Structural Steel Rehabilitation, New York, NY/ Fort Lee, NJ

Project manager who led the PTG/HNTB Joint Venture project with responsibility for overall project development from inception to final completion of contract documents. Upcoming task will be the post award construction support services. Project includes field inspection, rehabilitation of the orthotropic deck, drainage improvements, priority repairs to supporting steel, weight-in-motion (WIM) data collection, load testing, instrumentation, and life-cycle cost study of future deck alternatives. The project also requires complex traffic staging and the use of heavy-duty work platforms.

Port Authority of New York and New Jersey, Capital Security On-Call AE Services, Jersey City, NJ

Provided technical supervision for the installation of interim police facilities on the roof of a parking garage including monitoring of crane heavy lifting operations and design of temporary shoring and permanent strengthening systems for the parking deck structure.

Port Authority of New York and New Jersey, Rehabilitation of Lincoln Tunnel New Jersey Helix Approaches, Weehawken, NJ

Project manager for preliminary design and final design contract documents for major structural and electrical rehabilitation of 260,000 square feet of heavily trafficked, elevated concrete roadway, deck structure and sub-structure for Route I-495 highway approach to the Lincoln Tunnel. The project included the evaluation of costs and construction schedults for three different traffic staging alternatives and five different levels of deck rehabilitation to select the scheme that is the most cost effective over the next 10 years, until complete replacement of the structure can be funded by the Authority.

JOSEPH ENGLOT, PE (CONTINUED)

Port Authority of New York and New Jersey, Bayonne Bridge Lift Concept, Staten Island, NY
Project manager who supervised the technical work to perform a preliminary study to confirm the feasibility of converting the existing fixed arch truss into a lift bridge to increase the navigational clearance from 151 feet to 215 feet for new large container ships. The scope of the study included conceptual sketches for the lift bridge modifications, conceptual structural analysis, a conceptual mechanical and electrical design, and a description of the assumed operating conditions for large container vessels that will require the deck to be raised for passage. In addition, the scope called for descriptions of reliability of the moveable bridge mechanism, modifications to the navigational channel, assumptions on construction staging and a design and construction schedule for the project.

Port Authority of New York and New Jersey, Capital Security On-Call AE Services, Jersey City, NJ
Project manager who supervised an agency-wide security system evaluation. Performed an assessment of the long-term effectiveness of the existing security infrastructure and incident command system and compared it conceptually to alternatives modeled after best practices in government and private industry.

Port Authority of New York and New Jersey, Capital Security On-Call AE Services, Jersey City, NJ
Project manager who supervised asset strengthening for major Port Authority facility against the hazards/threats of hydrocarbon fire, blast fragmentation, and special force demolition techniques.

New Jersey Department of Transportation and the Office of Homeland Security & Preparedness, Validation of Vulnerability Assessment of Bridges and Tunnels in New Jersey, NJ
Project manager who led a study to prioritize all bridges and tunnels in the state by criticality and vulnerability and conduct a threat assessment, a vulnerability assessment, an impact assessment and a countermeasure needs assessment for the 50 most critical assets.

Metropolitan Transportation Authority Security Program, New York, NY
Quality assurance review of incidence management system for 14 underwater mass transit system tunnels. Tasks include hardening of tunnel lighting, communications, and emergency signage. Oversaw testing of prototype system fixtures in the blast simulator shock tube facility. Vulnerability risk assessment and mitigation design for two major, long-span bridges.

New Jersey Department of Transportation, On-Call Services, Trenton, NJ
Project manager who supervised threat and vulnerability assessment and mitigation analysis for major highway bridge and viaduct structure. Conducted workshops on critical infrastructure for state transportation engineers and first responders.

MATTHEW DOMINY, PE

Role:
Program Manager

Firm:
HNTB

Education:
ME, 1977, Civil Engineering Management, University of Florida

BS, 1969, Civil Engineering, Bucknell University

Registrations:
Professional Engineer:
FL/1977,
DC/2007,

Affiliations:
American Academy of Environmental Engineers, National Director, National Treasurer

American Public Works Association, National Director

Years of Experience:
40

Matt has more than 40 years of experience in transportation, utilities, municipalities, public works and environmental industries. His expertise includes tactical and strategic planning, operational development and project management exceeding profit, volume, revenue growth and organizational goals. Matt has proven skills in program leadership and the technical ability to lead and manage the development of complex highway, bridge and associated infrastructure programs. Matt is dedicated to development and retention of talent, while meeting challenges of organizational restructuring. Furthermore, he has a proven record of new business initiatives and capabilities in design and construction of all phases of program management for programs exceeding $1 billion. Determining and securing funding sources has been a significant part of these programs. Matt has consistently managed the delivery of these complex projects on-time and under budget. His project experience includes:

District Department of Transportation, Anacostia Waterfront Improvement Implementation, Washington, DC

Program manager in charge of delivering $2 billion worth of projects included in the Anacostia Framework Plan. The two principle projects under the program are replacement of the 11th Street and South Capitol Street bridges. The goal of the program is to update and improve transportation facilities across all modes to support the economic redevelopment of the Anacostia Waterfront area.

Missouri Department of Transportation District 6, Veterans Memorial Highway (Route 21) Relocation, Jefferson County, MO

Program manager for the first Program Management Consultant (PMC) role in MoDOT history. Worked with MoDOT as an extension of their staff and fulfilling the traditional role of a MoDOT project manager on this high-profile project, including participation in all District 6 meetings, execution of public involvement activities, and acting in the same capacity of an internal MoDOT project manager. This project included the relocation and upgrade of a new 15-mile corridor to a four-lane freeway configuration. Route 21 was characterized as "the most dangerous highway in Missouri." Under his leadership, HNTB and MoDOT staff selected and negotiated contracts with all corridor design consultants. This important assignment included delivery of final design plans and construction documents with HNTB on-call during construction phases. This contract is valued at $120 million.

Alachua County, Public Works Director and County Engineer, FL

Program manager who oversaw the development of the first Corridor Design Manual for the County supervised the reconstruction of 10 miles of CR-232.

North Texas Tollway Authority, Eastern Extension of President George Bush Turnpike, Garland/Rowlett/Sachse, TX

Deputy executive director in charge of the design and right-of-way acquisition for a proposed 9.9-mile segment from SH 78 in Garland, east to IH-30. The proposed six-lane toll road will pass through Garland, Sachse

MATTHEW DOMINY, PE (CONTINUED)

Employment History:
2007 – Present
HNTB Corporation

2005 - 2007
North Texas Tollway Authority

2004 - 2005
HDR

2002 - 2004
Jacksonville Transportation Authority

2000 - 2002 Alachua County, Gainesville, FL

1996 - 2000
HNTB Corporation

1988 - 1996
City of Torrington, CT

1986 - 1988
Barry Isett & Associates

1984 - 1986
Salisbury Township, Allentown, PA

1983 - 1984
GPI Architects, Planners & Engineers

1980 - 1983
MRI Corporation

1970 - 1980
U.S. Army Corps of Engineers

and Rowlett and will include a one-mile bridge over Dallas' Lake Ray Hubbard. The $1.037 billion project was divided into four design sections, with different consultant design teams for each section. Right-of-way for the whole project was managed by a separate consultant team.

North Texas Tollway Authority, Southwest Parkway, Fort Worth, TX

Deputy executive director responsible for design and interagency coordination Texas Department of Transportation (TxDOT) and Union Pacific Railroad (UPRR), for Southwest Parkway, a proposed six-lane tollway that will connect the City of Fort Worth's Central Business District at IH-30 to U.S. 67 in the city of Cleburne in Johnson County. The initial $944 million, 8.2-mile project is currently under design by five different section consultant teams and will link IH-30 and Forest Park Boulevard to Altamesa Boulevard in the southwest portion of Fort Worth. TxDOT has plans to eventually extend the toll road further south from Altamesa to U.S. 67 in Cleburne. Final design is under way and environmental clearance has been received.

North Texas Tollway Authority, Lewisville Lake Toll Bridge, Lewisville, TX

Deputy executive director responsible for design bidding, award and construction of a new 1.7-mile east-west signature toll bridge across Lewisville Lake. Specific challenges involved heavy interaction with Army Corps of Engineers. The new bridge will feature a lighted, tied arch spanning 360 feet at the center of the 1.7-mile bridge. Approaches and thresholds of the bridge will be flanked by pairs of decorative lighted columns.

Jacksonville Transportation Authority, Better Jacksonville Plan, Roadway and Utility Improvements, Jacksonville, FL

Program manager for the $375 million program consisting of 23 individual roadway capacity improvement projects. In-house staff of four design project managers and two construction managers delivered these projects through individual consultant and construction contracts. At any one time, projects were at various stages in the delivery process from preplanning through construction. Coordinated flow of projects with client to correspond with flow of available bond funds, which were backed by anticipated sales tax revenues.

Jacksonville Transportation Authority, Better Jacksonville Plan Countywide Roadway and Rapid Transit Improvement Projects, Jacksonville, FL

Chief engineer responsible for all aspects of project delivery from planning through right-of-way acquisition, public involvement, design, construction and turnover to owner. Thirty-two individual projects were dispersed over the entire 864 square-mile-area of Duval County and had individual construction costs of $35-150 million. Funding sources included federal transportation funds, bond funds and dedicated sales tax funds. Projects evolved along an individual timeline with all work post planning performed by individual project consultants and contractors. Directed execution of the first three design-build projects in Northern Florida. Total construction value of $1.02 billion.

DAVID DOWNS, PE

Role:
Program Manager

Firm:
HNTB

Education:
BS, 1983, Civil Engineering, University of Utah

Registrations:
Professional Engineer: UT/1992 [redacted]

Years of Experience:
28

Employment History:
2007 - Current
HNTB Corporation

2001 - 2007
Downs Consulting

1999 - 2001
Carter & Burgess

1994 - 1999
Utah DOT

1988 - 1994
HNTB Corporation

1983 - 1988
Utah DOT

David is HNTB's national director of Program Management services and is an expert in strategic management consulting and innovative project delivery. For the past 27 years, he has led program management teams to deliver multi-billion dollar capital improvement programs. He has assisted numerous owners in developing strategic goals for their most challenging programs; and developing and implementing project delivery strategies to meet these goals. David will use his invaluable expertise to help implement innovative project delivery strategies for the future of your on-call project. David's experience and his readiness to lead the HNTB Team in delivering more value for your investment can be noted through his contribution on the I-15 CORE in Salt Lake City, Missouri I-64 Design-Build Program, and the I-405 Corridor in Washington. His project experience includes:

Colorado High Performance Enterprise Transportation Enterprise (HPTE), CO

Interim executive director for the Colorado High Performance Transportation Enterprise. The HPTE was created by the General Assembly of the State of Colorado as a government-owned business within CDOT with the authority and mission to seek out opportunities for innovative and efficient means of financing important surface transportation infrastructure projects. David is assisting the HPTE Board to develop a Strategic Plan and organizational structure that will utilize Public Private Partnerships (P3), and user fee revenue sources such as tolling and vehicle miles traveled (VMT) to develop and deliver critical transportation corridors throughout Colorado that would not be delivered by traditional funding sources in the foreseeable future.

Regional Transportation District and the Colorado Department of Transportation Other, Transportation Expansion Project (T-REX), Denver, CO

The T-REX project, a $1.7 billion multi-modal project, was the first of its kind to be delivered using D-B. The owners having never used D-B delivery for a project of such significance and called on David to lead their project team through a D-B procurement process and successful project completion. David was part of a three-member project direction team providing leadership to a 90-person Owner team. David played a key role in establishing and implementing all project management processes and systems for the D-B light rail expansion and highway improvement project. David provided support to the RTD and the CDOT for establishing project goals, developing D-B procurement processes, performing systematic risk analysis, developing contract documents, establishing the selection criteria and evaluation process. David also assisted RTD and CDOT thru project implementation including resolving contract disputes, establishing a quality council and establishing project closeout procedures.

Utah Department of Transportation, I-15 Reconstruction Project, Salt Lake City, UT

Project director who led the Utah Department of Transportation's I-15 team to successfully implement the nation's largest highway D-B proj-

DAVID DOWNS, PE (CONTINUED)

ect. A project that would be valued close to $3.5 billion in today's dollars, David led UDOT in the effort to evaluate project delivery methods, develop the RFQ and RFP; select the D-B contractor; negotiate a D-B contract; and manage the delivery of the work. He was responsible for all elements of project delivery, including legislative reporting, public communications, local government coordination, contract administration, project controls, DBE/EEO compliance, project safety, environmental mitigation, and railroad/right-of-way/utilities coordination.

Washington Department of Transportation, I-405 Project, Bellevue, WA

David was Chairperson of a Strategy Advisory Board that advised the Washington Department of Transportation on program management solutions for the I-405 highway improvement program. The Strategic Advisory Team provided input into the development of project goals, procurement strategies, selection criteria and evaluation processes, risk analysis, contract document development and D-B implementation systems for D-B projects totaling close to $1B.

Utah Department of Transportation, I-15 CORE, Salt Lake City, UT

Design-build manager helping UDOT to strategically develop a design build process, D-B procurement documents and management systems necessary for successful project delivery. David led the development of a fixed-price/best design D-B procurement that resulted in selection of a D-B contractor that provided a project scope that was originally estimated by UDOT to cost $2.63 billion for $1.75 billion.

Missouri Department of Transportation, Design-Build Program, Jefferson City, MO

Provided strategic advice to the Missouri Department of Transportation to create a very flexible fixed-price/best design approach to develop its first D-B program. David led the D-B procurements for two critical transportation improvement projects, the $545 million I-64 corridor in St. Louis and the $250 million kcICON Project in Kansas City. He also helped develop MoDOT's Design-Build Manual to be used by MoDOT on all of its D-B projects.

Minnesota Department of Transportation Design-Build Program, Minneapolis, MN

Provided strategic advisory services to the Minnesota Department of Transportation to develop its programmatic D-B approach. This included developing model D-B contracts, procurement and oversight processes. The model D-B contract and procurement processes were used successfully to deliver the I-494 reconstruction project, the TH212 project and the I-35 emergency bridge replacement project.

JONATHAN POPE, PE

Role:
Program Manager

Firm:
HNTB

Education:
BS, 1981, Civil Engineering, Lehigh University

Registrations:
Professional Engineer: IL/1987, #[redacted]

Affiliations:
American Society of Civil Engineers, Air Transport Division

ASCE Transportation & Development Institute, Charter Member

American Association of Airport Executives

Airport Council International – North America, Technical Affairs Committee

Airport Consultants Council, Terminal and Project Delivery Committees

Years of Experience:
28

Jon has an unparalleled record of delivering comprehensive aviation capital investment programs for both airports and airlines. He has formed a unique approach to assignments based on his extensive experience in analyzing aviation facility operational challenges, developing solutions, and implementing improvement programs. He has managed projects through all phases of development, from establishing purpose and need, through conceptualization and programming, planning, design and construction to start-up, commissioning, and contract closeout. His project experience includes:

Port Authority of New York and New Jersey, Newark Liberty International Airport, Terminal A Modernization Program, Newark, NJ

Program director for PFC-funded planning for the future of the 37-year old terminal, assessing demand, capacity, ability to accommodate future demand, and alternatives including renovation, redevelopment, and replacement. He performed on-site in an extension-of staff role, leading a group of 18 staff planners, architects, and designers, and 12 sub-consultant firms in developing airport-wide terminal-area plans for the capacity-constrained facility. His efforts encompassed forecasting, identifying existing facility capacities and constraints to growth, determining future needs, assessing the role of future technologies, program economics, developing the business plan including potential P3 participation, incorporating sustainable development strategies through an integrated design effort and LEED certification, environmental planning and processing, and conceptual project design. The resulting all-new, 33-gate facility will provide accommodations for domestic legacy, low-cost, and international carriers in a common-use facility. The program includes extensive infrastructure, roadway, parking facility, and both on-airport and airport access transit systems incorporated into the design.

Port Authority of New York and New Jersey, Newark Liberty International Airport, Redevelopment Program, Newark, NJ

Program manager for the $780 million Redevelopment Program at Newark Liberty International Airport. Leading an on-site staff of 12 in an extension-of-staff role, he provided on-site schedule, budget, and project management control over the six-year effort which was completed on time and $60 million under budget. He also acted as the lead planner for all airside and landside planning. His staff provided service as the owner's project managers for each element of the program scope, including two 3,000+ space parking garages, access and central terminal area roadway improvements, terminal re-lifing, construction of a new administration building and Airport Rescue and Firefighting Facility, airfield taxiways and hold aprons, and coordination with the Newark AirTrain Extension program. His team also acted as the landlord in coordinating and overseeing the Continental Airlines' $800 million Global Gateway Program.

City of Chicago Department of Aviation, Operations Studies & Capital Improvement Projects, Chicago, IL

Consultant who performed numerous business/operating studies, including the Midway Airport Fixed Base Operators' Business Services Study and O'Hare International Airport Slot Rule Analysis/FAA Coordination.

JONATHAN POPE, PE (CONTINUED)

Employment History:
2010 - Current
HNTB Corporation

1998 - 2010
The Louis Berger Group, Inc.

1995 - 1997
Edwards and Kelcey, Inc

1992 - 1995
Ricondo & Associates, Inc.

1987 - 1992
Northwest Airlines, Inc.

1986 – 1987
Robert + Company

1984 – 1986
Schal Associates (now part of Bovis)

1981 – 1984
Foster Wheeler Energy Corporation

He also was instrumental in the preliminary layout studies for the Midway Airport New Terminal Design Concept Development. As the Northwest Airlines Facilities representative, he was project manager for various tenant improvement projects, including outbound baggage system expansion, cargo building renovations, and ADA compliance projects at both O'Hare and Midway. He represented the airline on both the O'Hare Airport Facilities Steering Group and the Chicago International Carriers Association, playing an integral role in setting the planning parameters for ORD Terminal 5, the International terminal. Early in his career he was as a resident engineer on aircraft hydrant fueling and airfield paving projects at O'Hare.

Metropolitan Washington Airports Authority, Planning Task Management, Washington, D.C.
Task manager on multiple assignments at both MWAA airports, including the New North Terminal Program Airside Planning at Reagan National Airport and the permanent midfield concourses at Dulles International Airport. He also prepared the Airport Rescue and Fire fighting Station Master Plan for Dulles, and produced the airside plans for a fast-tracked six-gate expansion project for ValuJet (now AirTran) at Dulles.

Northwest Airlines, Inc., Facilities Project Management, St. Paul, MN
Represented the Facilities Department in establishing corporate-wide policies and procedures in the development of capital project program controls. He initiated the corporate project management team concept of project delivery, including members of all interested divisions, such as properties, operations, marketing, maintenance, finance, and law, in the capital improvement process. Notable projects he directed include the simultaneous roll-out of the automated bag tag print-on-demand system 140 cities, and the facilities evaluation and integration plans for both the Midway Airlines and Continental Airlines Acquisition Assessments. He had responsible charge over all facets of airport and aviation facility development projects in 34 cities throughout the United States, Canada Mexico and Jamaica, including discreet project management and serving on capital program technical advisory committees at each of those facilities.

Detroit Metropolitan Wayne County Airport, Airline Technical Representative, Detroit, MI
Airline technical representative for the major airline at Detroit, Jon was chairman of the Detroit Airline-Airport Technical Committee. As such, he developed the technical brief for and was a design judge for the 74-Gate World Travel Center Midfield Terminal Design Competition (the McNamara Terminal). Major capital improvement projects managed by him included overseeing the planning, design, and construction of the Berry International Terminal FIS fast-track expansion, flight kitchen expansion and various airport facility tenant improvements, including automated baggage system expansion, hangar renovations, ADA compliance projects. These projects were financed by a combination of direct airline investment, Special Facility Bonds, and General Airport Revenue Bonds, all of which required differing levels of administration and record keeping.

SHARIF ABOU-SABH, PE

Role:
Program Manager

Firm:
HNTB

Education:
Diploma, 1988, Construction Management, New York, NY

MS, 1981, Civil Engineering, Columbia University

BS, 1977, Civil Engineering, Ain Shams University, Cairo

Registrations:
Professional Engineer:
NY/1983,
IL/2000,
CT/Inactive,

Affiliations:
American Society of Civil Engineers

American Concrete Institute

National Academy of Sciences

CMAA

Years of Experience:
34

Sharif is an experienced program and construction manager for large-scale and complex infrastructure and institutional capital improvement programs, as well as commercial projects. In his 32 years of diversified engineering practice in the United States and abroad, Sharif has managed the full range of technical and managerial aspects of construction and development projects. His extensive hands-on experience encompasses technical and managerial activities, including design, production, construction management and program management. Sharif's responsibilities cover client contact, organization and direction of civil and structural engineering design and construction function as well as schedules, budgets, profit margins and feasibility studies. Responsibilities include client contact with extensive multiple department coordination, organization and direction of civil and structural engineering design and construction functions, as well as schedules, budgets, profit margins, and feasibility studies. His project experience includes:

Illinois Tollway, Illinois Tollway Program Management Office, Downers Grove, IL

Program manager for the first five years of the program responsible for the strategic direction, activities and performance of the Program Management Office. Sharif directed the development of programs, operations and activities for the program management team. He also developed and managed procedures and processes to plan, design, implement, monitor, evaluate and document all capital construction activities. Sharif saw that projects were implemented on a timely basis, consistent with established budgets and schedules and in conformance with client, state and federal funding agency regulations and requirements. Sharif designed and implemented process efficiencies to streamline internal procedures and time lines related to construction management, project progress and budget and schedule adherence. He also implemented a structure designed to effectively execute this fast-paced, complex program at a cost that is well below the industry average as depicted in the percentage of Change orders at less than 2-percent of the awarded amounts. Sharif's oversaw the following PMO initiatives:

- Implementation of strategic direction, activities and performance of the program management office.
- Development of programs, operations and activities for the program management team.
- Leveraging of the Tollway's in-house knowledge and experience to establish parameters and guidelines for design and maintenance.
- Assembling, maintaining and motivating an integrated team comprised of Tollway, HNTB, GEC and additional consultant staff.
- Establishing and pursuing a master schedule for the Program that balances the numerous safety, operational and public concerns and priorities.
- Evaluation of existing Tollway capital planning and construction processes.
- Implementation of the ISO 9001-2000 certified quality management system.
- Building consensus among all customers and stakeholders.
- Monitoring of the performance and results of existing management processes and procedures.
- Cultivating a "no surprises" approach to management.
- Upholding the Tollway's management principles throughout each phase of the Program's implementation.

SHARIF ABOU-SABH, PE (CONTINUED)

Employment History:
2005 - Current
HNTB Corporation

2004 - 2005
Earth Tech, Inc

2004 - 2004
CTE Engineers

1999 - 2004
URS Corporation

1986 - 1999
Metropolitan Transit Authority

1984 - 1986
Prentice & Chan Ohlhausen Architects

1982 - 1984
Internationan Consulting Services Company

1981 - 1982
Amman & Whitney Consulting Engineers

1978 - 1981
Parson Brown Consulting Engineers

1977 - 1978
DR. M. HWSHIMV Consulting Engineers

The goal of this $6.1 billion congestion-relief program - Open Roads for a Faster Future is to rebuild and restore nearly the entire Tollway system, including widening and reconstructing 274 miles of existing highways and completing the construction of a new 12.5-mile extension of a major corridor. It is projected that the Tollway capital plan will improve mobility in 12 counties, reduce daily commute times by 20 minutes a day, and will provide a positive economic benefit to local communities. Projects include:

- I-88 Corridor, $1 billion
- I-294 Corridor, $2.4 billion
- I-355 Corridor, $750 million
- I-90 Corridor, $400 million

Metropolitan Transportation Authority, Stations Rehabilitation Program, New York, NY

Deputy program manager for the Department of Capital Program Management for the $1.9 billion Stations Rehabilitation Program. Sharif directed the daily operations of 15 project management offices, with more than 350 professionals comprised of NYCT transit personnel, consultants, designs firms and more than 40 contracting companies. He also served as the MTA/NYCT's ADA liaison on the Mayor's transportation committee and was responsible for the implementation of the design and construction of the entire transit accessibility program. He co-authored and oversaw construction management of the MTA/NYCT 2000-2004, $1.9 billion Stations Program that was categorized as the most aggressively-scheduled program in the U.S. at the time.

United States/Illinois/Chicago Departments of Transportation, Metra, Amtrak, CREATE Program Manager, IL

Project manager providing program management services for the $3.0 billion CREATE program, a public-private partnership between the U.S. DOT, Illinois Department of Transportation, Chicago Department of Transportation, Metra, Amtrak and the nation's freight railroads, developed to invest in critically-needed rail infrastructure improvements in the Chicago area, and to increase the efficiency of freight and passenger rail service throughout the region. The goals of the CREATE program are to improve the efficiency and reliability of local and national passenger and freight rail service.

Chicago Transit Authority, Capital Improvement Program Manager, Chicago, IL

Program manager for the Capital Improvement Program for CTA. Sharif was responsible for planning and implementation of the $2.4 billion capital construction program and managing a staff of 68 professionals. He developed and managed procedures and methods to plan, design, implement, monitor, evaluate and document capital construction activities. He also made sure projects were implemented on a timely basis, consistent with established budgets and in conformance with CTA, state and federal funding agency regulations and requirements.

BILL RUTHERFORD, PE

Role:
Program Manager

Firm:
HNTB

Education:
Engineering Executive Program, 1993, Stanford University

MS, 1972, Civil Engineering, Stanford University

BS, 1966, Civil Engineering, Clarkson College of Technology

Registrations:
Professional Engineer:
NY/ 1986, #[redacted]
NJ/1991,
FL/1984, #[redacted]
TX/1979, #[redacted]
CT/1971, #[redacted]
CA/1977,

Certified General Contractor:
FL/1984, [redacted]

Certified Special Inspector:
FL/1986 #[redacted]

Affiliations:
American Society of Civil Engineers

Society of American Military Engineers

Construction Management Association of America

American Society for Quality

Years of Experience:
40

Bill, a vice president with HNTB, is a registered professional engineer with more than 40 years of experience in managing both design and construction on many projects. More than 20 of those years were spent working on structural design projects with electrified railroad track elements, while chairing the ASCE design/build committee. Currently, he is responsible for project management and quality control of general consultants and on-call design and construction projects in the New York/New Jersey metropolitan area, including HNTB's general consultant agreement for bridge and rail assignments with the New Jersey Transit and the multi-discipline, on-call project for A/E Services, engineering services for various agencies including New York MTA and the Authority. Bill is continuously interfacing with various railroad departments and agencies, while coordinating/managing engineering, design, project scope, budgets and schedules. His project experience includes:

Port Authority of New York and New Jersey, Security On-Call A/E Services, NY and NJ

Project manager responsible for overseeing on-call design and construction phase services for a variety of district-wide projects for the Port Authority's Security program on an as-needed basis. The project types include hardening of structures, security fencing, crash walls, access control and personnel intrusion detection systems. Specific project information is client confidential. Work has been accomplished under high security control by HNTB and our team of specialty subconsultants.

New York City Department of Transportation's, Willis Avenue Bridge, New York, NY

Principal-in-charge for this resident engineering and inspection services contract for the $650 million replacement of New York City Department of Transportation's Willis Avenue Bridge over the Harlem River and the Major Deegan Expressway. The bridge replacement includes the replacement of the FDR Drive approach ramp and the ramp onto Bruckner Boulevard.

Port Authority of New York and New Jersey, Newark International Airport, On-Call A/E Services, Newark, NJ

Project manager responsible for overseeing the architectural and engineering design services for a variety of projects at Newark International Airport on an as-needed basis. The project types include terminal frontages, terminal access roadways and terminal building modifications, as well as utility system upgrades. Projects may also include airfield modifications such as taxiways, roadways and drainage system design, aircraft parking design and taxiway bridges and building design for ARFF, administration and parking garage facilities, as well as building demolition.

MTA – Long Island Rail Road, Atlantic Avenue Viaduct Design-Build Phase II, Brooklyn, NY

Design manager for the second phase of the Atlantic Avenue Viaduct replacement project. The second phase of this design-build project included another 84 spans as well as custom spans at the ends of the

BILL RUTHERFORD, PE (CONTINUED)

Employment History:
1993 - Current
HNTB Corporation

1974 - 1993
Kaiser Engineers

1972 - 1974
Peter Kiewitt Sons' Co., Inc.

1969 - 1971
Morrison Knudsen Construction Co.

1966 - 1969
U.S. Navy CivilEngineer Corps (LT)

viaduct where spiral curves were introduced to the correct tunnel alignments at both the east and west ends. This phase is projected to be completed by the fall of 2010.

MTA - Long Island Rail Road, Atlantic Avenue Viaduct Design-Build Phase I, Brooklyn, NY

Design engineer for the first phase of the Atlantic Avenue Viaduct project in the borough of Brooklyn, New York. The project calls for the replacement of 87 spans of a dual-track commuter rail line for the LIRR with a total construction value of approximately $69 million. HNTB will design the superstructure replacement, and column repairs of the viaduct, including seismic evaluation of the new configuration. Construction will occur while maintaining rail service on at least one of the two tracks. The team will conduct inspection of the structure, evaluate current conditions, and prepare traffic control plans for lane closures and alternate routes.

Ocean County, Mantoloking Bridge Replacement, Mantoloking, NJ

Construction management - project manager for this $22 million federally funded project which entailed the replacement of this historic circa 1938 single-leaf, bascule-lift span with a new hydraulic-lift double-leaf bascule bridge. Project includes H-beam and concrete-filled pipe piles, realignment of approach roadways, drainage, embankment, HPC bridge deck construction, structural steel and precast concrete girders, multiple sequenced construction to allow for unobstructed traffic on the existing structure. Coast Guard permitting and environmental regulations were strictly enforced.

New York City Department of Transportation, Shore Road Bridge, NY

Project manager for replacement of the Shore Road Bridge, a 10-span double-leaf rolling bascule bridge over the Hutchinson River. HNTB, as part of a joint venture, has been retained by the NYC Department of Transportation for the total replacement design. The assignment required the development of a bridge reconstruction project report that required an in-depth inspection as well as traffic study. The scope included comparisons of different structural alternatives and alignments for the complete replacement / rehabilitation of the existing bridge, demolition of the existing structure once a new one is built, seismic analysis, approach work, replacement or relocation of utilities, and an environmental impact study, EIS. Also involves multi-agency coordination involving New York City Department of Parks, New York City Planning Commission, and NYC Arts Commission, Public Outreach, Uniform Land Use Review Procedure (ULURP), and CEQR process.

New Jersey Turnpike Authority, Hudson County Extension Bridge Deck Repair, NJ

Principal-in-charge for the supervision of construction services for Contract No. R-1347 involving the replacement of the existing parapet/safetywalk configuration with Jersey shape parapets, as well as roadway shoulder widening and asphalt resurfacing on existing structures and roadways.

SAM MODY, PE

Role:
Program Manager

Firm:
HNTB

Education:
MS, 1988, Civil Engineering, Drexel University

BS, 1983, Civil Engineering, Drexel University

Registrations:
Professional Engineer:
NJ/1995, #[redacted]
PA/1994, #[redacted]
DE/1997, #[redacted]

Affiliations:
American Society of Highway Engineers

Southern NJ Section Board of Directors, 1991 – Present

Steering Committee Advisor for 2007 ASHE National Conference;

Charter Member of NY Metro Section established in 2005.

Elected as ASHE New Sections Chairman

American Council of Engineering Companies - Deputy Transportation Chairman

American Society of Civil Engineers

Years of Experience:
27

Sam has more than 27 years of experience in the administration, management, design, and construction of civil/transportation engineering projects, balanced equally between design and construction. He has served in the capacity of design/construction engineer, senior project manger, constructability review team leader, resident engineer for 12 years, and QA/QC manager on numerous projects during his career for the NJ Turnpike Authority, NJDOT, DRPA and Port Authority of New York and New Jersey, and NJ MPO's /Counties. His project experience includes:

New Jersey Department of Transportation, Alexander Road Bridge Replacement over Amtrak Northeast Corridor (NEC), West Windsor Township, NJ

Project manager responsible for the management of resident engineer and inspection staff; attendance and recording of minutes from bi-weekly progress meetings; monthly reviews of contractor's primavera schedule; review of shop drawings, RFI's, and monthly estimates; and evaluation of value engineering requests submitted by the contractor. His duties began during the design phase which included final scope development, preliminary and final designs of roadway, structure (bridge and retaining walls), landscape, electrification-traction (ET), and ROW contract documents. In addition, he assisted the NJDOT during the constructability workshop, pre-bid meeting, and pre-construction conference prior to awarding the contract to the IEW Construction Group. This $24 million, heavy-highway project included the construction of a new, single-span bridge over the Northeast Corridor, a roundabout intersection, pile foundations, HPC deck, catenary/transmission lines, three new retaining walls, and extensive utility relocations.

Pennsylvania Department of Transportation, S.R. 4006, Section 76S, Reconstruction of City Avenue, Philadelphia, PA

Project manager responsible for contract administration and management of the following activities: provided appropriate support staffing to execute the project; supervision of resident engineer, field inspection, and office engineering staff; interfaced with PennDOT field manager and contractor; prepared/monitored project reports, budgets, and invoices; attended and recorded minutes from bi-weekly progress meetings; performed reviews of contractor's master and monthly updated primavera schedule; reviewed contractor's RFIs and value engineering requests; and participated in dispute-resolution analysis at the request of the owner. This $15 million heavy-highway project included the construction of one new prestressed concrete bridge (Ramp D/Lincoln and Kelly Drives), rehabilitation of one bridge (SB City Ave. Schuylkill River and NS Railroad), substructure repairs, HPC decks, nighttime work; utility relocations, and complex MPT.

South Jersey Transportation Authority, Widening of Atlantic City Expressway (ACE), City of Pleasantville, NJ

Project manager serving in an oversight capacity and extension of SJTA's staff during the design and construction of the 3-mile ACE widening project. Construction supervision duties included management and oversight of resident engineer, inspection, and office engineering staff;

SAM MODY, PE (CONTINUED)

Employment History:
2009 - Present
HNTB Corporation

2007 - 2009
URS Corporation

1999 - 2007
Urban Engineers, Inc.

1996 - 1999
Dewberry/Goodkind & O'Dea

1993 - 1996
Geotrack, Inc.

1990 - 1993
Gannett Fleming, Inc.

1983 to 1990
NJDOT Bureau of Construction

attended and recorded minutes from bi-weekly progress meetings; review of contractor's master and monthly primavera schedule updates; review of shop drawings, RFI's, and monthly pay estimates; and provided recommendations to construction modifications proposed by the contractor to expedite the schedule. This $30 million heavy-highway project included roadway and structure widening (nine-span McGahn Bridge over Beach Thorofare) for a six-lane section; widening of two culverts; new beam erection onto widened pier; HPC deck construction; upgrades to roadside safety; new drainage in accordance with NJDEP stormwater regs; new signing; and utility relocations. PMO duties began in 1999 with constructability reviews of 30-, 60-, and 90-percent submission contract documents, technical support of design activities, assistance with review and execution of permit applications, design schedule oversight, and coordination with design engineers associated with adjacent AC-BC Design/Build and AC Visitors' Center construction projects.

New Jersey Department of Transportation, Reconstruction of Route I-295 Interchange 18, Salem County, NJ

Project manager responsible for providing support staffing, supervision of field and office staff, interfacing with the resident engineer/NJDOT/contractor, review of shop drawings and monthly pay estimates, and preparation/monitoring of project budgets and invoices. This $17 million heavy-highway project consisted of the demolition and replacement of two bridges that carried CR 667 and CR 678 over I-295. The interchange ramp system was reconfigured and channelized, including significant amounts of roadway widening and reconstruction.

New Jersey Department of Transportation, Route 133, Hightstown Bypass (D/B Project), Mercer County, NJ

Highway design team leader assigned to NJDOT's first modified Design/Build project. This $75 million project included the design and construction of the proposed Route 133, Section 1A Hightstown Bypass. This 3.8-mile, four-lane divided controlled-access highway provided two lanes of traffic in each direction separated by a grass median, with appropriate shoulders, auxiliary lanes and superelevation commensurate with the established design speed. The new highway commenced at the intersection of County Road 571 and Windsor Drive in East Windsor, heading in an easterly direction around Hightstown, crossing the New Jersey Turnpike (vicinity of Interchange 8), and terminating at the intersection of Route 33 and Milford Road in East Windsor Township. This project provided one new at-grade signalized intersection, three intersection modifications, seven bridges (six dual structures) which cross arterial roadways and drainage waterways, 14 sign structures, five noise barriers, relocation of two local roads, and milling, resurfacing and widening of the intersecting streets. Major revisions were made to the project alignment, landscaping and noise walls based upon extensive partnering with the local community. Innovative designs incorporated into the project include the use of stub abutments atop modular retaining walls, jointless bridge decks, integral backwalls, and steel shell foundations for noise barriers and sign structures.

JONATHAN GOLDSTICK, PE

Role:
Program Manager

Firm:
Halcrow

Education:
BSc, 1980, Ocean Engineering, Massachusetts Institute of Technology

1976-1978, Ocean Engineering studies, U.S. Coast Guard Academy (No Degree)

Registrations:
Professional Engineer:
NY/1985, #[redacted]
NJ/2009, #[redacted]

Affiliations:
American Society of Civil Engineers, Member

Society of American Military Engineers, Member

Society of Naval Architects and Marine Engineers, Member

Years of Experience:
30

Employment History:
1995 - Current
Halcrow

1989 - 1995
Frederic R. Harris, Inc

1980 - 1989
American Bureau of Shipping

Jonathan has 30 years of domestic and international experience in waterfront engineering and project management. He has been involved in the design, analysis, construction, rehabilitation, and installation of a wide variety of waterfront structures worldwide. His expertise also includes project management and engineering support for urban waterfronts. He has served as principal-in-charge of "on-call" contracts with the Authority for the design of waterfront structures and the inspection of waterfront structures, as well as with the New York City Economic Development Corporation and the Hudson River Park Trust for marine engineering services. His project experience includes:

Port Authority of New York and New Jersey, "On-Call" Waterfront Condition Surveys, NY and NJ

Principal-in-charge of "on-call" engineering services for condition surveys of waterfront facilities. Jonathan oversaw the regular maintenance work and emergency response inspections for waterfront facilities of various types and constructions. Typically, these projects entailed 100 percent visual inspection of all structural elements and ten percent detailed inspection of select elements. Detailed inspections included cleaning of the structural elements, ultrasonic thickness measurement of steel, sounding of concrete, and evaluation of timber elements with regard to the presence of marine borers.

Port Authority of New York and New Jersey, "On-Call" Marine Structural Engineering Services, Engineering Division, New York, NY

Principal-in-charge and project manager for "on-call" professional engineering design services for waterfront structures in New York Harbor. Services provided include assessments and repairs to existing structures and the design of new structures including bulkheads, and low and high level piers. Projects were generally part of an on-going maintenance program, but there have been numerous emergency response projects often resulting from vessel collision.

Port Authority of New York and New Jersey, Regional Private Ferry Study, New York, NY and New Jersey Harbor, NJ

Project director for the Halcrow-led review and market analysis of existing and potential private ferry services in the greater NY and NJ Harbor. The study examined how ferry service is currently funded, what role ferry service plays in the regional transportation network, the public and private sector roles in ferry transportation, and what funding and financing options are available. The potential for new routes was explored. Study findings helped guide strategies to better integrate ferries into the regional transportation network and enhance the financial stability of the privately-operated ferry services.

Brooklyn Navy Yard Development Corporation, Brooklyn Navy Yard Rehabilitation, Brooklyn, NY

Project manager for the rehabilitation of Berths 1A, 8, 8A, 8B, 9, 9A, 10, 10A and structures at the small boat basin. The majority of the struc-

JONATHAN GOLDSTICK, PE (CONTINUED)

tures are timber relieving platforms between and at the entrances to the dry docks. The timber had deteriorated from rot and marine borer attack. Various repair scenarios were developed, and detailed designs were prepared for repairs that included the removal of all fill, encasement of piles, and re-filling with lightweight concrete to seal the relieving platform floors. The project began with detailed underwater inspections of the 19 structures for which only limited documentation existed.

Hudson River Park Trust, Hudson River Park Parkwide "On-Call", New York, NY

Principal-in-charge of the inspection, engineering, design, and construction administration services for the marine structures throughout the full length of the Hudson River Park, a five-mile park stretching along the Hudson River. Jonathan had final authority for all work performed, including condition surveys to monitor structures that were scheduled for replacement, inspection and rehabilitation design of structures that were to remain in use by the park, inspection and design of demolition plans for structures that were to be removed, and monitoring of pile fields for previously demolished piers. Structures inspected included timber and steel pile supported piers, granite block seawalls, and timber pile fields.

National Parks Service, Battery Park Pier A, New York, NY

Project director for ferry transportation issues at Pier A. This included developing layouts for secure docking of passenger ferries using a floating barge option, as well as examining the transition of passengers from the National Parks Service's security screening facility within Pier A onto the ferries to Liberty and Ellis Islands. Halcrow conducted extensive research to determine key stakeholder interactions as well as to obtain ferry sizes and preferred layout options, likely and projected passenger volumes, structural information related to securing the docking barge and the ferry, ferry operations schedules (numbers of ferries, frequency, timing and staggering of ferry arrivals), and other related information to develop a circulation strategy.

New York City Economic Development Corporation, "On-Call" Marine Engineering Services, New York, NY

Principal-in-charge for comprehensive "on-call" marine engineering services for waterfront sites in all five New York City boroughs. Jonathan ensured that all services were performed including above and underwater inspections; condition evaluations; recommendations for maintenance; preparation of designs, drawings, and specifications for repairs; cost estimating; and inspection of construction.

ALAN WALLER, PE

Role:
Port Commerce Project Manager

Firm:
Halcrow

Education:
BS, 1979, Civil Engineering, Manhattan College

Registrations:
Professional Engineer:
NY/1988, #[redacted]
CT/1988,

Affiliations:
American Society of Civil Engineers

Years of Experience:
31

Employment History:
1997 - Current
Halcrow

1993 - 1997
D & Z Utility Services, Inc.

1992 - 1993
Delta Electric Corp.

1991 - 1992
New York Power Authority

1998 - 1991
Visco Engineering

Alan is an expert professional engineer with more than 31 years domestic and international experience in the areas of project and construction management, engineering design, and field supervision specializing in waterfront and land based projects. His experience includes new and retrofit construction of piers, bulkheads, petrochemical plants, fossil and nuclear power plants. Specific areas of expertise include the analysis and design of marine structures, value engineering, design project supervision, construction planning, and construction management.

Alan is the recipient of numerous awards from the American Council of Engineering Companies, New York, including the Diamond award for design of the ferry landing and enclosed pedestrian ramps for the Pier 79 West Midtown Ferry on the Hudson River; Diamond award for the Reconstruction of Pier 86 on the Hudson River which required the replacement of the entire pier where the Sea Air and Space Museum's Aircraft Carrier "Intrepid" is berthed. He has also been awarded the Gold award for the Hudson River Park Piers & Esplanade and the Staten Island Yankees Esplanade projects.

Currently, Alan is serving as project manager for the Glen Cove Ferry Terminal Design, project director for the Norfolk Shipyard Berth Rehabilitation, as well as project manager for "on-call" services contract providing waterfront engineering services to the New York City Economic Development Corporation. His project experience includes:

City of Glen Cove/State of New York, Intermodal Ferry Terminal, Hempstead Harbor, Long Island, NY

Project manager for the construction of a new terminal, accommodating two ferries and many recreational boats, and is designed to act as a transportation center. Responsibilities included a ferry terminal building, new marine waterfront structures and esplanade, a parking area, associated infrastructure appurtenances, as well as access improvements along local roads. Construction documents were prepared and all construction phase services and waterfront aspects of the terminal will be provided.

New Jersey Department of the Treasury, Liberty State Park Ferry Terminal Fender Rack 2 Reconstruction, NJ

Project manager for the reconstruction of the badly deteriorated timber fender rack No.2 with a new modern pipe pile supported reinforced concrete fender platform with timber panel facing. Project included design bidding, shop drawing review, and construction supervision.

Intrepid Sea Air Space Museum, Intrepid Pier 86 Reconstruction, New York, NY

Project director for the home of the Sea Air Space Museum's Aircraft Carrier "Intrepid." Deterioration of the substructure requires replacement of the outer 782 feet of the 1,000-foot-long by 150-foot-wide pier at which the 27 K ton, 872-foot-long Intrepid is berthed. The design

ALAN WALLER, PE (CONTINUED)

meets the latest seismic criteria and includes fenders and mooring hardware for the Intrepid and other transient military vessels. The pier also functions as a park.

U.S. Navy, Naval Weapons Station Earle Pier Reconstruction, Colts Neck, NJ

Project manager during final mechanical, electrical, and rail construction of Pier 3 and steam plant replacement on Pier 4. Responsibilities included installation of three new package steam boilers, water treatment system and all new high pressure steam supply system piping and controls, as well as punch out of all pier fire protection, rail tracks and building structures on Pier 3.

Queens West Development Corporation, Queens West Waterfront Development Stage 2, Queens, NY

Project manager for preparation of the engineering design for replacement of approximately 1,900 linear-feet of the East River bulkhead. The previous shoreline consisted of various structures including relieving platforms, timber cribs, and riprap slopes. The new waterfront includes a wetlands area, high level platforms, and new tied back steel sheeting outboard of the timber crib structures. Responsibilities included performing condition surveys, bathymetry, permitting, and detail design.

United States Coast Guard, Pier 4 Reconstruction, Cape May, NJ

Project director for this design-build project which included the partial demolition and reconstruction of Pier 4, a severely deteriorated timber pile-supported pier at the United States Coast Guard Training Center. The reconstructed pier is a steel pipe pile-supported pier with precast concrete caps, prestressed precast concrete deck planks, and a reinforced concrete deck. Additional features included precast concrete utility trenches and provisions for mechanical and electrical services for berthing vessels.

New York City Economic Development Corporation, Pier 79 West Midtown Ferry Hudson River, New York, NY

Project manager for a floating ferry landing that accommodates seven ferries of various dimensions and configurations (side loading and end loading). The terminal building is supported on a rehabilitated pier. Work included inspection and design of repairs to existing waterfront structures and the design of a 314-foot by 30-foot floating ferry landing and enclosed pedestrian ramps linking the building with the landing.

BILL PAPARIS, PE

Role:
Port Commerce Project Manager

Firm:
Halcrow

Education:
MS, 1976, Civil Engineering, Columbia University

BS, 1975, Civil Engineering, Columbia University

Registrations:
Professional Engineer:
NY/1980,
NJ/1988,

PADI Scuba Diver Certification/1982

Years of Experience:
34

Employment History:
1984 - Current
Halcrow

1981 - 1984
Exxon Research and Engineering

1976 - 1981
Burns and Roe, Inc.

Bill has more than 33 years of experience on many marine related projects involving structural inspection, rehabilitation, upgrades and new construction design, planning, cost estimating, and construction management. His background includes inspection diving, as a certified diver, and on-site construction management for marine and waterfront projects. Bill has served as manager of the inspection department and is currently manager of Maritime Structures Group. His project experience includes:

Port Authority of New York and New Jersey, New York Marine Terminal Piers 6, 7, 8 and Bulkhead 9B, Brooklyn, NY

Project director for inspection and design of repairs to Piers 6, 7, 8 and Bulkhead 9B. The work included repair of concrete extension on timber piles, plating repairs to steel sheet piling, and installation of a new steel sheet pile bulkhead.

U.S. Navy, Norfolk Naval Shipyard, Pier 3 and Berth 25, Norfolk, VA

Lead structural engineer for design of Pier 3 and Berth 25 for the Atlantic Division of the US Navy. The pier is to accommodate aircraft carriers, submarines, and all other classes of Navy vessels. The work included the evaluation of numerous alternatives, including platform structures and bulkheads. The options of replacement and building outboard of the existing structures were evaluated.

U.S. Navy, Naval Weapons Station Earle Pier Replacement, Colts Neck, NJ

Assistant project manager for the $134 million replacement of an ammunition loading pier. Work involved steel pipe piles, precast concrete caps, a composite prestressed/cast-in-place concrete deck, fender systems, mooring fittings, dredging, mechanical and electrical works, and buildings.

Port Elizabeth Marine Terminal Upgrade, APM Terminals North America, Elizabeth, NJ

Project manager and lead structural engineer responsible for improvement of 6,000 linear-feet of wharves. The work included the strengthening and deepening of the wharves by provision of a sheet pile cut off wall and new crane foundations to accommodate 152,000 LT container vessels, and super-post-Panamax container cranes.

Global Container Terminal Extension, Weeks Marine, Bayonne/Jersey City, NJ

Project director and project manager for a 900-foot extension to Global Container Terminal. The major challenge of the project is spanning over an existing storm water sewer outfall which runs at an acute angle to the length of the wharf. In order to accomplish this, a 190-foot-long by ca. 30-foot-deep steel truss was designed to span over the outfall pipe and support the waterside crane rail. Resilient high energy absorption rub-

BILL PAPARIS, PE (CONTINUED)

ber fenders and 150-ton capacity bollards were provided along the face of the wharf. The scope of work also included electrical and mechanical utilities and pavement design.

Choctaw Point Container Terminal Development, APM Terminals North America, Mobile, AL

Project director/project manager for planning, design, engineering, and construction supervision for a new container terminal. The work includes final planning and layout of the terminal and gate, considering future expansions. Detailed design was performed for an administration building, maintenance building, longshoremen's shelter, and several smaller buildings and gate. In addition, design of the container yard, including grading, paving, storm drainage, fire water, domestic water, sewage, electrical, and communications, was carried out. The work also included full time resident engineering and construction support services.

New York City Economic Development Corporation, Passenger Ship Terminal Redevelopment, New York, NY

Project director for redevelopment design including pile repairs and structural upgrades to existing Piers 88 and 90, and the addition of new pile supported concrete decks with fendering along each side of the existing piers. Master planning included development of construction alternatives, phasing concepts, and project costs. The terminal was designed to berth a variety of cruise ships including the QM2.

New York City Economic Development Corporation, Cruise Ship Terminal, Brooklyn, NY

Project director for design of upgrades to Pier 12 to convert the facility from a general cargo pier to a cruise terminal.

Port Authority of New York and New Jersey, Howland Hook Container Terminal, Staten Island, NY

Project manager for detailed design to expand and upgrade the Howland Hook Container Terminal. The major elements of the project included strengthening of the northernmost 945 feet of the existing wharf to permit future dredging, a 300-foot extension of the wharf to the north and a 175-foot extension to the south. The design relied on the installation of new high capacity steel pipe piles to resist sufficient vertical load so as to make it unnecessary for the existing outboard row of piles to resist any load. Steel sheet piling was to be driven and supported by these new pipe piles, to stabilize the dike below the wharf.

JACK LUO, PE, PHD

Role:
Port Commerce Project Manager

Firm:
Halcrow

Education:
PhD, 2000, Geotechnical Engineering (ABD), University of Connecticut

MS, 1995, Geotechnical Engineering, University of Connecticut

MS, 1987, Structural Engineering, Southwest Jiatong University

BS, 1985, Civil Engineering, Changstra Railroad Institute

Registrations:
Professional Engineer:
NY/2001, #[redacted]
CT/1997, #[redacted]

Years of Experience:
21

Employment History:
2001 - Current
Halcrow

1998 - 2001
Mueser Rutledge Consulting Engineers

1995 - 1998
American Consulting Engineers, PLC

Jack is a structural engineer with more than 21 years of experience in the design and analysis of marine and waterfront structures, geotechnical, mass transit, tunnel, bridge and building foundations, railroad facilities, sewage treatment plants, support of excavation, underpinning, cut and cover, slurry wall, cofferdams, piling and steel reinforced concrete structures. His background includes computer modeling of structures. His project experience includes:

United States Navy, Craney Island Fuel Pier Replacement, Norfolk, VA

Structural engineer for the replacement of Fuel Pier D. Halcrow provided an update to the DD 1391. The scope of work included review of existing drawings and the facility operation, followed by the development of conceptual arrangement and structural drawings. Engineering calculations were developed to validate the concept drawings and provide further data to develop the cost estimate. A Basis of Design document was drafted to document the assumptions and conceptual design. Upon completion of these steps, a cost estimate was developed that accounted for the sequence of construction and followed the conceptual plan. Percentages for various overhead costs were included, plus escalation for the year 2010. Profit, contingency and other fees were included as directed by the Navy.

Hudson River Park Trust, Hudson River Park Pier 25 Replacement, New York, NY

Lead structural/geotechnical engineer responsible for the rehabilitation of Pier 25. The project consisted of demolition of the existing pier and the detailed design of the new pier replacement and platform. The completed project is a public recreation area including pedestrian areas, sports areas and water access.

APM Terminals North America, APM Terminal Berths 82-98 Wharf Improvements, Elizabeth, NJ

Lead geotechnical engineer and structural engineer for conceptual design for approximately 6,000 linear-feet of cutoff wall to provide for future dredging to elevation –50 feet, and strengthening of the wharves to accommodate larger container cranes. Detailed designs were prepared for the first three phases of the work (approximately 3,500 lin ft), and detailed designs for the remaining two phases are to be carried out in the future. The designs consisted of a combination H-Z system cutoff wall, new pipe piles, and H-piles in combination with existing H-piles to support the larger container cranes.

United States Navy, Pier 3 Replacement, Portsmouth, VA

Structural engineer for the replacement of Pier 3 under the indefinite quantity contract to provide waterfront engineering services to the Atlantic Division of the Naval Facilities Engineering Command. Halcrow prepared the DD1391 planning documentation for the demolition and replacement of the Ship Repair Pier 3 (49m by 317m) and Quaywall

JACK LUO, PE, PHD (CONTINUED)

Berth 25 (90m long) at the Norfolk Naval Shipyard and negotiated with LantDiv for the detailed design of this $70 M project. The project included new precast, prestressed concrete sheet pile walls, precast prestressed concrete support piling, precast and cast-in-place concrete relieving platforms, fendering and heavy weather mooring systems, replacement of crane runways and railroad tracks, new mechanical and electrical utility systems, dredging and site improvements. The work also included the demolition of ten buildings and the reconstruction of a saltwater pump station and restrooms.

United States Navy, Norfolk Naval Shipyard Dry Dock 8 Extension, Portsmouth, VA

Lead structural engineer for the arched extension of existing Dry Dock 8 to service future generation aircraft carriers. Project included the design of 75 feet deep cofferdam, demolition and reconstruction of pile-supported mass concrete slabs and walls/abutments, replacement of crane rails/rail foundations, and extensive underground utilities.

United States Navy, Norfolk Naval Base Vessel Collision Protection, Portsmouth, VA

Structural engineer/project director for the evaluation and preliminary design of standard anti-terrorism vessel collision structures for the US Navy to protect Navy vessels in berth from direct impacts by terrorist-controlled combatant vessels. The project called for developing a cost effective structural system that will safely absorb all of the energy, and bring to a stop, combatant vessels up to 100,000 t displacement traveling at velocities of up to 15 knots.

Project director for the development of a low cost continuous security barrier system to encircle naval port facilities and provide protection from attacks by small, agile, explosive-laden speedboats. The structure will prevent small boats between 5 and 25 tonnes traveling at velocities of up to 45 knots from entering restricted naval port zones.

Owens Corning South Dock Rehabilitation, Kearny, NJ

Lead structural/geotechnical engineer for the work which included design of 300 linear-feet anchored combined wall bulkhead, H-pile supported deadman anchorage system, pipe pile supported platform, precast framing, fender system, slope stability analysis, existing timber pile repair, demolition of existing bulkhead and construction staging/phasing.

ANDREW CHIURAZZI, PE

Role:
Aviation Project Manager

Firm:
HNTB

Education:
BS, 1988, Civil Engineering, New Jersey Institute of Technology

Continuing Education: Introduction to NEPA Requirements and Procedures, 1997

Pavement Management for Airports Roads and Parking Lots, 1995

Federal Aviation Administration Airport Conferences, 1989-2003, 2008

Application of the FAA's Eastern Region Laboratory Procedures Manual, 1989

Registration:
Professional Engineer:
NY/2008, [redacted]
NJ/2000, [redacted]
DE/2006, [redacted]
CT/2006, [redacted]
AZ/2006, [redacted]
RI/2006, [redacted]

Years of Experience:
22

Andrew is an airport engineer with more than 22 years of experience performing all aspects of design, program administration and on-site supervision services for a multitude of airfield related construction programs. He has considerable expertise performing both program and construction management, including the supervision of engineering staff as well as an extensive history of aviation related design. He is extremely well versed at identifying both site-specific and facility-wide operational dilemmas and developing and implementing situational solutions to such matters. He is skilled in executing essentially all aspects of program and construction management responsibilities from overseeing project cash flows and tracking quantities, to scheduling and all facets of construction supervision, inspection, testing, and contract administration. Additionally, Andrew has also been responsible for the code review and approval process, along with the subsequent field oversight, of substantial tenant projects performed at a variety of aeronautical facilities. Andrew has coordinated the application process for attaining both Federal and State project funding. He has been responsible for the evaluation of aeronautical pavement sections and the subsequent implementation of associated pavement management programs. Andrew has been charged with the design coordination of numerous airside and landside construction projects at multiple facilities throughout the Northeast. His project experience includes:

Port Authority of New York and New Jersey, Newark Liberty International Airport, Terminal B Modernization Program
Project manager for the Port Authority's Terminal B Modernization Program. In this capacity, he was originally responsible for the transformation of the existing mid and upper departures levels of the facility, as well as the expansion of the existing meter-greeter hall. The original scope of the program called for the relocation of the domestic baggage claims facilities to a new lower level, shifting domestic ticketing to the mid-level and devoting the upper level to international departure ticketing. On the upper level, the existing ticketing positions and baggage belts were to be pushed back from their original locations resulting in enlarged queuing areas and increasing the total number of international ticket counters by capturing the positions currently used for domestic departures. "Back-of-house" airline office space was relocated to newly created mezzanine areas constructed above the new international ticketing counters. Similarly, the domestic baggage claim area on the mid-level was slated to be relocated to a newly created lower level freeing up space to accommodate up to sixty additional ticketing positions with ample room for queuing in front of the counters.

Subsequent project workload associated with the Terminal B Modernization Program, included the responsibilities of project management for several undertakings at EWR, in support of the Port Authority's Project Management and Aviation Departments. Those additional endeavors included both the upgrade and ultimate replacement of the Terminal B fire alarm system, improvements to the existing vertical circulation at Terminal A, the replacement of the Terminal B baggage information display

ANDREW CHIURAZZI, PE (CONTINUED)

Employment History:
2009 - Current
HNTB Corporation

1998 - 2009
The Louis Berger Group

1988 - 1998
Pan Am/Johnson Controls/AvPorts

system (BIDS), improvements to the Terminal B & FIS lighting controls, planned improvements to the FIS Hall and renovations to the contiguous U.S. Customs and Border Protection (CBP) facilities, studying the drainage systems inherent to the Terminal B satellite bay rooms, modifications to the CBP ship's and hologram offices, resurrection of the third phase of the Southern Access Roadway project and the proposed planning associated with the inclusion of additional baggage facilities at Terminal B.

Port Authority of New York and New Jersey, Redevelopment Program, Newark Liberty International Airport, Newark, NJ

Project manager for the Authority's Redevelopment Program where he was responsible for overseeing all aspects of the planning, design and construction of Continental Airlines' expansion of Terminal C at Newark International Airport. The work, exceeding $620 million in development costs, included the modifications to the existing Terminal to incorporate a new, at-grade arrivals and multiple departures levels, as well as the construction of a new C3 concourse, 1,500 passenger/hour Federal inspection facility, a 134-foot operations control tower, expansion of the existing terminal over the airside restricted service road resulting in a double-height airside corridor connecting all three concourses, and the construction of a new outbound baggage handling facility. As a component to managing the Continental Airlines program, workload, Andrew facilitated the internal Port Authority distribution and review process of all of the tenant alteration application (TAA) documentation which resulted in more than 100 different design packages being eliminated from the daily workload of the EWR TAA liaison and the reorganization of the overall process to include "review by appointment" procedures. Andrew also managed the implementation of a 30-acre airside expansion project at EWR providing for additional remain overnight (RON) aircraft parking and the repositioning of existing parallel taxiways to accommodate simultaneous larger aircraft operations as well as modifications to the existing taxiway system to provide for enhanced aircraft circulation in the vicinity of the remodeled Terminal C.

Port Authority of New York and New Jersey, Construction of Taxiway 'RL', Newark Liberty International Airport, Newark, NJ

Project manager responsible for the construction of two taxiway throats to accommodate the newly constructed C3 Concourse at Terminal C to support the operation of the new facility. The project also included the resurfacing of existing Taxiways 'W' and 'Y' within the vicinity of the new taxiway throats.

Port Authority of New York and New Jersey, Relocation of Taxiway 'U', Newark Liberty International Airport, Newark, NJ

Project manager tasked with the relocation of a portion of an existing taxiway to help facilitate operations on the western side of the airport and up to the approach end of Runway 11. The work also included the elimination of the depressed roadway system which served as the access point for the original Port Authority Administration Building and FAA Air Traffic Control Tower.

NICHOLAS SALERNO, PE

Role:
Aviation Project Manager

Firm:
HNTB

Education:
MS, 1977, Industrial Engineering, Auburn University

BS, 1976, Industrial Engineering, Auburn University

Air Command and Staff College

AF Squadron Officers School

Registrations:
Professional Engineer:
NY/1991, #[redacted]
FL/1986, #[redacted]
CO/1988, [redacted]
PA/1991, [redacted]

Certified Project Manager

Affiliations:
National Society of Professional Engineers

Society of American Military Engineers

Years of Experience:
32

Nicholas has more than 32 years of experience in airport program and construction management, planning, development, execution, control; and engineering & operations management for programs in excess of $4 billion. He is a result-oriented professional who excels in long-range planning that reduces operating costs and increases profitability. Nicholas is an experienced leader responsible for saving clients more than $100 million annually. He exercises sound judgment in high-pressure situations. He is an advisor to client senior management on risk, claims recovery, and program issue resolution. He is a convincing oral and written communicator with a proven track record of gaining consensus on solutions to complex problems within an international and domestic context. His project experience includes:

Newark Liberty International Airport, Terminal A Modernization and Expansion Program, Newark, NJ

Assistant director of this $2.5 billion aviation program management, bringing his experience with other airports such as Logan International Airport in Boston, MA, the Ft Lauderdale-Hollywood International Airport, FL and USAF airfield facilities to add another dimension to the program's planning, design development, and management team, as well as, prepare the Terminal A Team for the anticipated design and construction of the terminal. His responsibilities include managing a diverse group of engineers, environmentalists, airport planners, and architects while advising the Port Authority of New York and New Jersey on Airport Engineering matters for the design and ultimate construction of a new 45 gate replacement of the current Terminal A, new parking facilities, ramps, taxi lanes, taxiways, runways, and roadways to meet the anticipated future increase in passenger demand.

Ft. Lauderdale-Hollywood International Airport, Ft. Lauderdale, FL

Program operations and controls manager, and senior project manager for this $1.2 billion airport expansion program. He developed and executed policies and procedures to control cost, schedule, and contract changes to ensure program and project completion on time and within budget. Nicholas provided program management oversight, and coordination among the project managers, designers, and contractors. He was the lead contract negotiator for construction and design contracts and optional services. He directed project managers and accountants in program field operations, personnel management, training, program and project analysis, resource planning and utilization, budget analysis and control; cost tracking & analysis; sources and uses of funds; invoice processing, change order control; and reporting. Facilities included runways, taxiways and aprons, terminals and concourses, roadways, maintenance and administrative.

United States Air Force, Air Force Reserve and Air National Guard Utility Outsource Program, Destin, FL

Program and operations manager responsible for directing staff engineers, legal and technical personnel in the analysis of Military Base Utility Systems to determine the feasibility of privatizing the function.

NICHOLAS SALERNO, PE (CONTINUED)

Employment History:
2009 - Current
HNTB Corporation

2007 - 2009
Louis Berger Group, Inc.

2000 - 2007
URS Corporation

1999 - 2000
The Onyx Group

1996 - 1999
O'Brien - Kreitzberg, Inc.

1993 - 1996
Salerno Engineers & Assoc. Inc

1990 - 1993
NYC Health and Hospitals Corporation

1977 - 1990
United States Air Force

Logan International Airport, Airport Modernization Program, Boston, MA

Deputy program coordinator and program controls manager, providing program management oversight, coordination with the program designers, project contractors, and the Massachusetts Port Authority for the $1.4 billion construction and renovation program. He was responsible for the evaluation of potential changes and recommending solutions to senior airport management. He directed engineers in project management, program master planning, schedule development and analysis, cost tracking & analysis, and reporting.

Port Authority New York and New Jersey, World Trade Center (WTC), Bomb Damage Recovery, New York, NY

Corporate president, program & technical risk manager, and advisor to the Port Authority New York and New Jersey Recovery Team on claims, resolutions to technical and financial recovery issues related to the early recovery of the WTC Complex of high-rise office facilities, a $275 million project. He established a joint technical advice group with insurance representatives to coordinate and validate data, and developed technical and financial data for claims justification.

New York City Health and Hospitals Corporation, Hospital Modernization Program, NY

Group director of engineering, design and construction who directed professional engineering and architectural directors in all aspects of this $500 million planning, programming, design, estimating, scheduling, and new construction and renovation of 35 medical facilities under tight deadlines and budgets. He programmed new facility designs and executed construction projects to keep pace with the medical technology and procedures to meet the dynamic needs of both patient and the medical professionals. Facilities include: Emergency Trauma Centers, Neonatal, TB, Labor and Delivery, Laboratories, Substance Abuse/Detoxification as well as Electrical/HVAC modernization, and code upgrade.

United States Air Force Academy, Construction and Renovation Programs, USAF Academy, Colorado Springs, CO

Director of programs who directed engineers, architects and contractors in the development and execution of a five-year, $100 million program to maintain existing and construct new facilities for the Air Force Academy. Saved $7 million annually and justified increased annual funding levels, based on identifiable needs. Facilities include dormitories, classrooms, airfield, and recreation.

TERRY KITER, PE

Role:
Aviation Project Manager

Firm:
HNTB

Education:
BS, 1985, Civil Engineering, Michigan Technological University

Registrations:
Professional Engineer: NY/1992, [redacted]

Affiliations:
American Society of Civil Engineers New York Airport Managers Association

Aviation Council of Pennsylvania

Years of Experience:
22

Employment History:
1992 - Current
HNTB Corporation

1985 - 1992
Greiner Engineering

Terry is a senior project manager in charge of the aviation department in HNTB's New York office. He has more than 22 years of experience in the design, construction and management of aviation (civil and environmental) related engineering projects. Terry has extensive experience in the planning design and construction of airport pavements, utilities, and facilities. His areas of expertise are airfield geometry, aircraft movement, construction staging, portland cement concrete pavement (PCCP) design, asphalt concrete pavement design, de-icing fluid collection and treatment, and environmental permitting issues. He lectures on PCCP design to various professional organizations throughout the Northeast. His project experience includes:

Port Authority of New York and New Jersey, Security On-Call Assignments, Various Locations, NY/NJ

Deputy project manager for this project which involves planning, designing, and engineering support services during construction for security enhancements at all of the Port Authority facilities. In this role, Terry is responsible for ensuring that all of the assignments are delivered on-time, on-budget, and to the client's satisfaction. This project began in 2003 and continues through the present. The facilities worked on in this project include the four airports, all Port Authority bridges, the PATH system, and Port Elizabeth.

Port Authority of New York and New Jersey, New Jersey Airports On-Call Assignments, Newark, NJ

From 1999 until 2004, Terry was the task manager of several large projects at both Newark – Liberty International Airport and Teterboro Airport. This project was a direct result of Continental Airlines Global Gateway program at Newark International Airport, and required significant coordination between the Global Gateway program and the Port Authority's Newark redevelopment program. Most of the work was done while the facilities were in use, and significant consideration of airline customers, airline operating issues, Port Authority Operating issues and constraints and Port Authority vendors.

Port Authority of New York and New Jersey, New Jersey Airports On-Call Assignments, Relocation of Building 51, Newark, NJ

Task manager who supervised the development of plans, specifications, and cost estimates for the sitework and maintenance of traffic required for the relocation of Building 51 - a landmark structure noted for being the first airport terminal in the United States - to the site of two demolished cargo buildings. Plans included utility removals and reconnections, pavement design and repair, and the development of a route to move the building. He also coordinated the efforts of various disciplines including structural, electrical, and architectural.

Port Authority of New York and New Jersey, New Jersey Airports On-Call Assignments, Building 1, Newark, NJ

Building 51 was relocated nearly a mile from its original site. An addition to Building 51 was developed to include more office spaces and an airport rescue and fire-fighting facility and the building was renamed Building 1. As the task manager, he developed plans for the sitework around the relocated building and its new addition including storm drainage, sanitary sewer,

TERRY KITER, PE (CONTINUED)

water supply, electric, gas, communications, site lighting, pavement design, and parking lot layout & signage. Under his supervision, we are provided construction support services including review of submittals and response to requests for information.

Port Authority of New York and New Jersey, New Jersey Airports On-Call Assignments, Teterboro Airport Interim Maintenance Building, Teterboro, NJ

Task manager who developed plans, specifications, and construction cost estimates for a new Maintenance Building at the Airport. Terry supervised the sitework design and coordinated the foundation design and interior architectural and MEP design for a pre-fabricated building supplied by a third party. The sitework involved the design of utilities including electrical, gas, communications, storm drainage, sanitary sewers, and water supply and the design of the staff parking lot and maintenance yard including signage, paint striping, and security fencing, and a fuel island with an above-ground fuel tank. The interior package included the standard elements of a maintenance building including HVAC, plumbing, electricity and mechanical equipment. The maintenance building was programmed for office space, a service garage with storage facilities, and a service shop with storage facilities. Terry also supervised construction support services including review of contractor's submittals and response to requests for information.

Lehigh-Northampton Airport Authority, Terminal Apron Reconstruction, Allentown, PA

Project manager of this multi-phase, multi-year effort to repave the aircraft apron surrounding the Satellite Terminal Building and Concourse at Lehigh Valley International Airport. This work involves analysis of the existing pavement and subgrade soil conditions, design of rigid pavement or flexible pavement, and grading and installation of new drainage structures as necessary to eliminate ponding. All of this work is being designed to allow uninterrupted operations at the terminal, and all of this design takes into account future expansion plans of the terminal, concourse, and satellite terminal.

Port Authority of New York and New Jersey, Newark International Airport, On-Call Assignments, Newark, NJ

Senior engineer and task leader on several projects and Newark-Liberty International Airport for the Port Authority of New York and New Jersey. Projects included:

Lot G Extension

Project manager who supervised the design of bituminous asphalt concrete parking lot pavement, storm drainage, and site lighting. Following the relocation of Building 51, the original site was redeveloped as an extension of an existing long-term parking facility – Lot G.

WILL FLORES

Role:
PATH Project Manager

Firm:
HNTB

Education:
MBA, 2004, Corporate Finance and Strategic Management, Pace University, Lubin School of Business

BS, 1998, Civil Engineering, Manhattan College, School of Engineering

Affiliations:
American Society of Civil Engineers

Society of Hispanic Professional Engineers

American Society of Public Administrator

Years of Experience:
13

Employment History:
2007 - Current
HNTB Corporation

1999 - 2007
MTA

1998 - 1999
Perini

1997 - 1998
NY Power Authority

Will is a senior rail systems transportation manager experienced in planning, design, construction, inspection and project management for major railway transportation, track and facility engineering projects. He has strong skills in planning, organizing, and mobilizing resources to support design projects. Will has experience leading engineering projects for the Port Authority of New York and New Jersey, MTA-New York City Transit, MTA-Capital Construction, MTA-Long Island Railroad, and MTA Metro-North Railroad. He has developed detailed design drawings, specifications, and procurement packages for maintenance facilities and yards, fan plants, track and signals, bus depots, perimeter security bollards, security enhancements for tunnels and transit complexes, and hydrology and ventilation analysis for stations. He is experienced in funding and procedures and contractual constraints, political and legal constraints. He is able to identify and analyze a broad range of multiple interrelated problems and issues, and develop a viable solution as well as excel at interfacing with others at all levels to ensure milestones are accomplished. He has successfully worked with regulatory agencies such as DOT, DEP, SHPO, Landmarks, and Community boards to advance projects His project experience includes:

MTA - Long Island Rail Road, Hall Interlocking – Signals & Power Fire Investigation (GEC Contract), Queens, NY

Project manager to lead the investigation for the signal system shutdown that controls the interlocking east of Jamaica Station. He has coordinated the efforts to review the site condition and draft an investigative report to the cause of the fire within the control tower.

New Jersey Transit, Portal Bridge Capacity Enhancement (PBCE) Project, Secaucus, NJ

Rail systems integration task manager responsible for managing and coordinating the design of the new Northern and Southern long-span bridges replacing the existing swing bridge over the Hackensack River. Work includes track alignment design oversight and ISO QA review; constructability reviews and integration of rail systems components with the structural and civil design. Other responsibilities include preparation of capital cost estimates, construction staging, contract packaging, monitoring and tracking of design budgets.

MTA - Long Island Rail Road, Signals & Communication, Queens, NY

Responsible for managing and coordinating design/construction activities with internal and third-party contractors, as well as coordinated with Contracts and Procurement to award design and construction contracts and change orders. Will coordinated with Force Account (Signal, B&B, Track & Power) Construction to ensure construction work activities are coordinated appropriately, and developed alternatives solutions to unforeseen site conditions to minimize schedule impact. Will managed construction activities and milestones, and developed monthly reports to senior staff on construction activities and progress as well as make certain construction sign-off were completed by designated Force

WILL FLORES (CONTINUED)

Account Department. Will managed technical staff to resolve discrepancies with design consultants and monitored progress and payments to design consultant. Will also managed and prepared responses to internal Quality Audits and Surveillance. He also managed the preparation of schedules, estimates and project controls while working closely to interface project controls with F/A line departments on scope definition to make sure accurate estimates and schedules were maintained as well as manage and prepare RFP's.

MTA - New York City Transit, Contract A-36109 – Flood Mitigation Measures and Design in Brooklyn & Queens, Brooklyn and Queens, NY

Project manager to develop flood design mitigations for seven stations in the boroughs of Brooklyn and Queens. He coordinated the hydraulic analysis to determine stations required for fire safety ventilation. He worked with the industry leaders to develop a three dimensional model for the stations to analyze the smoke dispersion throughout the station, mezzanines, entrances and exits. The analyses were performed to determine the ventilation performance to identify the ventilation gratings to be closed or modified. Will coordinated with NYC DOT and other regulatory agencies to acquire approvals to finalize the design documents. Construction documents were completed and construction expected to be completed by December 2010.

MTA - New York City Transit, Contract A-36107 – MTA NYCT Flood Control Manhattan, New York, NY

Task leader to mitigate flooding vulnerabilities for 79th, 86th, and Chambers Street Station of Broadway-Seventh Avenue Line. He coordinate multi disciplines to analyze ventilation conditions to the tunnels and stations for fire life safety conditions. Computational Fluid Dynamics (CFD) and Subway Environment Simulation (SES) analysis to determine the level of ventilations closures to be implemented. He coordinated a complex group of multi-disciplinary agencies such as NYC DOT, Arts Commission, Landmarks, Community Boards, and Parks department to develop and approve a mitigation concept to prevent flooding to the subway system. A street furniture prototype has been procured thru his efforts and approved with favorable reaction from the NYC city agencies.

Port Authority of New York and New Jersey, Security On-Call Projects, NY/NJ

Task manager for facility projects where he has provided services for site development, facility design, utility coordination, office space renovation, Security K-9 facilities, and police locker facilities. He leads the Architecture and Structural program to support on-call projects for buildings and transportation. He has led projects to develop design contracts for facility renovation, temporary housing for police and K-9 personnel and perform conceptual layouts for police firing ranges.

STANLEY WIECEK

Role:
PATH Project Manager

Firm:
HNTB

Education:
BS, 1961, Mechanical Engineering, City College of New York

Professional Program in Urban Transportation, Carnegie Mellon Institute

Affiliations:
Past President, Metropolitan Railway Club of New York

National Fire Prevention Association

Years of Experience:
49

Employment History:
2005 - Current
HNTB Corporation

1997 - 2005
Amtrak

1996 - 1997
Leher McGovern Bovis

1961 - 1996
Port Authority of New York and New Jersey/ PATH Corporation

With 49 years of experience in planning, railroad operations, maintenance, and major construction projects, Stan has developed expertise in many areas. During his 36 years with the Port Authority of New York and New Jersey and PATH Corporation, he assumed increasing responsibilities, initially involving operations and maintenance, then facility planning, and ultimately, capital program development. Stan provided design support for dozens of PATH and PA major infrastructure projects involving station expansion, railroad and bridge right-of-way improvements, security upgrades, train operations and fare collection systems.

At Amtrak, Stan managed the design development and award of Life Safety contracts, including tunnel emergency ventilation, sub-station expansion, tunnel lighting rehabilitation and rail improvement programs in and around Penn Station New York. His project experience includes:

Port Authority of New York and New Jersey, PATH, Harrison Transfer Yard Facility, Harrison, NJ

Project manager for rail system design to expand PATH's yard tracks in Harrison, New Jersey. Under the Authority's 2008-2010 Civil (Rail) on-call contract his responsibilities include initial design development meetings with PATH's maintenance divisions to integrate requirements of each PATH unit. Initial work involved preparation of procurement documents for new track work, and third rail. Subsequently, scope was expanded to provide contract drawings and specifications for installation of new trackwork by a third party contractor. Key design elements involved track alignment and contact rail design for 10 new turnouts, and a crossover, as well as revisions to existing signal system wireways, cables and equipment.

Port Authority of New York and New Jersey, PATH, Track 52, Waldo Yard, Harrison, NJ

Project manager responsible for rail system design for grading and ballast for Track 52, in PATH's Waldo Yard. Work involves coordination with Jersey City Municipal Utility Authority on existing utilities, as well as an alignment plan for future installation of track and third rail, by PATH forces. This project is under the Authority's 2008-2010 Civil (Rail) on-call contract.

MTA - Long Island Rail Road, Rehabilitation of the Atlantic Avenue Viaduct, Phase I & 2, Brooklyn, NY

Rail task leader for the track and third rail design for rehabilitation of LIRR's Atlantic Avenue Viaduct, Brooklyn, New York. Responsible for the track profile, alignment and open-deck timber details, as part of a 1.5-mile replacement of bridge girders and track structure. He also planned integration of contractor's work with force account personnel to provide timely restoration of track, signal and third rail systems each weekend.

Staten Island Economic Development Corporation, West Shore Light Rail Phase II Study, Staten Island, NY

Task leader for establishing route alternatives, developing a fatal flaw analysis, establishing optimal profile, and preparing preliminary cost esti-

STANLEY WIECEK (CONTINUED)

mates. Scope involved development of station locations, parking areas and facility support locations for vehicle cleaning, inspection and repairs. Considerable time was spent on liaison and review with technical task force, which included the Authority, MTA, New York State Department of Transportation, New Jersey Transit, and local agencies. Project development relied on several open house and community board presentations.

New York Economic Development Corporation, Staten Island Railroad Reactivation, New York, NY

Project manager for design and post-construction reviews. Managed solutions for design of special track work and compressed air system, and reviewed shop drawings and RFI's from contractor. Facilitated design interface for a pedestrian walkway requiring NYCDOT approval. Responsibilities included reviewing operating and maintenance plans submitted by proposed system operator, Conrail Shared Assets. Work involved significant coordination with Authority departments relating to the concurrent rehabilitation of the railroad lift bridge crossing the Kill Van Kull. Scope included new freight yard, new track, replacement of railroad bridges, along with auxiliary systems to support rail operations. Service was inaugurated in April, 2007.

New Jersey Transit, Preliminary Engineering Services, Northern Branch Rail Corridor Project, Newark, NJ

Deputy project manager for an A/E joint venture performing the preliminary design for a new passenger rail service on the Northern Branch Rail Corridor, from North Bergen to Tenafly, New Jersey. His responsibilities involved the design and development of track plans and new passenger stations for a 12-mile right of way. The current phase involves initial surveys, geotechnical investigations and environmental analyses.

Sandia National Laboratories, Radiation Portal Monitors at New York Container Terminal, Staten Island, NY

Project manager for design and construction phase services for a DHS-funded project, that includes radiation monitoring of out-bound truck containers leaving New York Container Terminal, at Howland Hook, Staten Island. He developed the infrastructure required to support experimental detection devices amd was responsible for obtaining TAA approval from the Authority, along with coordination of work between disciplines, client and construction manager.

Port Authority of New York and New Jersey, PATH Corporation, NY

Program manager from 1991 to 1996 who directed staff in the development of multi-million dollar contracts for new construction and infrastructure rehabilitation at the Hudson River crossings and the PATH transit system. He managed the design development and award of seven major contracts, with a project value of $57 million for infrastructure renewal at the PATH transit system.

BENJAMIN HOVEY, PE

Role:
PATH Project Manager

Firm:
HNTB

Education:
BS, 2004, Civil and Environmental Engineering, Bucknell University

Registrations:
Professional Engineer: NJ/2009, [redacted]

Affiliations:
American Railway Engineering and Maintenance-of-Way Association

American Society of Civil Engineers

Years of Experience:
6

Employment History:
2010 - Current
HNTB Corporation

2004 - 2009
Parsons Brinckerhoff

Benjamin is a licensed professional engineer with six years of engineering experience working exclusively in the railroad industry. His background includes experience in the functional areas of track and yard facilities design, special trackwork design, track and railroad system integration, feasibility studies and concept development for railroad and transit systems. His project experience includes:

Port Authority of New York and New Jersey, Harrison Car Maintenance Facility – Rail Transfer Yard, Harrison, NJ

Alignment and trackwork designer responsible for providing preliminary and final design for two areas within the PATH Harrison Car Maintenance Facility. The scope includes providing a new transfer yard in the west area and additional storages tracks in the south loop area. The trackwork design includes horizontal and vertical alignments, contact rail design, modifications to existing tracks as necessary, and development of design documents to procure trackwork materials through the Authority procurement office.

Long Island Rail Road, Amityville, Copiague and Lindenhurst Viaduct/ Massapequa Slab, Amityville, Copiague and Lindenhurst, NY

Engineer who compiled and edited report of slab and viaduct direct fixation condition survey. Ben reviewed published design guidelines and existing direct fixation installations to design loads for fastener specifications. He performed design calculations for direct fixation fastener system in accordance with TCRP Project D-5: Design Guidelines. He also compiled and edited construction specifications for direct fixation fastener replacement program. Additionally, Ben produced staging plans and repair details for direct fixation fastener replacement contract drawings. He performed construction phase services, including review of shop drawings and material submittals, and preparation of meeting minutes for project status meetings. He also made numerous field visits to collect data and analyze the performance of the contractor's alternative method of work.

MTA-Long Island Rail Road, Vanderbilt Yard, Brooklyn, NY

Engineer who analyzed survey data for special trackwork alignment for relocating the LIRR's Vanderbilt Yard to allow for construction of a new arena and mixed use development overhead as part of the Atlantic Yards development project. Ben produced special trackwork drawings for multi-staged storage yard realignment. Coordinated with relevant disciplines to locate contact rails, access roads and insulated joints. Developed 3D model of train dynamic envelop along length of tunnel track for use in verifying clearance to existing and planned tunnel utilities.

Brookfield Properties 9th Avenue Development, 9th Avenue and 31st Street, New York, NY

Engineer who performed conceptual studies and prepared final design documents for the track modifications required to provide clearance to structural supports of a multi-building overbuild west of New York Penn

BENJAMIN HOVEY, PE (CONTINUED)

Station. Ben's services included providing column clearance zones, rail vehicle data, runaway train calculations and hydraulic bumper loads to other project team members. Provided each railroad with waiver documents, clearance studies, track capacity reviews, alignment documents and material estimates for Force Account work.

New Jersey Transit Corporation, Passaic-Bergen Passenger Restoration Project, Passaic County, NJ

Engineer who conducted a project-wide site tour of the 8.7 mile, double- and single-track corridor, to determine the existing conditions at the interface points between existing track and proposed track. Ben annotated alignment drawings based on the results of this site tour and updated material quantities accordingly.

New Jersey Transit Corporation, Trans-Hudson Express Tunnel Project, Hudson County, NJ and New York, NY

Engineer who assisted in production of trackwork and trackway directive drawings and trackwork design criteria, including creation of a project vehicle clearance envelope, during preliminary design of this project to add two new rail tunnels under the Hudson River from New Jersey to New York Penn Station.

Metro North Railroad, Walden Passenger Rail Study, Village of Walden, NY

Engineer for feasibility study of expanding Metro North Railroad service from Port Jervis Station to the Village of Walden located in Orange County, New York. Ben was responsible for collecting data from public and private sources and field visits to create study documents for the existing conditions of the rail infrastructure and right of way of this 10-mile spur.

Port Authority of New York and New Jersey, PATH Harrison Maintenance Shop, Harrison, NJ

Engineer who produced layout plan of electronics shop and potential expansion areas. Ben produced horizontal and vertical alignment of wheel truer shop trackwork.

Metropolitan Transportation Authority/Long Island Rail Road, East Side Access, New York, NY

Engineer who prepared railroad Force Account plans, bill of materials, estimate and task list for track, traction power and third rail from existing contractor/force-account plans for Contract FQA28. Ben prepared technical description and location plans of all tunnel systems work, including track, traction power, communication and signal systems, for use in revising the contracting model for these work items.

NICHOLAS TASSOULAS

Role:
World Trade Center Project Manager

Firm:
HNTB

Education:
MBA, 1991, Finance, St. John's University

MS, 1981, Civil Engineering, Polytechnic Institute of New York

BS, 1978, Civil Engineering, Polytechnic Institute of New York

Years of Experience:
32

Employment History:
2008 - Current
HNTB Corporation

2003 - 2008
AECOM Technology Group (DMJM+Harris)

2001 - 2003
National Railroad Passenger Corporation (Amtrak)

1978 - 2001
Washington Group Int'l. Inc. / Raytheon Engineers & Constructors

Nick is a project manager with extensive experience and demonstrated ability in managing all engineering functions for multi-million dollar programs in both the government and private sectors. Successfully developed, directed and coordinated multidiscipline engineering activities and have managed up to 125 engineering professionals. Expertise spans resource planning, project controls, capital cost estimates, budgets/ schedule formulation and cost containment. Nick has superior negotiation and communication skills resulting in substantial project cost savings. His project experience includes:

Port Authority of New York and New Jersey, World Trade Center Transportation Hub Project, New York, NY

As the World Trade Center Construction (WTCC) – risk management program director, reports directly to the Program Director and leads a staff of six cost estimating, scheduling, cost engineering, accounting, economics and risk analysis professionals, drawn from within the Authority and other consulting firms, including HNTB. His responsibilities include oversight of the risk management program, including evaluation of completeness, consistency, and adequacy of the grantees' program construction cost estimates and schedules, budget development and forecasting, earned-value management and cost allocation of the various Authority projects constituting the program and many other public and private entities impacted by the redevelopment program. Additional responsibilities included the development of effective project control policies and procedures, integrating "best practices" processes, focusing on control and reporting functions, while ensuring compliance with FTA guidelines. The total cost is $14 billion.

Port Authority of New York and New Jersey, World Trade Center Transportation Hub Project, New York, NY

Risk/cost estimating/scheduling/constructibility manager on this $3.4 billion architecturally iconic transit center, providing oversight on all cost estimating, construction scheduling, risk management and constructibility review tasks. Formulated a streamlined cost estimating model that generated standardized bid forms, capturing all attendant labor, material and equipment costs with complete support documentation. Ensured on-time completion for all major design milestone cost deliverables (engineer's construction cost estimates).

National Railroad Passenger Corporation (Amtrak), Fire and Life Safety Program, New York, NY

Managed and efficiently executed all aspects (design and construction) of Amtrak's $900 million Fire and Life Safety (F&LS) Program involving Penn Station and the New York Tunnels.

Hudson-Bergen Light Rail Transit System, Various Locations, NJ

Project engineering manager responsible for the technical oversight of all engineering activities associated with the first $1.5 billion DBOM transit project in the United States for the Hudson-Bergen Light-Rail Transit System (HBLRT).

New Jersey Transit, Newark City Subway Extension, Newark, NJ

Project engineering manager on this $75 million Newark City Subway Extension and Vehicle Base Facility (NCS) project for New Jersey Transit.

HUGH CASPE, PE

Role:
World Trade Center Project Manager

Firm:
HNTB

Education:
MS, 1970, Civil Engineering, City College of New York

BS, 1965, Civil Engineering, City College of New York

Registrations:
Professional Engineer:
NJ/1986,
NY/1971,
CA/1975,
MA/1978,
TX/2002,
KY/2003,

Affiliations:
American Underground Construction Association (Treasurer, Board of Directors)

American Consulting Engineers Council of Massachusetts (Past Chairman of Ethics Committee)

The Moles

American Society of Civil Engineers

Boston Society of Civil Engineers (Past Chairman of Construction Group)

Underground Technical Research

Council (Past Chairman of Contracting Practice Subcommittee)

Throughout his 45-year career, Hugh has led complex underground engineering design and construction projects in Boston, New England, New York City, California and other locations throughout the nation. The value of these projects totals over $6 billion. For these projects, Hugh has applied his expertise in tunnel planning, design and construction management of major multi-discipline transportation (highway and rail), water/wastewater and tunneling facilities. He is knowledgeable in contracting practices, estimating, scheduling, community and client interface, and claims analysis.

Specialized expertise includes:

- Extensive background with soft-ground and rock tunnels and shafts, micro-tunneling, slurry walls, cofferdams, utility relocations, protection of existing structures
- Design, constructability reviews, construction phase services, and maintaining operations of existing services (including traffic, utilities, rail service and access for local businesses)
- Specialized experience in developing plans for dewatering and groundwater control during design and construction phases of projects
- Management of geotechnical investigations and has incorporated geotechnical findings into fully functional engineering design and construction documents
- Risk Management and Claims analysis

Hugh has authored numerous papers regarding tunnel design and construction including those addressing risk management, planning of major tunnel projects, and specialized techniques to address complex subsurface conditions. He is a member of both the Moles and the Transportation Research Board (TRB) Committee on Tunnels and Underground Structures, AFF60. His project experience includes:

Port Aurhority of New York and New Jersey, World Trade Center Transportation Hub, New York, NY

In-house program manager for the design and construction of the HUB portion of the World Trade Center reconstruction, a $6 billion potion of the of massive World Trade Center reconstruction program. The Hub portion of the project encompassed the complete subsurface facility constructed within the expanded bathtub that remained after the 9/11 event. It also included all newly constructed facilities for the new Santiago Calatrava Oculus and Transit Hall serving NYCT, PATH and other facilities. Hugh also was instrumental in the design and construction the MEP systems to support all WTC operations, as well as the bottom-up construction instituted to support and upgrade NYCT facilities all during their continuous operations. Hugh coordinated with numerous stakeholders and third parties involved in WTC's reconstruction.

Georgia Department of Transportation, Atlanta North South Tunnel Atlanta, GA

Tunnel design manager with overall responsible for developing complete engineering study for a 13 mile highway corridor between I-85/SR 400 to I-285/I-675 in Atlanta. Due to the constraints associated with the corridor

HUGH CASPE, PE (CONTINUED)

International Tunneling Association

Recipient, Boston Society of Civil

Engineers' 1994 Ralph W. Horne

Award for Public Service

Years of Experience:
45

Employment History:
2001 - Current
HNTB Corporation

1997 - 2001
Caspe Consulting Company

1996 - 1997
Woodward Clyde

1986 - 1996
Sverdrup Corporation

1980 - 1986
Kaiser Engineering

1977 - 1980
Bechtel Corporation

1971 - 1977
Guy F Atkinson Construction Company (Water Tunnel Contractors)

1968 - 1971
Pavlo Engineering Company

1965 - 1968
Blauvelt Engineering Company

7 miles of the alignment was designed as dual 36-foot finished diameter dual tunnels carrying two lanes in each direction. Other alternatives were also analyzed based upon the results of the HNTB's preliminary geotechnical investigation, which included dual 48-foot diameter tunnels with three lanes in each direction, and a single 54-foot diameter bi-level tunnel with two lanes in each direction all about 150 in depth. In order to minimize impacts to the community an innovative approach to tunnel ventilation was developed which both minimized cost and surface impacts. This project is a part of GDOT Public Private Initiative (PPI). Costs were developed utilizing a bottoms up approach similar to that utilized by contractors for each of the tunnel alternatives analyzed. The project was estimated to cost $3.2 Billion.

California High Speed Rail Authority, California High Speed Rail Environmental Impact Statement and Preliminary Design for Segment between San Francisco and San Jose, CA

HNTB's lead tunneling engineer and project advisor for all aspects of tunnel design and analysis for this 47-mile-long corridor. Two tunnel configurations were considered, dual 33-foot-diameter tunnels carrying single track High Speed Rail, or dual 45-foot-diameter tunnel jointly carry both High Speed and Commuter Rail service. Right of Way was limited to an operational Commuter Rail corridor with numerous stations traversing areas of sensitive environment constraints and limitations. The project design addressed both the Life Safety and Ventilation requirements that had to limit the potential locations for such structures. Construction staging was prepared to allow for continuous Commuter Rail operations without the closing of any stations along the alignment.

City of Dallas, Major Flood Management and Storm Drainage Project, Dallas, TX

Tunnel engineer manager responsible for managing and a number of section designers in the development of the overall program and final tunnel alignment for a 5-mile-long, 31-foot diameter tunnel which will convey storm water from a number of drop shafts to a tributary to the Trinity River. In the process of developing the alignment HNTB also established tunnel design criteria and performed the program-wide geotechnical investigation program and prepared the program wide master technical specifications. HNTB also prepared a complex Risk Register outlining anticipated project risks and associated mitigation measures for each risk delineated.

Metropolitan Washington Airports Authority, Washington Dulles International Airport's Automated People Movers (APM) Tunnels, Dulles Airport, VA

Project advisor and member of Technical Advisory Group supporting the design of the $450 million APM Tunneling System. The project entails the design of over 10 miles of tunnels constructed utilizing NATM, Bored and Cut a Cover Tunneling techniques to accommodate new baggage handling system, underground tunnels, utility tunnel, pedestrian walkback tunnel and APMs. Various tunneling cross-sections were employed ranging 20 to 60 inches in diameter depending on the function purpose of the Tunnels. Tunnels traversed beneath active taxiways which required extensive analysis and precautions for potential settlement at these critical locations.

PIERRE DESAUTELS, PENG

Role:
World Trade Center Project Manager

Firm:
Halcrow

Education:
ME, 1980, Department of Civil Engineering and Applied Mechanics, McGill University

BE, 1977, Department of Civil Engineering and Applied Mechanics, McGill University

Registrations:
Professional Engineer: Ontario

Affiliations:
American Institute of Steel Construction, Member

American Society of Civil Engineers, Member

International Code Council (ICC), Member

Structural Engineers Associations of New York

American Institute of Steel Construction, Member

Prestressed Concrete Institute, Member

ACE Mentor Program, NY Chapter

Urban Land Institute

Ordre des Ingénieurs du Québec

Engineers without Borders

Years of Experience:
30

Pierre is a senior associate and project principal at Halcrow. He has overseen projects in a variety of building sectors including hospitality, commercial, institutional, health care, and parking garages. In this role, he oversees and maintains responsibility for the schematic design, the design development, and the production of contract documents. He remains actively involved in projects though the various construction stages. In recent years he has worked on projects in North America, China, Korea, the United Kingdom, Mexico, Morocco, Egypt, Kuwait, Dubai, and the West Indies.

Since 2004, Pierre has been the principal responsible for the Property Business Group at the New York City office. He has specific project experience in fast-track construction, award-winning international embassies, seismic design, and design-build projects. This unique experience has led to a high demand for his expertise in areas such as high loading requirements, security issues, complex negotiations, and international projects. His project experience includes:

DCM Erectors, WTC Transit Hub, New York, NY

Project director for technical assistance related to means and methods to DCM Erectors, who are the structural steel contractors who provided the fabrication and erection of the HUB steel at the new Fulton Street Transit Hub in lower Manhattan. Responsibilities included the evaluation on the HUB steel of the effects of the means and sequence of erections. The evaluation was carried out using a sequential model analysis reflecting the erection and concrete construction phases.

Fresh Kills Park, Field Operations, Staten Island, NY

Technical advisor for the Fresh Kills Park project for the transformation of the former Fresh Kills Landfill on the Arthur Kill waterfront of Staten Island into a new public park. The new 2,200-acre park is one of the most ambitious public works projects, combining state of the art ecological restoration techniques with extraordinary settings for recreation, public art, and facilities for many sports and programs that are unusual in the city. The structural aspect of the project included lookout towers, photovoltaic structures, observation decks, pedestrian bridges and walkways, and entrance gates.

Tishman Speyer Properties, 200 West Street, New York, NY

Project director for this headquarters office building which consists of a 45-story steel tower housing 2.1 million square-feet of mixed office, fitness facilities, atriums, and dining facilities. Responsibilities included coordinating, designing, and administration of contracts for structural and architectural elements during the construction phase of the building. Specific tasks included providing curtain wall connection details, ground floor and mezzanine structural modifications, foundation redesigns, structural modifications due to MEP design changes, and the design and modifications of non load-bearing masonry walls.

PIERRE DESAUTELS, PENG (CONTINUED)

Employment History:
1980 - Current
Halcrow

Modifications for Spiderman Production, Hilton Theater, New York, NY

Project advisor for this project which involved altering the existing 1,850-seat, 90,400-square-foot, theater on 42nd Street and Broadway in midtown Manhattan. The alteration included expanding the orchestra pit and modifying the stage apron to allow the stage designer to use extensive hydraulic lifts for a new theatre production.

New York Jets, Atlantic Health Jets' Training Center, Florham Park, NJ

Project director for the New York Jets training facility located in New Jersey, a 130,000-square-foot athletic, coaching, and management headquarter. The facility includes an outdoor field and an indoor field for security reasons. The center also includes fitness and therapy spaces for the players and is the head office for the team management and coaching staff. There is also a business center on-site that allows potential sponsors to meet the players and watch them train.

Tishman Construction Corporation of New York, Albert Einstein College of Medicine, Bronx, NY

Technical advisor for the design of remedial work, as part of means and methods, for the contractor to repair the results of a partial local collapse of a form for an architecturally exposed concrete column. The original requirement, recommended by a third party, of shoring five floors, was avoided using an innovative approach, saving time and money.

World Financial Center, Olympia & York, Battery Park, NY

Project engineer for this project in lower Manhattan. The World Financial Center was, at the time of construction, the largest commercial development undertaken in New York City since the Rockefeller Center was constructed in the 1930s. The complex consists of four high-rise towers ranging from 33 to 52 stories in height. Halcrow provided the overall concept for the project, as well as the detailed design for both the 52-story Tower Three (2,190,000 square-feet) and the 44-story Tower One (1,600,000 square-feet). The overall design of the complex created dramatic public spaces and access to the waterfront, which promotes spectacular views of the Hudson River and the harbor. Two identical towers form a gateway between the street and the waterfront via an enclosed glass vault known as the Winter Garden. The Winter Garden is part of a thriving street-level base that also contains the Liberty Street portal, retail arcades, restaurants, and a courtyard.

ANTHONY PIECHNIK, PE

Role:
Tunnels, Bridges and Terminals Project Manager

Firm:
HNTB

Education:
MS, 1995, Civil Engineering, University of Virginia

BS, 1990, Physics, Wake Forest University

Registrations:
Professional Engineer:
NY/2001, #[redacted]
ME/1996, #[redacted]
MA/1996, #[redacted]

Affiliations:
American Concrete Institute

Years of Experience:
18

Employment History:
2000 - Present
HNTB Corporation

1999 - 2000
Lockwood Consulting Engineers

1992 - 1999
TY LIN International

A.J. joined HNTB in 2000, and is a structural project engineer/squad leader in the New York office. He is involved with the analysis, design and construction of long-span and complex bridges. His project experience includes:

Port Authority of New York and New Jersey, Goethals Bridge over Arthur Kill Modernization Program, Staten Island, NY and Elizabeth, NJ
This $550 million project included the following:

Goethals Bridge Design Build Finance Procurement (DBFM), 2009-Present - Project manager for the development of the technical qualifications for the Goethals Bridge DBFM RFQ and the development of the DBFM RFP technical requirements. The scope of work includes the development of design and construction specifications as well as performance criteria. Site specific live load design criteria using WIM studies has been developed for the project. Additionally, maintenance and handback requirements have been developed with risk analysis.

Stage II Preliminary Design, 2004-2009 - Deputy project manager/lead engineer for the design of steel and segmental cable-stayed bridge alternatives with a 900-foot main span over the Arthur Kill waterway. Additionally, the design of segmental, composite steel girder and PPC composite girder alternatives are being completed for the over 5,200 feet of approach structure. Foundation and seismic studies have been completed to develop cost effective drilled shaft and concrete filled steel pipe foundation designs. Constructible details, durability and project specifications are under development to provide a 100-year service life.

Stage I Planning, 2002-2004 - Deputy project manager/lead engineer for the preliminary planning studies to replace the Goethals Bridge between Elizabeth, NJ and Staten Island, NY. The Goethals Bridge is a cantilever truss carrying I-278 (four lanes of traffic) over the Arthur Kill waterway and leading to the Staten Island Expressway. Total length, bridge and approaches, is approximately 7,100 feet. Type studies were completed for bridge types to show that a 900-foot main span cable-stayed bridge is the cost effective and constructible solution. The studies involved the development of alignments, preliminary steel and segmental cable stayed bridge designs, preliminary foundation studies, construction access studies, construction staging and tie-ins over the New Jersey Turnpike and construction schedules over the critical Arthur Kill waterway and its wetlands. Additionally, preliminary design criteria were developed with cost estimates.

Port Authority of New York and New Jersey, LaGuardia Airport FRP Deck Proposal, New York, NY
Senior bridge engineer responsible for the FRP composite design check, content and development of the proposal. In conjunction with a composite manufacturer, responsible for the development and design of a replacement FRP composite deck.

City of Milwaukee, Sixth Street Viaduct, Milwaukee, WI
Deputy project engineer and design/construction point of contact for contractor during the 24 month design-build of two 195-foot main span

ANTHONY PIECHNIK, PE (CONTINUED)

concrete cable-stayed, approach structures and two bascule bridges. The design of the viaduct was completed within a nine month period. The design included over 1,100 contract drawings. All critical path construction drawings were prepared in the order of construction and in self contained segments for easier understanding and portability. Reinforcement bar lists for all shop drawings were prepared and submitted directly to the rebar manufacturer and field via email. A three week time frame between completing the construction drawings to rebar delivery in the field was standard. Travel to Milwaukee and on-site time was as needed for the project team. The owner required inspection and approval of details prior to concrete placement, therefore traveling was at least once a month. Approvals of cable and post-tensioning stress was with in minutes via email with the resolution of field issues (i.e. damaged PT, piles, etc) typically accomplished by emailing of photos and sketches, with solutions within an hour or two. Early design recognition of improvements to the owners RFP concept, lead to simplifying a low level approach structure with an at-grade solution, resulting in time and cost savings.

Massachusetts Turnpike Authority, Leonard P. Zakim Bunker Hill Bridge over the Charles River, Boston, MA

Project manager/lead engineer for this $115 million project for a 10-lane landmark hybrid cable-stayed bridge with concrete back spans (250 feet) and a steel composite main span (745 feet). Opened in early 2003, the bridge has won numerous design awards including ACEC's 2003 Grand Award and the 2003 George S. Richardson Medal from the International Bridge Conference. A.J. was responsible for construction support services to the bridge contractor. Key responsibility included on/off-site coordination between rebar supplier, iron workers and contractor to produce full bar lists and constructible detailed integrated shop drawings. Integrated construction shop drawing production involved the advanced identification and resolution of constructability issues to reduce construction delays. Detailed shop drawings incorporated bridge geometry, reinforcement detailing, post-tensioning layout/details, stay anchorage layout/details and utilities to resolve conflicts and insure constructability. Reinforcement lists were sent directly to the bar fabricator for fabrication and delivery to the field. Additionally, the design of temporary support structures was completed.

City of Rome and Floyd County, Rome Pedestrian Bridge over the Oostanaula, Rome, GA

Design engineer participating in the final design of the 354-foot main span suspension pedestrian bridge over the Oostanaula River. This project will have a major impact on the skyline of this historic city. The concept is to install the cable and steel girder without temporary support and construct the deck with prefabricated panel. The main suspension cable will be anchored with grouted rock anchors in order to improve the aesthetics of the abutments. Inclined suspenders were utilized to ensure that the bridge performs adequately under pedestrian live loads. Anchorage design utilized a combination of H piles and rock anchors to minimize construction costs. The suspension bridge utilizes a steel composite deck, inclined suspenders and steel towers above the 100-year flood elevation.

SETH MEDWICK, PE

Role:
Tunnels, Bridges and Terminals Project Manager

Firm:
HNTB

Education:
MBA, 2004, New York University

BS, 1984, Civil Engineering, State University of New York at Buffalo

NHI Bridge Inspection Refresher Course, #130053, 4/2004

Registrations:
Professional Engineer: NY/1989, [redacted]
NJ/2004, #[redacted]

PADI Divemaster/1998, [redacted]

Years of Experience:
29

Employment History:
2007 – Current
HNTB Corporation

2003 – 2007
Naik – Prasad, Inc.

1992 – 2003
HNTB Corporation

1990 – 1992
Vollmer Associates

1990 – 1990
Steinman Engineers

1984 – 1990
Vollmer Associates

Seth currently leads the Bridge Inspection group at HNTB New York, a role to which he brings 29 years of experience in the management and quality control of bridge design and inspection. He has also served as QA/QC engineer on a number of transportation related projects. Seth's project experience includes:

Port Authority of New York and New Jersey, George Washington Bridge Main Span Upper Level Structural Steel Rehabilitation, NJ/NY
Quality control engineer for the in-depth inspection of orthotropic deck, framing, suspender collars, finger joints, and drainage system. The project was completed in 2007.

Port Authority of New York and New Jersey, On-Call Structural Engineering Services, Various Locations, NY/NJ
Structural task order project manager overseeing inspection tasks for a variety of on-call structural assignments. Facilities include the George Washington, Bayonne, Goethal's Bridges and the Outerbridge Crossing, as well as the Holland and Lincoln Tunnels.

Port Authority of New York and New Jersey, Contract PMD-07-007, Performance of Expert Professional Engineering Services for the George Washington Bridge, Main Span Upper Level Structural Steel Rehabilitation, New York, NY
Quality control engineer for the in-depth inspection of the GWB upper level framing and installation of WIM sensors.

New York State Department of Transportation, 2008 Biennial Inspection, Brooklyn, NY
QC on the inspection of this historic East River Crossing. This suspension/cable-stayed bridge has a main span of approximately 1,600 feet and side spans of 933 feet each. The inspection includes the entire structure from the Manhattan approach to Brooklyn approach with a total length of over one mile. The bridge has six lanes of vehicular traffic and a pedestrian promenade.

Triborough Bridge and Tunnel Authority, 2003 Biennial Inspection of Bronx-Whitestone Bridge, Bronx/Queens County, NY
Project manager for inspection which included the two-girder, non-redundant approach spans, suspension spans, towers and cables. Inspection included the use of rope climbing access and in-depth inspection of cables. He also prepared NYSDOT report and all required TBTA reports, and updated BIN maps, database, inventory and load ratings. He coordinated inspection with the TBTA, NYCDOT and USCG.

Triborough Bridge and Tunnel Authority, Inspection On-Call, 2001-2003, PSC-00-2599, New York, NY
Project engineer/quality control engineer for this second consecutive contract award. Project tasks included: in-depth inspection of lighting standards on the Throgs Neck Bridge; in-depth inspection of the VN

SETH MEDWICK, PE (CONTINUED)

Bridge lower tower struts; inspection of light poles at HH bridge, lighting study at the QMT; design of repairs at the VN towers lower strut; inspection of abutment and wingwalls at the TN; and replacement of toll plaza pavement at the QMT. Wrote scope of services to be provided and prepared inspection criteria. Reviewed all inspection reports and flag reports. Coordinated all activities with the facility involved and NYCDOT as required.

Triborough Bridge and Tunnel Authority, 2001 Biennial Inspection of Marine Parkway and Cross Bay Blvd. Bridges, PSC-00-2593, Queens County, NY
Quality control engineer for inspection which included the MP Lift Bridge, CBB prestressed concrete girder viaduct and Riis Park Pedestrian Bridge. Performed diving inspection and fathometric survey, elevator inspection at MP, and mechanical/ electrical inspection at MP lift span. Prepared NYSDOT for each BIN and all required TBTA reports. Updated BIN maps, databases, inventory and load ratings. Coordinated inspection with the TBTA, NYCDOT and USCG.

Triborough Bridge and Tunnel Authority, Inspection On-Call, 1999-2001, PSC-98-2517, New York, NY
Project engineer/quality control engineer for this project, which included the following tasks: Task 1-Battery Garage façade inspection; Task 2-Performed Battery Tunnel (BBT) fresh air duct inspection; Task 3/3A-QMT drainage design & survey; and Task 4 -Throgs Neck Bridge light pole inspection. Wrote scope of services to be provided and prepared inspection criteria. Reviewed all inspection reports and flag reports. Coordinated all activities with the facility involved and NYCDOT as required.

New York State Department of Transportation, 2001-2002 Biennial Inspection of Arterial and Local Bridges, Region 10, Nassau & Suffolk Counties, NY
Quality control engineer for the inspection of 260 bridges and the preparation of BIPPI inspection reports. Reviewed AASHTO VIRTIS load ratings and ensured inventory was updated. Prepared weekly, monthly and yearly inspection schedules. Coordinated inspections with LIRR and USCG. Coordinated all access equipment needed for inspection.

New York State Department of Transportation, 2000 Biennial Inspection of Williamsburg Bridge, Region 11, NY and Kings County, NY
Quality control engineer in charge of inspecting the suspension bridge and preparing inspection reports. Inspection involved coordination with NYCT, NYCDOT, Yonkers Construction, USCG, and NYC Police Department. Prepared weekly inspection schedules and reviewed and submitted all flag reports on a daily basis. Also reviews flagging criteria, implemented the QA Plan and Safety Plan, and conducted tailgate safety meetings.

STEVEN RICHARDS, PE

Role:
Tunnels, Bridges and Terminals Project Manager

Firm:
HNTB

Education:
BS, 1997, Civil Engineering, Rutgers University

AAS, 1993, Engineering Technology, Raritan Valley College

Registrations:
Professional Engineer:
NY/2005, #[redacted]
NJ/2007,
WV/2002, #[redacted]
FL/2007,

Affiliations:
American Society of Civil Engineers

American Institute of Steel Construction

Years of Experience:
13

Employment History:
1998 - Current
HNTB Corporation

Steve is a senior bridge engineer in the New York City office with more than 13 years of experience in bridge design, inspection and rehabilitation. He has played a key role on complex bridge projects throughout the Northeast. For the last seven years, Steve has supervised structural engineering and inspection for the Delaware River and Bay Authority General Engineering Consulting Services contract. His project experience includes:

New York State Department of Transportation, Lake Champlain Bridge Replacement, Crown Point, NY

Structural task leader for the design of the reinforced concrete piers and miscellaneous structural details for this signature long span bridge over Lake Champlain. The project design employed open delta type pier geometry, which required complex rebar detailing, as well as careful analysis of load paths through the pier elements. Structural design was completed in record time due to the emergency nature of this project. Currently involved in construction phase services for this project.

MTA-Bridges and Tunnels (TBTA), Miscellaneous Design Services On Call Weigh-in-Motion Truck study at RFK Bridge and Bronx-Whitestone Bridge, NYC

Structural task leader for the design and implementation of a WIM truck study at these major NY suspension bridges. The objective of the study is to gather and analyze vehicular traffic data at each bridge using portable, temporary Weigh-in-Motion (WIM) systems. The analysis would uncover any high frequency usage of the structure by overloaded trucks. Site-specific load models representative of the actual trucks that routinely cross these bridges was developed from the WIM data. An additional objective of this study is to evaluate the carrying capacity of the ten lowest rated structural members of these bridges for common overload configurations revealed in the WIM analysis using the AASHTO LRFR procedure.

Delaware River and Bay Authority, Freeman Highway & Bridge Rehabilitation, Lewes, DE

Project manager for the rehabilitation design of the Freeman Highway Bridge; a four-span continuous, steel multi-girder bridge carrying the Freeman Highway over the Lewes & Rehoboth Canal. The design services included overlay replacement, expansion joint replacement, drainage improvements, substructure testing and repairs, bearing replacement, miscellaneous steelwork repairs and recoating. The bridge was also analyzed for load ratings and performance of fatigue sensitive details.

Delaware River and Bay Authority, Elevator Systems Replacement, Miscellaneous Steelwork, Security Enhancements, Delaware Memorial Bridge, New Castle, DE

Project manager and structural task leader for the design of new exterior mounted, rack and pinion tower elevators on the Delaware Memorial Bridge, as well as security enhancements and miscellaneous steel repairs throughout both structures. The design work included elevator support tower connections to the existing structure, new elevator platforms at four levels, tower saddle hood modifications, changes to tower

STEVEN RICHARDS, PE (CONTINUED)

access points, addition of security doors to all bridge access points, miscellaneous steelwork repairs, and interior tower painting. Project required extensive coordination with mechanical and electrical systems.

Florida Department of Transportation, N.W. 12th Avenue Replacement Bridge No. 871005 over Miami River, Miami, FL

Structural task leader providing construction support services for this twin-leaf bascule bridge. The scope of work involved shop drawing review, RFI responses, plan revisions and general structural engineering duties for two complex, reinforced concrete, three-level bascule piers that were constructed in two stages.

Delaware River and Bay Authority, Rehabilitation of Expansion Joints, Delaware Memorial Bridge, New Castle, DE

Structural task leader responsible for contract plans, specifications and construction cost estimate for the retrofit of open deck joints throughout the Delaware Memorial Bridge. The Delaware Memorial consists of twin suspension bridges with over three miles of approach structure. The rehabilitation included the large expansion dams at the steel towers of the suspended spans. The expansion dams were modified to add redundant hold-down mechanisms in the event of bolt failure. Additionally, the stringer bearings at the tower were replaced to provide proper vertical alignment of the end dams and proper seating of the tooth joint sections at the towers. The contract also included suspended span stringer bearing replacements, wind seat repairs, tower pin & link inspections, and miscellaneous steelwork repairs.

Delaware River and Bay Authority, 2003-2010 General Engineering Consultant Services for Delaware Memorial Bridge and Appurtenances, New Castle, DE

Structural project manager providing general engineering services on a task order basis. Scope of services includes preparation of design studies, alternatives and concepts, providing technical advice and consulting expertise, providing detailed design services for construction projects, performing annual inspections of all DRBA owned facilities, attending meetings with and for the DRBA, and review of plans prepared by other consultants for any possible improvements.

Delaware River and Bay Authority, 2003-2010 General Engineering Consultant Services for Cape May and Lewes Ferry and Terminal and Three Forts Crossing Facilities, NJ & DE

Structural project manager providing general engineering services on a task order basis for all land based structures at the Cape May-Lewes Ferry terminals. The land-based structures include the terminal buildings, transfer bridges, sign structures, toll canopies, roadways and one highway overpass structure. Scope of services includes preparation of design studies, alternatives and concepts, providing technical advice and consulting expertise, providing detailed design services for construction projects, performing annual inspections of all DRBA owned land-based facilities, attending meetings with and for the DRBA, and review of plans prepared by other consultants for any possible improvements.

KEVIN WILLIAMS, AICP

Role:
Public Outreach & Cooridnation

Firm:
HNTB

Education:
JD, May 2008, Rutgers University Law School

Masters (MURP), 2000, Urban and Regional Planning, Florida Atlantic University

Architectural Studies, Florida Atlantic University/PBCC, 1997-2000

BA, 1996, History, University of Florida

BS, 1996, Psychology – Neuroscience, University of Florida

Registrations:
American Institue of Certified Planners (#[redacted], National Accreditation

Affiliations:
American Institute of Certified Planners (AICP)

American Planning Association (APA)

American Planning Association – NY

American Planning Association - NJ

Urban Land Institute

Years of Experience:
13

Kevin, an associate vice president with HNTB, directs the preliminary-design and planning practice for the New York Region. He leads teams of engineers, site designers, and planners in the development of sustainable transportation projects, regions, communities and places. Kevin's multi-disciplinary background blends skills in site design and master planning with market based analysis, policy and economic decision-making. His work is grounded in consensus building between public and agency stakeholders to create functional, technical and realistic plans. Kevin has led challenging interdisciplinary projects, including regional land use and transportation plans, including forecasting, demand modeling and market for multi-modal and transit design projects, major transportation feasibility and infrastructure studies, environmental assessments, and master plans for large-scale redevelopment projects, transit-oriented development, waterfront revitalization, as well as corridor, downtown and site plans. His project experience includes:

Port Authority of New York and New Jersey, 2009-2012 Transportation Planning and Policy Analysis, Specialized Transportation Planning Services, Intermodal Freight Planning, Project Appraisal and Economic Analysis, and Strategic Research and Planning On-call Contract
Program manager for these five on-call planning contracts for the Port Authority leading a large, nationally renowned team of sub consultants assisting the Authority in specialized transportation feasibility projects and long range system-wide planning.

New York State Department of Transportation, NYS High Speed Rail, Empire Corridor Tier I – Environmental Impact Statement, NY
Task leader for ridership demand forecasting, requiring the development of a 25 year time horizon market analysis and ridership forecast for the analysis of high speed rail service alternatives for the Empire Corridor from New York City to Niagara Falls. Using the results of this competitive mode market assessment he works with members of the team to development and adjust various service alternatives to optimize fare return and ridership. He is responsible for developing a financial feasibility model that considers fare to cost considerations to develop a cost benefit analysis picture for all feasible alternatives.

Delaware Department of Transportation, DART – Delaware Transit Corporation – Six-Year Business Plan, DE
Lead technical planner role for the development of a six-year Business Plan for DTC. This statewide organization provides bus, rail and para-transit services Statewide. The plan will seek to address both organizational and service hurdles to more fully tie long range planning goals to near term strategies and annual budgets while at the same time defining roles and responsibilities as well as projects to assist in making the plan part of the daily organizational practice.

KEVIN WILLIAMS, AICP (CONTINUED)

Employment History:
2009 - Current
HNTB Corporation

2002 - 2008
Urbitran/AECOM

2000 - 2002
Moreland-Autobelli

1999 - 2000
City of Fort Lauderdale

1998 - 1999
Diginet

1997 - 1998
Smith Architectural Group

Southeastern Pennsylvania Transportation Authority, Jenkintown-Wyncote Station Region Long-Range Parking and Ridership Demand Analysis, PA

Project manager and technical planning expert for the preparation of a demand model for Jenkintown-Wyncote Station and seven other area stations including Noble, Glenside, and others. He developed a 25 year demand model for ridership and station are parking as well as a commuter preference survey for this region to determine the needed capital improvement to meet demand and preference needs. The complex model utilized census based projections, and a specialized demand analysis method combined with consideration of the affect of fluctuating and increasing fuel prices on conversion of passenger vehicle riders to transit utilization.

MTA - Long Island Railroad, Design Improvements at Great Neck Station, Design Report- Environmental Assessment DR/EA and Public Outreach, NY

Task leader for environmental planning and public outreach. The project which involves the planning and design of a new bridge over the Port Washington Branch line, the design of a new comprehensive stormwater drainage system at the track level, as well as the installation of a new 1,600-foot pocket track. Kevin is also overseeing the development of a NYS Design Report.

New Jersey Transit, 2009-2012 Stations, Access and Parking Planning Program Manager & On-call Services Contract, NY/NJ

Project manager in charge of this comprehensive systemwide station and station area planning and preliminary design contract. Kevin and his team of consultants assist the NJT Corporation in the strategic planning of its assets and the development of scopes, budgets, concepts and preliminary engineering of its station sites and access areas.

MTA Metro-North Railroad, On-Call Metro-North Station & Parking Planning, Design, Marketing, and Transit Oriented Development, NY

Program manager for sole source on-call for Metro-North Railroad. For over six years, Kevin directed a large and diverse consultant team working intimately with MNR staff to define both near-term projects and their long range capital plan. With more than 30 task assignments on average per contract year, a broad variety of work was managed by Kevin for MNR.

TONY LAGALA, PE

Role:
Constructibility

Firm:
HNTB

Education:
BS, 1977, Civil Engineering, New Jersey Institute of Technology

Registrations:
Professional Engineer:
NJ/1998, #
NV/1996, #
DE/1993, #

Certifications:
ASCE VII

ACI, SAT, ATSSA Certifications

ATSSA Worksite Safety Supervisor

NJ Society of Asphalt Technicians Certification

48-Hour HazMat Supervisor Course

Troxler Nuclear Density Gauge Certification

Years of Experience:
33

Employment History:
1984 – Current
HNTB Corporation

1977 – 1984
Catania Construction Company, Inc

Tony has more than 35 years of experience in construction inspection, bridge inspection, surveying, and building construction. He has served as project manager on many construction projects for repairs and improvements to NJ Turnpike facilities. Previous experience includes building construction and inspection, as well as installation of electronic toll collection facilities. Currently he is serving on the NJTA Interchange 6 to 9 widening program as the field project manager for Section 6.

For the last seven years, He has been the manager of construction services for the HNTB NJ Construction group, serving as the project manager for all construction service contracts, and providing guidance to a staff of 50 technicians and engineers. In this role, he has active involvement in the various NJTA general consultant contracts. Duties under these contracts include constructability, specification, feasibility, MPT, and scheduling reviews, bid evaluation, claims analysis, submittal of annual reports, final inspection attendance and any other support services requested by the Authority concerning construction issues. His project experience includes:

New Jersey Turnpike Authority, Interchange 8, Section 6 of the NJTA 6-9 Widening Program, NJ

Field project manager on this $300 million interchange improvement project. This project includes the dualization of the Turnpike Mainline for 2 miles in the vicinity of Interchange 8, as well as multiple new ramps and bridge structures encapsulated in Section 6 of the NJTA Interchange 6-9 Widening Program. The project is comprised of five individual contracts, including the creation of a new toll plaza and utility building and the first SPUI interchange in New Jersey. Work includes 15 new bridges and associated ramps, H-piles, drilled shafts, structural steel, HPC bridge deck, two stage and single stage MSE walls, conventional retaining walls, surcharge and settlement monitoring, utility relocations and installations, demolition of buildings and existing structures, sign structures, highway lighting, roadway box construction, milling, drainage, HMA, night work, sheeting, concrete approach pavement, electrical/ITS work, signalized intersections at Route 33, roadway excavation and embankment, contaminated soil, APS (acid producing soils), storm water management basins, extensive traffic shifts, detours and associated maintenance and protection of traffic (MPT), new toll plaza, booths, canopy and utility building, and other incidental work. Tony's duties include being the consultant's direct representative to the owner, responsible for coordination between the seven other sections involved in the overall widening program, responsible for coordination with all of the local affiliations, DCA, SCD and other jurisdictional authorities. He was also responsible for providing appropriate construction inspection/engineering personnel, overseeing the quality of work provided by the firm's construction inspection/engineering staff and directly supervising this project's five resident engineers and their support staff.

TONY LAGALA, PE (CONTINUED)

New Jersey Department of Transportation, Routes 1 & 9 (25) Saint Paul's Avenue Viaduct and Catenary Construction Inspection, Jersey City, NJ

Project manager responsible for construction inspection and scheduling review services for the replacement of Routes 1&9(25) St. Paul's Avenue Viaduct and Routes 1&9(25) Catenary Tower Construction. Routes 1&9 carries traffic from the Holland Tunnel to Pulaski Skyway. Major aspects of this project include construction of 11 bridges, 45 retaining walls, surcharge, 20 sign structures, significant utility relocation, new ITS facilities tied into the NJTA Traffic Management Center, and a highly coordinated MPT effort. Also included is a community outreach program due to the project's close proximity of existing residential properties to the project site. This $200 million project is the largest NJDOT construction contract released to date.

New Jersey Turnpike Authority, Interchange 16W Ramp Improvements, East Rutherford, NJ

Project manager responsible for this multi-contract, $70 million interchange improvement project which includes four new ramps and four bridge structures, as well as flyovers with curved girders, MSE and conventional retaining walls, surcharge and settlement monitoring, reconstruction of seven existing ramps and two bridge structures, utility relocations and installations, and a wetlands mitigation site. The project also includes sign structures, highway lighting, milling, HMA, drainage, H-piles, drilled shafts, structural steel, HPC bridge deck, sheeting, concrete approach pavement, electrical/ITS work, roadway excavation, contaminated soil, stormwater management basins and extensive MPT. He serves as the consultant's direct representative to the owner, providing appropriate construction inspection/ engineering personnel, overseeing the quality of work provided by the construction inspection/engineering staff, and directly supervising the resident engineers. This project required the use of both NJTA and NJDOT specifications and standards.

County of Ocean, Mantoloking Bridge Replacement, NJ

Project manager for this $22 million federally funded project which entailed the replacement of this historic circa 1938 single-leaf bascule lift span with a new hydraulic-lift double-leaf bascule bridge. Project includes H-beam and concrete filled pipe piles, realignment of approach roadways, drainage, embankment, HPC bridge deck construction, structural steel and precast concrete girders, multiple sequenced construction to allow for unobstructed traffic on the existing structure.

JOHN BRIZZELL, PE

Role:
Construction

Firm:
HNTB

Education:
BS, Civil Engineering, Rensselaer Polytechnic Institute,

AAS, Engineering Science, 1971, Hudson Valley Community College

Indiana University, National Highway and Transportation Management Institute (AASHTO Sponsored), 1997

Cornell University, Materials Engineering RPI, Troy, NY;

Engineering Management, Rockefeller Institute, State University of New York at Albany; Programs in Public Administration

Registrations:
Professional Engineer: NY/1978, [redacted]

Affiliations:
Eastern New York Chapter, Association of Bridge Construction and Design

Hudson Mohawk Chapter of ASCE

Civil Engineering Foundation for Innovation (CEFI)

NYS Associated General Contractors

Years of Experience:
37

John recently joined HNTB and brings 37 years of experience in a wide range of transportation engineering and management activities. These include agency management; program management; asset management; strategic planning; program and project planning, design and construction. John has served in engineering management and executive level positions in both the New York State Department of Transportation (NYSDOT) and the New York State Thruway Authority (NYSTA).

Throughout his career, John has earned recognition as a leader and innovator, with expertise in many aspects of Transportation Engineering. His project experience includes:

Bergmann Associates, Albany, NY

Construction manager responsible for the Transportation Construction Program in Bergmann's Albany office. Tasks included development and oversight of Contractor Procurement Processes; development of proposals for Construction Inspection and Management Services; Quality Assurance oversight of Construction Services and direct supervision of construction field staff. John often served as the communication and issue resolution link between Owners, Contractors, Designers, Field Staff and other project parties (Agencies, Utilities, etc.). The most significant project completed during this period was "Walkway Over the Hudson," the transformation of the abandoned Poughkeepsie Highland Railroad Bridge into the world's longest pedestrian bridge and New York State's newest park.

New York State Thruway Authority and Canal Corporation, Albany, NY

Chief engineer who provided management oversight and coordination of all engineering, maintenance and operational activities of the Authority. John was responsible for the coordination, development and delivery of in-house and contracted activities; including the Authority Capital Program. He lead a comprehensive effort to develop a strategic long range plan for improving Authority assets, with an objective of improved customer service and value to the State of New York. John also coordinated activities with other NYS Transportation agencies with the objective of improving operational activities and services. (2000 through 2007, six years with added responsibility of deputy executive director)

Southern Tier (Region 9) New York State Department of Transportation.

Regional director of transportation who was responsible for the planning, development and implementation of all NYSDOT programs and operations within a six county area of central southern New York State. This included integration of asset maintenance and operations with a multi-year capital program involving both state and locally owned transportation facilities. John was responsible for managing and directing all Regional program areas to achieve DOT goals and objectives within bud-

JOHN BRIZZELL, PE (CONTINUED)

Employment History:
2010 - Present
HNTB Corporation

2007 - 2010
Bergmann Associates

2000 - 2007
New York State Thruway Authority

1973 - 2000
New York State Department of Transportation

geted resources and consistent with Department policies. While in this assignment, he chaired statewide strategic efforts involving pavement management and economic development.

New York State Department of Transportation, Construction Contract Management and Administration, Albany, NY

Responsible for construction supervision in NYSDOT's Capital District Region and as the supervisor of the Departments Construction Contract Administration Unit in the central office. During these assignments, he was an integral part in the development and implementation emergency response contract procedures which were ultimately adopted on a statewide basis. (1990 through 1996)

New York State Department of Transportation, Contract Administration, Albany, NY

Responsible for direction and oversight of multiple contract issues including: Review of Bids and Recommendations for Award; Payments to Contractors; Change Orders; Dispute Resolution; and Contract Acceptance and Close-out processes. During this time, John oversaw the updating of the NYSDOT Manual for Uniform Record Keeping (MURK) and the combining of MURK with an expanded Construction Supervision Manual to create the NYSDOT Contract Administration Manual (CAM). Training classes and seminars on various aspects of Contract Administration and Dispute Resolution were developed and presented statewide at DOT training and seminars.

New York State Department of Transportation, Partnering, Albany, NY

Worked with the design and construction industry to achieve mutually beneficial results. As a field engineer he practiced the Partnering principals of cooperation, open communication, trust and respect; within the limitations of the contract agreement. The creation of "Interim Payment" was a product of his participation in Executive Partnering efforts between NYSDOT and AGC. John also chaired the NYS "Asphalt Paving Task Force," a cooperative effort aimed at improving the performance and cost effectiveness of asphalt pavements. When he became the chief engineer at the NYS Thruway, John cleared lines of communications with the private sector, creating an Executive Level Partnering effort that grew to include the NYS Consulting Engineers. An outgrowth of this Executive Level partnering was the realignment of duties and authority among NYSTA Construction field personnel such that decisions are made and actions taken to address unforeseen circumstances in a timely manner.

SHEREAF YOUSSEF

Role:
Cost Control/Earned Value Management

Firm:
HNTB

Education:
BS, 1991, Structural Engineering, Alexandria University, Egypt

Years of Experience:
19

Employment history:
2009 - Current
HNTB Corporation

2004 - 2009
URS Corporation

2001 - 2004
AECOM Technology Inc.

2000 - 2001
B & H Engineering, P.C.

1998 - 2000
TRC Environmental - A & H Engineers, P.C.

1997 - 1998
THE RBA GROUP

1994 - 1997
URS Griener Woodward-CLYDE Inc.

1993 - 1994
Macia Consulting Enterprises

1992 - 1993
Fellow Craft, Inc.

1991 - 1992
The Land, Inc., Alexandria, Egypt

Shereaf has more than 19 years of scheduling and cost experience for various public and private clients. His duties have included monitoring the performance of subconsultants; cost control; scheduling and schedule control tasks for compliance with contract requirements; project procedures; and work instructions. The major software he uses includes Oracle's Primavera Risk Analysis, Oracle's Primavera P6 Professional Project Management, Oracle's Primavera Contract Management, Oracle's Primavera Earned Value Management, Primavera Contractor, Sure Track Project Manager, Primavera Project Planner P3, Primavera Charts, PRISM Project Manager, Prolog Manager, Crystal Reports XI, Info Maker 13.0-Sybase Application, Causeway Collaboration, Citadon Project Net, People Soft, JD Edwards and MS Project 2007. His project experience includes:

New Jersey Turnpike Authority, Program Management for NJTA Capital Program, Various Locations, NJ
Director of scheduling and claims responsible for monitoring 2009 bond series performance, including fund 300 and 310; establish an earn value system for various bond series by utilizing Oracle's Primavera P6 Professional Project Management; the development and tracking of budgets and budget revisions for all program components; management of contingencies and allowances; tracking of all funding authorizations; projections of cash flow; regular estimates and forecasts at completion; variance and exception reporting; project accounting, including tracking of all invoices, commitments and payments; and prepare and recommend a comprehensive project budget, including all phases of the planning, design and construction consistent with the program budget and funding authorizations. The project budgets are developed in accordance with the budgeting guidelines issued by the Turnpike Authority to provide consistency and reliability across all projects. The cost management system is linked to website collaboration "DashPort" and constitutes a unified database with information flowing from consultants and contractors. The system provided all varieties of standard and customized on-line and printed management reports to allow the Turnpike Authority project managers to manage and control costs at completion. The NJTA maintains and operates the 148-mile New Jersey Turnpike and the 173-mile Garden State Parkway. The NJTA contracted HNTB to monitor the $7 billion capital program.

New Jersey Department of Transportation, Claims Management for Route 46 Section 7L & 8K from the Vicinity of Princeton Avenue to the Vicinity of North Sussex Street & Route 15 from the Vicinity of Pequannock Street to the Vicinity of Fairview Avenue (Contract No. 038960701), Various Locations, NJ
Director of scheduling and claims responsible for claims analysis for the entire construction project, analyzing all delay codes (compensable, excusable, non-compensable, non-excusable), analyzing all claim codes (engineering error, NJDOT design revision, engineering omission, NJDOT support delay, field condition, contractor error/omission, inci-

SHEREAF YOUSSEF (CONTINUED)

dental (unrelated to original scope), contractor lost productivity, project scope addition, contractor under-estimated effort utility delay, contractor coordination of work and contractor inappropriate schedule logic)

South Jersey Transportation Authority, Construction Management and Inspection Services for the Third Lane Widening of the Westbound Atlantic City Expressway, Milepost 7.8 to 17.4 (9.6 Miles), located at Hamilton Township and Egg Harbor Township, Atlantic County, NJ
Director of scheduling and claims responsible for the management of all activities related to management and coordination of the construction schedule and cost control interface. The work within this contract includes lane construction, bridge widening, box culvert extensions, installation of overhead sign structures and installation of highway lighting at the interchanges. Provisions for various ITS components were incorporated into the project, including CCTV cameras, EZ-Pass Tag readers and overhead variable message signs to improve communications, safety and mobility along the expressway. The widening project will increase the capacity of the roadway, decrease congestions and increase safety by providing auxiliary lanes of adequate length for merging vehicles onto the mainline.

New York City Economic Development Corporation, Construction Management Services for Randall's Island Sports Field Development Project at Randall's & Wards Island Park, Randall's Island, New York City, NY
Senior national principal project controls manager responsible for developing the electronic document management system (EDMS) utilizing Prolog Manager 7.5 with the interface with Primavera Products. Shereaf also developed a website that linked to Meridian System to track down thousands of documents, schedule activities and budgets across various stages of the project. The New York City Department of Parks & Recreation (NYCDPR) in conjunction with the New York City Economic Development Corporation (NYCEDC) and the Randall's Island Sports Foundation, Inc. (RISF) is implementing the Randall's Island Improvements project in effort to improve the functionality and quality of the land owned by NYCDPR. The overall project will include 64 new integrated and overlapping artificial and natural turf fields, upgrades and addition to utility infrastructure and the resurfacing of existing roadway and bike trail. The proposed work at the East River Field and the Sunken Garden will include the removal of roadway, asphalt pedestrian trail and selected trees. The new water service is installed to provide field irrigation and new storm-water outfall to the Harlem River to meet the drainage requirements. This project was valued at $110 million.

SAMUEL ILECHUKU

Role:
Scheduling

Firm:
HNTB

Education:
MS, 1986, Mechanical Engineering and MBA, Management, Widener University

BS, 1980, Industrial Engineering, Arizona State University

Years of Experience:
30

Employment History:
2009 - Current
HNTB Corporation

2007 - 2009
Shaw Power Group

Iraq Reconstruction Program

2001 - 2003
Hunt Construction Group

2000 - 2000
Intel Corporation

1997 - 2000
Motorola, Inc

1996 - 1997
NYNEX Corporation (Verizon)

1993 - 1996
PANYNJ

1987 - 1993
Health and Hospitals Corporation

Sam has experience working as a senior project controls manager/ scheduling consultant on large programs and projects using his expertise in Primavera P5 or P3, MS Project, Visio, MS Access, PowerPoint and a host of other project management tools. He has experience providing hands-on support in the development of Levels I through IV Critical Path Method project schedules and report, contributing in EV analysis, project risks analysis and mitigation planning, maintenance of inter-dependency matrix, document control and project communication. His project experience includes:

Port Authority of New York and New Jersey, World Trade Center Transportation Hub Project, New York, NY

Program scheduler on this $2.8 billion architecturally iconic transit center, performing master program scheduling, schedule and cost risk analysis via Monte Carlo simulations, and constructability review tasks.

Khor Al Zubair Power Plant, Iraq

Lead planner who developed scope of work (SOW), work breakdown structure (WBS) and the organization breakdown structure (OBS). Responsibilities included developing project schedules and establishing a baseline for controlling the project. Sam analyzed performances against the plans, performed Risk Analysis (Monte Carlo), forecasted schedule impacts on the plan, and reported status to project team members and client.

US Department of Defense, Iraq

Program planning and scheduling consultant who developed enterprise project structure and program schedules for the program which included all the Iraqi Oil Production and Construction Projects. Sam communicated plan to various tiers of the coalition task force, monitored execution versus the plan, and analyzed performance against the plan, forecast program schedule impacts on the plan, and provided part of the Sec Army reports that cover % work in progress (WIP) from the sectors of the program. He developed the enterprise structure and organization breakdown structure (OBS) and trained staff on P3e/c software used for scheduling and reporting, and provided some of the reports requested by various sectors of the program and the military.

New York Power Authority, 500 MW Combined Cycle Power Plant, Astoria, NY

Developed and managed the project integrated schedule, and earned value reporting and performance analysis for multiple-prime construction. Responsible for field validation of schedule updates, forecasts, and productivity analysis. The project is valued at $750 million.

SAMUEL ILECHUKU (CONTINUED)

SCI Engineers & Associates
Principal program/project scheduling and planning consultant who provided services to clients in their respective programs and projects.

Turning Stone Casino Resort, Hotel Construction, Event Center, and Winter Garden Project, Oneida, NY

Project management consultant who maintained heavy construction equipment logistics schedule and issues databases used for all civil and structural phases of the program. They included Rough Terrain Cranes, Hydraulic Lifting Cranes, Truck Terrain Cranes, and Tower Cranes used for flying the forms during 20-story tower hotel construction. He used P3e/c for comprehensive reporting, structured projects by developing enterprise project structure (EPS); work breakdown structures (WBS); and organization breakdown structure (OBS) needed for reporting. He developed activity logic/inter project dependencies and project phases.

Marriott, Desert Ridge Resort, Phoenix, AZ
Project scheduling consultant for this one million square-foot, 950-room hotel on 6 floors featuring an 18-hole golf course, health Spa, convention facilities, and extensive landscaping. Sam developed and maintained heavy construction equipment logistics schedule and issues databases used for all civil and structural phases of the project.

TRUMP, Starlight 29 Casino Expansion Project, Palm Springs, CA
Project scheduling consultant who developed and maintained heavy construction equipment logistics schedule and issues databases used for all civil and structural phases of the project.

Port Authority of New York and New Jersey, 1993 - 1996 World Trade Center Recovery Project, New York, NY
Senior construction scheduling consultant who developed project plans, work breakdown structures, and maintained updated detail cost and resource loaded CPM Schedules using Primavera for windows and PMBOK methodology. Sam prepared monthly status reports for project managers and executive management describing program status, including cost and schedule performance, flagging key issues requiring senior management attention. He also developed As- built construction schedules of the recovery used by Coopers and Lybrant for insurance claims.

ANGRI SRINIVAS, PMP

Role:
Estimating

Firm:
HNTB

Education:
BS, 1987, Mechanical Engineering, STJ Inst of Technology

Registrations:
Certified PMP, #[redacted] 2008

Years of Experience:
15

Employment History:
2009 - Current
HNTB Corporation

2001 - 2009
JCMS, Inc.

1998 - 2001
Toyo Engineering Corporation

1995 - 1998
Essar Limited

Angri has more than 15 years engineering and construction project controls experience in mass transit infrastructure projects, managing project controls for large transit projects, EPC power plant and heavy industry construction projects. His project experience includes:

MTA Capital Construction, East Side Access Project, New York, NY

Senior cost/scheduler engineer on the East Side Access Project, specifically for the Manhattan contracts. Work involves reviewing contractor schedule, monthly payments, look ahead schedules, change orders and time extensions. He is heavily involved in resolving claims ascertaining equitable adjustments between the parties concerned. Other responsibilities include managing daily, weekly and monthly reports, calculating contractor production levels to be utilized in comparison with contractor plans, weekly and monthly cost curves. Forecast of future work in terms of cost and schedule is another area in which he has active participation.

Southeastern Pennsylvania Transportation Authority, MSEPM Project, Philadelphia, PA

Lead project controls analyst on the $740 million reconstruction of the Market Street El program which included replacing 11,000 feet of the current structure with new single-beam supports, replacing six existing stations, constructing two new Automatic Train Control buildings and other related improvements. The program consisted of six packages for phased reconstruction. Responsibilities included works such as reviewing contractor schedules, resources, invoices, and maintaining overall integrated program schedule and budget for all packages with three independent contracts per package. As part of Program management team Angri conducted risk analysis by creating risk management plan, risk identification, Qualitative and Quantitative risk analysis, response planning, controlling and mitigation. Work involved assessment of key project elements for cost and schedule with three point estimates, generating probabilistic curves based on assessments, maintaining a risk register identifying key constraints and contributors to project risk, assessing their criticality, setting method of mitigation, and assigning responsibility. He also maintained risk impacted project schedule and updated program budget with periodical forecasts for FTA and upper management. As well as performed in depth schedule review and conducted summary review of contractor claims for entitlement.

Balfour Beatty Rail, Inc, Philadelphia, PA

Lead project control engineer for the Broad Street Subway Signal System Upgrade Project for SEPTA in Philadelphia, PA. Angri's responsibilities involved relating to project elements of upgrading the existing signal system and communication facilities on Broad Street Subway between Pattison Avenue and Fern Rock Yard. He was responsible for project engineering with coordinating various field activities, preparing a new baseline schedule for the project incorporating work completed and estimating balance of work along with cost and resource requirements. Angri also developed weekend outage schedule incorporating

ANGRI SRINIVAS, PMP (CONTINUED)

round the clock shift work on express tracks between operating local tracks by creating work zones/foul time. He prepared monthly updates that were used as a basis for preparing the monthly report covering items such as work progress, cost and cash projections.

Southeastern Pennsylvania Transportation Authority, Transformer Rooms Modernization, Philadelphia, PA

Senior project control engineer whose responsibilities involved in the project of modifying, expanding, upgrading and/or relocating existing transformer rooms to accommodate new equipment while maintaining dual power service during construction. He prepared baseline schedule and performed monthly updates. Weekly and monthly meetings were part of the job.

MTA - New York City Transit, Coliseum Bus Depot, Bronx, NY

Senior project control engineer on this project which involved construction of a bus depot including office building with various systems, such as gas detection system, fire alarm system, profiling area, bus wash system, high pressure and parallelogram lifting, security systems with CCTV, HVAC, boiler room, parking lots, and fencing. After the original contractor defaulted on the contract, Angri prepared a new baseline cost and schedule incorporating work completed and estimating balance of the work along with resource requirements while performing multiple iterations with alternate sequencing to achieve the shortest overall project duration. Angri was part of all project design coordination, issues resolution, progress and schedule control meetings with NYCT personnel, performed monthly reports and incorporated changes as needed.

New Jersey Transit, MMC Facility Expansion, Kearny, NJ

Senior project control engineer who was responsible for reviewing and approving the contractor prepared specifications, schedule, attending monthly progress, information coordination and resolution meetings, and reporting on the project status based on review of the monthly progress. He also evaluated time-impact analysis submitted by the contractor and made recommendations to NJ Transit.

AMTRAK, Fire and Life Safety Program, New York, NY

Senior portfolio management engineer at Amtrak this assignment included managing multiple projects related to the Fire & Life Safety improvements at Tunnels (North River & East River) and also at Penn Station. Major projects included the Mechanical and Electrical Rehabilitation and Modification at Penn Station, Interim Fire Stand Pipe System, Ventilation System at North & East River Tunnels and Tunnel Structural Rehabilitation. The Total Fire and Life Safety Improvement Program included approximately 45 projects spanning till 2010 with a budget of approximately $1 billion shared by Amtrak/LIRR/NJT.

MIKE DEBIAK, EVP, PMI-RMP

Role:
Risk Management

Firm:
HNTB

Education:
BBA, Acquisition and Contract Administration, Strayer University, in progress

AS, Civil Engineering, University of Hartford, 1991

Registrations:
Risk Management Professional (PMI-RMP)

Planning & Scheduling Professional (PSP)

Earned Value Professional (EVP)

Construction Documents Technologist (CDT)

Master Format Accredited Instructor (MAI)

Alternative Dispute Resolution

OSHA 10 Hour

OSHA IIPP/200

Safety Manual Development

OSHA Competent Person

Confined Space Training

DOT FH-181/FH-126F

HAZ-MAT Handling

Domestic Preparedness Awareness

Expedition Certification

P3, P3e/c, and P6 Advanced Methods Certification

Mike is an associate vice president and regional director of risk and scheduling. In this role he engages all team members to participate in the process of finding practical solutions that encourages proactive problem solving. He emphasizes sound business-focused decision making and ethics, while working to achieve optimal project outcomes. He draws upon my experience as an owner/developer, consultant and contractor to provide a clear perspective of the concerns of all participants in the project.

In addition to expertise in the traditional program and project controls functions - CPM scheduling, cost control and change management, and estimating- Mike is skilled in facilitating risk analysis workshops, performing Monte Carlo risk analysis, risk analysis tools, earned value management systems (EVMS), advanced cash flow analysis, claims mitigation, creating and implementing economic planning models, building and analyzing forensic schedules, and developing and globally deploying technology solutions and systems integrations. He employs the latest versions of Oracle Primavera's Project Portfolio Management (PPM) solutions - P6 Professional Project Management, Risk Analysis (PertMaster and Crystal Ball), Contract Manager (Expedition), and Earned Value Management, and the latest versions of Bentley's suite including Microstation and ProjectWise, and a suite of other tools including @Risk, CostWorks, Milestone Pro, Project 2007, Meridian Prolog, Project 4D, NavisWorks, Revit, Prism, MS Access, and SharePoint. In addition we employ proprietary and patented tools such as Base4D, DashPort, Braxis, and TrueViz.

Mike also has expertise in all forms of project and program delivery methods for all forms of design and construction including complex federal, public, and private infrastructure and transportation projects from the perspective of his many roles including at-risk self-performing general contractor, construction manager, and owner agent, for projects both domestic and international. He has managed capital program portfolios totaling more than $3.5 billion annually and executed procurement and logistic strategies for globally sourced programs valued at nearly $1.0 billion. His project experience includes:

Florida Department of Transportation, High-Speed Rail Program, Tallahassee, FL
Risk manager responsible for providing risk management, conducting risk workshops and strategy sessions, analysis using Monte Carlo simulations, and mitigation for FDOT in programming the states advancement of high-speed rail during the program planning stage. $Multi- Billion.

WSDOT, SR99 Bored Tunnel Alternative, Seattle, WA
Risk manager responsible for providing risk management, conducting risk workshops and strategy sessions, analysis using Monte Carlo simulations, and mitigation for the design-build team in partnership with Dragados and Tutor Perini. $1.5 Billion.

MIKE DEBIAK, EVP, PMI-RMP (CONTINUED)

Affiliations:
Construction Specification Institute, Past Institute Director

Construction Management Association of America

Project Management Institute

PMI College of Scheduling

PMI Risk Management Association for the Advancement of Cost Engineering Society for Risk Analysts

National Defense Industry Association, Schedule Risk Sub-Committee Chair

Years of Experience:
29

Employment History:
2009 - Current
HNTB Corporation

2006 - 2009
Jacobs Global Buildings

2005 - 2006
Jerome J Parks Company

2001 - 2005
DMJM Harris | AECOM

1997 - 2001
Roy Kay, Inc./KeySpan Business Solutions

1991 - 1997
Sagacity Management and Consulting

1981 - 1991
Naek Construction Company

Amtrak, Chicago Union Station Improvement Project, Chicago, IL

Deputy design manager – operations responsible for financial and design management for selective demolition and replacement of the rail yard switch, signaling, and accessory appurtenances . A design-build project in partnership with Kiewit Construction. $86M

MTA - Long Island Rail Road, Atlantic Avenue Viaduct Phase II, New York, NY

Senior project controls manager responsible for providing project design schedule management and EVM analysis and reporting for selective demolition and replacement of the rail bridge spans. A design-build project in partnership with Kiewit Construction.

New Jersey Transit, Portal Bridge Capacity Enhancement Project, Constructability Task Force, Secaucus, NJ

Senior risk analyst and master scheduler responsible for providing project integrated master CPM and detailed design schedules, EVM analysis and reporting, and schedule and cost risk analysis with Monte Carlo simulations. Work includes constructability reviews and integration of rail systems components with the structural and civil design. Other responsibilities include review of capital cost estimates, construction staging, and contract packaging. $1.5 Billion

Metropolitan Sewer District of Greater Cincinnati, West Branch Muddy Creek Project Bundle, Cincinnati, OH

Senior risk analyst and master scheduler responsible for providing project integrated master CPM and detailed design schedules, EVM analysis and reporting, and schedule and cost risk analysis with Monte Carlo simulations. An 18-month advanced study, planning and alternative analysis of $150 million bundle of projects to eliminate sanitary sewer overflows and reducing combined sewer overflows in the West Branch Muddy Creek sewer basin. This is the first major project bundle of the 20-year sewer upgrade and rehabilitation program. $2.0 billion

New York State Department of Transportation, Replacement of the Belt Parkway Bridge over Mill Basin and Gerritsen Inlet, Brooklyn, NY

Senior project controls manager responsible for providing project design schedule management and EVM analysis and reporting for design of replacement bridge. The project includes replacement of the existing bascule bridge with a new high-level fixed bridge on a new alignment. Because of the new alignment, approximately one mile of highway approaches requires reconstruction. As part of the approach work, HNTB is preparing the design and construction documents for the new horizontal and vertical alignment, pavement reconstruction, drainage and grading, utilities relocation, temporary and permanent lighting, landscaping, wetland mitigation and maintenance and protection of traffic.

GLENN RIDSDALE, PE

Role:
Standards & Procedures

Firm:
HNTB

Education:
MS, 2005, Organizational Leadership, Philadelphia Biblical University

Mass Transportation Management Institute, 1988, Northeastern University

MS, 1978, Civil Engineering, New Jersey Institute of Technology

BS, 1974, Civil Engineering, Newark College of Engineering

Registrations:
Professional Engineer:
NJ/1979, #[redacted]
NY/1986,

Affiliations:
American Public Transit Association

Project Management Institute

Years of Experience:
31

Employment History:
2009 - Current
HNTB Corporation

New Jersey Transit
1981 - 2009

The RBA Group
1978 - 1981

Goodkind & O'Dea
1974 - 1978

Glenn has 31 years of experience in QA/QC and project/facilities management. He possesses strong skills in project and program management, organizational performance and development, construction and oral/written communications. His project experience includes:

Port Authority of New York and New Jersey, Civil Engineering Services On-Call: PATH Harrison Rail Transfer Yard, Harrison, NJ

Quality manager overseeing design of the expansion of the West Yard and South Loop Yard at the Harrison Car Maintenance Facility. The project involved the preparation of plans and specs, cost estimates and construction support. This task also included the development of specifications for the separate procurement of concrete ties and special trackwork.

New Jersey Transit, Portal Bridge Capacity Enhancement, Secaucus, NJ

Project quality manager for all design activities undertaken by HNTB on this project for NJ Transit to replace the existing moveable span bridge carrying Amtrak's Northeast Corridor over the Hackensack River. The project will not only replace the existing span with two new fixed spans, but also expand the overall capacity and operational flexibility of the Northeast Corridor in this area in support of the Trans-Hudson Tunnel Program. Glenn's responsibilities include ongoing oversight of the design procedures and processes to ensure compliance with the Quality program, as well as integration of the work into the efforts of the other members of the design team.

New Jersey Transit, Atlantic City Rail Line Operational Assessment, Atlantic City, NJ / Philadelphia, PA

Infrastructure task leader responsible for all HNTB work, which includes development of conceptual level plans of all improvements, assessment of possible impacts and preparation of cost estimates. HNTB is examining the necessary infrastructure improvements which can be made to improve the frequency and flexibility of rail service between Atlantic City, New Jersey and Philadelphia, Pennsylvania.

New Jersey Transit Corporation

While working for New Jersey Transit, Glenn held several positions, including chief engineer, and was responsible for facilities management, engineering, design, construction and project management. Glenn led development and implementation of Standard Project Operating Procedures, establishing quality standards and processes to confirm consistent project delivery and meet user expectations. Glenn taught these procedures to more than 400 individuals from all facets of the NJT organization through the project management training program and established a clear understanding of the preferred project delivery process. Glenn established a quality unit within the engineering division to provide ongoing oversight and support to the delivery process, update and maintain these procedures, develop and deploy best prac-

GLENN RIDSDALE, PE (CONTINUED)

tices, track and monitor quality processes, and provide a resource to project managers in delivering their projects.

Specific Project Accomplishments while at New Jersey Transit include:

Statewide Rail Yard Master Plan, Statewide, NJ

Project manager for development of a long-range plan to upgrade commuter rail maintenance and storage facilities to accommodate on-going system growth and planned major system expansion as a result of the 2017 opening of the new Trans-Hudson Rail Tunnel. This 15-year, $1.1B plan identified expansion plans for four locations, establishment of three new storage yards, and addition of service and inspection as well as running repair capability at key locations.

Newark Light Rail Modernization, Newark, NJ

Project director for the $375 million rehabilitation/expansion of the existing 4.5-mile light rail system, including introducing new low-floor light rail vehicles. Work included new traction power and signal systems, replacement of the existing overhead contact system, rehabilitation of four stations for full ADA accessibility and a ventilation system for the one-mile downtown tunnel. To accommodate new vehicles a 1.1-mile extension with two new stations was constructed to access a new vehicle base facility. Work was concurrently advanced for a one-mile downtown extension linking the two major commuter rail stations serving the downtown area. A major component of the work included the necessary quality and safety documentation to obtain the Office of State Safety Oversight approval to begin revenue service.

Rail Facility Improvement Program, Statewide, NJ

Project director for development of an on-going program to address "state of good repair" needs for 165 existing rail stations and related support facilities. Major construction activities advanced through this annual program ($4 million to $7 million) included new platforms and passenger shelters at existing stations, historic station renovations, parking expansions, crew facilities at yards and shops, and environmental site remediation efforts. A key element of the construction phase services included coordination with regulatory organizations such as the NJ Department of Community Affairs regarding construction quality issues to ensure issuance of Certificates of Occupancy upon project completion.

Newark Bus Facility, Newark, NJ

Project director for the rehabilitation/expansion of the existing manufacturing facility to a 600,000-square-foot complex providing a central maintenance facility, central storeroom, 200-bus operating garage, and non-revenue repair facility. Work included initial site location studies, conceptual planning, environmental review, final design, construction management and relocation planning/oversight.

HNTB EXPERIENCE

PROGRAM MANAGEMENT EXPERIENCE

HNTB is a preferred provider of program management services to major transportation agency clients nationwide. Over the past decade, these agencies have seen their fiscal and human resources shrink, while at the same time, their needs have grown disproportionately. As a result, more and more agencies have increasingly relied upon program management strategies to deliver transportation improvement projects in a timely, coordinated and cost-effective fashion.

HNTB's track record as a pioneer in program management assignments includes services to agencies in New Jersey, Pennsylvania, Washington, Texas, Missouri, Illinois, Minnesota, California, District of Columbia, Mississippi, Michigan, Utah and Florida. Our expert program management staff continuously take best practices and lessons learned in the evolution of the industry and applies them to gain time- and cost-efficiencies for our clients. The list to the right is a sampling of HNTB's involvement in program management contracts and highlights our team's qualifications, as well as demonstrates our ability to plan programs, manage schedules and budgets, stretch resources and ultimately deliver capital improvement projects for our clients.

Often, because of a client's or agency's size, we have served as the overall project administrator and directed all of the design and construction engineering on major projects. As a result, to name a few, our firm was the first program manager selected by the Illinois Department of Transportation, Missouri Department of Transportation, Kansas Department of Transportation, Ohio Turnpike Commission and Ohio Department of Transportation to oversee some of their complex programs.

AUTHORITY EXPERIENCE

Currently holding 13 on-call contracts, HNTB has provided multi-discipline services to the Authority for nearly 30 years on projects such as:

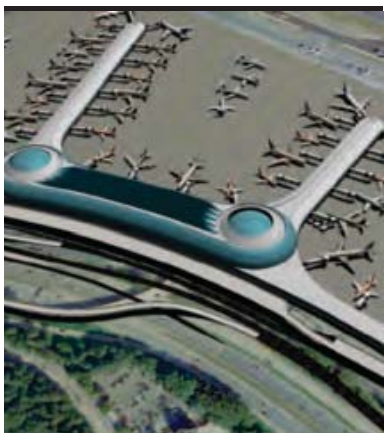
- George Washington Bridge Upper Level Structural Steel Rehabilitation
- Call-in Security Improvements at Authority Facilities, and the Exchange Place Improvement
- Goethals Bridge Modernization Program
- Planning Call-in
- Structural Call-in
- ITS Call-in

Select HNTB Program Management Contracts

- New Jersey Turnpike Authority, Program Management for Interchange 6 to 9 Widening Program - $2 billion
- Pennsylvania Department of Transportation, District 6 Design Management - $500 million
- Illinois State Toll Highway Authority, Program Management for Congestion Relief Program - $6.3 billion
- Denver International Airport Redevelopment Program - $1 billion
- Washington State Department of Transportation, I-405 Program Management - $5 billion
- San Diego Association of Governments, Program Management - $14 billion
- Florida's Turnpike Enterprise, Program Management - $2.2 billion
- Utah Department of Transportation, I-15 Program Management - $5 billion
- Bay Area Rapid Transit, Seismic Retrofit Program Management - $1.3 billion
- North Texas Tollway Authority, Program Management, Capital Improvement Program - $7 billion
- Port Authority of New York and New Jersey, LaGuardia Airport Program Management Services - $4 billion
- Delaware River Port Authority, Program Improvement Services for Capital Improvement Projects - $1.2 billion

- Civil/Rail Call-in
- CM Services Call-in
- Traffic Call-in
- Architectural Call-in
- PATH Security Program
- Expert Professional Engineering Services
- Security Program
- Building Facilities Call-in
- Tunnel Call-in
- Asset Management Call-in

HNTB is eager to continue the relationship that we have developed with the Authority, while incorporating the "lessons learned" through our experience with working on numerous projects for the Authority. HNTB's relevant project experience begins on page D.2.



LAGUARDIA AIRPORT TERMINAL PROGRAM MANAGEMENT SERVICES, FLUSHING, NY

HNTB is currently serving as program manager for the LaGuardia Airport Central Terminal Building Modernization Program (LGA CTB). LaGuardia Airport served approximately 23 million passengers in 2008 through its 72 aircraft gates on the 680-acre site. HNTB is tasked with achieving the client's expectations, providing project management services as part of this program. This $4 billion planned rebuild of the 45-year-old CTB includes the 38-gate terminal building complex with a main terminal and several concourses, as well as a 5,600-car parking garage and a completely new roadway access system. HNTB is performing airside improvements, including new taxiways, taxi-lanes, aircraft aprons, hold-pads, remain overnight aircraft aprons, and potential new de-icing pads. Tasks also include new surface parking lots, commercial vehicle staging areas, utilities, general site work and landscaping, potential future right of way for subway access, central heating and refrigeration plant, and a central electrical substation.

Innovative concepts:

- Proposing alternate delivery methods, including design-build, DBOM, and construction manager at-risk, and Integrated Project Delivery.
- Proposing private sector participation to provide alternative funding and a reduction of "soft" project costs.
- Alternative operating scenarios, including third-party management and operations.
- Alternative leasing models, including Common/Preferential use.
- Project management tools/project controls, including BIM 4th dimension capabilities.
- BIM 3D Modeling, including 4-5 Dimensional tools like cost estimating and facility management.
- Sustainable solutions, including development of the sustainable design Master Plan.

CLIENT REFERENCE:
Michael Moran
Port Authority of New York and New Jersey
(718) 533-3509
mmoran@panynj.gov

START DATE:
2009

COMPLETION DATE:
Ongoing

PROJECT COST:
$4 billion

INTERCHANGE 6 TO 9 WIDENING PROGRAM, VARIOUS LOCATIONS, NJ

HNTB is providing program management services for the Interchange 6 to 9 Widening Program. The project entails modifying four major interchanges and widening 33 miles of turnpike from six to 12 lanes between milepost 48 and milepost 74, and from 10 to 12 lanes from milepost 74 to milepost 83. One hundred and seventy lane miles will be added to the Turnpike system at a cost of $2 billion. The program extends through 11 communities in three counties of central New Jersey. In addition to the enormous scope, the project involves many complex environmental challenges, including mitigating major wetland damages and designing to conform to new, stringent stormwater management regulations.

As program manager, HNTB will assist the NJTA in delivering complete construction contract documents and providing support during construction as needed. The assignments comprise managing and coordinating the efforts of nine engineering design teams, as well as legal and real estate firms. HNTB services will include monitoring and maintaining quality and performance standards, program budget cost and schedules.

CLIENT REFERENCE:
Richard Raczynski
New Jersey Turnpike Authority
[redacted]

START DATE:
2006

COMPLETION DATE:
Ongoing

PROJECT COST:
$2 billion

ILLINOIS TOLLWAY PROGRAM MANAGEMENT AND PROJECT CONTROLS, DOWNERS GROVE, IL

As members of the Program Management Office for the Illinois Tollway's $6.3 billion Congestion-Relief Program (CRP) – Open Roads for a Faster Future, HNTB manages a portfolio of projects to achieve objectives within the time and budget parameters. The goal is to rebuild nearly the entire Tollway system, which means widening and constructing 276 miles of existing highways and constructing a new 12.5-mile extension of a major corridor. It is projected that the plan will improve mobility in 12 counties, reduce daily commute times by 20 minutes a day, and will provide a positive economic benefit to communities. Since the inception of the PMO program in 2004, over $3.6 billion of construction-related contracts have been awarded and over $2.9 billion of construction improvements have been completed; all were completed on-time and within budget. Key PMO accomplishments to date include:

- Nearly $4.0 billion in construction work has been obligated, which represents approximately 58.3-percent of the CRP program budget.
- $700 million in consultant services have been committed to-date, which represents approximately 11-percent of the CRP program budget.
- $163 million in other costs, including utilities, right-of-way and miscellaneous items have been committed to date, approximately 2.5-percent of the CRP program budget.
- $4.8 billion, approximately 73-percent of the CRP program budget has been committed.
- $57.8 million in reimbursement agreements have been approved to date, reducing the overall program cost by 0.9-percent.

CLIENT REFERENCE:
Paul Kovacs
Illinois Tollway
[redacted]

START DATE:
2005

COMPLETION DATE:
Ongoing

PROJECT COST:
$6.3 billion

BAY AREA RAPID TRANSIT (BART) EARTHQUAKE SAFETY PROGRAM, SAN FRANCISCO BAY AREA, CA

HNTB is providing program management and design support services for the $1.3 billion BART Earthquake Safety Program (BART ESP). During the design phase, we were also responsible for general engineering and design oversight.

The original BART system is more than 75 miles-long and includes over 1,900 aerial structures, numerous underground, at-grade and aerial stations; the Transbay Tube; and miscellaneous BART building/maintenance facilities and systems. Under the comprehensive program, HNTB analyzed all of these elements in the original BART system and are being retrofitted to protect public safety and BART's substantial capital investment.

HNTB was the lead bridge designer for the program, establishing criteria for the analysis, evaluation, performance and design of the nearly 25 miles of aerial guideway structures. The retrofit designs of the BART aerial structures had to overcome a number of complex challenges, including near field ground motions from the San Andreas and Hayward Faults, crossing two other active faults, deep Bay Mud, soil liquefaction, large variations in structure types, constrained construction areas, and operational and safety considerations of the active BART train operations. To meet these challenges while keeping within the overall project budget, HNTB and the BART ESP team developed innovative retrofit solutions such as base isolation using foundation rocking to limit forces into the columns and superstructure, allowing inelastic action in the pile foundations where operability was not required.

CLIENT REFERENCE:
Tom Horton
Bay Area Rapid Transit District
[redacted]

START DATE:
2000

COMPLETION DATE:
Ongoing

PROJECT COST:
$1.3 billion

PROGRAM MANAGEMENT OFFICE/GENERAL ENGINEERING CONTRACT, TX

HNTB provides global program and construction management oversight for all services on major corridors under construction. The firm is responsible for managing all consultants providing construction management services and will coordinate construction schedules, see that construction managers are following NTTA construction manual and procedures, and assess contractor claims. Although NTTA uses consultants for all construction management services, the consultants are not in a position to make decisions regarding construction change orders. HNTB implemented a system where proposed change orders from contractors are immediately brought forth by the construction manager so an NTTA committee can make a decision on the change order. This allows the construction manager to enforce the contract, but any cost change is controlled by NTTA. This effort parallels the efforts implemented at the Illinois Tollway and put into practice by the Contract Cost Change Controls Committee (C5), which is the authorized panel who recommends or rejects Change Orders and Extra Work Orders, and is chaired by the Tollway's Deputy Chief Engineer for Program.

CLIENT REFERENCE:
Gerry Carrigan
North Texas Tollway Authority
[redacted]

COMPLETION DATE:
2007

COMPLETION DATE:
Ongoing

PROJECT COST:
$7 billion

I-405 CORRIDOR PROGRAM GENERAL ENGINEERING CONSULTANT CONTRACT, KING AND SNOHOMISH COUNTIES, WA

HNTB is the general engineering consultant for the reconstruction of 30 miles of I-405, one of the most congested freeways in Washington. As the owner's representative for design-build, HNTB is responsible for providing program management, conceptual design and cost estimating, public involvement, environmental clearance/permitting, right-of-way acquisition, design-build program requirements, oversight and construction management for the currently funded $1.6 billion program. Projects under this program include the I-405 Corridor Program Context Sensitive Solutions Process, Congestion Relief and Bus Rapid Transit Corridor and Stormwater Strategy. Additionally, HNTB has developed preliminary engineering and program requirements for several design-build requests for proposal to date, such as Kirkland Nickel Stage 1, NE 10th Street Bridge Crossing Stage 1, NE 10th Street Bridge Crossing Stage 2, South Bellevue Widening Project, Renton Stage1 Widening Project, Renton Stage 2 Widening, SR 515 Interchange Project, and Spring Creek Wetland and Habitat Mitigation Bank Project.

CLIENT REFERENCE:
Kim Henry
Washington State Department of Transportation
[redacted]

START DATE:
2002

COMPLETION DATE:
Ongoing

PROJECT COST:
$5 billion

DENVER INTERNATIONAL AIRPORT REDEVELOPMENT PROGRAM, DENVER, CO

Denver International Airport has engaged the services of HNTB to provide program management services for the terminal expansion, RTD stations, new roadways, Automated People Mover expansion, hotel and existing terminal renovations. The PM/Design team will develop a program and ultimately, program definition packages, for each component of the overall terminal expansion to allow for future growth.

Visioning and conceptual design for the $1 billion expansion will include a change of use for major portions of the Terminal, expansion of the Terminal curbside areas, addition of a train station for FasTracks, expansion of the existing Terminal with connecting bridges, airport hotel, landside roadway improvements/expansions, Federal Inspection Service facility expansion, all security checkpoint reconfiguration, and FasTracks/Pena Boulevard bridges. Scope of services includes evaluation and incorporation of sustainable design strategies for possible LEED certification.

CLIENT REFERENCE:
David Rhodes
Department of Aviation for the City and County of Denver
[redacted]

START DATE:
2008

COMPLETION DATE:
Ongoing

PROJECT COST:
$1 billion

I-15 UTAH COUNTY CORRIDOR PROGRAM MANAGEMENT, DESIGN-BUILD GENERAL ENGINEERING CONTRACT, UT

As the Owner's Representative, HNTB was selected by UDOT in Spring 2008 to perform Design-Build Program Management Services for the Interstate 15 Utah County Corridor Reconstruction (CORE) program. HNTB is providing program management services including project controls, quality management, and public information; preliminary engineering including roadway, structures, traffic engineering, drainage, utilities, and geotechnical work; right-of-way services; and oversight of and contract administration for the design-build procurement, design, and construction processes. The team consists of a combination of co-located staff and remote design centers, linked by technology to facilitate effective communication, providing UDOT with immediate access to additional staff resources as needed. HNTB's scope of work includes cost/risk assessments with the explicit goal of maximizing the extent and effectiveness of the corridor improvements within the budget allocated by the legislature.

The Utah legislature has appropriated $2.6 billion for the improvement of the I-15 Corridor in Utah County, part of an overall 43-mile corridor improvement plan estimated to cost in the range of $5 billion. The project will add additional capacity to I-15 and reconstruct nearly every interchange to accommodate significant growth that is occurring in Utah County. With the signing of the NEPA EIS Record of Decision in August 2008, UDOT moved forward with plans to issue a Design-Build Request for Proposal in Spring 2009 to allow construction to start in Spring 2010, with 2014 as the target date for completion of construction of the initial improvements.

CLIENT REFERENCE:
Dal Hawks
Utah Department of Transportation
[redacted]

START DATE:
2008

COMPLETION DATE:
Ongoing

PROJECT COST:
$5 billion

PROGRAM MANAGEMENT SERVICES FOR CAPITAL IMPROVEMENT PROJECTS, DE

HNTB was recently selected by the Delaware River Port Authority (DRPA) to serve as program manager of their $1.2 billion capital improvement program over the next five years.

The DRPA is embarking on the largest capital improvement program in the agency's history. Lacking adequate staff in-house to manage the program, the Authority selected HNTB to provide program management and project delivery assistance. The task order based assignments will include "cradle to grave" services across the Authority's four bridges, the PATCO Commuter Rail Line, the Philadelphia Cruise Terminal, and the RiverLink Ferry System, along with their extensive network of roadways and operations and support facilities.

As part of the contract, HNTB will be responsible for program management, project controls, scheduling & estimating, project management, design review services, including civil, structures, traffic, ITS, MEP, architecture, marine, and geotechnical, and construction management/inspection.

CLIENT REFERENCE:
Michael Venuto, PE, PLS
Delaware River Port Authority
[redacted]

START DATE:
2009

COMPLETION DATE:
Ongoing

PROJECT COST:
$1.2 billion

PROGRAM MANAGEMENT AND RELATED SERVICES, SAN DIEGO, CA

HNTB is currently providing services related to program management as part of this on-call contract. These services assist San Diego Association of Governments (SANDAG) and Caltrans with managing the TransNet program by providing a framework for coordinating the efforts of many agencies and stakeholders. HNTB has helped SANDAG enhance processes and tools for managing scope, schedule and budget for projects within the six TransNet corridors. Project examples include:

I-15 Managed Lanes North Segment Widening - HNTB was responsible for final civil and structural design services as part of multiple contracts with SANDAG along the I-15 Corridor located between SR 163 and SR 78. This managed lanes corridor project is a $1 billion, 20-mile, state-of-the-art facility that will be the world's first use of fully dynamic variable pricing. HNTB also completed final design services for the 2.3-mile I-15 North Segment of the I-15 Managed Lanes project which will accommodate four buffer-separated high occupancy vehicle lanes in the current freeway median. In addition to widening the roadway, the project includes significant design services for undercrossing structures and on- and off-ramps. Additionally, HNTB was responsible for preparing type selection reports and cost estimates for five bridges: South Direct Connector and Clarence Lane, Citracado Parkway, Flecita Road and 9th Avenue Undercrossings.

Los Angeles-San Diego (LOSSAN) Rail Corridor - This project is part of a larger, multi-year effort to provide a parallel double track on the LOSSAN corridor across Camp Pendleton and through the city of Oceanside to improve commuter and freight rail service, and reduce conflicts leading to train idling and delays. The project consists of upgrading approximately 5.8 miles of single-track rail between the San Onofre and Las Pulgas Canyon control points to double-track rail. In addition to the existing rail line, the project proposes constructing one new single-track bridge, one new double-track bridge, new retaining walls and a new universal crossover on the northern end of the segment.

The project is within the Camp Pendleton Marine Corps base, a large land area generally off-limits to the public that contains areas of high quality habitat and is home to numerous endangered species, as well as to Native American archaeological sites. HNTB's environmental staff prepared a constraints analysis to identify sensitive resources within the project limits, which included conducting a wetland delineation and cultural resources assessment, evaluating fossil resources and creating a geographic information system database that mapped these resources. With this information, the environmental staff worked with the base staff and project designers to modify the project design to avoid these resources where possible. In many locations, we evaluated the project to determine the comparative benefits of using retaining walls or vegetated slopes to reduce habitat impacts. The project is now progressing to 60-percent design and current work includes preparing an environmental document and meeting with resource agencies to discuss permitting.

CLIENT REFERENCE:
Richard Chavez
San Diego Association of Governments
[redacted]

START DATE:
2008

COMPLETION DATE:
Ongoing

PROJECT COST:
$14 billion

GEORGE WASHINGTON BRIDGE MAIN SPAN UPPER LEVEL STRUCTURAL STEEL REHABILITATION, NY/NJ

HNTB, as part of a joint venture, was selected to provide design services for the rehabilitation of the main-span upper-level deck of the George Washington Bridge. Work on this project included remediation of the priority and routine repairs of the upper level steel, with a particular focus on the orthotropic deck.

During the preliminary engineering phase of the project, HNTB conducted a detailed field inspection, prepared a report detailing all the repairs required, and provided conceptual design for each repair type. As many of the repairs were located in the orthotropic deck, HNTB conducted a detailed fatigue life evaluation of the existing deck. In order to accurately assess the remaining life of the structure, a Weigh-in-Motion study was performed to determine the actual weight of trucks crossing the structure. To enhance the fatigue life of the structure, a partial replacement of the orthotropic deck was recommended. A detailed life cycle cost analysis was performed to determine the preferred option between no repair, partial replacement or total replacement. Partial replacement with priority repairs was the recommended alternative. HNTB provided final design services for the partial replacement of the orthotropic deck, priority and routine repairs. Additionally, a prototype replacement of the finger joint and drainage improvements were included in the contract.

CLIENT REFERENCE:
Stewart Sloan
Port Authority of New York and New Jersey
(973) 792-4534
ssloan@panynj.gov

START DATE:
2007

COMPLETION DATE:
Ongoing

PROJECT COST:
$140 million

A/E SERVICES ON-CALL AT NEWARK AIRPORT, NEWARK, NJ

A team led by HNTB Corporation was selected by the Port Authority of New York an New Jersey to provide miscellaneous architectural and engineering design services for the New Jersey Airports, specifically Newark International Airport and Teterboro Airport. The contract consisted of miscellaneous architectural, engineering and planning design assignments, including roadway design, airside aircraft apron design, building design, including parking structures, and special studies. The Team assisted the Authority as an extension of their professional staff as they embarked on their ambitious Newark Redevelopment Program.

The HNTB Team provided services for three architectural design assignments, including the interior finishes to the Northeast Corridor Monorail Station, architectural design and details of the Lot E Parking Structure and Monorail Station modifications, and the relocation and design of a new Administration Building for Newark Airport. The architectural assignments include assistance in Stage II design, preparation of Stage III contract documents and Stage IV, construction administration services.

In addition, the HNTB Team completed services for the following engineering assignments: a feasibility study and structural design for the expansion of the central heating plant; a structural systems study for the proposed Central Terminal Area (CTA) Garage; preparation of contract documents for the demolition of Buildings 150 and 153 to prepare the site for the new Administration Building; tidal gate replacement; airside north area drainage; and the preparation of a study and civil and structural engineering services for the Southerly Access Roadway Program (SARP) from Exit 13A of the New Jersey Turnpike.

CLIENT REFERENCE:
Michael Valletta
Port Authority of New York and New Jersey
(201) 595-4748
mvallett@panynj.gov

START DATE:
1999

COMPLETION DATE:
2001

PROJECT COST:
$150 million

FLORIDA'S TURNPIKE ENTERPRISE (FTE) GENERAL CONSULTANT, ORLANDO, FL

HNTB serves as one of two general consultants selected to deliver Florida's Turnpike Enterprise five-year, $2.2 billion dollar work program. FTE is responsible for toll operations on every toll road and bridge owned and operated by the Florida Department of Transportation, and collects nearly $600 million in toll revenue annually.

HNTB has been providing services to the Turnpike since its inception in 1957. In this role, HNTB serves in the areas of production support, including project management, design support and oversight (both engineering and architectural), environmental management, contractual services, right-of-way, asset management, information systems, document management, toll operations, and concepts/planning.

The five-year contract consists of a series of six-month work authorizations which are renegotiated at the end of each authorization period dependant on upcoming workload and anticipated expenditures. Currently, there are 36 individuals on the HNTB contract (including subconsultants) who work in the FTE offices, with additional on-call support personnel available from HNTB's home offices. As FTE's work program reduces or expands, the number of HNTB personnel is adjusted accordingly.

CLIENT REFERENCE:
Kevin Thibault, PE
Florida's Turnpike Enterprise
[redacted]

START DATE:
2008

COMPLETION DATE:
Ongoing

PROJECT COST:
$2.2 billion

E. MANAGEMENT APPROACH

MANAGEMENT APPROACH

HNTB has extensive expertise in managing task order ("call-in") agreements for the Authority, as well as other transportation agencies in the New York Metropolitan region, and many others across the country. HNTB's tradition and culture of providing project and program management services results in managers and support personnel who remain sensitive and attuned to exactly how critical each specific task assignment can be in terms of providing assistance to the Authority in supplying transportation, terminal and other facilities of trade and commerce to the Port District.

Our proposed organizational structure, which is depicted by the organizational chart located on page E.2, has been assembled to allow HNTB to remain responsive to the Authority's needs for the duration of this "call-in" contract and to make sure the HNTB Team is able to provide the requisite services in support of the Authority's comprehensive set of business lines. HNTB has similarly executed a task-order management approach, which will allow us to remain responsive to the Authority's needs, making sure experienced and qualified personnel are assigned to your projects, the scope of services is clearly defined, and the associated fee proposal remains within your expectations. We are fully committed to performing our services under each assignment with a focus on 4for4 performance: Quality Work, On-time, Within Budget and to Your Satisfaction.

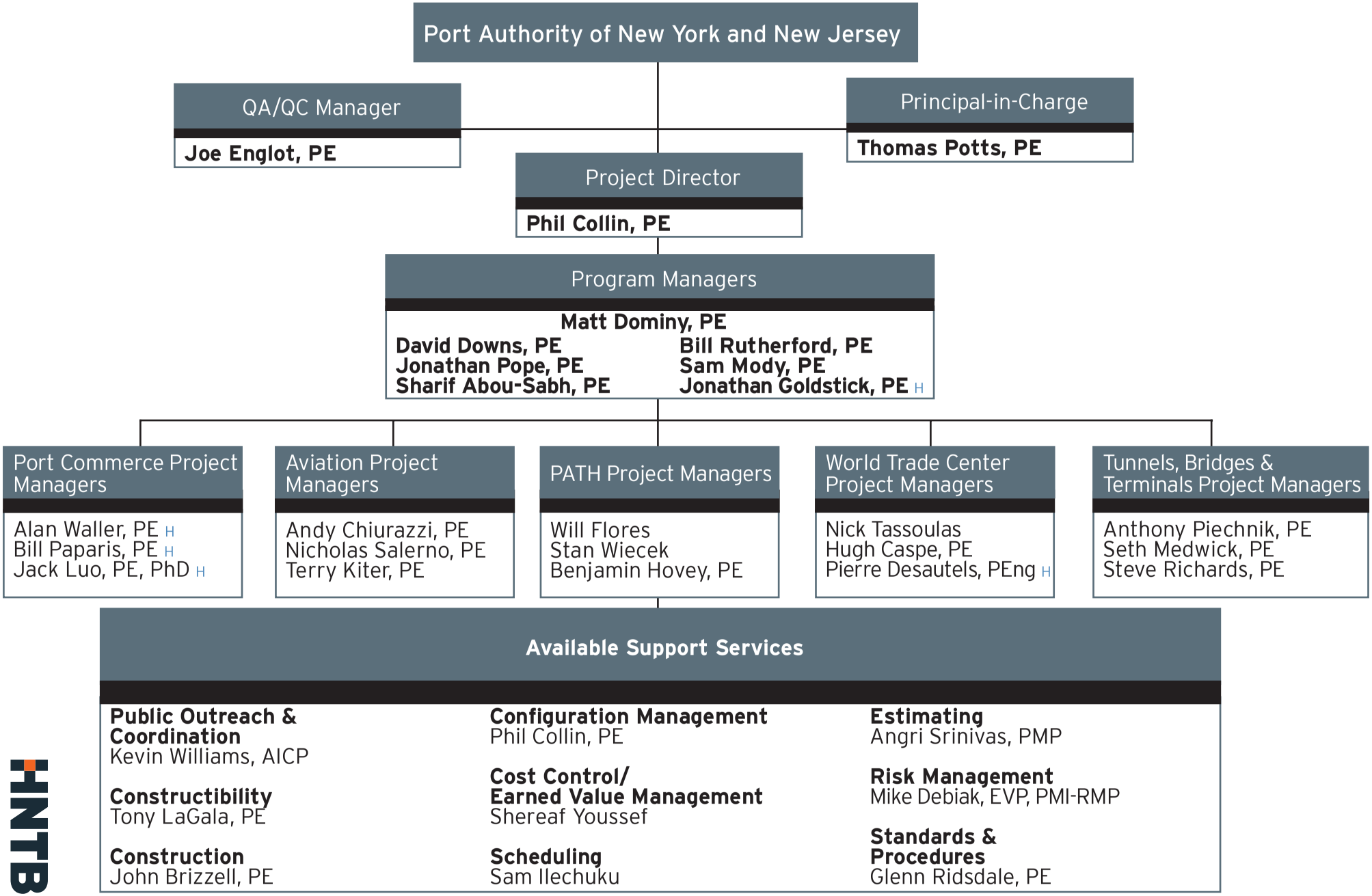
Our management approach for the Performance of Expert Professional Project Management Services as Requested during 2011, 2012, 2013 and 2014, offers the following:

An experienced project director who operates as your single point of contact. Phillip Collin, PE, will be committed to the Authority as project director. Phil heads HNTB's program controls and construction management department in New York and has worked on many of the region's most critical infrastructure as engineer, manager and project controls specialist. **Phil will remain available to the Authority 24/7 to facilitate any such requests for professional project or program management services on behalf of HNTB**. Upon receiving notice from the Authority of a contemplated task assignment, Phil will quickly meet with the Authority, as appropriate, to develop a concise understanding of the appropriate services required, and identify key staff to fulfill a particular role or responsibility. Phil will identify and assign qualified and technical or support personnel to perform a particular assignment, and will follow up with all other project matters until the assignment has been completed. Phil will continuously track project progress during that period with a focus on client satisfaction and continuous improvement.

Prior to joining HNTB, Joe Englot worked for the Authority for more than 30 years, the last three of which were in an assistant chief engineer, which makes him an invaluable asset to our proposed Professional Project Management Services on-call team.

A coordinated project plan and leadership for each assignment. HNTB will compile a comprehensive, task-specific work plan, including scope, schedule, cost estimate, identification of milestones for deliverables, and any technical reviews to help achieve the Authority's objectives. This includes utilization of the appropriate project management systems and tools to budget and track status, report progress, monitor production, and coordination of overall staff activities. **Our organization structure and key personnel proposed for this assignment are all dedicated HNTB employees, many of which are already knowledgeable in the Authority's facilities, policies and procedures.** Additionally, HNTB project managers are all required to adhere to our "Manual of Professional Practice" and to participate in our training modules such as Work Planning, PM Principals, PM Tools and Earned Value Management (EVM). We are committed to providing the right staff to the Authority for each assignment to work as an extension of your dedicated team in planning, executing and managing the work at hand.

Dedicated senior support staff and executive commitment. HNTB has committed **Thomas Potts, PE,** as principal-in-charge and **Joe Englot, PE,** as QA/QC manager. Thomas is the office leader for HNTB's New York Office and avails himself for this on-call program to provide leadership and commitment, as necessary, to the program, our assigned project staff, and to the Authority throughout the term of the contract.



The HNTB Team

HNTB New York Engineering and Architecture, PC *(an affiliate of HNTB Corp)*

Halcrow, Inc. H

In addition to being a dedicated office leader, Thomas continues to build and support HNTB's Program Management and Controls services business lines. Joe serves as HNTB's national director of infrastructure security and prior to joining the HNTB Corporation, he worked for the Authority for more than 30 years, the last three of which were in as assistant chief engineer. Joe currently serves as project manager for critical on-call agreements with the Authority and New Jersey Turnpike Authority and MTA Capital Construction. His knowledge of the Authority's organizational structure and procedures makes him an invaluable asset to you on the overall program and for each individual task order with regard to quality assurance. Both Tom and Joe are available to the you upon request to address any need and will periodically conduct client "audits" to make certain that HNTB is providing 4for4 performance.

We have also included senior project/program managers who are committed to assisting the Authority in overall program success. We have presented a number of program managers as key staff to demonstrate the depth and breadth of senior resources available under this services contract. Each of these individuals has a proven track record of leading large, complex programs throughout the country and will be available at the Authority's request in order to fulfill our obligations.

Business line-specific expertise. To provide the most comprehensive expert professional project management services under the parameters of this agreement, our proposed HNTB technical staff are prepared to demonstrate a breadth of knowledge associated with the identified Authority business lines, which will prove essential to understanding how capital improvement programs and projects may be phased, staged, bid and ultimately constructed at Authority facilities. We have structured our organization to provide a delegation of authority through the project director to a dedicated program or project manager, project engineer or subject matter expert as required for each individual assignment. As such, we have included a number of key staff for each business line to demonstrate our approach and capacity to manage multiple task orders at multiple facilities at any particular time.
All of our project managers have been trained to operate under the basic mandates of sound project management principals, including following the concepts of work breakdown structure (WBS) identification and earned value management and S curve analysis. These individuals understand and have extensive experience in working with the various Authority project management reporting systems and software, such as Primavera to perform project planning and scheduling, Expedition to track deliverables and approvals, SAP to monitor project accounting, WINTRAK as a means to coordinate with the CMD, and the InCAPS budgeting program.

Project Director Phil Collin, PE, will remain available to the Authority 24/7 to facilitate any such requests for professional project or program management services on behalf of HNTB.

Please note that we have also included in our staffing plan the additional depth and breadth of technical staff that are available to fulfill any obligation under this agreement. By including Halcrow as a dedicated subconsultant for this agreement, we further bolster the HNTB Team's capabilities in the area of port commerce and marine infrastructure.

We will be focused on addressing each task-order assignment with the appropriate staff relative to the facility, scope and requirements of your request. The following highlights our pledge to successful support for each specific business line:

A. Aviation

- Our staff will be continuously focused on airport operations with respect to hours of work, contractor access and airside security.
- Personnel will provide a knowledge of terminal operations with respect to arrivals, departures, and baggage handling systems and operations; domestic versus international operations and interline connections; security operations; and tenant leases with respect to hours of work, contractor access and mandatory security requirements.
- Our program and project managers will adhere to landside roadway operations, light-rail operations, parking facility operations, and rental car operations with respect to hours of work and maintenance and protection of traffic.
- We remain current with respect to all Federal Aviation Administration guidelines and will apply these rules to all work product and technical reviews.

B. Tunnels, Bridges and Terminals

- Our technical personnel will strictly adhere to TBTA facility hours of work, peak operational

periods, contractor access, coordination with PAPD, site access security protocols and typical MPT lane closures.
- HNTB staff will comply with commuter and long-distance bus operations, express bus lane operations, tolling operations, primary tenant leasing, and general hours of work for bus terminal operations.
- We possess a keen understanding of NYCDOT, NJDOT and local township requirements associated with permitting for street work and will make sure that plans and designs take into consideration these critical factors.

C. Port Commerce
- We will apply our deep understanding of berthing operations, cargo handling and storage facilities, contractor access, site security requirements, primary tenant leases, and general hours of work.
- We will employ our expertise in CSX and Norfolk Southern freight rail operations and regional destinations, primary freight lines in region and rail security requirements and general hours of work.
- Our staff are well versed of current environmental regulations and the issues associated with site excavation, dredging, and the disposal of contaminated soils and will review all technical product for consistency and completeness.

D. PATH
- HNTB personnel will provide a knowledge of transit operations; rail safety and training issues; power and way structures; contractor access to systems; SCADA systems; work-train availability and general hours of work; and operation of signals, switches and track interlocking.

E. World Trade Center
- We will be respectful of the intricate site logistics and complexity of the work downtown with regard to multiple stakeholder involvement.
- We will utilize our intimate knowledge of the day-to-day master program schedule and risk management program to help monitor and manage WTC work in a properly coordinated fashion.

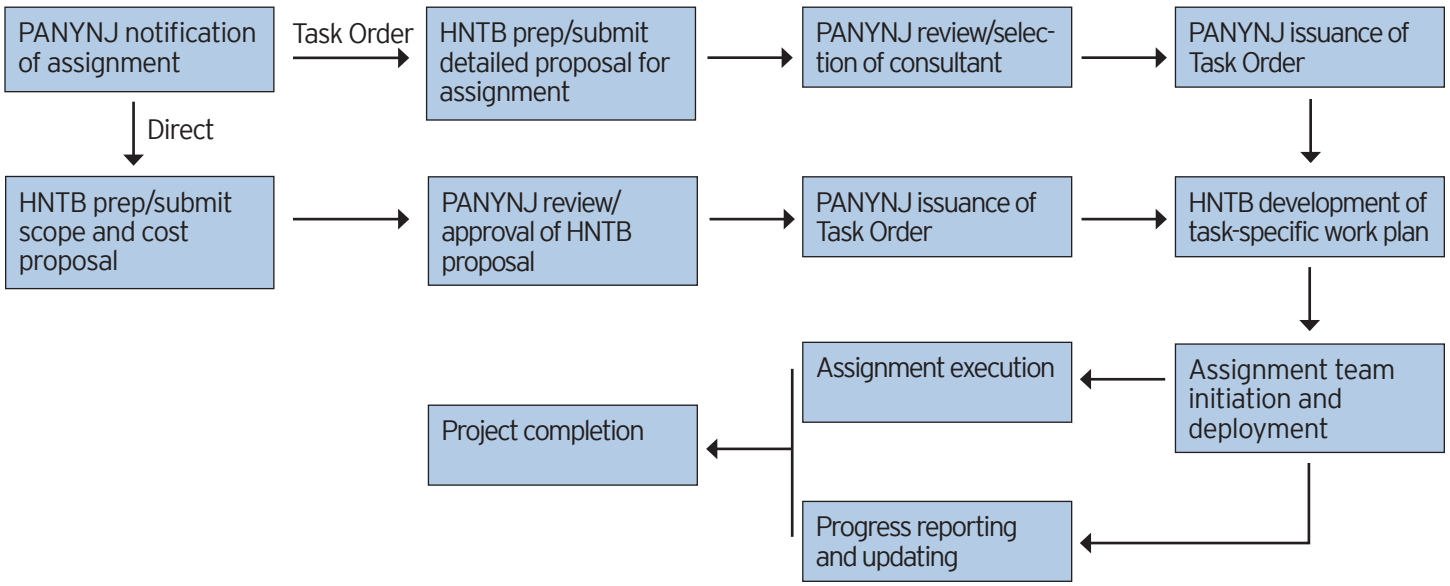
Approach to Tasks
Prior to executing any assignment, HNTB will establish protocols with the individual designated to administer the agreement for the Authority to establish lines of communication and identify the proper format for proposals, salary rosters, out-of-pocket expenses, and invoices to make sure execution and administration of a particular assignment will advance uninhibited.

Requested proposals for assignments will be submitted to the Authority within the identified time frame, including estimated hours of labor for each assigned project responsibility, resources required (general conditions, expenses, and other reimbursable items), a detailed scope of work, and a project staffing schedule.

During the performance of each specific task order, HNTB will provide the continuous client and staff coordination that will be instrumental in maintaining an efficient and quality process in achieving the relative objectives. Once an assignment is underway, the following management tasks will be completed as necessary:

- Labor expended will be charged directly to the appropriate task order by direct coding of individual employee time cards, which are checked weekly.
- All approved direct project expenses and outside service items, will be charged to the appropriate task through direct coding of purchase requisitions and invoices.
- Subconsultant labor and expenses will be shown on each monthly invoice with supporting ledgers clearly depicting the cost attributed to each such task order.
- At the close of each month, the assigned project manager will provide project data to determine progress and an estimate of the direct staff hours and cost required to complete the task.

The HNTB Team will provide the right staff at the right time in response to your anticipated needs.



Actual cost and comparison-to-estimate report will be prepared monthly which will compare the estimated cost of services with actual task-order costs and percent complete.

- Monthly reports will include identifiable production targets and forecast dates for deliverables or completion dates for each authorized task.

HNTB will establish internal procedures, including master agreements with subconsultants, regular monthly reports and documentation of actions taken. The task-order manager will monitor these measures and brief the Authority on regular project progress, as well as identify and discuss issues requiring attention.

The flow chart above illustrates our successful approach to task order or "call-in" response and delivery for similar clients and programs.

In the event the monthly evaluation of cost or schedule for an authorized task indicates a deviation from the authorized budget or schedule, the cause of the deviation will be analyzed and a mitigation plan formulated. Mitigation plans will include an adjustment upward or downward of assigned personnel, overtime, outside experts or allocation of special expertise, if needed. An explanation of any deviation will be discussed with the Authority during the monthly review. Task orders and their associated progress will be monitored individually and collectively for conformance with our overall on-call agreement and the Authority Project Management Manual.

KEEPING THE AUTHORITY INFORMED

As project director, **Phil will serve as your single point of contact to the Authority and will keep the Authority informed of issues and progress during project execution.** He will adhere to the Authority's procedures and protocols for proper reporting and communication, as requested. HNTB has standard operating procedures and policies regarding project reviews and reporting, earned value management, and corrective action that we will employ in your best interest. Phil will develop an open and collaborative relationship with the Authority's representative(s) to instill efficiencies and value to the overall program and to remain nimble and flexible in our approach in serving your needs.

We will develop project-specific reports and communications protocols based on your needs for regular publication, transmittal or discussion. These efforts will result in the right "tools" necessary to inform the Authority, provide a basis for decision making, and to serve as contemporaneous project data for the program and for each task order or assignment.

Other Support Services

HNTB's program and project managers promote communication among all involved entities to fully eliminate and minimize the number of possible conflicts. By developing trust and an understanding of all project concerns for each specific assignment, the team can appropriately prepare for managing any such conflicts that may arise. As part of our approach, our staff will initiate early on key schedule-sensitive activities, as may be appropriate. These activities, in particular, will be monitored on

a proactive critical path basis and met head-on with an aggressive evaluation of potential approaches during stakeholder meetings. Successful resolution of the issues will help to promote the timely completion of each particular task or project.

QUALITY

HNTB will provide quality control and individual task leadership throughout the program. We will develop a Quality Control/Quality Assurance Program, which addresses the particular character of this call-in agreement prior to starting work. As previously stated, Joe Englot will serve as QA/QC manager throughout the term of the agreement. Joe has a vast amount of experience in the industry to satisfactorily review, monitor and deliver the level of service mandated by each individual task order performed by HNTB technical staff. He will provide regular insight into the service agreement as the senior technical advisor and will also provide quality reviews to confirm that the progress of the work is consistent with the requirements of each task scope, objective and any associated deliverables. He will formally review and sign off on the project specific quality plan and will periodically audit the project to make sure we are adhering to its doctrine and performing services to the satisfaction of the Authority.

QA/QC is fundamental within HNTB's culture and pervades our processes, including project and program management. QA/QC is not merely a book the company prepares to satisfy a need to establish policy - rather, it is the application of good practice at all levels and at all stages of a project. Joe will be committed to addressing quality at all levels of the project, including at the task management, delivery and director levels. He will be involved in HNTB's monthly internal project review process where all aspects of project and program management will be addressed. This review will include addressing project work plans, 4for4 client service, issues resolution and risk management.

HNTB is committed to the development of comprehensive solutions that represent the latest innovations while having basis in sound engineering, but above all, HNTB knows that the quality process is a cornerstone rather than an adjunct to project development. This commitment to quality is formalized in a written Project Management

Plan dedicated to providing superior levels of work which comprise the key ingredients in delivering quality during the development of project requirements and communication of those requirements to all involved.

Within our quality control/quality assurance program, specific quality control procedures have been developed that define the identification and implementation of quality control measures to carefully plan, check and review all work. Our subconsultants will similarly be expected to adhere to this QA/QC program and coordinate with our QA/QC team to review work activities and undertake periodic audits to further examine records and verify that proper procedures are followed.

Summary

HNTB's combination of key technical and support staff, subject matter expertise, and dedicated focus on delivery will provide the Authority with the comfort that their program will be in good hands. We will provide the right staff at the right time in response to your anticipated needs, to be responsive in maintaining a sense of urgency to all of your requests, as well as to communicate at the highest degree to fully understand the vision and goals for the program and for each individual task order. The HNTB leadership is fully committed to supporting the Authority with a continuous focus on 4for4 performance on this vital program.

F. SALARY AND MULTIPLIERS

SALARY

The following pages detail HNTB's salary schedule that identifies key personnel, their job classifications and rates. To demonstrate HNTB's breadth of staff, we have also included a list of our personnel in the New York, New Jersey and Pennsylvania offices. Please note that these rates are subject to annual increases in July of each year, in line with HNTB's ethos of competitive compensation in order to attract and retain quality talent.

The increases will adhere to all approved guidelines of the Authority. In accordance with applicable regulatory and governing agencies (i.e. FLSA), employees categorized as non-exempt cannot voluntarily work overtime without compensation and will be compensated 1 1/2 times their hourly rate for hours worked in excess of 40 per week. Employees categorized as exempt may receive additional compensation in the form of straight time for hours worked in excess of 40 per week. HNTB does not have premium for union differentials.

Halcrow's salary information is located on page F.5.

F. SALARY AND MULTIPLIERS

HNTB

Name	Title	HNTB Title	Section	Rate
Thomas Potts, PE	Principal-in-Charge	Office Leader II	Bridges & Tunnels	$250.00 (billing rate)
Phillip Collin, PE	Project Director	Project Director	Administrative Services	$108.72
Joe Englot, PE	QA/QC Manager	Department Manager - Engineering	Bridges & Tunnels	$91.04
PROGRAM MANAGERS				
Matt Dominy, PE	Program Manager	National Practice Consultant	Administrative Services	$98.16
David Downs, PE	Program Manager	National Practice Leader	Administrative Services	$129.44
Jonathan Pope, PE	Program Manager	Sr Project Manager - Engineering	Administrative Services	$96.16
Sharif Abou-Sabh, PE	Program Manager	Sr Project Director	Rail	$161.28
Bill Rutherford, PE	Program Manager	Sr Project Manager - Engineering	Bridges & Tunnels	$106.40
Sam Mody, PE	Program Manager	Office Leader I	Administrative Services	$109.28
PROJECT MANAGERS				
Andy Chiurazzi, PE	Aviation PM	Sr Project Manager - Engineering	Aviation	$81.76
Nicholas Salerno, PE	Aviation PM	Sr Project Manager - Engineering	Aviation	$91.68
Terry Kiter, PE	Aviation PM	Department Manager - Engineering	Aviation	$67.20
Will Flores	PATH PM	Department Manager - Engineering	Rail	$63.84
Stan Wiecek	PATH PM	Sr Project Manager - Engineering	Rail	$62.64
Benjamin Hovey, PE	PATH PM	Engineer III	Rail	$43.36
Nick Tassoulas	World Trade Center PM	Department Manager - CS	Construction Services	$89.20
Hugh Caspe, PE	World Trade Center PM	National Practice Consultant	Bridges & Tunnels	$110.00
Anthony Piechnik, PE	Tunnels Bridges & Terminals PM	Project Manager - Engineering	Bridges & Tunnels	$67.92
Seth Medwick, PE	Tunnels Bridges & Terminals PM	Department Manager - Engineering	Bridges & Tunnels	$68.08

Bold denotes resume included.

F. SALARY AND MULTIPLIERS

Name	Title	HNTB Title	Section	Rate
Steven Richards, PE	Tunnels Bridges & Terminals PM	Project Engineer/ Squad Leader	Bridges & Tunnels	$47.36
Belinda Rivera, PE	PM	Project Engineer/ Squad Leader	Aviation	$52.00
Matthew Riegel, PE	PM	Sr Project Manager - Engineering	Bridges & Tunnels	$72.24
Kanagarajah Ravishankar, PE	PM	Project Engineer/ Squad Leader	Bridges & Tunnels	$51.84
Greg Baron, PE	PM	Assistant Department Manager	Mechanical/ Electrical	$65.68
James Forte-McRobbie, PE	PM	Sr Project Engineer/ Sr Squad Leader	Mechanical/ Electrical	$59.20
Arie Naaktgeboren	PM	Sr Technical Advisor	Transportation	$59.60
Franco Stanisci	PM	Project Engineer/ Squad Leader	Mechanical/ Electrical	$56.56
ENGINEERS				
Mark Frazer	Engineer	Inspector II	Rail	$30.64
Yuen-Ping Chia, PE	Engineer	Engineer II	Aviation	$40.40
James Harris	Engineer	Sr Inspector	Rail	$37.04
Robert Dippy	Engineer	Project Analyst	Rail	$26.08
Theordora Kamberogiannis	Engineer	Technician II	Rail	$30.40
Brian Buckman, PE	Engineer	Engineer III	Bridges & Tunnels	$44.24
JoAnna Billings	Engineer	Engineer II	Bridges & Tunnels	$33.60
Justin Steinhouse	Engineer	Engineer II	Bridges & Tunnels	$33.52
Brian Felber	Engineer	Engineer I	Bridges & Tunnels	$35.68
Joseph Juzwin	Engineer	Engineer	Bridges & Tunnels	$27.52
Sheetal Choudhary	Engineer	Engineer	Bridges & Tunnels	$29.52
Martin Crosley	Engineer	Sr Technician	Mechanical/ Electrical	$40.08
Agana Gandhi	Engineer	Engineer	Mechanical/ Electrical	$30.32
Edward M. Grill	Engineer	Engineer I	Mechanical/ Electrical	$38.96
Chincy Mathew	Engineer	Engineer	Mechanical/ Electrical	$29.76
Bik Yin Ng, PE	Engineer	Engineer III	Transportation	$39.84
Sue Ong	Engineer	Technician III	Transportation	$36.24
Wanda Chang	Engineer	Engineer	Transportation	$27.68

Bold denotes resume included.

F. SALARY AND MULTIPLIERS

Name	Title	HNTB Title	Section	Rate
Judith Fleischer	Engineer	Project Analyst	Transportation	$34.00
Greg DeMarinis	Engineer	Engineer	Mechanical/ Electrical	$27.52
Joe Wasielewski, PE	Engineer	Project Engineer/ Squad Leader	Mechanical/ Electrical	$45.84
Patricia Hickey	Engineer	Engineer I	Mechanical/ Electrical	$29.60
OTHER TECHNICAL AND ADMINISTRATIVE STAFF				
Kevin Williams, AICP	Public Outreach Coordinator	Project Director	Urban Planning	$80.32
Tony Lagala, PE	Constructibility Engineer	Sr Project Manager - Engineering	Construction Services	$85.44
John Brizzell, PE	Construction Engineer	Construction Manager II	Construction Services	$62.08
Shereaf Youssef	Cost Control Manager	Director of Claims and Scheduling	Administrative Services	$86.72
Sam Ilechukwu	Scheduler	Project Manager - Claims & Scheduling	Construction Services	$69.76
Angri Srinivas, PMP	Estimater	Project Manager - Claims & Scheduling	Construction Services	$69.44
Mike Debiak, EVP, PMI-RMP	Risk Manager	Director of Claims and Scheduling	Technology	$86.72
Glenn Ridsdale, PE	Standards & Procedures Specialist	Division Quality Specialist	Administrative Services	$72.48
Ho Sik Nam	Graphic Designer	Graphic Designer	Bridges & Tunnels	$25.12
Eric Tobias	CAD Technician	Technician II	Bridges & Tunnels	$27.36
Paul Ella	CAD Technician	Technician II	Bridges & Tunnels	$25.52
Joe Crouch	Project Administrator	Project Administrator I	Administrative Services	$31.12
Carlos Rojas	Project Administrator	Project Analyst	Administrative Services	$40.56

Bold denotes resume included.

HALCROW, INC.

Halcrow's range of rates by disciples is in the chart below:

Classification	Name	Rate Range
Senior Vice President	Jonathan Goldstick, PE Bill Paparis, PE	$105 - $155
Vice President	Allan Waller, PE Pierre Desautels, PEng	$82 - $107
Senior Principal Engineer	Jack Luo, PE, PhD	$69 - $87

MULTIPLIERS

HNTB

Detailed below is HNTB's multiplier for staff work at our offices under the 2011, 2012, 2013 and 2014 Services Project Management Call-In. A breakdown of our FAR overhead is given on page F.7.

The multiplier for staff when assigned to work at HNTB's office is proposed as follows:

Labor	1.000
Proposed Contract Overhead	1.479
Sub-Total	2.479
Profit (8%)	0.198
Total	2.67

Halcrow, Inc.

Halcrow will use a multiplier of 2.95.

$$\text{General \& Administrative Overhead Rate} = \frac{\text{Allowable Indirect Costs}}{\text{Direct Labor}} = \frac{\$37,445,944}{\$18,638,586} = 200.9055\%$$

HNTB Corporation

Schedule of Design and Project Office Overhead Rates Excluding Overtime Premium Calculated in Accordance With the Federal Acquisition Regulation Part 31

Year Ended December 31, 2009

	FAR Cost Pool	FAR Unallowable	FAR Ref.	FAR Allowable	Project Office	Design Office
Job costs – payroll	$ 201,656,899	$ –		$ 201,656,899	$ 14,624,207	$ 187,032,692
Premium portion of overtime	666,112	–		666,112	17,615	648,497
Direct straight-time payroll	$ 200,990,787	$ –		$ 200,990,787	$ 14,606,592	$ 186,384,195
Salary related						
Paid leave	$ 38,152,662	$ –		$ 38,152,662	$ 2,766,839	$ 35,385,823
Employee's insurance	25,689,665	–		25,689,665	1,863,021	23,826,644
Payroll taxes	22,974,480	–		22,974,480	1,666,115	21,308,365
Miscellaneous employee benefits	8,334,975	740,868	1	7,594,107	550,740	7,043,367
Total salary related	95,151,782	740,868		94,410,914	6,846,715	87,564,199
% of direct straight-time payroll					46.87%	46.98%
General overhead costs						
Indirect salaries	69,164,492	4,800,039	2	64,364,453	4,667,727	59,696,726
Rent and maintenance	29,834,159	–		29,834,159	330,392	29,503,767
Insurance	12,927,145	122,820	3	12,804,325	928,572	11,875,753
Taxes	2,513,454	–		2,513,454	152,334	2,361,120
General	56,654,132	6,369,215	4	50,284,917	2,485,656	47,799,261
Bid and proposal/marketing	41,141,662	3,810,734	5	37,330,928	2,707,248	34,623,680
Firm support services	2,540,312	124,744	6	2,415,568	175,178	2,240,390
Other expense (income)	2,204,277	2,214,500	7	(10,223)	(740)	(9,483)
Total general overhead costs	216,979,633	17,442,052		199,537,581	11,446,367	188,091,214
% of direct straight-time payroll					78.36%	100.92%
Total overhead cost pool	$ 312,131,415	$ 18,182,920		$ 293,948,495	$ 18,293,082	$ 275,655,413
% of direct straight-time payroll					125.23%	147.90%
Facilities capital cost of money					$ 27,333	$ 624,997
% of direct straight-time payroll					0.19%	0.34%

See accompanying notes.

This document contains information HNTB Corporation considers to be confidential and privileged and not subject to disclosure under the Freedom of Information Act and which HNTB Corporation considers as information that cannot be disclosed under the Trade Secret Act.

G. M/WBE PARTICIPATION

MBE AND WBE PARTICIPATION

Due to the nature of call-in services, the scope and magnitude of work may vary widely from task to task. It is for that reason that HNTB has not identified specific MBE or WBE firms as part of this proposal. However, in response to a specific task assignment, HNTB will propose, for Authority approval, qualified and certified MBE and/or WBE professional service team members with whom the Authority is more than familiar. HNTB will take into account the nature of the assignment and will identify a meaningful supporting role for any such MBE or WBE team partner.

HNTB is aware of the Authority goals of 12-percent MBE, and 5-percent WBE participation on technical service projects and will employ a "good faith effort" to meet those goals when a specific task order request has been identified.

H. FIRM AFFILIATES

A listing of all HNTB affiliates is shown below:

- 1914 Holding Company [redacted]. This entity is the ultimate parent of the HNTB Companies. Address: 715 Kirk Drive, Kansas City, MO 64105
- HNTB Holdings Ltd [redacted] . This entity is 100% owned by 1914 Holding Company and owns 100% of the following 3 subsidiaries. Address: 715 Kirk Drive, Kansas City, MO 64105
- HNTB Corporation [redacted]). This entity is 100% owned by HNTB Holdings Ltd. Address: 715 Kirk Drive, Kansas City, MO 64105
- HNTB International Corporation [redacted] This entity is 100% owned by HNTB Holdings Ltd. Address: 715 Kirk Drive, Kansas City, MO 64105
- HNTB Design/Build Inc ([redacted]. This entity is 100% owned by HNTB Holdings Ltd. Address: 715 Kirk Drive, Kansas City, MO 64105
- HNTB Corporation (a Massachusetts Corporation) [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Pennsylvania, Inc. [redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Alabama Inc. [redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Arkansas, Inc. [redacted] Address: PO Box 412197, Kansas City, MO 64141
- Howard Needles Tammen & Bergendoff California Architects PC ([redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Connecticut Architecture, PC [redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB District of Columbia Architecture, PC ([redacted] . Address: PO Box 412197, Kansas City, MO 64141
- HNTB District of Columbia, PC [redacted] . Address: PO Box 412197, Kansas City, MO 64141
- HNTB Georgia, Inc [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Idaho, PA [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Illinois, Inc. [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Indiana, Inc. [redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Iowa, Inc. [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Louisiana Architecture, Inc. ([redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Maine, Inc. [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Maryland, Inc. [redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Michigan, Inc. ([redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Mississippi Architecture, PC [redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Montana, Inc. [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Nevada, Inc. [redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB New Jersey Architecture, Inc. (43-1628399). Address: PO Box 412197, Kansas City, MO 64141
- HNTB New York Engineering & Architecture, PC. [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB New York Architecture, PC [redacted] . Address: PO Box 412197, Kansas City, MO 64141
- HNTB North Carolina, PC [redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB, PC [redacted]. Address: PO Box 412197, Kansas City, MO 64141
- HNTB Ohio, Inc. ([redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Oklahoma, PC. ([redacted] . Address: PO Box 412197, Kansas City, MO 64141
- HNTB Oregon Architecture, PC. [redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Rhode Island, Inc. ([redacted]). Address: PO Box 412197, Kansas City, MO 64141
- HNTB Virginia Architecture, Inc. ([redacted] Address: PO Box 412197, Kansas City, MO 64141
- HNTB Vermont Engineering, PC. [redacted]. Address: PO Box 412197, Kansas City, MO 64141

I. CONFLICT OF INTEREST

HNTB certifies to the best of our knowledge and belief that no affiliation exists that presents a possible conflict of interest for the Authority's Project Management Services Contract (Proposal No. 22388).

J. TERMS AND CONDITIONS

As requested in Section J of the RFP, contract exceptions are provided in a separate letter included with our response to this RFP.

Jacobs Civil Consultants Inc.
5 Penn Plaza, 18th Floor
New York, NY 10001-1810
212.944.2000 Fax: 212.302.4645

October 21, 2010

Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

Attention: RFP Custodian

RE: Performance of Expert Project Management Services as Requested on a "Call-in" Basis during 2011, 2012, 2013, and 2014, RFP #22388

Dear Sir or Madam:

Jacobs Civil Consultants Inc. is pleased to submit our proposal for the above-referenced solicitation.

In accordance with the requirements of the Draft Agreement included in RFP #22388 dated September 30, 2010, Section 24, Jacobs is unable to certify in the affirmative to Section 24 of the same for the reasons as stated in the attached statement.

Very truly yours,

Michael P. Cavanaugh, PE
Chief Executive Officer

Attachment

VI. Additional Information, RFP dated September 30, 2010, Fourth Page

In accordance with the requirements of the draft agreement included in RFP No. 22388 for the Performance of Expert Professional Project Management Services as Requested on a "Call-in" Basis during 2011, 2012, 2013, and 2014, Jacobs is unable to certify in the affirmative to Section 24, paragraphs of the same for the reasons as stated below:

> In 2003, due to misconduct by two former employees of an affiliate of Jacobs Civil Consultants Inc., the Jacobs organization was informed that the affiliate company was the subject of a federal investigation. More recently, the United States Department of Justice has confirmed that neither Jacobs Engineering Group Inc. nor the former affiliate is a subject of such an investigation.

JACOBS

Jacobs Civil Consultants Inc.
5 Penn Plaza, 18th Floor
New York, NY 10001
Tel: 212.944.2000 Fax 212.302.4645

October 21, 2010

Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

Attention: RFP Custodian

Re: Request for Proposals for the Performance of Expert Professional Project Management Services as Requested on a "Call-in" Basis During 2011, 2012, 2013, and 2014 (RFP #22388)

Dear Sir or Madam:

As a provider of consulting services to the Port Authority of New York and New Jersey dating back over two decades, Jacobs Civil Consultants Inc. (Jacobs) submits this proposal with a deep sense of commitment.

Our years of experience in providing call-in services to the Port Authority amount to significant knowledge of the Port Authority's facilities and a great understanding of the its programs and objectives. We are known to your staff across several departments and, most importantly, are well-versed in your standards and procedures. In short, we are dedicated and prepared to provide you with the level of excellence you have come to expect from our staff of professionals.

We have committed a substantial staff with the requisite technical knowledge and experience who are available to respond the Port Authority's needs. We look forward to the opportunity to provide you with the expertise necessary to successfully complete your call-in program for project/program management services.

Very truly yours,

Michael P. Cavanaugh, PE
Chief Executive Officer

THE PORT AUTHORITY OF NY & NJ

One Madison Avenue
New York, NY 10010

October 13, 2010

SUBJECT: REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388 – ADDENDUM #1)

Dear Sir or Madam:

The Port Authority of New York & New Jersey hereby amends the subject Request for Proposal (RFP) letter, dated September 30, 2010, as follows:

The following questions were received from an RFP recipient(s). The Authority provided the corresponding answers:

1. Please clarify what is required for III.C.3 "table that provides a summary of project experience for key personnel on this project with respect to number of projects and project costs."

It is anticipated that the table shall provide a summary of the information presented in the resumes including project costs.

2. In light of the fact that this is an on-call proposal to provide Project Management Services, is it necessary to have a license to practice Architecture or Engineering services in the State of New York and New Jersey?

Yes.

The due date for receipt of proposals remains 2:00 p.m. on October 21, 2010.

If you have any questions, please contact Ms. Tracy Tiernan at ttiernan@panynj.gov.

Sincerely yours,

Tim Volonakis
Manager
Professional, Technical & Advisory Services Division
Procurement Department

Acknolwedgement of Addendum No. 1

Michael P. Cavanaugh, PE
CEO

ATTACHMENT B

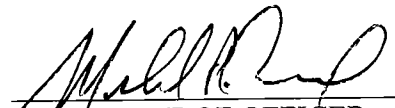
PERFORMANCE OF EXPERT PROFESSIONAL CIVIL ENGINEERING SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 – RFP #22188

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority of New York and New Jersey's (Port Authority) receipt or discussion of any information (including information contained in any proposal, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) is not to impose any obligation whatsoever on the Port Authority or to entitle us to any compensation therefore (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with, or after this letter, either orally or in writing, is not given in confidence and may be used or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this agreement, whether made as part of or in connection with any information received from us, or made at any other time in any fashion, shall be void and of no effect. This letter is not intended, however, to grant to the Port Authority rights to use any matter which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Port Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

Jacobs Civil Consultants Inc.
NAME OF COMPANY



SIGNATURE OF OFFICER

Chief Executive Officer
TITLE

September 30, 2010
DATE

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   Jacobs Civil Consultants Inc.

2. Business Address (to receive mail for this RFP):

   5 Penn Plaza, 18th Floor, New York, NY 10001

3. Business Telephone Number: **212.944.2000**

4. Business Fax Number: **212.302.4645**

5. Firm website: **www.jacobs.com**

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: **10** / **02** / **1928**

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See attached - Section H - Firm Affiliates

9. Officer or Principal of Firm and Title:

   Michael P. Cavanaugh, PE, Chief Executive Officer

10. Name, telephone number, and email address of contact for questions:
    Michael P. Cavanaugh, 212.944.2000; mike.cavanaugh@jacobs.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

List of Personnel to be assigned to this project

Project Director	Stanley Rosenblum	
QA/QC	Michael Kennedy, PE	
Program Manager	Michael Murno, PE, PP	
Aviation Facilities	*William DeGraaff, PE, Project Manager*	
	Chris Bowker, PE	David Chamberlain, PE
	Stephen Flecchia, PE	Richard Lasdin, PE
Rail Facilities	*Leo McGlynn, PE, Project Manager*	
	Stephen Bond, PE	Michael Moskowitz, PE
	James S. Craig	William Madden, PE
	Lew Morgan, PE	Michael Kennedy, PE
Tunnels	*Igor Maevski, PhD, PE, Project Manager*	
	Nick Chen, PE	Gregory Zdenek
	Kai Kang, PhD, PE	Robert Harvey, PE
Bridges	*Marcos Loizias, PE, Project Manager*	
	Avanti Shroff, PE	Robert LaMagna, PE
	Lynne Baumann, PE	Todd Schickel, PE
	Kimberly Murray	Scott Jarmel, PE
	Wanda Lam, PE	
Terminals	*Richard Wenger, PE, Project Manager*	
	Vincent Cassano, PE	David Fox
	James Coddington, PE	Ronald Zwerdling, CCM
Marine Facilities	*Thomas Schanze, PE, Project Manager*	
	Christopher Ahern, EI	John Larson, PE
	Kamran Marashi, PE	Ron Zimmer, PE
WTC Facilities	*Michael Cavanaugh, PE, Project Manager*	
	Lauren Brennan, PE	Andrew Holland, PE
	Jessica Forse, PE	
Environmental	Toby Kizner, AICP, PP	
Cost Estimating and Scheduling	JCMS	
Business Analysis	Stanley Grill	
MBE/WBE Evaluation	Stanley Grill	
Constructability	Randall Sprague, PE	
Security	Robert Craig, CPP	
Team Building	Richard LaRuffa, PE	
Construction Inspection	James McCarty, PE	
Planning & Traffic Engineering	John Pavlovich, PE	
RFP Preparation	Stanley Grill	
Risk Management	Richard LaRuffa, PE	
Sustainability	Stephen Lathrop, PE	

Profiles of Program/Project Managers

Program Manager – Michael Murno, PE, PP. All work will be managed and coordinated by Michael Murno, PE, PP; our designated Project Manager. Mr. Murno has over 40 years of experience in transportation infrastructure. Currently the infrastructure manager for the World Trade Center

Streets Project, Mr. Murno has managed numerous planning and design projects, and has monitored the activities of multi-disciplined professional personnel in the preparation of contract documents, feasibility studies, alternative analyses, and site investigations for public and private sectors. Most recently, Mike managed the MOT plans for the Alexander Hamilton Bridge, and Phases I-V for the preliminary design and EIS for Route 347; a multi disciplined 15 mile highway corridor in Suffolk County, N.Y. The project included leading and coordinating the work of 5 sub-consultants. Working under Mr. Moron's leadership will be his Principal Design Discipline Engineers and the designated sub consultants. The benefit of this approach is that each Principal Engineer will be focused on their design discipline and have the appropriate staff assigned to help maximize innovative but practical solutions. Utilizing our collaborative Team approach and coordination through internal meetings, the Team will have the benefit of sharing common information and working toward a common set of project goals and objectives.

As Project Manager, Mr. Murno will be our point of contact at all levels and direct the Team's efforts to respond to the technical, schedule, and fiscal requirements of the project. Mike will provide overall management of the project including day-to-day interface/liaison with the Authority and the entire team to bring the project to fruition. He will work closely with his designated Principal Engineers leading each Design Team – Structural, Civil, Traffic, and MEP to:

- Develop the design schedule for the project
- Monitor the development of designs to ensure the timely application of resources to the project
- Achieve maximum efficiency in meeting or bettering the schedule milestones

Working in close concert with the Authority, Mike will coordinate and monitor with the all discipline leaders in the development of bridge concepts to assure the designs are optimal and reflect the established goals/objectives /standards for the project. He will ensure that all members of the Team have a clear understanding of their project assignments. Project control, cost control, scheduling, reporting, MBE/WBE participation, and documentation will fall under Mike's purview. In addition, Mike will provide the project(s) oversight to ensure the full performance of the Team in all areas of the project(s). He will oversee all of the efforts and contractual obligations of the Team and provide the resources, support, and commitment needed.

Aviation Facilities Project Manager – William DeGraaff, PE. Bill DeGraaff's background includes an impressive 34 years of experience in airport planning and engineering, the majority of which has been with the FAA Airports Division. Mr. DeGraaff has held numerous managerial positions while in the Airports Division, including Deputy Division Manager, Acting Division Manager, Safety and Standards Branch Manager and Programming and Planning Branch Manager. In addition, he was the Regional Runway Safety Program Manager for 5 years. Bill is very knowledgeable in airport design and construction standards as well as airport safety issues and with the many FAA Advisory Circulars that cover these topics. His contribution to airport planning and engineering projects is greatly enhanced, as a result of his thorough understanding of FAA Standards and protocols. Bill is considered an expert in airport paving and airport safety. Bill has made numerous presentations on these topics at conferences throughout the country.

In his former career with FAA, Bill has worked closely with the Port Authority staff on many issues. These topics included airport design and construction standards, requests for modifications to standards, compliance with Part-139, as well as grant funding and runway safety issues.

Positions Bill held at the FAA are summarized below:

- Regional Runway Safety Program Manager
- Deputy Manager, Airports Division
- Acting Manager, Airports Division
- Manager, Planning & Programming Branch, Airports Division
- Manager, Safety and Standards Branch, Airports Division
- Supervisor, Standards Section, Airports Division
- Paving Engineer, Standards Section, Airport Division
- Supervisory Civil Engineer, Construction Branch, Airways Facilities Division
- Civil Engineer, Construction Branch, Airways Facilities Division

Rail Facilities Project Manage – J. Leo McGlynn, PE. Leo McGlynn is a results-oriented, responsible, engineering professional with extensive experience in railroad engineering, construction management, and design. He is a strong leader with excellent organization, financial management, and team building skills. Leo has managed many important and high profile projects among which are the Conrail, Bergen Tunnel Enlargement, a private/public partnership (Conrail/NJDOT, Funding Sponsor FHWA) including environmental permitting (CED) and SHPO. As project manager for this $25M National Docks Clearance Project, Leo managed the enlargement of the Bergen and Waldo Tunnels, which included Design Construction Management for the vertical clearance of two tunnels (Bergen Tunnel and Waldo Tunnel) and the clearance under the NJ TRANSIT bridge.

Mr. McGlynn has over 32 years of experience with Conrail, where he served in various capacities including Director of Design and Construction. As such, he managed a team that was responsible for the design and construction of all capital and state participation projects and construction agreement negotiation with government and transit agencies. Responsibilities included safety, customer satisfaction, employee development, on-time performance, budget, design, estimating, and construction integration with rail operations.

Under his direction his team completed five rail infrastructure projects worth $168,000,000 in construction cost.

- Northern Branch Double Track, 3.8 miles of new track and 2 new remote control interlockings.
- North Jersey Infrastructure Project, 10 miles of double track and 8.5 miles of secondary and yard tracks and 8 new remote controlled interlockings
- Reviewed and approved the track design for 75,000 feet of new on-dock loading and support tracks
- Conrail-NJDOT Joint Participation National Docks clearance and CP Port Reading Junction upgrade and expansion
- Managed the design and construction of approved projects including the International Paper industrial track upgrade in Florence, NJ and the new interchange track at Winslow Junction.

With his track record and dedicated work ethic, we are confident that Mr. McGlynn can get results consistent with the Authority's goals and objectives and that he is well suited to any Rail Facilities project.

Tunnel Facilities Mechanical/Electrical Project Manager – Igor Maevski, Ph.D., PE. Igor Maevski, a licensed Professional Engineer in New York and New Jersey, has over 26 years of experience in diverse mechanical system design, feasibility studies, and alternatives development and analysis. He is nationally recognized as a specialist and authority in defined and applied solutions, including technical guidance for transportation and facilities ventilation design, and has authored numerous articles on tunnel ventilation. He is experienced in the research and design of heating/ventilation and air conditioning systems for roadway, railway, and subway tunnels, stations, and industrial plants. Igor was also the Senior Mechanical Engineer for the Authority's Holland Tunnel Ventilation System Rehabilitation and Project Manager for Authority's Mechanical Engineering Services – Design of Fire/Smoke Management and Tunnel Ventilation Systems Task 1 Hudson Mews Overbuild Project for the 2007-2009 Call In.

As Project Manager and Team Leader for the MTA Triborough Bridges and Tunnels, Brooklyn Battery Tunnel Design and Construction Support Services for Project BB-45 Igor was responsible supply fan replacement, switchgear replacement and Manhattan underground Exhaust Building (MUEB) fan Upgrade and repairs.

Igor also served as Team Leader for the LBJ Tunnels Procurement Engineering Project in Dallas Texas, responsible for Road Tunnel Ventilation. He also served as Team Leader for the SR99 Bored Tunnel Architectural Services, Alaskan Way Viaduct Project for the Washington DOT responsible for tunnel ventilation and fire life safety. As Senior Mechanical Engineer for the Massachusetts Highway Department, I-93 Central Artery/Tunnel Mechanical and Electrical Systems Contract D020B in Boston, Igor was responsible for the tunnel ventilation systems including the performance of a Computational Fluid Dynamics (CFD) analysis of air flow distribution.

Bridge Facilities Project Manager – Marcos Loizias, PE. Marcos Loizias has over 25 years of professional experience, during which time he has been in charge of the planning, structural design and plan production, construction and/or rehabilitation of numerous steel and concrete long-span bridges (cable-stayed, suspension, arch, truss, girder, segmental), movable bridges, interchanges and major viaducts throughout the U. S. He is experienced in both conventional design/bid/build and design/build projects.

Marcos currently is Jacobs national bridge design practice lead and is recognized nationally as a leader in bridge design solutions.

Terminal Facilities Project Manager – Rick Wenger, PE. Rick Wenger is a licensed professional engineer with over 19 years of construction management/ inspection experience. Mr. Wenger is an experienced Resident Engineer with attentiveness to details and options. Past and present experience has primarily focused on constructing and renovating NY City and NY State owned vehicular repair, parking, and administrative facilities with diversified and specialized equipment including fuel storage and dispensing, pneumatically and electrically operated vehicle repair, lifting and frame straightening, and machine/ blacksmith shop. Pre-construction duties have entailed scope development through the understanding of user needs, preliminary and final design documents constructability reviews, preparation of pre-bid Addendums, conducting pre-bid walkthroughs, and bid evaluation/ award.

Marine Facilities Project Manager Tom Schanze, PE. Tom Schanze has over 27 years of experience that spans engineering project management and corporate, operations and financial management. As engineering project manager, he has worked on multi-million dollar port and marine facilities located both in this country and abroad. Mr. Schanze has also served as project manager and assistant project director involved in environmental consulting services, and a client manager for the St. Johns River Water Management District.

Tom has served as Principal-in-Charge of several major port projects around the world bringing effective project management resulting in successful project completion of major projects. Hs solutions based approach results in cost and time savings for the Port owner.

WTC Facilities Project Manager – Michael Cavanaugh, PE. Mr. Cavanaugh has extensive project management experience on a wide variety of assignments involving the rehabilitation of highways, streets and their related infrastructure in the New York metropolitan area. Mr. Cavanaugh has been involved in the design and construction services for over 30 miles of streets and roadways for agencies such as NYS Department of Transportation, NYC Department of Transportation and the NYC Economic Development Corporation. The projects have encompassed topographic surveys/ mapping, subsurface investigation and pavement design, design reports and the preparation of final plans, specifications and estimates for street reconstruction work including drainage, traffic signals and street lighting improvements. His experience encompasses extensive underground utility work that includes utility surveys, subsurface investigations and test pitting and the design of new and relocated utility system.

Currently, Mike is Project Manager for the Port Authority of NY & NJ, World Trade Center Streets, Utilities, and Related Infrastructure Designs. Mike leads a joint venture team on this $200M project providing design services for the creation of Greenwich Street between Vesey and Liberty Streets, and Fulton Street between Route 9A (West Street) and Church Street, including the installation of street utilities (water, storm and sanitary sewers, gas, and steam mains) to service the World Trade Center Site. As such, Mike is eminently qualified to serve as WTC facilities project manager. He is abreast of the WTC programs and is familiar with WTC stakeholder requirements.

> ***Jacobs recognizes the critical role that Mike has with the Design Services for Street, Utilities and Related Infrastructure project. Therefore Mike will be able to support this project only after concluding his current responsibilities for the Port Authority.***

Mike has also served as principal in charge on a previous Port Authority of NY & NJ, Civil Engineering Services on a "Call-In" Basis, which included over 33 assignments ranging in fee from $25,000 to approximately $270,000. The project design work included roadway reconstruction, airside site work, storm drainage rehabilitation, utility relocation and pavement repair.

Subconsultants

JCMS (MBE)

JCMS, Inc. a Certified Minority Owned Business Enterprise, is a respected professional consulting firm engaged in Cost Estimating, CPM scheduling and Web Based Document Control. Founded in 1985, JCMS is headquartered in Mercerville, N.J. with branch offices in New York, NY, Newark, NJ and Washington D.C. JCMS has provided scheduling, and definitive cost estimates on projects ranging in

cost from $1M to over $1B for various agencies in the Northeast including PANYNJ, SEPTA, NYCT, MNR, AMTRAK, LIRR, NJ Transit, DRPA, MBTA. JCMS has well qualified and experienced professionals in the field of project management (PM), construction management (CM) and construction claims. We provide PM/CM consulting services in the United States and in Canada.

KS Engineers, P.C. (MBE)

KS Engineers is a Certified Minority Owned Business Enterprise, has earned a reputation for being a top-ranked, highly regarded, client responsive professional engineering, survey, and construction management firm. Founded in 1991, the corporate headquarters is located in Renaissance City, Newark, New Jersey. The firm has regional offices in New York City, Philadelphia, PA, as well as Southern New Jersey. KSE serves clients in both public and private sectors. Their comprehensive engineering and surveying services include civil, structural, geotechnical, traffic and transportation engineering, complete survey and right-of-way mapping, resident engineering, construction inspection and construction management, site safety, and structural integrity/condition inspections. KSE structural engineers, combined with their traffic and survey staff, provide extensive capabilities in the rehabilitation of existing structures and in the aesthetic design and construction of new and replacement steel, concrete, and timber structures including pre-stressed, post-tensioned and curved girder bridges. KSE's recent experience with the Port Authority includes numerous assignments as a Prime Consultant.

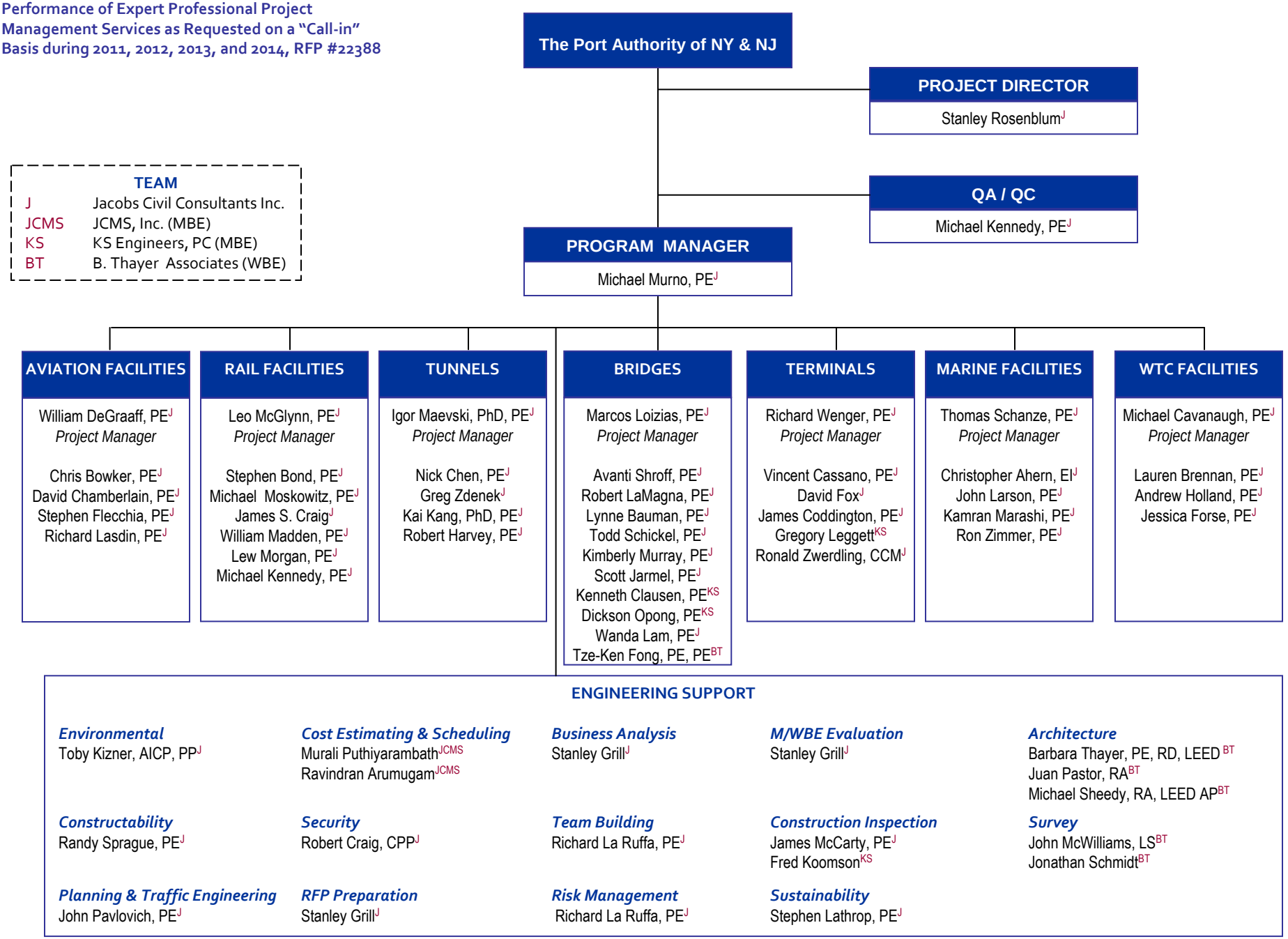
Barbara Thayer Associates (WBE)

Established in 1990 by Barbara Thayer PE, RA, LEED AP, B Thayer Associates (BTA) is a well respected architectural and engineering firm, specializing in bridge design and headquartered in Woodbury Long Island. BTA is also a member of the United States Green Building Council (USGBC), and sustainable design is a vital piece of each of the firm's projects. BTA is a Port Authority Certified Woman Owned Business Enterprise (WBE) and will fulfill the WBE requirement for this project. Current and recent projects include involvement with the No. 7 Subway Extension, East Side Access Tunnel Project, and the Access to Regions Core Tunnel Project. Additionally, BTA is currently working on the seismic upgrade of the Macombs Dam Bridge and the upgrade of the Queens Approach to the Whitestone Bridge, the pedestrian access ramps for the Willis Avenue Bridge, and the renovation and upgrade of the Queens Abutment of the Throgs Neck Bridge.

KEY PERSONNEL

Project Leadership	Total # of Projects	<$10M	$10M - $50M	$50M - $100M	>$100M	Project Mgmt	Conceptual Design	Prelim Design	Final Design	Contract Prep	Construction Completion
Name / Title											
Michael Murno - Project Manager	42	8	6	15	12		✓	✓	✓	✓	✓
Stanley Grill - RFP Prep/M/WBE Goals		>100,000	>50	>500	>50	✓			✓	✓	
Richard LaRuffa - Value Engineering	50	5	20	15	10	✓	✓	✓	✓		
Jim McCarty - Construction Inspection	17	7	6	2	3	✓	✓	✓	✓		✓
Aviation											
William DeGraaff	10	9		1		✓	✓	✓	✓	✓	✓
Chris Bowker	10	3	6	1		✓	✓	✓	✓	✓	✓
Tunnels											
Nick Chen	23		8	6	9	✓	✓	✓	✓	✓	✓
Igor Maevski	23	8	4	3	8	✓	✓	✓	✓	✓	✓
Robert Harvey	4	1	2	1		✓	✓	✓	✓	✓	✓
Greg Zdenek	5	2	2	1		✓	✓	✓	✓	✓	✓
Bridges											
Marcos Loizias	54	10	16	14	14	✓	✓	✓	✓	✓	✓
Leo McGlynn	10	9	1							✓	✓
Robert LaMagna	13	8	2	1	2	✓	✓	✓	✓	✓	✓
Terminals											
Rick Wenger	2		1		1	✓	✓	✓	✓	✓	✓
Rail											
Michael Kennedy	7	4	5	1	1	✓	✓	✓	✓	✓	✓
Leo McGlynn	184	173	7	4		✓	✓	✓	✓	✓	✓
William Madden	225	165	37	20	3	✓	✓	✓	✓	✓	✓
WTC											
Michael Cavanaugh	125	110	10	3	2	✓	✓	✓	✓	✓	✓
Jessica Forse	14	12	2			✓	✓	✓	✓	✓	✓
Marine											
Tom Schanze	8		2	2	4	✓	✓	✓	✓	✓	✓
Leo McGlynn	5	5								✓	✓
Other Services											
John Pavlovich - Planning & Traffic Eng						✓	✓			✓	
Toby Kizner - Environmental Planning	10	3	5	2		✓				✓	

Performance of Expert Professional Project Management Services as Requested on a "Call-in" Basis during 2011, 2012, 2013, and 2014, RFP #22388



JACOBS

Michael J. Murno, PE, PP
Program Manager

Education

- MS, Transportation Planning, 1973
- BS, Civil Engineering, 1969

Registration

- Professional Engineer:
  NY #[redacted]
  NJ #[redacted]
  VA #[redacted]
- Professional Planner:
  NJ #[redacted]

Employment History

1994-Present - Jacobs
1994-1992 - Envirodyne/ CTE
1982-1992 - Goodkind and O'Dea
1979-1982 - PRC Harris
1973-1979 - Parsons Brinckerhoff Quade
1971-1973 - Vollmer Assoc.
1969-1971 - Andrews and Clark

Mike Murno has extensive and diversified experience in all phases of highway and transportation engineering including the design of such transportation facilities as interchanges, multi-lane highways and expressways, railroads, mass transit, arterials, and access roads. He has managed numerous planning and design projects, and has monitored the activities of multi-disciplined professional personnel in the preparation of contract documents, feasibility studies, alternative analyses, and site investigations for public and private sectors.

Mr. Murno's project experience includes coordination and liaison with state and local agencies, subconsultants, community groups, and chambers of commerce. He has provided engineering services to the Departments of Transportation in New York, New Jersey, Virginia, and Connecticut; the Battery Park City Authority (BPCA); The Toll Road Corporation of Virginia (TRCV); The Triborough Bridge and Tunnel Authority (TBTA); The Port Authority of New York and New Jersey; and The New York State Thruway Authority (NYSTA).

Mr. Murno has been actively involved in public participation and involvement programs on large scale projects, including formal public information meetings, community board meetings, public hearings, and environmental impact statements.

Project Experience

Port Authority of New York & New Jersey, World Trade Center Streets, Utilities and Infrastructure, NY (2010). Serves as Infrastructure Project Manager on this project which consists of the creation of Greenwich Street between Vesey and Liberty Streets, and Fulton Street between Route 9A (West Street) and Church Street, including the installation of street utilities (water, storm and sanitary sewers, gas, and steam mains) to service the World Trade Center Site.

NYS Dept. of Transportation, Design Phases I-IV for Route 347; Northern State Parkway to Route 25A, Suffolk County, NY (2004-2007). Project Manager for the preliminary design (Phases I-IV) for 15 miles of the Route 347 Reconstruction Project(estimated construction cost $500M-$800M environmental mitigation). The project consisted of developing two alternatives, including the No Build, for the roadway. The project encompassed 2 interchanges at major intersections, and 35 intersecting cross roads, noise walls, ROW acquisitions, storm water recharge basins. Additionally, the project examines traffic demand management and traffic system management strategies, namely ITS solutions. The project is being coordinated among five subconsultants, local municipalities, community planning boards, chambers of commerce, and cooperating federal and state agencies. A full Environment Impact Statement and a design report, including plans for the community-sensitive alternative, are being prepared.

NYC Dept. of Transportation, Bridge Rehabilitation Projects (Metropolitan Avenue over English Kills, Brooklyn Queens Expressway over Cadman Plaza, Crooke Avenue over the BMT, Newkirk Avenue over the BMT, Grand Street over Newton Creek, and Bryant Avenue

over Amtrak and ConRail, Brooklyn and Bronx, NY. Manager of the Highway/Civil design efforts in the production of construction plans, including alignment, profiles, grading, paving, drainage, and MPT Plans; estimates; and specifications for the roadways.

NYS Dept. of Transportation, Rehabilitation of 16 Bridges on or Spanning the Cross Bronx Expressway, Section I-95 Alexander Hamilton Bridge Complex from Amsterdam Avenue in New York County to Undercliff Avenue in Bronx County (2000-2009). Principal Engineer responsible for the civil engineering and the preparation of construction staging and MPT plans for both the main line and the interchange ramps for Segment 1, and the coordination of MPT for all four segments. Mike was responsible for coordinating such tasks as MPT, including the development of a detailed traffic network model to assess various construction staging and MPT scenarios for various roadways. The project consisted of more than 10 miles of roadways and construction contract packaging for 50 bridges on or spanning the CBE.

NYS Dept. of Transportation, Design Phases I-IV for Route 34; Northern State Parkway to Route 25A, Suffolk County, NY (1994-1996). Project Manager for the preliminary design (Phases I-IV) for 15 miles of the Route 347 Reconstruction Project (estimated construction cost ($300M-$400M). The project consisted of developing three (3) alternatives for the roadway, including as many as 22 interchanges, parallel service roads, and intersecting crossroads. Additionally, the project examined traffic demand management and traffic system management strategies, including HOV, employer commuter options, and ITS. Land use options were also considered such as Down Zoning, Transfer of Development Rights, and Development Improvement Districts. The project was coordinated among four (4) subconsultants, local municipalities, community planning boards, chambers of commerce, and cooperating federal and state agencies. A full Environmental Impact Statement and a design report, including plans for each alternative, were being prepared.

NYS Dept. of Transportation, Route 9A Reconstruction Project Horatio Street to West 26th Street, Phases V-VI, NY (1998). Project Engineer for final design services for this one-mile segment. This $70 million project involved full reconstruction of the roadway to provide a landscaped Boulevard adjacent to the Hudson River. Mr. Murno directed the development of MPT and civil designs for the project, which encompassed six construction stages. MPT was complicated by the extensive underground utility work of the project, which included a system of duel 20-inch water mains, a new storm sewer system, a relocated outfall/tide gate chamber and new nine-duct telephone bank. Extensive coordination was required with major adjacent uses, which included the Gansevoort Meat Market and the Chelsea Piers Sports Complex.

NYS Dept. of Transportation, Design Phases I-IV Trans-Manhattan Connector Ramp from the Harlem River Drive, Manhattan, NY (2000-2005). Project Manager for the preliminary design phases, consisting of alternative analyses, traffic and environmental studies and Environmental Analysis (EA), including a final design report for the rehabilitation of the ramp connecting the Harlem River Drive with the Trans-Manhattan Expressway. Responsible for developing four alternatives with respect to the rehabilitation/ replacement of the Ramp; the No Build Alternative, a full rehabilitation of the existing ramp, a complete replacement of the existing ramp on the existing alignment, a partial/complete replacement on new alignments both onshore and offshore.

Stanley J. Rosenblum
Project Director

Education

- MA, City and Regional Planning, 1978
- BA, Political Science, 1974

Employment History

2002-Present - Jacobs
1998-2002 - NJ Transit
1994-1998 - NJ Department of Transportation
1981-1994 - NJ Transit
1978-1981 - Gov. Byrne's NJ/Washington Office

Mr. Rosenblum's professional career spans both the private and public sector. He has direct experience in the day-to-day operations of complex organizations, legislative experience at both the Federal and State levels of government, and public policy and strategic planning experience in both the public and private sectors. As Vice President of Operations for Jacobs, Mr. Rosenblum manages the Mid-Atlantic Infrastructure Region where he is responsible for overseeing the quality work performance and operational productivity of approximately 600 professionals. He has served in leadership positions with Jacobs since 2002.

Mr. Rosenblum has extensive experience in leading large transportation organizations, and spearheading planning, policy and legislative issues at the Federal and state level. He has directed numerous efforts to improve operational performance and efficiency, secure and advance innovative financing solutions, and advance complex policy initiatives related to the prioritization of investments and strategic planning.

Mr. Rosenblum served as Acting Executive Director of NJ TRANSIT and as the public agency's Chief Operating Officer/Deputy Executive Director from 1998 through 2002, where he was responsible for day-to-day operations and the overall operational performance of the third largest transit agency in the United States. He implemented quality improvement programs that resulted in the high levels of rail on-time performance and bus reliability. He also served as the transit agency's lead person on policy development and legislative affairs earlier in his career at NJ TRANSIT. During his tenure at NJ TRANSIT, he implemented service standards and performance objectives that resulted in NJ TRANSIT meeting or exceeding financial and operational performance objectives; advanced the procurement of approximately $1 billion of commuter rail and over-the-road and urban bus and light rail rolling stock. During his tenure NJ TRANSIT initiated light rail service on the Hudson-Bergen Line, and extended operations of the Newark city subway. Mr. Rosenblum implemented programs to prioritize and evaluate capital investments, established a streamlined capital project delivery process that reduced conception to construction time by 25 percent, and initiated cost control programs that increased the financial performance of bus and rail services, while reducing administrative overhead and costs.
Mr. Rosenblum also served as the Deputy Commissioner of Transportation for the New Jersey Department of Transportation, and in other senior positions from 1996 through 1998. His emphasis as Deputy was on improved maintenance and operational practices, the implementation of strategic performance measures for capital program delivery and prioritization, strategic plans related to ITS deployment, and an improved integration of services with local governments for the construction of local road projects and the delivery of local based transit services.

Project Assignments with Jacobs

NJ Turnpike Authority (NJTA), Interchange 6 to 9 Widening, Section No. 8 Design, NJ. Deputy Project Executive responsible for assuring adequate resources to support the project, adherence to Jacobs procedures and overall project oversight for the widening of the NJ Turnpike from Interchange 6 to 9. This project involves a total of eight design sections between Milepost 48.7 and 82.6 along the NJ Turnpike Maineline. Working closely with the NJ Turnpike and other

consultants, Jacobs' responsibilities included the fast tracking of environmental permits, final design, and construction support for this widening.

Port Authority of Allegheny County, Program and Construction management for the North Shore Connector, Allegheny County, PA. Deputy Project Executive responsible for assuring adequate resources to support the project, adherence to Jacobs procedures and overall project oversight for the expansion of the Port Authority of Allegheny County's light rail system in order to connect downtown Pittsburgh to the Shore through the construction of two bored tunnels under the Allegheny River and the construction of two new stations. Jacobs' responsibilities include program and construction management of this $450 million federally funded project.

Dulles Rail Extension
Deputy Project Executive responsible for assuring adequate resources to support the project, adherence to Jacobs procedures and overall project oversight for the extension of Washington's Metro system, 23.1 miles from East Falls Church Metro Station westward to Ashburn in Loudoun County Virginia (11 new stations). Jacobs' responsibilities on this project include program management support and construction management oversight.

Projects with NJ TRANSIT/NJDOT:
Transportation Capital Investment Strategy (TCIS). Project Director responsible for establishing the policy framework and guidelines required to implement a TCIS for NJDOT and NJ TRANSIT. The project included an assessment of current conditions; and the development of standards for reinvestment based on factors including useful life; safety; customer impact; and reduction in operation costs. The TCIS became the guiding document for capital programming decisions at both NJ TRANSIT and NJDOT.

NJ TRANSIT Fast-Track Program: Project Director for the fast tracking of six critical infrastructure projects at NJ TRANSIT. The fast track program's goal was to significantly reduce the schedule to bring these projects to construction through the leveraging of unencumbered funds, streamlining of the environmental review process, consideration of design alternatives and the implementation of innovative and simplified procurement strategies.

NJ TRANSIT Station Program: Project Director for the implementation and advancement of the NJ TRANSIT Station Program. The Station Program's goal was to develop uniformed standards for NJ TRANSIT stations as it related to station capital conditions, cleanliness and customer services; the identification of capital funding to support the station program, and a community outreach effort to increase local interest in the station as a community asset.

NJ TRANSIT Long Range Plan: Project Director for the development of NJ TRANSIT's Long Range Plan that identified the trends, conditions and needs of public transportation operations, and capital reinvestment. The plan also articulated a series of public policy proposals required to support the long term growth of transit in the state. The plan was adopted by the NJ TRANSIT Board of Directors and approved by the Governor's Office.

Michael J. Kennedy, PE
QA/QC

Education

- **BS, Civil Engineering, Bucknell University, 1980**

Registration

- **Professional Engineer: NY #** [redacted]

Employment History

- 1980-present - Jacobs

Michael Kennedy has served as project manager on a wide variety of civil engineering assignments, including projects for site development, rail expansion and aviation improvements, new facility construction, and highway reconstruction. These projects have included conceptual studies, Major Investment Studies, Environmental Impact Statements, preliminary designs, preparation of final contract documents and design-build. He has been responsible for overall client contact, technical designs, quality control, budget and schedule. Mr. Kennedy has been in charge of producing contract documents on projects with construction costs ranging from $500,000 to $282 million. A skilled communicator, he maintains a strong public information program, building trust through proactive, informative, and honest communication.

Project Experience

Amtrak, Nationwide Program Management for Designated American Recovery and Reinvestment Act Projects (ARRA). Nationwide Design Manager overseeing the development of bridging documents for more than 400 Amtrak projects nationwide. The bridging documents will be used to procure approximately 50 design-build contractors to complete the series of ARRA stimulus projects within an 18-month time period. As the Nationwide Design Manager, Mr. Kennedy is responsible for delivery of these documents for $460 million worth of improvements at stations, facilities and along the mainlines. The work includes facility upgrades, security enhancements, station improvements, track replacement, signal projects, and right-of-way upgrades.

Port Authority of NY&NJ, Relocation of Taxiways "I" and "O" at John F. Kennedy International Airport, Queens, NY. Engineer responsible for the "landside" designs of the relocated service roads, parking lots, details and the construction cost estimate for the Port Authority of New York and New Jersey, as part of final design contract documents for the $30 million relocation of the two most heavily utilized taxiways at Kennedy Airport.

Port Authority of NY&NJ, 1990 - 1999 Civil Engineering Services on a "Call-In" Basis, NY & NJ. Project Manager responsible for more than thirty different projects encompassing rehabilitation and design for roadways and parking lots. Some of the projects included:

- LaGuardia Airport: drainage and utility study encompassing existing lines and proposed improvements
- JFK and LaGuardia Airports: design of new intersections and service roads, including drainage and utility designs
- Newark Airport: design and reconstruction of three parking lots at. This work included utility studies, regrading, architectural improvements, drainage design and maintenance of traffic
- North Tube of the Lincoln Tunnel: rehabilitation including pavement reconstruction, drainage improvements, traffic control, plaza reconstruction and construction sequencing; rehabilitation of roadway slabs over an electrical vault at the Lincoln Tunnel toll plaza
- Port Newark and Port Elizabeth: roadway rehabilitation and track reconstruction on several streets
- George Washington Bridge: safety recommendations for impact attenuators
- Outerbridge Crossing: rehabilitation of roadways and parking lots

- Goethals Bridge: fencing improvements

MTA Metro-North Railroad, Cortlandt Station Parking, Intermodal and Access Improvements, Cortlandt, NY. Project Manager for this $25 million project to add 750 parking spaces, a new pedestrian overpass, station and plaza to the Metro-North Railroad Cortlandt Train Station. The project involves new utilities, lighting, stormwater management facilities, roadway bridge, access road, retaining walls and toilet facility. Mr. Kennedy is responsible for the day-to-day management of the design, quality, administrative tasks and schedule.

MTA Long Island Rail Road, Arch Street Yard and Shop, Queens, NY. Managed design for a $76 million design-build project that received the American Council of Engineering Companies' "Diamond Award for Engineering Excellence, New York City;" and the American Society of Civil Engineers' "Design-Build Project of the Year Award," New York City. He was responsible for producing nearly 900 contract drawings. The state-of-the-art facility is located on a 12-acre site and contains a 5-track heavy maintenance shop, administration offices, rail yard and several storage buildings. The new facility can accommodate more than 200 employees and has its own substation. LIRR sent a letter to our senior management stating that they "were extremely pleased with the cooperation of the design-build team and their commitment to providing a superior product." They also recognized "the efforts of Design Manager Michael Kennedy" and "the many competent design personnel that worked on the project."

MTA Metro-North Railroad, Harmon Shop Replacement Phase III, Croton-on-Hudson, NY. Design Manager responsible for the design for the largest engineering and construction project ever awarded by Metro-North Railroad. Responsible for preparation of approximately 1,750 contract drawings within a 12-month time frame. Oversaw technical team, administration, budget, and schedule. The $282 million project included a 65,000-SF locomotive shop, a 110,000-SF coach shop, 15 new tracks, new K-9 grounds for MTA police dogs, and design of drainage, utilities, communications systems, power, lighting, snowmelter, and traction power systems. All elements of the 20-acre site were designed in an active rail yard.

MTA Metro-North Railroad, Wheel Truing Facility, Croton-on-Hudson, New York, NY. Lead Civil Engineer responsible for the site civil and utilities designs. The project involved a new Wheel Truing Facility at Harmon Yard, including roadways, utilities, and a drainage recharge system. The 12-month design-build project was especially fast in order to get the facility on-line for the peak wheel truing season in the autumn of 2007.

MTA Metro-North Railroad, Irvington, Greystone and Spuyten Duyvil Station Improvements and Expansion, New York, NY. Project Manager responsible for general conceptual, preliminary and final design contract documents covering site civil elements, including access road realignments and widening, parking lot reconfigurations, parking lot expansion, pedestrian circulation and amenities. Mr. Kennedy is responsible for coordinating technical designs and coordinating the design effort across a multi-discipline design team, consisting of electrical, structural, and civil engineering.

William J. DeGraaff, PE
Aviation Facilities – Project Manager

Education

- MS, Civil Engineering, 1975
- BS, Civil Engineering, 1972

Registration/Credentials

- Professional Engineer: NY# [redacted]

Employment History

- 2/2010-Present - Jacobs
- 2006-2010 – DY Consultants
- 1980-2006 – Federal Aviation Administration

Bill DeGraff's background includes an impressive 34 years of experience in airport planning and engineering, the majority of which has been with the FAA Airports Division. Bill has held numerous managerial positions while in the Airports Division, including Deputy Division Manager, Acting Division Manager, Safety & Standards Branch Manager and Programming & Planning Branch Manager. In addition, he was the Regional Runway Safety Program Manager for 5 years. Bill is very knowledgeable in airport design and construction standards as well as airport safety issues and with the many FAA Advisory Circulars that cover these topics. His contribution to airport planning and engineering projects is greatly enhanced, as a result of his thorough understanding of FAA Standards and protocols. Bill is considered an expert in airport paving and airport safety. He has made numerous presentations on these topics at conferences throughout the country.

In his former career with FAA, Bill has worked closely with the Port Authority staff on many issues. These topics included airport design and construction standards, requests for modifications to standards, compliance with Part-139, as well as grant funding and runway safety issues.

Project Experience

DY Consultants, Director of Technical Services (2006-2010)
Bill served as Project Manager for airport engineering and planning projects and resident expert on FAA design, construction, and safety standards. He was the liaison for coordination issues with FAA and provided advice/ assistance to junior airport engineers. Projects include:

- **Port Authority of New York & New Jersey:**
  - **JFK Rotating Beacon Relocation Analysis. Project Manager.** This project was a study to determine the three best locations for a new rotating beacon at Kennedy Airport as well as the best and most appropriate equipment (beacon) available for the airport. The existing rotating beacon is currently located on Hangar 12, which is scheduled for demolition.
  - **JFK, Runway 13L/31R and Runway 4L/22R, Runway Safety Area Improvement Project. Project Manager.** Bill's role was to identify all navigational equipment that would be required to be relocated under the various alternatives and identify new sites for each piece of equipment. Bill provided guidance on how to adjust or relocate these items to accommodate the new location of the runway ends.

- **Los Angeles World Airport, Peer Review Group, LAX - Project Manager.**
  A Peer Review meeting for Los Angeles World Airport. The airport was considering runway/terminal alternatives to accommodate an increase in operations, the introduction of the Airbus A-380 and terminal capacity enhancements, all with severe Runway Incursion problems. Bill lent the group his expertise in Runway Safety in considering alternatives to airside improvements.

William J. DeGraaff, PE
Aviation Facilities – Project Manager

- **Connecticut Dept. of Transportation, Airport Obstruction Analysis. Project Manager.** Obstruction Analyses at Bradley International Airport as well as five general aviation airports. Project consisted of an in-depth analysis of FAR Part 77 surfaces and approach surfaces, TERPS, and ILS critical areas.

- **Groton-New London Airport, EMAS, Groton, CT. Project Manager.** Design and installation of an Engineered Materials Arresting System at an environmentally sensitive airport.

- **East Hampton Airport, Airport Master Plan, East Hampton, NY. Project Manager.** Development of a non-FAA funded Master Plan, which presented alternatives for the future of a controversial airport in the very noise sensitive area of the Hamptons.

- **Capital City Airport, MALSR Installation, Harrisburg, PA. Project Manager.** In charge of replacement of an SSALR approach lighting system with a MALSR. Light stations traversed a residential area presenting numerous design/construction challenges. Project also included design and installation of a PAPI.

- **Trenton-Mercer Airport, Taxiway A, C and J Rehabilitation, Trenton, NJ. Project Manager.** Coordinated and oversaw design and construction of over 7,000' of taxiways. This project encompassed pavement rehabilitation, survey work, drainage and the installation of new technology LED lights on the taxiways.

Bill was also a valued member of the team on the following Port Authority projects:
- JFK Operational Efficiency Study
- ALP Update (EWR, JFK, LGA, TEB)
- Snow Study Update (All five Port Authority Airports)
- Delay Reduction Initiative (All five Port Authority Airports)

Federal Aviation Administration – Eastern Region, Queens, NY (1980-2006)
- Regional Runway Safety Program Manager. 10/2000-2006. Bill served as a recognized technical authority on the Runway Safety Program and as such was responsible for the formulation, direction, coordination, management and evaluation of runway safety strategic plans, programs, procedures and mitigation strategies. The purpose of the work was to maximize safety, efficiency and service levels within the National Airspace System by reducing runway incidents/accidents.
- Deputy Manager, Airports Division. 4/1997-10/2000.
- Acting Manager, Airports Division. 6/1996-4/1997
- Manager, Planning & Programming Branch, Airports Division. 5/1994-6/1996.
- Manager, Safety and Standards Branch, Airports Division. 7/1987-5/1994.
- Supervisor, Standards Section, Airports Division. 8/1986-7/1987.
- Paving Engineer, Standards Section, Airport Division. 12/1982-9/1986.
- Supervisory Civil Engineer, Construction Branch, Airways Facilities Division. 12/1980-12/1982.
- Civil Engineer, Construction Branch, Airways Facilities Division. 6/1976-12/1980.

Christopher W. Bowker, Jr., PE
Aviation

Education

- BS, Civil Engineering, 1990

Registration/Credentials

- Professional Engineer: MA, FL, VA

Mr. Bowker has over 18 years of experience in airport engineering with specific emphasis on airfield related projects. He is extremely familiar with the FAA Advisory Circulars and the various requirements of the FAA. Mr. Bowker not only has experience in the traditional "design/bid/build" delivery method of a project, but has also been involved with FAA reimbursed design-build projects.

Mr. Bowker currently serves as a Senior Project Manager / Aviation Practice Leader. Mr. Bowker's professional experience reflects his strong aviation background. He has served as a Project Manager and Resident Engineer on numerous airport design and construction projects ranging from small general aviation airports to major hub airports. Projects have included pavement design for runways, taxiways, and parking aprons, the installation of guidance signs, taxiway centerline and edge lights; pavement rehabilitation and overlays; airfield drainage NAVAIDS, and design and construction of Engineered Material Arresting System (EMAS).

Project Experience

Port Authority of NY & NJ, Engineered Material Arresting System (EMAS), Newark Liberty International Airport, Newark, NJ. Project Manager on this Design-Build project to design, permit and construct an Engineered Material Arresting System in the overrun to Runway 29. The project included designing the site to accommodate the installation of and EMAS. The site improvements included drainage and earthwork, which required the project to obtain permits from NJDEP and Bergen County. Jacobs' responsibilities included all aspects of design, permitting and the construction of the site improvements and the installation of the EMAS material. Project management responsibilities included all aspects of design, construction management, safety, and subcontractor and subconsultant coordination.

Port Authority of NY & NJ, Engineered Material Arresting System (EMAS), JFK International Airport, Queens, NY. Project Manager on this Design-Build project to design, permit and construct an Engineered Material Arresting System in the overrun to Runway 22L. The project included designing the site to accommodate the installation of and EMAS. The site improvements included drainage, earthwork, re-routing low and high voltage utilities, and modifications and upgrades to ALSF-2 approach lights. Jacobs' responsibilities included all aspects of design, permitting and the construction of the site improvements and the installation of the EMAS material. Project management responsibilities included all aspects of design, construction management, safety, and subcontractor and subconsultant coordination.

Port Authority of NY & NJ, Engineered Material Arresting System (EMAS), Teterboro Airport, Teterboro, NJ. Project Manager on this Design-Build project to design, permit and construct an Engineered Material Arresting System in the overrun to Runway 6. The project included designing the site to accommodate the installation of and EMAS. The site improvements included drainage and earthwork, which required the project to obtain permits from NJDEP and Bergen County. Jacobs' responsibilities included all aspects of design, permitting and the construction of the site improvements and the installation of the EMAS material. Project management responsibilities included all aspects of design, construction management, safety, and subcontractor and subconsultant coordination.

Christopher W. Bowker, Jr., PE
Aviation

Port Authority of NY & NJ, Engineered Material Arresting Systems, LaGuardia Airport. Design Engineer and Construction Manager on this Design-Build project for two Engineered Material Arresting Systems (EMAS) in the overruns of Runways 22 and 13 at LaGuardia Airport. Responsibilities included design and construction supervision. Design involved preparing construction plans and specifications. Construction supervision involved construction inspec-tion, coordination of construction subcontractors with the airfield operational requirements, and certifying the installation of each EMAS.

Pensacola Regional Airport, Terminal and Parking Structure Expansion, Pensacola, FL. Project Principal directed design efforts for this multi-facility, multi-phase project expansion of the existing apron, construction of a new remote overnight parking area, relocation of airfield power and control circuits together with fiber optic cables. This project involved interfacing with facility utilities with the building expansion of the existing terminal as well as local utilities to coordinate the relocation and connection of storm, sanitary, water and natural gas. Extensive coordination with NWFWMD for permitting of the projects was also required.

Hartsfield-Jackson Atlanta International Airport, Extension of Runway 27R, Atlanta, GA. Project Manager for a 500 foot extension to Runway 27R and associated parallel taxiways L and M. The extension accommodated a three position "shotgun" start for group V and IV aircraft. The extensions included earthwork, drainage, PCC construction, taxiway edge and centerline light, runway edge and centerline lights, and pavement runway runway guard lights. The extensions also impacted existing FAA NAVAIDS. The project requires the relocation of the runway 9L localizer and the installation of in-pavement approach lights, along with modifications to existing approach tower elevations. Responsibilities include all aspects in design drawings, specifications, estimates, bidding, and construction administration.

Hartsfield Jackson Atlanta International Airport, Extension of Taxiway L, Runway Safety Area (27R), and Rehabilitation of Taxiway M, Atlanta, GA. Project Manager for the extension of Taxiway L and the rehabilitation of the parallel Taxiway M. The extension and rehabilitation is approximately 3,800 feet in length for each taxiway and included PCC construction, new taxiway centerline and edge lighting, runway guard lights, and illuminated guidance signs, new homerun cables, and modifications to the airfield lighting vault. The extension of the Runway 27R safety area included the construction of an MSE retaining wall. Responsibilities included all aspects in design drawings, specifications, estimates, bidding, and construction administration.

Norwood Memorial Airport Commission, Runway 17-35 Reconstruction, Construction of Runway Safety Areas, Relocate PAPI's and Approach Lights, Norwood, MA Project Principal for the design and reconstruction of Runway 17-35 and it's associated safety areas. This project required shifting the runway 200' to obtain the necessary safety areas, while at the same time minimizing the environmental impacts. The project also included the installation of 50 airfield illuminated guidance signs, 243 new airfield runway and taxiway edge lights (including new airfield lighting vault), three wind cones, 50 acres of tree clearing, and construction of 18,000 SF wetland replication. Responsible for coordinating design and construction efforts with the FAA to install two new PAPI and the relocation of the existing MALSF. Responsibilities included design, bidding, and construction administration.

David M. Chamberlain, PE
Aviation

Education

- BSCE, Civil Engineering, 1989

Registration/Credentials

- Professional Engineer: NH[redacted]; ME #[redacted]
- Professional Civil Engineer: FL#[redacted]

Dave Chamberlain has served as PIC, Senior Project Manager, Project Engineer, and Resident Engineer on numerous aviation and airport design and construction projects. His design experience includes grading, drainage, runway and taxiway pavement design, apron pavement design, design and layout of runway and taxiway lighting systems, horizontal and vertical alignment, cross sectioning, and estimating construction quantities and costs. His field inspection experience includes earthwork, Portland cement concrete pavement, bituminous concrete pavement, high voltage lighting installation, and electrical vault construction. Dave has extensive experience preparing Federal and State grant applications, technical specifications, design reports, construction reports, and record drawings for airport improvement projects. He is also intimately familiar with Federal Aviation Administration design and construction criteria, as well as the various requirements of State agencies.

Project Experience

County of Fulton, Rehabilitate Runway 10-28 and Parking Apron Expansion-Fulton County Airport, Johnstown, NY. Project Manager responsible for the design and construction administration for the rehabilitation of Runway 10-28 and aircraft parking apron expansion at the Fulton County Airport. The runway rehabilitation portion of the project consisted of reclaiming the existing runway pavement and base course, re-grading and compacting the reclaimed base material, constructing a bituminous concrete surface course, and painting new runway markings. The apron expansion portion of the project consisted of construction of a full depth pavement box, new drainage structures and pipes, new under-drain and drainage grass swales.

County of Saratoga, Reconstruct, Mark and Light Runway 5-23-Saratoga County Airport, Milton, NY. Project Manager responsible for the design and construction administration for reconstructing the 4700 ft Runway 5-23 at the Saratoga County Airport. Project consisted of reclaiming the existing bituminous concrete pavement and amending the base with supplemental aggregate, new bituminous concrete pavement, new medium intensity runway edge light system, new pavement marking, and runway safety area grading.

County of Saratoga, Remove Obstructions Runways 5-23 & 14-32, Saratoga County Airport, Milton, NY. Project Manager responsible for removing obstructions from Runway 5-23 and Runway 14-32 at the Saratoga County Airport. Approximately 42 acres of vegetation were penetrating the approach/departure clear surfaces for both runways and another 29 acres of vegetation were within 15 ft of the surfaces which are required to be clear of all obstructions by the FAA. This project included the clearing of the 71 acres of vegetation. Because of the clearing proximity to the Blue Lupine/Karner Blue Butterfly habitat, a federally endangered species, areas affected by the obstruction removal were replanted and maintained in an effort to create additional hospitable habitat for the species.

County Of Saratoga, Reconstruct, Mark, and Light Runway 14-32-Saratoga County Airport, Milton, NY. Project Manager responsible for the design and construction administration for reconstructing the 4000 ft Runway 14-32 at the Saratoga County Airport. Project consisted of reclaiming the existing bituminous concrete pavement and amending the base with supplemental

aggregate, new bituminous concrete pavement, new medium intensity runway edge light system, new pavement marking, and runway safety area grading.

MassDOT Aeronautics LPV Aeronautical Surveys for Three GA Airports, Various Locations, MA. Principal-in-Charge for this FAA-funded project to develop the first state-contracted LPV instrument approaches at three GA airports: Mansfield, Martha's Vineyard, and Taunton. Jacobs and its team prepared the aeronautical mapping, ground surveys, and obstacle analysis to obtain the lowest LPV minimums at each airport. This was in compliance with FAA Advisory Circulars 150/5300-16A for Aeronautical Surveys; -17B Imagery for National Geodetic Survey; -18B Data Collection and GIS Standards; AC150/5300-13 Airport Design; and FAA Orders 8260.3B TERPs and 8260.54A RNAV approaches. The key objectives were to: (1) obtain geodetic control and survey at each airport; (2) collect aerial photogrammetric imagery to support the development of the LPV approach procedures; (3) submit the survey data to the FAA and National Geodetic Survey (NGS) for approval; (4) analyze the airspace surfaces to identify any penetrations and mitigation to obtain the lowest possible LPV approach minimums; (5) coordinate with the three airports, MassDOT Aeronautics, and the FAA throughout the project to ensure minimal delay in obtaining these innovative new procedures.

City of Chicago, O'Hare Modernization Program, Runway 10C-28C and Associated Taxiways, NAVAIDS, Chicago O'Hare International Airport, Chicago, IL. Task Manager responsible for the design and preparation of bid documents for the NAVAIDS portion of the above project. NAVAID design items included a localizer and glide slope on both ends of the new runway, ALSF-2 systems on ends, inner markers, runway visual range, far field monitors, precision approach path indicators, and a fiber optic network back to the air traffic control tower for systems control.

City of Bangor, Reconstruct Terminal Apron Phase 4, Bangor International Airport, Bangor, ME. Project Manager responsible for design and construction administration of the reconstruction of the existing 346,600 SF PCC Apron and 50' Shoulder pavement. Project was designed to FAA Standards and elements of the project included removal of existing PCC pavement, bituminous concrete pavement, trench drains, PCC milling and reclaiming the existing bituminous concrete shoulder pavement. New construction elements include sub base course, crushed aggregate base course, bituminous concrete overlay, bituminous concrete shoulder pavement, ASR pressure relief strips, PCC pavement and jointing, trench drain, concrete drainage structures, oil/water and sediment separator reinforced concrete and ductile iron drainage pipe, under drain, glycol recovery system, adjustment of fuel hydrants, PCC saw cut control joints, bituminous concrete saw cut control joints, taxi lane painting, slurry seal, actuated gate valves, and flow meters.

Maine Department of Transportation, Reconstruct Mark and Light Runway 14-32, and Obstruction Removal/Vegetation Management Plan-Newton Field Airport, Jackman, ME. Project Manager responsible for the design of Runway 14-32 at Newton Field Airport in Jackman, Maine. Projects included new vertical alignments, new bituminous concrete pavement, rehabilitating the existing rigid foam insulation, constructing additional frost protection above the existing rigid foam insulation, safety areas grading, new runway edge lighting system, new underdrain, new pavement markings, and obstruction removal for FAR Part 77 surfaces.

Stephen J. Flecchia, PE
Aviation

Education

- BS, Civil Engineering, 1990

Registration/Credentials

- Professional Civil Engineer: MA [redacted]

Stephen Flecchia's design experience includes grading, drainage, and pavement design of runway, taxiway, apron, and safety area construction, as well as terminal, aircraft rescue fire fighting, and snow removal equipment facilities. His field inspection experience includes earthwork, drainage, pavement, and electrical installations. He also has prepared federal and state grant applications, contract documents, technical specifications, construction management plans, disadvantaged business enterprise goals, construction reports and, record drawings for various airport improvement projects. Mr. Flecchia is experienced with Federal Aviation Administration design and construction criteria and has attended and conducted various project progress meetings including pre-design, pre-bid, pre-construction and final inspection meetings.

Project Experience

Martha's Vineyard Airport Commission, Shift Runway 6-24, Martha's Vineyard Airport, West Tisbury, MA. Project Manager for the construction of an airport improvement that includes the shifting of the airport's only instrument runway. The project involves shifting the runway 303 feet to the northeast to allow the construction of FAA standard safety areas. Four FAA NAVAIDs will be relocated as a result of the runway shift. NAVAID facilities to be relocated include the glide slope antenna and equipment shelter, REILs, PAPIs, and approach lights.

Provincetown Airport Commission, Re-Stripe and Crack Fill Runway 7-25, AIP 3-25-0043-26-2009, Provincetown Municipal Airport, Provincetown, MA. Project Manager for the restoration of critical runway pavement markings and crack sealing maintenance. Construction phasing had to occur at night as this is the airports only runway that has commercial service to Boston Logan International Airport.

Provincetown Airport Commission, Reconstruct Terminal Apron (Approx. 400' x 130'), AIP 3-25-0043-23-2008, Provincetown Municipal Airport, Provincetown, MA. Project Manager for the reconstruction of the airport's only commercial terminal ramp. This project involved detailed construction phasing in tight conditions to allow minimizing the construction time frame while maintaining secure and non-secure passengers safely to their respective airplanes.

Nantucket Airport Commission, Terminal Improvement Project, AIP 3-25-0033-42/45/46/48-2006/2008/2009, Nantucket Memorial Airport, Nantucket, MA. Project Manager assigned to Owner's Project Manager (OPM) services for a $30 million major renovation and building expansion. This project included approximately 12,500 square feet of major renovations and an approximate 18,000 square foot new building expansion. This project also featured unique construction technology including the installation of a geothermal well HVAC system.

Nobadeer Hangars LLC, Nobadeer Hangar Site Development, Nantucket Memorial Airport, Nantucket, MA. Project Manager for a private development that included civil/site layout, grading, drainage, electrical, sewer, telephone, and cable work for three proposed aircraft hangars on the north side of the airfield. This project involved such challenges as the successful Massachusetts Aeronautics Commission airspace determination and a Commonwealth of Massachusetts Ethics Commission decision.

Stephen J. Flecchia, PE
Aviation

Nantucket Airport Commission, Replace Taxiway A, B, C, D, and E Edge Lights (MITLS) and Fence (Approx. 6,600 L.F.), AIP 3-25-0033-43-2007, Nantucket Memorial Airport, Nantucket, MA. Project Manager for the replacement of a majority of the entire airfield taxiway edge lighting system. This project replaced existing direct buried/stake mounted incandescent fixtures with a light base and conduit/LED fixture system. The project also replaced several thousands of feet of existing airport perimeter/security fence.

Provincetown Airport Commission, Purchase Snow Removal Equipment (SRE) Truck, AIP 3-25-0043-21-2007, Provincetown Municipal Airport, Provincetown, MA. Project Manager for the acquisition of a snow plow vehicle for the airport. Worked closely with Airport Management to obtain the intended SRE characteristics. Prepared project grant applications and attended State grant vote approval process.

Norwood Airport Commission, Snow Removal Equipment (SRE) Building, AIP 3-25-0037-28-2007, Norwood Memorial Airport, Norwood, MA. Client Project Manager for the design and construction of a snow removal equipment building. Coordination with an outside architectural firm and internal mechanical, electrical, plumbing, fire protection, structural, and civil/site engineers to complete the design of a four bay garage with office and storage space. The building also includes eventual space for airport management, an airport conference room, and other airport administration space. Coordination involved with the local conservation commission as project limits were located adjacent to protected wetlands and within a wetland buffer zone.

Norwood Airport Commission, Reconstruct Gate 3 Apron (Approx. 325' x 260') and Taxilane (Approx. 600' x 35'), AIP 3-25-0037-27-2006, Norwood Memorial Airport, Norwood, MA. Project Manager for the design and construction of an aircraft parking apron reconstruction improvement. The scope involved close coordination with airport staff and tenants as several aircraft had to be temporarily relocated during construction as well as dealing with impacts to a taxilane serving several facilities such as aircraft maintenance, fueling, and parking. Coordination involved the local conservation commission as project limits were located adjacent to protected wetlands and within wetland buffer zones.

Nantucket Airport Commission, Final Terminal Design and Improvements/Program Management, Nantucket Memorial Airport, Nantucket, MA. Project Manager for a $25 million terminal improvement project. The project included the rehabilitation of the airport's existing terminal and the construction of a new terminal addition. Elements of the project included coordination with the airport's architect/engineering firm and the construction management company. Responsibilities involved meeting coordination and Owner's Project Management (OPM) work tasks under the projects Construction Manager at Risk format.

Nantucket Airport Commission, Purchase Re-Circulating Air Sweeper, Nantucket Memorial Airport, Nantucket, MA. Project Manager for the acquisition of a self propelled mechanical pavement sweeper for the airport. Worked closely with airport maintenance staff to obtain the intended sweeper characteristics. Prepared the bid documents and assisted the airport through the advertisement process up to project close-out.

Richard A. Lasdin, PE
Aviation

Education

- BSCE, Civil Engineering, 19189

Registration/Credentials

- Professional Engineer: ME[redacted] PA #[redacted]
- Professional Civil Engineer: MA#[redacted]

Richard Lasdin is a Principal Engineer and Project Manager for Jacobs' Airports Group. He brings over 25 years of engineering experience, including 10 years focusing on a wide variety of aviation design and construction projects. Mr. Lasdin is intimately familiar with all aspects of project development, from the initial data collection phase, through the design and bidding stages, to ultimately performing construction management and inspection. In recent years, he has successfully completed assignments at a broad range of aviation facilities, including Logan International Airport, Philadelphia International Airport, T.F. Green Airport, and Barnstable Municipal Airport. For each assignment, he draws upon his vast experience to ensure projects are designed and constructed with minimal impacts to day-to-day airport operations.

Prior to joining Jacobs, Mr. Lasdin worked for 15 years in the design and construction of roadways, bridges, toll facilities, and airports. During this time, he developed extensive knowledge of AASHTO and state guidelines for highway and street design. His experience includes the design of new roads and the widening/rehabilitation of existing roads. His construction experience includes serving as a Resident or Construction Manager for heavy highway and bridge construction projects involving concrete construction, steel erection, earth support, foundation construction, blasting and road construction. Mr. Lasdin has also overseen the construction or rehabilitation of various specialty projects related to toll road facilities.

Project Experience

Massachusetts Port Authority - Airfield Engineering Consultant, Massachusetts. Project Manager overseeing all projects issued through a term consulting engineering contract. Projects vary and have included taxiway construction and improvements; airfield electrical and lighting studies and improvements, ALP update, Telecom infrastructure studies, and construction administration. Duties include QA/QC, scope and fee development, and overall project management.

Massachusetts Port Authority – Runway 22R/33L Runway-End Safety Area Improvements EA/EIR, MA. Project Manager overseeing development of airfield planning and engineering of multiple concepts to improve the runway safety areas. The concepts included various studies for shortening and shifting of the existing runways, and constructing infrastructure within the Boston Harbor in order to allow for runway end safety areas complying with FAA requirements.

T.F. Green Airport, Improvement Program- Environmental Impact Statement, Providence, RI. Project Manager overseeing the development of multiple different concepts proposed to improve safety and enhance capacity at T.F Green Airport. These concepts involved expanding the terminal, replacing related support facilities, runway safety area improvements, runway lengthening, taxiway and airfield facilities upgrades and improvements. Specific design elements included terminal and airfield design, airspace analysis, scheduling and phasing, and cost estimates.

Philadelphia International Airport, Capacity Enhancement Program – Environmental Impact Statement, Philadelphia, PA. Deputy Project Manager overseeing the development of three

different concepts proposed to replace Philadelphia International Airport. These concepts involved replacement of the terminals and related support facilities, the runway and taxiway system, and all airfield facilities. Specific design elements included terminal and airfield design, airspace analysis, scheduling and phasing, and cost estimates. Specific design responsibilities included the development of airfield geometry and determining locations for the airport general aviation and support services facilities. Also responsible for the development of the construction schedule and phasing plans for this 12-year, multi-billion dollar project. Additional responsibilities included coordination of design efforts performed by three separate Jacobs offices and one subconsultant firm, totaling a project staff of 20 employees.

Massachusetts Port Authority, Upgrade Runway 4R-22L Lighting Systems. Project Manager and Resident Engineer responsible for design and construction related to the complete replacement of all lights, cables and regulators for Logan Airport's only category II runway. This project required extensive coordination with airport operations due to the nightly closures of this runway and all other intersecting taxiways and crossing runways.

Barnstable Airport Commission, Terminal Ramp Rehabilitation, Barnstable Municipal Airport, Hyannis, MA. Project Engineer for the rehabilitation of the terminal ramp. Design efforts included preparing plans, profiles, cross sections, a grading plan, specifications and engineers' estimates.

Massachusetts Port Authority, Taxiway K North Overlay and Miscellaneous Improvements, Logan International Airport, East Boston, MA. Project Engineer for design and Resident Engineer for construction of a portion of Taxiway K North. This project required the sequential closure of sections of the taxiway during construction and also included concrete repair work on specific airlines' gates requiring coordination with airline representatives.

Massachusetts Port Authority, Taxiway A North Overlay and Runway Ground Lights, Logan International Airport, East Boston, MA. Project Manager and Resident Engineer responsible for the complete design and construction of the Taxiway A North Overlay and Runway Ground Lights. Project required the sequential closure of ¾ miles of Taxiway A North and 15 aircraft gates. The temporary closure of the airport's main cargo ramp and aircraft overnight parking area required the design of a temporary taxiway and the temporary replacement of the overnight parking positions.

Massachusetts Port Authority, Taxiway A East 9-27 and 15R Rehabilitation, Logan International Airport, East Boston, MA. Project Engineer for design and Resident Engineer during construction. This project involved the sequential reconstruction of the taxiway plus the reconstruction of portions of two runways.

Provincetown Airport Commission, Runway 6-24 Rehabilitation, Provincetown Municipal Airport, Provincetown, MA Project Engineer responsible for the implementation of all requirements needed to satisfy the various permitting agencies, including Massachusetts DEP, Cape Cod Commission, National Park Service and Provincetown Conservation Commission. Additional responsibilities included generation and review of specifications.

J. Leo McGlynn, PE
Rail Facilities – Project Manager

Education

- B.S., Civil Engineering, Penn State University
- Conrail Executive Management Program, Penn State University
- Conrail Financial Management, University of Pennsylvania, Wharton School

Registrations and Certifications

- Professional Engineer: NJ and PA

Specialized Training

- Primavera Scheduling

Employment History

2009-present – Jacobs
1977-2009 – Conrail

Leo McGlynn is a results-oriented, responsible, engineering professional with extensive experience in railroad engineering, construction management, and design. He is a strong leader with excellent organization, financial management, and team building skills.

Project Experience

Conrail, Bergen Tunnel Enlargement. Project Manager for the $25 million National Docks Clearance Project including the enlargement of the Bergen and Waldo Tunnels. This private/public partnership (Conrail/NJDOT; Funding Sponsor FHWA) project included environmental permitting (CED), SHPO, Design and Construction Management for the vertical clearance of two tunnels (Bergen Tunnel and Waldo Tunnel) and the clearance under the NJ TRANSIT bridge. The environmental permitting requires the submission of a CED with major input from SHPO that required a detailed Memorandum of Understanding (MOU). The design work for the Bergen Tunnel included lowering and removing the track outside the northern portal. This added a pump station to remove the drainage water, since it was a low spot in the alignment, and clearance work within the tunnel, which was coordinated with a third party designer. The design work included track alignments, new track bed construction, utility coordination to limit impacts to three PSEG 138 KV oil static lines, relocation of fiber optic cable, regrading of drainage swales, maintenance cleaning of existing ditches, restoration of the historic Portals (North and South), permanent survey markers in the tunnel for line, and grade of the proposed track. The design work for the Waldo Tunnel included track alignment design, open cutting of 30 feet of the tunnel to provide the necessary vertical clearance, installation of steel structures to support the newly constructed wingwalls, and historic treatments to the southern portal to meet the stipulations outlined in the MOU. Other work performed was to perform a HAER document and perform work on a GIS database to illustrate the historical changes between the railroads. Jacobs was also responsible for the overall construction management of the project, which requires coordination with adjacent NJDOT contractors on the Route 1/9T project, verifying conformance to NJDOT polices and procedures for construction monitoring, and quality assurance for all the work associated with both contracts.

Project Experience with others

North Jersey Terminal Capacity Improvement Infrastructure Project, Newark, NJ for Consolidated Railroad (CONRAIL), Northern, NJ Completion 2009. While still working for Conrail, Mr. McGlynn was the Client Project Manager with overall responsibility for this $68 M+ program. The Program included seven projects: Valley to Stock, Valley to Pike, Pike to PN, Bay Line Yard, Chemical Coast, Double Tracking of the Lehigh Valley Line (Potter to Bound Brook 10.5 miles), and Port Reading Junction, Manville, NJ. Mr. McGlynn worked closely with the Jacobs staff who were providing design, bid assistance, construction support, and construction management as an extension of the Conrail staff.

Consolidated Rail Corporation, Philadelphia, PA (1977-2009). Mr. McGlynn has over 32 years of experience with Conrail, where he served in various capacities including:

J. Leo McGlynn, PE
Rail Facilities – Project Manager

Director Design and Construction (1999-2009)

Mr. McGlynn managed a team that was responsible for the design and construction of all capital and state participation projects and construction agreement negotiation with government and transit agencies. Responsibilities included safety, customer satisfaction, employee development, on-time performance, budget, design, estimating, and construction integration with rail operations. Staff Size: 7 to12

Directed a team that completed $168,000,000 in rail infrastructure projects including:

- North Jersey Infrastructure Project, 10 miles of double track from Bound Brook to Clark, NJ, 8.5 miles of secondary and yard tracks and 8 new remote controlled interlockings
- Northern Branch Double Track, 3.8 miles of new track and 2 new remote control interlockings between Jersey City and North Bergen
- Reviewed and approved the track design for 75,000 feet of new on-dock loading and support tracks at Port Elizabeth
- Led a team that managed the Conrail-NJDOT Joint Participation National Docks clearance and CP Port Reading Junction upgrade and expansion
- Worked closely with NJDOT rail freight section preparing and submitting applications for rail freight assistance. Managed the design and construction of approved projects including the International Paper industrial track upgrade in Florence, NJ and the new interchange track at Winslow Junction.

Area Engineer(1996-1999) / Engineer Construction (1986-1996)

Mr. McGlynn managed a team that completed an average of 33 capital projects ($27 million) and 300 force account construction projects ($10 million) each year. Projects included interlockings, intermodal terminals, pollution abatement facilities, tunnel enlargements, office buildings, material handling systems, and railroad and highway bridges. Staff Size: 12 to 18.

- Led a team that completed the customer sensitive commercially critical NJ, NY, and PA vertical clearance improvement projects at 56 locations, totaling $35 million. Projects included 12 rock tunnel enlargements and 4 new highway bridges.
- Managed a team that fast-tracked the design and construction of a new road bed for the Solomon's Gap, PA rock slide project. $400,000 drill and blast excavation that returned the Lehigh Line to service in one month.
- Developed and implemented a new computer program and estimating procedure for estimating the cost of track projects, which reduced cycle time 50% and improved accuracy 25%.
- Managed a team that safely completed the complex $5.5 million Newark CP "NK" main line interlocking project under budget and without impact to passenger traffic allowing freight train speed upgrades ahead of schedule.

N. Stephen Bond, PE
Project Manager

Education

- MS, Civil Engineering, 1977
- BS, Civil Engineering, 1971

Registration/Credentials

- Professional Engineer:
  NY #[redacted]
  NJ #[redacted]

Steve Bond has extensive experience in the management of railroad improvement projects. He has successfully managed multi-team efforts on time and within the client's budget. He is cognizant of the technical, environmental and community issues associated with advancing railroad improvement projects within the confines of constricted sites. Mr. Bond has been involved in numerous commuter rails, subway and light rail transit projects in the northeastern United States. The clients he has done work for include Amtrak, Long Island Rail Road, New York City Transit, Connecticut Department of Transportation, Metro-North Commuter Railroad, and NJ Transit. He has been Project Manager or Deputy Project Manager on a variety of structurally oriented multi-disciplined transportation projects.

Project Experience

Port Authority of NY & NJ, Civil/Rail Engineering "Call-In" during 2009-2010. Project Manager on tasks including:

- ***Track Design for PATH, Harrison Station Improvements.*** Provided final design of horizontal and vertical track alignments for both operating tracks to accommodate increasing the station platform lengths to allow 10 car trains. The alignments were coordinated with the proposed platform, retaining wall and catenary structures.
- ***PATH Pavonia/Newport Station Improvements.*** Investigated the potential impacts on ADA criteria of extending the existing station platforms with the existing track alignment to accommodate 8 car trains. This task required simulating car locations for the proposed platform extensions determining the maximum length that would meet ADA criteria.

Port Authority of New York & New Jersey, PATH Christopher Street Substation Modernization, New York, NY. Project Manager for the design of upgrades and replacement of the Port Authority Trans Hudson (PATH) Christopher Street Substation. This project requires replacing the 4 existing 1.5MW transformer rectifiers with 4 sets of new 3MW equipment in an existing historical building, landmark district area of New York City. The Christopher Street Substation is a vital component to the PATH operation as it supplies traction power and auxiliary power for all uptown Manhattan. The project requires providing an additional means of egress and includes modifications to the building structure, new control rooms and HVAC equipment without interruptions to existing PATH service.

MTA Metro-North/Amtrak, Engineering and Design of Shell At-Grade, New Rochelle, NY. Project Manager for the design of the $70 million at-grade improvements necessary to reduce Amtrak and Metro-North service conflicts at Shell Interlocking which handles over 250 trains per day. Improvements include three new interlockings, replacement of an undergrade bridge under traffic, track relocations, and platform extension at New Rochelle Station. Major improvements are required to the signals and catenary to accommodate the new track work. Sequencing of construction to maintain train operations at all times is a major aspect of this project.

MTA Metro-North, Engineering and Design for Addition of Mid-Harlem Third Mainline Track and Associated Interlocking Improvements, Mount Vernon to Crestwood, NY. Responsible for the project management, scheduling and control as well as the civil/track, structural, signals and communications, traction power, and rail operations design tasks for the addition of a new 3.2

mile main line track. Traction power modifications included a new third rail system with associated positive and negative feeder cables, control cable, ductline and conduit system, as well as modifications to substations. Trackwork required modifications to 2 interlockings.

Connecticut Dept. of Transportation, On-Call Railroad Engineering and Construction Inspection Services (Rail) Bridgeport, CT. Project Manager for an on-call contract to perform railroad-engineering assignments. The assignments included replacement design for a railroad bridge carrying 4 electrified Metro-North New Haven Line tracks over South Avenue in Bridgeport. The work required investigation of alternative structure types, geotechnical investigation to determine substructure modifications and preparation of final design plans, specifications and construction cost estimates. The assignments also included reviewing inspection reports for 70 bridges, prioritizing their condition and preparing design plans for 10 bridges. Design documents are intended for Metro-North Force Account personnel to perform the repairs.

MTA Metro-North Railroad, Design of Ten New Traction Power Substations on the Upper Harlem Line, Upper Harlem, NY. Project Manager responsible for providing design and procurement specification for two new 4MW, 700VDC prefabricated substations to be installed on the Upper Harlem Line. Design included 15Kv all-resistant switchgear (ConEdison and NYSEG territories), transformer rectifier equipment, 800VDC switchgear, SCADA RTU systems, 125VDC station battery and auxiliary power systems.

MTA Long Island Rail Road, Shea Substation Design, Queens, NY. Project Manager for the final design and construction phase services of a new dc traction power substation. The work included sitework, structural design, pile foundations and electrical design (ac and dc switchgear) for an indoor facility to replace the existing substation. The project was to serve as a prototype for all future substations. Construction phase services included assistance during bidding, review of contractor proposed alternative designs and field modifications.

MTA Metro-North, Penn Station Access – MIS and DEIS, New York, NY. Project Engineer for this Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) to examine the potential to connect Metro-North's Harlem, Hudson and New Haven Line services to Pennsylvania Station, New York (Penn Station). Mr. Bond was responsible for examination of existing track connections from Metro-North's New Haven and Hudson Lines to Penn Station on the west side of Manhattan to provide access for Metro-North trains into Penn Station. In addition, the study examined the potential to construct and provide service to new intermediate station(s) on the Hudson Line on the west side of Manhattan at 62nd and 125th Streets, and on the New Haven Line at Hunts Point, Parkchester and Co-op City in the Bronx. Services included the preparation of station layouts, capital and operating costs for recommended improvements.

Roseland Properties, LLC, Railroad Station Feasibility Study, Sleepy Hollow, NY. Project Manager for preparation of a Railroad Station Feasibility Study for a new Metro North passenger station at the site of the former General Motors automotive assembly plant in the Village of Sleepy Hollow, New York. The work included development of conceptual designs for various track and station platform configurations in consideration of all Metro-North operating requirements. Both center island and side platform concepts were developed. All concepts were in conformance with Metro-North system station standards and maintained the existing operating train speed limits on all tracks through the station area. Elements of the station designed by Jacobs include high-level concrete platforms, a new pedestrian overpass, stairways, elevators for full ADA access, and utility relocation.

James S. Craig
Rail Facilities

Education

- Project management courses: Risk Management; Managing Projects in Organizations; Project Leadership; Management and Communication; Scheduling and Cost Control; and Contracting for Project Management

Expertise in all facets of high speed passenger, transit, and freight railway construction, operations and maintenance.

Project Experience

AMTRAK, Philadelphia, PA, Director of Production Field Operations. Responsible for various Track production disciplines to include the Communications and Signaling department. Responsibilities include directing and estimating program work from Boston to Lorton Va. including Philadelphia to Harrisburg PA.

AMTRAK, Philadelphia, PA, Program Director Track. Responsible for Track Maintenance and construction for Amtrak's 135 and 150 MPH, electrified four track high speed passenger rail systems. Responsibilities included directing and estimating program work between Boston and Washington D. C. Also responsible for special track work interlocking work for the North East Corridor. Accountabilities included coordination of railroad engineering disciplines, signal and electric traction.

Long Island Railroad, Queens, NY, Engineer of Track Projects. Directed and coordinated the railroad's construction equipment performing programmed maintenance. Responsibilities include interlocking reconfiguration, grade crossing rehabilitation and yard expansion with conventional wood turnout and crossover technology.

Long Island Railroad Queens, NY, Engineer Of Track, Maintenance East. Directed the Track maintenance and construction activities for the East Region of LIRR. Labor force consisted of 200 employees.

AMTRAK Philadelphia, PA, Manager of Field Operations. Directed all facets of Amtrak's Switch Exchange and Special Construction operations, including associated planning, and scheduling. Installed 200 turnouts along Amtrak's NEC including site preparation, panel construction, and track re-configuration. Utilized a variety of specialized equipment performing 135 to 150 MPH high speed realignments, with signals and electrification.

AMTRAK Philadelphia, PA Engineer of Interlockings, Maintenance and Construction. Managed the operation of the Panel Renewal System on Amtrak's NEC employing specialized switch equipment. (1988-1991)

AMTRAK Philadelphia, PA. General Foreman of Rail Distribution/Reclamation. Responsible for the daily operations of Amtrak's rail trains. This included the SAFE distribution and removal of all C.W.R. on the Northeast Corridor. Also provided contract rail services to New Jersey Transit, Metro North Railroad, WMATA and the Long Island Railroads. (1985-1988)

AMTRAK Philadelphia, PA. General Foreman, Panel Renewal System. Supervise the operation of turnouts and crossovers during construction and installation. (1983-1985)

William J. Madden, PE
Rail Facilities

Education

- MS, Civil Engineering, 1994
- Juris Doctorate, 1986
- BE, Civil Engineering, 1982

Registration

- Professional Engineer: NY, NJ, PA, RI
- New York State Bar

William Madden has over thirty years of experience in the engineering, construction and contracting industry. He has worked for over twenty of those years in the rail industry and has particular expertise in managing very large capital construction contracts. He was the Program Manager for NYCT Shops, Yards and Bus Depots and then later served as Program Manager for Stations. The station program area was a $5 billion construction, rehabilitation and modernization effort that included such projects as Times Square, Grand Central and 72nd St on the Broadway Line. As a contractor, he acquired an expertise in vertical transportation and ADA compliance. Here his experience includes NYCT escalator replacement and the New Meadowlands Stadium. He also brings to his projects the legal background when dealing with contracting, code interpretation, change orders, permitting and risk assessment.

Select Project Experience with other firms:

Fujitec New York - Business Manager, 10/2002 to 10/2010
Manager of 85 projects worth $177 million with up to 200 employees.

- Traction/hydraulic elevators
- Transit/Commercial escalators
- Moving walks
- Elevator Data Acquisition Systems and security systems

RWKS Transit - Vice President, 10/2000 to 10/2002
Manager of 20 projects worth $75 million with up to 60 employees:
Tunnel rehabilitation (fans, lighting and fire protection with SCADA systems).

- Fan plant rehabilitation
- Electric substation rehabilitation
- Station rehabilitation
- Signals modernization

MTA NYC Transit - Program Manager, 09/1996 to 10/2000
Manager of 60 projects worth $1.92 billion with up to 220 employees with unified project management procedures focusing on goals of safety, quality, budget, and schedules.

- Station reconstruction/rehabilitation
- Elevator and escalator construction/replacements
- Fiber Optic Node Stations
- Ejector room construction

NYC Transit - Assistant Vice President/Program Manager, 02/1994 to 09/1996
Manager of 45 projects worth $975 million with up to 75 employees.

- Railway yard rehabilitation
- Rail shop construction/rehabilitation
- Bus depot construction/rehabilitation

NYC Transit - Project Manager, 05/1991 to 02/1994
Manager of 25 projects worth $225 million with up to 28 employees.

- Station rehabilitation/rehabilitation
- Fiber optic node enclosures
- Escalator/elevator installations
- Station lighting replacement
- Electrical distribution room up grades

NYC Transit - Administrative Engineer/Assistant Project Manager, 01/1988 to 05/1991
Night Project Manager and Administrative Engineer later promoted to Assistant Project Manager for Lexington Avenue Rehabilitation. Total Project cost was $275 million and directly employed 35 technical staff. This project included:

- Replacement of inter-lockings
- Signal rehabilitation
- Power rail replacement
- Tunnel lighting installation
- Fan plant construction
- Pump room construction
- Structural steel replacement

NYC Transit - Assistant Civil Engineer and Civil Engineer, 08/1982 to 01/1988
Survey team member promoted to crew chief of survey party, squad leader for design of track and switch layouts, and supervisor of construction layout and inspection.

Lewis O. Morgan, PE, PP
Rail Facilities

Education

- BS, Civil Engineering, 1980

Registration/Credentials

- Professional Engineer: NY, DE and PA
- Professional Planner, NJ

Lew Morgan has worked on a wide range of activities including project management and technical analyses on major transportation and infrastructure projects throughout the NY metropolitan area. The types of projects have ranged from feasibility studies to complete construction plans and specifications. Mr. Morgan also offers considerable expertise for the filing of environmental permits.

Project Experience

NJ TRANSIT, Phase II Preliminary and Final Design Lackawanna Cutoff Trackbed Restoration Project MOS-1, Morris and Sussex Counties, NJ. Project Manager for the design of the rehabilitation of 8 miles of abandoned freight railroad to provide a service to northern and western New Jersey. The line will connect to the existing Morris and Essex Line to provide train service to New York City. The first 4 miles of the project is scheduled for construction in November of 2010.

NJSEA and NJ TRANSIT, NJ Meadowlands Rail and Roadway Improvement Project, East Rutherford, NJ. Project Manager responsible for design and construction phase services to bring rail service to the NJ Sports and Exposition Authority complex. The total project construction cost was approximately $214 million which included the construction of 2.3 miles of new railroad, 2 miles of new roadway; 3,500 linear feet of viaduct; $20 million train station; 3 bridges; 2 pedestrian overpasses; 435,000 cubic yards of embankment; signal and communications systems; electric distribution systems; and, extensive water, sewer, communication, electric and gas utility relocation activities. The soils to the west of Berrys Creek are extremely soft with open water and wetlands in abundance. Jacobs developed design plans for large portions of the project alignment that would allow the contractor to build into these marsh/swampy areas from the top down thereby minimizing the limits of disturbance in the environmentally sensitive areas. In order to save time many of the viaduct components were fabricated and pre-cast offsite. Utilizing panelized construction techniques the contractor was able to build his structures efficiently from the top down in a leapfrog fashion across the marshy and open water areas.

MTA Metro-North Railroad Croton Harmon Yard, NY. Task Manager for civil engineering, for the $62 million expansion of Croton Harmon Yard. The project involved the redesign of the yard facilities south of the existing shops and modification of the tracks and supporting facilities to support MNR's diesel fleet servicing. A new yard master control system was designed to allow for remote control of the new yards from a refurbished tower.

NJ TRANSIT, Morrisville Train Storage Yard, Fall Township, PA. Project Manager for a 28-acre (11-hectar), $82 million train storage yard project for NJ TRANSIT, capable of storing 26 passenger trains for a total of 236 units. The project included an operational analysis covering yard functions and interface with main line operations; concept definition of the new yard, including layout of tracks, roads, structures, drainage, utilities, catenary, wayside and traction power, communications, and site mitigation measures required to construct the yard; and preliminary and final design of the selected alternative including a 12,000 square foot Crew Facility, 100 foot long S&I Facility, and a 1,040 foot long S&I Facility. The project also included the redesign of MY Interlocking, redesign of Morris Interlocking, the replacement of Conrail

Bridges 0.40 and 0.50 and the rehabilitation of Amtrak Bridge 58.16. An environmental assessment and permitting was also prepared as well as providing technical support during construction.

NJ TRANSIT, Passaic-Bergen DMU Project, Passaic and Bergen Counties, NJ. Responsible for the preparation of preliminary and final construction plans for the Passaic Bergen Diesel Multiple Unit (DMU) project. The project involves the restoration of passenger rail service within the existing New York Susquehanna and Western (NYS&W) right-of-way along a 10.2-mile corridor from Hawthorne to Hackensack. The project will upgrade existing NYS&W infrastructure, and restore two-track commuter rail service operated by NJ TRANSIT. The project would construct up to twelve passenger stations, two park-and-ride facilities, a vehicle maintenance facility, and improvements to track and signal infrastructure. The project also required the reconstruction/upgrade of four open deck and thru-girder bridges.

NJ TRANSIT, Main and Pascack Valley Line Right-of-Way Improvement Project, NJ. Responsible for the design of improvements on two NJ TRANSIT lines to increase capacity. Project elements included specifications for high-speed turnouts; expansion of the Suffern Yard; and double tracking of a 1.7-mile (2.7-kilometer) single-track segment that included two through girder bridges and extensive retaining walls, five passing sidings, and a 2-mile-long (3.2-kilometer) freight siding with industrial side tracks.

North Avenue Improvements Project, Elizabeth, NJ. Responsible for the preparation of preliminary and final construction plans for improvements to the North Avenue Corridor serving the Kapkowski Road and Port Elizabeth area. The project involved the construction of a new bridge at North and Dowd Avenue and 3.5-miles of interconnecting roadway construction with Ramps to 1&9 and Interchange 13A. The project also involved the widening of three other ramp bridges to accommodate the new roadway geometry.

NJ TRANSIT, Northern New Jersey Bus Maintenance Facility, Clifton, NJ. Civil Task Leader for the design and construction of a new 265,000 square foot Bus Maintenance Facility for NJ TRANSIT's Northern Bus Fleet. Responsibilities included site grading, drainage, and permits, oversight of geotechnical work, and management of various subconsultants for surveying, soil borings, environmental testing, and wetlands delineation.

Southern New Jersey Light Rail Transit System. Prepared site plans for 20 new passenger stations along a 33-mile light rail corridor. The station design elements included the geometric layout, grading and drainage design for station platforms and parking facilities. The project contained several large park-n-ride areas ranging from 300 to 800 parking spaces. Additional tasks included coordination with other disciplines for station architecture, lighting and electrical design, and structural design of the station platform and foundation systems.

Irvine Turner Traffic Calming Project, Newark, NJ. Responsible for the development and design of traffic calming measures for a busy 1.1mile section of Irvine Turner Boulevard including 8 intersections. Responsibilities included cost control, project management, initial and final construction plan preparation of existing roadways, and client and subconsultant coordination.

Michael Moskowitz, PE
Rail Facilities

Education

- MS, Civil Engineering, 1996
- BSCE, Civil Engineering, 1980

Registration/Credentials

- Professional Engineer: NY, NJ and LA

Mike Moskowitz has many years of commuter railroad and bridge engineering experience, as well as experience in construction, maintenance and repair of over 120 commuter railroad stations as a Superintendent of Stations and military contingency engineering and programming. He also has managerial experience in the operation of station maintenance for Metro-North Railroad and is a Certified Building Code Compliance Officer in New York State.

Project Experience

MTA Long Island Rail Road, Woodhaven and Queens Boulevard Bridges Rehabilitation, Queens, NY. Project Manager and Senior Structural Engineer for the design and construction phase services (CSS) for the rehabilitation of the Queens Boulevard and Woodhaven Boulevard Bridges in Queens. Responsibilities include review and update of existing rehabilitation design concepts, drawings, specifications, and calculations, force account planning and coordination, and construction phasing, to produce the bid documents necessary for construction. Developed an integrated Force Account/3rd party construction sequence utilizing an hour-by-hour track outage and phasing for the bridge rehabilitation sequencing.

MTA Long Island Rail Road, Broadway and 150th Street Bridges (four) Rehabilitation: Project Manager for the design and construction phase services (CSS) for the rehabilitation of these four bridges in Queens. Responsibilities include review and update of existing rehabilitation design concepts, drawings, specifications, and calculations, force account planning and coordination, and construction phasing, to produce the bid documents necessary for construction.

MTA Metro-North Railroad, Development of Design-Build Documents for New Haven Line Stations. Project Manager for the development and conceptual level design for all eight of Metro North's stations located on the New York State side of the New Haven line. Led a team of architects, civil, structural, and electrical engineers to develop conceptual designs to provide solution sets for the rehabilitation of these 8 stations. Work included structural improvements, ADA enhancements, architectural upgrades, elevator installation and electrical upgrades. Promulgated and championed efforts to involved construction contractors into the design, and particularly the construction estimating process.

MTA Metro-North Railroad, Inspection and Load Rating of 10 New Haven Line Bridges. Assumed duties as Project Manager for the inspection of 10 overgrade bridges from MT. Vernon East, to Harrison, New York. The ratings for the bridges are for automotive vehicles, utilizing both Load Factor Rating, and working stress rating criteria. Utilized a prioritized criteria for programming improvements against a fixed repair/construction budget.

MTA Metro-North Railroad, Station Improvement Designs for Croton Harmon and Peekskill Stations: Assumed duties as Project Manager for the development of scope, schedule, and budget and the development of construction documents for the upgrading of these two stations. The work is designed to be constructed with little to no impact on the operating railroad. Also performed construction phase services.

MTA Metro-North, Undergrade Bridge Inspections and Load Rating Program, and Emergency Repairs, New York, NY (1998-2005): Project Manager for the inspection, rating, and

prioritization of two major capital improvement programs for both the East and West of Hudson lines. He managed and was involved with the inspection, rating, and prioritization of a total of over 360 undergrade bridges in New York State. Also managed the design efforts for repairs to multiple bridges utilizing both third party contractors, and Force Account forces. Acted as Team leader for the longest structures including the Moodna Viaduct (4000' trestle) in Salisbury Mills, NY, utilizing "Hi-Rope" access techniques, and the Woodbury viaduct (880 ft trestle) located in Woodbury, NY. Both historic structures are over 100 years old.

MTA Metro-North Railroad, Commuter Railroad Station Design, Cortlandt, NY: Project Engineer responsible for the concept and preliminary designs combining two existing commuter rail stations with one new station. Personally developed conceptual layouts and drawings for the geometry and parking capacity of the vacant land plot. Supervised required surveys, property acquisition, and interface with municipal officials. Also responsible for establishing metes and bounds, adjacent right-of-way geometry, and NYSDOT format acquisition maps for MTA's Real Estate Department.

MTA Metro-North Railroad, Superintendent-Stations, New York, NY: The Lead Operating Department Engineer responsible for maintenance and repair of all Metro-North outlying passenger stations (120). Directed management staff and 40 craft personnel in daily upkeep of the station buildings, platforms, facilities, utilities, stairs, overpasses, and 58 elevators. Prioritized Capital Program requirements for total plant state of good repair. Developed scopes and track outage coordination schedules for all construction related to stations. Developed, and coordinated force account scopes, schedules, and budgets.

Norfolk and Western Railroad Bridge Design, Cleveland, OH: Lead Designer for substructure design for a railroad bridge over the Cayahoga River. Prepared plans, specifications, and estimates for this through girder steel bridge. Also checked all superstructure calculations. Reviewed geotechnical engineer field reports to develop substructure system of pile bents.

MTA New York City Transit, Design Services for the Station and Structural Rehabilitation of Ten Stations on the White Plains Road Line (IRT), Bronx, NY. Deputy Project Manager for the design and rehabilitation of ten NYC Transit stations, plus 4.1 miles of overhead line structure. Responsible for coordinating plans, specifications, and estimates for this project. Estimated construction value was $150 million. Lead Coordinator for seven subconsultants and representatives for joint venture consultant. Also lead task leader for station structural design work, including elevator structures, as well as the "dropped" station design (attached from the overhead structure above). Developed unique "raised floor" precast panel system for the new station where the panels were lifted into place from the street level.

Igor Maevski, PhD, PE

Tunnel Facilities – Mechanical/Electrical – Project Manager

Education

- Ph.D., Mechanical; Tunnel Ventilation, 1992
- MS, Civil Engineering, 1984

Registration

- Professional Engineer in NY, NJ, and WA:

Employment History

1996-Present – Jacobs
1994-1996 - Parsons Brinckerhoff
1984-1994 - VNIGGS

Dr. Maevski is nationally recognized as a specialist and authority in defined and applied solutions, including technical guidance for transportation and facilities ventilation design, and has authored numerous articles on tunnel ventilation. He is experienced in the research and design of heating/ventilation and air conditioning systems for roadway, railway, and subway tunnels, stations, and industrial plants.

Project Experience

PANYNJ, Mechanical Engineering Services – Design of Fire/Smoke Management and Tunnel Ventilation Systems as Requested on a Call-In Basis during 2007-2009. ***Task 1. Dermot Hudson Mews Overbuild Project*** – Project Manager and Team Leader responsible for review of the Tunnel Ventilation Design Criteria, studies, and design performed by other Consultant. Performed CFD analysis of several tunnel ventilation alternatives, including fixed fire suppression system using a water mist technology. As the result, Jacobs made recommendations on tunnel ventilation design, which allowed substantially (more than twice) to reduce the required number of tunnel ventilation fans and vent structures achieving the desired safety performance. We revised the ventilation scheme that was accepted by the Consultant and the Authority. The proposed scheme allowed for substantial cost savings. ***Task 2. Confidential Project Review*** –.Reviewed the preliminary engineering drawings and results of the analyses; provided necessary details and information to support the Port Authority with the decision-making and evaluation of the proposed alternatives. ***Task 3. WTC Hub PATH Train Downtown*** – Review of the Concept of Smoke Management proposed by the Consultant; and of the tunnel ventilation conceptual drawings and results of the analyses; participated in the meetings with the Port Authority. Ensured that the plan meets the Port Authority's requirements for safety. ***Task 4. Trans Hudson Expressway (THE) Tunnel Project*** – Review of the station and tunnel emergency ventilation contract drawings, reports, and results of the analysis, specifications, and participated in the project meetings to ensure conformity with all technical requirements.

PANYNJ, Holland Tunnel, NY and NJ. Senior Mechanical Engineer responsible for providing expert professional services for the rehabilitation of the electrical and mechanical components of the Holland Tunnel Ventilation System located within four ventilation buildings. Prepared all documents required for a conceptual design package, which included reports, drawings, construction, life cycle cost estimates, and schedules for the proposed rehabilitation. Also performed rehabilitation design of the ventilation systems of several existing tunnels under similar phasing conditions.

MTA Triborough Bridges and Tunnels, Brooklyn Battery Tunnel Design and Construction Support Services for Project BB-45 - Supply Fan Replacement, Switchgear Replacement, and Manhattan Underground Exhaust Building (MUEB) Fan Upgrade and Repairs, NY. Project Manager and Team Leader responsible for the project performance of all of the inspection, fan testing, analyses, and design associated with the replacement/rehabilitation of 27 supply fans and fire hardening of the MUEB. Investigation work included fan inspection; fans, motors, and building structure vibration tests; motor tests; damper inspection and tests; fan performance aerodynamic tests and analysis; environmental inspection and life cycle cost analyses. Prepare 40%, 70%, 100% designs, perform constructability reviews and bid package review, and perform construction support services.

Igor Maevski, PhD, PE
Tunnel Facilities – Mechanical/Electrical – Project Manager

Massachusetts Highway Department, I-93 Central Artery/Tunnel Mechanical and Electrical Systems Contract D020B, Boston, MA. Senior Mechanical Engineer responsible for performing Computational Fluid Dynamics (CFD) analysis of air flow distribution in the most complicated air duct area. Created sixteen models, most of which included all ventilation buildings. Propose technical recommendations on ventilation systems modifications based on the results of the CFD modeling. Performed SES analysis for seven ramps, and analyzed the fire emergency and idle traffic conditions. Project included the design for depression of the city's existing I-93 artery into cut-and-cover tunnels and the interface with the existing I-93 double deck viaduct in Charlestown, MA. Developed the mechanical/electrical design for the Fort Point Channel Crossing – the first concrete immersed tube tunnel ever constructed in the U.S. This design covered full mechanical and electrical systems for the new tunnel and boat sections. Primary design elements included tunnel ventilation, tunnel drainage, tunnel fire protection, power distribution, as well as tunnel, boat section, ramps, and exterior roadway lighting.

Texas DOT, LBJ Tunnels Procurement Engineering – Road Tunnel Ventilation Analysis, Dallas, TX. Tunnel Ventilation Team Leader responsible for the road tunnel ventilation analysis under normal operation, congested traffic, and in case of fire emergency. Performed Subway Environmental Simulation (SES) analysis for different ventilation alternatives and tunnel configurations, and Mobile 6 vehicle emission simulations. Produced a set of drawings for conceptual design of tunnel ventilation and for cost estimates. To mitigate community concerns with regard to elevation, right-of-way, noise and traffic disruption. Provide technical support for TxDOT to propose that two 1.5 to 1.9 mile (or longer) one-way tunnels be constructed under LBJ Freeway – one being a mined tunnel, the other a cut-and-cover tunnel.

Washington DOT, SR99 Bored Tunnel Architectural Services, Alaskan Way Viaduct. Team Leader responsible for Tunnel Ventilation and fire-life safety reviews, including changes to technical requirements, specifications, and mechanical rooms' layout for service portal buildings. As part of the Alaskan Way Viaduct program, WSDOT needs to provide maintenance and operations facilities and ventilation structures at the south and north access points of the SR99 Bored Tunnel. Managed the civil design and fire-life safety review and provided expertise for the two portal facilities. The mechanical scope includes evaluation of space requirements and ventilation and egress connections between the ventilation buildings and tunnel egress corridor. The project entails the replacement of the two-mile long, six to eight-lane double-decked viaduct and seawall structure, which was built in the 1950's and is currently carrying over one-quarter of Seattle's north-south traffic through downtown. Jacobs provided project management; feasibility studies; EIS documentation and support; TS&L studies; preliminary design (structural, civil-roadway, and utility engineering); scheduling; cost estimates; risk assessment; value engineering; and design-build document development on this project.

Florida DOT, Design, Construct, Finance, Operate, and Maintain the Port of Miami Tunnel, Miami, FL. Mechanical Design Team Leader responsible for final design and analysis of tunnel ventilation, fire protection and fire life safety systems, and drainage. Jacobs, as part of the MAT Concessionary led by Bouygues is responsible for the final tunnel design of the design, build, operate and maintain POMT project.

NYCDOT, Route 9A Reconstruction Segment 1, Battery Park Underpass Ventilation Study. Project Manager designed the tunnel ventilation and fire protection system for the rehabilitation and reconstruction of tunnel in Lower Manhattan. Performed tunnel ventilation analyses and prepared a report on required changes to existing ventilation system to be made to meet the NFPA 502 standard.

Nick Chen, PE
Tunnels

Education

- MS, Civil Engineering, 1983
- BS, Civil Engineering, 1978

Registration/Credentials

- Professional Engineer: PA, RI, TN, KY, MA

Nick Nick Chen specializes in structural engineering for underground structures, particularly deep excavations, tunnels, and shafts. Additionally, he specializes in soft ground and hard rock tunnels, deep excavation supports, cut-and-cover tunnels, bored tunnels, mined tunnels, shafts, caverns, and inspection and rehabilitation of existing tunnels. His understanding of the interrelationship between geotechnical elements and their effects upon tunnel and underground structures is well recognized within the tunneling industry. He currently serves as a Committee member for the ACI 506 Sub-committee Underground Shotcrete, Chair of the New Austrian Tunneling Method (NATM) Technical Committee for American Underground Association (AUA), and Director of the AUA Board of Directors.

Project Experience

Port Authority of NY & NJ, Holland Tunnel Seismic Vulnerability Study, New York, NY. Tunnel consultant, provided seismic evaluation criteria for this study, including ground motion time histories and their associated response spectra and the structural performance criteria. A two-level seismic evaluation that is consistent with the New York City seismic hazard design guidelines for bridges is adopted. The first level is the Functional Evaluation Earthquake (FEE), which corresponds to a 500-year reoccurrence seismic event, and the second level is the Safety Evaluation Earthquake (SEE), which corresponds to a 2,500-year reoccurrence seismic event.

NJ Transit, Bergen Tunnel Rehabilitation, Hoboken, NJ. Tunnel consultant, performed an independent analysis for a revised tunnel lining system (to enlarge the existing tunnel section) because of the actual ground condition encountered in the field by sequential excavation and shotcreting method. The existing tunnel lining is made of brick arch. The original proposed tunnel lining system includes 6" shotcrete and lattice girder as initial support, with 12" reinforced cast-in-place final lining. The revised tunnel lining system includes shotcrete and cast-in-place reinforced concrete lining only, which results in construction cost savings.

Port Authority of Allegheny County, North Shore Connector Project/Allegheny River Crossing Tunnel, Pittsburgh, PA. Tunnel engineer, working as the PM/CM for the Authority, reviewed the Alternative Tunneling Methods for the Allegheny River Crossing from Gateway Station to PNC Station, including steel immersed tube tunnel, cut-and-cover tunnel, and TBM bored tunnel. Lead the review of 30% preliminary design documents and tunnel design criteria.

South Bay Tunnel Outfall Project for the City of San Diego, CA. Senior structural/tunnel engineer; provided 95% contract package review of this CSO tunnel and shaft contract package (soft ground tunneling), including the reviews of constructability, scheduling, designs, and specifications. The tunnel is situated in soft ground excavated by Earth Pressure Balance (EPB) machine with one-pass bolted and gasketed precast concrete segmental lining.

Tren Urbano Carolina Extension, San Juan, Puerto Rico, for the Puerto Rico Highway and Transportation Authority. Tunnel consultant; provide tunnel evaluation and conceptual cost estimate for one of the proposed alternatives. This alternative is an extension of the existing Tren Urbano heavy rail system utilizing the existing Rio Piedras Station as the western terminal.

Nick Chen, PE
Tunnels

Existing spur tunnels, located to the south of the station, have been constructed in the original system for the planned expansion. This alternative requires the extensions of these spur tunnels as the alignment continues to the east past the heavily congested Rio Piedras Station area. The existing spur tunnels, 22' oval shape cross section, were designed and constructed by the NATM principles. The proposed tunnel (soft ground in congested urban setup with high groundwater table), 2,500-ft in length each bore, would be designed and constructed with similar principles as that of the original system. Its lining system includes shotcrete, lattice girder, and self drilled grouted steel pipe spiles as its initial lining and cast-in-place concrete as its final lining. The waterproofing system is through waterproofing membrane installed between the initial lining and the final lining.

APM Tunnel Study for Hartsfield-Jackson Atlanta International Airport, Atlanta, GA. Tunnel consultant, provided a conceptual level planning for a proposed APM tunnel connecting the proposed International Arrival Terminal (IAT) and the proposed International Arrival Building (IAB) at Hartsfield-Jackson Atlanta International Airport, Atlanta, Georgia. Two tunnel alternatives are included in this study. The tunnel lengths of Alternative 1 and Alternative 2 are approximately 6,000 ft, to be constructed by EPBM, and 945 ft, to be constructed by NATM, respectively. The subsurface condition includes fill, dense silty sand, weathered rock and sound rock. The elevation of the top of weathered rock is erratic. It is expected that the tunnel excavation will encounter mix-ground condition.

West Virginia Dept. of Transportation, Wheeling Tunnel Inspection and Rehabilitation, Wheeling, West Virginia. Tunnel consultant; this project involves the inspection and repair/rehabilitation of the existing Wheeling Tunnel constructed in 1960s. It is a twin-bored two-lane highway hard rock tunnel, about 1500 ft long for each bore with horseshoe cross section of about 22.5' high and 29.5 ft wide. Assist, provide, and consult the repair strategies and priority of the tunnel deficiencies, including the primary groundwater infiltration through construction joints, concrete cracks and spalling, falling tiles, and the upgrade of the fire and life safety components of the tunnel.

TRB, Transit Cooperative Research Program (TCRP) Project J-10G, Assessing and Improving Rail and Highway Tunnel Operational and Structural Security and Safety. Panel member, prepared research project statement, select the research team, monitor the research process, and review and assist the publication of the research report. The objective of this research is to develop safety and security guidelines for owners and operators of transportation tunnels to use to identify: (1) critical locations; (2) potential structural improvements; (3) operational countermeasures; and (4) deployable, integrated systems for command, control, communications, and information. The guidelines will be applicable across the spectrum of both accidental and intentional threats.

Massachusetts Turnpike Authority, GEC Contract, MA. Tunnel consultant, assisted the Work Task of evaluating the effectiveness of MTA existing corrosion protection systems and facilities, including cathodic protections and stray current tests for the following structures: Ted Williams Tunnel, Central Artery Tunnel, and Fort Point Channel Tunnel.

Robert Harvey, PE
Tunnels

Education

- BS, Electrical Engineering, 1994

Registration/Licenses

- PE in NY, NJ, PA, TX, FL, OH, WA, VA, SC, CO

Robert Harvey is a versatile lead electrical engineer specializing in electrical design for transportation projects who has been involved with all aspects of project development, from conceptual and detailed design through construction management, field inspection, project management and final commissioning. His expertise includes medium and low voltage distribution, motor controls, emergency power design, indoor, outdoor and tunnel lighting design, process controls, instrumentation selection and specification, HVAC and other building control systems, communications design, and life safety systems.

He is a Senior Member of the Instrumentation, Systems and Automation Society (ISA), a Senior Member of the Association of Energy Engineers (AEE), a full member of the Institute of Electrical and Electronics Engineers (IEEE) and the Illuminating Engineering Society of North America (IESNA) and serves as a Full Member of the IESNA ANSI/RP-22 (Tunnel Lighting) subcommittee.

MTA Bridges and Tunnels, Brooklyn Battery Tunnel BB-45, Brooklyn, NY. Lead Electrical Engineer responsible for design of replacement switchgear, motor control centers to replace existing fan motor controllers, 4160v transformers and 4160v feeders and UPS's for tunnel lighting. Work included performing detailed survey of existing conditions and providing full power systems analysis.

Virginia Dept of Transportation, Hampton Roads Bridge Tunnel Switchgear Replacement, Norfolk/Hampton, VA. Lead Electrical Engineer responsible for design of replacement medium voltage (15kV) and low voltage (480V) substations and switchgear for two shores, two bridge and two island locations. Design includes new medium voltage (15kV) bridge and tunnel feeders sized for all required tunnel loads, especially emergency tunnel ventilation. Two 2.25 MVA medium voltage (15kV) emergency generators were designed to also accommodate required loads associated with safe operation of tunnel systems. Extensive coordination with utilities was performed especially with respect to closed transition operation of generators. Responsible for all short-circuit analysis, load studies, and other electrical system reliability analysis for electrical equipment to form basis of design. Estimated Project Cost: $40 million

MTA Bridges and Tunnels, Brooklyn Battery Tunnel Switchgear Replacement, Brooklyn, NY. Lead Electrical Engineer responsible for design of replacement low-voltage switchgear for entire tunnel. Electrical system is divided among three buildings, each with multiple sets of double-ended 2000A or 4000A switchgear sets with automatic transfer capabilities. In addition, design includes all replacement conduit and wiring to loads fed from switchgear including 4160V feeders to remove ventilation building. Also responsible for multiple UPS design to handle uninterruptible power source to all tunnel lighting. Responsible for all short-circuit analysis, load studies, and other electrical system reliability analysis for electrical equipment to form basis of design.

MTA Long Island Rail Road, Jamaica Central Control (JCC) Building Jay, Hall and Dunton Interlocking, Jamaica, NY. Lead Electrical Engineer responsible for design of all power, lighting, communications, security, and fire alarm design for architectural fit-out of control room to replace three existing towers. Work included careful integration of power and communications requirements

of train control system equipment procured under separate contract into the new control room and associated spaces such as electrical and communications room. Designed full emergency and UPS power distribution system and all above-ceiling and below-raised-floor power and communications cabling to each operator workstation. Designed control room lighting scheme which included use of fully dimmable LED task lighting to supplement normal room lighting. Provided layout of cable tray and additional cable management to all communications equipment and rooms. Responsible for design of Lenel-based security design including CCTV and keyboard controllers with monitors and DVRs.

State University Construction Fund, SUNY College of Technology at Canton, Replace Electrical Substation and Perform Load Study, Emergency Power Study, Canton, NY. Lead Electrical Engineer responsible for investigation of existing electrical systems including the existing campus sub-station, design of new switch gear and standby power systems. Perform load studies and standby power studies for the campus.

MTA Metro North Railroad, Cortlandt Station Improvements, Cortlandt, NY. Lead Electrical Engineer responsible for complete design of all power and lighting for extensive additions to commuter train station. Work includes coordination of new electrical service to facility, lighting calculations and design of station parking lot and plaza lighting, and production of demolition and construction documents, drawings and specifications.

MTA Metro North Railroad, Croton/Peekskill Stations Improvements, Croton/Peekskill, NY. Lead Electrical Engineer responsible for electrical design of power distribution for various improvements around the stations including addition of heat-tracing, replacement lighting and passenger elevator improvements.

MTA Long Island Rail Road, Seaford Station Platform Replacement, Queens, NY. Lead Electrical Engineer responsible for complete design of all power and lighting for replacement of platform at commuter train station. Work included coordination of new electrical distribution to platform equipment including new lighting, public address and passenger information systems. Work included lighting and electrical connected/demand load calculations and production of demolition and construction documents, drawings and specifications.

ConRail, Oak Island Yard Improvements, Newark, NJ. Lead Electrical Engineer responsible for all lighting and power distribution for new rail yard including overhead and underground electrical service and distribution, transformer specification and selection, medium and low voltage power distribution panel boards and electrical construction details in accord with AREMA standards.

Private Client for Ohio Dept of Transportation, WH Sammis Roadway Tunnel Lighting Replacement. Lead Electrical Engineer responsible for design of replacement for low pressure sodium tunnel lighting with high pressure sodium. Work included field investigations to determine existing lighting conditions using LSEQ method per IES standards. Full tunnel lighting calculations, renderings and animations provided using AGI32 software were used in evaluation of various alternatives. Final design included all power distribution and circuiting for new tunnel lighting. (2009. Estimated Project Cost $1.5 million)

Kai Kang, PhD, PE
Tunnels

Education

- PhD, Mechanical Engineering, 2004
- MS, Mechanical Engineering, 1999

Registration/Credentials

- Professional Engineer: NY and TX

Dr. Kang has extensive experience in the in-depth design and analysis of the fire life safety, ventilation systems of major roadway, and transit tunnels. He has taken on technical leading roles in many large transportation projects as well as managed numerous projects in the capacity of fire life safety and ventilation. Dr. Kang is especially familiar with document control, quality control, and assurance procedures. For more than ten years, he has been practicing computational fluid dynamics (CFD) and published countless papers on ventilation and fire safety design in tunnels and stations. Dr. Kang serves as voting members on the ASHRAE Technical Committees of "Enclosed Vehicular Facilities" and is currently the Secretary on the committee of "Control of Fire and Smoke".

Project Experience

MTA Bridges and Tunnels, TBTA Brooklyn Battery Tunnel, Design and Construction Support Services for Project BB-45, Supply Fan Replacement, Switchgear Replacement and Manhattan Underground Exhaust Building (MUEB) Fan Upgrade and Repairs, Brooklyn, NY (2009). Senior Mechanical Engineer responsible for conducting CFD modeling and design calculations for the use of a water mist fire suppression system on the longest vehicular tunnel water crossing in the United States. Prepared design report for the 40% design submittal and assisted in the preparation of fan vibration test reports and responses to Client's comments.

Port Authority of NY & NJ, Design Service for PATH Harrison Station, NJ. The PATH Station at Harrison, NJ, is one of the 13 stations that make up The Port Authority Trans-Hudson (PATH) rail system. As part of the PATH Capacity Expansion Capital Program, provision is provided to upgrade the station to 10-car platforms from the existing 8-car platforms. In addition, the station is being substantially re-developed with four new station houses and platform canopy structure for the anticipated development in the area. Urban planning and sustainable solutions are also being considered for the Harrison Station Replacement Program. As Project Manager and Lead Engineer in fire and smoke management, working with the Authority's Architectural and Engineering Design Division, the scope of work is to provide engineering design support in fire life safety and smoke management for Harrison Station. NFPA-130 (2007) was adopted as the design standard; and work includes review of the project design document, establishment of analysis criteria, and specification of design requirements for fire and smoke management. Kai is currently working with the Authority on smoke ventilation design of the platform canopy and smoke management for the four station house buildings.

Port Authority of New York and New Jersey, PATH System Tunnel Ventilation, New York, NY. Tunnel Ventilation Engineer. Conducted detailed field survey for all of the PATH stations and tunnels; developed the computer model using the subway environment simulation (SES) computer program. Performed calibration and sensitivity analysis for model validation, using historical field fan reach test data.

Port Authority of Allegheny County, Pittsburgh North Shore Connector Light Rail Project, Pittsburgh, PA. Lead Mechanical Engineer responsible for review of the mechanical design for stations and tunnels, conducted comprehensive review to ensure the design meets the code and the project requirements. As an on-going effort, working with the design engineers to evaluate design alternatives and the mitigation measure.

Kai Kang, PhD, PE
Tunnels

Trans-Link Dunsmuir Tunnel Emergency Ventilation Control Upgrade, Vancouver, Canada. Project Manager in Fire Life Safety and Ventilation. Responsible for evaluation of emergency ventilation control strategy using subway environment simulation (SES) computer program, investigation of existing station and tunnel conditions, prepared engineering design report for the emergency ventilation control. Managed internal assignments, coordinated peer review and team presentation to Client. The Dunsmuir Tunnel consists of three stations and a "stacked" tracks configuration for the SkyTrain system.

MTA New York City Transit, Fulton Street Transit Center, New York, NY. Lead Tunnel Ventilation Engineer. Assessed the impact of station environment on the proposed transit center such as cooling and heating load and related design issues; evaluated the effectiveness and feasibility of platform spot cooling for subway stations connecting to transit center; studied station fire and smoke control strategies.

Evergreen Light Rail Transit (LRT), Trans-Link, Vancouver, Canada. Project Manager in Fire Protection Engineering including Tunnel Ventilation. Developed scope of work, including code analysis, tunnel fire strategy and means of egress for multiple train scenarios. Designed and analyzed ventilation concepts of portal jet fans using SES. Made equipment selection and set ventilation modes. Deliverables include design analysis, code compliance report and conceptual design of tunnel ventilation and alternatives. (2006)

Bay Area Rapid Transit (BART), San Jose Extension, BART / VTA, CA. Project Manager in Fire Life Safety and Smoke Control Design. Led smoke control study for Alum Rock Station; Evaluated emergency ventilation strategies using tunnel ventilation fans, conducted CFD simulations and tenability analysis to ensure that in the event of a fire, the NFPA-130 requirements can be met. As part of the life safety assessment, recommended station ventilation modes and operational considerations of the emergency ventilation systems; Reviewed design basis for system wide tunnel ventilation design and fire analyses; Reviewed options for cross-passage spacing and alternatives of mid-tunnel ventilation shafts; Assisted in the evacuation modeling (STEPS & NFPA-130) for a mid-tunnel train fire. Deliverables include reports and presentations.

Texas DOT, Woodall Roger Deck Plaza, Dallas, TX (2009). Lead Tunnel Ventilation Engineer responsible for the tunnel ventilation system design and documents, and for the CFD analysis. Longitudinal tunnel ventilation system using jet fans is implemented for the project. The Woodall Rogers Park in downtown Dallas TX is to be built over the existing Woodall Rogers Freeway and offers multi-fold benefits to the residents and the development of the downtown area. The park will be built on top of a deck that will cover the Woodall Rogers Freeway from St. Paul to Pearl Street.

MTA New York City Transit, Second Avenue Subway, MTA New York City Transit, New York, NY. Senior Mechanical Engineer responsible for the preparation of preliminary engineering report for station smoke management design. Reviewed CFD simulations, fire engineering calculations, station evacuation and structure fire protection assessmentsand investigated and drafted report on the egress usage of elevator and relevant code compliances; conducted site survey of tunnel sections and fan rooms of the existing subway system; reviewed field measurement data for train braking heat release; and the effectiveness of the trackway exhaust system in station environment control.

Greg Zdenek
Tunnels

Education

- *MBA, Business Administration, 1998*
- *BS, Electrical Engineering, 1990*

Greg Zdenek is experienced in the management and operation of an electronic engineering/system integration business focusing on mission critical and life safety applications. He is the Department Head for our New York office's mechanical and electrical group, which includes directing engineering, software and system integration projects.

Project Experience

Virginia Dept of Transportation, Hampton Roads Bridge Tunnel Switchgear Replacement, Norfolk/Hampton, VA. Technical lead for the communication and SCADA design. Early in the project, he directed field work and developed an existing condition's report as well as a conceptual design report. He is involved in developing design plans and engineering specification for construction. Project involved design of replacement medium voltage (15kV), low voltage (480V) substations, generators and switchgear. In addition existing ventilation and electrical SCADA system is to be upgraded. The project is currently in the design phase.

MTA Bridges and Tunnels, BB 15A, Brooklyn Battery Tunnel Control Room Modernization, New York, NY. Project Manager responsible for the initial development and scoping, preliminary and detailed design, as well as construction support services for the modernization of the Control Room of the Brooklyn Battery Tunnel. The design was conceived to identify a uniform upgrade path to enhance the mechanical and electrical systems of the Tunnel. The conceptual design allows for all critical systems in the tunnel to be monitored and controlled from a single user interface (SUI). This means that TBTA personnel will be able to view all critical systems at a single workstation allowing them to respond to emergencies quicker, work more efficiently, and require less training. The project included the design of a temporary control room using a trailer, the demolition and retrofit of the existing control room, the addition of seventy two CCTV units, a fully redundant 1Gbsec Ethernet backbone wide area network and the optical communication cable plant to support the system. In addition to provide standard design services, Jacobs was tasked with performing the complete programming, integration and startup of the contractor supplied components. Jacobs developed the overall strategy and architecture to help the TBTA identify, prioritize and specify improvements to these systems. Jacobs recommended a level of integration for each sub-system investigated ranging from simple monitoring to complete remote control.

NYS Department of Transportation (Region 11), Western Queens ITS System Software and Integration, New York, NY. Leading Technical Specialist managing a group of software developers who built a system which allows operators to monitor and control sensors and signs throughout the Western Queens region. The system allows operators at the JTOC (Joint Traffic Operation Center) to monitor critical traffic data such as speed, volume and occupancy in real time. In addition, the system he helped architect is being used to coordinate the messages displayed to the traveling public through the Variable Message Signs throughout the region.

Pennsylvania Dept. of Transportation, District 8-0 Harrisburg ITS, Harrisburg, PA. Jacobs and Wellington Power were awarded a design-build contract for the installation of various ITS devices in the field, and a complete upgrade of the Traffic Management Operation Center. Mr. Zdenek led the design, procurement, installation and integration of all equipment installed in the

traffic management center. The project included performing a design of the new operation command and control center; communication backbone; video encoding; T1 bridges; switches and routers; two servers and four workstations; custom consoles; a 6' by 9' video wall; network video recorder (NVR) as well as the Traffic Management Center computer network.

Florida Department of Transportation, Turnpike Enterprise, Maintenance and Traffic Operations Engineering Management Consultant Contract, Statewide, FL. Led the peer-to-peer committee to review the existing operations of the Florida Turnpike ITS operations. Interviewed the staff at both Orlando and Pompano Beach Traffic Management Centers (TMC) and conducted a thorough investigation of the operation. The findings included potential flaws and possible solutions in the existing system resulting in improvements that have reduced data loss, network issues, and poor communication with critical field equipment such as VMS.

MTA Bridges and Tunnels, Assignment #12, Control Room Modernization, New York, NY. As Task Manager, supervised the development of the scoping and conceptual design for the modernization of the Control Room of the Brooklyn Battery Tunnel. The work included the development of the scoping and conceptual design for the modernization of the Control Room of the Brooklyn Battery Tunnel. The design was conceived to identify a uniform upgrade path to enhance the mechanical and electrical systems of the Tunnel. The conceptual design allows for all critical systems in the tunnel to be monitored and controlled from a single user interface (SUI). This means that TBTA personnel will be able to view all critical systems at a single workstation allowing them to respond to emergencies quicker, work more efficiently, and require less training. In addition, with the real-time data provided by the SUI, maintenance personnel will be able to more quickly identify and correct problems. Jacobs (then Edwards and Kelcey) developed the overall strategy and architecture to help the TBTA identify, prioritize and specify improvements to these systems. Jacobs recommended a level of integration for each sub-system investigated ranging from simple monitoring to complete remote control.

Philadelphia International Airport, Automatic Temperature Control System Upgrade. As Project Manager, provided design services to the Philadelphia International Airport (PHL) for a control systems upgrade. PHL had issues because there were multiple control systems at which are incompatible with each other, creating a maintenance burden. Systems affected by this project include the rooftop HVAC units, indoor central station air handlers, Central Utility Building (CUB) pumps and equipment. Mr. Zdenek led the design of a control system replacement for approximately 129 rooftop units including new direct digital control panels, control valves, temperature sensors, damper actuators, dampers, smoke detectors, freezestats, pressure switches, CO2 and Nox as required, and communication link to the Airport Central Utility Buildings. The project upgraded the control system at the CUB and Satellite Thermal Plant including the upgrade of existing chiller/boiler control panels, new gateways between existing chiller/boiler control panels and ATC system, isolation control valves for chillers, flow meters, temperature transmitters and load management system.

Marcos Loizias, PE

Bridges - Project Manager

Education

- MS, Structural Engineering, 1983
- BS, Civil and Environmental Engineering, 1981
- Construction Management Diploma, 1989

Registration/Credentials

- Professional Engineer: NY #[redacted] NJ#[redacted]CT, PA, WV, MO, KY, OH, VA, FL, NC, SC, MA, IL, TX, AZ, DE, ME, GA, WA

Employment History

1998-2004 - Jacobs
4/1998-9/1998 - Rust Environmental & Infrastructure
1989-1998 - HNTB
1988-1989 - Parsons Brinckerhoff
1983-1988 - HNTB

Marcos Loizias has over 25 years of professional experience, during which time he has been in charge of the planning, structural design and plan production, construction and/or rehabilitation of numerous steel and concrete long-span bridges (cable-stayed, suspension, arch, truss, girder, segmental), movable bridges, interchanges and major viaducts throughout the U. S. He is experienced in both conventional design/bid/build and design/build projects.

Project Experience

Port Authority of NY & NJ, Goethals Bridge Expansion, Elizabeth, NJ. Project Manager and Chief Engineer for the preliminary design and plans equivalent to 30% Stage III final design of the concrete alternative a 6,310-foot-long high level precast segmental concrete box girder bridge with a 1,640-foot 3-span cable-stayed main span. The approach spans consist of precast segmental concrete box girders varying in length from 120' to 150' and build by the span-by-span method of construction. Also in charge of the design of the prestressed concrete girder approach spans varying in length from 120' to 160', along with the design and constructability reviews of the steel tied-arch main span (740') for the steel alternative. The bridge was designed for combined highway and light rail use. Responsibilities included: project management and cost control, bridge type studies (steel composite and concrete cable-stayed, tied arch), engineering analyses/designs, civil/highway design, ship collision studies/risk analyses including preliminary design of dolphins and artificial island, multi-mode response spectrum dynamic seismic analysis and liquefaction studies, hydraulic and scour analyses, electrical and mechanical, aesthetic lighting, cost estimates including life cycle analyses, and technical special provisions for design-build project deliver option.

Port Authority of NY & NJ, George Washington Bridge, NJ and NY. Project Manager in charge of the rehabilitation to control water infiltration in the New Jersey and Palisades Cliff anchorages of a 4,800-foot-long suspension bridge.

NJ Dept. of Transportation, Route 36 Highlands Bridge over the Shreswbury River, NJ. Project Executive and Principal Engineer in charge of the preliminary design of a 1,700-foot long mid-level fixed bridge designed to replace on-line a 1,240-ft long low-level double leaf bascule bridge. The new bridge features twin precast segmental concrete box girder structures designed to be built by the balanced cantilever method. Bridge alternatives studied during the conceptual design phase included precast segmental concrete box girder (span-by-span, balanced cantilever), steel box girder, steel I-girder and post-tensioned spliced girder. Engineering services for the project include: project management, support of environmental assessment documents and permits, roadway and ROW plans, surveys, subsurface investigations, preliminary design, and public involvement program.

NJ Dept. of Transportation, Route 7 Wittpenn Bridge over the Hackensack River, NJ. Project Executive and Principal Engineer for the final scope development and preliminary design of a 8,800-ft long mid-level vertical lift bridge, approach viaducts and ramps to replace the existing Wittpenn Vertical Lift

Bridge (one of the "Tri-Hack" Vertical Lift Bridges built on the Hackensack River in 1930) on a north alignment. The 324' long by 110' wide main span - believed to be the widest vertical lift bridge in the world - features steel orthotropic box girder construction. The approach viaducts and curved ramps are of steel composite I-girder construction. Engineering services for the project include: project management, final scope development, environmental assessment documents and permits, roadway and ROW plans, surveys, subsurface investigations, preliminary and final design and plans, and public involvement program. The project is currently in the preliminary design phase.

West Virginia Dept. of Transportation, Bridge No. 3693 over the Mud Fork River, WV. Project Manager / Chief Engineer in charge of the final design, contract plans preparation and construction support services including construction engineering, shop drawing reviews and RFI's for a 1,530-foot-long 6-span continuous steel plate girder bridge. Steel plate girder (longitudinally stiffened) spans vary from 200' to 290' and are supported on post-tensioned T-piers with heights up to 210'. First use of high performance weathering steel in West Virginia. Developed bridge concept and provided technical supervision to all analyses and designs including erection analysis and construction support services. The bridge was recipient of 1998 AISC/NSBA Prize Bridge Award for Medium Span Bridges.

South Carolina Dept. of Transportation, Replacement of the Cooper River Bridges, SC. Project Manager / Chief Engineer in charge of the replacement of the existing Grace and Pearman Bridges with a 7.2-mile-long high-level bridge that carries U. S. 17 across the Cooper River and Town Creek between the City of Charleston and the Town of Mt. Pleasant. The project included a signature cable-stayed main bridge (longest in the western hemisphere) with accompanying high and low level north and south approach viaducts, interchanges and associated roadway approaches in Charleston and Mt. Pleasant. Responsibilities for the project included:

1) project management and administration
2) engineering analyses and preliminary designs for cable-stayed main span bridge (concrete segmental and steel composite alternates) with a western hemisphere record center span of 1,550'. Conceptual studies included self-anchored suspension bridge and steel tied arch
3) engineering analyses and preliminary designs for segmental concrete box girder, post-tensioned spliced girders, steel plate girders and steel box girder alternates for approach spans and interchanges
4) Surveys and mapping
5) Right-of-way plans
6) Roadway plans
7) Boring exploration program including pile load test program for 6' and 8' diameter drilled shafts under static, dynamic and simulated liquefaction tests
8) Hydraulic Analyses (tidal flow) and reports. Scour analyses
9) Development of seismic design criteria including site specific time histories and response spectra curves. Push-over analyses
10) Ship collision studies including conceptual design of artificial island
11) Wind studies; 12) Bridge architectural renderings
13) Re-evaluation of FEIS including updating of traffic studies, noise analyses, hazardous materials and cultural resources
14) Utilities
15) Development and coordination of public involvement program including brochures, newsletters, public information meetings and project web site
16) Development of early construction documents for utilization of FHWA discretionary funds

Avanti Shroff, PE
Bridges

Education

- Ph.D. Studies, 1967-1973
- MS, Engineering Mechanics, 1965
- BS, Civil Engineering, 1963

Registration/Credentials

- Professional Engineer: NY, NJ, DE, MI, MO, VA, WV

Avanti Shroff has over 45 years of experience on several major diversified projects. He is a registered Professional Engineer in many states and is an active member of many professional and technical organizations. His expertise covers inspection, evaluation and design of major transportation structures, recreational facilities and commercial building, industrial and institutional Building facilities, mass transit structures and water front facilities.

Mr. Shroff has authored numerous technical publications in professional journals and conference proceedings in the fields of Structural Engineering, Computer Applications, Inventory, Inspection and Rating of Bridges, failure investigations and Rehabilitation of Buildings and Bridges. He has led numerous short courses and lectures to industry professional. He has participated as Principle Investigator in many research projects and workshops with funding from National Science Foundation, National Institute of Standards and Technology, Federal Highway Administration and American Iron and Steel Institute. Mr. Shroff has been responsible for the development of many innovative solutions using new technologies and materials. Some of these include:

- Use of precast polymer concrete to produce a pile jacket system to prolong life of existing piles
- Use of (shot-Crete) in rehabilitation of flat plate buildings to increase the load carrying capacity
- Use of remote sensing techniques (GPR and Infra Red) to rapidly and accurately identify delamination in building facades and concrete bridge decks.
- Development of Copy righted software for storage of multi-media information, Integrated Bridge Inspection Information System (**IBIIS**).
- Development of copy righted software for electronic field data collection using hand-held computers,
- Inspection On Hand (**IOH**)
- 1998 finalist for The CERF Charles Pankow Award for Innovation in Innovative Application Category for both of the above software.

Project Experience

Port Authority of New York and New Jersey, Expert Professional Structural Engineering Services for All Electronic Toll Collection System, New York, NY. Project Manager for project involving Toll Collection System at the existing six PANYNJ tunnels and bridges using a proprietary type space frame structure spanning several lanes of the roadway. This System will eliminate cash toll payments by utilizing E-Zpass transponders (tags) to collect the tolls to the maximum extent possible, and license plate image capture to collect tolls from non-E-Zpass customers.

Port Authority of New York and New Jersey, Modernization of the PATH Christopher Street Substation, New York, NY. Project essentially involves replacement of four existing 1.5 MW rectifiers with 3 MW rectifier lineups and replacement of existing 650 V DC switchgear, cable vaults and duct banks. Other project elements include architectural, structural and mechanical modifications to the building in compliance with NYC Landmarks requirements.

NYS Dept. of Transportation, Rehabilitation/Replacement of Trans-Manhattan Expressway Connector Ramps, New York, NY. These Ramps connect the Harlem River Drive with the Trans-Manhattan Expressway (I 95) leading to the George Washington Bridge. The challenge was to evaluate the

condition of the asphalt-covered deck, establish/improve the load carrying capacity of the deck and extend the life of this deck to ensure a satisfactory performance for at least 5 years.

NYS Dept. of Transportation, Rehabilitation of Kosciuszko Bridge over Newtown Creek, Brooklyn and Queens, New York including Seismic Evaluation and Retrofit. Engineer responsible for conducting seismic analyses, evaluating seismic vulnerability of bridge components and developing recommendations for upgrading/rehabilitation.

MTA Bridges and Tunnels, Various Locations, NY. As a Project Principal/Manger involved in biennial inspections, in-depth inspections, evaluations and production of repair documents for a number of bridges including:

- In-depth inspection and repairs of Marine Parkway Bridge
- Specific repairs, inspection of main cables and investigation of breakage of cable wires for the Verrazano Narrows Bridge
- Biennial inspections and preparation of repair details for Marine Parkway, Cross Bay Boulevard and Henry Hudson.

NYS Dept. of Transportation, Biennial Inspection of Bridges in all 11 Regions of New York State including NYC, Nassau and Suffolk Counties. Project Principal/Manager/QC Engineer for biennial inspection of over 7,900 bridges (30,000 Spans) including major bridges in NYC: Manhattan Bridge, Queensboro Bridge, Robert Mosses Causeway twin bridges over Great South Bay, Kosciuzko Bridge, Third Avenue and Madison Avenue Bridges, Gowanus Expressway Viaduct.

NYS Dept. of Transportation, Rehabilitation of Robert Moses Causeway NB and SB Bridges over Great South Bay. Project Principal/Manager involving field inspection, load rating, structural vulnerability assessment, seismic analysis and retrofit measures, BRPR and cost estimates for two bridges, each 2 miles long with 155 spans. A 3D computer model of the northbound structure, composed of over 318 nodes and 807 elements was used to model the entire structure consisting of 2 cantilever 225-foot anchor spans and one 350-foot main span. This model was capable of providing load rating (static analysis), fatigue assessment (static and dynamic), traffic impact evaluation (dynamic), and seismic assessment (static and dynamic).

Steel Detail Vulnerability Assessment of Steel Bridges in NYC. Project Principal/Manager for the Steel Detail Vulnerability Assessment of 538 bridges (3,750 spans) including long viaducts in Region 11 within the Bronx, Queens, Kings and Richmond Counties. The project also included the structural integrity evaluation and seismic, collision and fatigue vulnerability assessments of 61 bridges.

Value Engineering Studies for Various Clients. Mr. Shroff has participated in VE workshops and has completed value-engineering assignments for NYSDOT, ConnDOT, MTA Bridges and Tunnels, and NYC Dept. of Sanitation of New York for projects involving large bridges and buildings.

Robert J. LaMagna, PE
Bridges

Education

- ME, Civil Engineering, 1986
- BE, Civil Engineering, 1984

Registration/Credentials

- Professional Engineer:

NY #[redacted]
NJ #
CT #

Robert LaMagna has over 20 years of experience in bridge, roadway, and transit related projects. He currently is Project Manager of a NYSDOT Preliminary Design phase project for a section of the Major Deegan Expressway in The Bronx, and is Project Manager for structural on-call assignments with The Port Authority of New York and New Jersey and MTA-Bridges and Tunnels. Robert was also recently Deputy Project Manager for the NYSDOT Alexander Hamilton Bridge rehabilitation project. He was also previously in charge of Final Design of the Tappan Zee Bridge Partial Superstructure Replacement project and a series of three NYSDOT expressway bridges in the Bronx carrying or crossing over I-95, I-295, and I-695. He was also a Structural Task Manager for the Fulton Street Transit Project in lower Manhattan and Project Manager for Final Design of several NYCDOT roadway bridges over Amtrak on Manhattan's west side, including the landmarked West 79th Street Traffic Circle and Rotunda Complex. His experience has focused mainly on Total Design Contracts including preliminary design, final design, and construction support services

Project Experience

Port Authority of NY & NJ, Rehabilitation of George Washington Bridge 178th Street and 179th Street Ramps. Project Manager for performance of the in-depth inspection, preparation of Field Verification Report, Development of Testing Plan, and generation of Level 1 load ratings for the 178th Street, 179th Street, East and West Bus Ramps, and Bus Turnaround structures. Scheduled and provided oversight to the Jacobs engineering staff in undertaking these tasks while coordinating with the prime consultant and the Authority. Elements inspected included reinforced concrete roadway decks, and structural steel and reinforced concrete superstructure elements. The testing plan included cores with tests for compression strength, chloride concentration, freeze/thaw resistance, and air content. Additional testing included top of deck Ground Penetrating Radar (GPR) and underside of deck Half-Cell Potential and Linear Polarization methods to determine likelihood and rate of steel rebar corrosion. The load ratings will be used to develop details for a comprehensive rehabilitation project that addresses all priority repairs.

Port Authority of NY & NJ, 2009-2010 Structural (Bridges) Call-in, New York and New Jersey. The following tasks were completed for this on-call project:

- Inspection of LaGuardia Airport runway deck structures expansion joints. Led the structural effort in performing expansion joint inspections to identify structural weld failures and to inventory splice locations. A report documenting weld failure locations was prepared and delivered to the Authority.
- Analysis of In-Pavement light fixtures at LaGuardia Airport runway decks. Led the effort in evaluating the condition of a subject in-pavement runway light fixture. Aircraft load conditions were applied to the fixture and structural analyses were performed to evaluate the adequacy of various connection configurations. A report was prepared for the Authority that included analysis overview, discussion of results, and recommendations for future maintenance. FHWA bulletins were referenced throughout this task assignment.

Port Authority of NY & NJ, Structural Engineering Services for Port Newark-Port Street Improvements East of NJ, Stage I. Project Manager responsible for conceptual structural design of a flyover ramp at the Corbin Street and Port Street intersection and widening of an existing roadway bridge connecting eastbound Port Street with southbound Corbin Street. A 2-lane flyover structure was planned, piers were located on plan to allow construction staging and to provide adequate clearances, and preliminary

design was performed on the multi-span continuous structure. Conceptual bridge sections for steel plate girders and reinforced concrete pier bents were prepared and delivered to the Authority. Further, design and loading criteria were developed and a preliminary cost estimate was prepared.

NYS Dept. of Transportation, Cross-Bronx Expressway, Section I-95, Alexander Hamilton Bridge and Highbridge Interchange Ramps Rehabilitation between Amsterdam Avenue and Undercliff Avenue, New York, NY. Deputy Project Manager responsible for oversight of final designs, assistance in completion of temporary works designs for bridge deck replacement and superstructure and substructure rehabilitation, as well as the preparation and submission of a major PS&E package for this $400 million construction project. This project maintains 4 peak hour traffic lanes in each direction of high volume traffic passing between Bronx and Manhattan on Interstate 95 (Cross-Bronx Expressway). Under the Construction Support phase, Project Manager coordinating the review of shop drawings and Contractor material submittals, addressing questions for the client and contractor, resolving field condition issues, and reviewing the Contractor's design change suggestions.

MTA Bridges and Tunnels, GFM 468, Miscellaneous Designs on an As-Needed Basis, (2010-2011). Project Manager responsible for all as-needed design services. Currently leading the structural effort at the RFK Bridge for a series of tasks including cable anchorage investigation, structural joint repairs, drainage modifications, and electrical system inventory. Non-destructive testing is scheduled at anchorage eyebars, anchorage roof joints will be inspected and repaired, and structural concrete modifications will be performed on the sidewalks to accommodate drains and improve water runoff flow

NYS Department of Transportation, Phases I-VI of Trans-Manhattan Expressway Connector Ramp to Harlem River Drive, New York County. QA/QC Engineer for the preparation of final plans, specifications, and estimate for superstructure and substructure repair details on the connector ramp, a 2000 ft long steel and concrete-framed 55 span viaduct that carries 4 lanes of traffic, and five ramp structures ranging in length from 50 ft to 400 ft connect the ramp with local streets and TME. Responsibilities included oversight of structural analysis of members identified for repairs, load ratings of structural deck elements, development of various steel and concrete repair methods, and estimated construction costs. Engineering support was provided during construction to address field conditions.

NYS Dept. of Transportation, Phases I-IV of Major Deegan Expressway (I-87) Southbound between High Bridge Interchange and Macombs Dam Bridge, Bronx County, NY. Project Manager for the scoping, development of design alternatives, and preliminary design of a new southbound collector-distributor road parallel to southbound Major Deegan Expressway. The existing southbound steel viaduct in this area will either be rehabilitated or replaced with a fill section supported by retaining walls. Responsibilities include leading the Structural Department effort and coordinating with Civil, Traffic, MPT, and Environmental Departments throughout the scoping, identification of alternatives, and preliminary design phases, culminating with delivery of a Design Report.

Lynne Baumann, PE
Bridges

Education

- MS, Structural Engineering, 1981
- B.SCE, Civil Engineering, 1977

Licenses/Certificates

- Professional Engineer, NJ and NY

Lynne Baumann is thoroughly experienced in the management, coordination, and design of projects for transit, railroad, and highway infrastructure and facilities, especially those involving bridges, viaducts, and stations. She specializes in the design of new bridges and viaduct structures, as well as the inspection, evaluation, analysis, rehabilitation, and repair of existing structures, particularly throughout New Jersey, Connecticut, and New York. Her expertise includes the evaluation and design of both concrete and steel structures.

Project Experience

NJ Dept. of Transportation, Wittpenn Bridge, Route 7 over the Hackensack River. Project Manager responsible for the Final Scope Development, Preliminary Design, and Final Design for the replacement of a four-lane highway vertical lift bridge with a new higher level 324-foot long by 110-foot wide vertical lift bridge with 70-foot vertical clearance in the closed position. The new bridge is proposed to be a steel box girder lift span with an orthotropic deck. Preliminary bridge type studies and Environmental Assessment document for the replacement included resolution of hazardous materials, wetlands, historic/archeological, and geometric constraints. The preliminary design was completed in November 2005. Due to funding limitations, the Final Design started in Spring 2007. Preliminary plans were produced for the lift span, conventional steel girder with concrete deck approach spans, and curved girder approach spans and ramps. Various pier types and wall types were studied and evaluated based on utility conflicts and staging constraints.

NJ Dept. of Transportation, Route 36 over the Shrewsbury River, Monmouth County, NJ. Project Manager responsible for leading the effort in the Feasibility Assessment, and Preliminary and Final Design phases of the project. The work during the Feasibility Assessment phase included optimum height studies for replacement of the existing double leaf bascule bridge. This phase also included an Alternatives Analysis, development of Coast Guard permits, presentation material for community meetings, and alignment studies. Preliminary studies resulted in the recommendation for replacement with a 55-foot double leaf bascule, however changing U. S. Army Corp of Engineers requirements led to re-evaluation of the alternatives. A revised Alternatives Analysis was undertaken along with the Final Scoping for replacement of the structure with a new fixed bridge providing 65-foot vertical clearance on an extension of the same navigational channel (extended slightly to the south) as the existing.

NJ Dept. of Transportation, Route 9 over Bass River, New Gretna, NJ. Project Engineer responsible for studying alternate types of bridge crossings for the replacement of the existing historic bascule bridge. Various vertical clearances for navigation were studied, and impacts of various alignments and profiles were presented. Coast Guard permits were prepared in order to obtain early approval to modified navigation clearances.

MTA Bridges and Tunnels, Triborough Bridge Sidewalk and Specific Deck Repairs, New York, NY. Project Engineer responsible for the contract documents, design specifications, and estimates for the replacement plans for the sidewalk on the Triborough Bridge including the Bronx Kills Crossing, Harlem River Lift Bridge, Steel Viaducts, and Main Suspension Span. Replacement of sidewalks on both sides of over 2.1 miles of structure included the replacement of drainage structures and structural repairs of sidewalk supporting members.

Lynne Baumann, PE
Senior Project Manager / Structural Engineer

NJ Dept. of Transportation, Pulaski Skyway Rehabilitation, Newark to Jersey City, NJ. Project Engineer responsible for the rating and design of structural and safety improvements. Repair plans based on field inspection findings for the 3.2 miles of structure included structural strengthening, drainage modifications, clearance modifications, new sign structures, substructure repairs, and bearing rehabilitation. Responsible for consultation during construction and shop drawing review. Plans also involved construction staging for maintenance and protection of traffic during construction on this heavily traveled elevated roadway.

CT Dept. of Transportation, Stamford Station Improvements including Washington Boulevard Bridge, Stamford, CT. Project Manager responsible for the design of the station platform replacement and modifications. Project responsibilities included plans, specifications, and estimates for the Washington Boulevard Bridge and station modifications. The station improvement involved the installation of new tracks and relocation of existing tracks throughout the project. The replacement of the railroad bridge over Washington Boulevard and roadway reconstruction to increase the underclearance included maintenance of traffic studies and staging of new track construction to maintain both highway and rail traffic throughout the project. This project also included coordination of work for new center island platforms and side platforms, which were prestressed tee beams. Track realignment, handicapped accessibility, catenary modification, electrical and mechanical modifications to the station, pedestrian overpasses, and replacement of the pedestrian tunnel were also part of the project scope. Final plans, specifications, and estimates for all work were integrated with separate contracts by three other consultants to be bid as a single contract. Presently providing construction phase services, shop drawing review, and consultation during construction.

CT Dept. of Transportation, Yankee Doodle Bridge Rehabilitation, Norwalk, CT. Project Engineer responsible for the analysis and rehabilitation plans for the seven-span, 900-foot long highway bridge carrying I-95 over the Norwalk River. In charge of rehabilitation contract documents and construction inspection for replacement of the existing pin and hangers and retrofit of the hinge supports. The project also included safety improvements, installation of a new latex modified overlay for the deck, and new drainage structures. Maintenance of traffic on the heavily-traveled structure was a key consideration for staging the design for construction.

NJ TRANSIT, Monmouth-Ocean-Middlesex Study, NJ. Project Manager in charge of oversight on the Supplemental Study of Alternative Alignments and Mitigation Measures, Investigation of Tunnel Options, and Investigation of Jamesburg and Monroe Stations. This work was part of an ongoing study of the feasibility of providing a new commuter rail line between Lakewood and Monmouth Junction to respond to the growing populations in these three counties.

Todd N. Schickel, PE
Bridges

Education

- MS, Structural Engineering, 1981
- BS, Civil Engineering, 1975

Registration/Credentials

- Professional Engineer: NJ

Todd Schickel has extensive experience in bridge design, rehabilitation and inspection. He has managed major bridge design and inspection programs for a variety of clients and in a variety of settings throughout the Northeast. His experience includes replacement design of multi-span viaduct structures, railroad carrying structures, pedestrian bridges, roadway and bridge safety improvements, and microwave antenna support structures, and inspection and report preparation for hundreds of bridges.

Project Experience

NJ Turnpike Authority (NJTA), Interchange 6-9 Widening Program, Design Section 8. Structural Design Leader responsible for the management of the design of bridges, retaining walls, noise walls, culverts, and sign support structures for Design Section No. 8 of this $1.25 Billion Widening Program. Mr. Schickel's responsibility on this project was to lead the design team and to act as the interface between my designers, the Project Manager, and the client. Also had the responsibility to act as Deputy Project Manager regarding issues such as management of subconsultants, attendance at all project status meetings, and in the preparation of monthly progress reports and invoices.

NJ Turnpike Authority, Interchange 16W Route 3 Improvements, East Rutherford, NJ. Project Manager and Structural Design Leader responsible for the structural design of two bridges carrying Route 120 SB over Route 3 to Route 3 EB. Some unique aspects of the project included the design of tight radius, horizontally curved girder structures on skewed substructures that maintained adequate sight distance above and minimum horizontal and vertical clearances below; designing to minimize impacts to adjacent wetlands; designing to minimize staged construction activities; and the design of mechanically stabilized earth retaining wall systems. The project also included the design of new overhead and cantilever sign support structures in accordance with the criteria set forth in the NJDOT Design Manual, Bridges, and Structures.

NJ TRANSIT, Engineering Services for Undergrade Bridge Inspection, Statewide, NJ. Project Manager responsible for the management and QA activities of this railroad bridge inspection project. The project includes the field inspection, rating, and report preparation for 53 railroad bridges throughout New Jersey. This project entails detailed bridge inspections and condition evaluations, preparation of load capacity rating calculations or an update of existing load capacity ratings, preparation of inspection reports, and a revision of data sheets for the bridge management system.

NJ Turnpike Authority, Design Services for the Lengthening of Six New Jersey Turnpike Bridges, Southern, NJ. Project Manager responsible for acting as client liaison and providing project administration and staffing. Jacobs provided professional design services for the lengthening of six bridges carrying Authority, local, and state roads over the Turnpike Mainline. In anticipation of the future widening of the Turnpike Mainline from four to six lanes along its southern reaches, the Authority choose these six structures (which are currently in need of substantial rehabilitation) for lengthening to accommodate the future widening of the roadways below. The staged lengthening of these structures was accomplished with minimal impact to the motoring public.

NJ TRANSIT, General Engineering Consultant for Bridge/Railway Engineering, Plainfield, NJ. Project Manager responsible for the management of a study to rehabilitation or replace 13 bridges on NJ

Transit's Raritan Valley Line in Plainfield, NJ; for the preparation of contract documents for the rehabilitation of the Grant Avenue Bridge within this group of bridges; and for the complete reorganization and rewriting of NJT's Specification for Pipeline Occupancy on NJ Transit Property.

NJ TRANSIT, Main-Bergen Connection and Main Line Improvements for Secaucus Transfer, Secaucus, NJ. Project Manager responsible for the management of the design of two multi-span elevated structures, one culvert replacement, and one thru-girder bridge rehabilitation for this project to connect NJT's Main Line and Bergen County Line. Also served on the Technical Evaluation Committee with NJT, evaluating the qualifications of prospective contractors for the construction of the project. Jacobs was responsible for conceptual planning, environmental assessment, operations, and preliminary/final design of the project, including services during construction.

NJTA, Jersey Gardens Mall Off-Site Roadway Improvements (Kapkowski Road), Elizabeth, NJ. Deputy Project Manager, Project Manager responsible for the management of the design and construction of roadway improvements, including five new bridge structures and several retaining wall and sign structures, for improved access to the Jersey Gardens Mall, located in the vicinity of the NJ Turnpike Interchange 13A and Newark Airport.

NJ Sports & Exposition Authority, Replacement of Pedestrian Bridge over NJ Route 120, East Rutherford, NJ. Structural Director responsible for the development of 30% contract documents for the replacement of this bridge between Giants Stadium and the Continental Arena. Special issues addressed were aesthetics, ease of maintenance, vandal resistance, and cost. The existing bridge was an enclosed steel truss bridge approximately 1200' long by 10' wide supported on steel trussed towers which spanned over NJ State Route 120 between the Giants Stadium and Continental Arena parking areas.

NJ TRANSIT, Undergrade Structure Inspection, Statewide, NJ. Project Manager responsible for the management of this railroad bridge inspection program. The project included the field inspection (including coring and testing of brick and/or stone structures), rating and report preparation for 97 railroad bridges throughout New Jersey.

NJ TRANSIT, Frank R. Lautenberg Rail Station at Secaucus Junction, NJ. Lead Structural Engineer responsible for management of the structural design portion of this extensive project, a major rail transportation hub located at the junction of the Northeast Corridor and NJT's Main Line and Bergen County in the Hackensack Meadowlands. Jacobs was responsible for conceptual planning, environmental assessment, operations, and preliminary/final design of the project, including services during construction.

Kimberly L. Murray, PE
Bridges

Education

- ME, Structural Engineering, 1990
- BS, Civil Engineering, 1979
- Course, NYSDOT Bridge Inspection

Registration/Credentials

Professional Engineer
in NY #[redacted]
NJ #[redacted]
OH

Kimberly Murray's experience is concentrated in bridge design and rehabilitation for both design projects and construction support services. She has served as project manager and project engineer responsible for contract plans and report preparation, client contact, agency coordination and supervision of technical personnel.

Project Experience

Port Authority of NY & NJ, George Washington Bridge, Installation of Exterior Metal Stairs at Several Locations, NY. Project Manager for this call in contract assignment for work at the George Washington Bridge, for replacement of the maintenance platform at the obstruction beacon on the New York tower saddle room roof and installation of maintenance stairs at other locations on the bridge. Responsibilities included client coordination, supervision of technical personnel, project task scheduling and budget and project progress tracking. Project tasks included data research, field inspection, contract plan and estimate preparation and post award services, (shop drawing review, review of contractor requests for information, preparation of "as-built" drawings).

Port Authority of New York & New Jersey, George Washington Bridge, NY Approach Ramps LX1, LX2, Lower Level Ramps 3 and 4 Structural Engineering Services, New York, NY. Project Manager for this call in contract assignment for work at the George Washington Bridge, for provision of structural engineering services required to prepare the superstructure steel for painting by PANYNJ maintenance personnel at four New York approach ramps to the bridge. Responsibilities included client coordination, supervision of technical personnel, project task scheduling and budget and project progress tracking. Project tasks included data research, field inspection of steel and concrete repair areas and drainage downspouts, an electrical and utility survey, development of performance criteria for suspended work platforms, contract plan and estimate preparation.

Amtrak, Nationwide Program Management for Designated American Recovery and Reinvestment Act Projects, various locations. Ms. Murray performed quality reviews of Security Enhancement Bridging Documents for over 30 projects and prepared Bridging Documents for 2 Bridge Public Safety Improvement projects, meeting a fast tracked schedule. The Bridging Documents, which include plans, specifications, scope of work and performance design criteria, comprise procurement packages for design-build firms to bid on.

NJ Transit, Lackawanna Cut-Off Passenger Rail Service Restoration, Morris and Sussex Counties, NJ. Ms. Murray is the Structural Task Leader responsible and currently responsible for the design of a concrete arch culvert to replace the existing arch culvert. Since the project is in the Lackawanna Cut-Off Historic District it is necessary to consider SHPO concerns in the design and configuration of the new structure.

NJ Dept. of Transportation, Route 7 Wittpenn Bridge over the Hackensack River, Jersey City and Kearny, NJ. Reviewed structural design calculations and prepared structural design calculations for the new machinery room and new control house for the lift bridge. Also performed an independent check of the design of pier mounted sign structures. The designs and checks included use of computer modeling.

Somerset County, NJ, Replacement of Southside Avenue over Peters Brook, Borough of Somerville and Township of Bridgewater, NJ. Project Manager for engineering design services for replacement of a single-span through girder bridge with a prefabricated truss structure. The roadway will be widened and the sidewalk will be extended from the bridge to meet the existing sidewalk at the adjacent cross street. The profile will be modified to improve the west approach. All construction on the east approach must be done within the ROW since the adjoining properties are parkland. The work included hydraulic analysis, preparation of plans and applications for NJDEP permits and a NJ Soil Conservation District certification, utility coordination, community involvement and preparation of contract plans, specifications and estimates. Responsibilities included coordination with the survey subconsultant, client contact, budget tracking and staff supervision.

NYC Dept. of Transportation, Rehabilitation of Metropolitan Avenue Bridge over English Kills, Brooklyn, NY. Deputy Project Manager for the Construction Support Services (CSS) Phase of the rehabilitation of this double leaf bascule bridge. The project provided for replacement of the bridge mechanical and electrical equipment, deck replacement, repair and replacement of structural steel superstructure and trunnion column elements, partial replacement of the reinforced concrete piers and replacement of the wing walls and approach retaining walls, construction of a new operator house, elimination of the approach spans, fender system rehabilitation and painting the structure. Responsibilities included coordination with project team subconsultants, the resident engineer, the contractor and the client; review of contractor-generated requests for information (RFI's); supervision of technical personnel; shop drawing review; attending site visits to provide technical input; and attending weekly project progress and technical review meetings.

MTA Bridges and Tunnels, 2003 Miscellaneous A/E Design Services, GFM-419A, Assignment No. 27 – Verrazano Narrows Bridge: Scoping of Upper Level Approaches Rehabilitation. Served as Structural Task Leader; work included the scoping and preparation of a Deck Scoping Summary Report for the design of the deck rehabilitation for the Upper Level Approach Spans of the Verrazano Narrows Bridge The scoping includes the collection and review of available data, conceptual design for the replacement of the decks, maintenance and protection of traffic schemes, barrier replacement/relocation, life cycle cost analysis and evaluation of probable costs.

MTA, Bridges and Tunnels, 2001 Miscellaneous A/E Design Services As-Needed, GFM-413B, Various Locations, New York, NY. Served as the Structural Task Leader for the following assignments:

- **Throgs Neck Bridge:** Assignment #4 – Oiling of Cable Strands; Assignment #11 – Final design and preparation of plans, specifications and estimates for the Walkway and Ladder Upgrade; Assignment #14 – Feasibility study, conceptual design and preparation of scoping document for the walkway and access upgrade access system by preparing a request for proposal document for the design services required to satisfy the intent of the project.

- **Henry Hudson Bridge:** Assignment #15 – Feasibility study, conceptual design and preparation of scoping document for the replacement of upper level toll plaza; Assignment #16 – Feasibility study, conceptual design and preparation of scoping document for the replacement of lower level toll plaza.

Scott I. Jarmel, PE
Bridges

Professional Background

Education

– BSCE, Civil Engineering, 2001

Registration/Credentials

– Professional Engineer: NY #[redacted]

Professional Affiliations

– National Society of Professional Engineers

Scott Jarmel has ten years of experience as an Engineer that includes reviewing shop drawings, preparing reports, and modeling/analyzing structures using GTSTRUDL for bridges and buildings. He has also been a Team Leader and Assistant Team-Leader on inspections of buildings and multiple bridge types including suspension, truss, stringer, and moveable bridges.

Project Experience

Port Authority of NY & NJ, 178th St, 179th St, Bus Ramps, and Bus Turnaround, George Washington Bridge. Team Leader responsible for the in-depth inspection and documentation of the two New York approach ramps and three Port Authority Bus Terminal bus ramps for the George Washington Bridge. Bridge structures consist of concrete decks on steel stringers, floorbeams, and columns, and concrete decks on concrete floorbeams and concrete columns. n addition, a concrete testing program including coring, compression testing, concrete property determination, and half-cell potential analysis will be developed based on the results of the inspection effort.

Port Authority of NY & NJ, Runway Expansion Joint Inspection, LaGuardia Airport. Team Leader responsible for the inspection and documentation of damaged or delaminated plug welds on the tie-down plates of the runway expansion joints. Approximately 300 segments of expansion joint plates were inspected on both runways 4-22 and 3-31, with each segment having approximately 30 plug welds requiring sounding and documentation.

Port Authority of NY & NJ, Christopher Street Substation Upgrade, NY. Project Engineer responsible for the schematic design phase thru 100% design documents for the PANYNJ Christopher St substation upgrade. Work included assisting in the development of a Design Development Package, field trips to measure and verify existing conditions, and preliminary calculations/design to determine possible structural schemes and their related costs.

NYC Dept. of Sanitation, Garage 4/4A/7, New York, NY. Project consists of design of $150M, 400,000 SF four-story parking structure to support DOS vehicles with an equivalent weight of an HS-20 truck. The structure was designed as a vertical bridge, carrying moving vehicles from the ground floor to the 4th floor. As Office Engineer, provided construction support services for the construction phase of the project. This consisted of reviewing shop drawings for a variety of items including steel and concrete details, and assisting in the development of design modifications to the superstructure and substructure as a result of field conditions and Contractor RFIs.

NYS Dept. of Transportation, Bridge Maintenance Repairs at Various Locations, Trans-Manhattan Connector Ramps, New York, NY. As Engineer, assisted in the completion of a maintenance contract for the 55-span main TME ramp and 5 connector ramps. This consisted of identifying items requiring repair and noting them on bridge plan drawings, developing details for these repairs, and providing a quantity estimate for each repair. Repair items included full median barrier replacement, structural deck repair, parapet repair, bridge railing replacement, and curb replacement. Additional work consisted of performing load rating calculations for the concrete deck on the 55-span main TME ramp and assisting in performing a concrete integrity evaluation for the main TME ramp deck.

Scott I. Jarmel, PE
Senior Structural Engineer

NYC Dept. of Transportation, Final Design Metropolitan Avenue Bridge, Brooklyn, NY. Project Engineer inspecting the inside of the Metropolitan Ave. drawbridge, concentrating on the structure's steel framework. The inspection included taking measurements of the steel members, noting pack rusting and corrosion. Sketches were made in addition to taking photographs in order to show the location and extent of these finding. Also, proofread updated CAD drawings and noted any errors found.

NYS Dept. of Transportation, Rehabilitation of 16 Bridges Cross Bronx Expressway, Bronx, NY. Gathered information on the Alexander Hamilton Bridge's structures and made notes and sketchers as to locate and size all the defected areas for future repair.

NYS Dept. of Transportation, Van Wyck Expressway Bridges, Queens, NY. Assisted in various aspects of the design for the 190th Avenue and Foch Boulevard bridges over the Van Wyck Expressway, including the design of the overhead sign support frame used to mount the traffic sign to the fascia of the bridge. Helped to develop the profile and support details for the water main that runs along the side both bridges. Also helped in reviewing and approving/disapproving shop drawings for various elements in the construction phase of this project.

NYC Dept. of Transportation, Crooke/Newkirk Avenue Bridge, Brooklyn, NY. Assisted in inspecting abutments of the bridges crossing over MTA tracks. The inspections included sounding the concrete deck and abutments and noting hollow areas, checking for spalled areas, and noting other imperfections in the concrete such as efflorescence. Additional measurements were taken of the columns and their connection details located on the station platform so that accurate drawings could be made.

NYS Dept. of Transportation, Seismic Analysis of Kosciuszko Bridge, Queens/Brooklyn, NY. As Engineer, assisted in the seismic analysis and retrofit of the pier and abutment foundations for the 23-span bridge. The foundations consisted of both spread and pile footings. The analysis required checking the soil bearing capacity, pile capacity, spread footing/pile cap moment and shear capacities.

Connecticut Dept. of Transportation, Office of Rails; Field Verification Inspection of 63 Metro-North and Off-System Bridges. As Team Leader and Assistant Team Leader, performed inspections of 63 Metro-North bridges and Off-System bridges in various Connecticut counties. These inspections were intended to verify conditions noted in previous routine inspections and to identify which conditions warranted repair or replacement. As Engineer, completed repair plans based on the findings and conclusions from the field inspection. The repair plans consisted of repair details and a bill of materials. Typical repairs included full bearing replacement, bearing rehabilitation, primary and secondary member replacement, cracked weld repairs, and bearing stiffener repairs.

Wanda Wing Man Lam, PE

Bridges

Education

- MS, Structural Engineering, 2005
- BS, Civil Engineering, 2003

Registration/Credentials

- Professional Engineer: CA

Wanda Lam has seven years of experience and has been responsible for designs of bridges, buildings and specialized structural support projects. She has worked on bridge rehabilitation and bridge replacement projects and completed design calculations, plans, cost estimates, quantity estimates and specifications. Ms. Lam is experienced in the use of Staad.Pro, Sap 2000, GTStrudl, SAFE, RISA, Prestressed 14, Cap 18, MicroStation, PDS Frameworks 3D Modeling, AutoCAD, MathCAD, Matlab, C++, EnerCals.

Project Experience

Port Authority of NY & NJ, Design and Implementation of Replacement Toll System, NY and NJ. Structural Engineer responsible for evaluating existing conditions of structural elements and providing recommendations for removal and replacement of Toll Systems at Authority facilities. Developed Structural Technical Parameters and criteria to be used in design including: project scope, codes and standards, functional requirements including loads, material grades, design and construction assumptions and sustainability checklist. Developed contract drawings for system modifications.

NYS Dept. of Transportation, Long Island Expressway Corridor ITS Improvement, NY. Structural Engineer responsible for the analysis and design checking of new cantilever and overhead sign structures and support system in accordance with AASHTO Standard Specifications for Structural Support for Highway Signs. The effects of new sign structure loadings onto the existing superstructure of each bridge were analyzed.

NYS Dept. of Transportation, Cross Bronx Expressway, Bronx, NY. Analyzed and designed new overhead sign structures and support system in accordance with AASHTO Standard Specifications for Structural Support for Highway Signs. Developed attachments and connections details. Designed temporary supports, stringers, deck slab and retaining walls in phased construction in accordance with AASHTO Bridge Design Specifications. Modified drawings using Microstation.

MTA Metro-North Railroad, Cortlandt Station and Parking Improvements, Cortlandt, NY. Designed prestressed concrete slab units roadway bridge in accordance with AASHTO Bridge Design Specifications and PCI Precast Prestressed Concrete Bridge Designed Manual. Analyzed and designed foundation against static and dynamic loadings. Developed structural drawings.

Washington Department of Transportation (WSDOT), SR532 Corridor Improvement Design/Build Pursuit, WA. Performed preliminary structural design for General Mark W. Clark Memorial Bridge Replacement: designed and analyzed various bridge configurations using WSDOT prestressed precast girders and weathering steel plate girders; designed substructure; performed material estimations.

NYS Thruway Authority, Term Agreement for Seismic Vulnerability Assessment, Statewide NY. Evaluated structural integrity and seismic vulnerability of existing bridges according to the NYSDOT Seismic Vulnerability Manual. Prepared seismic assessments reports.

BP Products Company, Upgrade and Modification Projects, Los Angeles, CA. Responsibilities included designing new equipment supporting structures, pipeways and foundations for multi-million dollar modification projects at Carson Business Unit. Modified and upgraded existing structures to meet current

building code requirements. Prepared calculation packages for the city plan check. Prepared drawings using Microstation and AutoCAD. Performed material requisitions and estimations. Attend project meetings and coordinated project schedules with project managers and clients. Obtained field measurements, performed jobwalks and communicated with various disciplines.

Project Experience with Others

Simpson Gumpertz & Heger, Inc., Los Angeles, CA (1/06–7/06). Structural Engineer

- **Structural Engineering Department** - Designed 3-stories residential wood framed buildings according to LABC code. Prepared calculation package for plan check submittal. Coordinated project schedule with architects. Checked shop drawings.
- **Building Technology Department** - Coordinated and instructed water testing on varies construction sites according to ASTM standard. Determined and traced leakage sources and directed leakage repairs on sites. Communicated progress and schedule with property owner. Prepared daily technical field reports. Checked construction submittals and drafted waterproofing specifications. Provided information requested by Architects.

City of Los Angeles, Bureau of Engineering, Los Angeles, CA (2005). Served as civil engineering associate designing buildings components: masonry walls, wood truss joist roofs according to the UBC code. Obtained measurements from field.

Chiang, Patel & Yerby, Inc., Austin Texas, (2003–2004), Structural Engineer

- **Fort Bend County Toll Road Authority, Westpark Tollway Direct Connector, SE, Fort Bend, TX (06/03–06/04).** Designed substructures: straddle bents, multicolumn bents and steel-concrete transition bents according to AASHTO using structural analysis programs such as RISA, Prestressed 14 and Cap18. Performed structural analysis for moment connections between caps and columns. Designed reinforcement for caps and columns using PCACOL. Obtained roadway geometry using Geopak and RDS. Drafted detailing plans using Microstation.

- **Texas Department of Transportation, Bridge Widening over Onion Creek, Austin, TX (6/03–6/04).** Sub-coordinated the project. Analyzed bridge widening possibilities and designed phase construction, designed substructures, superstructures using Cap 18, RISA, RDS. Analyzed column reinforcement and foundation design. Obtained measurements from field. Designed quantities. Prepared detailing drawings.

Richard I. Wenger, PE
Terminals – Project Manager

Education

- BE, Mechanical Engineering, 1986

Registration/Credentials

- Professional Engineer: NY #[redacted]

Employment History

1997-present - Jacobs
1987-1997 - NYC Dept. of Sanitation
1986-1987 - Mason & Hanger

Rick Wenger is a licensed professional engineer with over 19 years of construction management/ inspection experience. Mr. Wenger is an experienced Resident Engineer with attentiveness to details and options. Past and present experience has primarily focused on constructing and renovating NY City and NY State owned vehicular repair, parking, and administrative facilities with diversified and specialized equipment including fuel storage and dispensing, pneumatically and electrically operated vehicle repair, lifting and frame straightening, and machine/ blacksmith shop. Pre-construction duties have entailed scope development through the understanding of user needs, preliminary and final design documents constructability reviews, preparation of pre-bid Addendums, conducting pre-bid walkthroughs, and bid evaluation/ award.

Project Experience

MTA New York City Transit, Charleston Bus Annex, Staten Island, NY. Project Director for design review, construction management and inspection services. Jacobs has been serving as the Consultant Construction Manager (CCM) during the pre-construction, construction, and closeout phases of the Charleston Bus Annex. The new Annex was planned to relieve the severe overcrowding at the Yukon and Castleton Depots in Staten Island and provide additional capacity for the expansion of service on Staten Island where overall ridership has grown from 31.3 million to 39.6 million since 1998. The new bus annex – bound by vacant properties to the south, a residential area of the north, and a golf driving and pistol range to the southeast and east – will provide operational capacity for 220 MCI buses. The facility consists of a building with a footprint of approximately 108,000 SF, with outdoor parking areas for buses and employee vehicles. Construction Value: $113 million

NYC Department of Environmental Protection Hillview Reservoir, Yonkers, NY. Resident Engineer for this project where Jacobs provided construction management services for a $500M project that involved improvements to the 90-acre, 900-M-gallon reservoir located in Yonkers. Chlorination of 85 to 90 percent of city water takes place at the reservoir, also pH balance monitoring and corrosion control. Improvements include chamber reconstruction and a chloride addition facility.

MTA Bridges and Tunnels, Battery Parking Garage, New York, NY. Resident Engineer for this $30 million structural repairs and lighting system improvement project including mechanical, plumbing, fire protection and electrical rehabilitation and upgrade.

MTA Bridges and Tunnels, New Service Building at the Bronx Whitestone Bridge, Bronx, NY. Resident Engineer for this $15 million new service building. Jacobs provided construction inspection and support services to the MTA Bridges and Tunnels for the 33,000 SF New Service Building at the Bronx Whitestone Bridge. The New Service Building provides space for operations, maintenance and engineering units attendant to the operation of the Bronx Whitestone Bridge Facility. Specifically, it includes locker rooms, muster rooms, administrative

offices and repair garages. Security systems coincident with toll collection operations were integral to the Facility.

NYC Dept. of Sanitation, Rehabilitation of Garage Floor at Central Repair Shop, New York, NY. Project Manager for the $10 million demolition and reconstruction of elevated concrete slabs and supporting structural steel for three 20,000 sf garages in an existing, operational facility including installation of a high pressure steam bypass system to de-energize steam piping below, temporary support and protection of ductwork and plumbing assemblages, replacement of electrical busway, lighting, public address and power distribution equipment and enhancement of an oil/water separator system.

NYC Dept. of Sanitation, Clinic Relocation at 44 Beaver Street, New York, NY. Project Manager for this $1 million medical clinic construction in high rise building including examination, laboratory and office areas, complete with sanitary, heating/air conditioning, and electrical facilities.

NYC Dept. of Sanitation, Construction of Manhattan Borough Repair Shop, New York, NY. Project Manager for this $50 million 5-story (70,000 sf per floor) specialized equipment repair and administrative edifice containing a blacksmith shop with plate bending, forge, brake, shear and frame straightening machines, a machine shop with milling, lathe, pressing, and hose repair equipment, a paint shop with a spraying booth, a truck washing area, administrative facilities on raised floor construction for computer and communications flexibility, roof top parking, storage areas, locker rooms, kitchens, fire alarm, closed circuit television, public address and inventory control equipment and a pneumatic temperature control system governing HVAC equipment.

NYC Dept. of Sanitation, Construction of Queens North Borough Repair Shop, New York, NY. Project Manager for this $25 million 4-story vehicle repair facility (60,000 sf per floor) housing hydraulic and electric truck lifting equipment, overhead bridge cranes and monorails, specialized equipment for dismounting, inspection and repairing tires, integrated compressed air, vacuum and underground tanks coupled with vehicular fluids dispensing systems, magnetic door locking for security, a microprocessor based energy management system controlling chilled water air conditioning and gas fired heating and boiler equipment, along with administrative offices, an exercise room and a roof top parking lot.

NYC Dept. of Sanitation, Office Engineer, Construction of Queens 5/5A Garage, Queens, NY. As Office Engineer, assisted in the development of design documents, scheduling and project costs breakdown during pre-construction phases of $30 million garage complex. Corresponded with City Agencies and Utility Companies to obtain approvals.

Mason and Hanger/Silas Mason Incorporated, New York, NY. Inspected commercial building construction projects. Prepared construction progress reports and daily logs.

Tilcon New York, Incorporated, New York, NY. Assistant Plant Engineer; troubleshooting and preventative maintenance evaluation of stone quarry crushing, conveying, screening and pollution control equipment. Instituted new equipment designs and installations.

Vincent A. Cassano, PE
Terminals

Education

- BSCE, Civil Engineering, 2005

Registration/Credentials

- Professional Engineer:
  NY #[redacted]
  NJ #[redacted]

Vincent Cassano is a project manager and heads up the site-civil engineering group. He is responsible for project management, design and development of site/civil projects and has served as Project Manager and Project Engineer leading the design efforts on numerous projects for both public and private clients. He is experienced in the design and management of multi-disciplinary projects and has specific expertise in site-civil engineering including parking facilities, plazas, parks, roadways, drainage, utilities, and other related tasks.

Project Experience

Port Authority of NY & NJ, Civil Engineering "Call-In" (2008-11), NY and NJ. Project manager for this ongoing agreement. Following are a representative sample of assignments:

- **Teterboro Airport, Construction Staging:** Project Manager responsible for leading the Stage I effort to evaluate removal and relocation of the existing construction staging and storage area at Teterboro Airport. The Stage I report evaluated various alternative locations considering pros and cons associated with site access, environmental constraints, and facility concerns. Additionally the team prepared preliminary drainage analysis and identified all the necessary permits required for the improvements. This required extensive coordination with the PA environmental discipline as well as others to ensure all the constraints were identified and addressed.
- **Stewart International Airport, Runway Incursion Mitigation Study:** Project Manager responsible for leading the Stage I effort to evaluate the existing conditions and improve the maneuverability and load bearing capabilities of the perimeter roadway at Stewart International Airport. This project included roadway alignment vertical and horizontal, drainage, and pavement design. The objective was to improve the existing roadway and allow it to be used by a fully loaded fuel truck. The design enhanced maneuverability, and rehabilitated the pavement to accommodate the structural load as well as extend the service life of the roadway. Storm drainage as well as environmental constraints were evaluated and coordinated with the appropriate PA disciplines.
- **John F. Kennedy International Airport, North Boundary Road Pavement Rehabilitation.** Project Manager responsible for leading the Stage I effort to evaluate the existing conditions of North Boundary Road and providing recommendations as to the necessary rehabilitation to extend its service life. Jacobs performed a field assessment and condition analysis of the roads and parking facilities included in the program consisting of approximately 1 mile of roadway. We evaluated pavement cores taken by the PANYNJ subcontractor and made recommendations for rehabilitation which will extend the expected life of the surface and meet current Port Authority standards.
- **LaGuardia International Airport, Storm Drainage Rehabilitation/ Master Utility Study.** Managed the Stage III review of sewer video inspections at LaGuardia. This project will provide the PA with recommendations for rehabilitation and upgrading of the storm sewer system through out the airport and surrounding infrastructure. This task is a follow up to a master utility study also prepared by Jacobs. A hydraulic analysis of the airport storm sewer system evaluated the available capacities as compared to the expected design flows, and deficiencies were identified. We are currently working with the PA to combine the recommendations of both studies into a comprehensive long term rehabilitation plan.

Vincent A. Cassano, PE
Terminals

Port Authority of NY & NJ, Civil Rail Engineering "Call-In" (2008-11), Harrison PATH Station Replacement, Harrison, NJ. Lead Engineer responsible for providing site civil design for the construction of four new head houses, plaza areas, and bus turnouts at the station. The upgraded station is the transit hub and center of the redevelopment zone which included a new stadium, residential and retail development as infill to an existing urban community. Plaza areas are designed to be an inviting park like atmosphere accommodating pedestrian and bicycle traffic and supported by the adjacent vehicular zones including bus and passenger drop off areas and parking facilities. The design will include grading drainage and utility improvements as well as storm water management and roadway design. Additionally this project requires extensive coordination between the Port Authority Real-estate developers, county and municipality.

MTA Metro-North Railroad, Cortlandt Station Parking, Intermodal and Access Improvements, Cortlandt, NY. Project Engineer involved with the design of a new parking and intermodal facility at Cortlandt Station. The design will include a new pedestrian overpass, plaza area and 400 car parking expansion. He is responsible for the grading, drainage and storm water management design for the project. Responsible for the design and analysis of a new detention basin to control water quality, and managed the water quality basin design and stream analysis associated with a new bridge crossing. He also reviewed SWPPP plans for the adjacent roadway project being developed, and prepared a combined SWPPP for the project.

State University Construction Fund, SUNY College of Environmental Science and Forestry, Bray Hall, Syracuse, NY. Project Manager responsible for leading the site design of a new parking facility to support the gateway building project. This task included site layout of a new parking lot, and access roadway, utility upgrades, storm water management, site lighting, retaining walls, stairs, landscaping and plaza improvements. Jacobs is currently managing the construction phase of this project with an expected completion in the spring of 2010. Mr. Cassano was also responsible for preparing design of a detention system to address NYSDEC water quantity and quality requirements. As part of the design, he prepared a SWPPP report and plans, coordinated with the MSU and received approval.

State University Construction Fund, SUNY College at Fredonia, Phase II Water Distribution Upgrade, Fredonia, NY. Project Manager for the Phase II Water distribution upgrade at the College at Fredonia. The project includes replacement of several thousand feet of water mains on campus as well as providing new service and backflow prevention to approximately 13 existing buildings. In addition to preparing plans and specifications for the water main replacement the team is developing a water model which will identify areas of deficiency, and account for future growth. Mr. Cassano is responsible for the overall quality control, including schedule, budget and coordination of lead and supporting disciplines. He is also coordinating long term goals associated with growth as they are factored into our model and design.

David Fox, EIT
Terminals

Education

- BS, Mechanical Engineering 2006

Registration/Credentials

- EIT

David Fox is experienced in construction administration procedures including: construction inspections; preparation of construction estimates and CPM schedule reviews; and constructability reviews. Although, a recent Graduate, with a BS in Mechanical Engineering, He is very experienced in various areas of the construction industry.

Project Experience

MTA NYC Transit, Charleston Bus Annex, Staten Island, NY. Office Engineer - specific duties include reviewing design-build drawings and specifications, conducting construction inspections of various disciplines, managing project document control by tracking submittals, RFIs, correspondence and daily reports in the Constructware database system, preparing construction progress meeting minutes, preparing the monthly Project Management Manual, preparing AWO construction estimates and assisting in CPM schedule reviews. The new bus annex will consist of a building with a footprint of approximately 108,000 square feet, with outdoor parking areas for buses and employee vehicles. The major scope of work items include the new building consisting of the bus annex at the first floor, with a mezzanine and second floor for offices, locker rooms, and support areas. The annex shall include facilities for the service and maintenance of buses with a bus fueling area, bus washing system, revenue extraction system, and maintenance bay area with 15 dedicated lift workstations and automated parts retrieval system. The facility's fluid distribution system includes thirteen underground tanks and piping for diesel fuel, fuel oil, motor oil, automatic transmission fluid, antifreeze and windshield washer fluid dispensing and waste systems with two oil/water separators. The project also includes green design (DfE) requirements including a bus wash system with water reclamation system for utilization of site storm drainage water, and energy-efficient lighting and HVAC systems. The scope of work also includes mechanical, electrical, communications and I&C systems for the new building with BMS system integration and a bus parking area for 220 buses and employee parking area for 196 cars outside the facility.

NJ School Development Authority, Paterson Public School 24, Paterson, NJ. Project Engineer – specific duties included managing project document control by tracking submittals, RFIs, change orders and invoices in the Prolog database system, preparing construction progress meeting minutes, preparing the monthly reports, preparing construction change order cost estimates and assisting in CPM schedule reviews. Public School 24 consists of an existing four-story brick building of approximately 76,000 square feet. Scope of work included addition of a new curtain wall structure of approximately 33,500 square feet constructed on the site of the existing school and linked to the facility by a closed entry element, construction of a new state-of-the-art media center, addition of a new gymnasium, cafeteria, kitchen, nine general classrooms, two science rooms and community health center. The existing building received replacement of the entire existing HVAC, electrical and communications systems as well as architectural renovations. Site improvements included new paving in the courtyard, new concrete sidewalk, steps and ramps, installation of synthetic playground surfaces and new fencing.

Port Authority of New York & New Jersey, Various Locations. Engineering intern - Construction services including mechanical/electrical inspections at Goethals Bridge, Outerbridge Crossing & Bayonne Bridge and surveying at John F. Kennedy and LaGuardia Airports.

James Coddington, PE
Terminals

Education

- BSCE, Civil Engineering, 1968

Registration/Credentials

- Professional Engineer: NY

James Coddington has 40 years of heavy construction experience on projects for city and state transportation and environmental agencies. He is a specialist in both new construction and rehabilitation of bridges, tunnels and sewer line installations. He has managed many of the facilities projects performed by the New York office.

Project Experience

Port Authority of New York & New Jersey, Performance of Expert Professional Program and Construction Management Services on an "As-Needed" Basis-Project Manager. Port Newark/Port Elizabeth – Widening of bridges over New Jersey Turnpike and Conrail. Responsibilities included: inspection of and reports for concrete placement for foundations, piers and abutments, steel reinforcement installation, installation of insertion valves, check torquing of high strength bolts, lane closings on Turnpike and North Avenue. Express Rail – responsibilities included inspection of and reports of dynamic soil compaction, installation of test piles, pile load testing, stone backfilling and density testing, inspection of drainage installations.

MTA Bridges and Tunnels HH-06 Replacement of the Northbound Approach of the Henry Hudson Bridge - Project Manager for the construction inspection and support services including excavations and removals, new reinforced concrete pavement, new drainage and repairs to existing drainage, installation of new guardrail and concrete barriers, new pavement markings, repair arch underpass and maintenance and protection of traffic.

MTA Bridges and Tunnels Queens Midtown Tunnel Roadway Slab and Fresh Air Duct Sidewalls - Project Manager for the construction inspection and support services – rehabilitation of the reinforced concrete supporting the asphalt riding surface, sealing the newly rehabilitated support surface with a waterproofing membrane system which was overlaid with "Trinidad Lake" asphalt pavement. Thorough lead and asbestos removal in the ducts and flues supplying fresh air to the tunnel roadway area.

NYC Department of Transportation, Bureau of Bridges - Project Manager. Projects included: $6M demolition and replacement of Stillwell Avenue Bridge, Brooklyn, NY; $1M replacement of Livonia Avenue Pedestrian Bridge over Long Island Rail Road, Brooklyn, NY; $2M reconstruction of Sixth Avenue Bridge over Long Island Rail Road, Brooklyn, NY; $2.2M reconstruction of Carlton Avenue Bridge over Long Island Rail Road, Brooklyn, NY; and $2.1M flag elimination project from various structures in all boroughs of New York.

NYC Department of Environmental Protection Inner Harbor CSO, Brooklyn, NY – Resident Engineer for construction management services for Capital Project WP-169, Inner Harbor CSO Abatement – Phase I. Responsible for the overall project management and resident engineering services of this site including: supervision and inspection of the work being performed, reviewing and monitoring construction schedules, maintenance of project documentation, reviewing and monitoring health and safety, and preparation of field change orders.

Ronald Zwerdling, CCM
Terminals

Education

- BS, Building Construction, 1981
- AAS, Construction Technology, 1979

Registration/Credentials

- Certified Construction Manager (CCM)

Ronald Zwerdling has over 26 years of construction estimating/ project administration on institutional, commercial and heavy civil projects in New York City. Mr. Zwerdling has been responsible for formulation of bids, change order estimating and contract negotiation. He has provided estimating services for lump sum and "hard money" projects as well as construction management contracts. He has experience in estimating and purchasing in the construction of industrial, commercial and residential projects including waste water treatment plants, municipal projects, Department of Transportation Public Works, correctional and medical facilities, bridges, schools, interior renovations and custom homes. He also has extensive experience with Primavera web based Contract Manager-Expedition, Prolog and P3 Scheduling.

Project Experience

United States Mission to United Nations, General Services Administration, New York, NY. Office Engineer/ Sr. Field Engineer. Worked on the $2.5 million Demolition of the United States Mission to the United Nations located at 45th Street and First Avenue in New York City. Project is to make way for new 27-Story high security US Mission.

MTA Bridges & Tunnels, Henry Hudson Bridge Lower Level Deck Replacement. Sr. Field Engineer. $85 Million renovation of the Lower Level of the Henry Hudson Bridge in New York City, Responsibilities include shop drawing review, contractor payments, change order estimating and negotiations, cost control, computerized document controls and overseeing of inspectors.

NYC Department of Sanitation Garage (Districts 1 & 4). Office Engineer. $55 Million New Construction of (2) Sanitation Maintenance Facilities in Greenpoint, Brooklyn. Responsibilities include contract and shop drawing review, change order estimating and negotiations.

MTA Bridges & Tunnels, Battery Parking Garage, New York, NY. Office Engineer. $30 million Structural Repairs and Lighting System Improvement; and Mechanical, Plumbing, Fire Protection and Electrical Rehabilitation and Upgrade of the Battery Parking Garage. Responsibilities include maintaining computerized document control system.

Juvenile Detention Facilities, Brooklyn and the Bronx for the NYC Department of General Services, NY. Office Engineer/Estimator. Construction of two new 100-bed facilities. These facilities will replace the City's only secured juvenile detention facility, which is now over 30 years old.

Thomas Schanze, PE
Marine Facilities - Project Manager

Education

- Masters of Engineering, 1984
- BS, Engineering, 1982

Registration/Credentials

- Professional Engineer: FL

Employment History
2009-present - Jacobs
1998-2009 - Georgia Ports Authority
1988-1993 - Greater Orlando Aviation Authority

Tom Schanze has over 27 years of experience that spans engineering project management and corporate, operations and financial management. As engineering project manager, he has worked on multi-million dollar port and marine facilities located both in this country and abroad. Mr. Schanze has also served as project manager and assistant project director involved in environmental consulting services, and a client manager for the St. Johns River Water Management District.

Project Experience

Georgia Ports Authority. Principal-in-Charge for over 10 years with this fast growth port facility in Savannah, GA. Projects included terminal expansions for Container Berths 7, 8 and 9 at Garden City Terminal in the Savannah Harbor. Services included planning, modeling and permitting for numerous projects at the facility that currently provides 9 berths along 10,000 feet of riverbank.

Principal-in-Charge for the Savannah Harbor Deepening project responsible for compliance with NEPA and preparation of a comprehensive Environmental Impact Statement. In order to facilitate the Port's growth plan and prepare for the arrival and servicing of Post-Panamax ship traffic, the harbor needed to be deepened to 48+ ft. This process requires a multi-year effort of environmental and alternatives analysis to fully understand environmental impacts to the ecosystem of the Savannah River and mitigating measures to offset the impacts. To facilitate the assessment, numerical model development of the harbor, assessment of the proposed dredging / deepening of the harbor on natural resources including marsh / wetland systems, fisheries, municipal water supplies and support for preparation of Environmental Impact Statement by the Federal Agencies was performed.

Environmental Program Manager for comprehensive planning of Hutchinson Island for development as a container terminal facility. This island is across the river from GPA's Garden City terminal and will require the closure and remediation of large pulp mill wastewater treatment facilities.

South Carolina State Ports Authority. Principal-in-Charge of the Charleston Naval Center conversion to a container terminal. Capital costs exceed $50,000,000. The team's efforts for this project focused on studies in support of ACOE issuance of Environmental Impact Statements for the project. Studies included transportation infrastructure to and from the port, environmental justice issues for the surrounding neighborhoods, air quality, dredging, soil contamination, wetland impacts, port planning and stakeholder coordination / public involvement.

Dubai Ports World, Port Jebel Ali. Facilitated conceptual planning to develop options for rail service to the berths planned for reclaimed land being developed at the port. The port terminal concept includes several basins in parallel extending out into the Gulf. The challenge for rail service to the individual berths was to connect the landside with a spine track and turnouts to each berth without interrupting truck and equipment movement.

Thomas Schanze, PE
Marine Facilities - Project Manager

Greater Orlando Aviation Authority, FL. Senior Project Manager/Assistant Project Director for five-year environmental consulting services project with the Greater Orlando Aviation Authority during expansion of the Orlando International Airport (OIA).

- Program Manager for a multi use utility/transportation corridor between OIA and Port Canaveral that considered light rail for cruise ship passengers, fuel, gas and electrical transmission and communications systems. Responsible for environmental assessment of alternative alignments for the corridor to compare with engineering evaluations of alternatives and stakeholder coordination.
- Project Manager for comprehensive planning for OIA buildout including master stormwater management planning and master mitigation plan development for wetland losses. Analysis included determination of alternative runway and taxi-way configuration as well as terminal planning.
- Project manager for the south terminal complex conceptual plan development including alternative development for stormwater management.
- Project manager for overall OIA compliance monitoring including surface and ground water quality.

St. Johns River Water Management District (SJRWMD). Client Manager and Principal-in-Charge approaching Jefferson Smurfit Corporation regarding regulatory issues associated with paper mill discharge to the St Johns River. Mr. Schanze recognized that the pending TMDL rules would adversely impact not only the Smurfit Mill but the members of the First Coast Manufacturers Association (FCMA— an industry group representing various stakeholders on the river). He facilitated an all-day seminar for members to hear technical presentations from the regulatory community, attorneys, and technical specialists to understand how the regulations may impact the membership. His team was selected by FCMA to represent the association and collaborate with the SJRWMD to develop a hydrodynamic / water quality model to apply various scenarios to the river in order to minimize impacts.

Cooper River Water Users Group. Client Manager and Principal-in-Charge facilitating an agreement within the Cooper River Water Users Group, an association of stakeholders to the river, who encouraged collaboration to assess the current health of the harbor and develop a water quality model of the harbor system. Objectives - gain consensus with regulatory agencies on data, the model and its application, and adoption of the model as the tool to be used by the agencies to develop waste load allocations and TMDL limitations for each user in the ecosystem.

Christopher P. Ahern, EI
Marine Facilities

Education

- MBA, 2010
- BS, Environmental Engineering Sciences, 1999

Registration/Credentials

- Engineering Intern: FL

Mr. Ahern is an experienced project and program manager for a variety of waterfront development and water resources projects. He uses his high degree of professionalism and integrity to build relationships and effectively manage projects to minimize risk and manage effective project teams.

Project Experience

Development Manager for Island Global Yachting, Dubai, United Arab Emirates International. Primary point of contact and client relations manager for Nakheel, Dubai-based developer of Palm Jumeirah, and other reclaimed island developments. Responsible for the implementation of Nakheel-IGY Master Development Agreement (MDA) to exclusively provide marine development concepts, preliminary design, detailed design and ultimately construction management services similar to a "turn-key" project approach for all Marine Boating facilities at all of Nakheel's developments. Specific responsibilities as Development Manager include:

- Coordinated resources of up to 12 Development Team staff and consultants to maintain progress against stated milestones and conformance to established protocols
- Monitored monthly Development Services billings relative to progress in annual revenue projections. Oversight of project deliverable preparation for quality management and compliance with Nakheel-IGY MDA
- Implementation and oversight of internal procedures to identify, evaluate and ultimately select consultants and Contractors for award
- Review of progress payment applications approved by Development Staff before recommendation for Payment to Nakheel
- Participation and management of analysis for in IGY Deal Teams for international development and investment projects in Europe, Easter, African Coast, India and Middle East

Charleston Marine Container Terminal at Charleston Naval Complex (CNC). Project Manager of engineering feasibility study for South Carolina State Ports Authority (SCSPA) to evaluate berth alignments and wharf construction alternatives to minimize dredging requirements. Program Manager responsible for coordination and management of all for NEPA Support Services Contract with SCSPA to support development of EIS and other decision documentation for the United States Army Corps of Engineers, Charleston District. Responsible for the production and distribution of the Draft EIS, as well as establishment and execution of Agency and Public Outreach Program.

Charleston Harbor Total Maximum Daily Load (TMDL) for Dissolved Oxygen. Project Manager for hydrodynamic and water quality data analysis to evaluate proposed reduction in NPDES permit loads for various discharges in Charleston Harbor. Evaluation of accumulated data and recommendations to Cooper River Users Group, an industry group evaluating the proposed reductions in permitted loads. Prepared estimates for the capital improvements required for Charleston Harbor users to achieve load reductions proposed by State and Federal Resource Agencies.

Savannah Harbor Expansion Project (SHEP). Performed a variety of roles for the Georgia Ports Authority's effort to evaluate impact of a proposed deepening of the Savannah River Federal

Navigation Channel from 42 ft MLW to a depth of 48 ft MLW. He started on the project as in intern performing field services, and eventually serviced a project manager presenting results from data analysis and modeling results:

- Project Manager for the analysis and presentation of accumulated data from 96 day continuous hydrodynamic and water quality monitoring. Responsible for the preparation of documentation summarizing results of 3-D Model Calibration and predictions of impacts resulting from alternative depths for deepening of the Savannah River Navigation Channel
- Field Data Collection Manager for continuous monitoring. Task Manager for creation of input files for 3-D Hydrodynamic and Water Quality Computer Model of the Lower Savannah River Estuary
- Field Services Technician responsible for four boat crews executing preliminary continuous monitoring plan to support calibration of 3-D model

Stormwater Engineer for the Town of Port Royal, SC. Responsible for on-call services to the Town of Port Royal, SC related to stormwater management and drainage improvement projects. Analyzed drainage issue reports and submitted recommendations to Town for corrective actions. Review of bid packages for major works including drainage improvements, reestablishment of hydroperiod in impacted freshwater wetlands and design and construction drawings were distributed. Mr. Ahern also maintained anticipated capital works budget for stormwater management and drainage improvement.

Stormwater Ordinance Development Support for Beaufort County, SC. Project Manager for the review of accumulated technical resources regarding environmental impacts of stormwater entering estuarine environment. Coordination with State resource agencies and USEPA regarding studies performed to date on upland development impacting water quality. Drafting ordinance language and presentations to Beaufort County Council to adopt proposed language as a County ordinance.

Agitation Dredge Impact Evaluation Study, Savannah, GA. Project Manager for study by USACE Savannah District, Georgia Ports Authority (GPA) and Savannah River Users Group to evaluate the impacts to water quality resulting from sediment plume during agitation dredging operation. Agitation dredging is common berth depth maintenance technique in Savannah Harbor. Agitation dredging methods include I-Beam dragging and 12" hydraulic dredging with sidecasting proposal into Savannah River Federal Navigation Channel.

John L. Larson, PE
Marine Facilities

Education

- BS, Civil Engineering, 1970

Registration/Credentials

- Professional Engineer: FL and WA

Mr. Larson is a senior project manager with over 39 years experience specializing in transportation program management, design project management, and construction management of highway, bridge, and marine facility projects. He is experienced in the management and design of complex highway interchanges, long span bridges, toll plaza facilities, transit stations, and intermodal rail and port cargo facilities; including waterfront structures, backland container development, container rail transfer facilities, cargo wharves, ferry terminals, and petroleum transfer piers.

Project Experience

Southport Terminal Berth 30 Container Crane Rail Extension, Port Everglades, Fort Lauderdale, FL, Project Manager. Provided engineering evaluations, design, construction documents and construction administration services for the extension of a heavy rail foundation system and electric power supply for low-profile container cranes. The project involved designing a minimum radius curve that accommodated the transport of electric powered 100-ft gage container cranes around a curved rail (90-degree corner) between Berth 31 and 30; and the design of rail switches and rail crossings to enable the container cranes to work along straight sections of the each berth and back into the corner locations to service the maximum possible length of container ship. The project also involved design of a new 4.2 KV power supply feed for two new cranes constructed in Korea, which arrived fully assembled. The project was phased to accommodate the crane delivery and testing while providing the minimal interference with existing Port operations.

Berth 219 Heavy Duty Wharf, Port of Tampa, Tampa, FL, Project Manager. Provided preliminary engineering and preparation of a design-build criteria document for the construction of a 400-foot x 100-foot wharf structure to handle scrap metal loading and unloading. The wharf was designed for a uniform live load of 2,400 per square feet and included concrete mooring dolphin structures and an energy absorbing rubber fendering system to accommodate both bulk ore carriers and barges. Duties also involved the development of a specific design-build selection procedure for this public agency, and the administration of the designer/contractor selection process, as well as design reviews and periodic construction inspection.

Port of Tacoma Intermodal Rail Yards, Port of Tacoma, WA, Project Manager. Managed the planning and design of three separate intermodal rail transfer container facilities totaling over 50 acres of land at a cost of approximately $12M. Projects included rail yard layout, heavy-duty pavement design, closed drainage systems and support buildings. The improvements serve Sea Land, Maersk, and other major shipping lines as the starting point of their railway land bridge across the United States. Innovative heavy-duty paving with roller-compacted concrete allowed for a rapid project delivery at a substantially reduced cost to the client. Provided periodic inspection and consultation during construction.

Intermodal Rail Facility, Port of Jacksonville, Jacksonville, FL, Technical Consultant. Performed a feasibility study to site a new intermodal rail yard on Blount Island adjacent to the Sea Land Container Yard. Developed conceptual plans for yard layout and support facilities on a 20-acre dredge spoil disposal site, including analysis of rail access and potential unit train

marshaling sites along a 20-mile corridor between the container transfer yard and mainline rail connections.

Marine Petroleum Loading Facility, Texaco, Inc., Anacortes, WA, Resident Construction Engineer. This $10M wharf improvement project included rehabilitation of two tanker berths capable of handling 125,000 DWT and 60,000 DWT ships by constructing of new crude oil and product loading platforms with articulating marine loading arms, breasting and mooring dolphins, a dock office, articulating gangways, fire protection monitors and sprinkler system, major piping modifications, new dock lighting, replacement of deteriorated timber pier components, and installation of steel grating over open pipeway areas. The project involved complicated pile-driving with water-borne equipment installing concrete piling up to 176 feet long in one piece. The project was accomplished while keeping the existing facility in full operation.

Terminal 18 Intermodal Rail Facility, Port of Seattle, Seattle, WA, Project Manager. Managed the planning and design and provided construction consultation for the initial development of a 15-acre container yard, including yard drainage, paving, crane runways, and a 3,800-square foot marine operations building with observation deck. In a subsequent phase of development, managed the design of an adjacent 10-acre "on-dock" intermodal rail yard container facility, including temporary and permanent gate facilities, lighting modifications, trackwork, paving, drainage and sewerage, and modifications to existing city streets. The facility serves major shipping lines with container yard rail access capable of assembling unit trains for trans-continental container shipments.

Pier 48 Ferry Terminal and Warehouse Renovation, Port of Seattle, Seattle, WA, Project Design Manager and Construction Consultation. Responsible for the structural rehabilitation of an existing 40-year-old timber pier with warehouse and Alaska State Ferry Terminal passenger facility. Replaced deteriorated timber piling with a combination of new driven piles and replaced stub piles underneath an existing pier structure. Utilized low headroom clearance pile driving techniques to drive steel piles inside the warehouse and installed full-length steel piles through the ferry waiting room roof and floor to support deteriorated substructure. Installed buried coated steel plate girders to re-support the building structure over a failing seawall, and raised the sagging building structure to a level condition.

Bulk Materials Handling Facility Feasibility Study, Port of Bellingham, Bellingham, WA, Project Manager. Conducted engineering feasibility study for the storage of agricultural products and the transfer from warehouse to ship-side loading using portable conveyor systems. The study also analyzed rail delivery of products to warehouse storages and low volume transfer methods from bulk rail car to storage.

Log Export Wharf and Berth Dredging, Anderson and Middleton Timber Company, Hoquiam, WA, Project Manager. Provided preliminary design of a 500-foot by 80-foot log export wharf and backland log storage yard, including U.S. Army Corps of Engineers permit drawings. Also obtained a permit for wharf construction and maintenance dredging using the "sand by-pass" technique. Conducted soils analysis in conjunction with permitting approvals to maintain dredge with special prop-wash machinery, which sweeps silt from the berth area into deeper main channel areas.

Kamran Marashi, PE, SE
Marine Facilities

Education

- MBA, Business Administration in Engineering and Technology 1988
- MS, Structures and Mechanics, 1983
- BS, Civil Engineering, 1979

Registration/Credentials

- Professional Engineer: FL, WA and CA
- Professional Structural Engineer: HI

Mr. Marashi has 30 years of design and project management experience in structural engineering. He has been a principal engineer on numerous structural engineering studies and designs of transportation structures, marine facilities, underground structures, serving municipal, state, federal, and private clients. These projects include bridge structures, waterfront piers, wharfs and bulkhead structures, low and high-rise building structures, due-diligence condition surveys, landslide restoration projects, buildings deterioration and remediation design and management, buildings failure investigation, structures corrosion rehabilitation, disaster relief funded projects, large retaining wall structures such as: cast-in-place concrete, tie-back soldier piles, secant piles, battered piles, sheet piles with dead-men, combi-walls, cellular walls and soil nail walls.

Project Experience

Port of Tacoma, Road and Rail Infrastructure Improvements, Tacoma, WA. Lead Structural Engineer for one of the largest port facility developments underway on the west Coast, for the Port of Tacoma. Project responsibility includes a new Taylor Way overpass bridge structure to be constructed as a single span bridge, but designed to accommodate the future expansion into a multiple span bridge. Due to poor soil conditions, detailed analyses and design are performed to enhance the current subsurface stability and its load bearing capacity. There are two new Qwest Telephone Exchange buildings, which includes the design of the building shells, site security fencing, and gates. Some of the project remediation includes Wapato Creek crossing structure that protects an existing stream which is a Salmon passage and habitat. This concrete bridge structure is necessary to support the future rail line installation for the project. As part of Blair Hylebos Shoreline protection, design and construction of seawalls and the shorelines retrofit are part of the remediation tasks project responsibility.

Port of Seattle Pier 69 Rehabilitation Survey, Seattle, WA. Pier 69 is a cast-in-place concrete structure built in 1931 for American Can Company. Responsible for assessment of below deck structure which included field investigation, chloride ion, pH, and half cell testing, review of the available existing documents and reports, and an underwater dive inspection of the deck structure. The study resulted in recommendations for rehabilitation system and protection against future deterioration. Passive and active cathodic protection (sacrificial anode system) was recommended to confirm the longevity of pier serviceability.

Pier 17 Replacement Project, Harbor Island, Seattle, WA. Responsible for the design of an 800-foot-long pre-cast pre-stressed concrete deck pier supported on steel pipe piles. The pier width varies from 50 feet to 25 feet while the mud line varies from 8 feet to 50 feet below deck level. The lateral system and stiffness were proportioned to provide a uniform distribution of lateral forces and limit lateral deflections of the pier. The piles closest to the bulkhead were 24" diameter pipe piles designed with a rocker pined connection to the deck structure for increased flexibility while the outer piles were 32" pipe pile with moment connections to the deck structure for increased stiffness. The entire system was balanced to minimize the whiplash effects during seismic activities.

Kamran Marashi, PE, SE
Marine Facilities

Port of Oakland Inter-Harbor Turning Basin Developments, Oakland, CA. Design of pier aprons and bulkheads, in addition to scope redevelopment of basin to a 2000-foot diameter turning basin modification of harbor.

Eighth Avenue Terminal Pier Modifications, Alaska Marine Lines, Seattle, WA. Project Structural Engineer for the reconstruction of an existing concrete pile-supported marginal wharf requiring modifications to support a roll-roll barge loading and container stacking operation.

Pier 48 Inspection Report and Modifications, Port of Seattle, WA. Engineer responsible for assessing the pier's capacity and make maintenance recommendations in keeping with the pier's deferred status. This is a 74,000-square-foot timber waterfront terminal supported on approximately 4,300 creosote timber piling.

Terminal 115 Concrete Pier and Timber Pier Structural Reviews and Rehabilitation, Northland Services, Seattle, WA. This project provided the due-diligence study necessary to establish facility conditions and the basis for shared maintenance. Three timber piers were rehabilitated as one part of an overall terminal upgrade. Project included modifications to the existing concrete pier for construction of two new 106' barge loading ramps and the ramps' pile-supported abutments.

Jacksonville Shipyard, Jacksonville, FL. Responsible for the structural design of waterfront features in the redevelopment of bulkhead and marine facilities at the old Jacksonville Shipyard. The scope of work included the design of all bulkhead (approximately 5,000 lineal feet) and marine features in the conversion of the industrial shipyard to a residential commercial development.

Atlantic Marine Dry dock Corp Finger Pier, Jacksonville, FL. Responsibilities included all aspects of design of a 536-foot-long finger ship service pier at Atlantic Dry Dock Corp including layout, gantry crane accesses, design coordination, and cost estimates.

Shell Oil Terminal Fendering & Mooring Dolphin Design & Replacement, Charleston, SC. Project Structural Engineer responsible for renovation of the fendering and for the design of mooring dolphins at the Shell Terminal facility including design, vendor selection and approval and product specifications contract documents.

Berth 3 Jaxport, Toyota Terminal, Jacksonville, FL. Project included construction of a 700-foot-long berthing facility to be constructed over the existing pile supported concrete deck with 700 feet of bulkhead. The existing facility was deteriorating and sink holes were developing due to migration of sub-grade material through the existing deteriorating bulkhead wall. The existing facility was to remain operational while construction was phased. The existing bulkhead line was fixed and could not be moved seaward or landward. A new cut-off wall was designed to mitigate sub-grade material migration into the river. The new concrete deck was constructed on the existing deck using the existing pile supports.

Ronald N. Zimmer, PE
Marine Facilities

Education

- BSCE, Civil Engineering, 1967
- BS, Architectural Sciences, 1965

Registration/Credentials

- Professional Engineer: IL, IN, SC, MO
- Registered Civil Engineer: KY and LA

Mr. Zimmer offers over 35 years in diversified engineering and architectural expertise. Mr. Zimmer specializes in planning and designing port and harbor projects with emphasis on land transportation interface, cargo and materials-handling systems, and specialized heavy cargo movements; and planning and designing railroad facility projects with emphasis on water and roadway transportation interface, cargo and materials-handling systems, and specialized heavy cargo movements.

Mr. Zimmer has extensive experience in operations planning for intermodal transfer of bulk, break-bulk, neo-bulk, and containerized cargoes. His experience includes management of multidiscipline design groups in the preparation of marine and waterway related construction documents, as in piers, terminals, flood control, navigation locks and dams and in the preparation of transportation facility related construction documents, as in yards, terminals, and waterfront and industrial facilities.

Mr. Zimmer has managed designs of piers, wharves, bridges, bulkheads, and other marine structures for port facilities, waterfront industries, railroads, and highways.

Project Experience

Intermodal and Waterfront Cargo Handling Projects. Ports and Marine Facilities Specialist for operational planning and design services as part of the development of intermodal and cargo handling facilities projects for:

• Port of Tacoma • Port of San Francisco • Port of Seattle • Port of Los Angeles • Port of Long Beach	• Los Angeles – Long Beach Intermodal Container Transfer Facility (ITCF) • Indiana Port Commission • Virginia Port Authority • International Marine Terminals • St. Louis Terminals Corporation

South Intermodal Yard, Port of Tacoma, WA.
Project Manager and Lead Planner for the development of this, first in the nation, port based Intermodal Rail Facility planned and designed for intense double-stack container operations. This facility, constructed on very limited available land has become the model for many subsequent Intermodal facilities serving the busiest port in the nation. The basic layout of having a limited space for lift operations led to the end-to-end arrangement for lift tracks and support tracks. This configuration also permits terminal switch crews to move cars between the lift and support tracks without interfering with or being interfered by the arrival and departure of mainline trains. Subsequently served as planner or planning consultant on more than 10 additional intermodal rail projects for the Port of Tacoma.

Terminal Island Container Transfer Facility (TICTF), Port of Los Angeles, CA.
Lead Planner for this Jacobs-designed Terminal Island rail facility. This facility represents an industry standard for operational efficiency. With eight lift tracks, eleven support tracks and two arrival/departure tracks capable of handling a 9000 foot long train each, the terminal is

designed to permit each independent activity to function with little to no interference from other terminal activities. By providing lift and storage and lift tracks of equal length in an end-to-end arrangement each track can service or be serviced by any other track in the facility. The TICTF design recognizes the intense demands placed on Intermodal rail equipment by providing for the need to make most running repairs while the railcar is in the terminal on the lift tracks. Provisions are also made for making heavier repairs and to accommodate the layover of mainline motive power in the terminal.

Pacific Container Terminal, Port of Long Beach, Ca.
Project Manager for the planning and design of a 4-track Intermodal Rail Loading Section in this operating marine terminal. Because this facility was within the leased limits of an operating container terminal, the question of how much space could be dedicated to the rail operation became even more critical because every square foot came at the expense of container yard operations. To minimize the footprint of the rail facility was designed for one aisle operation using the newly introduced "Reach-Stacker" as the equipment of choice for this operation. Efficient arrival and departure was another issue that required a unique solution. Since the terminal also desired a dockside heavy-lift track, this track was extended completely around the terminal to form a loop joining the Intermodal tracks. Arriving trains approach the terminal in the normal configuration with the locomotives on the head end. They proceed around the loop until they are in position to back into each of the Intermodal tracks.

Pierce County Terminal, Port of Tacoma, WA.
Project Specialist to guide the design of the Intermodal Rail Yard in the new Pierce County Terminal to permit the rapid loading and unloading of rail cars and to facilitate the efficient assembly or breakup of trains and their movement to and from the mainline trackage. This effort called for the close coordination of operations for this facility as well as the three other existing and two planned Intermodal rail facilities in the Port and the operations of three railroads that have access to the area. The Port of Tacoma is continuing to increase their capacity to handle containerized freight moving in the international market. Because the Pacific Northwest has a fairly small local market, nearly 80% of the containers moving through Tacoma are for inland and eastern destinations and most of these containers move by rail.

Security Improvements NWS Concord, MA. Civil Engineering lead for the design of security improvements at the Concord, California Naval Weapons Station. This project included a floating marine barrier, launching ramp and floating dock for small patrol boats. The project also included substantial amounts of new fencing and improvements to the facilities for handling containerized munitions.

Intermodal Rail Yard, Chicago Area. Project Manager for the performance evaluation and alternatives recommendation for a high volume intermodal terminal for the Santa Fe Railway.

Rail Access Improvements, Port of Long Beach, CA. Internal consultant for access track improvement serving several port terminals in the Port of Long Beach.

Michael P. Cavanaugh, PE
WTC Facilities - Project Manager

Education

- BCE, Civil Engineering, 1977

Registration/Credentials

- Professional Engineer: NY #[redacted]

Employment History

- 1977-Present - Jacobs

Mike Cavanaugh has extensive project management experience on a wide variety of assignments involving the rehabilitation of highways, streets and their related infrastructure in the New York metropolitan area. Mr. Cavanaugh has been involved in the design and construction services for over 30 miles of streets and roadways for agencies such as NYS Department of Transportation, NYC Department of Transportation and the NYC Economic Development Corporation. The projects have encompassed topographic surveys/ mapping, subsurface investigation and pavement design, design reports and the preparation of final plans, specifications and estimates for street reconstruction work including drainage, traffic signals and street lighting improvements. His experience encompasses extensive underground utility work that includes utility surveys, subsurface investigations and test pitting and the design of new and relocated utility system.

Project Experience

Port Authority of NY & NJ, World Trade Center Streets, Utilities, and Related Infrastructure Designs, New York, NY. Project Manager of the joint venture team providing design services for the creation of Greenwich Street between Vesey and Liberty Streets, and Fulton Street between Route 9A (West Street) and Church Street, including the installation of street utilities (water, storm and sanitary sewers, gas, and steam mains) to service the World Trade Center Site. Also responsible for the design coordination of the streets and related infrastructure designs with all participating stakeholders, including Silverstein Properties, Inc. (SPI), the MTA, Lower Manhattan Development Corp., NYCDOT, and NYCDEP. In addition to the new streets and utilities, the project includes the creation of Liberty Park, a new park adjacent to the WTC Memorial on Liberty Street, all roadway surfaces, sidewalks, street lighting, traffic control measures, appropriate street furnishings, way finding, landscaping and perimeter security measures.

Port Authority of NY & NJ, Civil Engineering Services on a "Call-In" Basis, NY & NJ. Principal-in-Charge for these "Call-In" agreements which include 33+ assignments ranging in fee from $25,000 to approximately $270,000. Project design work includes roadway reconstruction, airside site work, storm drainage rehabilitation, utility relocation and pavement repair.

NYS Dept. of Transportation, Route 9A Reconstruction Project, Horatio Street to W. 26th Street Phases V-VI, New York, NY. Project Manager for the final design and construction support services for the $70 million reconstruction of Route 9A through the Chelsea Section of Manhattan. The project encompassed the full reconstruction of the roadway corridor to provide a landscaped urban boulevard; construction of a new part at W. 14th Street and a significantly enlarged Thomas F. Smith Park at W. 23rd Street. The project also included extensive improvements to the underground utility systems including a new storm sewer system, new water main distribution system, new electric, telephone and gas facilities and new street lighting and traffic signal systems. Directed the overall design effort and interfaced extensively with NYS and NYC agencies, private utility companies and major stakeholders that included the Chelsea Piers Sports Complex and the Gransevoort Meat Market Associated.

Michael P. Cavanaugh, PE
WTC Facilities Project Manager

NYC Dept. of Transportation, Hudson Street Reconstruction, New York, NY. Project Manager for the preparation of a design report and final PS&E (1.8 miles) for this $30 million street reconstruction project. The design included a vault survey and special reconstruction details above existing vaults, 6,300 ft of new 48" trunk water main, the replacement of 16,000 ft of existing 12" and 20" distribution water mains, lining existing brick sewers, signal improvements at 32 intersections and the full reconstruction of the pavement, curb and sidewalks (including special streetscape designs at specific locations). The project also included the relocation design of the Empire City Subway duct system necessary to accommodate the new 48" water main.

NYC Dept. of Transportation, HWQ 342 Hillside Avenue Reconstruction, Queens, NY. Project Manager for the preparation of a design report and final PS&E for this 7-mile reconstruction. Project included widening of the roadway to provide a continuous mall to accommodate left turn lanes, special protection features at two Long Island Rail Road overpasses, upgrading traffic signalization and pedestrian crossings at 70 intersections, new water main construction, and the installation of seepage well systems to provide roadway drainage in unsewered sections. The project was constructed under four staged contracts covering different roadway segments.

NYC Dept. of Transportation, McGuiness Boulevard Reconstruction, Brooklyn, NY. Project Manager for the preparation of a design report and final PS&E (1.3 miles). The design included rehabilitation of the pavement, curbs and sidewalks, reconstruction of the boulevard's center mall to provide a planted median and channelization for left turning vehicles, signalization improvements at selected locations, the replacement of 9,000 feet of water main and 4,600 feet of combined sewers. Private utility work was also included in the design under a joint agreement with NYCDOT.

NYC Economic Development Corp., Linden Place, Queens, NY. Project Manager for the preliminary and final design for the reconstruction of NYC streets within the College Point Corporate Park in Queens. The project included subsurface investigations, geotechnical analysis and pavement design and final plans, specifications and estimates for pavement, curb and sidewalk rehabilitation. The project called for raising the Linden Place profile by approximately 5-feet to bring it into conformance with legal grade.

Battery Park City Authority, Vesey Street Utility Extensions, New York, NY. Project Manager for providing underground utilities to service the new NY Mercantile Exchange Building. New utilities constructed within Vesey Street between West Street and North End Avenue included 700 feet of new 10"/20" steam main, new electric duct banks, new storm/sanitary sewer connections and new water services. The project included test pitting to identify existing utility locations and the design of new utilities to minimize interferences. All designs were in accordance with NYCDEP and Con Edison standards.

MTA Bridges and Tunnels, 2003 Miscellaneous Design Services, NY. Principal-In-Charge for this "As Needed" design contract that includes more than 30 project assignments to date at the Authority's Bridge and Tunnel facilities for various structural/civil, architectural, electrical, mechanical, cost estimating, constructability review, value engineering and construction support services.

Lauren Calia Brennan, PE
Project Engineer

Education

- BS, Civil Engineering, 1998

Registration/Credentials

- Professional Engineer: NY#[redacted]

Lauren Calia Brennan is a Project Engineer in Jacob's Civil Engineering Group responsible for project design, development and management of site/civil and highway projects, contract documents and is thoroughly versed in AutoCAD/Microstation and other engineering software applications.

Project Experience

Port Authority of NY & NJ, Civil Engineering "Call-In" during 2002-2007. Project Engineer on tasks including:

- **Newark Liberty International Airport.** Study to install a new Oil Water Separator at Building 117 Stage I. Evaluated the quantity of storm-water run-off generated from a 10-year storm that is currently handled by the existing separator and what the increase in flow would be if tributary areas were increased.
- **JFK International Airport, Guard Post "R" Relocation and Reconstruction of North Hangar Road:** Designed site and roadway improvements in the vicinity of Guard Post "R" and North Hangar Road at the north side of the airport.
- **LaGuardia Airport, Crossover Chamber A:** Prepared design of a crossover valve chamber between high pressure and low pressure water supply systems.
- **LaGuardia Airport, Guard Post Drainage:** Prepared design to re-grade three guard posts to accommodate new security barriers.
- **LaGuardia Airport, Phase 3 Storm Improvements:** Providing construction support during the slip-lining of storm sewers throughout the airport.
- **Newark Liberty International Airport, Brewster Road:** Providing design of additional roadway improvements along Brewster Road.

Port Authority of New York & New Jersey, Civil Engineering "Call-In" during 1999-2001. As Project Engineer, involved in several assignments under this agreement; selected project assignments included:

- **Newark International Airport, Brewster Road Improvements.** Prepared a design for the relocation of Brewster Road and the construction of a bypass culvert system to redirect stormwater runoff under 3 separate contracts.
- **LaGuardia Airport, Master Utility Study - Storm Water Management.** Using state-of-the-art stormwater management software, Jacobs prepared a detailed hydrologic and hydraulic analyses of multiple stormwater conveyance systems and pump stations throughout the airport.

Amtrak, Nationwide Program Management for Designated American Recovery and Reinvestment Act Projects (ARRA) 2009-2011. Project Manager involved in the development of bridging documents at over 20 Amtrak facility locations. Ms. Brennan is responsible for the civil engineering design and coordination of discipline work at each site. The bridges documents will be used to procure design-build contracts to complete the ARRA stimulus projects within an 18-month time period. The projects include facility upgrades, security enhancements and station improvements.

MTA Metro-North Railroad, Cortlandt Station Parking, Intermodal and Access Improvements, Cortlandt, NY. Project Engineer for this $25 million project to add 750 parking spaces, a new

Lauren Calia Brennan, PE
Project Engineer

pedestrian overpass, station and plaza to the Metro-North Railroad Cortlandt Train Station. The project involves new utilities, lighting, stormwater management facilities, roadway bridge, access road, retaining walls and toilet facility. Ms. Brennan was responsible for the civil design elements, coordination of the technical design effort across a multi-discipline team, administration and support services during the design phase and preparation of final design documents.

MTA Long Island Rail Road, Morris Park Locomotive Shop, Jamaica, NY. Lead Civil Engineer responsible for site civil designs, including roadways, utilities and stormwater management. The site work includes the design of roadways, parking areas, water distribution system, sewer system and gas main connection. The design, which is seeking LEED certification, also includes a stormwater system that reuses rainwater within the building. Rainwater that is not re-used as part of the non-potable water system will be routed through the site new stormwater detention system to improve water quality and reduce peak flows.

MTA Metro-North Railroad, Harmon Shop Replacement Program, Phase III, Croton-on-Hudson, NY. Engineer responsible for the project's utility plans, utility alignment plans, profiles and details. Additionally, contributed to the preparation of the project's specifications and provided construction administration and support services during the project's construction phase. Harmon Shop Replacement Phase III is the largest engineering and construction project ever awarded by MTA Metro-North Railroad. Jacobs performed all site work on the $282 million project including 15 new tracks, new K-9 grounds for MTA police dogs, and design of drainage, utilities, communications systems, power, lighting, snow melter, and traction power systems. Responsibilities included the design of the water distribution, fire water, and sanitary systems.

NYS Dept. of Transportation, Alexander Hamilton Bridge and Highbridge Interchange Ramps Rehabilitation I-95 Corridor between Amsterdam Avenue in New York County and Undercliff Avenue, Bronx, NY. Project involved major bridge rehabilitation/replacement work for nine bridges and their associated segments of on grade roadways. As designer for this final design project, responsible for roadway design elements, including horizontal and vertical alignments using In-Roads, miscellaneous details, typical sections and for maintenance and protection of traffic.

ERA South Associates, Flatrock Square, City of Englewood, NJ. Engineer responsible for preparation of design documents inclusive of site layout, roadway design, site grading, drainage, stormwater management facilities, signage, utilities, lighting and landscaping. Also prepared application documents and obtained the required approvals from the NJDEP and Bergen County. Jacobs prepared site plan documents and provided traffic-engineering services on a 20-acre industrial and commercial parcel adjacent to Route 4 in the Englewood. The project includes 452 residential units, 50,000 sf of retail and two towers including more than 400,000 sf of office space.

Andrew R. Holland, PE
Project Engineer

Education

- BS, Civil Engineering, 2001

Registration/Licenses

- Professional Engineer: NY# [redacted]

Andrew Holland has over seven years of experience in highway and drainage design.

Project Experience

Port Authority of NY & NJ, World Trade Center Streets, Utilities, and Related Infrastructure, New York, NY (2007-2010) Project engineer responsible for storm sewer design, design of roadway profiles, road and sidewalk grading, water main design revisions, and utility connection coordination with existing and proposed facilities.

MTA Metro-North Rail Road, Harmon Shop Replacement Program-Phase III Croton-on-Hudson, NY (2006-2007). Project engineer responsible for design of storm sewer system for Harmon Shop Replacement.

NY Route 347, Nesconset Highway, Suffolk County, NY. Project engineer responsible for preparation of preliminary quantity and cost estimates, driveway-roadway access analysis, and right of way impact analysis.

NYS Department of Transportation, Van Wyck Expressway Intelligent Transportation Systems Improvements, Queens County, NY. Design engineer responsible for preparation of erosion and sedimentation control plans and Stormwater Pollution Prevention Plan (SWPPP) in accordance with New York State Department of Environment design standards.

Long Island Expressway Construction Support Drainage Design. Responsible for design of drainage structure and pipe layout to replace a storm sewer system that was damaged during construction activity.

NYSDOT, Alexander Hamilton Bridge-Cross Bronx Expressway, Bronx County and New York County, NY. Design engineer responsible for preparation of erosion and sedimentation control plans and Stormwater Pollution Prevention Plan (SWPPP) in accordance with New York State Department of Environment design standards.

Experience with Other Firms:

U. S. Route 209-Delaware Water Gap National Recreation Area, Pike County and Monroe County, PA. Project Engineer for the proposed improvement of a 6.5-km section of two-lane highway for the Federal Highway Administration–Eastern Federal Lands Highway Division. Design responsibilities included design of horizontal and vertical alignments, and preliminary drainage area calculations.

Interstate Route 70, Frederick County, Maryland. Design engineer for the proposed 2.5-mile section of eight-lane divided highway between Maryland Route 144 and Maryland Route 355. Responsible for revisions to design of the drainage system.

East New Market Streetscape, Dorchester County, Maryland. Design Engineer for proposed improvement of storm drain system and stormwater best management practice (BMP).

Andrew R. Holland, PE
Project Engineer

MD 214 at MD 468 Intersection Improvements, Anne Arundel County, Maryland. Design engineer responsible for completion of drainage and stormwater management analysis. Prepared a drainage report and stormwater management report for review by the Maryland State Highway Administration Highway Hydraulics Division and Anne Arundle County Department of Public Works.

MD 337 from MD 5 to Forestville Road, Prince George's County, MD / MD 198 from Eighth Street to Anne Arundel County line, Price George's County, MD / MD 586 from North of Randolph Road to Parklawn Memorial Park, Montgomery County, MD. Project engineer for resurfacing and safety projects. Responsible for reviewing field conditions, identifying required repairs to curb and gutter, sidewalk, pedestrian ramps, and drainage structures, and improvements to meet current design and safety standards, preparing construction cost estimate, construction specifications, and details.

MD 201 at Cherrywood Lane, Price George's County, MD. Design engineer responsible for design of drainage and stormwater management facilities required for roadway widening and intersection upgrades.

Baltimore Harbor Tunnel Maintenance Facility, Baltimore, MD, Governor Harry Nice Memorial Bridge Maintenance Facility, Charles County, MD. Project engineer responsible for site grading, erosion and sedimentation control methods, and design of preparation of bioretention chamber for stormwater management. Prepared report and plans for permit approval from the Maryland Department of the Environment.

Jessica M. Forse, PE
Civil Engineer

Education

- BSCE, Civil Engineering, 1999

Registration/Credentials

- Professional Engineer: NY#[redacted]

Employment History

- 2002-Present – Jacobs

Jessica Forse is responsible for project design and development as well as compilation of construction drawings including roadway layout, grading, drainage, utility design, construction staging, soil erosion and sediment control, and the preparation of site specifications and construction cost estimates.

Project Experience

Port Authority of NY & NJ, World Trade Center Streets, Utilities, and Related Infrastructure, New York, NY. Lead Civil Engineer for the design of the streets and infrastructure at the 16 acre World Trade Center Site. Responsibilities include design of the new roadway and utility network and extensive coordination with New York City Agencies including Planning, DEP, DOT, MTA and various other development projects on the site to define the surface and sub-grade design parameters. Additional project responsibilities include coordination for the installation of at-grade security devices and urban design features.

Port Authority of NY & NJ, **Civil Engineering "Call-In" 2002-2004.** Civil Engineer responsible for multiple assignments under a Civil Engineering "Call-In" agreement. The following projects are a representative sample of the assignments completed for the Port Authority:

- **JFK International Airport, Guard Post "R" Relocation and Reconstruction of North Hangar Road.** Designed site and roadway improvements in the vicinity of Guard Post "R" and North Hangar Road at the north side of the airport.
- **Newark Liberty International Airport, Brewster Road.** Provided design of additional roadway improvements along Brewster Road.
- **Jamaica AirTrain Station.** Prepared grading design of site features bounding the newly constructed Jamaica Station in the Borough of Queens, New York.

Port Authority of NY & NJ, Civil Engineering "Call-In" 1999-2001. Civil Engineer responsible for multiple assignments under a Civil Engineering "Call-In" agreement. The following projects are a representative sample of the assignments completed for the Port Authority:

- **Rehabilitation of the Approach Bridges to the Lincoln Tunnel.** This project included civil design for the rehabilitation of five approach bridges to the Lincoln Tunnel. Design services included grading, drainage, pavement rehabilitation and utility relocation and coordination.
- **LaGuardia Airport, Roads West of the Central Terminal Building Utility Design.** This project involved extensive utility rehabilitation and relocation due to the roadway reconstruction and realignment west of the Central Terminal Building. Design included drainage rehabilitation and relocations as well as the design of twin 24" water mains.

Somerset Development, Wesmont Station, Borough of Wood-Ridge, NJ. As project engineer, Ms. Forse is responsible for all aspects of the site design and permitting for the project as well as tasked with coordinating the site layout and design with the client, Borough, and project architect. The development included 737 residential units, in a mixture of single-family lots, townhouses, and multi-family mixed-use buildings. Also included in the 67-acre tract will be land for the construction of a recreation facility for multiple athletic fields and a future school building.

Avports, E. 34th Street Heliport, New York, NY. The project consists of the design of a new terminal building for the E. 34th Street Heliport and an upgrade of the entire heliport facility on Manhattan's eastside waterfront. Facility improvements include a new waterfront bikeway/walkway, a new hangar, an upgraded take off and landing area, and a view enhancing perimeter wall. Ms. Forse is responsible for the site design as well as coordination of the four project sub-consultants. Ms. Forse is also responsible for permit applications to the various New York City agencies including the New York City DEP, Department of Small Business Services, and the DOT.

FDNY Randall's Island Training Facility, New York, NY. Project Engineer for improvements to the New York City Fire Department Training facility at Randall's Island. This unique, multi-phased project involved the construction of one new training building and 2 new building additions at the FDNY's 20-acre training facility. Ms. Forse worked closely with various other project disciplines to ensure proper coordination of all project phases. As the Project Engineer, Ms. Forse was responsible for the design of all proposed site features including roadway design, grading, utility infrastructure and stormwater management designs.

S. Hekemian Kasparian and Troast LLC, Englewood Commons, City of Englewood, NJ. The project is mixed-use development in the City of Englewood including 350 apartment units, retail and office in seven separate buildings. Jacobs prepared design documents inclusive of site layout, roadway design, site grading, drainage, stormwater management facilities, utilities, lighting, and landscaping. The project was overwhelmingly received by the community and approved by the Englewood Planning Board. As a design engineer Ms Forse was involved in the preparation of application documents to the NJDEP and Bergen County.

Lowe's Companies Inc., Retail and Storage at King's Plaza, Borough of Brooklyn, NY. Site design of a ±90,000 sf Retail and Storage facility along the Mill Basin in Brooklyn. Other design services included a bi-level parking garage, site grading, stormwater management, utility systems and landscaping features. Ms Forse is involved in the permitting applications to New York City DEP for stormwater and sewer connections

NYS Department of Transportation, Design Phases I-IV for Route 347 Northern State Parkway to Route 25A, Suffolk County, NY. The project involves the preparation of a Design Report and environmental Impact Statement for 15 miles of roadway improvements, including widening one lane in each direction with increased width shoulders, the construction of 3 new interchanges, intersection improvements, environmental assessment, storm water management, public outreach, and community participation. Using Micro-Station V8 and In Roads, Ms. Forse's responsibilities include design and development of the horizontal and vertical alignment for the intersections as well as design of super elevations and transitions and typical sections.

NYC Department of Transportation, Manhattan Bridge Rehabilitation, Manhattan, NY. The Manhattan Bridge project included the rehabilitation of the lower roadway as part of a continuing maintenance effort on the structure by the NYCDOT. Ms. Forse's responsibilities included the design for the upgrade of the drainage system along the lower roadway and the rehabilitation design of the plaza and transition areas leading up to the suspended spans on both the Brooklyn and Manhattan sides.

Toby Kizner, AICP, PP
Environmental / Planning

Education

- MCRP, City and Regional Planning, Cornell University, 1991
- BS, Urban and Regional Studies, Cornell University, 1990

Registration/Credentials

- AICP – U. S.
- Professional Planner – NJ

Toby Kizner, Manager of Jacobs Planning Group in New York City, is responsible for project planning management on numerous multidisciplinary projects and public outreach for major transportation projects. Her previous assignments have successfully involved almost all aspects of planning including: public outreach; environmental impact assessment; transportation planning; zoning analysis; site planning; fiscal impact analysis and master planning. Ms. Kizner has directed major public outreach assignments for projects in New York City, Long Island and Upstate New York. She is particularly adept at developing outreach programs that inform, are inclusive, that communicate to underrepresented groups and that mediate conflict in a manner that advances a project towards consensus. Ms. Kizner has directed major assignments involving the comprehensive evaluation of land use, transportation, and environmental projects for both public agencies and private industry. Ms. Kizner has extensive experiences in preparing and processing environmental documents under NEPA, SEQR, CEQR and ULURP for all levels of government.

Project Experience

Hugh L. Carey Battery Park City Authority, Environmental Assessments – Redevelopment of Pier A and Contiguous Upland Area, New York, NY. Project Manager responsible for the preparation of a SEQR Environment Assessment Form and Supplemental Report for the redevelopment of the historic landmark Pier A and contiguous upland area in Battery Park City. Since several potential uses were under consideration for the structure's reuse, the environmental analysis assessed potential impacts of a range of tenants including the National Park Service, retain and restaurant uses, office, and museum activities. The analysis including detailed traffic and pedestrian analyses associated with the proposed tenants, as well as noise impacts associated with proposed ferry embarkation/debarkation from the site.

General Services Administration (GSA), Lease-Construction Project EAs, Jersey City, NJ. Preparation of NEPA Environmental Assessment. This study formally documented two locations under consideration for a lease-construction project for a Social Security Administration district office in Jersey City, NJ. This study included the preparation of two individual EAs to address the environmental impacts associated with each location.

GSA, Designation as Restricted Use Streets Two Locations in Lower Manhattan EAS and Supplemental Report, New York, NY. Preparation of Environmental Assessment Statement and Supplemental Report pursuant to CEQR guidelines. This study formally documented the environmental impacts associated with public street closures and security enhancements that were installed around the perimeter of federal buildings in Lower Manhattan following the events of September 11, 2001.

Dormitory Authority of New York, 462 First Avenue DASNY-Bellevue Hospital Center EIS, Manhattan, NY. Project Manager responsible for a SEQR-certified EIS for the construction of a new ambulatory care facility and DNA Laboratory at the Bellevue Hospital Center in Manhattan. This effort involved coordination with the Office of the Chief Medical Examiner (OCME) and the

NYC Health and Hospitals Corporation (HHC) to assess potential project-related impacts associated with he displacement of parking and the transfer of employees from the existing DNA laboratory.

Dormitory Authority of the State of New York, Staten Island Criminal Court and Family Court Complex Environmental Impact Statement, NY. Project Manager for an EIS for a new court complex located in the St. George section of Staten Island. Key project issues include the displacement of a municipal parking lot, a special permit application for the construction of a new parking structure and the historic significance of the project site, which was once used as a burial site for the former Marine Hospital/Quarantine Ground. Edwards and Kelcey is using a fast-track schedule to complete a street demapping ULURP action and SEQR review.

NYC Department of Design and Construction (DDC), Public Safety Answering Center II EAS, NY. Project Manager for expanded Environmental assessment Statement for the construction of a new Police Department 911 emergency answering center in lower Manhattan. As part of the assessment, a fair share analysis was conducted for closure of a municipal parking garage. Other key issues involved the potential for shadow impacts on Police Plaza, a well utilized urban open space resource, potential zoning nonconformities associated with some of the project alternatives, as well as potential traffic impacts resulting from the parking garage closure. The project involved coordination with several city agencies, including the NYPD, OCA, and DDC.

New York Metropolitan Transportation Council, Regional Freight Study, New York, NY. Project Manager for this inventory and analysis of freight corridors within the NYMTC region. The NYMYC Freight Study will identify potential alternatives for improving the flow of goods into, out of, and through the region. Responsible for activities including preparation of Internal Scan of current an past freight planning efforts in the New York region, as well as an environmental scan of all freight corridors, including highway, rail, air, port and intermodal facilities. Responsible for client contact, assigning resources and keeping the study budget and schedule.

New York Metropolitan Transportation Council, Operation and Enhancement of the NYMTC Public Involvement Program, New York, NY. Project Manager responsible for leading efforts to implement and expand the public involvement program for the New York Metropolitan Transportation Council (NYMTC), the Metropolitan Planning Organization for New York City, Long Island, and the lower Hudson Valley. A significant goal of the program is to seek out individuals and groups not previously involved in planning to educate them on the future of transportation in the region and to integrate their input into the planning process. Responsible for activities including maintaining the mailing list database, coordinating media coverage and protocols, organizing public events, developing a guidebook for public involvement, and annually evaluating and recommending improvements to the public involvement program. Responsible for client contact, assigning resources and keeping study budget and schedule.

New York City Economic Development Corporation, Strategic Plan for the Redevelopment of the Port of New York, New York, NY. Public Outreach Specialist for the development of a strategic plan for the redevelopment of the Port of NY. Ms. Kizner was responsible for the development of the outreach plan, identification of stakeholders, media relations, newsletter and fact sheet development, data base management, etc. during this high profile project. A major component of the effort was focused on identifying and communicating with port users as well as communities directly adjacent to strategic facilities that might be disproportionately impacted by these facilities.

Randall K. Sprague, PE, PP, CVS
Constructability

Education

- MS, Construction Management, 1981
- BS, Civil and Environmental Engineering, 1971

Registration/License

- Professional Engineer in NY and NJ
- Professional Planner in NJ
- Certified Value Specialist

Randy Sprague is the Senior QA/QC Officer for Jacobs. He has over thirty years of project management and value engineering, construction, constructability analyses, design engineering, claims consulting experience and cost estimating. He has worked for design firms, contractors and project/construction management consultants. His project experience includes schools, hospitals, offices, hotels, and high-rise buildings, water and wastewater treatments systems, power and co-generation plants, industrial and transit facilities, and military installations.

Quality Officer for Jacobs responsible for overseeing the company-wide quality program, which includes maintaining the Jacobs Quality Manual, quality reviews and quality audits. Regional Quality Managers assist Mr. Sprague in the implementation of the overall quality program. The Quality Program is continually monitored to address client needs, updates to technology and changes in the way work is contracted. The quality program is structured to address the entire range of project size and diversity of services provided by Jacobs, including joint venture contract obligations.

Project Experience

Amtrak ARRA Amtrak Improvements Project, Nationwide. National Quality Manager for the $550 million Amtrak Improvement Project, which is the rehabilitation of over 300 Amtrak stations and facilities throughout the continental United States. Established and implemented the quality program for Jacobs and all design-build contractors. Scope of work per facility cumulatively included track improvements, vehicle maintenance facilities, ADA compliance, mobility first, platform replacement, security systems, bridge replacement and other needs. Jacobs is to develop the bridging documents than contract all work as design-build contracts. The program is funded by federal stimulus package, which all work is to be performed in approximately 18 months. Construction is performed by approximately 50 design-build contracts, all of which are retained by Jacobs.

MTA Metro-North Railroad Harmon Shop Phase II, Croton-Harmon, NY. Quality Manager for the design-build construction of a new wheel truing facility at Harmon Yard. Established, implemented and managed the quality program of the joint venture responsible for all design-build construction activities.

MTA Metro-North Railroad Harmon Wheel Truer Facility, Croton-Harmon, NY. Quality Manager for the design-build construction of a new wheel truing facility at Harmon Yard. Established, implemented and managed the quality program of the joint venture responsible for all design-build construction activities.

MTA Long Island Rail Road, Arch Street Yard/Shop, Design/Build, Queens, NY. QA/QC Manager responsible for establishing and implementing the ISO compliant QA/QC program for the $76 million design/build project in which Jacobs was a joint venture partner. The quality control program was inclusive for all project design/build services including design, construction,

procurement, sub-consultants, subcontracting and commissioning. Field operations were monitored and documented on a continuous basis by the Quality Manager's support staff.

MTA Metro-North Railroad, Highbridge Yard-Design/Build, Bronx, NY. QA/QC Manager responsible for $75,000,000 design-build project in Jacobs was a joint venture partner. He prepared an ISO 9000 compliant, project specific QA/QC manual, which was approved by Metro-North Railroad. QA/QC procedures were developed and documentation monitored as the project progressed from the preliminary design stage into final design and field construction. As joint venture partner and lead engineer, Jacobs' primary design responsibilities included civil (under- and above-ground utilities), trackwork, traction power, third rail, structural (shop and substation foundations, building and roof structures, high level platforms, and overpass), systems integration, and communications system, CCTV cameras and a security system which is integrated with the fire protection system. The quality control program was inclusive for all project design-build services including design, construction, procurement, subconsultants, subcontracting and commissioning. Field operations were monitored and documented on a continuous basis by the Quality Manager's support staff.

NJ Dept. of Transportation, Route 21 Reconstruction, Newark, NJ. Project Manager responsible for the development plan for maintaining sanitary interceptor flow during construction of Route 21 realignment and improvements. Portions of the interceptor sewer area to be reconstructed and the interceptor system remained functional as Route 21 was reconstructed. Jacobs was responsible for roadway widening and relocation in downtown Newark, from Green Street to north of Passaic Street. This project included the development of an interactive traffic communications and management system, to decrease delays and improve safety within the Route 21 corridor in the City of Newark, County of Essex.

New York State Department of Transportation, Miscellaneous Value Engineering Services, All Regions, Various Locations, NY. CVS Team Leader for several highway value engineering studies. Jacobs provided task order Value Engineering services to NYSDOT under it's second consecutive two-year term agreement. From 2001-2003, Jacobs conducted nine VE studies statewide, on projects including new highway alignments and bus lane additions, highway widening and reconstruction projects, and major viaduct and bridge structure rehabilitations and replacements.

MTA Bridges and Tunnels, 2001-2005 Value Engineering Services, New York, NY. CVS Team Leader for these on-call VE services. Jacobs provided full value engineering teams to conduct studies for the Triborough Bridge and Tunnel Authority Capital Projects from 2001-2005. Assignments included: Task 1 - Value Engineering Review for Project BW-82, Suspended Span Roadway Deck Replacement; Task 2 - Value Engineering Workshop on the Cable Strand Re-Anchoring work under TB-66 for the Triborough Bridge; and Task 3 - Value Engineering Study for Project MP-08, New Administration Building at Marine Parkway Bridge.

John Pavlovich, PE
Planning & Traffic Engineering

Education

- MBA, Operations Planning, 1978
- MS, Transportation Planning / Engineering, 1973
- BE, Civil Engineering, 1972

Registration/Credentials

- Professional Engineer: NJ

Employment History

1985–Present – Jacobs
1982–1985 - NY Metropolitan Transportation Council
1978–1982 - Tri-State Regional Planning Commission
1975–1978 - Raymond Parish Pike
1974–1975 - Barton Aschman Associates
1973-1974 - Green Associates

Mr. Pavlovich has 37 years of diversified and progressively responsible experience in transportation planning and traffic engineering in both the public and private sectors. He has managed large scale programs and projects requiring comprehensive planning and logistics, traffic demand analysis, traffic assignment, and traffic forecasting. John has been responsible for technical oversight on other projects in the tri-state area dealing with the movement of commuters, traffic impacts on communities, and the interrelationship of land use and transportation systems.

Many of Mr. Pavlovich's assignments involved working with multi-tiered policy and advisory committees. He has also been directly involved in community involvement activities on large-scale projects including major highway studies, environmental impact studies, and other transportation projects that involved sensitive community issues. Maintaining traffic flow during roadway construction was a major issue on many projects.

Other Jacobs projects managed by Mr. Pavlovich include access studies for airports, transit stations, and stadiums; analyses of urban commuter patterns; simulation of maintenance and protection of traffic plans for staged construction on complex projects; and evaluations of alternative transportation modes. He also managed the Hybrid Signage Project for the Lincoln Tunnel.

Project Experience

PANYNJ, Trans Hudson River Crossing, NJ. Project Manager responsible for management of entire assignment for developing traffic flows and commuter patterns on six Hudson River crossings. Included were data collection programs such as passenger and vehicle counts, turnstile readings, Lincoln Tunnel Exclusive Bus Lane (XBL) travel time surveys, travel attitude survey, and the first origin and destination survey of reverse peak travel commuters.

NYSDOT, Alexander Hamilton Bridge Rehabilitation Project, New York City, NY. Task Leader responsible for analyzing traffic operational issues associated with the staged rehabilitation of the AHB. The objective was to maintain the full compliment of travel lanes in each direction during construction. Traffic simulation was used to assess six construction stages and evaluate multiple MPT measures and strategies in each stage to maintain traffic flow through the I-95 corridor. Measures of Effectiveness (MOEs) were generated for each MPT scheme for final plan selection. Study products included detailed technical memoranda, presentations to stakeholders including PANYNJ, NYC OCMC and the members of TRANSCOM. Traffic forecasts were developed and level of service analysis performed for the roadway segments in earlier project phases. These efforts provided essential input in the development of the improvements.

PANYNJ, NJ Turnpike 16E/17E - Lincoln Tunnel Comprehensive Signage Improvement Program, NY, NY. Team Leader responsible for technical aspects of the project including preparation of planning studies and conceptual design of motorist signs and structures related to the Lincoln Tunnel. Services being performed include field inspection of all signs maintained by PANYNJ at the Lincoln Tunnel, and development of a Stage I Conceptual Plan Sign Program to enhance effectiveness of conveying information to these motorists.

John Pavlovich, PE
Planning & Traffic Engineering

PANYNJ, Traffic Engineering Call-In 2007-Present, NYC Metropolitan Area. Project Manager and Lead Traffic Engineer responsible for preparation of technical scopes and budgets in response to Authority task order requests and managing the study effort. Mr. Pavlovich has managed the following task order assignments to date: PABT Bus Operations Study; Dey Street Traffic Simulation; LaGuardia Airport Traffic Survey; Newark Liberty Airport CUSS Survey; and the Inland Ports Terminals Study. These assignments have involved developing and executing data collection programs, training and mobilization of field crews, data tabulation, and analysis. The PABT task order involved the use of PDA devices to obtain time-synchronized bus observation data at multiple points; the Dey Street Simulation included development of a 3-D simulation model of the WTC redevelopment area using a VISSIM software platform; and LaGuardia Airport involved developing a balanced traffic flow map using an Excel spreadsheet on a GIS platform.

PANYNJ, Inland Port Truck and Rail Shuttle Terminal Study. Project Manager - Working for the Port Authority Department of Ports and Commerce. Jacobs examined the potential feasibility of establishing a major inland port that would, in turn, "free-up" valuable space at the Port of Newark and Elizabeth. This study required a series of extensive interviews with freight carriers and warehousing concerns within the region to understand their existing operations as well as their future plans. Ten locations within New Jersey, Pennsylvania, and New York were reviewed in detail to understand their feasibility as potential sites. Major tasks undertaken during this study include screening for physical site viability; industry outreach; economic viability; development of prioritized list of sites; and detailed site assessment. Industry outreach was crucial to this study and afforded Jacobs an intimate understanding of the trends and practices in the industry. These efforts allowed the project team to identify the most desirable locations for an inland port and prepare a detailed case study for three individual sites.

BLRA, MOTBY Transportation & Sustainable Land Use Study, Bayonne, NJ. Project Manager/Client Manager/Task Manager responsible for the transportation efforts associated with the proposed redevelopment of the former Military Operations Terminal in Bayonne. Work elements included the formulation and analysis of regional access alternatives between NJ Turnpike Interchange 14A, State highways, and the site; rail access for goods movement; transit mobility on the 1.9-mile long Peninsula; and the development of an on-site street grid to support the uses presented in the redevelopment plan. Development of transportation models to replicate the existing transportation infrastructure and to test various roadway and transit alternatives. Traffic planning involving vehicle trip generation, trip distribution and traffic assignment was used to develop trip table and logical vehicle paths for use in the simulation modeling of the study area. Also responsible for preparation of Highway Access Permit and support documentation.

NYSDOT, TRANS Manhattan Expressway, New York, NY. Traffic Engineer responsible for evaluating traffic issues and solutions to improve the connector ramp between the Harlem River Drive and I-95. This interchange consists of a series of merge points on curves carrying 60,000 vehicles daily. As Task Leader, Mr. Pavlovich was responsible for technical oversight of data collection, traffic analysis and traffic demand forecasting of alternative assessments, and providing traffic results and assessing MPT strategies.

NYSDOT, Route 6/6N Corridor Planning Study, Putnam & Westchester Counties, NY. Project Manager responsible for conducting a corridor study to assess current and forecasted mobility needs for Routes 6 and 6N. The study inventoried existing transportation system conditions, forecasted future conditions, identified existing and future needs, and conducted traffic simulation to assess short/long-term alternative solutions/strategies to address identified needs. Study documentation included detailed technical memoranda, final corridor study reports, conceptual plans and layouts.

Robert K. Craig, CPP
Security

Education

- Electrical Engineering

Registration/Credentials

- ASIS – Certified Protection Professional (CPP)

Mr. Craig has been mastering the art of protection engineering for more than 20 years. He has provided security consulting and design services to a variety of clients serving municipal, state, and federal agencies. Mr. Craig is Board Certified as a Certified Protection Professional (CPP) – the only recognized security professional certification. His expertise extends into the design of fire protection systems, allowing for resolution of life safety and security conflicts in each design project. He brings extensive design experience in sophisticated electronic security systems. Mr. Craig's designs capabilities include integration of Anti-terrorism/Force Protection countermeasures with the hard and softscape designs of facilities. Mr. Craig's expertise extends to design of traditional electronic entry control, explosives and weapons screening, intrusion detection, duress, intercommunications, electronic article surveillance, and closed circuit television systems and has experience in numerous business sectors including: water, transportation, defense industrial, energy, information and technology/telecom, public health and Homeland Security.

Project Experience

Florida Turnpike Enterprise (FTE), Orlando & Pompano Beach, FL. Senior Security Specialist for developing a security training program for approximately 400 field and office personnel to help protect FTE property, assets, staff, and customers.

Florida Turnpike Enterprise, Statewide. Senior Security Specialist for conducting Threat and Vulnerability assessments through out 245 miles of surface roadway assets.

St. Louis Gateway Transportation Center, St. Louis, MO. Senior Security Specialist responsible for threat assessment, security design, and emergency operations planning.

Regional Transportation Commission (RTC) of Southern Nevada, Las Vegas, NV. Security Advisor to RTC security staff with developing the RTC's CityWatch.US™ database. The CityWatch.US™ is a comprehensive system consisting of several interrelated components. These components are site-based Threat & Vulnerability Assessment (TVA), Security Operations & Plans, site-specific Training, Drills, Exercises & Incidents to validate the security operations and the training, and most importantly, a Leadership & Management component that allows for visibility into each asset, as well as the system as a whole.

Regional Transportation Commission (RTC) of Southern Nevada, Las Vegas, NV. Security Advisor to RTC for the development and implementation of the UAW-Daimler Chrysler 400 NASCAR Race Citizens Area Transit Depot Operations Emergency Action Plan. The objective of the plan was to ensure RTC's readiness to provide logistical support services to the Clark County Emergency Operations and the Las Vegas Motor Speedway for mass evacuation of the area.

Federal Aviation Administration, Nationwide. Security Specialist on various FAA facilities nationwide for security and blast analyses of TRACON and ARTCC designs. The analyses included recommendations for improved facility performance as setback requirements and perimeter security components. Advised on modifying the structural column spacing for the TRACON (or MCF) Standard Design to accommodate more stringent blast-resistant design should future site

adapts at specific locations require higher levels of protection. The new exterior metal and glass curtain wall design for the ARTCC administration wing rehabilitation standard design took into account recommendations for enhanced blast performance.

Chicago Skyway, Chicago IL. Senior Security Specialist for the Chicago Skyway toll highway. The services involved a physical security survey of the property to evaluate existing security conditions and procedures and submit recommendations for improvements.

Air Force Civil Engineering Support Agency (AFCESA), Gainesville, FL. Project Security Consultant responsible for development of a threat and risk assessment for United States Air Force installations worldwide. The assessment was used for the development of evacuation schemes and procedures. The results of the assessment were used as the basis for the DoD Antiterrorism Construction Standards mass notification systems security documents.

Lucent Technologies Corporation, Mt. Laurel, NJ. Security Specialist for physical and technical security systems evaluation of 17 sites throughout the United States. Project included a Master Plan for development of a single access card credential integrated with various manufacturers of security equipment.

Lucent Technologies Corporation, Mt. Laurel, NJ. Security Specialist for physical and technical security systems evaluation of three research and development sites in the United State and Europe. Project included a Master Plan for development security improvements for each of the three facilities.

NIAID Integrated Research Facility, Fort Detrick, MD. Security advisor to the construction management team for all security related designs. Conducted reviews all relevant design documents for compliance with Department of Defense security design standards and constructability of those designs.

United States Department of Treasury Headquarters, Washington, DC. Project Manager responsible for security system and life safety code issues. Developed threat assessment and security analysis for security program to be used as the basis of design for the facility. Systems design included pedestrian/ vehicular electronic entry control, intrusion detection, video surveillance, blast mitigation and anti-vehicular assault systems.

Department of Watershed Management (DWM), Atlanta, GA. Senior Security Specialist for conducting a security feasibility study for Hemphill Water Treatment plant. The study included an operational analysis, security countermeasure plan, and site visits to check physical security at each of its facilities including and a review of existing security and access control systems for incorporating the use of sensor and detection equipment, CCTV and remote sensing of plant activities.

Richard A. LaRuffa, PE, CVS
Team Building / Risk Management

Education

- MS, Mechanical Engineering, 1968
- BES, Engineering Service, 1966

Registrations/Licenses

- Professional Engineer in NJ and NY
- Certified Value Specialist (CVS)

Rich LaRuffa has served as Project Director, or Project Manager, overseeing project teams with up to 40 staff members. Assignments included P/CM, construction claims analysis and prudency audits, Value Engineering, Constructability Reviews, CPM scheduling, and cost estimating on projects ranging from $0.5 million to $3.2 billion. Projects include high-rise buildings, hospitals, sewage treatment plants, highways, bridges, airport, rail and bus systems, transportation facilities, prisons and courthouses, educational facilities, golf clubs, auditoriums and banquet halls, refineries, and industrial and power generation plants.

A Life-Certified Value Specialist, Mr. LaRuffa has been actively involved in Value Engineering for more than 30 years. He has participated in over 200 VE workshops, as team member or team leader. Mr. LaRuffa has presented seminars on project management and value engineering, and teaches the one-week SAVE certified Module I VE Training course, and an 8-hour 'Introduction to Principles of VE', both of which are approved for professional development hours toward PE license renewal in New York State.

Project Experience

Port Authority of NY & NJ, Homeland Security Upgrades VE Studies, Newark, NJ. VE Team Leader on confidential VE studies for Homeland Security Upgrade projects at all PA NY&NY airports and PATH system tunnel infrastructure.

Port Authority of NY & NJ, JFK International Airport, New York, NY: Value Engineering Team Leader for a Value Planning Workshop on the design of a restricted service road for fuel operations at the Port Authority's JFK airport. The project included construction of a new RSR overpass across the Van Wyck Expressway.

MTA Bridges and Tunnels

- ***Triborough Bridge, NY, NY:*** The Triborough Bridge complex, centered on Randall's Island, includes a mile-long viaduct structure with a suspension bridge to Queens, a battle-deck bridge to the Bronx and a lift-span bridge to Manhattan. Mr. LaRuffa directed eight VE studies for TBTA, for rehabilitation/replacement of deck structures throughout the various bridge spans and ramp network, for replacement and expansion of the main toll plazas and service buildings, for rehabilitation of the cable anchorage structures for the Queens suspension span, for cable replacements at the Queens span, and rehabilitation of the lift span bridge section over the Harlem River. Total project costs exceed $800 million.
- ***Verrazano Narrows Bridge, NY, NY:*** Directed a VE review for a service building expansion to house toll collection, security, and engineering operations, and a new boiler plant to distribute glycol hot water to the plaza toll booth heating system. He also conducted a study to relocate all utilities on the lower deck as the first phase of a program to replace both deck structures.
- ***Brooklyn Battery Tunnel, NY, NY:*** Directed a VE study of the proposed roaddeck rehabilitation project. The project included roadway drainage, and rehabilitation of catwalk structures.
- ***Henry Hudson Bridge, NY, NY:*** Directed a VE/constructability review of the proposed staged construction to replace the lower deck while maintaining traffic.

- ***Bronx-Whitestone Bridge, NY, NY:*** Directed a VE review of a total deck replacement, including structural rehabilitation of deck framing, new utilities and fire line across the bridge, and a second study to replace the north approach to the bridge that include partial grade and viaduct structures.
- ***Marine Parkway Bridge, NY, NY:*** Directed a VE review of a new service building and garage for toll collection, security, engineering and vehicle maintenance operations, and a new boiler plant to distribute glycol hot water to the plaza toll booth heating system.

Connecticut Dept. of Transportation:

- ***Route 34 Highway Extension, New Haven, CT:*** Lead VE review of $18 million preliminary design of a 2.2km roadway section including passage under major cross streets, retaining walls, street overpass bridges and utility relocations.
- ***Sikorsky Bridge Replacement, Milford, CT:*** Lead VE for review of the $85 million replacement of the Sikorsky Bridge as proposed by Connecticut DOT. The team reviewed concrete and steel alternative designs.
- ***I-84 Realignment, Widening and Interchange Improvements, Waterbury-Southbury, CT.*** Lead two parallel VE studies reviewing the approximate 9-mile project that involved seven overpass interchanges and two river crossings. All overpass structures were being replaced as part of the interstate widening and realignment on this $170 million project that involved three separate design packages.
- ***Rehabilitation of the Walk Swing Bridge, Norwalk, CT (CTDOT):*** Conducted a VE study to review preliminary design to reinforce structure and replace mechanical/electrical systems for the 4-track swing bridge serving MetroNorth Railroad, Amtrak and Conrail.
- ***Rehabilitation of the Saga Bascule Bridge, Westport, CT (CTDOT):*** Conducted a VE study to review preliminary design to replace the 4-track bascule rail bridge as part of MetroNorth Railroad New Haven Line Upgrades.
- ***On-Call Constructability and VE Services:*** Jacobs currently serves as VE sub-consultant to HNTB on a 5-year task order contract. To date, Mr. LaRuffa has lead 2 VE workshops, Rehabilitation of the Commodore Hull Bridge in Shelton/Derby, and I-84 Auxiliary Lanes Addition in West Hartford.

New York State Dept. of Transportation

- ***Van Wyck Expressway Bridge Rehabilitations:*** Lead VE Team review of design to rehabilitate four bridges and improving northbound mainline traffic. Work includes replacing decks, bearing seats, damaged steel and decks, rehabilitate all abutments . All existing steel will be cleaned (lead-abated) and painted, and a pedestrian bridge replaced and relocated approximately 200' further north.
- ***Roslyn Viaduct Replacement, Hempstead, NY:*** Lead VE Team review of design for the viaduct replacement. The existing viaduct is a four-lane structure with concrete piers on wood pile-supported foundations, a steel superstructure and concrete deck roadway. Six alternatives, ranging from $62-$85 million were reviewed.
- ***Brooklyn-Queens Expressway Park Avenue Viaduct, Brooklyn, NY:*** Lead VE Team reviewing preliminary design to replace approximately 1 mile of viaduct. The deck replacement includes widening work (approximately 2 feet each side), replacement of all expansion joints, replace steel railings with single slope concrete barriers, and drainage revisions for the revised elevated roadway cross-section. Seismic improvements, fatigue upgrades and lead abatement are also proposed for the structure. Estimated project cost $85 million.

Stanley Grill
Business Analysis

Education

– BM, MM

Registration/Credentials

CPPBP

Stan Grill is an experienced public transportation executive. He has over 30 years of extensive experience implementing technology and strategies to achieve savings and a comprehensive understanding of complex contract negotiations and project management. His core competencies include strategic sourcing, negotiations, vendor management, supply chain management, cost/price analysis, federal contracting regulations, procurement best practices and process re-engineering. Stan is a dynamic, insightful executive with a record of achieving steady improvements in performance and a strong ability to restructure organizations and motivate staff to maximize effectiveness.

Project Experience

Amtrak Improvements Project.
Project Chief Procurement Officer responsible for all aspects of the procurement team supporting the Amtrak Improvements Project. Provides procurement services and contract administration support for the design/procurement/construction of over 400 Amtrak projects nationwide. Develops procurement packages that best meet the needs of Amtrak in regard to procurement process, timeliness and cost effectiveness.

Previous Experience

MTA New York City Transit, Materiel Division, New York, NY.
Vice President responsible for procurement, material planning, contract administration, cost analysis, asset management, world-wide inspection and testing, vendor relations, inventory management and procurement policy. Processed over 30,000 procurement requests valued at $1-3 billion annually including major capital acquisitions, maintenance equipment/materials, professional and other services. Represented the agency before the MTA Board as well as in various national, state, and local forums. Worked with agency department heads to develop sound business strategies. Major acquisitions included: outsource contracts for transportation services for the disabled, expansions of the NYC subway system, new technology buses and subway cars, automated signaling and train control systems. Accomplishments included achieving annual savings of $200+ million through effective negotiations and sourcing initiatives, significantly reducing procurement lead-times by re-engineering and automating procurement processes, driving persistent problems in vendor quality and late deliveries to a minimum by implementing an effective vendor management program, ensuring timely delivery of maintenance material requirements through effective logistics analysis and implementation of a material planning services function, introducing innovative strategies better suited to the acquisition of new technology and improving service delivery by centralizing management of agency wide contracts.

MTA New York City Transit, Materiel Division.
Chief Procurement Officer responsible for directing staff who wrote solicitation and contract documents, qualify contractors, negotiate, expedite delivery of goods, and perform cost/benefit analyses and market research. Streamlined the procurement process to cut lead-times by over 30% while reducing staff by 25%. Gained acceptance of procurement as a strategic business partner by emphasizing customer service and achieving operational objectives.

Stanley Grill
Business Analysis

MTA New York City Transit, Transit Adjudication Bureau.
Executive Director responsible for directing the enforcement of over 300,000 summonses issued annually for violations of transit rules. Managed a staff of 90 to collect fines, conduct hearings and appeals, operate a mainframe summons processing system and provide public information. Developed effective policing strategies that drastically reduced fare evasion and the incidence of quality of life violations on the transit system. Implemented an automated collection system to increase revenues sufficiently to offset agency costs.

James P. McCarty, PE
Construction Inspection

Education

- BS, Civil Engineering, 1985

Registration/Credentials

- Professional Engineer: CA; VA (pending)

Employment History

1985-Present - Jacobs

Jim McCarty is experienced in the design and construction inspection of bridges, tunnels, retaining walls, and roadways, including maintenance and protection of traffic. His expertise includes reinforced concrete, prestressed concrete, structural steel superstructure, substructure and retaining wall design; preliminary design and layout of bridge structures; and construction management of bridge, retaining wall, and at-grade roadway projects.

Project Experience

National Railroad Passenger Corporation (Amtrak), Nationwide Program Management for Designated American Recovery and Reinvestment Act Projects (ARRA). As Northeast Regional Construction Manager, responsible for construction management of the design/build improvement projects in the northeast U. S. (Washington, D. C. to Boston, MA). The design/build contracts include but not limited to the expansion of the high-speed rail shop to include a drop-table, bridge repair and painting, station improvements, remodeling of police department offices, paving of parking lots and security improvements (CCTV systems, fencing, K-12 bollards, CBRNE analysis). Also responsible for the supervision of the construction management staff on nine contracts covering ten states. The construction management staff was responsible for ensuring that the design/build contractor's constructed the projects to the requirements of the contracts.

Chesapeake Bay Bridge and Tunnel Commission, General Consultant Engineer. As Emergency Response Manager and Deputy Project Manager, he is on call for any emergency response and incident management required on this toll facility. Timeliness of response and flexibility to constantly varying conditions is a requirement of this assignment. He also is responsible for the annual condition assessment of the entire facility including pilings, piers, tunnels, bridges, artificial islands, roadways, toll facilities and maintenance facilities.

Virginia Dept. of Transportation, Hampton Roads District-wide CEI Contract. Project Coordinator responsible for training and assigning qualified construction inspection staff. Professional Services value: $3M.

Virginia Dept. of Transportation, Lynchburg District, Madison Heights (Route 29) Bypass . Project Coordinator responsible for training and assigning qualified construction inspection staff for construction of 4.7-miles of roadway on new alignment, three bridges and five major box culverts, in an environmentally sensitive area adjacent to the James River near Lynchburg, VA. The construction cost of the project is $43M.

Benning Road Bridge Replacement over the Anacostia River. Project Coordinator and engineer in charge of project responsible for maintaining the proper construction inspection staff and client satisfaction for this $28M project involved the phased construction for an eight-lane bridge replacement on the same alignment. Specific relevant experience included metric construction drawings, FHWA's guidelines, extensive Maintenance Of Traffic (80,000 vehicles/day), progress payments, change orders, and inspection experience with continuous span steel plate girders superstructure with a cast-in-place concrete deck, concrete piers within the river, steel H-piles, and

sediment and erosion control in highly sensitive environmental areas. Relocation of gas, high-volt electric, water and telephone were included.

Federal Highway Administration, Eastern Federal Lands Division, Indefinite Delivery Indefinite Quantity Contract for Construction Inspection in the District of Columbia. Project manager for this $20M on-call delivery order contract for construction inspection with in the District of Columbia. He is responsible for the management of the construction inspectors for multiple delivery orders on FHWA/EFLD construction contracts for roadway and bridge construction.

Columbia Department of Public Works, Rehabilitation of New York Avenue Bridge over South Dakota Avenue and Amtrak, Washington, D. C. Project Coordinator and the engineer in charge responsible for maintaining the proper construction inspection staff and client satisfaction for the $30-million bridge rehabilitation project. The project involved six-phases of construction and maintenance of traffic on a main artery for computer traffic into the District of Columbia. This roadway has an average daily traffic (ADT) count of 135,000 vehicles.

Virginia Dept. of Transportation, Route 125 (King's Highway) Bridge Replacement, City of Suffolk, VA. Provided constructability review for the replacement of the Route 125 Bridge over the Nansemond River and its approaches.

Virginia Dept. of Transportation, Route 642 (Lorton Road) and CSX Railroad, Lorton, VA. Project Coordinator responsible for maintaining the proper construction inspection staff for the replacement of an existing CSX railroad bridge and the widening of Lorton Road (Route 642).

Chesapeake Bay Bridge and Tunnel Commission, Parallel Crossing of Chesapeake Bay Bridge, Virginia Beach to Cape Charles, VA. Assistant Resident Engineer responsible for the construction management of the at-grade roadways and bridges for the parallel crossing to the existing Chesapeake Bay Bridge-Tunnel, rehabilitation of portions of the existing structure, and temporary maintenance of traffic. Also responsible for notice of intent analysis and for the coordination of a staff of up to 35 inspectors. The bridge consists of approximately 12.44 miles of low-level trestle spans consisting of primarily prestressed concrete girder superstructure with precast concrete bent caps and large diameter cylinder pile foundations; approximately 0.67 miles of structural steel plate girder spans with cast-in-place concrete piers and large diameter cylinder pile foundation; and approximately 3.39 miles of at-grade roadway and causeway. The project also entails toll plaza reconstruction; rest stop building construction; and rehabilitation of the existing structure upon completion of the new structure. The project construction cost is approximately $200 million.

Missouri Highway and Transportation Department, Route 36 Bridge over the Mississippi River, Hannibal, MO. Deputy Project Manager/Designer/Design Checker for the 4,485-foot-long bridge over the Mississippi River at Hannibal. The main span is a 640-foot-long simple-span truss with both steel plate girders and prestressed concrete I-girders for the approaches. Designed steel plate girders, river piers and land bents, and checked simple-span truss and bearings.

Stephen B. Lathrop, PE
Sustainability

Education

- M.S., Civil Engineering, 1996
- B.S., Civil 1995

Registration/Credentials

- Professional Engineer: CA & GA

Mr. Lathrop has over 14 years of experience in finding innovative and cost-effective solutions to geotechnical, environmental, and sustainable projects. Additionally, Mr. Lathrop is a seasoned project manager and project controls engineer managing projects ranging in size up to several million dollars in scope. Mr. Lathrop has successfully completed and numerous projects for clients ranging from municipal solid waste, construction and demolition, and hazardous waste landfills; wastewater utilities; municipalities; developers; and agricultural chemical distributors. Mr. Lathrop is capable of applying organizational skills to effectively manage a project team for successful and timely project delivery, as well as having the technical knowledge to complete projects including greenhouse gas accounting and credits; monitored natural attenuation, in situ bioremediation, groundwater remediation, and environmental compliance.

Project Experience

Environmental and Sustainable Engineering

- Performed landfill gas modeling to evaluate gas generation rates for use in landfill gas-to-energy project evaluations for several landfills in Georgia.
- Performed economic feasibility evaluations for a landfill gas-to-energy project and additional environmental revenues from carbon credits, production tax credits, and renewable energy certificates for a landfill in Columbia County, Georgia. Developed a RFP for the project and facilitated project vendor evaluation and selection for landfill gas project development.
- Currently performing a carbon footprint analysis for a wastewater treatment facility in Florida for use in future planning of facility expansion with regard to carbon footprint implications
- Implemented detailed hydrogeologic investigations for a full-scale denitrification design work to hydraulically contain, extract, and denitrify nitrate-impacted groundwater beneath a 270-acre biosolids application field.
- Developed a constructed wetlands treatment pilot-scale project to field measure the effectiveness of wetlands to reduce high nitrate concentrations from impacted groundwater.
- Investigated and delineated nitrate and ammonia impacts in soil and groundwater at a former LAS in north Georgia.
- Designed, constructed, operated, and interpreted data from experimental system for measurement of nitrate reduction rates for a site in Columbus, Georgia. The innovative system included on-site columns for the controlled reduction and measurement of nitrate contamination. Additionally, the project included groundwater modeling and complex regulatory compliance issues intended to achieve a unique and acceptable nitrate management solution.
- Project Engineer for a pilot-scale field test using Hydrogen Release Compound (HRC) to enhance in-situ biodegradation of chlorinated solvents, pesticides, and inorganic contaminants at a retail chemical facility in Northern California.
- Designed and managed operation of a groundwater extraction and treatment system for fertilizer and pesticide impacted groundwater at a site in Northern California. Following treatment, the water was permitted for discharge under the requirements and restrictions of a completed NPDES permit.

- Designed and supervised installation of a geosynthetic vapor barrier for use in the mitigation of organic vapor transport beneath the subgrade of a laboratory building near San Francisco, California.

Geotechnical Engineering

- Project Lead for mitigation of differential settlement along a major, 40-in. petroleum pipeline in Sandy Springs, Georgia. The pipeline crossed a formerly unknown section of a municipal solid waste landfill and needed to be stabilized. The project included field investigations, assistance with local regulators, stabilization alternatives assessment, settlement analysis, construction quality assurance, and reporting.
- Analyzed soil and structural data and produced a report for evaluation of settlement stresses induced in a major petroleum pipeline located in Tennessee.
- Performed multiple civil engineering tasks including preliminary road layout, cut and fill estimating, and reclamation cost estimating for conversion of the former Bellwood Quarry to the City of Atlanta's approximate 2-billion gallon Bellwood Reservoir.

Environmental Compliance and Permitting

- Project Lead for RCRA Part B Permit Application renewal for Chemical Waste Management's Emelle, Alabama hazardous waste landfill in 2002 and 2009. The project included updating and verifying approximately 18,000 pages of text, tables, and figures and then reorganizing the information onto an interactive CD. The new CD format was suggested by JJG and allowed the client to easily view all site data, perform searches on all data, and linked the documents together into an easily navigable format.
- Completion of a revised and updated NPDES permit for the Chemical Waste Management, Emell, Alabama facility.
- Reorganized and redeveloped JJG's landfill compliance program including hiring 3 key new staff, development of tracking and quality assurance procedures, and training of staff to perform and run the system. System development led to award of new work from existing and new clients.
- Completion of multiple Spill Prevention Countermeasure and Control (SPCC) plans for clients across the southeast.

Project Management and Controls

- Performed project management and project controls duties for the $33 million West Area CSO tunnel, the $2.7 million Bellwood Quarry project, and the $3.3 million South River CSO tunnel. Management and controls included invoicing, progress reporting, staff meetings, financial and schedule projections, and updating and projections for joint venture partners.
- Serves as Director of Projects for the Tunnels and Geotechnics Service Area which includes responsibility for A/R's, schedule compliance, and invoicing, and timely deliverable submittals for projects in the approximately $7 million Service Area.

B. THAYER ASSOCIATES

BARBARA THAYER, PE, RA, LEED AP
PRINCIPAL ARCHITECT

EDUCATION and TRAINING

B.S.C.E., Civil Engineering, City College of CUNY, 1985
B. of Arch., Architecture, The Cooper Union for the Advancement of Science and Art, 1979

LICENSES and CERTIFICATIONS

Professional Engineer, NY, NJ, PA
Registered Architect, NY, NJ, PA, MI
LEED Accredited Professional, United States Green Building Council

PROFILE

Ms. Thayer has 31 years of experience in the architectural and engineering field. As founder and president of B. Thayer Associates, she is involved in all phases of the work. As a licensed architect and engineer, she is particularly qualified to supervise project teams comprised of both architects and engineers. Ms. Thayer maintains regular contact with direct staff concerning on-going project operations, production of deliverable drawings and design plans, and review and approval of all cost data prior to submission to the client.

EXPERIENCE

LaGuardia Airport Communication Room Improvements, Queens, NY

Port Authority of New York & New Jersey
Provided architectural services for improvements to communication rooms for the Central Terminal Building at LGA Airport for the Port Authority. As part of our on-call agreement with the Port Authority these ongoing efforts included site inspections, coordination with the Port Authority engineers, identification of design issues, and the preparation of cost estimates, preliminary drawings, and construction documents. Design concerns focused on limiting the construction impact while maintaining all communication systems and operations. Ms. Thayer served as Principal Architect.

Port Jervis Yard Extension, Port Jervis, NY

Metro-North Railroad
Architectural and structural preliminary and final design for new maintenance of equipment storage building and air compressor building and enlargement of T & E building within the yard. Work includes site survey and conditions assessment and documentation, the development of plans and complete CSI specifications, architectural finishes, spatial layouts to meet ADA requirements, cost estimating, constructability reviews and shop drawing review. (2001-2005)

Terminal Service Road Bridge over Route 78 Connector at Newark Airport

Port Authority of New York & New Jersey
Abutment and wingwall design for new bridge to be built partially on surcharged fill. Pile supported foundation. Seismic design and analysis.

Total Design of Willis Avenue Bridge over the Harlem River

New York City Department of Transportation
Provided architectural and associated structural design services.

BARBARA THAYER, PE, RA, LEED AP...CONT'D

Atlantic Avenue Terminal Temporary Ticket Office
Long Island Rail Road
Provided architectural and structural support services, design, specifications and contract drawings for temporary ticketing office including public and employee restrooms, which are specified to comply with current ADA requirements. Temporary Ticketing Office will be constructed in a neighboring mall and will replace all functions of the current permanent Ticketing Office during re-construction, which is estimated to last 2 years.

Jamaica Bay Swing Bridge
New York City Transit
Provided design and Shop Drawing review. Rehabilitation of the operator's house. Extensive staging to all asbestos removal and construction while maintaining bridge operation. Design included secondary access to operator's house by providing a steel stair supported off existing truss members. Architectural design included new windows, roof, and interior construction to accommodate operation, personnel and shop facilities. Coordination with mechanical and electrical systems was required.

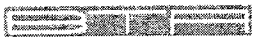
White Plains Line Rehabilitation
New York City Transit
Provided final design of five elevated stations. Work included architectural design and coordination with the structural, electrical and mechanical design disciplines. Special features of the project include the design of replacement hung mezzanines and the development of design standards for elevated stations including the design of canopies, windscreens, stairways and finishes. Provided construction support services as well.

Structural Condition Survey of Transit Authority Physical Plant
New York City Transit
Provided inspection of ventilation buildings ranging from original one story structures to modern structures several stories high, housing ventilation systems, controls and personnel. Development of database management system.

Rehabilitation of the 125th Street Station, Lexington Avenue Line, Manhattan
New York City Transit
Work included repairs, upgrades and modifications to the existing architectural, mechanical, electrical, communications and signal elements of the station. Associated architect responsible for architectural design.

Fulton Street Transit Center
New York City Transit
The project is part of new connection with J, M & Z, A/C, 2/3, 4/5, Transit Center and coordination with structural, electrical, mechanical and communication disciplines.

Port Jervis Yard Extension
Metro-North Railroad
Architectural and structural preliminary and final design for new maintenance of equipment storage building and air compressor building and enlargement of T & E building within the yard. Work included site survey and conditions assessment and documentation, the development of plans and complete CSI specifications, architectural finishes, spatial layouts to meet ADA requirements, cost estimating, constructability reviews and shop drawing review.



B. THAYER ASSOCIATES

JUAN PASTOR, RA
SENIOR PROJECT ARCHITECT

EDUCATION AND TRAINING

Master of Urban Design, Pratt Institute, School of Architecture, 1989
B. of Arch., Architecture, The Central University of Ecuador, School of Architecture, 1986

LICENSES AND CERTIFICATIONS

Registered Architect, NY [redacted]

PROFILE

Mr. Pastor is a licensed architect with 24 years of experience in architectural design for new and renovation educational, commercial, residential, and transportation facilities. He possesses working knowledge of New York City and New York State Codes and Regulations. His expertise is in planning, schematic design, design development, construction drawings and construction support. He also has extensive knowledge and solid skills in AutoCAD and Microstation.

EXPERIENCE

Howard Beach Station at JFK Airport, Queens, NY

Senior Project Architect/Project Manager. In collaboration with the Port Authority of New York & New Jersey, this elevated train station was designated as the NYC subway system gateway to the airport and its architectural expression fits within the airport terminal context (12,000 sf). Construction Cost $25 million.

Port Authority Bus Terminal, Basement Level for Greyhound Lines Inc., New York, NY

Architect Designer/Production. Offices, 2 wash-bays, maintenance shop and support areas (21,000 sf).

New Concourses for NJT and Amtrack at Penn Station, New York, NY

Designer/Production Architect. Two new concourses were designed in an existing structure below 2 office towers and Madison Square Garden and above the train tracks/platforms without disrupting the essential day-to-day operations. Ornate architecture of the old Penn Station building was incorporated in the new spaces. The new concourses (110,000 sf) provide for ticketing windows, waiting areas, new stairs, escalators and elevator access to platforms for 13 train tracks, and a new access/ entrance area at the street.

Design Services for New Data Center at Building 157, Newark Liberty International Airport

Port Authority of New York and New Jersey

Managed the team that provided design, construction documents and construction support services for infrastructure modifications capable to handling a data center's needs including furnishing and installation of IT, electrical and mechanical systems; upgrade and modifications of structural and architectural building components and systems and utilities upgrades. The team provided structural analysis and design for the Data Center located in the Mezzanine level of the existing Building 157. Consideration was given specifically to the existing floor and roof area which were designed for office use and now in need of structural reinforcement for additional equipment and loads necessary for the new use. Design for the necessary steel framing and foundation as well as the dunnage framing for the rooftop air-cooled condenser units was completed. Structural work also included the design of a new one-story building adjacent to Building 157 to house a UPS/Battery room and various concrete pads for an emergency generator and other electrical and mechanical equipment as well as a retaining wall for an access platform.

General Warehouse,Randall's Island, NY
Triborough Bridge and Tunnel Authority
Architect Designer/Production. Conversion of salt & vehicle storage to administration offices, maintenance shop and storage areas (28,000 sf).

Commuter Control Center, New York, NY
Joint Venture Amtrak and LIRR
Architect Designer/Production. 7 stories plus cellar (71,000 sf) housing the state-of-the-art double story control center for trains in and out of the 21 rail tracks of Penn Station, offices, retail and support areas.

Henry Hudson Facility, Administration Building and Maintenance Garage, New York, NY
Triborough Bridge and Tunnel Authority
Architect Designer/Production. 4 levels (17,000 sf) housing fire fighting apparatus, dining facilities, offices, dormitory, training facilities, health and fitness center and support areas. Cost $28 million.

New York City Schools Exterior Renovations, Staten Island, NY
School Construction Authority
Project Manager. Exterior renovation including façade restoration and complete window and roof replacement of two large city schools for the School Construction Authority.

Columbia University Renovation Projects, New York, NY
School Construction Authority
Project Manager. Exterior renovation including façade restoration and complete window and roof replacement of two large dormitory buildings in the University campus.

Hunter College at Brookdale, New York, NY
Dormitory Authority State of New York
Project Manager. Renovation of buildings: 6, 10 and 14 stories (528,500 sf) consisting of complete MEP systems upgrade and ADA and code compliance. Construction cost $23 million.

School Re-structuring Projects, New York, NY
School Construction Authority
Restructuring of five large New York City Schools for the SCA. Each of the buildings were altered/ renovated to accommodate several individual academies. Scope of work included extensive interior and exterior renovations.

Medical Center, Queens, NY
Architect Designer/Production. New outpatient medical facility: 3 levels (16,000 sf) housing exam rooms, offices and support areas. Cost $17.5 million.

Fire Engine Company 277, New York, NY
Senior Project Architect/Project Manager. New fire house with four levels (17,000 sf) housing fire fighting apparatus, dining facilities, offices, dormitory, training facilities, health and fitness center and support areas. Cost $28 million.

B. THAYER ASSOCIATES

MICHAEL SHEEDY, RA, LEED AP
PROJECT ARCHITECT

EDUCATION AND TRAINING

B. of Arch., Architecture, Carnegie Mellon University

LICENSES AND CERTIFICATIONS

Registered Architect, NY
LEED Accredited Professional, United States Green Building Council

PROFILE

Mr. Sheedy is a licensed architect with 17 years of experience in architectural design, schematic design, design development, and preparation of construction documents for a variety of projects: infrastructure improvements, renovations and new structures for transportation facilities, libraries, schools, hospitals, hotels, office buildings, and performing arts center. He proactively coordinates with engineers, designers, CADD operators, and clients to reconcile final details prior to a delivery.

EXPERIENCE

N.Y.C. Dept. of Housing, Preservation and Development Brooklyn Redevelopment Corporation

As a Field Inspector for these city owned buildings, created construction documents for restoration and rehabilitation, reviewed field orders, and administered contracts.

Port Authority of NY & NJ PATH Station

Designer for the World Trade Center station renovations including the replacement of platform flooring, seating, wall treatment and turnstiles.

Davis Park Harbor Tower and Bath-house Renovations
Town of Brookhaven

Project Architect, responsible for the design and successful completion of extensive renovations for the Harbor Master Tower and comfort stations at the Davis Park Marina on Fire Island.

Parks Administration Building
Town of Brookhaven

Project Architect and designer of a 12,000 square foot Adirondack Style Parks Administration building at the Centereach Pool Facility, This Capital Project is a combined Youth Community and Parks Department headquarters. Expedited competitive bidding and contract awards. The projected LEEDS Gold building is currently under construction.

Sheltaire Air Terminal at Gabreski Airport

Represented as Quality Control (QAQC) Construction inspector for a Fuel Farm Installation, a parking lot expansion and Drainage systems for the runway expansion.

East Islip Dental Building

Project Architect responsible for vital portions of design, presentation drawings, research of building code compliance, and preparation of working drawings for a medium sized Newport Style dental facility.

MICHAEL SHEEDY, RA, LEED AP, CONT'D...

Beechwood Organization Luxury Condominiums, Garden City NY
Project Architect responsible for the preparation of working drawings, design of architectural details and contract administration for this LIBI Award winning condominium community.

Southampton Residences
Project Architect implemented preparation of working drawings and presentation before the Town Board, six varieties of single family luxury houses for a Bob Morrow and Associates development.

Baltimore Public Schools
Project Architect: writing proposals and preliminary cost estimates, conducting building inspections, identifying deficiencies and prepared working drawings incorporating cost effective solutions, while maintaining architectural integrity.

Croton Falls NY Pump Station
Project Architect for restoration of a 11,000 s.f. pump station, establishing a paradigm for a 21st century rural industrial facility. Using AutoCad and 3-D Studio Viz, Rendered and Animated the virtual building and led an oral Powerpoint presentation before the New York Dept. of Environmental Protection.

Delaware Aqueduct Potable Water Reservoir
Project Architect and chief decision maker for the extensive restoration of 50,000 s.f. of early 20th century brick fortress like structures Designed historically accurate additions, confronted security issues, and generated drawings for the reproduction of numerous existing building components.

Curtis High School, Staten Island
Recipient of 2004 Building Design and Construction Reconstruction Award. As a key member of the project team, helped to catalogue the condition of terra cotta tiles on a component by component basis. Conducted field surveys of main structural components which led to their reconstruction. Construction completed in 2004.

Grand Central Terminal East End Access
Assistant Project Architect adapting program requirements within existing physical boundaries; restrictions of adjacent landlords, and governing authorities.

Deepdale Assistive Living Facility
As intermediate architect, prepared scope reports, conducted field evaluations, interacted with respective clients, applied Zoning and Building resolutions, created and reviewed construction documents, coordinated with Department of Landmarks and Department of Buildings requirements.

Tarrytown YMCA
Administered contracts, familiarized clients with a host of new products and resolved various challenges during the construction phase.

B. THAYER ASSOCIATES

TZE-KEN FONG, PE
STRUCTURAL ENGINEER

EDUCATION AND TRAINING
B.S., Civil Engineering, Utah State University, 1999

LICENSES AND CERTIFICATIONS
Professional Engineer NY, CT

PROFILE
Mr. Fong has 9 years of experience as a Structural Engineer. His experience includes a variety of private clients and public agencies including rail roads, airports, bridges, and educational institutions.

EXPERIENCE
LIRR Port Washington Bridge Abutment and Retaining Wall Restoration, Port Washington, NY
Long Island Rail Road
Mr. Fong served as Structural Engineering providing structural rehabilitation services during construction for this bridge restoration project. The scope involved preparation of structural repair drawings for breaches in the structural integrity found during the construction phase of the project. Tasks included integrity testing, structural evaluation of under-grade structures for 286,000 pounds carrying capacity, and the design for strengthening, rehabilitation or replacement of structurally deficient structures.

Babylon Train Wash Facility – Design Services, Babylon, NY
Long Island Rail Road
B. Thayer Associates provided architectural and structural services for the design of this new automated train wash facility for the Long Island Rail Road. The new facility was erected adjacent to fully operational rails. The wash bay and equipment was designed to accommodate all LIRR equipment types including diesel and dual mode locomotives, diesel hauled bi-level passenger coaches and single level multiple unit electric trains. The building was designed to house train wash equipment, overhead walkways, overhead crane supports, control equipment, and ancillary spaces. Extensive coordination was required with LIRR to maintain daily commuter train operations. Mr. Fong served as Structural Engineer.

Newark Liberty International Airport - Design Services for New Data Center (Building 157), Newark, NJ
Port Authority of New York and New Jersey
Newark Liberty International Airport is not only home to the world's longest commercial flight, but with three major terminals and over 60 arrival gates, it is one of the world's busiest airports. B. Thayer Associates was contracted to provide a structural analysis for one of the existing buildings on the property as the Port Authority of New York and New Jersey considered converting an existing warehouse (Building 157) into a data center. Consideration was to be given specifically to the existing mezzanine and roof area regarding additional equipment, chillers, etc. that would be necessary for a data center of this magnitude to run efficiently. The analysis determined that additional support would indeed be necessary for the existing floor framing to withhold 100 pounds per square foot of live loads. B. Thayer engineers developed a design for the necessary steel framing and foundation as well as the dunnage framing for the rooftop air-cooled condenser unites and concrete pads for mechanical equipment. The design is currently under review. Mr. Fong served as Structural Engineer.

Willis Avenue Bridge Reconstruction over the Harlem River, New York, NY
New York City Department of Transportation
B. Thayer Associates was responsible for the architectural features and the extensive pedestrian network for the reconstruction of the swing bridge over the Harlem River. The bridge is an important pedestrian and bicycle link between Manhattan and the Bronx. Access was required to the Manhattan River Front and the area adjacent to the river on the Bronx side. Mr. Fong served as Structural Engineer.

TZE-KEN FONG...CONT'D

Architectural design included the bridge operator house, auxiliary bridge operator house, pedestrian stairways and ramps, granite piers, railings and other architectural components. The B. Thayer team performed structural design for the ramps, stairs and bridge house. Attention was given to enhance the character of the new bridge to complement the surrounding architecture and neighborhood. Services included cost estimates, construction support, and presentations to the New York City Art Commission and State Historic Preservation Office (SHPO) for review and approval. Mr. Fong served as Structural Engineer.

Suffolk County Yaphank Jail, Yaphank, NY

Suffolk County DPW

The County expanded the existing correctional facility by adding a new addition to the facility. The new correctional facility building consists of a steel-framed structure with exterior pre-cast panel walls. This building included 6 pods with two story cell rooms and visitation rooms and two story mechanical rooms. The phasing of the project included the expansion of an additional 6 pods. Mr. Fong served as Structural Engineer.

Connetquot Senior High School Renovation and Addition, Bohemia, NY

Connetquot Schools Central Administration

The existing high school was expanded by adding new classrooms and gymnasium adjacent to the existing classrooms. Mr. Fong's responsibilities included the structural design for gravity and lateral supports and foundation design utilizing RAM software. Responsibilities also included the analysis of existing roof structures and foundations due to the impact of the new building additions. Mr. Fong prepared a full set of structural drawings by utilizing AutoCAD. During the construction phase, he reviewed shop drawings, responded to RFI's and inspected contractors work.

Connetquot - Sycamore Elementary School Renovation and Addition, Bohemia, NY

Connetquot Schools Central Administration

The existing elementary school was expanded by adding new classrooms to the existing building. Mr. Fong's responsibilities included the structural design for gravity and lateral supports and foundation design utilizing RAM software. Responsibilities also included the analysis of existing roof structures and foundations due to the impact of the new building additions. Mr. Fong prepared a full set of structural drawings by utilizing AutoCAD. During the construction phase, he reviewed shop drawings, responded to RFI's and inspected contractors work.

Bayport-Blue Point Senior High School Renovation and Addition, Bayport, NY

Bayport-Blue Point School District

The existing high school was expanded by adding new classrooms and gymnasium adjacent to the existing classrooms. Mr. Fong's responsibilities included the structural design for gravity and lateral supports and foundation design utilizing RAM software. Responsibilities also included the analysis of existing roof structures and foundations due to the impact of the new building additions. Mr. Fong prepared a full set of structural drawings by utilizing AutoCAD. During the construction phase, he reviewed shop drawings, responded to RFI's and inspected contractors work.

Hicksville Public Library Renovation and Addition, Hicksville, NY

Hicksville Union Free School District

The new library building constructed in Hicksville is a triangular shaped steel-framed structure. The project required that an additional floor be added on the roof for future expansion. Mr. Fong's responsibilities included the structural design for gravity and lateral supports and foundations in accordance with building codes. He prepared a set of structural drawings utilizing AutoCAD. During the construction phase, Mr. Fong reviewed shop drawings, responded to RFI's and conducted site inspections.

B. THAYER ASSOCIATES

JOHN R. MCWILLIAMS, LS
PROJECT MANAGER, LAND SURVEY

EDUCATION AND TRAINING
Construction Technology, SUNY Farmingdale
Civil Engineering Technology, Nassau Community College

LICENSES AND CERTIFICATIONS
Professional Land Surveyor, NY
NICET IV, NY
ACSM Technician III
Hazardous Waste Operations (HAZWOPER)

PROFILE
Mr. McWilliams has 24 years of experience in the field of surveying. He is a New York State licensed land surveyor experienced in the management of right-of-way and acquisition mapping; high precision control surveys; and boundary, utility, topographic, and design surveys for public and private clients. His experience includes providing surveying construction support services for large commercial projects as well as for smaller community projects in addition to completing topographic and utility surveys for major roadway and sewer improvements throughout New York City and Long Island.

EXPERIENCE

High Bridge Restoration Project, Survey Services, Manhattan and the Bronx, NY
New York City Department of Parks and Recreation
The B. Thayer Associates survey team was contracted to produce a series of drawings depicting the planimetric and topographic features of the bridge span and gate house areas for the High Bridge, the oldest surviving bridge in New York City connecting the boroughs of Manhattan and the Bronx. It has been closed to pedestrian traffic since 1960, and was designated a landmark by the New York Landmarks Preservation Commission in 1970. Special measures were taken to protect historical surface finishes and structures during surface mapping. During interior mapping, challenges included the fact that access to the work area, 17 feet below the bridge surface, was provided by only two manholes approximately 500 feet apart. Therefore, control was set using a total station with an extreme plunge on the scope and elevations were checked via differential leveling and taping. Cross-sections to match the surface were collected with special attention paid to the clearance between the 90-inch aqueduct and the ceiling of the attic area. Mr. McWilliams served as Project Manager.

Republic Airport Boundary Survey, East Farmingdale, NY
New York State Department of Transportation
Republic Airport is a state-owned, public-use airport that utilizes two runways: 14/32 and 1/19. The 14/32 is the longer of the two, typically serving larger aircraft and, therefore, utilizing an instrument landing system (ILS) to provide precision guidance during reduced visibility. Three-dimensional avigation easements were required (i.e. an "air easement" acquired through eminent domain proceedings to grant aircraft the right to fly over necessary air space to take off and land at airports) to bring the Approach Surface and the Transitional Surface of this precision instrument runway up to current specifications. To that end, Mr. McWilliams, as Project Manager, completed a boundary survey of not only the 526-acre airport parcel, but to 22 contiguous and neighboring properties. He calculated the elevations at all easement corners for both the Approach Surface and the Transition Surface and completed additional surveys to identify protrusions through all the surfaces at both Runway 14/32 and Runway 1/19. Deliverables included acquisition maps necessary for the three-dimensional avigation easements sought by the NYSDOT.

New York City Parks On-Call Survey Services, New York City, NY
New York City Department of Parks and Recreation
This contract involved on-call survey services for a variety of New York City Department of Parks and Recreation projects throughout the five boroughs of New York City. Project scopes included boundary, utility, and topographic surveys which were used in the design of various park and waterfront improvement projects for the Department. Mr. McWilliams served as Project Land Surveyor.

JOHN R. MCWILLIAMS, LS...CONT'D

Milburn Creek Culvert Improvement - Survey Services
Nassau County Department of Public Works
Nassau County Department of Public Works wanted to redesign the Milburn Creek Culvert. B. Thayer Associates was contracted to set up horizontal and vertical controls based on existing boundary monumentation. The B. Thayer survey crew set up an 11-point control network with primary points along the roadway, secondary points along the culvert, and tertiary points along the topography area. Mr. McWilliams served as Project Manager.

Renaissance Technologies Corporate Center, Setauket, NY
Private Developer
This project involved the topographic survey and the construction, boundary, and utility stakeout of a 54-acre parcel destined to be the site of large corporate center. The project objectives included the civil engineering site design of a proposed 20,000 s.f. office building, 20,000 s.f. athletic facility, 300,000 s.f. additions to an existing corporate center, NYSDOT upgrades to 25A with new parking, grading/drainage, SWPPP / MS-4 permitting, and various site landscape improvements. Mr. McWilliams served as Project Land Surveyor.

On-Call Survey Services for Long Island Region
Hess Corporation
This on-call contract allowed for a variety of survey services over a ten-year period for Hess Corp.'s major expansion program on Long Island. Project scopes involved over 100 facility upgrades and new Hess Express stores which included planning, civil design, parking lot design, grading and drainage, septic design, storage tank design/permitting, survey, permitting, and construction management. Mr. McWilliams served as Project Land Surveyor.

Design Survey and Mapping for Roadway Improvements, Queens, NY
New York City Department of Transportation
This project involved right-of-way, topographical, and utility surveys detailing both plan and profile view of approximately 34,000 linear feet of roadway and 45 intersections for pre-engineering design of sewers and roadway improvements at various locations throughout Queens. All survey observations were referred to recovered borough monumentation. Control networks were densified utilizing GPS technology. All drawings were prepared to demanding New York City Department of Design and Construction specifications. Mr. McWilliams served as Project Surveyor.

Staten Island Survey Control Study, Staten Island, NY
New York State Department of Transportation (Region 11)
The NYSDOT required surveying services as part of a larger project to replace all existing guardrail on the three major roadways in Staten Island: the West Shore Expressway, the Staten Island Expressway, and the Martin Luther King, Jr. Expressway for a total of 36 miles of first order traverse and second order leveling. As Project Surveyor, Mr. McWilliams conducted a high precision control survey throughout the borough to determine the relationship between the Staten Island Coordinate System and the North American Datum of 1927.

Bridge Creek Wetlands, Staten Island, NY
New York City Department of Transportation
Nearly a century ago, a state highway and railroad line was constructed in this area, cutting off tidal flow and jeopardizing the entire upstream aquatic ecosystem. The wetlands were created in 1997 to restore that ecosystem. Key partners in the project included the National Oceanic and Atmospheric Administration (NOAA), the USDA Natural Resources Conservation Service, and the USDI Fish and Wildlife Service (FWS). Mr. McWilliams performed an as-built topographical survey of the 18-acre site as the final phase of this Bridge Creek Salt Marsh Restoration Project to ensure tidal inundation of the seedlings.

B. THAYER ASSOCIATES

JONATHAN SCHMIDT
SURVEY SUPERVISOR

EDUCATION

A.A.S., Surveying and Mapping, Denver Institute of Technology, 1994

PROFILE

Mr. Schmidt has 22 years of experience in the survey field. His experience includes control and property boundaries, highway and railroad surveys, building surveys, topographic, utility, and land title surveys. As Survey Supervisor, Mr. Schmidt oversees the completion of projects and helps other field crews with various tasks. He serves as a liaison between B. Thayer and the prime and/or the client as necessary.

EXPERIENCE

Survey of Delta Apron at JFK Airport, Queens, NY

Port Authority of New York & New Jersey

B. Thayer Associates was contracted to complete topographic survey within the proposed Delta lease limits at Terminal No. 4 at JFK Airport in Queens. Survey data obtained used the Queens Coordinate System as a reference; elevations were relative to mean sea level. Mr. Schmidt served as Senior Crew Chief.

New York City Flood Mitigation, New York, NY

New York City Transit

B. Thayer Associates provided professional surveying and mapping services for the drainage study at street level of four New York City Transit subway stations. In addition, elevations were collected at specific locations, created profiles and cross sections. The field information was supplemented with existing city and subway maps. Elevations were tied to the city and subway datum. Mr. Schmidt served as Senior Crew Chief.

Amityville Retail Center Site Development – Survey Services, Amityville, NY

Private Developer

B. Thayer Associates was contracted to complete a boundary search to verify previous survey data for development of this vacant lot into a substantial retail center. A horizontal control network was established on site to locate boundary evidence. Elevation data was transferred from bench marks in the Town of Babylon Datum onto each of the established horizontal control. Once the site had been cleared, the boundary was staked-out and bench-marks set on site in preparation of construction. After construction of the foundation was completed, a foundation location plan was prepared for submission to the building department. Curb-lines were staked-out as part of the final construction process. Upon completion of construction a final "as-built" survey was completed for this project. As part of this as-built all drainage and sanitary structures were opened and invert information was acquired. Detailed information on all utilities servicing the subject parcel was also collected at this time. Mr. Schmidt served as Survey Supervisor.

Milburn Creek Culvert Improvement - Survey Services

Nassau County Department of Public Works

Nassau County Department of Public Works wanted to redesign the Milburn Creek Culvert. B. Thayer Associates was contracted to set up horizontal and vertical controls based on existing boundary monumentation. The B. Thayer survey crew set up an 11-point control network with primary points along the roadway, secondary points along the culvert, and tertiary points along the topography area. Mr. Schmidt served as Survey Supervisor.

Eastchester Bus Terminal, Eastchester NY
New York City Transit Authority
This project involved the detailed topographic survey of 349,000 square feet of the Eastchester Bus Terminal for preparation of a major addition to the bus wash facility. Mr. Schmidt served as Survey Supervisor.

Two Bridges on the Bronx River Parkway, Westchester, NY
Westchester County Department of Public Works
This project involved a topographic survey for the replacement of two county bridges. Work included collection of existing features, vertical and horizontal control base lines, elevations within the river bed, and cross-section of a portion of the Bronx River Parkway. Mr. Schmidt served as Survey Supervisor.

Palmer Road and Access Ramps, Yonkers, NY
Westchester County Department of Public Works
This project involved the topographic survey of approximately 5,000 l.f. of Palmer Road for rehabilitation. Tasks included vertical and horizontal control, utility survey, and cross sections. GPS was utilized to transfer horizontal control from New York State Department of Transportation monuments and bench marks. Mr. Schmidt served as Survey Supervisor.

Boundary Survey for Eight Parks, Nassau County, NY
Town of North Hempstead
Surveys were required by the Town of North Hempstead as a condition of purchasing each property from Nassau County. The B. Thayer survey crew completed boundary surveys at eight separate parks (totaling about 280 acres) in about four weeks' time. Work items included adjacent roadways, fences, walls, monuments, and descriptions. Property descriptions, tax maps, roadway plans, and easement were collected and set markers were installed on the corners of each property, using ½" iron rebar with caps. Mr. Schmidt served as Senior Crew Chief.

SUNY Farmingdale Topographic Survey and Utility Work, Farmingdale, NY
State University Construction Fund
This project included a detailed topographic survey and utility inventory of 7.5 acres of the SUNY Farmingdale campus. The B Thayer survey crew created a horizontal control network across the campus using GPS and conventional total station traversing techniques. Two sets of inter-visible coordinate pairs were established via GPS observations. Then a conventional closed traverse that encompassed all four points was run and the horizontal positions were adjusted to the New York State Plane Coordinate System. On-site elevations were generated by conventional differential leveling from elevations previous established on the campus, across the horizontal control network with a check-in to other existing control elevations and a detailed topographic study of the work area was completed. All major improvements were located along with enough topographic data to generate contours on a one-foot interval. Utility mark-outs were located using conventional survey methods. A detailed utility inventory was completed that included opening all sanitary and storm drainage structures for as-builting, reconciling multiple generations of record maps against the field mark-outs, and coordinating with various agencies to determine the location of various utility lines (both abandoned and active). Mr. Schmidt served as Survey Supervisor.

JCMS, Inc.
25 Years of Excellence

MURALI PUTHIYARAMBATH, MBA — SR. COST ESTIMATOR

Experience Highlights:
Strong Estimating & CM experience on diverse projects.

Proficient in the use of Primavera and other Project Management tools

Total Experience:
21 Years

Education:
B.S. Civil Engineering, MREC, India
MBA, Marshall School of Business, USC, Los Angeles

Certifications:
Primavera Certified P6 Trainer
Project Risk Management in Primavera Pertmaster – Oracle University

Memberships:
CMAA, PMI, Metropolitan Railway Club of NY

Training:
Construction Quality Management – US Army Corps of Engineers, Philadelphia
Financial Mgmt. – Indian Institute of Management (IIM), Calcutta, India
Project Mgmt. – Administrative Staff College of India (ASCI),
Quality Mgmt. – National Productivity Council, New Delhi, India
Project Mgmt. & QC – National Thermal Power Corporation, New Delhi, India

Mr. Puthiyarambath is an engineering and management professional with over twenty one years experience on diverse construction projects including infrastructure, commercial, industrial institutional buildings, and defense department projects. His responsibilities included project management, construction management, contract management, project planning, CPM scheduling, cost estimating, bidding, performance reporting, vendor negotiations and subcontracting.

Mr. Puthiyarambath has provided Cost Estimating services on a variety of infrastructure, commercial and industrial building projects. These include mass transit, facilities, schools, universities, hospitals, peritentiaries etc. Serving as Project Manager, Mr. Puthiyarambath also developed hard bid estimates for a number of projects and subsequently supervised the construction through completion and commissioning. Mr. Puthiyarambath has provided conceptual, preliminary, budget and definitive cost estimates. Working with A/E firms from the beginning of a project he has developed construction cost estimates through the various design phases and for various scenarios, broken down by CSI Division or work breakdown structure (WBS) with detailed backup data. Due to his field experience Mr. Puthiyarambath has a keen understanding of field productivity rates as it applies to labor cost and crew requirements for work components. He also is knowledgeable about pricing trends and bidding climate, resource availability that have impact on construction time and cost.

Mr. Puthiyarambath is also proficient in using E=MC2 Estimating software and project management tools such as "Expedition" and "Prolog" Document Control software. His other software experience includes all MS Office applications including MS Word, Excel, Power Point and Access etc.

PROJECT EXPERIENCE:

NJT - System Wide Communication Improvements NJ: The scope includes communication improvements to 7 stations in Raritan valley line and 4 stations in Morristown/Boonton lines, 2 stations in NorthEast Corridor line, 1 stations in North Jersey Coast line, Newark City Subway. Supervised the development of detail cost estimates for civil work involved in electrical/telecommunication improvements in various stations separately.

NJT - Port Morris Rail Yard, Port Morris, NJ: The Port Morris Rail Yard property is comprised of approximately 41-acres situated between Port Morris Center/Canal Street and Kings Highway, along NJ Transit's Morris and Essex (M&E) Line. The site is currently an operational rail yard, servicing up to seven trains per day. The rail yard is in operation 24 hours a day, five days a week. Services at the yard include fueling, brake and service inspection, and overnight storage of trains operating on the M&E Line. The proposed Building includes the construction of the following new structures:

Service and Inspection Building (approximately 65 ft by 800 ft Pre-Engineered Building system);
Crew Quarters Building (approximately 25 ft by 400 ft); New and replacement of existing tracks;
New storm drainage and detention system; New Electric substation; Fueling station improvements & relocation of sanding silo; Supervised the development of 30% cost estimate and project cost summary for Yard, Service & Inspection Building.

Port Authority of Allegheny County, FTA, PA DOT - The North Shore Connector - Light Rail Transit System (Under River Tunnel), Pittsburg, PA: The North Shore Connector project is an extension of the 25 mile Light Rail System in Pittsburg. The major features of the project are: 1. 1.2 miles extension to the existing LRT system, 2. Bored Tunnel underneath the Allegheny River 3. Cut and cover tunneling underneath Downtown and North Shore Streets and 4. Three new stations. Working as a part of the Project Management Oversight team, Mr. Puthiyarambath provided cost estimating support that included the following: Perform cost confidence analysis of the Engineer's construction cost estimates; Prepare and maintain overall program cost estimate; Review contractor's value line breakdown for each contract; and Prepare cost estimates for all contract change requests and claims.

Miami-Dade Transit – Metrorail Extension, Miami, FL: The North corridor Metrorail Extension is an elevated 9.2 mile double-track, heavy-rail extension of the Miami-Dade Metrorail system. This is a New Starts involving design, procurement and construction. Scope includes construction of elevated concrete structures (pre-stressed, pre-cast and regular cast in-situ); tracks; traction power; train controls and communication; new vehicle procurement; seven new stations; and associated site developments including demolitions, utility relocation, utility services and parking lots. Mr. Puthiyarambath was responsible for review, analysis and comments on grantee's cost estimates; which involved independently verifying major cost components in conformance with PMOP Operating Guidance #33. The scope of work included – stratification of cost items, mechanical check of estimate, comparison of cost to industry standards, correspondence with scope review, evaluation of contract package elements, and review of GC cost and cost escalation factors. Mr. Puthiyarambath was also responsible for evaluating project schedule and project risk.

PIDC - Architectural Landscape Design, Civil Engineering, & Owner's Representative Services for the Navy Yard Riverfront Greenway: The project includes a two mile long, 9-acre "Riverfront Esplanade" that stretches from just west of Broad Street and then extending eastward along the Delaware River. Enhancement of the riverfront not only adds to the redevelopment efforts of the Navy Yard, but also provides a unique, much-needed urban waterfront recreational opportunity for the City of Philadelphia as well as the entire metropolitan region. He was responsible for preparing preliminary construction cost estimates (including maintenance costs) for each schematic design, and Preliminary Design for the Project ("Preliminary Design Drawings") for review and comment by PIDC, DRAC and DCNR.

SEPTA - Walnut & Locust Subway Station, Philadelphia, PA - The project consists of modifying the existing subway station building stairwell and adjacent portions of the building, rerouting of the building utilities, constructing an elevator shaft way and machine room and installing a new ADA compliant elevator. Supervised cost estimating services for specific scope of work.

NJSCC- Greater Egg Harbor Regional High School, Egg Harbor, NJ: The project includes construction of new high School (208,000 SF) building and site development spread over 76 acres including football field, basketball, soft ball, soccer, field hockey and parking lot. Mr. Puthiyarambath is responsible for supervising the development of cost estimates at various stages of design development & construction documents.

NJSCC - Egg Harbor Township High School, Egg Harbor, NJ: Additions & Rehabilitation of existing school to meet impending enrollment. This project consists of adding over 20 classrooms, enlarging the cafeteria, adding a new auditorium, and adding new gymnasiums is expected to bring the classrooms on for September 2008 with the remaining projects anticipating concluding in the early part of 2009. Mr. Puthiyarambath is responsible for developing cost estimates at various stages of design development & construction documents.

JCMS, Inc.

RAVINDRAN ARUMUGAM — SR. COST ESTIMATOR

Experience Highlights:
Extensive experience in providing both budgetary, definitive cost estimates and change order estimates

Cost Estimating experience supplemented by strong field experience

Total Experience:
20 Years

Education:
B.S. Civil Engineering
University of Madras, India

Software Skills:
MS Office, AutoCAD 2002; AutoCAD lisp routine; Primavera Project Planner (P3); & MS Project Platforms: Windows

Mr. Arumugam has over twenty (20) years experience in the field of cost estimating, project controls and construction management. He has served in various capacities such as Cost Estimator, Site Engineer and Asst. Project Manager. He has been involved in a variety of projects that include infrastructure, industrial, institutional and commercial projects. Mr. Arumugam is very proficient in the field of cost estimating. During the design phase of projects, Mr. Arumugam has developed cost estimates (conceptual and final cost estimates) including quantity take-offs and costing, performed constructability review and provided construction phasing services. He has a keen sense of labor productivity rates, material pricing, bidding climate, resource availability (manpower and equipment) and their impact on construction time and cost. Mr. Arumugam also has considerable experience in estimating change orders resulting from design modifications and changed site conditions. He has provided Change Order Estimating services on major transit projects.

Mr. Arumugam's experience as a Cost Estimator is reinforced by his considerable field experience having served as Field Engineer and Assistant Project manager. He has been responsible for management of construction field office including subcontract negotiations, coordinating material purchases and expediting deliveries, directing and allocating a team of site foreman, trades persons, performing quantity estimates for the purpose of estimating work completed, assisting the project manager with job costing, etc.

PROJECT EXPERIENCE:

SEPTA – Market Street Elevated Reconstruction Project, Philadelphia: The project involved the staged replacement of the Market Street Elevated system which is approximately 11,000 feet long and the replacement of six stations located at 46th Street, 52nd Street, 56th Street, 60th Street, 63rd Street, and Millbourne. This complete replacement had to be carried out while keeping the system open to traffic .Mr. Arumugam was responsible for preparing numerous change order estimates for the Stations and Guideway contract packages due to multiple design modifications. The change order estimates were for among others, changes due to foundation redesign, span emergency retrofit, trumpet bearing problems, additional shoring towers, canopy roof sub decking, plinth redesign etc.

AMTRAK PROGRAM Management Oversight (ARRA Funded Projects): The program includes more than 100 infrastructure improvement projects throughout the U.S with an estimated value in excess of $1.3 Billion, being funded through the American Recovery and Reinvestment Act (ARRA) economic-stimulus package. The project scope is to design and construct the projects such as maintenance facility upgrades, bridge replacements, track work, security enhancements, fall protection systems and various station improvements. Mr. Arumugam was responsible for preparing Schematic design and Bridging design (bid package for design-build) phase cost estimates.

MTA – East Side Access, New York, NY: The $8.7 billion East Side Access (ESA) program is one of the largest construction efforts ever undertaken by New York's Metropolitan Transportation Authority (MTA). Elements include more than 26,000 linear feet of new hard rock, soft-ground, and reconstructed tunnels; major reconfiguration of the lower level of GCT; and new track work, station, and yards. Mr. Arumugam, as a part of constructability review team was responsible for reviewing project's cost estimates. He worked on CQ031 Queens Bored Tunnels and Underground Structures, CM012 Construct Manhattan Structures and CM013 Ventilation Building at 50th street which involved critical site considerations due to its location.

Miami-Dade Transit – Metrorail Extension, Miami, FL: The North corridor Metrorail Extension is an elevated 9.2 mile double-track, heavy-rail extension of the Miami-Dade Metrorail system. This is a New Starts involving design, procurement and construction. Scope includes construction of elevated concrete structures (pre-stressed, pre-cast and regular cast in-situ); tracks; traction power; train controls and communication; new vehicle procurement; seven new stations; and associated site developments including demolitions, utility relocation, utility services and parking lots. Mr. Arumugam was responsible for review, analysis and comments on grantee's cost estimates; which involved independently verifying major cost components in conformance with PMOP Operating Guidance #33. The scope of work included – stratification of cost items, mechanical check of estimate, comparison of cost to industry standards, correspondence with scope review, evaluation of contract package elements, and review of GC cost and cost escalation factors.

New Jersey Transit – Morrisville Yard Improvements Phase – 2: The project involved the construction of a new train washer building, yard facilities, services and inspection building and a wheel truing facility. Mr. Arumugam was responsible for preparing change order estimates for the Morrisville Yard Improvement project Phase 2 contract due to design modifications and changed site conditions.

NJ Transit – The Lower Hack under Grade Bridge Rehabilitation, NJ: The project is located on the Morristown Line over Hackensack River in Jersey City, Hudson County, New Jersey. The work consists of Structural Steel Repairs, replacement of Walkways and Ladders, Machinery House/Operator House rehabilitation, and Inspection and Machine work of the counterweight Sheaves of Lower Hack Bridge. Mr. Arumugam assumed the responsibility of Assistant Resident Engineer following the assignment of the existing R.E. to another project. His duties include project coordination, document control, meetings and correspondences, inspection of work to ensure conformance to project specifications, preparing change order estimates and processing change orders, payment certifications, etc.

SEPTA - Norristown Transportation Center Intermodal Parking Facility: The new Intermodal Facility includes a multi-deck parking garage for 540 cars and an intercity bus terminal. The project will provide new intermodal connections between SEPTA's suburban rail lines and bus routes, while adding greatly to the supply of convenient parking for the Transportation Center. Mr. Arumugam was responsible for preparing Cost Estimates for the multi-deck parking garage and bus terminal at 50% & 100% design phases. He also developed a pre-bid construction schedule for the project.

NJSCC – Cumberland High School, Cumberland, NJ: The scope of work included school building renovation work in a built-up area of 250,000 SF. The work included architectural, mechanical and electrical renovation. Mr. Arumugam was responsible for preparing conceptual and detailed cost estimates at various stages of design.

Bergen Community College – West Hall, Paramus, NJ: Mr. Arumugam was responsible for preparing Cost Estimates at 30%, 60%, 90% and 100% design for the construction of a new three story building with a total built up area of 60,000 SF.

SDP - G W Carver High School & Elementary School, PA: This project involved additions and extensive renovation to existing facilities including HVAC, plumbing, fire protection, electrical system, data communication and ACM abatement under Capital Improvement Program initiated by the School District of Philadelphia. The project involved alteration of existing school (124,381 SF) and addition of new gymnasium & kitchen (35,000 SF). He was responsible for developing cost estimates for the project.

Best Western Inn & Suites, Rahway, NJ: The project is new construction of a 5-story hotel building with 74 guest suites, common dining area, gymnasium, indoor swimming pool, parking lot etc. Mr. Arumugam was responsible for the management of the construction field office including subcontract negotiations, coordinating material purchases and expediting deliveries, directing and allocating a team of site foreman, trade persons , estimating numerous change orders, performing quantity estimates for the purpose of estimating work completed, assisting the project manager with job costing, etc.

JCMS, Inc.

PUSHPA RAJASHEKAR — COST ESTIMATOR

Experience Highlights:
Experience in providing cost estimating services on varied building projects

Expertise in preparation of electrical and mechanical cost estimates

Total Experience:
8 years

Education:
B.S. Electrical Engineering

Skills:
E=MC2 Estimating software, MS Word, Excel, MS Access, Lotus 123 and Primavera's Expedition

Ms. Rajashekar has provided cost estimating services on a large number of infrastructure, institutional, commercial, and residential projects. While she has developed cost estimates for all CSI Divisions, she has a strong background in the electrical and mechanical disciplines. She has expertise in preparing quantity take-off and costing of projects including vendor verification of costs for specialty items. She has a keen understanding of market prices of material and equipment as it relates to various types of projects.

Ms. Rajashekar is proficient in many application softwares including E=MC2 Estimating software, MS Word, Excel, MS Access, Lotus 123 and Primavera's Expedition

PROJECT EXPERIENCE:

NJT - Port Morris Rail Yard, Port Morris, NJ: The Port Morris Rail Yard property is comprised of approximately 41-acres situated between Port Morris Center/Canal Street and Kings Highway, along NJ Transit's Morris and Essex (M&E) Line. The proposed Building includes the construction of the following new structures:

1. Service and Inspection Building (approximately 65 ft by 800 ft Pre-Engineered Building system);
2. Crew Quarters Building (approximately 25 ft by 400 ft);
3. New and replacement of existing tracks; New storm drainage and detention system;
4. New Electric substation;
5. Fueling station improvements & relocation of sanding silo;

Developed site utilities, mechanical and electrical cost estimate for the project during preliminary phase.

NJT - Morrisville Train Storage Yard Phase 2, Morrisville, PA: Project involved expansion of the Yard to double the train storage capacity to accommodate 120 rail cars, two elevated tracks in a fully enclosed Service & Inspection facility and Wheel Truing Facility. It also included Crew Quarters and an employee parking lot. Developed detailed electrical and mechanical quantity take off and cost estimates at schematic and detailed design construction cost estimate for the project.

SEPTA R-3 Elywn to Wawa Service Restoration Project: This project comprises of new track, overhead catenary, signals, communication systems, and structures. It also includes a new station and parking spaces at the old Wawa Station near Chester Heights. There are also two grade crossings, two overhead road bridges, a rail bridge over Route 1, and bridges over six creeks or streams. Ms. Rajashekar is responsible for providing cost estimating services for this project.

NJT - MMC Facility Expansion, Kearny, NJ: This project involved major additions such as a new train washer facility, expansion to several buildings in the complex including the services and inspection building for all levels of inspection of new comet V coaches, installation of new track, catenary and additional rail vehicle maintenance equipment. Ms. Rajashekar served as the estimator for the project during preliminary and final design phases.

MTA–East Side Access, New York, NY (CM 012- Manhattan Structures-2): The $ 8.7 billion East Side Access (ESA) program is one of the largest construction efforts ever undertaken by New York's Metropolitan Transportation Authority (MTA). Elements include more than 26,000 linear feet of new hard rock, soft-ground, and reconstructed tunnels; major reconfiguration of the lower level of GCT; and new track work, station, and yards. Ms. Rajashekar, as a part of constructability review team is responsible for reviewing project's cost estimates.

SEPTA- Walnut & Locust Subway Station, Philadelphia, PA - Walnut-Locust is a subway station in Philadelphia, PA on SEPTA's Broad Street Line. The project consists of modifying the existing building stairwell and adjacent portions of the building, rerouting of the building utilities, constructing an elevator shaft way and machine room and installing a new ADA compliant elevator. The scope includes remove, replace and relocate FP control system inside the University of Arts building. Responsible for cost estimating services for specific the scope of work.

City of Philadelphia – Platt Bridge Lighting Project, Philadelphia, PA: The project consisted of two options: Package A - Furnish and install navigation and aviation lighting fixture including conduit and wiring. Package B –Furnish & install roadway, navigation and aviation light fixture including conduit and wiring. Cut and remove existing roadway lighting poles. Prepared quantity take-off, design and final cost estimate.

SEPTA - 2nd & Oregon Avenue Stations, Philadelphia, PA: Project involved escalator replacement, elevator construction, new stairway, head house, and associated electrical and mechanical work. Prepared cost estimate at 60% and 100% design phases.

SEPTA - Norristown Transportation Center Intermodal Parking Facility(NTIPF), Norristown, PA: Responsible for preparation of Cost Estimates for a multi-deck parking garage for 540 cars and a bus terminal at 50% & 100% design phases.

DRPA - PATCO Administration Building, Lindenwold, NJ: Prepared Cost Estimates at 50%, 90% and 100% design phases and construction schedule for the two story administration building, control center, vehicle storage building, and improvement in space utilization and associated yard work.

NJSDA - Elberon Elementary School, Long Branch, NJ: A 2-story construction of 108,000 SF Elementary school. The primary construction is load bearing reinforced concrete masonry units. Scope also includes Plumbing and fire protection. Electrical and communication work includes electrical service, emergency power, Intrusion detection system, Access control, and Surveillance CCTV and Voice communication. Ms. Rajashekar was responsible for preparing plumbing, HVAC and electrical cost estimates.

LIRR - Station Master's Office Renovation, Penn Station, NY: This project will provide for the renovation of the station Masters Office in Penn Station. Scope of work includes architectural, structural, MEP, FP, communications, electronic safety and security. Ms. Rajashekar prepared electrical quantity take-off and cost estimates for the project.

SDP - Robert Vaux School, Philadelphia, PA: Work included conversion of Middle school to High school, addition of a second level high school gymnasium and support facilities and renovation of existing interior spaces to provide three classrooms, new science laboratory classroom, new vocal and instrumental music classrooms, new media center, administrative office space and limited renovations to existing toilet rooms. Ms. Rajashekar was responsible for quantity take off and preparation of project cost estimate.

SDP - Palumbo Academy High School, Philadelphia, PA: The renovations include new science classrooms and laboratories, a music suite, an art suite, another refurbished gymnasium, renovated restrooms, an upgraded auditorium, and upgraded electrical systems to accommodate additional technology. Upon completion of the renovations, the school will occupy 185,200 square feet.

SDP - New Lincoln High School, Philadelphia PA: Construction of new high school building and demolition of existing school building. Ms. Rajashekar assisted in the preparation of the cost estimate by performing quantity take off for Site, Architectural, and Structural divisions.

SDP - G W Carver High School, Philadelphia, PA: The project involved alteration of existing school (124,381 SF) and addition of new gymnasium & kitchen (35,000 SF). Ms. Rajashekar was responsible for preparing plumbing, HVAC and electrical cost estimates.

SDP - John Bartram High school, Philadelphia PA: Work involved demolition of the existing rooftop of greenhouse, roofing alterations, exterior repairs, renovation of horticultural room, and science laboratories. Provided electrical and mechanical quantity take off, schematic and construction cost estimate.

KENNETH A. CLAUSEN, PE *KS Engineers, P.C.*
Structural Task Leader

EDUCATION
MS/Civil Engineering, University of Illinois, 1967
BS/Civil Engineering, University of Illinois, 1966

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
Professional Engineer – NJ (# [redacted] Received: 1985, Expires: 4/30/12), NY ([redacted] Received: 1983; Expires: 9/30/11)

TRAINING
The Mini Bridge – Culvert Planning and Design, Rutgers University, Spring 2009
LRFD Steel Bridge Design course, presented by Highway Bridge Services, Boston MA, May 2010
Accelerated Construction Using the Northeast Extreme Tee (Next) Beam, presented by PCI, April 2009
Applications of Fiber Reinforced Polymer (FRP) Composites to Bridge Rehabilitation and Design, presented by ASCE at NJIT including a speaker from FHWA, April 2010.

PUBLICATIONS
Co-author and presenter of paper for 2003 NYC Bridge Conference
"Refined LRFD Analyses Used to Check Inverset Design."
Author and presenter of paper for 2004 national Concrete Bridge Conference
"Striving for 100-Year Bridge Decks –Overcoming Chlorides and Cracking"

EXPERIENCE SUMMARY
Mr. Clausen has 42 years of diverse structural/bridge engineering experience including corporate oversight, section and project management, and design for both highway and railroad bridges. He has designed steel girder and prestressed concrete girder railroad and highway bridges and miscellaneous structures for expressways, river crossings, and railroad relocation projects. He has also led numerous special structural investigations and repair/rehabilitation studies and plan preparation for a variety of clients including the Port Authority. He is the Director of Bridge Design at KS Engineers.

PANYNJ, Performance of Expert Professional Structural Engineering Services (MBE/WBE) On A "Call-In" Basis During 2008, 2009 and 2010 – PA Agreement #'s 415-08-058, 415-09-058 and 415-10-058 – Deputy Project Manager / Task leader for structural engineering services on a "Call-In" basis for the Port Authority of New York & New Jersey. Services provided under this contract generally consist of preparing structural engineering studies, condition surveys, designs, contract drawings, technical specifications and construction cost estimates for a wide variety of new facility structures and structural renovation and rehabilitation projects.

PANYNJ, Performance of Expert Professional Structural Engineering Services (MBE/WBE) On A "Call-In" Basis During 2008, 2009 and 2010 – JFK Airport – Aqueduct Bridge Crossing Stages 3 & 4, NY – Project Engineer for structural design services for contract repairs to the JFK Airport Aqueduct Bridge railings and expansion joints. He was Task Leader during Stage III for performing structural design and preparing the structural contract drawings for the necessary repairs. He investigated the use of Asphaltic Plug Joints, which were used and developed a simple method of ensuring field fit for the railing repairs. .The scope included preparation of General Drawings as well as the structural plans..

PANYNJ, Performance of Expert Professional Structural Engineering Services (MBE/WBE) On A "Call-In" Basis During 2008, 2009 and 2010 – Protective Structures at JFK Airport – Taxiways Q and A, NY - Project Engineer for providing design services for protective slabs at Taxiway A and Q at JFK Airport in Queens, NY. Led the structural design and preparation of structural contract drawings for protective structures over the Junction chamber and triple barreled culverts that run under Taxiway's Q and A. The protective structures are to carry the loads from various aircraft specified by the Authority with allowances for future increases in load and impact. Protective systems include precast slabs, cast-in-place slabs and a steel beam framing system with a steel plate

deck support system. The work also includes preparation of General Drawings and incorporating requirements and drawings from various non-structural disciplines. KSE prepared detailed cost estimates as well as an estimate of the construction duration. During stage IV, KSE attended a preconstruction meeting, reviewed shop drawings, and responded to requests for information.

PANYNJ, Performance of Expert Professional Structural Engineering Services (MBE/WBE) On A "Call-In" Basis During 2008, 2009 and 2010 – JFK Airport – Reconfiguration of Fuel Truck Loading Racks – Project Engineer for Stage I&II design of miscellaneous structural supports for the fuel truck loading racks.

PANYNJ, PATH Rail Structures East & West of Newark Penn Station, NJ - Structural lead for the inspection and rehabilitation of bridge superstructures, piers and abutments used by PATH, some of which were owned by AMTRAK. Project included the development of repair recommendations, contract plans, and services during construction. Bearings were monitored periodically over a 2-year period.

PANYNJ, Amsterdam Avenue Bridge over Trans-Manhattan Expressway, NY - Project Manager for the inspection, evaluation and plans for extensive deck and structural repairs to this structure to the west of George Washington Bridge. Staging of construction, utilities coordination, and M&PT were major considerations.

PANYNJ, Expressway over Amtrak and LIRR, NYC, NY - Project Manager for the inspection, evaluation and plans for extensive deck and structural repairs for this structure leading to the Lincoln Tunnel. Designed emergency repairs when it was discovered that the strands in a prestressed concrete deck panel were extensively corroded. M&PT and coordination with Amtrak, LIRR and NJ Transit were required.

NYSDOT, Richmond Road Bridge Design, Rehabilitation and TMS Measure as Part of 21 Bridge Contract on Staten Island Expressway, Richmond County, NY (Contract D010248) – Project Engineers for structural design of four bridges carrying Staten Island Expressway (S.I.E.) WB and EB over Richmond Road and Targee Street, replacing the steel beam bridges and widening the S.I.E. using prestressed concrete box beams. A similar project is underway for the steel beam superstructure and widening of the Renwick Street Bridge. Prestressed concrete NEXT beams and box beams were evaluated for the replacement. Abutments were also widened.

MTA LIRR, Contract No. 5973-1-5, Release A, POJ6243 – Design for Shinecock Canal, Montauk Highway and North Highway Bridge Rehabilitation Project – Project Manager for KSE's portion of the rehabilitation of three (3) Long Island Railroad bridges located in Hampton Bays, Suffolk County, NY. Responsible for computation of As-Built and As-Inspected Ratings for the North Highway Bridge and the Montauk Highway Bridge including estimates of remaining fatigue life. He performed the conceptual design study for the replacement of the North Highway Bridge abutments and superstructure according to two alternatives, attempting to accomplish the complete replacement in 48 hours. Construction schemes and conceptual cost estimates were prepared for the two schemes. Work also involves computing quantities and estimating costs at the various phases of the work as well as performing a general review of the rehabilitation plans by the prime consultant.

NYCDOT, 145th Street Bridge Reconstruction Support Services, New York, NY - Provided oversight for shop drawing review of bridge deck replacement using prefabricated Inverset and Effideck systems.

MTA Bridges & Tunnels, Brooklyn-Battery Tunnel Deck Slab Rehabilitation Study, NY - Project Engineer for study of methods for the long-term rehabilitation of the elevated deck slab in the Brooklyn Battery Tunnel. The deck slab was extensively deteriorated and lane closures were permitted only during night-time hours and on weekends. Various methods of demolition were investigated including hydro-demolition. Various repair and overlay materials were investigated including LMC, rapid-set concrete, and high performance concrete. SHRP Reports were studied and industry experts were contacted for state-of-the-art recommendations. An in-depth constructibility study was performed and cost estimates prepared.

FRED KOOMSON
Civil Inspector

KS Engineers, P.C.

EDUCATION
AS/Civil Engineering, City and Guilds of London Institute

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
NICET II Equivalent

EXPERIENCE SUMMARY
Mr. Koomson has over 16 years of Construction Inspection working for agencies that include the PANY&NJ, NYC DDC, NYC DEP and others agencies providing construction oversight. A sampling of project's with relevant project experience follows:

PANYNJ, New Jersey Marine Terminal Construction – Civil Inspector monitoring activities at Marine Terminal construction sites. Work includes installation, testing and inspecting Civil works. Provides oversight to ensure construction progresses as scheduled and contract specifications are adhered to. Prioritizes multiple assignments, maintain deadlines, and works in a team environment. Inspects construction site daily and works with contractors to schedule deliveries, follow safety requirements, adhere to quality and code compliance; files daily narratives and progress reports detailing personnel, equipment, materials and work summary.

Over the last twenty-six months, Mr. Koomson has performed construction inspection on the following projects:

- **Port Elizabeth Expressrail,** Elizabeth Lead Tracks & South Bay Avenue - work consisted of construction of second lead track into Expressrail, reconstruction of existing lead track, construction of rail bridge over McLester St., reconstruction of Bay Ave., construction of new South Bay Ave. roadway, utility and other related work.
- **Port Newark** – Berth 8 & Berth 10 Wharf Reconstruction - work consisted of demolition of existing wharf, dredging and berth deepening, steel pile & steel sheet piling installation, installation of gabion walls, concrete deck reconstruction, paving & utilities.
- **Port Elizabeth** – North Ave/McLester St. Curve Realignment – work consisted of roadway realignment, including paving, utilities, traffic controls, overhead signage, storm water treatment units and related work.
- **Port Newark** – Port Street Interim Traffic Improvements - work consisted of removal of concrete islands and traffic controls; installation of guiderails, traffic barriers, signage, pavement markings and electrified traffic control devices at Port Street and vicinity.
- **Port Newark** – Berths 36 & 63 Wharf Reconstruction - work consisted of removal and disposal of existing wharf, dredging, upland disposal of dredged materials, steel pipe piles, sheet piles and other marine construction, paving, utilities and related work.
- **Immediate Repairs, Berths 10–12 -** repair of concrete encased piles.
- **Immediate Marine Rehabilitation,** repair of concrete encased piles.
- **Concrete Roadway Rehabilitation** – Repairs to North Avenue Bridge & Corbin Street Ramp; work included removal of deteriorated concrete and placement of new concrete and Latex Modified Concrete.
- **Immediate Repairs - Corbin Street** – excavated deteriorated concrete and replaced with Latex Modified Concrete (LMC).

NYCDDC, Reconstruction of Frederick Douglas Circle Project, Borough of Manhattan – Senior Construction Inspector The project involves reconstruction of this circle to include the erection of Figure monument in tribute to Frederick Douglas, fountain and constellation wall and quilt pattern design. The project also includes installation of 48", 20" and 12" sewers, heritage and standard traffic signal and street lighting, along with complete granite curb,

sidewalk and roadway construction, and tree planting. He also attended all critical phase meetings.

NYCDDC, HWK614B1, Reconstruction of Bergen Avenue Area in Brooklyn – Senior Construction Inspector responsible for construction oversight on a $27.7 million project. The work includes the installation of sidewalks, roadway, center mall, storm and sanitary sewers and the complete street and sidewalk reconstruction within approximately 16 residential blocks just west of Paerdegat Basin. The storm sewers were built on piles while most of the sanitary sewers were placed on the same lane as the existing sewers that were removed.

NYCDDC, Contract MED-579/Abandonment of Existing High Pressure Fire System in Lower Manhattan – Senior Construction Inspector responsible for the inspection of the removal of hydrants, hydrant valve boxes and main line valve boxes. Inspection of concrete and asphalt restoration surveys and does the preparation of Punch list for the final inspection. Also, he does testing and inspection of the concrete (Slump test, Air test, Temperature), plus the inspection of MPT.

NYCDEP, Installation of Sewers in Linwood Avenue, Staten Island, NY, Project No. SE-247A/SER002155. This project involved installation of 12" ESVP gravity sewers and 5'6" x4" concrete box culvert sewers. His duties include record keeping, project status/completion reports, documentation supporting contract payments, balance of materials, fixed assets reports, field cards, in-service notification and change orders.

New Jersey Turnpike between Interchange 8 and 13 Linden City, Union County. Senior Construction Inspector for the widening project.

NYCDEP, Victory Boulevard Sewer Project in Staten Island (SE208A/362A). Construction Inspector responsible for construction oversight on project. This project included installation of gravity sewers, utility crossing and pavements and sidewalk restoration.

GREGORY T. LEGGETT *KS Engineers, P.C.*
Construction Inspector - Electrical

EDUCATION

Union County College – Inspectors (Electrical) Licensing Course (ICS, HHS, Sub code official)
New Jersey Institute of Technology (NJIT) – Electrical Technology - Electrical Contractors licensing course
I.U.O.E. AFL-CIO Local 68 Electrician Apprentice School

PROFESSIONAL REGISTRATIONS

Licensed in New Jersey as:
Electrical Contractor (#[redacted]
Electrical Inspector (#[redacted]
Electrical Sub-Code Official (#[redacted]
Construction Official

Licensed in Pennsylvania as:
Residential Electric Inspector (#[redacted]
Commercial Electric Inspector (#[redacted]
Plans Examiner

CERTIFICATIONS

OSHA Construction Safety & Health, Issued 6/25/08

EXPERIENCE SUMMARY

Mr. Leggett has over 15 years of Electrical Construction experience and is a dedicated hands-on electric systems specialist. He has handled small-to-large projects involving electrical & energy based problems / solutions. His strengths include adherence to strict regulatory compliance procedures and regulations, detailed project documentation, complete facility audits, field staff training, and managing multi-level contracts.

PANY&NJ, Newark Liberty International Airport, CTA Toll Plaza & Terminal B Renovations – Electrical Inspector responsible for the inspection of the installation and/or commissioning of electrical equipment (including high tension), communication and fire alarm systems, and electrical rehabilitation of existing building systems (including switchgears, switchboards, emergency generators, fire alarm systems). The following is a list of current construction activities at Terminal B:

- Replacement of Transformers @ central heating plant (ongoing) Removal of=2 0and replacement with 2 - 10 MVA transformer
- Installation of EMG Generator in @ central heating plant (ongoing).
- 4,000 kva Genset and enclosure, including 4 ATS switches and implement sequence of ops.
- Demo and retrofit CTA Toll Plaza (ongoing)
- Gut interior and install new elect panels, lighting & HVAC equip. Build and fit up Temp trailer to house personnel during construction.
- Additional Lighting for CTA Mini Plazas.
- Installation of mast tower lighting and controls for parking mini exit plazas.
- Terminal B expansion (ongoing)
- Complete demo and renovation of Terminal B (B1,2 & 3 connectors) elect distribution centers including, Gensets (3), switchgear, main dist panels, sub panels, main feeders, secondary feeders, public address, fire alarm, HVAC, baggage handling system, 3 large sewage pumping stations (w 3ea 40 hp motors & controls) NML & EMG lighting

Selected Responsibilities and Accomplishments

- Managed maintenance contracts for more than 105 buildings. Helped customers save money by ordering the most energy efficient products and insured that energy conservation measures were properly used, resulting in maximum dollar payback.
- Directed & managed installation of energy efficient lighting and / or motor (VFD) systems for more than 95 locations in the NY / NJ metro area. Including automatic data processing, United Water Company, Camden Schools, Cherry Hill Schools, US Postal Service & 30 Shoprite Supermarkets which resulted in electric bill reductions, utility rebates, and savings of 25% or more in each location.
- Conducted training sessions for project managers, defining electrical "rules of thumb" and key NEC problems on various job sites. Decreased project run times by 9%.
- Trained customers on proper use of installed energy monitoring systems. End users were able to properly use the newly installed energy conservation measures, which ensured maximum energy savings.
- Inspected and certified large & small industrial, commercial, and residential electric equipment, wiring, and installations in New York City, New Jersey, southeastern Pennsylvania and Delaware. Insured compliance with the National Electric Code, and local codes. Included but not limited to: service entrance equipment, lighting, motors, motor controls, HVAC, emergency & standby power equipment, above / underground wiring, single and multi unit housing, conduits and plan review for all mentioned.
- Analyzed electrical harmonics issues for Cherry Hill School systems. Utilized data recorders to determine where schools were not receiving proper voltage from the local utility. As a direct result, the utility companies installed new transformers, at no cost to the customer or SYCOM.
- Presented building electrical system audits to customers, indicating potential trouble areas, and areas where optimal energy savings could be achieved.

DICKSON OPONG, PE *KS Engineers, P.C.*
Project Manager

EDUCATION
MSE, Civil Engineering, Princeton University/1983
BSE, Civil Engineering, Princeton University/1980

PROFESIONAL REGISTRATION/CERTIFICATIONS
Professional Engineer: New Jersey ([redacted] received 03/1990) and New York ([redacted]
NHI Course 130053A, Bridge Inspection Refresher Course
NHI Course, Steam Stability and Scour at Highway Bridges
AASHTO LRFD Bridge Design Workshop, FHWA/NSBA

EXPERIENCE SUMMARY
Mr. Opong has nearly 30 years of experience in planning, preliminary and final design, development and implementation of bridge and highway projects for New Jersey Department of Transportation, Port Authority of New York and New Jersey, New Jersey Turnpike Authority and other public agencies in tri-state region. He has demonstrated excellent technical and managerial skills on several infra-structure improvement/rehabilitation projects for many pubic transportation agencies. He is a Vice-President and Head of the Structures Department of KS Engineers.

PANYNJ, Performance of Expert Professional Structural Engineering Services (MBE/WBE) On A "Call-In" Basis During 2008, 2009 and 2010 – PA Agreement #'s 415-08-058, 415-09-058 and 415-10-058 - Project Manager responsible for providing structural engineering services on a "Call-In" basis for the Port Authority of New York & New Jersey. Services provided under this contract generally consist of preparing structural engineering studies, condition surveys, designs, contract drawings, technical specifications and construction cost estimates for a wide variety of new facility structures and structural renovation and rehabilitation projects. Assignments to date have consisted of the following:

- Multi-Facility CAD Drafting Services
- JFK Airport –Protective Slabs on Taxiways, Q & A
- Structural Engineering Services / Staff Augmentation
- PATH - Installation of Backflow Prevention Devices
- LaGuardia Airport - Upgrade CTB East
- JFK Airport - Fire Alarm Connection for Gas Station - Bldg.#
- JFK Airport – Reconfiguration of Fuel Truck Loading Racks
- JFK Airport - Repairs to Aqueduct Bridge Railings/Expansion Joints
- Stewart Airport - Positive Air Pressure for Loading Bridges
- JFK Airport – Repair of Slab at Building
- CADD Design Services for Navigation Aids Improvements at JFK Airport
- CADD Design Services for Demolition- Hanger 12 &building #94 at JFK Airport
- SWF- Runway Incursion Mitigation Study
- PATH – Installation of Backflow Prevention Devices, Macmillan Bloedel Building
- EWR Airport – Structural Engineering Services –Shop Drawing Review – Stage 3
- EWR Airport – Structural Engineering Services –Shop Drawing Review – Stage 3

NYSDOT, Richmond Road Bridge Design, Rehabilitation and TMS Measure as Part of 21 Bridge Contract on Staten Island Expressway, Richmond County, NY (Contract D010248) – Project Manager for structural design of four bridges carrying Staten Island Expressway (S.I.E.) WB and EB over Richmond Road and Targee Street, replacing the steel beam bridges and widening the S.I.E. using prestressed concrete box beams. Abutments are also being widened.

NJTA, Bass River Bridge Widening and Rehabilitation, Garden State Parkway, Bass River Township, New Jersey—Project Manger for the in-depth structural inspection/evaluation, design of new MSE Retaining walls at approaches of new bridge including utility relocations, survey/mapping and right-of-way plans.

NJTA, Cedar Creek Bridge Replacement, Garden State Parkway, Berkeley Township, NJ. QA/QC Engineer for the replacement of a northbound and south bound 3-span deck slab bridges with wider single-span prestressed girder bridges, according to LRFD. Semi-integral abutments on steel pipe piles are being used. Construction staging to maintain traffic on the Parkway is required.

PANYNJ, 1998 Biennial Inspection of Outerbridge Crossing New Jersey Approach Bridges – Project Manager responsible for supervision and coordination of the project work. Project work involved inspection of fracture critical members, miscellaneous structures, bridge mounted sign structures and preparation of report.

PANYNJ, 1997 Biennial Inspection of the Lincoln Tunnel New Jersey Approach Bridges – Senior Project Engineer responsible for technical review and quality assurance of the project work. Project work involved routine NBIS inspection of approach structures, sign structures, structural rating analysis and preparation of reports. Major parts of the inspections were conducted at night to allow for minimal traffic interruptions.

PANYNJ, George Washington Bridge NBIS Inspection of the New Jersey Approach Bridges, NJ – Senior Project Engineer – Project work involved the NBIS inspection of approach structures, sign structures and light towers. Responsible for technical review of project work which included inspection, load ratings and report preparation.

PANYNJ, Biennial Inspection of 15 Bridges at LaGuardia Airport in Queens, New York – Senior Structural Engineer – Project work included inspection involving bridges with fracture critical members and reviewing inspection reports.

PANYNJ, Rehabilitation Design Study Report of the 102nd Street Bridge Over Grand Central Parkway In Queens, New York – Project Manager – Project work included the inspection and structural evaluation of the bridge for rehabilitation to meet current AASHTO and New York State Department of Transportation design standards and preparation of report.

PANYNJ, Structural Evaluation, Analysis and Load Rating of Floorbeams and Brackets of the Outerbridge Crossing between Perth Amboy, New Jersey and Staten Island, New York – Project Engineer – Project work included structural evaluation, load rating and fatigue strength analyses.

PANYNJ, Inspection and Rehabilitation of the PATH Vertical Lift Bridge over Hackensack River in Jersey City, NJ – Structural Engineer – Project work included the inspection of the lift span truss members, counterweights, sheaves and trunnions, fender system and development of repair details and shop drawings.

PANYNJ – Design Services for WTC PATH Terminal Transportation HUB Project – WP # 21 – Project Manager responsible for design services of various temporary structures for WTC PATH Terminal Transportation Hub Project, as design consultant to Phoenix Constructors, JV.. Design included, but not limited to, crane platform, structural bracings, roof structures and columns supports, support of excavation for footings and walls, supports under blast plates construction barricades, under-pinning columns and support beams. Services also included preparation of signed and sealed CADD drawings / calculations and review of shop drawings. Also responsible for additional design services on Task Order No. 26 (Design Engineering Services / MATOC) for cantilevered temporary work platform, and other miscellaneous structural design support for field modification during construction.

NJDOT, Design of Bridge Replacement Project on Libertyville-Plumbsock Road over Clove Brook in Sussex County, New Jersey – Project Manager – Project work included preparation of the final (Phase III and IV) design contract documents for the new replacement bridge and post-award construction engineering services. Designed the reinforced concrete abutments and prestressed box beams as per AASHTO Standard Specification and the New Jersey Department of Transportation Bridge Design Manual and reviewed shop

As good as the reputation of a firm may be, the final quality of their work and commitment to success is really a function of the individuals they assign to a project. It is for this reason we have selected individuals who have a proven track record of managing all aspects, from planning to implementation, of large scale projects. The Jacobs Teams presented to perform Expert Professional Project Management Services offers the Port Authority individuals who have proven themselves to be successful in the delivery of projects, from small to mega. Specific resumes and personnel profiles for individuals we anticipate working on this contract are included in Section C and provide detail of the relevant experience the individuals bring to this project.

In the following section we have included a number of project descriptions that were performed for public agencies. These projects have involved project and program management, project/program scoping, cost and schedule oversight from EIS and planning to conceptual design through contract preparation and construction support services. Our experience with major projects such as the Rehabilitation of the Alexander Hamilton Bridge and the PANYNJ World Trade Center Engineering and Design Services for Streets, Utilities and Related Infrastructure demonstrates our ability to be successful in many project environments.

Nationwide Program Management for Designated American Recovery and Reinvestment Act Projects, Nationwide

Client

Art Misiaszek
[redacted]

National Railroad Passenger Corporation (Amtrak)
2955 Market Street
Philadelphia, PA 19104

Budget

$561 million

Duration of Services

9/2009-2/2011

With the initial passage of the American Recovery and Reinvestment Act (ARRA), Amtrak received over $1.3 billion in stimulus funding to invest in improving its aging infrastructure and, in turn, to help the country get out of recession. Amtrak is working with Jacobs to help implement this massive undertaking within the strict ARRA deadline of completion – February 17, 2011. We are providing Amtrak with nationwide program management and construction management services for more than 100 infrastructure improvement projects. These projects, all funded through the ARRA economic-stimulus package, are located at over 360 specific locations in 46 states and have a potential value in excess of $560 million.

Under this contract, we are managing, procuring and administering, in part or in full, the design and construction of projects. These include maintenance facility upgrades, bridge replacements, track work, security enhancements, and various station improvements.

As part of the procurement process, we are contracting directly with design-build firms to fast track $310 million worth of projects in order to meet the February 2011 completion deadline. With only one full construction season between notice-to-proceed and the ARRA deadline, we have developed a project bundling strategy based on project type and geographic location that will:

1. Create attractive and worthwhile contracts for competitive bidding
2. Encourage small and minority-owned business participation
3. Rely on local firms for fast project implementation
4. Keep projects on schedule and within budget

In support of small and minority-owned businesses, Jacobs and Amtrak have set individual goals for significant levels of small and disadvantaged business enterprise participation and contract projects to create jobs that will further economic recovery and provide long-term benefits.

Systemwide Security Enhancements: As part of our contract, we are performing survey, engineering support, and oversight for the nationwide security program for Amtrak. The program includes both physical and electronic security improvements at many stations, platforms, yards, and shops located throughout the Amtrak system. Services include engineering integrated camera technology with intelligent video, detection, and access control. The systems are designed to afford simultaneous around the clock monitoring, command, and control of real-time video, alarms, and data.

We are responsible for mobilizing and deploying multiple teams to conduct detail surveys of the various stations, platforms, yards, and shops and developing conceptual plans to be issued to various contractors. Additionally, we are developing various documents, including basis of design, cost estimates, and schedules. Following contractor selection, we also will provide on-site oversight to interface with the contractor and local Amtrak staff and assist with conflict resolution.

Charleston Bus Annex, Staten Island, NY

Client

Charles Treubig
[redacted]

MTA New York City Transit
2 Broadway
New York, NY 10004

Construction Value

$113 million

Project Completion

2010

Jacobs is currently serving as the Consultant Construction Manager (CCM) for the pre-construction, design, construction, and closeout phases of the Charleston Bus Annex Design/Build Contract. The new Annex was planned to relieve the severe overcrowding at the Yukon and Castleton Depots in Staten Island and provide additional capacity for the expansion of service on Staten Island where overall ridership has grown from 31.3 million to 39.6 million since 1998.

The new bus annex – bound by vacant properties to the south, a residential area to the north, and a golf driving and pistol range to the southeast and east – will provide operational capacity for 220 MCI buses. The facility consists of a building with a footprint of approximately 81,000 square feet, with outdoor parking areas for buses and employee vehicles. The major work items include:

Blue Line Extension to Largo, Prince George's County, MD

Client

Dan Korzym, PE, CCM
Senior Project Manager
Office of Construction
[redacted]

WMATA
600 Fifth Street, NW
Washington, DC 20001

Construction Value

$215 million

Completion

2005

With an estimated construction cost of $215 million, the Blue Line Extension to Largo was the first major transit extension and was WMATA's first major design-build project for a line extension. As project designer for a joint venture constructor team, Jacobs was responsible for all civil, structural, and site design; facilities design; and systems design of this expanded transit system, including at-grade double tracking, underground/covered structures, cut and cover tunneling and aerial structures.

We also performed an analysis of contracting options, which included a review of the planning performed for and an analysis of benefits, costs, advantages and disadvantages for construction using conventional design-bid-build contracting versus design-build contracting practices. We prepared an independent estimate for completion of the construction using each method.

Jacobs responsibilities included final mechanical design, tunnel ventilation system design and analysis, tunnel and station fire protection, station plumbing and tunnel drainage systems design. Jacobs performed SES analysis of different ventilation options and produced Construction drawings and a smoke management report.

Meadowlands Rail/Roadway Design and Environmental Impact Statement, East Rutherford, NJ

Client

New Jersey Sports & Exposition Authority (NJSEA)
Meadowlands Sports Complex
40 State Hwy Route 120
E. Rutherford, NJ 07073

Project Cost

$150 million

Completion

2007

NJSEA retained Jacobs to provide engineering, planning and environmental services for a new rail station and rail service for the Meadowlands Sports Complex area. The project included preliminary and final engineering and preparation of an Environmental Impact Statement (EIS) for the rail service located within the Hackensack Meadowlands Area, only 8 miles from Manhattan. Consulting services provided by Jacobs for this project include: track alignment; roadway alignment; civil design, structural engineering; station, vehicular and pedestrian facilities; geotechnical engineering; utility relocation; right-of-way documents; surveying; electrical design; railroad signal system design; railroad communications; EIS preparation; permitting; traffic analysis; value engineering; schedules and cost estimates; meetings and coordination; project control; bid services; and post-design construction assistance.

The project required significant coordination between several area stakeholders including the NJSEA, NJ TRANSIT, NJDOT, NJ Meadowlands Commission, Bergen County; NJ Department of Environmental Protection, U. S. Army Corps. of Engineers and the US Coast Guard.

Route 36 Highlands Bridge over the Shrewsbury River, Monmouth County, NJ

Client

Pankesh Pate, PE
[redacted]
NJ Dept. of Transportation
1035 Parkway Avenue
Trenton, NJ 08625

Construction Value

$125 million

Project Duration

2005-2011

Jacobs is the project manager for major feasibility studies, preliminary and final designs and plans, and construction services. We performed feasibility studies to evaluate bridge replacement versus rehabilitation; fixed bridge versus moveable bridge alternatives, and optimum height studies. Also included were an Alternatives Analysis, development of Coast Guard permits, presentation material for community meetings, and alignment studies. The Alternatives Analysis evaluated the impacts and provided both initial and life cycle construction costs for six alternatives for the existing bridge and recommended an Initially Preferred Alternative (IPA). We provided services for:

- Maintaining operations and traffic safety until construction completion.
- Maintaining uninterrupted traffic throughout construction and maintain a vital coastal evacuation route
- Aggressive schedule and rapid construction (2-years) and to minimize environmental and roadway impacts.
- Expediting project delivery.
- Minimizing impact on environment.

World Trade Center Engineering and Design Services for Streets, Utilities, and Related Infrastructure, New York, NY

Client

Vito Ranieri
[redacted]

Port Authority of NY & NJ
115 Broadway
New York, NY 10006

Duration

Ongoing

Project Cost

$180 million

Jacobs, part of the Downtown Streetscape Partners joint venture, is performing engineering and design services for the new World Trade Center (WTC) in lower Manhattan. The project consists of the creation of Greenwich Street between Vesey and Liberty Streets, and Fulton Street between Route 9A (West Street) and Church Street, including the installation of street utilities (water, storm and sanitary sewers, gas, and steam mains) to service the World Trade Center Site.

In addition to the new streets and utilities, Jacobs is responsible for the creation of Liberty Park, a new park adjacent to the WTC Memorial on Liberty Street, all roadway surfaces, sidewalks, street lighting, traffic control measures, appropriate street furnishings, way finding, landscaping and perimeter security measures.

Jacobs manages the design coordination of the streets and related infrastructure designs with all participating stakeholders.

Cross-Bronx Expressway, Section I-95 – Alexander Hamilton Bridge, New York, NY

Client

Syed Rahman, PE
[redacted]

NYS Dep. of Transportation
47-40 21st Street
Long Island City, NY 11101

Construction Value

$410 million

Project Duration

Design: 1994-2009
Construction Support: 2009-2014

Jacobs is the prime consultant for the rehabilitation of the Alexander Hamilton Bridge, encompassing 16 bridges on the CBE between Amsterdam Avenue, and is the Coordinating Consultant for the entire CBE corridor rehabilitation projects. The project required extensive construction sequence development to enable the structure to be rehabilitated while maintaining traffic lane capacity. It also required extensive coordination with numerous public stakeholders.

Jacobs provided in-depth, detailed inspection, load rating, alternatives development, final design, and preparation of construction documentation for the rehabilitation of the main 505 ft span arch bridge over the Harlem River, the replacement of the complete concrete deck of the 1,530 ft long main bridge, the replacement of the tightly curved Ramp TE over the west approaches of the main bridge, the rehabilitation of the connecting ramps between the Cross Bronx Expressway (I-95), and the Major Deegan Expressway (I-87).

Jacobs is performing shop drawing review, and is responsible for providing engineering services for investigating site conditions that lead to field changes, and modifying the design.

Design, Construction, Finance, Operate, and Maintain the Port of Miami Tunnel, Miami, FL

Owner

Gus Pego, PE
District Secretary
[redacted]

Florida Department of Transportation, District Six
1000 NW 111 Avenue
Miami, FL 33172

Contracting Entity

Jean-Francois Cubille
[redacted]
Miami Access Tunnel Consortium

Construction Value

$610 million

Completion Dates

Design: 2014

Operations and Maintenance: 2044

The Florida Department of Transportation is constructing an underwater tunnel in Miami to divert trucks, buses and other port-related traffic away from Miami downtown streets and onto a dedicated roadway connection to MacArthur Causeway and I-395. Major components of the projects are: Widening of the existing MacArthur Causeway Bridge; Tunnel connections between Watson Island and Dodge Island, where the Port of Miami is located and Connections to the existing Port of Miami roadway system.

This is a Design-Build-Finance-Operation-Maintenance project, a format of Public Private Partnership (PPP). The concession term is 30 years after the completion of its construction. Jacobs is the Engineer to the Miami Access Tunnel (MAT) team responsible for the design of roadways, ITS, bridges, tunnels, temporary support of excavations, utilities, and other structures for the project, including structural, geotechnical, electrical, mechanical, tunnel ventilation, fire/life safety, tunnel security, and utility disciplines.

Harmon Shop Replacement, Phase III, Design/Build, Harmon, NY

Client
Michael O'Neill
[redacted]

MTA Metro-North Railroad
347 Madison Avenue
New York, NY 10017

Duration
2006-2009

Construction Cost
$282,600,000

Coach Shop

Harmon Shop Replacement Phase III is the largest engineering and construction project ever awarded by MTA Metro-North Railroad.

Jacobs is the lead partner in the design of the facility and is providing project management, site civil engineering, track design, architectural, electrical engineering, and traction power design. More than 1,500 contract drawings are being prepared on a truly fast-tracked schedule that will require approximately $10,000,000 of design-build work to be performed each month to meet the 29-month schedule.

Jacobs designed the 13.2kV and 480 volt power distribution system for two major shops. Work includes: architectural design of both main buildings; drainage analysis; design of all sanitary, fire, and water utilities; track design; and design of all communications systems, power, lighting, snow melter, traction power, fire alarm, SCADA and security systems.

Introduction

Jacobs is a full service engineering, design, planning, environmental assessment, and construction management firm with offices throughout the United States, including major offices located in New York, New Jersey, and Pennsylvania. Our fundamental business strategy is building long-term client relationships by providing high-quality service and value to our clients. Jacobs is one of the largest global providers of comprehensive professional services including project and program management in the areas of civil engineering, port facilities planning and marine engineering, rail engineering and design, planning, building and site design, materials handling systems, intelligent control systems, construction inspection and construction management projects. We have an exceptional record of guiding projects from concept through implementation.

Our New York metropolitan offices have over 300 professional staff members dedicated to all disciplines of engineering includes project managers, rail and transportation engineers, environmental scientists, urban planners, architects, economists, urban designers, air/noise specialists, port planners, marine engineers and environmental permitting specialists.

We are proud to be providing a diverse range of high quality engineering services to The Port Authority of NY & NJ currently and for the past several decades. We are excited at the opportunity to add Project/Program Management to the services we provide to you. We recognize the importance of the Port Authority to the transportation and economic well being of the region and understand how essential it is to be responsive to the Port Authority's needs by providing high quality cost effective services.

Organization

Jacobs recognizes the importance of the call-in program to PANYNJ. This program enables PANYNJ to quickly and efficiently assign complex projects of varied sizes to capable project managers with the necessary and appropriate technical expertise in the required disciplines. In order for this program to be successful, the Port Authority needs to know that the consultant understands the assignment, the importance of schedule and the criticality of budget. Further, communication between PANYNJ and the consultant and the quality of the work performed is essential in assuring continued successful progress of each task assigned to the consultant.

Jacobs recognizes all of this and has an organization that is responsive to the needs and objectives of the Port Authority. As a result of this understanding we are offering PANYNJ a flexible and cost-effective matrix organization structured to provide only the required support necessary to successfully accomplish assigned task orders. We will identify the correct task leader as well as the most cost effective team with requisite technical capabilities. A Senior Engineer will lead each task by providing supervision and quality assurance on all tasks. As such, the staff will be used only in response to the special demands of the project and the size of the team will fluctuate in response to the workload ensuring that you will receive the maximum return for each dollar spent.

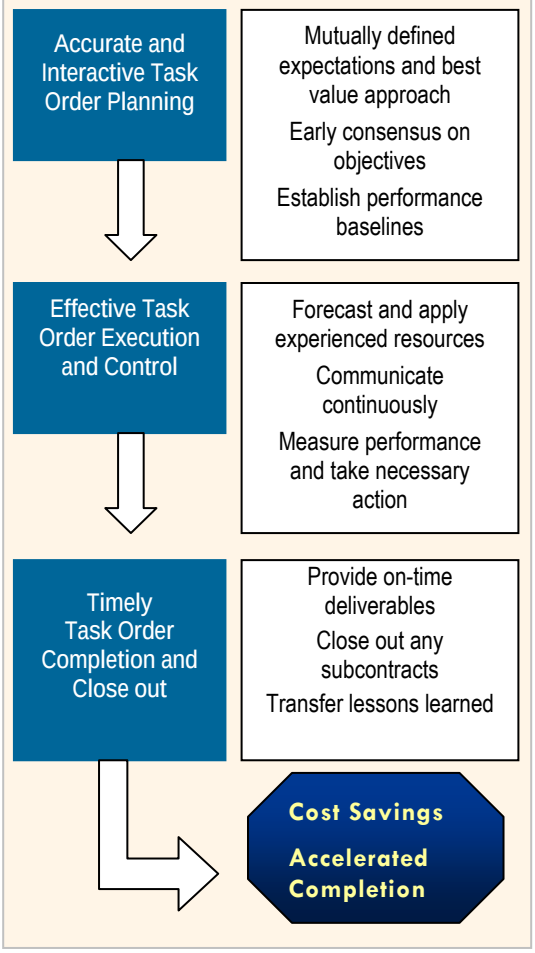
At the start of each task order, our Project Manager (PM), will review the scope of work for that particular task, will assemble a team with the appropriate experience and availability to work the task assigned. As you can see from our resumes, our staff have a broad array of experience, giving us a great depth of resources. The organization follows later in this section.

Management Plan Capability

We have assembled a first-rate team to be on call for this project. Furthermore, we will use an established approach that is based upon our extensive experience in task order contracts and that incorporates best practices and lessons learned (Figure 1). Our Management Approach is based on:

- Close partnering, team building, and joint interactive planning to ensure full understanding and strong working relationships – NO SURPRISES
- Proven systems for cost tracking, forecasting, scheduling, variance analysis, subcontractor management, and project reporting – COST AND SCHEDULE CERTAINTY
- A streamlined program and task order management in which the PM is fully empowered with the authority to execute task orders with direct access to Jacobs' technical capabilities and resources – QUICK RESPONSE
- Proven project management procedures from company-wide task order contracts – LESSONS LEARNED
- Best practices from our other contracts that will shorten our learning curve and streamline execution, reduce costs, and shorten schedules – WORLD-CLASS SOLUTIONS
- Sound workload, staffing and forecasting tools that ensure the right people with the right skills are available at the right time – VALUE FROM YOUR CONSULTANT

Figure 1
Best Value Management Approach



Capacity and Systems to Manage and Execute Multiple, Concurrent Task Order Contracts

Multiple task order, multiple location contracts constitute a very significant portion of Jacobs' work. With over 400 technical staff of all disciplines available in the New York metropolitan area, we have all the capabilities needed to support such contracts for numerous clients simultaneously. These personnel are available to support the PANYNJ tasks when the discipline specialty is required.

Team Leadership

The key to being responsive to PANYNJ and to meeting its needs timely is the ability to provide personnel with the necessary project management expertise to staff any size project for the Authority on short notice as the need arises. Jacobs will accomplish this by providing immediate response to the Authority's request for a project management team.

Jacobs has assembled a Team of technical professionals with the experience and expertise for the Performance of Expert Professional Project Management Services As Requested on a Call-In Basis

During 2011, 2012, 2013, and 2014 (RFP22388) that achieves the Authority's objectives. This call-In agreement will be under the overall direction of Jacobs' Project Director, **Stanley Rosenblum**, who will be responsible to PANYNJ for all matters relating to contractual obligations. He is acutely aware that ensuring staff availability is critical for these types of agreements and therefore he will see that the proper resources of the firm are available to PANYNJ as required to address individual project workload and schedules.

Our Project Manager, **Michael Murno, PE,** will maintain complete control for the management of the contract in all phases. Mike has demonstrated repeated success in being responsive to our clients by providing timely and cost effective support as requested. Mike's background, with management of large scale projects ensures full understanding of how to efficiently manage unique projects. Mike will be the single point of contact throughout the life of the contract and is committed to close coordination with the PANYNJ project manager. Mike's overall goal is to assure Jacobs' responsiveness to PANYNJ by providing high quality and timely products and services. His detailed responsibilities include:

- Preparing/negotiating proposals for each project assignment
- Assigning the proper staff to each project assignment
- Coordinating all work elements and disciplines, including interaction with subconsultants
- Ensuring the Authority's goals/objectives, as set forth in the individual proposals, are met as each project progresses
- Maintaining the schedule and budget of each project assignment

Our Quality Control Advisor**, Michael Kennedy, PE,** is currently the manager of the New York infrastructure office and will provide the QA/QC guidance and oversight throughout the project as well as guide the development of our Quality Plans and design documents, ensuring that products of the highest quality are delivered to the Port Authority.

Role of Subconsultants in the Organization

While Jacobs possesses the depth and mix of engineering design and construction support resources and expertise to support the PANYNJ task orders, we will subcontract selected services in the execution of this contract. As a company, we are committed to maximizing the participation of disadvantaged enterprises and will make every effort to meet the PANYNJ's MBE and WBE goals.

MBE/WBE Participation

Jacobs is committed to supporting and maximizing the participation of the MBE/WBE firms in support of the goals and objectives of the PANYNJ Diversity Program objectives. In an effort to meet the PANYNJ's goals of this program, we have assembled a team of MBE and WBE firms who will contribute value to this project. In order to deliver a quality and cost effective program to the PANYNJ, we have carefully selected MBE/WBE firms with whom we have successfully worked, either individually or collectively, on a variety of past projects. These firms all have past experience working successfully on projects for the PANYNJ. The following table lists the firms that will be part of our Team, summarizes the services they will provide and lists each firm's MBE/WBE certification.

FIRM	MBE/WBE %	SCOPE OF WORK	CERTIFICATION NUMBER	EXPIRATION DATE
KS Engineers, PC 494 Broad Street Newark, N. J.	Combined with JCMS to meet 12% MBE Goal	Structural, Electrical, and Civil Design	PA-20373	03/14/2015
JCMS, Inc. 1741 Whitehorse-Mercerville Road Mercerville, N.J.	Combined with KSE to meet 12% MBE Goal	Scheduling and Cost Estimating	PA-19889	09/07/2011
B. Thayer Associates 100 Crossways Pk Dr. W. Suite 104 Woodbury, NY 11797	WBE Goal 5%	Design/Inspection	PA-13953	09/09/2013

Scope of Services

The general scope of work for the projects to be assigned under this agreement will be to provide project management services for various project/programs at the Authority's facilities. Together with our sub consultants, we will provide project management, project/program scoping, cost and schedule oversight from conceptual design through contract preparation, and construction completion for projects in any of these areas: structural/bridge, aviation, marine, port, civil, rail, tunnels, bridges, terminals, traffic, mechanical, electrical and plumbing facilities engineering design and/or construction. Jacobs will be directly responsible for the overall quality of the project(s) and we will extend our commitment to quality to our entire team through quality reviews and in-house progress meetings.

Jacobs has successfully performed all these services in all areas, on varying size projects and for numerous clients. Our project experience, as well as our Team's individual resumes, demonstrates that we have a depth of experience as well as the right people who will deliver the projects for the Port Authority on time, within budget and at the highest quality level. We will offer the Authority the right person to lead the project and the right team to provide the needed support.

Jacobs commits to performing the services at the Authority's facilities as directed.

Task Order Proposal

Upon notification of a project task order assignment the Project Manager, Mike Murno, will coordinate with PANYNJ's Project Manager a site/scoping meeting, which both of them will attend along with key engineering discipline leaders/project engineers. Project objectives, as well as the general scope of work to meet these objectives, will be agreed upon at that time. These discussions, along with a review of available information will serve as the basis for the proposal submission.

A proposal for the specific task order assignment will be prepared. The proposal, typically prepared in letter format, will generally contain the following information for the Authority's review:

- Task name and number
- An opening statement identifying the goals and objectives of the project

- A description of the project scope of work on a task-by-task basis
- A description of any assumptions on which the proposal is based
- A staffing table that presents estimated staff hours for the project broken down by the tasks described in the scope of work
- A description of the quality control procedures that will be applied to each task
- A cost summary that presents:
  - ✓ Total salary costs by personnel classification
  - ✓ Breakdown of direct expenses
  - ✓ Summary of subconsultant costs
  - ✓ Total estimated fee
- A staffing table and cost summary for each subconsultant as required
- A project schedule

Mike Murno will be responsible for submitting proposals for individual task order assignments generally within five days of the site visit as well as assigning staff.

Task Organization

Our Project Manager, **Mike Murno**, will manage the Jacobs Team throughout the contract. The New York and New Jersey offices have the required personnel resources and company infrastructure support for project controls, contract management, and administrative services, as well as established equipment systems such as communications, computer workstations, servers, MIS, printers, plotters, and CADD systems. To ensure a responsive and effective management organization, we empower at the lowest required level, promoting rapid decision-making, effective allocation of resources, and rapid task order mobilization. Each task will have a Task Leader with experience appropriate to the work to be performed. The Task Leader will report to Mike Murno for the successful completion of the assignment.

Communications

Effective communication is a key factor in the successful execution of individual and especially simultaneous assignments. Clear reporting and communication procedures within the Jacobs Team and with the PANYNJ staff is essential in achieving effective control, timely guidance and consistent monitoring of the program.

A Communication Plan is an integral element of our project procedures and will include:

- Established project reporting requirements and formats, both internal and external to each task order team
- Contact information for each key team member (PANYNJ and Jacobs)
- Scheduled meetings for each task order team including meetings with the PANYNJ representatives
- Issue resolution (both during scheduled meetings and for immediate action)
- Emergency reporting procedures
- The use of common platforms that ensure connectivity and compatibility for reporting and data/drawing transfer
- Web page utilization

The PM and the task leaders for each assignment will meet with representatives of the Port Authority monthly, or more frequently as needed, to obtain available information, review the project schedule, and maintain coordination efforts. Progress meetings are valuable in assuring that all task participants have the same information, to clarify questions and alternatives, operational information that may affect design and to keep the design team fully synchronized. The process ensures that the channels of communication remain open between PANYNJ and the Jacobs Team throughout the project.

Contract Mobilization

Upon notification of award, the Jacobs Team will be activated in order to ensure quick responsiveness in mobilizing for task orders within expedited time periods.

A client expectation survey and kick-off meeting will be conducted to confirm full understanding of PANYNJ's requirements and understanding of overall program and project requirements.

Project Procedures Manual

One of our mandatory requirements is to completely plan the work at the onset of the project. The plan is used to progress and monitor the project. Development of the plan entails preparation of an in-house Project Procedures Manual (PPM), which includes a Project Criteria Document (PCD) and a Quality Plan (QP) for every project. The PM is responsible for preparing these documents. The PPM is prepared to provide each task order team with a clear and concise team organization, schedule, scope of work, and detailed administrative procedures for execution of the specific task order. The PCD is the basis for all technical work to be done on the project and establishes the guidelines for each individual task order. The outline PCD is established at the commencement of the contract, and is updated as each task order is requested of the Jacobs Team. The QP provides the project team a document outlining the quality goals, control, assurance, and procedures for reviewing and checking project deliverables. The PM is responsible for the project administration, staffing, schedule, contact with you, reviews with your engineers, budget and quality control, and the day-to-day operations of the project.

Task Order Execution Plan

For each task order we will:

- Work with PANYNJ to clearly define the delivery requirements of the task order
- Determine staffing for the task order team and mobilize personnel
- Conduct initial site visits as required to understand site conditions, climate and topography, local design/construction requirements, cultural parameters, neighboring facilities and utilities, etc.
- Obtain and review all applicable documents, existing drawings, codes, regulations, etc.
- Develop Scope of Work (SOW) for any subcontractors and obtain quotes from subs
- Establish performance measures and milestones
- Develop a Task Order Hazard Assessment Safety Action Plan
- Establish a Task Order Execution Plan based upon the above steps
- Develop a WBS based on the SOW to individual activity/element

- Develop a schedule
- Develop the cost estimate
- Review and modify the Quality Plan
- Update the Project Criteria Document

Project Controls

1. Cost Control Design – Controlling cost through planning and operational efficiency

We begin cost control during the early planning phases of each project. During the scope definition and proposal phase, our PM and key discipline leads clearly establish the scope, technical approach, and schedule to effectively execute each task order as defined in the PANYNJ's scope. We maintain cost control by holding monthly project financial review meetings where continually reviewing the scope of services to make sure that we remain within scope limits. At the monthly meetings the project budget is reviewed and the project progress is compared with the estimated cost to complete. Typical actions that we've implemented include adding or modifying staff to account for specific project elements as they develop and revising a task procedure to take advantage of newly gained information. For example, we may find that certain operational combinations and design conditions may apply to multiple locations, making the design process more efficient.

The time we invest in planning before design is "kicked off" effectively reduces design cost by eliminating unfocused effort and results in lower cost to you. Our task order team prepares detailed work plans with associated cost breakdowns, which are summarized in proposals provided to the Port Authority.

2. Cost Control Construction – Controlling construction cost and designing to budget

Effective cost control ensures that money is spent efficiently and that cash flows are appropriately matched to your design services and construction work. All personnel identified to support the Call-in contracts know that cost control depends upon an achievable budget, value engineering, continuous and accurate cost estimating, carefully managed procurement, and a proven project accounting system. We approach cost control early by:

- Establishing budgets and contingencies
- Developing a cost-based risk analysis of conditions impacting cost
- Evaluating possibilities of outside influence: market conditions, inflation, labor shortages, or design uncertainties
- Using parametric estimating techniques at each milestone
- Making adjustments to the design to adhere to established cost targets

3. Compliance with performance schedules through schedule control and planning

Like cost control, schedule control begins in our Interactive Planning Sessions in which we bring together our relevant design disciplines and technical experts to develop the best technical approaches. We will also invite and encourage representatives of the Port Authority to participate in this process. Interactive Planning (IAP) helps identify efficiencies and schedule delay avoidance strategies before start-up and throughout the life of each task order. Our IAP team analyzes and evaluates alternative technical and design solutions, work sequencing, and resource need.

Jacobs will maintain an interactive software based project schedule consistent with the Authority's goals and objectives. The bar chart schedule will include the individual project task time frames, task dependencies, milestone dates, and critical path. The schedule will be a living document and reflect project decisions and events.

4. Monthly Reporting

Jacobs will submit a work plan progress report on a monthly basis and task by sub-task to keep the Port Authority informed of the design progress. The report will consist of the following: 1) summary highlighting the key events that happened during the previous month, overall budget status, percentage of design completion, upcoming deliverables and key issues that require attention, if any; 2) description of work completed the previous month, and work anticipated for the coming month; 3) cost control by comparing actual cost incurred to date; budgeted amount; actual value of work performed; and the budget remaining; 4) required actions, key decisions, information required, and areas of responsibility; 5) an updated project schedule comparing actual status of each task order and anticipated schedule (for any sub-tasks within a task order that may be slipping, the reasons for the sub-task slippage and an outline of corrective measures to bring the sub- task back on schedule); 6) a staff loading plan showing anticipated staffing requirements versus actual staff used for each task order.

In addition to the scheduled coordination meetings with the Authority's Discipline Lead Engineer(s) and other potential agencies, Mr. Murno will conduct internal progress meetings with key personnel to maintain a proactive and collaborative approach. These meetings will focus on deliverables, project schedule, goals and objectives, quality, and budget, as these items are paramount to success. We welcome the Authority's Discipline Lead Engineer(s) to attend these meetings, which will be held on a regular basis.

Quality Control

1. Quality planning at the proposal stage

Quality work is a top priority for Jacobs and is assured by early project planning and ongoing review. We achieve quality through procedures as well as by having qualified experienced professionals preparing our analyses, studies and designs. During each task order initiation, we select our team from our resource pool based on the scope of services and the experience background of the team. This alignment of statement of work requirements with the skill sets and experience of our people is our first step in ensuring that the highest quality work is achieved. As the performance plan is developed, our project manager identifies and schedules all required quality control (QC) activities and milestones. By clearly identifying the requirements, staff-hours are budgeted and schedules developed that include the QC activities.

2. Quality during execution

By assigning an experienced team, the knowledge obtained from past designs contributes to a quality new design. In addition, we require that our Jacobs Project Delivery Quality Control process be used on all projects. The process includes formal procedures for assuring quality standards throughout all project phases. Our process facilitates the continuous pursuit of improvement needed to provide best-of-class services for our clients. Any product that goes through Jacobs's quality process meets the customer's needs and requirements.

The Jacobs Quality Control Process has been carefully developed to meet our customers' needs and those of our own organization. It is a documented process whose effectiveness can best be measured by our record of performance. Our process continues after the final QC and delivery of assessments, analyses, studies and design packages to the Port Authority with our staff capturing lessons learned and in order to apply to subsequent projects. In addition to our quality processes, we continuously improve our program execution through the Jacobs Performance Review System (PRS). The PRS includes the following elements:

- Client interview(s) for performance feedback and improvement goals
- PRS report documenting performance rates from clients
- Team feedback and improvement plan development
- Follow-up evaluations assessing progress toward improvement
- Follow-up client interviews for assessment of improvements, and identification of new improvement opportunities

Safety

Safety is more than policies and procedures; it's how we do business and it's how we live. Our people are our greatest asset and the basis for our success. We believe that we owe it to our employees to help keep them and their families, communities, our clients and our contractors safe at all times.

Conclusion

The Jacobs Team is prepared to provide project/program management services to the Port Authority. We understand that the Port Authority is committed to serving the economic and transportation needs of the region effectively and responsibly and we look forward to being able to support PANYNJ in delivering projects on-time, within budget and of the highest quality.

Key Personnel Project Assignment Salary Schedule

Project Assignment/Classification	Name	Hourly Rate, $
Project/Program Manager	Michael J. Murno, PE	87.44
QA/QC	Michael J. Kennedy, PE	101.70
Aviation Facilities	William DeGraaff, PE	74..64
	Chris Bowker, PE	88.53
	David Chamberlain, PE	77.14
	Stephen Flecchia, PE	52.22
	Richard Lasdin, PE	52.61
Rail Facilities	Leo McGlynn, PE	87.08
	Steve Bond, PE	80.12
	Michael Moskowitz, PE	86.10
	James S. Craig	75.00
	William Madden, PE	96.15
	Lewis Morgan, PE	96.40
Tunnels	Igor Maevski, PhD, PE	74.12
	Nick Chen, PE	120.19
	Greg Zdenek	95.29
	Kai Kang, PhD, PE	49.53
	Robert Harvey, PE	65.65
Bridges	Marcos Loizias, PE	119.51
	Avanti Shroff, PE	84.61
	Robert LaMagna, PE	79.57
	Lynne Baumann, PE	103.97
	Todd Schickel, PE	102.67
	Kimberly Murray, PE	67.85
	Wanda Lam, PE	47.59
Terminals	Richard Wenger, PE	72.83
	Vincent Cassano, PE	54.15
	David Fox	36.11
	James Coddington, PE	65.39
	Ron Zwerdling, CCM	57.22
Marine Facilities	Thomas Schanze, PE	86.54
	Christopher Ahern	60.10
	John Larson, PE	103.11
	Kamran Marashi, PE, SE	75.40
	Ronald Zimmer, PE	63.72
	Lauren Brennan, PE	52.29
	Andrew Holland, PE	41.09
	Jessica Forse, PE	62.45
Engineering Support	Toby Kizner, AICP, PP, Environmental	66.00
	Randy Sprague, PE, Constructability	82.44

Project Assignment/Classification	Name	Hourly Rate, $
	John Pavlovich, PE, Planning & Traffic	77.55
	Robert Craig, CPP, Security	66.24
	Stanley Grill, Business Analysis	94.55
	Richard La Ruffa, PE, Risk Management	106.51
	James McCarty, PE, Construction Inspection	91.35
	Stephen Lathrop, PE, Sustainability	60.65
Drafters/CADD	Juan Vivar	45.40
	Alexander Chizhik	45.34
	Jose Cerezo	44.48
	Mark Ellia	51.16

**Principal Billing Rate*

Jacobs

Multiplier: Overhead and Fee Summary

Location	Direct Labor	Fringe	Subtotal	G&A	Subtotal	Profit	Total Multiplier
Home Office	**1.0**	**26.94%**	**1.2694**	**96.32%**	**2.2326**	**8%**	**2.41**
Field	**1.0**	**26.94%**	**1.2694**	**70.0%**	**1.9694**	**8%**	**2.13**

JACOBS

U.S. Policy Supplement		Policy No: USP 5-202	Page: 1 of 4
Overtime Policy and Pay Practices		Supersedes: Rev. 1	Rev. 2
Issuing Department: Human Resources	Approval: Patricia H. Summers	Previous Rev. Date: 01-Oct-95	Current Revision Date: 27-Jun-08

1.0 PURPOSE

The purpose of this policy is to define Jacobs Engineering Group Inc., its subsidiaries and affiliated companies (hereinafter, "the Company") pay practices and overtime pay eligibility, in order to appropriately pay employees in accordance with their classification as defined by the Fair Labor Standards Act, 29 C.F.R. § 541.602 (FLSA).

2.0 SCOPE

This policy applies to all Jacobs employees in the United States.

3.0 POLICY

The Company policy on pay practices and overtime pay eligibility compliance is established to appropriately pay employees in accordance with their classification as defined by the Fair Labor Standards Act, 29 C.F.R. § 541.602 (FLSA). This policy discusses federal regulations regarding overtime. State laws may be more restrictive than federal laws. Local Human Resources representatives will provide details regarding regulations for specific states.

The FLSA is the federal law that establishes minimum wages, premium pay for overtime, child labor protections, and certain record-keeping and posting requirements. It authorizes the U.S. Department of Labor (DOL) to define exemptions from those requirements for bona fide executive, administrative, professional or outside sales employees. It also exempts certain employees in the computer software field.

3.1 The Company's salary pay policy shall be interpreted and applied in accordance with the salary pay requirement of the Fair Labor Standards Act.

3.1.1 Compliance

It is the Company's policy to promptly remedy any failure to properly compensate an employee. Any questions regarding compliance with this policy should be directed to an employee's Human Resources Representative. Questions or concerns may also be directed to the Company's compliance hot line.

Inquiries from government compliance agencies or auditing agencies which are addressed to the Company should be directed to the Senior Vice President, Global Human Resources or Director, Human Resources.

3.1.2 Exempt/Non-Exempt Classification

Pursuant to FLSA regulations, all Company employees are classified as either exempt from overtime pay (exempt employee) or not exempt from overtime pay (non-exempt employee). In certain circumstances, exempt employees may receive additional compensation for work in excess of their regular schedules. It is the immediate supervisor's responsibility to ensure that there is adequate supervision while overtime work is performed.

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3.1.2.1 Non-exempt Employees

3.1.2.1.1 FLSA requires that employees (unless they are determined to be exempt), must be paid at least the minimum wage for all hours worked in the designated workweek and receive overtime pay for all hours worked in excess of 40 hours during the designated work week. FLSA provides that such overtime will be paid on a premium basis, at one and one-half times the employee's hourly rate. These employees eligible to receive overtime premium pay in accordance with the FLSA regulations are referred to as "non-exempt" employees.

3.1.2.1.2 Work should be planned and scheduled to avoid having non-exempt employees work overtime (over 40 hours per week under FLSA). The company reserves the right to require employees to work beyond the designated work schedule when business conditions dictate. Non-exempt employees may not work overtime without the prior knowledge and approval of their appropriate supervisor. Employees who work unauthorized overtime are subject to disciplinary action, up to and including termination. However, all overtime work for non-exempt employees must be compensated, regardless of whether or not it was approved.

3.1.2.1.3 All hours of work must be recorded and compensated. A supervisor may not direct, tolerate or allow a non-exempt employee to work without recording the work time. Any questions regarding what activities are considered to be work must be directed to an employee's Human Resources Representative.

3.1.2.2 Exempt Employees

3.1.2.2.1 Certain types of employees may be excluded from eligibility to receive overtime pay as required by the FLSA. These employees are classified as "exempt". While not required by law, some exempt employees may be provided overtime compensation at the company's discretion in support of certain industry practices or customer request. Overtime compensation to exempt employees is normally provided on a straight time basis. However, there may be situations where exempt employees may not receive the extra compensation for extended work hours.

Additionally, when the demands of business require a pre-determined period of work beyond the designated regular work hours and therefore, overtime is scheduled and authorized in advance, exempt employees may receive pay equal to their straight time hourly rate with the approval of the appropriate supervisor.

3.1.2.2.2 Hours worked by employees are tracked for billing purposes. Exempt employee's salaries will not be reduced for a scheduled work day in which some work (there is no minimum) is performed. If a partial day's absence occurs, the portion not worked shall be charged to the employee's accrued paid time off (PTO), if hours are available. If PTO hours are not available, the hours not worked will be charged to the 555-000 account of the employee's performance unit. Charges to the Company's 555-000 account will need prior approval of the appropriate unit manager.

3.1.2.2.3 Where PTO benefits have been exhausted or have not yet accrued, salaries may be reduced only for the reasons set out below:

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- For unpaid leave as provided by the Family and Medical Leave Act
- For partial initial and final weeks of employment
- For absences of a full day for personal purposes such as vacation, sickness or disability
- For suspensions of a full day or more for disciplinary purposes in accordance with a written policy of general applicability
- For violations of safety rules of major significance
- For absences for an entire workweek for any reason

A reduction in salary must comply in every case with federal and state laws, as well as any contractual obligation.

3.1.2.2.4 The limitations on reducing exempt employees' salaries do not limit the Company's ability to address attendance, tardiness or untimely work.

3.2 Responsibilities

Human Resources is responsible to maintain all employee files relating to compensation and employee status.

3.3 Training

NA

3.4 Audits

The Internal Audit department will review employee status relating to this policy and report exceptions to Human Resources.

3.5 Disciplinary Action

The violation of this policy, including the following misconduct, may result in discipline, up to and including termination of employment:

3.5.1 The falsification of any time record or the alteration of a time record by an employee or a supervisor such that the time record is inaccurate;

3.5.2 Performing work without recording the work time in accordance with this policy;

3.5.3 A supervisor's directing, permitting or tolerating a non-exempt employee to work off the clock or to work in violation of applicable requirements; and

3.5.4 Retaliating or discriminating against a non-exempt employee for accurately reporting all work time or raising a concern regarding the reporting of work time or regarding the employee's compensation or another employee's compensation.

4.0 PROCEDURE

NA

5.0 MAINTENANCE

Human Resources will review this policy periodically against applicable regulations and update as needed.

6.0 DEFINITIONS

NA

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7.0 ATTACHMENTS AND RELATED DOCUMENTS (References)

7.1 Global Company Policy GP-001

7.2 Timekeeping Policy – USP 2-105

8.0 RECORDS

Human Resources will maintain all employee files relating to exempt status and pay practices.

REVISION HISTORY

Rev #	Date	Author	Reason for Changes
2	02/15/08	Corporate Compensation	FLSA regulation update

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Summary of At-Office and At-Site Rates
and
Statements of Fringe Benefit Expense and
General & Administrative Expense in Accordance with the
Federal Acquisition Regulation

North American Infrastructure

(formerly Jacobs Civil)

A Business Unit of Jacobs Engineering Group Inc.

For the Fiscal Year Ended October 2, 2009
With Report of Independent Auditors

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION WHICH HAS COMMERCIAL AND/OR FINANCIAL VALUE. SUCH INFORMATION HAS NOT BEEN PUBLICLY DISCLOSED AND IS EXEMPT FROM DISCLOSURE UNDER THE FREEDOM OF INFORMATION ACT AND ALL OTHER SIMILAR LEGISLATION. JACOBS ENGINEERING GROUP INC. REQUESTS WRITTEN NOTICE BEFORE ANY PUBLIC DISCLOSURE IS MADE.

Summary of At-Office and At-Site Rates
and
Statements of Fringe Benefit Expense and
General & Administrative Expense in Accordance with the
Federal Acquisition Regulation

North American Infrastructure

(formerly Jacobs Civil)

A Business Unit of Jacobs Engineering Group Inc.

For the Fiscal Year Ended October 2, 2009

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Cleary & Gill LLC

REPORT OF INDEPENDENT PUBLIC ACCOUNTANT

To: Board of Directors of Jacobs Engineering Group Inc.

Re: Indirect Cost Rates Prepared in Accordance with Part 31 of the Federal Acquisition Regulation

We have examined the accompanying Summary of At-Office and At-Site Rates, Statement of Fringe Benefit Expense and Statement of General & Administrative Expense (Schedules of the Indirect Cost Rates) of North American Infrastructure (NAI), a segment of Jacobs Engineering Group Inc., for the twelve months ended October 2, 2009 prepared in accordance with Title 48, Code of Federal Regulations, Part 31 of the Federal Acquisition Regulation (FAR). NAI is a wholly-owned business unit of Jacobs Engineering Group Inc. These schedules are the responsibility of NAI's management. Our responsibility is to express an opinion on these schedules based on our examination.

We conducted our examination in accordance with the attestation standards established by the American Institute of Certified Public Accountants and also the attestation standards in the *Government Auditing Standards* (July 2007 Revision), issued by the Comptroller General of the United States. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the Schedules of the Indirect Cost Rates are free of material misstatement. An examination includes reviewing, on a test basis, evidence supporting the amounts and disclosures in the schedules and performing such other procedures as we considered necessary in the circumstances. Our examination also included assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall schedule presentation. We believe that our examination provides a reasonable basis for our opinion.

The aforementioned Schedules of the Indirect Cost Rates were prepared on a basis of accounting practices as prescribed by Part 31 of the FAR as discussed in Note 2, and are not intended to be a presentation in conformity with accounting principles generally accepted in the United States.

In our opinion, the Schedules referred to above present fairly, in all material respects, the Indirect Cost Rates of NAI for the twelve months ended October 2, 2009, calculated in accordance with Part 31 of the FAR.

In accordance with the *Government Auditing Standards*, we have also issued our report dated March 17, 2010 on our consideration of NAI's internal controls over financial reporting and our test of its compliance with applicable laws and regulations. That report is an integral part of an examination performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report.

Individuals relying on this report must have an adequate understanding of Part 31 of the FAR. Therefore, this report is intended solely for the information of management and government agencies for use under contracts governed by the aforementioned regulations. It is not intended to be and should not be used by anyone other than the aforementioned parties nor should it be used for any other purpose.

Cleary & Gill LLC

Arlington Heights, Illinois
March 17, 2010

North American Infrastructure
A Business Unit of Jacobs Engineering Group Inc.
Summary of At-Office and At-Site Rates
For the Fiscal Year Ended October 2, 2009

The At-Office and At-Site rates relative to the audited Fringe Benefit Expense and General & Administrative Expense Statements were computed in accordance with Part 31 of the Federal Acquisition Regulation (FAR).

North American Infrastructure

At-Office

At-Site General & Administrative Rate	70.00%
Use & Occupancy Rate	26.32%
Fringe Benefit Rate	26.94%
Combined Rate	123.26%

At-Site

At-Site General & Administrative Rate	70.00%
Fringe Benefit Rate	26.94%
Combined Rate	96.94%

See the following statements for detailed computations of the above Fringe Benefit Expense and General & Administrative Expense rates and for the applicable explanatory notes.

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North American Infrastructure
A Business Unit of Jacobs Engineering Group Inc.
Statement of Fringe Benefit Expense
For the Fiscal Year Ended October 2, 2009

	NAI DIRECT FRINGE BENEFIT EXPENSE (Note 4)
COSTS, NET OF ADJUSTMENTS	
PAID TIME OFF	$ 21,573,944
FICA	15,039,670
SUI	636,315
FUI	142,486
THRIFT PLAN	4,307,569
GROUP INSURANCE	10,942,944
WORKERS' COMPENSATION	491,948
GENERAL LIABILITY	3,399,330
EMPLOYEE ASSISTANCE PLAN	58,898
TOTAL ALLOCATED FRINGE BENEFITS	**$ 56,593,104**
TOTAL FRINGE LABOR BASE	**$ 210,045,920**
COMPANY-WIDE FRINGE BENEFIT RATE	**26.94%**

The accompanying notes are an integral part of this statement.

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North American Infrastructure
A Business Unit of Jacobs Engineering Group Inc.
Statement of General & Administrative Expense
For the Fiscal Year Ended October 2, 2009

	TOTAL INCURRED G&A COSTS	TOTAL FAR UNALLOWABLE COST ADJUSTMENTS (Note 2)	NOTES	NET CLAIMED G&A COSTS	GENERAL & ADMINISTRATIVE RATE APPLIED TO AT-SITE & AT-OFFICE PROJECTS	USE & OCCUPANCY RATE (AT-OFFICE)
INDIRECT LABOR	$ 54,257,922	$ (196,208)	5	54,061,714	$ 54,061,714	$ -
INDIRECT EXPENSES						
OFFICE OCCUPANCY EXPENSES	32,759,399	(46,222)		32,713,177	8,454,107	24,259,070
PERSONAL COMPUTER SERVICES	16,056,925	(49,361)		16,007,564	46,231	15,961,333
FRINGE BENEFITS	14,618,977	-		14,618,977	14,618,977	-
TRAVEL & BUSINESS MEALS	3,399,746	(322,105)	6	3,077,641	3,077,641	-
VEHICLE EXPENSES	2,069,533	(56,425)		2,013,108	1,711,068	302,040
EMPLOYEE TRAINING & DUES	1,645,294	(283,389)	7	1,361,905	1,361,905	-
BUSINESS LICENSE & TAXES	1,293,204	(151)		1,293,053	1,126,553	166,500
PENSION & STOCK AMORTIZATION	1,247,827	-		1,247,827	1,247,827	-
OUTSIDE SERVICES	1,148,381	(46,568)		1,101,813	1,039,985	61,828
OFFICE AND OTHER SUPPLIES	1,040,262	(218,192)		822,070	1,278	820,792
RECRUITING & RELOCATION	736,225	(202,771)	8	533,454	372,941	160,513
REPRODUCTION	361,544	(11,675)		349,869	3,598	346,271
TEMPORARY STAFF	323,100	(68,163)		254,937	254,937	-
POSTAGE & FREIGHT	193,104	(122)		192,982	192,982	-
PUBLIC RELATIONS & ADVERTISING	106,848	(111,925)		(5,077)	(5,077)	-
COST RECOVERY	(906,070)	-	9	(906,070)	(906,070)	-
OTHER	2,078,145	(884,572)	10	1,193,573	987,510	206,063
SUBTOTAL INDIRECT EXPENSES	$ 132,430,366	$ (2,497,849)		$ 129,932,517	$ 87,648,107	$ 42,284,410
OTHER INDIRECT EXPENSES						
SALES, PROJECT SERVICES & CONST	$ 387,094	$ (1,862)		$ 385,232	$ 385,232	$ -
PUBLIC MANAGEMENT & ADMINISTRATION	277,450	(15,429)		262,021	$ 262,021	-
BONUS PAYMENTS	3,475,525	-		3,475,525	3,475,525	-
EMPLOYEE STOCK OPTIONS/PURCHASE PLAN	257,458	-		257,458	257,458	-
FIXED ASSET (GAIN)/ LOSS	261,835	-		261,835	261,835	-
OTHER	(161,091)	-		(161,091)	(161,091)	-
SUBTOTAL OTHER INDIRECT EXPENSES	$ 4,498,271	$ (17,291)		$ 4,480,980	$ 4,480,980	$ -
ALLOCATIONS						
CORPORATE ALLOCATIONS	56,220,224	$ (1,320,433)	3 & 11	54,899,791	$ 54,899,791	-
SUBTOTAL ALLOCATIONS	$ 56,220,224	$ (1,320,433)		$ 54,899,791	$ 54,899,791	$ -
TOTAL G&A EXPENSES	$ 193,148,861	$ (3,835,573)		$ 189,313,288	$ 147,028,878	$ 42,284,410
DIRECT LABOR (TOTAL AND AT-OFFICE)					$ 210,045,920	$ 160,673,729
NORTH AMERICAN INFRASTRUCTURE INDIRECT COST RATES					70.00%	26.32%
AT-OFFICE GENERAL & ADMINISTRATIVE RATE						96.32%

The accompanying notes are an integral part of this statement.

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North American Infrastructure
A Business Unit of Jacobs Engineering Group Inc.
Notes to Statements of Fringe Benefit Expense and General & Administrative Expense for the Fiscal Year Ended October 2, 2009

1. Business and Basis of Presentation

The financial information presented in the accompanying Statements of Fringe Benefit Expense and General & Administrative Expense includes the expenses of North American Infrastructure (formerly Jacobs Civil) and Jacobs Civil Consultants Inc. (collectively the Company) for the fiscal year ended October 2, 2009. Jacobs Civil Consultants Inc. was formerly known as Sverdrup & Parcel Consultants, Inc. The accompanying statements include the expenses of North American Infrastructure business unit as well as the expenses of the infrastructure operations of Carter & Burgess, Inc. (C&B) which was acquired by Jacobs Engineering Group Inc. in Fiscal Year 2008. The Fiscal Year 2009 company-wide indirect rates presented herein include the operations and results of North American Infrastructure (the Company) and are calculated consistently with the Company's Fiscal Year 2008 company-wide indirect rates.

The Company is a business unit of Jacobs Engineering Group Inc. (Parent Company) and Jacobs Civil Consultants Inc. is a wholly-owned subsidiary of the Parent Company. The Parent Company is a publicly traded company on the NYSE. The Company provides planning, design, construction management and design/build professional services. Major markets include transportation, public works and environmental.

The Parent Company was originally incorporated in 1957, and its clients include federal, state, local, and foreign government agencies, as well as numerous commercial entities. Revenues are derived from billings for professional services: project services; process, scientific and systems consulting services; operations and maintenance services, and construction services.

2. Basis of Accounting and Description of Accounting Systems

The Company's policy is to prepare the accompanying Statements of Fringe Benefit Expense and General & Administrative Expense on the basis of accounting practices prescribed by Chapter 1, Part 31 and Chapter 99 of the Federal Acquisition Regulation (FAR). The above mentioned statements are not intended to present the financial position or the results of operations of the Company in conformity with accounting principles generally accepted in the US.

The Company maintains its books of accounts using the Accrual Method of accounting.

The Company uses a multi-step process to identify and quantify unallowable costs as defined in FAR Part 31. First, the Company identifies certain expense accounts, expenditure types in the general ledger and certain indirect projects as totally unallowable (e.g., interest expense, bad debts expense, etc.) For certain other expense accounts that are likely to contain unallowable costs, the Company either reviews all of the significant transactions in the account or it reviews a sample of the transactions in the account. For those expense accounts that are sampled, the Company extrapolates the results of the sample to the related expense account population. In addition, the Company voluntarily excludes certain other costs from the indirect cost pools, and it uses estimates to determine the amount of certain other unallowable costs.

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION THAT HAS COMMERCIAL AND/OR FINANCIAL VALUE. SUCH INFORMATION HAS NOT BEEN PUBLICLY DISCLOSED AND IS EXEMPT FROM DISCLOSURE UNDER THE FREEDOM OF INFORMATION ACT AND ALL OTHER SIMILAR LEGISLATION. JACOBS ENGINEERING GROUP INC. REQUESTS WRITTEN NOTICE BEFORE ANY PUBLIC DISCLOSURE IS MADE.

2. **Basis of Accounting and Description of Accounting Systems (continued)**

The Company maintains a job cost accounting system based on actual costs for recording and accumulating costs incurred under its contracts. Each project is assigned a unique job number so that costs may be properly segregated and accumulated in the Company's job cost accounting system. Employee labor costs are charged to jobs using the employee's actual hourly pay rate at the time that the labor is incurred. For salaried employees, their actual hourly pay rate for job costing purposes is based on their annual salary divided by 2,080 hours per year.

Direct and Indirect Costs - Costs are specifically identified and recorded separately in formal financial accounting records as Direct Costs and Indirect costs as established in accordance with our disclosed practices. Direct costs are those costs that can be specifically identified to a customer project, work activity or final cost objective. Indirect costs are those costs that cannot be specifically identified with a single customer project, direct work activity or final cost objective. Contract/ Purchased labor is treated as Other Direct Costs.

Paid Time Off - The Company accrues Paid Time Off (PTO) based on the years of service for each employee. PTO may be used by employees for a variety of reasons, including (but not limited to) vacation, illness or accident, bereavement or personal time off. All requested PTO is subject to supervisory approval.

PTO benefits are paid based on the employee's base pay rate at the time that the absence occurs and does not include any special forms of compensation such as incentives, commissions, bonuses or shift differentials. Employees receive pay for all earned but unused PTO hours upon termination of employment

Uncompensated overtime - The Company's policy regarding overtime is to compensate NONEXEMPT employees for authorized additional hours of work. EXEMPT employees record only those overtime hours for which they are authorized to work and accordingly, compensated. As a result, uncompensated overtime is not tracked.

Depreciation - Depreciation and amortization is computed primarily using the straight–line method over the estimated useful lives of the assets. The cost of leasehold improvements is amortized using the straight-line method over the lesser of the estimated life of asset or the remaining term of the related lease. Estimated useful lives range from 20 to 40 years for buildings, from 3 to 10 years for equipment, and from 3 to 7 years for computers and software.

The Company's method of estimating costs for pricing purposes during the proposal process is consistent with the accumulation and reporting of costs under its job cost accounting system.

3. **Allocation Methods**

The Company has established two indirect rates: (1) an At-Office Rate that is applied to work performed in Jacobs-provided facilities, and (2) an At-Site Rate that is applied to work performed at non-Jacobs (i.e., customer) provided facilities. The allocation base for the At-Site G&A rate includes all Professional Services and all Field Staff Direct Labor including premiums. The allocation base for the At-Office G&A rate includes At-Office Professional Services and At-Office Field Staff Direct Labor including premiums.

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3. Allocation Methods

The Company uses the same fringe benefit rate for both its At-Office and At-Site direct labor and allocates fringe benefit expenses based upon total payroll dollars (including premiums and excluding incentive compensation.)

The Company receives an allocation of costs from the Parent Company that includes salaries, related fringe benefits and general and administrative expenses. These costs are allocated to the Company based upon a three-tier method, which allocates costs that are: (1) directly attributable to the Company; (2) separately associated with the Company that are allocated based upon appropriate bases that use direct labor dollars, total payroll dollars, revenues, or a combination thereof; and, (3) amounts remaining after the first two tiers, allocated based upon a two-factor formula that is computed using Professional Service and Field Staff payroll dollars and revenues.

The allocations of the Parent Company's Corporate Home Office costs have been properly adjusted to reflect FAR Part 31 disallowances. These amounts were determined by the multi-step process described above in Note 2. The net allowable costs for each of the Corporate Home Office cost pools are then allocated using the methodologies described above.

4. Fringe Benefits

The Parent Company calculates a Company-wide fringe benefit rate that is applied to its US business units and wholly owned subsidiaries. Fringe benefit costs include an adjustment of the indirect fringe benefit expense recorded in the general ledger at the standard fringe rate of 31.5% to the Fiscal Year 2009 actual fringe rate of 26.94%

5. Excess Compensation

The adjustment amount of $196,208 includes the amount that is unallowable in accordance with FAR 31.205-6.

6. Travel & Business Meals

Based on a review of travel and related costs, NAI disallowed $322,105 in accordance with FAR 31.205-46.

7. Employee Training & Dues

The adjustment amount of $283,389 represents dues that are unallowable in accordance with FAR 31.205-14.

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8. Recruiting & Relocation

The relocation adjustment of $202,771 represents employee relocation expenses that are considered unallowable in accordance with FAR 31.205-35.

9. Cost Recovery

The Cost Recovery accounts are used to charge projects for the usage of company-owned equipment, supplies and vehicles. Portions of the G&A relating to reproduction, vehicle costs, field equipment and supplies and other miscellaneous costs are charged (via a credit to cost recovery) to direct project expense based on actual usage.

10. Other

Included in the other adjustment of $884,572 are the following unallowable expenses of Fiscal Year 2009 actual costs:

Fines & Penalties (FAR 31.205-15)	$ 6,883
Contributions (FAR 31.205-8)	$ 105,500
Internal Promotion (FAR 31.2 various)	$ 376,229
External Promotion Meals, Entertainment & Other (FAR 31.2 various)	$ 367,882
	$ 856,494*

*The remaining balance of the disallowed amount is determined using the methodology discussed in Note 2.

11. Acquisition of Jordan, Jones and Goulding, Inc. (JJG)

On February 15, 2010, the Parent Company acquired Jordan, Jones and Goulding, Inc. (JJG), and the management and operations of JJG have been combined with those of the North American Infrastructure Business Unit (NAI) for the remainder of Fiscal Year 2010. Accordingly, the indirect rates presented herein appropriately do not include JJG. The NAI business unit is not a separate legal entity, and it will continue to operate as a separate business segment of the Parent Company .

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We have carefully selected MBE/WBE firms with whom we have worked successfully, either individually or collectively, on a variety of past projects. These firms all have past experience working successfully on projects for the Port Authority of NY and NJ. The following firms will be part of our Team and providing the services listed below.

B. Thayer Associates	Architecture, Survey, Bridges
JCMS, Inc.	Cost Estimating and Scheduling
KS Engineers, PC	Bridges, Terminals

The parent and affiliates of Jacobs Civil Consultants Inc., located at 5 Penn Plaza, New York, NY 10001, include the following:

Jacobs Engineering Group Inc. (Parent company of Jacobs Civil Consultants Inc.)
1111 South Arroyo Parkway
Pasadena, CA 91105
Tel: 626.578.3500
EIN: [redacted]

Jacobs Engineering New York Inc.
260 Madison Avenue, Suite 1200
New York, NY 10016
Tel: 212.268.1500
EIN: [redacted]

Jacobs Project Management Co.
260 Madison Avenue, Suite 1200
New York, NY 10016
Tel: 212.268.1500
EIN: [redacted]

Section I
Possible Conflict of Interest

In accordance with Subsection I of Section III (Submission Requirements), Jacobs maintains no conflict of interest in relation to the awarding of this contract.

We have reviewed the proposed Performance of Expert Project Management Services as Requested on a Call-in Basis during 2011, 2012, 2013, and 2014 contract and find it to be generally acceptable as the basis for the negotiation of a mutually-agreed-to final contract between the parties.

Louis Berger & Assoc PC
One Seaport Plaza, 199 Water Street, 23rd Floor, New York, New York 10038
Tel (212) 612-7900 Fax (212) 363-4341 www.louisberger.com

October 20, 2010

The Port Authority of New York and New Jersey
One Madison Avenue
Seventh Floor
New York, NY 10010
Attention: RFP Custodian

RE: Request For Proposals For Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014 (RFP #22388)

Dear Sir/Madam:

Louis Berger & Assoc., P.C. (LBA, P.C.) is pleased to submit one (1) original, six (6) copies, and one (1) compact disc copy of its proposal to provide the Port Authority of New York and New Jersey (the Authority) with **Expert Professional Project Management Services As Requested on a "Call-In" Basis During 2011 Through 2014 (RFP#22388).** This proposal is in accordance with the requirements detailed in the RFP, including all addenda.

LBA, P.C., authorized to perform engineering and design services in the state of New York, provides planning, environmental, engineering, construction and program management services to New York area clients and works in cooperation with The Louis Berger Group, Inc. (collectively comprising the LBA, P.C. Team). With support from The Louis Berger Group, Inc.'s worldwide headquarters in Morristown, New Jersey, and other offices in the region, the LBA, P.C. Team is a leading service provider in the greater New York City metropolitan area, including numerous New York City and State agencies. Working with The Louis Berger Group, Inc., LBA, P.C. has access to the entire Berger family of professional engineers, as well as technical and support staff.

The LBA, P.C. Team is ideally suited to provide the referenced services, based on our current and past work with the Authority. Our background and proven abilities give us an unsurpassed ability to understand and fulfill the Authority's needs. We are also dedicated to fulfilling the M/WBE requirements and, to that end, we have collaborated with Stellar Services and Team Support Services, Inc. to meet the Authority's subcontracting participation goals. Teaming details may be found in Section G of this Technical Proposal.

We look forward to the opportunity to work with the Authority on this Call-In contract. We hope that, upon your review, you will agree that our proposal represents the utmost in quality, experience, responsiveness and effectiveness. Should you have any questions or need additional information, please do not hesitate to contact our proposed Project Manager, Mr. Charles "Chuck" King, P.E. via e-mail at cfking@louisberger.com, or by telephone at (212) 612-7976.

Sincerely,
LOUIS BERGER & ASSOC., P.C.

Thomas Lewis, P.E., JD
Director/Secretary

October 13, 2010

SUBJECT: REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388 – ADDENDUM #1)

Dear Sir or Madam:

The Port Authority of New York & New Jersey hereby amends the subject Request for Proposal (RFP) letter, dated September 30, 2010, as follows:

The following questions were received from an RFP recipient(s). The Authority provided the corresponding answers:

1. Please clarify what is required for III.C.3 "table that provides a summary of project experience for key personnel on this project with respect to number of projects and project costs."

It is anticipated that the table shall provide a summary of the information presented in the resumes including project costs.

2. In light of the fact that this is an on-call proposal to provide Project Management Services, is it necessary to have a license to practice Architecture or Engineering services in the State of New York and New Jersey?

Yes.

The due date for receipt of proposals remains 2:00 p.m. on October 21, 2010.

If you have any questions, please contact Ms. Tracy Tiernan at ttiernan@panynj.gov.

Sincerely yours,

Tim Volonakis
Manager
Professional, Technical & Advisory Services Division
Procurement Department

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 20132 AND 2014 (RFP #22388)

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- *Experience Related to Number of Projects and Cost of Projects*

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- *Names, Titles, Hourly Rates*
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G. M/WBE Participation

H. Listing of Firm's Affiliates

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Attachment B

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

Louis Berger & Assoc., P.C.
(Company)

(Signature) Thomas Lewis, P.E., JD

Dirrector/Secretary
(Title)

October 20, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

Attachment C

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):
   Louis Berger & Assoc., P.C.

2. Business Address (to receive mail for this RFP):
   199 Water Street, 23rd Floor, New York, New York 10038

3. Business Telephone Number: 212-612-7900

4. Business Fax Number: 212-363-4341

5. Firm website: www.louisberger.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 05 / 02 / 1989 (New Jersey)

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):
   See Attached List of Affiliates

9. Officer or Principal of Firm and Title:
   Thomas Lewis, P.E., JD

10. Name, telephone number, and email address of contact for questions:
    Charles (Chuck) King, P.E., Project Manager (212) 612-7976
    cfking@louisberger.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

LISTING OF AFFILIATES

Louis Berger & Assoc., P.C. (a PA Co.),
320 Eagleview Blvd., Suite 250
Exton, PA 19341
EIN#: [redacted]

Berger Group West, P.C.
412 Mt. Kemble Avenue
Morristown, NJ 07962
EIN#: [redacted]

Qualifications and Experience of Staff

Qualifications and Experience of Staff

We are pleased to offer the PANYNJ a comprehensive staffing solution for this "as needed" program management contract. Our key staff are immediately available to serve on the project.

Firm Commitment and Staff Availability

The LBA, P.C. Team is committed to delivering the resources indicated in our proposal, specifically our proposed staff, for the full duration of the project. We understand that the most important factor in selecting a Project Management consultant is the quality of the proposed personnel; therefore, if selected by PANYNJ, as the LBA, P.C. Team's quality assurance policies require, we will deliver the personnel required for each assignment. We know that if the right staff is not delivered, your confidence in the LBA, P.C. Team may decrease, therefore, we have carefully selected our staff not only on the basis of their technical capabilities, but also their projected availability based upon the types of assignments for which they are most likely to be required.

Program Manager - Charles "Chuck" King, P.E.

The leader of our management team, Mr. Chuck King, P.E., is well known to the PANYNJ from over 20 of services on various PANYNJ projects, including presently serving as Program Manager for the George Washington Bridge Bus Station Redevelopment for TB&T. In addition, he also served as the Project Manager for the Assessment of the Project Management Office for the Chief Operating Officer.

Mr. King also served as **Deputy Program Manager for the Reconstruction of the World Trade Center, Phase 2.** His responsibilities included preparing Project Status Reports and Financial Reports. These reports provide information on budget vs. estimate at completion and actual expenses. He also managed the weekly progress reports and the web based project portal and he managed the FTA reporting process during Governor Patterson's Reassessment in Summer 2008.

In Philadelphia for SEPTA Mr. King served as the **Deputy Program Manager – Construction for the Reconstruction of the Market Street Elevated Transit Line**. This $650M, 5 year project included demolishing and rebuilding this two track elevated during tightly controlled outages. He served as **Project Manager for the Enhanced 911 Center in Metro Tech Center**, where he delivered both the design and construction services to the NYPD. He also served as the **Project Manager for the Amtrak/Long Island Railroad Central Control Center**. This facility housed all the switching and tracking systems for the Penn Station Train tracks, including those assigned to Amtrak, Long Island Railroad and New Jersey Transit.

Project Management Information System Manager (Project Controls) – Paul DeMeo, P.E.

Directing our Project Control Team will be Paul DeMeo, P.E. Mr. DeMeo has served the PANYNJ for over 20 years as a Program Manager. At Newark Airport, Mr. DeMeo served as a **Program**

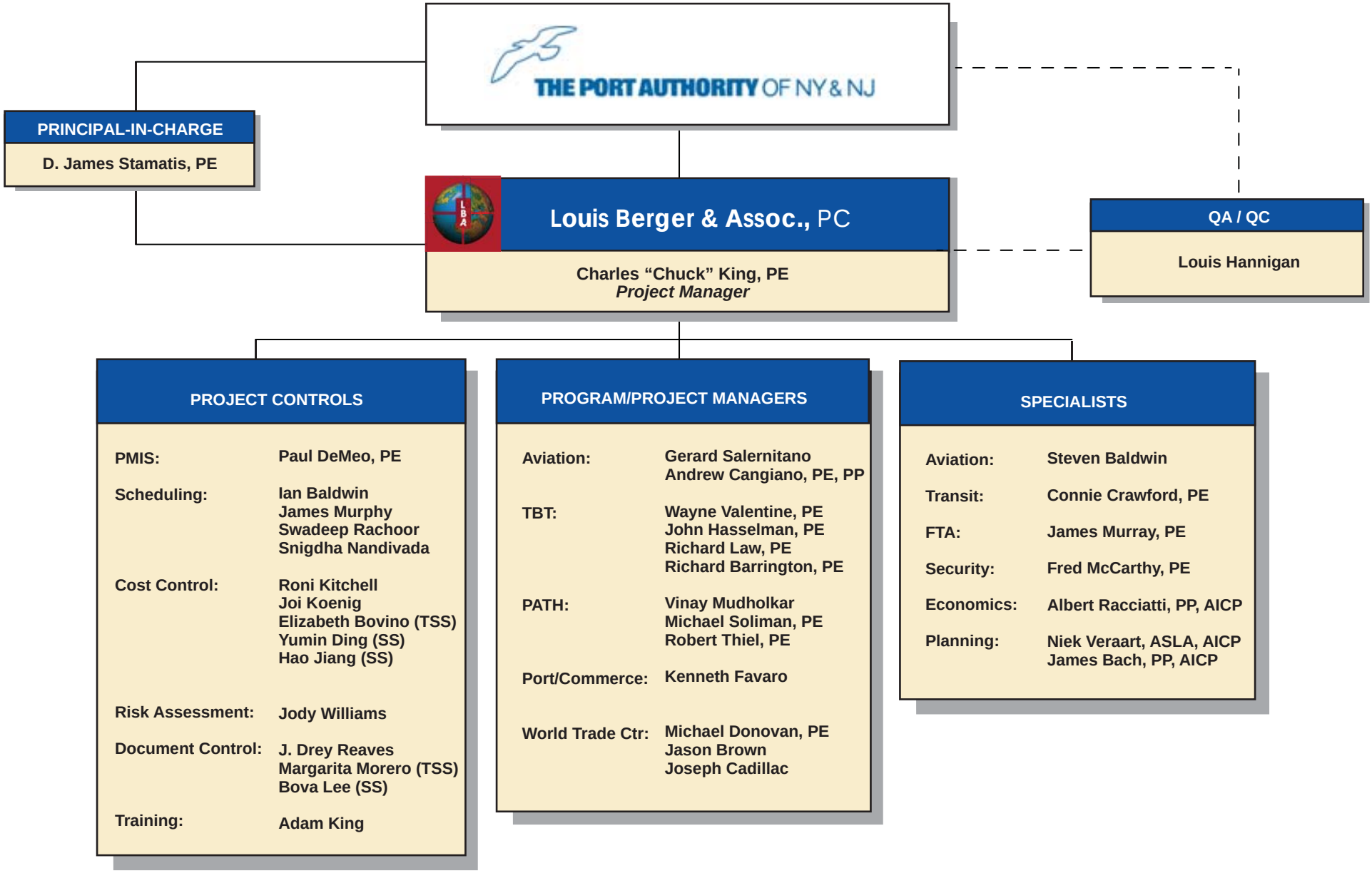
Manager on five separate programs, including International Arrivals Facility, Monorail, Landside Access, Monorail/Northeast Corridor Connection Program and Redevelopment associated with the Global Gateway Program at Terminal C. For these programs, Mr. DeMeo was instrumental in setting up project control systems that linked to PA accounting systems and provided tools for budgeting, forecasting, CPM scheduling, earned value analysis, problem resolution, document control, database and Web portal management and project status reports, weekly, monthly and annually.

Mr. DeMeo served as the **Program and Project Control Manager for the Initial Phase of the Downtown Restoration Program**. This program restored PATH service to Lower Manhattan through the design and construction of three projects; Expansion of Exchange Place Station, Restoration of Hudson River Tunnels and the new temporary Terminal at the WTC site. He was responsible for executive reporting, cost and schedule analysis, Website development, document control and coordination among stakeholders.

The balance of our staff is shown in the Project Organization Chart, where we have listed our Project Control Staff and our Project Management staff available for PANYNJ assignments.

Louis Berger & Assoc PC

Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014 (RFP #22388)



Sub-consultants: *Stellar Services (SS); Team Support Services, Inc. (TSS)*

Program/Project Manager Experience

Employee	Number of Projects	Total Project Cost	Representative Projects	Dates	Project Cost
Aviation					
Gerard Salernitano	22	*$305M*	Project Manager PANYNJ – NJ Airports (extension to staff)	2008 to current	Greater than $100 M
			Project Manager PANYNJ – EWR Terminal Modernization & Expansion Program(extension to staff)	2007 - 2008	$18.9 M
			Project Manager PANYNJ – Engineering on-call Design	2003-2007	$75 M
			Project Manager Philadelphia Schools – Athletic Fields Improvements	2005-2007	$110M
Andrew Cangiano, P.E., PP	4	*$33.7M*	Project Mgr - Security Improvements Phase I, II & III and Water/Sewer Project Orange County Airport, NY	2010	$2.1M
			Project Mgr-EWR Terminal A Expansion/Modernization Program, infrastructure & Utilities	2009	$18.9M
Tunnels, Bridges and Terminals					
Chuck King, P.E.	10	$3.0B	Program Mgr - GWB Bus Station Redevelopment	2010	$49.5M
			Dpty Prog Mgr – World Trade Ctr Redevelopment	2008-2009	$2.2B
			Project Engineer – I84/I87 Interchange Reconstruction	2006-2008	$80M
			Dpty Prog Mgr – Market Street Reconstruction - SEPTA	2004-2006	$650M

Program/Project Manager Experience – cont'd

Wayne Valentine, P.E.	8	$500M	Project Manager - Red Bull Stadium	2008-2010	$160M
			USPO Facility Improvements – NYC Metropolitan Area	2005-2007	$100M
PATH (Rail)					
Vinay Mudholkar	3	$15.15B	Technical Manager NS Railway Saudi Arabia Director, Amtrak Principal Engineer Bechtel UK West Coast Main Line	2006-2010 2004-2006 2000-2004	$ 5 Billion $150 million $10 Billion
Port/Commerce					
Kenneth Favaro	8	$17.4M	BMT Piers 7,8 and 9B-Pile Jacket Repairs, Steel Waler Replacement and Steel Bulkhead Plates	2010	$2.3M
			BMT – Steel Bulkhead and Tie-Rod Replacement Between Piers 7 and 8	2009	$2.8M
			BMT – Piers 7 and 11 – Rehabilitation of Warehouses for Phoenix Beverages (w/ Cogen Plant)	2008	$10.5M
			TAA Project for American Stevedoring (at Piers 8 and 10)	2009	$800K
World Trade Center					
Michael Donovan, P.E.	1	$2.2B	World Trade Center Redevelopment for PANYNJ	2009-2010	$2.2B
Joseph Cadillac	2	$3.2B	World Trade Center Redevelopment for PANYNJ	2006-2010	$2.2B
			Hudson Bergen Light Rail Extension	2000-2005	$1.0B

Louis Berger & Assoc PC

CHARLES (CHUCK) KING, P.E.
Project Manager

EDUCATION
M.S., Civil Engineering, University of Oklahoma, 1983
B.F.A., University of Oklahoma, 1975

PROFESSIONAL REGISTRATIONS
Professional Engineer – NJ, NY, CT, PA, MD
Structural Engineer – IL

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers
American Institute of Steel Construction
Project Management Institute
Construction Management Association of America

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- March 2008 – Present
Jacobs Engineering, Group – 2002-2008
Weidlinger Associates, Inc. - 1994-2002
Raytheon Engineers and Constructors (formerly Ebasco Services, Inc.) – 1992-1994
Sverdrup Corporation – 1988-1992
Blackburn Engineering – 1987-1988
Mico Engineering Division of Michelmann Steel Construction Company – 1985-1987
Sargent & Lundy Engineers – 1983-1985
Markeudaley Engineers – 1981-1983
Sullivan Engineering – 1979-1981

YEARS EXPERIENCE: 30

PROFESSIONAL EXPERIENCE
As a Program / Construction Management Executive with nearly thirty years experience, Mr. King has served in a number of increasingly responsible positions on several complex transportation and facilities projects. His management experience on design / construction programs includes strategic planning, cost analysis and budgeting, stakeholder relations, schedule and scoping analysis, contracts and public relations. His construction management experience ranges from "on site" management including inspection and field engineering to document control, change order processing, claims mitigation and quality assurance / control. These management skills coupled with his Professional Engineering background in both design and construction permit him to immediately understand issues on large complex projects and manage the resolution of cost, schedule, quality, and safety issues. In addition to strategic planning skills, Mr. King is an effective communicator and organizational manager. His skills include: leadership, technical competency, personnel management, organizational management, and profit / loss accountability. Tactical leadership skills include the ability to defuse difficult situations, resolve conflicts evolving from

contractual interpretations and to negotiate equitable resolutions between business, engineering and construction parties. Relevant project experience includes the following:

- **Port Authority of New York and New Jersey, Program Management PATH.** *Principal* responsible for the overall management of contract to provide Program Management Services for the PATH Capital Improvement Program, 2010-2014. Services include the planning for the design and construction program to be implemented over the PATH system. The projects being coordinated in the five year period include the Security Improvements, Signal/Communications System replacement, Vehicle replacement and upgrade, infrastructure and station improvements and new World Trade Center PATH station. Design and construction management personnel are being provided.

- **Port Authority of New York and New Jersey, Program Management Services for the George Washington Bridge Bus Station Redevelopment.** *Program Manager* responsible for the provision of design management, document control, scheduling and contract administration for the public/private partnership with Development Ventures, a retail developer. The developer is managing the design and construction of the combined Bus Station and Retail mall being planned for the PANYNJ owned Bus Station on 178th St, Manhattan, the NY approach to the George Washington Bridge. The $150M development will provide new retail services for the "Heights" and improve the bus operations and passenger access for the PANYNJ operated Station. Design of the PANYNJ "Reserved Spaces" is following a Design Criteria and must be approved by PANYNJ Engineering and Tunnels, Bridges and Terminals Departments before the Lease is executed. Upon execution, the Developer is entitled to proceed with the construction of Leased spaces.

- **Port Authority of New York and New Jersey (PANYNJ), Project Management Office Assessment, New York, NY.** *Project Manager.* Interviewed PANYNJ Executive Management and Project Management staff, analyzed business processes by comparing them to other agencies such as MTA CC, NJDOT, DASNY and NYC SCA, quantified project management and project controls staff to capital spending for the four Line Departments (Aviation, PATH, Port Commerce and Tunnels, Bridges and Terminals), investigated the PM's role in the PANYNJ's restructured PM organization, developed recommendations for increasing the effectiveness of the central Project Management Office per principles of the Project Management Institute.

  Port Authority of New York and New Jersey (PANYNJ), World Trade Center Site Redevelopment Program (Downtown Restoration Program), New York, NY. *Deputy Consulting Program Manager* responsible for the supervision of the program management team supporting the Port Authority of NY and NJ for the reconstruction of the World Trade Center in Lower Manhattan. This $16 billion program for reconstruction of the WTC site includes a new Transportation Hub designed by world-renowned architect, Santiago Calatrava, the 1776 feet tall Freedom Tower, the 9/11 National Memorial, Towers 2, 3, and 4, Vehicle Security Center, Rte. 9A realignment, a Central Chiller Plant, and the extensive Site Roadways and Utilities. Mr. King assisted the PA Director in managing the program including budgets, forecasts and cost variance analysis, project status reports, financial analysis and invoice processing, monthly financial and progress reports, program CPM scheduling (deterministic and probabilistic), site logistics, project communications, document control, contract management and serving as a liaison with the FTA and other stakeholders.

Louis Berger & Assoc PC

D. JAMES STAMATIS, P.E.
Principal-in-Charge

EDUCATION
M.S. Civil Engineering, Penn State
B.S. Civil Engineering, Penn State 1985

PROFESSIONAL REGISTRATIONS
Professional Engineer – NJ and NY

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- May 1985 – Present

YEARS EXPERIENCE: 25

PROFESSIONAL EXPERIENCE
Mr. Stamatis is President of LBA, P.C. responsible for directing transportation engineering programs, including water resources and hazardous waste programs. Mr. Stamatis has been Principal-in-Charge on several efforts with the Port Authority of New York & New Jersey, Metropolitan Transportation Authority agencies, and other state and local transportation agencies. In this capacity, Mr. Stamatis reviews project staffing, methods, deliverables and plan submissions for contract compliance. His technical experience includes projects involving engineering studies, design and construction support services for government agencies, industrial and commercial clients. Relevant projects include:

- **Port Authority of New York and New Jersey, Professional Design and Technical Services for Security Capital Programs on a "Call-In" Basis.** Principal-in-Charge responsible for providing various confidential security related design services for various tunnel, bridge, airport, rail, and port facilities projects in NY and NJ. Under this contract, presently preparing Stage I reports and design documents for construction and installation of crash barriers, perimeter intruder detection systems, structural hardening of access points, Infographics systems, ventilations systems safeguards and landside improvements.
- **Port Authority of New York and New Jersey, On-Call Civil Engineering Services.** *Principal-in-Charge* responsible for QA/QC of civil engineering services involving roadway, drainage and pavement design at JFK, Newark and LaGuardia Airports. In responsible charge of engineers and in the performance of engineering assessments and development of design plans, specifications and cost estimates. Representative projects included JFK Airport Service Road and Taxiway Rehabilitation, LaGuardia Airport Service Road Restoration, Oil/Water Separator Installations at Buildings 14, 75 and 79 at Newark International Airport, JFK Cargo Road Rehabilitation and Guard Post Crash Barriers at JFK.
- **Port Authority of New York and New Jersey, JFK Airport, Aviation, Environmental & Facility Engineering On-Call Services.** *Project Engineer* (Environmental) on comprehensive building conditions assessment program (including environmental and indoor air quality aspects) for over ten (10) Authority-owned airport buildings.
- **Port Authority of New York and New Jersey, Facilities Condition Surveys, JFK International Airport.** *Principal-in-Charge*. Conducted comprehensive facilities conditions surveys for 12 buildings totaling over 1.3 million sq. ft. Items included structural, mechanical, architectural, civil, electrical and environmental. Provided these services under an extremely tight fast track schedule to meet the Port Authority's end-of-lease requirements.

- **Port Authority of New York and New Jersey, On Call Maintenance Engineering Services.** *Principal-in-Charge*. Provided engineering services to the Port Authority for the past three years for maintenance, rehabilitation and reconstruction projects at Newark, LaGuardia and JFK International Airports. Projects have ranged from parking lot resurfacing and roadway drainage improvements to facility upgrades for wash racks and oil/water separators.
- **New York City Transit Environmental Services On-Call Contract.** *Principal-in-Charge*. Responsible for oversight of all environmental engineering projects, including abatement management, environmental site assessments (Phase I/II) including asbestos containing materials inspections, remedial investigations and sampling, remedial alternative assessments and conceptual designs (Phase II), groundwater monitoring programs, and compliance and permitting assignments for properties and right-of-ways impacted by contamination. Experience with NYACT includes over 40 assignments to date covering all five boroughs of NYC, and has specifically included management and staffing of rapid-response and 24 hour/7 day a week abatement management projects.
- **New Jersey Transit General Environmental Consultant Contract.** *Principal-in-Charge*. Under ten (10) different work orders to-date, managed services associated with feasibility studies/constraints analyses (including costing), site investigations, compliance and permitting support, noise and archaeological services, and asbestos/lead paint abatement support.
- **Delaware River Joint Toll Bridge Commission, Civil/Structural Task Order.** *Principal-in-Charge* for providing professional engineering services for various general civil/structural engineering projects within the Commission's jurisdiction. Tasks include sitework, surveying, foundations, highways, lighting, integrity inspections, structural repairs, substructure repairs/evaluation, steel painting/containment and disposal, toll plaza design, geotechnical engineering, traffic engineering, contract plans/specifications, estimates/schedules and environmental permits. Initial tasks have included Toll Plaza Impact Attenuators Improvements which included the study and design for the installation of attenuators and related toll plaza safety improvements at the I-78 Toll Bridge, Milford-Montague Bridge, I-80 Delaware Water Gap Bridge and the Portland-Columbia Toll Bridge, a systemwide substructure inspection and evaluation of all river piers in accordance with National Bridge Inspection Standards (NBIS), including structural and underwater inspectors and the preparation of a NJ Department of Environmental Protection Annual Report for stormwater management regulation compliance.
- **Compliance Audits Under Environmental Services IQC, USPS, NY.** *Principal-in-Charge* for compliance audits and reviews at major postal facilities throughout NY State. Compliance work covered lead/asbestos, energy/water/air conservation, air quality, stormwater management, USTs/ASTs, PCBs, waste management and pollution prevention, spill prevention, and worker health and safety.
- **IDC for A/E Services, Primarily for Picatinny Arsenal, USACE, New York District.** *Principal-in-Charge*. Providing A/E services under a multi-year, indefinite quantity contract for facilities, infrastructure and utility improvements projects, including hazardous waste abatement.
- **IDC No. 15, USACE, New York District.** *Principal-in-Charge*. Providing A/E services under a multi-year, indefinite quantity contract for facilities, infrastructure and utility improvements projects, including environmental abatement for Fort Hamilton, Brooklyn, New York. Also provided A/E services as part of Ramapo River (Upper Passaic Basin) Flood Control project.

Louis Berger & Assoc PC

LOUIS HANNIGAN, CQE

Quality Assurance/Quality Control

EDUCATION
M.B.A, University of Chicago
B.S., Nautical Science, California State University
Construction Project Management Certificate Program, NYU School of Professional Continuing Studies, Expected Completion May 2011

PROFESSIONAL AFFILIATIONS/ TRAINING/ CERTIFICATIONS
Certified Quality Engineer/Quality Manager/Six Sigma Green Belt
Registrar Accreditation Board Quality Systems Lead Auditor

YEARS OF EXPERIENCE: 37

EMPLOYMENT HISTORY:
The Louis Berger Group, Inc. – January 2008 – Present
Church & Dwight Company, Inc. December 2002 to December 2007
The Pleiades Company, Inc./Raytheon Service Company – January 1995 to December 2002.
Military Logistics/Transportation industry July 1973 to January 1995

PROFESSIONAL EXPERIENCE
Mr. Hannigan has substantial experience and education in Quality, Operations, and Management. Mr. Hannigan has an MBA from the University of Chicago. He is a Certified Quality Systems Lead Auditor, Quality Engineer, Quality Manager, and Six Sigma Green Belt. Relevant experience includes:

- **Downtown Restoration Program, New York, NY.** *Quality Assurance Specialist.* In this capacity, Mr. Hannigan serves as a Quality Assurance Specialist for the Port Authority of New York & New Jersey (PANYNJ)'s World Trade Center (WTC) Transportation Hub Project within the Downtown Restoration Program. He assists in the implementation of the program's quality system in accordance with the Federal Transit Administration's (FTA) quality assurance guidelines. Mr. Hannigan also audits the quality program and the safety program for the internal departments and subcontractors against the FTA, OSHA, and the contractual requirements.

  The Transportation Hub proposes to establish the PATH terminal as the focal point of an intermodal transportation hub at the World Trade Center site, which would connect several major destinations along a single axis, including PATH, New York City subways, and existing and planned future surrounding developments. The subway lines in Lower Manhattan run in a north-south fashion, but there are few opportunities to interconnect these lines in an east-west direction. There is a clear need to "connect the dots" and link these various lines in Lower Manhattan with an east-west spine, an underground concourse that would facilitate intermodal transit connections. The concept would be for a Transportation Hub -- a major public space aligned underneath Dey Street, anchored by the World Financial Center Winter Garden to the west and an MTA subway "Transit Center" to the east. This Fulton Street Transit Center would be developed to address linkages between the J/M/Z, A/C and 4/5 transit lines located below the Broadway, Nassau, Fulton Street confluence. The Transportation Hub would provide a 3,000-

foot long enclosed public space and thoroughfare between these two anchors that could feature moving walkways to facilitate pedestrian circulation, as well as adjacent retail development.

- **Church & Dwight Company, Inc.** *Quality Engineer*. This company's products include medical devices, drugs and cosmetics. Created the corporate supplier auditing program. Audit the seven hundred plus suppliers, contract manufactures, and service providers against various standards, including ISO 9001:2000 and 21 CFR 820 (Medical Device). Managed the transformation of the Special Products Division to ISO 9001:2000 Quality System Standard. Manage the internal audit program for this division. Coordinate and facilitate the resolution of quality problems throughout the corporation. Coordinate the relationship of the manufacturing plants within the ISO 9001 Quality System.
- **The Pleiades Company, Inc./Raytheon Service Company.** *Quality Management Consultant.* Implemented ISO 9001 Quality Management Systems and obtained certifications for clients. Educated and trained hundreds of students in the principles and applications of quality. Conducted more than five hundred second party audits and third party assessments within a diverse range of industries. Served as a subcontracted auditor for a major quality systems registrar. Approved by the General Services Administration as MOBIS (Management Organizational Business Improvement Service) provider.
- **Military Logistics/Transportation industry.** *Commander, USNR; USCG licensed Master Mariner.* Positions of increasing responsibility from U.S. Merchant Marine deck officer on oil tankers to Commander, USNR.

Louis Berger & Assoc PC

PAUL DeMEO, P.E.
PMIS

EDUCATION
B.S.. Civil Engineering, Notre Dame University, 1967
B.A., Notra Dame University, 1966

LICENCES/CERTIFICATIONS
Professional Engineer: PA

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. - June 1988 – Present
K&H Management Systems – 1983 -1988
Gilbert/Commonwealth, Inc. – 1970 - 1982

YEARS EXPERIENCE: 43

PROFESSIONAL EXPERIENCE
Mr. Paul DeMeo is the Senior Vice President for Management Systems possesses over 40 years of experience in Program Management, Construction Management, Civil Engineering, and Project Control System development. He is currently supporting a wide range of projects, performing management analyses, configuring and implementing systems, supporting project control assignments, and staffing new programs.

- **Downtown Restoration Program, Phase II.** *PANYNJ.* Served as Senior Program Manager on the FTA funded $3+ Billion World Trade Center (WTC) PATH Terminal Project, the $478 Million WTC Security Center and Tour Bus Facility Project, and WTC Site Planning and Development. Responsibilities included coordination with over $11 Billion in Lower Manhattan projects, including One World Trade Center, the WTC Memorial, the Fulton Street Transit Center, the West Street Development and other transportation infrastructure projects.
- **Downtown Restoration Program, Phase I.** *PANYNJ.* Served as Program Manager for the $544 Million Downtown Restoration Program consisting of three projects: the expansion of Exchange Place Station (tunneling, new switches and extended platforms); the restoration of the tunnels under the Hudson River connecting Exchange Place with New York; and the construction of a new terminal at the site of the former World Trade Center. Responsible for executive reporting, analysis of cost and schedule variances, public relations (including website development, presentations and computer animation), and coordination among the various stakeholders. Mr. DeMeo was recognized with the James G. Hellmuth citation for meritorious service for his participation in this latter role.
- **Newark International Airport Redevelopment Program, Phase II.** *PANYNJ.* Served as Senior Program Manager responsible for overseeing the $780M Redevelopment Program at Newark International Airport, which included new parking structures, an expanded roadway system, a new administration / ARFF facility, improved taxiways, and RON aircraft parking. Involved with initial planning, scope definition, model design, budgeting, scheduling and public relations. Responsible for coordinating Client activities with the Continental Global Gateway Program, which involved extensive development of Terminal C.

- **Newark International Airport Monorail/Northeast Corridor Connection (NEC) Program.** *PANYNJ.* Served as Program Manager for this $415M program, which extended the on-airport Monorail system approximately one mile to a new NEC Station. The station is composed of three major elements: two 32 feet wide and 1050 feet long NEC platforms, a 350' connecting Concourse and the Monorail Station. The program required increasing the number of electrified tracks along the corridor, in the area of the station, from four to a total of six. Reported to the Client Program Director and was responsible for overall coordination among design, management staff and construction contractors. Provided Program Management Services including: the establishment of the project's work breakdown and charge code structures; project authorization; project and annual budgeting; CPM scheduling; earned value analysis; actual expenditure and accruals monitoring and audit; cost forecasting and problem resolution analysis; document control; local area network administration; database application development; management presentation preparation; public relations; and weekly, monthly and annual status report preparation.
- **Newark International Airport Landside Access Project.** *PANYNJ.* Served as Program Manager responsible for managing the $100M Landside Access Project that involved airport approach and circulation roadways as well as bridges and ramps. Initial responsibilities included project definition, phasing and authorization. Program Management responsibilities included annual and project budgeting, coordination of design and construction, summary scheduling, cost forecasting, earned value analysis, progress reporting, and problem definition and resolution.
- **Newark International Airport Monorail.** *PANYNJ.* Served as Program Manager responsible for the $378M Monorail system which connects parking areas with the passenger terminals. Wrote a Program Management Manual defining organizational and communication standards, program policy and procedures, as well as reports and forms used by the staff. Prepared both program and executive level status reports; chaired monthly status meetings. Designed and deployed a Document Control System featuring document scanning and optical disk storage. Established a 100-user "campus" area computer network linking the Program office with field trailer operations.
- **Newark International Airport – International Arrivals Facility.** Served as Project Manager responsible for managing the $120M three-story structure that was constructed on the airside of Terminal B. The building was constructed adjacent to active apron areas; a service roadway and several baggage cart ramps ran through the site. Wrote the Project Authorization, participated in value engineering and partnering activities, coordinated design and construction activities, produced project cost and schedule reports, and developed a fire safety operations manual and airside security procedures.
- **Qatar Project Management (QPM).** *Qatar Project Management.* Served as Management Systems Advisor. QPM is a newly established enterprise formed to provide management services to Barwa and Qatari Diar – both major real estate investment companies. Implemented a full range of project controls, including a SharePoint based executive reporting systems with internet access from all project sites. Also provided management staff, associated training and procedures.
- **Masdar Headquarters.** *Abu Dhabi Future Energy Company.* Served as Management Systems Advisor for the Masdar Headquarters project in Abu Dhabi, United Arab Emirates. Commissioned by the government of Abu Dhabi to manage the design and construction of the one million square foot, mixed-use, "positive energy" Masdar Headquarters building.

Louis Berger & Assoc PC

JIM MURPHY
Scheduler

EDUCATION
M.B.A., Construction Management and Real Estate Finance, Columbia University, New York, NY
B.S., Engineering and Computer Science, United States Military Academy at West Point, NY

PUBLICATIONS
Co-author, *The Effect of Resource Constraints on Project Schedules,* presented to the American Association of Cost Engineers.
Co-author, *New Ideas in Overhead Recovery,* presented to the American Association of Cost Engineers.

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- Sept 2009 – Present

YEARS EXPERIENCE: 16

PROFESSIONAL EXPERIENCE
He has over 16 years of experience in dispute resolution, project management and controls, which, when coupled with his education in construction management, engineering, and finance, allows him to service a broad range of client needs.

- **The Louis Berger Group, Inc.** – *Integrated Master Schedule Manager.* Serving as Integrated Master Schedule Manager on the World Trade Center Redevelopment Program, having responsibility for:

  - Developing the program's Integrated Master Schedule (overall program construction schedule) using P3 / P6 (recently released web-based system)
  - Conceptual Planning and Logistics Analysis
  - Earned value analysis
  - Value planning construction activities and identifying best practices for sequencing and logistics
  - 3D modeling and 4D scheduling / visualization support
  - Revising the progression of planned construction to advance schedule, minimize impacts and interferences, enhance cost savings

- **Newark Airport Terminal C Modernization - Newark, NJ. Program Controls Manager** on this $1 billion program to expand and improve Continental Airlines' facilities at Newark. The project was designed and built under a fast-track process under operating conditions, requiring significant phasing and staging operations, and numerous construction change orders. Responsibilities included management of a staff of eight, including estimating, scheduling, contract administration, and cost & document controls. Additional responsibilities included significant involvement in change order review process as well as claims evaluation.

- **Greyhawk - New York, NY**. **Managing Consultant.** Performed dispute resolution, construction management, estimating, scheduling, and other project controls needs.

Brooklyn Courthouse and General Post Office – Brooklyn, NY. Claims Manager and Scheduler. Four years into the construction of this project, the contractor went bankrupt. Called in to evaluate construction claims, currently totaling almost $100 million, and to facilitate the schedule review and monitoring of the surety's replacement contractor's schedule. The project is nearing a successful completion, with the claim review complete and ADR still pending. **URS Construction Services, Inc. - New York, NY. World Trade Center Reconstruction and PATH Transportation Hub – New York, NY. Master Scheduler** for this $10 Billion program to reconstruct the World Trade Center. As part of the PB-URS Joint Venture team, served as an extension of staff to the Port Authority of New York and New Jersey in facilitating the phasing and staging of the program. Also coordinated PB/URS' efforts to provide reports for FTA oversight, including the conduct of earned value reviews. Conducted schedule reviews, as well as manpower, security, and feasibility studies in support of the Site Integration Team. **Jersey City Schools Program - Jersey City, NJ. Deputy Program Manager** on this $1.1 billion program to construct 30 new schools and perform renovations and additions to 31 existing schools throughout the Jersey City Public School District. Managed a staff of 10 performing all program controls functions, including scheduling, cost management, and document controls. Successfully implemented web-based Prolog project management software as pilot project prior to company-wide implementation.

- **Construction Disputes Group - San Francisco, CA.** Managed dispute avoidance, mitigation, and resolution assignments on behalf of all parties to the construction process. Assignments have included assisting clients with document discovery; formulation of written discovery and deposition support; claim preparation, review and analysis; rendering expert testimony in deposition and mediation; formulation of written testimony and trial graphics; and trial and post-trial support.
- **Luster Construction Management, Project Controls Group - San Francisco, CA.** As **Project Controls Engineer**, produced initial and updated schedules for major construction projects utilizing Primavera project control software. Responsible for cost engineering, resource loading, production of as-built schedules, and schedule development. Served as in-house Primavera technical support to junior schedulers. Major projects included the San Francisco New Courts Building and the Bay Area Rapid Transit, Colma Parking Structure and Bridges.

Vollmer Associates - Engineers, Landscape Architects, Planners, New York, NY. As **Traffic Engineer,** conducted highway capacity analysis for proposed and existing roadways and development projects. Assisted in the production of environmental impact statements and project proposals. Projected future traffic patterns and demand. Projects included: Mount Sinai Hospital Expansion; National Tennis Center Expansion, Hoboken Shipyard, Van Wyck Expressway Traffic System Management; Route 9A Reconstruction; Triborough Bridge and Tunnel Authority EZ Pass Evaluation, and Rockaway Peninsula Bridges Studies.

United States Army, Fort Ord, CA. Commissioned Officer – Captain. Second in command of a 208-man service battery. Directly supervised 70 and responsible for all unit training, deployment, and systems management functions. Scheduled maintenance of $14 million in equipment and managed $2.1 million ammunition budget. Forecasted, procured, and coordinated delivery of ammunition for a cannon battalion. Led an 11-man fire support team into combat for Operation Just Cause in Panama. Team conducted security patrols, weapons collections and seizures, and foreign embassy guard.

Louis Berger & Assoc PC

IAN P. BALDWIN
Scheduler

EDUCATION
B.S., Construction Management, Pratt Institute, New York, NY
Certificates, AutoCAD Design, New York University, New York, NY

TECHNOLOGY SKILLS
AutoCAD, Primavera Project Planner, SureTrak Project Manager, Prolog Manager, CorelDraw, MS Excel, Project & PowerPoint.

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- 2008 – Present
Bovis Lead Lead – 2005 - 2008
Turner Construction – 1999 – 2005
HRH Construction – 1997 – 1998
Structure Tone, Inc. – 1991 – 1997
Tishman Construction – 1977 - 1991

YEARS EXPERIENCE: 30

PROFESSIONAL EXPERIENCE
Mr. Baldwin has an impressive 30-year career highlighted by exceptional growth and outstanding performance with a positive "can-do" attitude. A results-driven manager with consistent track record demonstrating self-motivation, creativity and initiative to exceed or achieve personal and corporate goals. An integral member of a cohesive management team, contributing broad-based perspective to achieve outstanding results. Remains on the cutting edge of technology; experienced in conducting presentations and training seminars utilizing computerized visual aids. Demonstrates broad-based strengths and accomplishments in:

- ✓ Change Management
- ✓ Custom Programming
- ✓ Cast Flow Projection
- ✓ Time Impact Analysis
- ✓ Risk Management
- ✓ Development Training
- ✓ Presentation Graphics
- ✓ Claims Analysis
- ✓ Site Safety/Logistics

- **Port Authority of New York & New Jersey (PANYNJ) Technical Center, Jersey City, NJ.** *Senior Scheduler.* Responsibilities include the development and maintenance of CPM schedules for several PANYNJ, as well as the review and approval of all contractor schedules. Currently assigned to the George Washington Bridge Palisades Interstate Parkway to Lower Level Connector Ramp, a $50M improvement project.

- **High-Rise Residential Projects.** *Senior Scheduler.* Responsible for developing and maintaining CPM schedules for several high-rise residential projects in the Miami area. Responsibilities included the development and implementation of schedule comparisons and narratives, as well as Time Impact Analysis and Delay Claims Analysis. Performed on-site status updates and conducted schedule meetings with entire field staff to ensure the on-time completion of all projects.

- **Various Projects.** *Senior Scheduling Engineer*. Responsible for creating and maintaining CPM schedules, time impact analysis and monthly progress reports as well as analyzing delay claims. Hired and trained junior schedulers for project assignments, in-house scheduling, and technical support. Coordinated all scheduling meetings with field staff to ensure all projects were completed on time and as per contract documents.

  Accomplishments:
  - ✓ Implemented company-wide tracking and reporting system to enable executive management to assess productivity and project progress, simultaneously anticipating and averting project delays and claims. Monitor accuracy and diligence of scheduled maintenance through on-site visits to job sites.
  - ✓ Assessed needs and developed company-wide training seminars on CPM scheduling and software integration; designed and created detailed training manuals and PowerPoint presentations.

- **Various Projects.** *Assistant Project Manager / Scheduling Engineer*. Responsible for all project planning and scheduling as well as site safety and logistics utilizing a variety of scheduling and computer graphics software. Tracked and maintained change management and budget revision system as well as assisted in the contractor payment review, negotiation and approval process.

  Accomplishments:
  - ✓ Created custom designed cost and data entry and tracking templates using Lotus 1-2-3, macro-programming language; generated CAD graphics for site safety and logistics planning as well as stacking plans.
  - ✓ Successfully fostered collaboration between project management and sales personnel to create outstanding presentation materials instrumental in acquiring several major projects.

- **Various Projects.** *Assistant Project Manager / Scheduler*. Produced CPM logic generated schedules for new as well as periodical updating of ongoing projects using Primavera software. Created custom designed change management and scheduling program using spreadsheet application utilized by both office staff and project managers in the field. Created computer graphics and CADD drawings for site safety and logistics planning.

- **St. Regis Hotel, New York, NY.** *Assistant Project Manager*. Created and implemented change order / purchase order tracking system. Tracked and managed project shop drawings, submittals, material delivery and request for information logs.

- **U.S. Trust Headquarters, New York, NY.** Performed management responsibilities for 36-story interior construction and base building upgrade of newly constructed building at 114 West 47th Street. Coordinated activities of all contractors and field management staff; tracked performance and approved subcontractor payments and change orders. Reviewed and approved contractor payment requisitions and change orders.

- **Barclays Bank Plaza, New York, NY.** Provided overall management responsibilities for demolition of 14-story building and construction of new three-level public plaza.

Louis Berger & Assoc PC

SWADEEP C. RACHOOR
Project Control Specialist

EDUCATION:
M.S., Construction Management, Stevens Institute of Technology, 2007
B.S., Architecture, CSIIT, Jawaharlal Nehru Technological University, 2005

PROFESSIONAL AFFILIATIONS:
Indian Architect and Builder Association, Associate Member
Indian Institute of Architects, Associate Member

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. – January 2009 – Present
Kel-Tech Construction – June 2008 – January 2009
Aetna Insurance – January 2008 – May 2008
Skanska USA Building, Inc. – May 2007 – December 2007
Design Clique – January 2005 – December 2005
Basics – November 1999 – June 2000

YEARS EXPERIENCE: 5

PROFESSIONAL EXPERIENCE
Mr. Swadeep C. Rachoor is a Project Controls Engineer with over 5 years of experience in the construction industry. He has been involved in scheduling, cost and resource loading, document control, and space planning. In addition, Mr. Rachoor has served as an Assistant Architect as well as a Project Engineer, where he performed various project management functions.

- **Port Authority of New York and New Jersey, Aviation Perimeter Intrusion Detection Systems (PIDS) for Newark Liberty Int'l Airport (EWR), John F. Kennedy Int'l Airport (JFK), LaGuardia (LGA), Teeterboro (TEB)** *Project Controls Specialist.* Performed detailed schedule Analysis on PIDS Integrated Master Schedule (IMS) utilizing P6.1 for issues and inefficiencies in appropriate resource allocations, deadlines, milestones, critical path and made suggestions on adding and removing excess Float. Monitor progress against interim milestone dates and report issues/delays and make suggestions to resolve scheduling delays and conflicts.
- **Port Authority of New York and New Jersey.** *Project Controls Specialist.* Performed Schedule Risk Assessment and Cost Risk Assessment using P6.1, The John F. Kennedy Hangar 12 & Building 94 Demolition and Airport Beacon Light Relocation Project, New York, NY and The George Washington Bridge Structural Steel Rehabilitation & West Bound Repaving Project, New York, NY.
- **Port Authority of New York and New Jersey, Downtown Restoration Program, New York, NY.** P*roject Controls Specialist.* Traced critical paths and prepared summary schedule leading to the 9/11 Milestone on the following projects: Transportation Hub; Freedom Tower; Streets, Parks and Plazas; NS11MM Memorial and Museum; and Vehicle Security Center 1, South Basement. Currently working on the World Trade Center Construction (WTCC) cost and

schedule integration model. Assists in creating Cost Accounts in the P6 database. Enters the Activity Line Items (ALI) into the appropriate Global Activity Code Listing. Assigns the codes to the activities in the Program Controls Model. Assists with the development of the Integrated Cost and Schedule Reporting System. Working to expand the Program Controls Resource Library. Assigns resources to activities in the Program Control Schedule.

- **G&W System Tech Data Facility, Fuze and PHS&T Picatinny Arsenal Support.** *Project Controls Specialist.* Performed detailed resource and cost analysis, Impact of time on the schedule and Critical path analysis using P6.1. Analyzed: the critical path to see how long the project will take to complete and which activities are critical; the activities with invalid relationships appearing in the Scheduling/Leveling Report; the progress and status of the project & forecasted the likely future performance of the project to indicate how much of the budget has been spent, in view of the amount of work done and generated Earned Value reports (EV) from P6.1. Also made suggestions on how to get the schedule back on track.
- **City of New Orleans Disaster Recovery Project, New Orleans, LA.** *Project Controls Specialist*. Reviews existing Document Storage. Structured project into two departments: Public Works Projects and Public Facilities Projects. Produces Document Control flow charts. Develops Document Types. Working on developing individual document libraries for each project. Creates functional flow **char**ts for Document Control SharePoint site. Coordinates with Technical team to develop SharePoint features.
- **Various Projects, Morristown, NJ.** *Project Controls Engineer*. Worked on the proposed schedule for the New Jersey Turnpike Exits 6 to 9 Widening Project, which involved both cost and resource loading. Also developed the proposal schedule for the Susquehanna-Roseland 500 KV Transmission Line Project for Geotechnical Services. Trained in Primavera Contract Manager and P6.1.
- **New York City School Construction Authority (NYCSCA), Brooklyn, NY.** *Project Engineer*. Responsibilities included: generating, forwarding and tracking status of submittals; contacting subcontractors and suppliers for bid solicitations and evaluating lower bids and aiding in pricing alternates; assisting in managing the project; providing necessary coordination and planning for NYCSCA along with the subcontractors; attending and taking notes for project team meetings, including biweekly NYCSCA/ Architect meetings and subcontractor coordination meetings and distributing the meeting minutes to participants. Prepared and submitted daily/monthly project progress reports; prepared and answer RFIs; attended NYCSCA project meetings and updated construction schedule based on project team input; oversaw the set-up of job files. Prepared, updated and monitored logs for tracking submittals, RFIs, change orders, etc., considered necessary for a successful project. Prepared biweekly/monthly schedule in coordination with the Project Manager and Field Supervisor.
- **Various Projects, Middletown, CT.** *Facilities Space Planning and Move Coordinator.* Provided project management support, which involved space planning to assist Aetna with the proper placement of new offices, rooms, systems furniture and employees within established guidelines. Produced drawings for review and feedback and involved project management staff as needed for construction services. Coordinated with employees to ensure that all move-related information was properly reflected on Move Spreadsheets.

Louis Berger & Assoc PC

SNIGDHA NANDIVADA
Scheduler

EDUCATION
M.S., Construction Management, Stevens Institute of Technology, Hoboken, NJ, 2007
Bachelor of Architecture, School of Planning and Architecture, JNT University, India 2005

PROFESSIONAL TRAINING
Primavera Project Planner for Scheduling and MS-Excel for Estimation, Risk Analysis, Timberline Estimating, Document Control, 2007
AutoCAD, ADT and 3D StudioMax, 2005
Adobe Photoshop, Coral Draw, 2004

PROFESSIONAL MEMBERSHIPS
Registered Architect, Council of Architecture-India
Registered Member of Indian Architect and Builder Association
Registered Member of India Institute of Interior Design

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.– January 2008 – Present
Architectural Associates – August 2005 – July 2006

YEARS EXPERIENCE: 5

PROFESSIONAL EXPERIENCE
Ms. Nandivada possesses three years of relevant experience as a Project Controls Specialist. She has experience with conceptual planning and logistics analysis; developing integrated construction schedules and cost control using Primavera tools; performing Earned Value Analysis; and BIM 4d scheduling. Previously, Ms. Nandivada worked as an Architect on various major projects, including commercial complexes, hospitals, hotels, auditoriums, and residential buildings (including row houses, duplex houses and luxury Condos). Ms. Nandivada is skilled in developing and implementing feasibility studies and technical studies to support the design of projects requiring State and Federal permits, and monitoring the success of projects. Relevant projects include:

- **Port Authority of New York & New Jersey, NY.** *Project Controls Manager.* Currently working on a $50 Million George Washington Bridge Bus Station Redevelopment project for Port Authority Tunnels Bridges &Terminals (TB&T) division, Ms Nandivada is responsible to manage and coordinate all the Project Controls activities for facility design/construction projects including CPM scheduling, budgeting, cost estimating, risk management, reporting, document control, contract administration and administrative services.

  Ms Nandivada is also responsible for design and construction management activities, demonstrating advanced technical experience, education in architecture and knowledge of architectural/engineering systems. Management activities include reviewing and providing comments on the technical design aspects of the facility projects.

  - **New York City School Construction Authority, NY.** *Project Controls Specialist.* Worked on a $3.2 Billion project for NYCSCA, Ms Nandivada was responsible for all

aspects of schedule and cost control for schools in the City of New York using PPM (Version 6). Roles and responsibilities include: Developing and managing 200 integrated construction project lifecycle schedules for capacity projects spanning across 7 divisions within SCA including prototyping, testing and resource management; Identifying scope changes, impact analysis, developing and issuing project change notices, conducting project management briefings; Cost and schedule trends, and analysis of schedule and expenditures using earned value management; Responsible for the provision of overall cost controlling functions for the whole project lifecycle including initial budget set-up, updates and monitoring, forecasting, budget rebaseline, and cost reporting, from the beginning through the completion of the project; BvA (budget versus actual) variance analysis and reconciliation with the financial data sent by Finance, and make any necessary adjustment and accruals; Prepare detailed weekly/monthly cost and schedule reports for all divisions of SCA and external agencies, prototyping, testing and analysis of various report requirements & specifications; Creating documentation of Users Guide, Training Manuals and Business Processes.

- **Modi Construction, Phases 1, 2 & 3 -Township, Hyderabad, India.** *Architect*, responsible for performing technical studies and developing a township with a combination of row houses and independent condos with all the amenities in the township. The project encompassed residential buildings and a combination of commercial and recreational spaces. Took site visits at required stages and made necessary suggestions and recommendations to advise site engineers. Also, assisted in the development of design plans and prepared specifications.
- **Deccan Chronicle Holdings PVT Ltd., Corporate Office Building, Hyderabad, India.** *Architect* responsible for developing office space suiting to future needs with adaptable spaces. Assisted the Chief Architect in designing the structure, and gave necessary suggestions and technical details regarding the new elements that could be used in the building. Performed and coordinated site meetings with client, prime contractor and Chief Architect at each phase of the construction. Additionally, performed construction management, which included field placement of structures and selection of materials. Submitted all drawings to the client and contractors using AutoCAD 2004 and worked with the estimating team and 3D model making agency to enlighten the interior works for the client's satisfaction and approval.
- **Deccan Chronicle Holdings PVT Ltd., Commercial Complex, Hyderabad, India.** *Architect* responsible for developing the design catering to future expansions. Assisted the Chief Architect in designing the structure, have necessary suggestions and technical details regarding the new elements that could be used in the building. Performed and coordinated site meetings with client, prime contractor and Chief Architect at each phase of the construction. Prepared presentation drawings including 3D Views.
- **Deccan Chronicle Holdings PVT Ltd., Secundrabad Club- Sports & Recreational Center, Hyderabad, India.** *Associate Architect*, which included the following responsibilities: designed the facility according to standards and produced AutoCAD drawings for field work; created layout and production of site plans and preliminary drawings; prepared presentation drawings as per client requirements; managed daily project completion and trades coordination; prepared municipal drawings which had to be approved by the Government of Hyderabad; and conducted field inspections to verify compliance with construction documents and drawings.

Louis Berger & Assoc PC

RONI LYN KITCHELL, EIT
Senior Project Controls Specialist

EDUCATION
B.S., Civil Engineering and Economics, Rutgers University, New Brunswick, NJ, 1991

PROFESSIONAL CERTIFICATIONS
Project Management Certification, 2001
Engineering-in-Training Certification, 1993

PROFESSIONAL AFFILIATIONS
New Jersey Board of Professional Engineers – Newark, New Jersey
California Board of Professional Engineers and Land Surveyors – Sacramento, California

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. - October 2007 - Present
Terminal Construction Corporation – September 2004 – April 2007
Eclaro International, Inc. – September 2003 – April 2004
EGIS, Inc. – August 2002 – January 2003
Turner Construction – February 1999 – February 2002
Barba – Arkhon – Feburary 1998 – November 1998
Capital Project Management, Inc. – April 1997 – October 1997
Boswell Engineering – May 1996 – April 1997
Nordling, Dean Electronic Co., Inc. – March 1995 – May 1996
California Department of Transportation – September 1991 – February 1995

YEARS EXPERIENCE: 9

PROFESSIONAL EXPERIENCE:

- **Downtown Restoration Program, New York, NY.** *Senior Project Controls Specialist.* Responsible for the review, assessment, validation, and valuation of costs for both design and construction, including monthly cost analysis, invoice processing, and management reporting costs for the $2.877 Billion World Trade Center Freedom Tower Project. Maintains and updates cost-tracking databases and reports to incorporate procurement and contract changes for payments, cost analysis and monthly reporting. Reviews and applies contract language and terms to budget management and reporting.
- **Project Engineering**. Maintained daily interaction with subcontractors, Architect/Engineer, and the Owner in resolving technical, financial and administrative concerns to ensure on-schedule/on-budget completion of projects. Supervised and delegated work to office engineers and staff that generated, analyzed, and tracked cost controls, change orders, material submissions, and delivery status. Administered and enforced company procedures. Pro-actively investigated areas of potential conflict and/or claim. Authored all project communications. Automated logs and correspondence to increase productivity and reduce staff costs.
- **Arch Insurance, New York, NY.** *Contracts & Budgets Analyst (Contract Position).* Developed, executed, and regulated facilities/operations contracts and riders, budgets, bids and

Requests for Proposals. Created departmental policies and procedures. Maintained financial reports for operating expenses and capital projects, and reconciled records with corporate office. Reviewed, reconciled, and approved contractor billing, vendor invoices, payments, back-charges, change orders and contractual adjustments for facility expenses and capital projects; analyzed lease abstracts and maintained lease database; verified rent, escalations, and proportional operational expenses for all properties (national and international locations). Designed Access Reports for budget monitoring.

- **New York City Transit, New York, NY.** *Budget Analyst (Consultant Position).* Responsible for budget development, budget monitoring, variance analysis and reporting for New York City Transit (MTA) subway construction projects in excess of $600 Million. Audited project records for accuracy, completeness, and compliance with federal and state regulations and contractual requirements. Investigated discrepancies in Engineering Force Account charges. Performed confidential ad-hoc budgetary reports as needed by senior management.
- **Various Projects.** *Cost Engineer / Civil Engineer.* Forecasted financial expenditures and earnings on $25 - $35 Million construction projects; calculated and interpreted risk management measures; analyzed budget estimates versus actual expenses; investigated and corrected erroneous general ledger entries; audited jobsite records to ensure compliance with company policy; readjusted earning and expenditures according to changes in project volume and schedule; generated confidential quarterly, monthly, and ad-hoc financial reports for review by the company president and senior management to determine the annual profit plan and sales goals.
- *Construction Claims Analyst* Applied knowledge of the construction industry to provide litigation support for lawyers, insurance companies, and contractors involved on projects that had gone into arbitration and/or claim proceedings. Intensively researched job-site records and drawings for key documents to be used in support or defense of the claim. Supervised technicians in the creation, maintenance and reconciliation of databases and spreadsheets used in issue analyses. Prepared graphic and written materials for presentation to clients and prospective clients.
- **Various Projects.** *Project Engineer/Manager, Municipal Design.* Responsible for all aspects of municipal and private construction projects from designing and estimating, to bid openings and contract award. Increased profit by 30% as the new Project Manager on the re-design of a 48-lot subdivision; supervised Design Engineer, redesigned parcels, and generated monthly and change order billing. Designed plans and specifications for roadway resurfacing and sewer replacement projects. Designed site plans for Sprint's wireless communication antenna installations in New York City.
- **Various Projects.** *Project Engineer, Electrical.* Project Engineer for three Project Managers; supervised trade workers; assisted in the day-to-day operations on multiple multi-million dollar construction projects; provided engineering support to the Manager and Foreman on each job. Monitored performance and financial status of projects; evaluated vendor proposals; negotiated and executed subcontracts; prepared monthly budgets and billing.
- **Various Projects.** *Assistant Resident Engineer.* Worked in field designing and inspected multi-million dollar State transportation projects to ensure compliance with the contract documents. Supervised trade workers and inspected earthwork, grading, drainage, electrical work, and finished roadway. Liaison between the State and Bay Area Rapid Transit (BART).

JOI KOENIG
Cost Control

EDUCATION
B.S., Operations Research & Industrial Engineering, Cornell University, 1991

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- March 2006 – Present

YEARS EXPERIENCE: 9

PROFESSIONAL EXPERIENCE

Ms. Joi Koenig is a Project Control Specialist / Cost-Schedule Engineer with over 15 years of experience in the infrastructure development field. She has experience in project scheduling, project and program cost control, the preparation of management reports, and database design and implementation.

- **PANYNJ Project Management Office Assessment.** Interviewed PANYNJ Executive Management and Project Management staff, analyzed business processes by comparing them to other agencies such as MTA CC, NJDOT, DASNY and NYC SCA, quantified project management and project controls staff to capital spending for the four Line Departments (Aviation, PATH, Port Commerce and Tunnels, Bridges and Terminals), investigated the PM's role in the PANYNJ's restructured PM organization, developed recommendations for increasing the effectiveness of the central Project Management Office per principles of the Project Management Institute.
- **PANYNJ Terminal A Modernization & Expansion Program Planning.** Program Controls Manager responsible for providing Program Management Support Services to the Port Authority of New York & New Jersey (PANYNJ). Responsibilities included: producing management reports; coordination of sub-consultant payment process; creating and maintaining program cost, budget, and task order tracking database; creation of Program Management Plan; and oversight of document control and scheduling functions.
- **PANYNJ Newark Liberty International Airport Redevelopment Program.** Program Controls Manager for this $780 Million program. Responsibilities included: maintaining program master schedule, which incorporated Port Authority (PA), tenant, and contractor schedules; developing project and departmental baseline budgets and then tracking actual costs and forecasts on a monthly basis and comparing against baselines; producing weekly and monthly management reports, which included project status, summary schedule, cost forecasts, and earned value analysis; reviewing and monitoring tenant costs, invoices, and change orders; maintaining program Work Breakdown Structure; overseeing document control functions; and preparing annual department budget.
- **PANYNJ Terminal B Renovation, Newark Liberty International Airport.** Program Controls Manager responsible for developing and updating the project master schedule and management reports for this $136 Million Capital Program to renovate Terminal B at Newark International Airport. Reports included project status, summary schedule, cost forecasts, and earned value analysis.

- **PANYNY Northeast Corridor Monorail Extension.** Cost Control Engineer responsible for performing cost analysis for the NE Corridor Monorail Extension Project. Coordinated the download of accounting information and audited actual charges made to the project. Created and maintained cost database and reports for $13 Million annual Newark Airport major work program projects.
- **New York City Department of Transportation, St. George Ferry Terminal Renovation.** Responsible for tracking of submittals and requests for information. Created and maintained project master schedule for this $20 Million wharf and ferry slip renovation. Developed and issued weekly and quarterly cost and schedule status reports.
- **NJDOT Department of Transportation Pilot Program.** Supervised four schedulers to create design phase schedules for a $2.4 Billion pilot program. Developed scheduling standards and procedures for capital program. Designed and managed the development of the Project Management Control System (PMCS), allowing real time access to project schedule and cost information; system fed a Department-wide monthly executive status report. Responsible for coordinating the implementation of the PMCS and project controls process (scheduling, cost, reporting) with Project Management and Design Units. Identified and categorized more than 28,000 jobs into distinct projects for the classification and cost control of a $3.5 Billion capital program. Created format for reporting of in-house project costs and forum for Project Manager approval of these charges.
- **New York City School Construction Authority Various Projects.** Developed and updated project master schedules that tracked projects from scope through closeout for 200 major construction projects. Assisted in designing a user-friendly schedule and cost reporting system used by over 300 users; wrote user's manual and trained users. Developed model to determine annual level of full-time employees needed for a $5 Billion Capital Program.
- **Metropolitan Transportation Authority Various Projects.** Reviewed and analyzed contractor project schedules. Maintained and enhanced database of project concerns; used data to develop quarterly statistical report. Developed, authored, and issued a project procedures manual improving productivity and enhancing performance and quality of service.
- **Eastman Kodak.** Industrial Engineer responsible for maintaining cost and schedule controls for development of waste tracking system. Led production team to design and implement data handling system.

Louis Berger & Assoc PC

JODY WILLIAMS
Risk Assessment

EDUCATION
Bachelor of Construction Engineering Technology, Purdue University, Fort Wayne, IN, 2006
Associate's Degree, Architectural Engineering Technology, Purdue University, Fort Wayne, IN, 2005

PROFESSIONAL TRAINING
BIM Model Visualizations/4D Schedule Development
Timberline for Construction Cost Estimating
Revit and Navis Works
Primavera P5 & P6
Primavera Pertmaster and @Risk for Risk Analysis
Expedition and Livelink (Document Control)
Earned Value Analysis using Prism
AutoCad, Microsoft Office

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- July 2007 – Present

YEARS EXPERIENCE: 5

PROFESSIONAL EXPERIENCE
Ms. Williams is a Project Control Engineer with over five years experience in scheduling, engineering, and estimating. She has provided valuable services for Port Authority projects.

- **Port Authority of New York & New Jersey, Newark Liberty International Airport, Newark, NJ.** *Project Control Specialist*. This project consists of the redevelopment of Terminal A, which includes a new state of the art facility, a new infrastructure system consisting of both utilities and roadways, two 3,500 parking space garages, and the future development of the current Terminal A. Responsibilities include: creating initial construction schedules; assisting with the development of the Program Management Plan; creating a schedule for the Airport Operations Management preliminary meeting with tenants, contract negotiations and takeovers, and construction; provides schedule risk management; and assists in program economics based on initial and updated construction schedules. Project Value: $3.8 Billion.

- **MASDAR Headquarters, Abu Dhabi, United Arab Emirates.** *Project Controls Specialist.* This project consists of the design and construction of a new world-class innovative headquarter building for the new zero-carbon city of MASDAR, Abu Dhabi. This building will be a landmark in sustainable architecture and engineering design, exceeding the current highest standards of green building energy and waste efficiency, material technologies, and integrated design thinking (above LEED Platinum+). Responsibilities include: working with field personal to collect risk ranges for various affected activities; creating and inputting the ranges into Pertmaster; identifies errors within the project to deter false results; generates results for affected risks; and assists in creating final risk reports.

- **US Army Corps of Engineers, Picatinny Arsenal, Sparta, NJ.** *Project Control Specialist*. This consists of four different projects, which include an Explosives Research and Development Facility, a Pyrotechnics Research and Technology Facility including a Flare Tunnel, a High Energy Propellant Formulation Facility, and the Picatinny Arsenal Fire Station. Responsible for: working with Corps of Engineers (COE) in analyzing construction progress schedules; developing progress schedule reports; providing information to assist the COE in aiding their appointed contractors with scheduling errors; providing schedule analysis for the COE for

Request for Payment from their appointed contractors; analyzing monthly contractor progress schedules for logic, negative float, and out of sequence work; and analyzing documents and schedules for generating reports for claims resolution.

- **Various Project, Lebanon, NJ.** *Project Estimator*. Responsible for performing quantity take-offs and preparing cost estimates for large general contracting firms. Served as a liaison between the Project Manager and General Contractor to ensure accurate and qualified estimates. Also, managed the preparation of shop drawings for large projects including *Freehold Raceway Mall* and *The Watermark.* Performed for Port Morris Tile and Marble.

- **Various Projects, Waterloo, IN.** *Structural Detailer*. Responsible for performing project specific calculations of overall length of columns and rafters and calculations of overall length of purlins and girts. Also responsible for designing the roof and wall sheeting systems based on customer specifications. Worked directly with engineering staff to finalize building layouts for implementation of production and construction, and with Customer Service and Quality Service Representatives to ensure customer satisfaction. Performed at Nucor Building Systems.

Louis Berger & Assoc PC

JERRY DREYON REAVES
Document Control

EDUCATION
B.A., Psychology, Rutgers University, 1983
Geographical Information Systems (GIS) studies, Rutgers University
520 Intranetware 4.11 Administration, Novell Education
Paralegal Program, Diploma, New York University (NYU)
Certificate, Pre-Legal Studies, Seton Hall Law Center and Rutgers School of Law, Newark, NJ

CERTIFICATIONS
Geomatics (GIS) Rutgers University

COMPUTER SKILLS
- **Network Environment**

Topologies:	10Base-T Ethernet	ARCnet
Servers:	Compaq Proliant 5500	Dell 486DX/33
Software:	Novell Netware 4.1	Novell Netware 3.11
Hardware:	Novell NE3200	HP SureStore 6000 Tape Backup

- **Workstation Environment**

Computers:	IBM Compatible 486/Pentium	Dell Gx & Ga Series
Operating Systems:	Windows 2000 & 98	Windows 95 (network)

- **Software:** Livelink (Open Text), MS Office Suite 2000 (Word, Excel, PowerPoint), Paint Shop Pro, Adobe Acrobat Professional, Adobe Photoshop, MS Visual Basic, Novell ZENworks, Compaq Insight Manager, Trimble GPS Pathfinder & Asset Surveyor software, ArcView 3.2, ArcInfo 8.1, Kane Security Analyst, Cumulus, MS Exchange, Expedition

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- July 2010 - Present

YEARS EXPERIENCE: 17

PROFESSIONAL EXPERIENCE
Mr. Jerry (Drey) Reaves is currently a Digital Information Manager. His background includes administration of an intranet-based documentation system that includes a document exchange function and enormous photo management component, development of an automated system for the approval, tracking, and distribution of confidential and privileged security information, and implementation and maintenance of a Work Breakdown Structure based document management system. Mr. Reaves' duties have also included administrating and supporting a Novell network with more than 200 users while providing desktop support. Relevant project experience includes:

- **Port Authority of New York & New Jersey, Terminal A Modernization & Expansion Program, Newark Liberty International Airport, Newark, NJ**. *Digital Information Manager*. Responsible for content management of an intranet website (Livelink), that contains

confidential and security documents and is accessed by internal and remote staff. Job functions include: applying permissions, creating groups, training website users, supervising staff, overseeing scanning operations, and converting native files to a portable document format. Also responsible for developing and implementing systems to supplement the management of program-related records.

- **Port Authority of New York & New Jersey, Downtown Restoration Program (DRP), New York, NY.** *Website Content & Electronic Documents Manager.* Responsible for populating and maintaining documents on an intranet website. Other job functions include: supervising a staff, overseeing scanning operations to convert hard copies to electronic format, as well as maintaining hard-copy files for retrieval and archiving. Creating project folders and acquiring and codifying document files and images, and coordinates intranet access for internal and external staff to facilitate the exchange of documents. Develop and implement a tracking system for confidential and security related documents. Responsible for maintaining a digital asset management system comprised of hundreds of progress photos. Trains and assists website users. Also responsible for implementing an independent e-mail storage application.
- **Port Authority of New York & New Jersey, Newark International Airport Redevelopment Program, Newark, NJ.** *Help Desk Manager*. Supported a Novell network with more than 200 end-users. Duties included administration of a NetWare 4.11 server, and desktop maintenance comprised of PC configuration, software installation and upgrades; hardware, software, network and printing troubleshooting, and performance monitoring. Responsible for daily network backups, file maintenance, and security. Also responsible for creating and controlling network accounts, upgrading and configuring software for workstations, as well as attaching and administering peripheral devices. Maintained Novell and Microsoft Exchange user accounts.
- **Port Authority of New York & New Jersey, Newark International Airport Redevelopment Program, Newark, NJ.** *Document and Communications Systems Manager.* Responsible for the implementation and maintenance of a document scanning system used to manage program documentation. Responsible for: Supervising and training staff; designing and maintaining a database system to facilitate document retrieval; developing document tracking and control systems for contract drawings, and specifications; constructing a Resource Library to house various reports, proposals, and technical information; maintaining physical control of program related files; acting as purchasing agent for hardware, software, and various office equipment. Maintained a hardware and software inventory tracking and retrieval system, and administered an AT&T System 25 phone system.
- **Port Authority of New York & New Jersey, Newark International Airport Redevelopment Program, Newark, NJ.** *Document Control Technician.* Assisted in implementing and designing various logs and databases for document tracking. Also assisted in constructing a document coding system for program correspondence; coordination and distribution of project design review documents and drawings; maintenance of central file area.
- **Port Authority of New York & New Jersey (Engineering Department), New York, NY.** *Contract Administration Aide.* Processed Management and Law Department review documents, prepared bid schedules and reported bid results to contractors. Also distributed contract drawings and specifications to prospective bidders; instructed contractors on the Port Authority construction bid process.

Louis Berger & Assoc PC

ADAM KING

Project Controls Training & Implementation

EDUCATION

BA, English, Salisbury University, Salisbury, MD, 2008

PROFESSIONAL CERTIFICATIONS

Certified Primavera Consultant & Trainer for P6 (V6 and V7)
Suretrak, Contractor & Contract Manager

HISTORY OF EMPLOYMENT

Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- Sept 2010 – Present
Catalyst, Inc. – 2008 - 2010

YEARS EXPERIENCE: 2

PROFESSIONAL EXPERIENCE

Mr. Adam King possesses over two years of Primavera consulting experience with small business and individual markets. He has provided project management training and consulting to a multitude of Clients in several industries including, federal, state and local government agencies, construction and engineering, research and development, and manufacturing. Mr. King has received consistently above-average performance evaluations by Clientele for all classes to date. Moreover, he received Catalyst's performance excellence award for outstanding professional development in learning and becoming certified in Primavera tools. Other skills include:

SCHEDULING:

- ✓ Trains Clients not only in Primavera P6, but also in scheduling and project controls concepts from the Project Management Institute (PMI). The majority of these projects have been construction projects with fast paced deliverables to federal, state and private owners.

MANAGEMENT:

- ✓ Certified Primavera Contract Manager Ver. 12 - have trained Clients both on-site and off-site in an open classroom setting in how to use this document management system and in aligning their business processes and procedures to work within this tool.

TECHNOLOGY:

- ✓ Worked closely with a variety of Clients to resolve specialized issues regarding Primavera tools in conjunction with other applications resulting in experience with several other software platforms.
- ✓ Have effectively integrated Primavera tools with the most recent versions of Hard Dollar Estimating, Timberline, Microsoft SharePoint, and Microsoft Project.
- ✓ Currently learning Bentley Systems (BIM, Autodesk)

- ➢ **Various Projects.** *Project Controls Implementation & Training.* Develop and evaluate new strategies to enhance upon existing project controls practices. Responsible for developing and implementing training programs for clients and in-house management staff. Develops

Primavera P6, Contract Manager, Earned Value and other project controls related training manuals.

- **Various Projects.** *Primavera Consulting / Implementation Services.* Worked closely with Client in federals, state and local governments, and the construction and engineering industries to manage project schedules and train personnel in Primavera tools (P6, P6 Web, SureTrak, P3, and Contract Manager) as well as providing technology support for several other software programs. Also successfully implemented tools and strategies to a variety of Clients.

Louis Berger & Assoc PC

GERARD SALERNITANO

Program/Project Manager - Aviation

EDUCATION

B.S., Civil Engineering, New Jersey Institute of Technology, 1996

HISTORY OF EMPLOYMENT

Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. - January 2003 to Present
URS - June 1998 to January 2003
Killam Associates - May 1996 to June 1998
Spiniello Construction - June 1987 to November 1995

YEARS EXPERIENCE: 14

PROFFESSIONAL EXPERIENCE

Gerard Salernitano serves as a Senior Airport Engineer with 14 years of technical engineering experience and has managed many types of diverse projects with a strong emphasis in aeronautical engineering. With his core base of understanding in the metropolitan New York and New Jersey area, Mr. Salernitano possesses a strong understanding of the Port Authority of New York & New Jersey (PANYNJ) requirements. As an extension-of-staff for PANYNJ, he has been on site at Newark Liberty International Airport for the Terminal "A" Modernization and Expansion Program and more recently, a project management position for the Project Management Office (PMO) in the Physical Plant and Redevelopment Division for NJ Airports.

Mr. Salernitano was also a Principal Engineer responsible for the complete development of contract documents, including contract drawings, contract specifications and cost estimates for a wide range of clients. During that timeframe, he had the opportunity to manage and design many projects generated from the PANYNJ on-call contracts: including the Engineering Division, Quality Assurance Division and Security Divisions.

Prior to earning his Engineering degree, Mr. Salernitano has over 7 years of hands-on construction experience from a well reputable utility contractor. His specific construction responsibilities included the rehabilitation of existing water mains and installing new utility systems, such as sanitary sewers, storm sewers, and water mains.

Port Authority of New York & New Jersey Experience

- *Project Management – Physical Plant and Redevelopment Division (EWR & TEB)*
- *Modernization and Expansion of Terminal A (EWR)*
- *Project Management – Prequalification of Aeronautical Paving Contractors (EWR, TEB, JFK, LGA, & SWF)*
- *On-Call Civil Engineering Design (PANY&NJ)*
- *Perimeter Intrusion Detection System, PIDS (EWR, TEB, JFK, & LGA)*
- *On-Call Building Condition Assessment (PANY&NJ – Quality Assurance Division)*

- **Port Authority of New York & New Jersey, Project Management of Aviation Projects at Newark Liberty International Airport and Teterboro Airport.** Senior Airport Engineer currently performing duties as an extension to project staff for PANYNJ. The role consists of performing project management duties for facilities at Newark Liberty International Airport and Teterboro Airport. These endeavors include the Pavement Markings project and the Re-pave of Hotel Road at EWR and the following projects at TEB; Rehabilitation of Runway 1-19, Rehabilitation of Taxiway G, and Taxiway K, Installation of a perimeter Patrol Road, Athletic fields Improvements, Wetland Analysis, RSA Headwall Obstruction Study, Wetland Mitigation Development and a study involving Wetland Mitigation vs. Wildlife Hazards and more.
- **Port Authority of New York & New Jersey, Terminal A Modernization & Expansion Program at Newark Liberty International Airport.** Senior Airport Engineer working on the modernization and expansion of Terminal A at Newark Liberty International Airport. The project includes a new state of the art Terminal with new parking garages, air train facility, hotel and new roadway system. His specific responsibilities include the management and design of the roadway system and the utility infrastructure at the airport and surrounding areas.
- **Port Authority of New York & New Jersey, Perimeter Intrusion Detection System (PIDS).** Principal Engineer for the development of a high profile security project at the four major NY and NJ Airports (JFK, LGA, EWR, & TEB). The project is a large joint venture Design-Build project led by Raytheon Engineering, which consists of enhancing security to the Airport perimeters.
- **Port Authority of New York & New Jersey, Rehabilitation of the West Restricted Vehicle Service Road and Taxiway 'S', John F. Kennedy International Airport, NY**. Principal Engineer for the rehabilitation of a 1-mile length of airside service road and rehabilitation to the existing the Taxiway 'S' cracked slabs. Responsibilities included development of Preliminary Engineering documents and including an evaluation of the existing pavement and providing recommendations in a pavement design report. Design work included geometric design, pavement design, and drainage design in accordance with AASHTO and FAA guidelines. Other responsibilities included preparing the contract specifications and construction cost estimate.
- **Port Authority of New York & New Jersey, Crash Barriers – Guard Posts A-1 & A-2, H, J, O, P, R, S, V, W, Z and 106, JFK International Airport, NY.** Principal Engineer responsible for preparation of a major contract modification to the existing construction contract. The work included civil, mechanical, electrical and traffic engineering. Specific civil design work included providing geometric design and installation of a Delta Crash Barrier system at Guard Post H. Electrical and Mechanical Engineering support included design of electrical and hydraulic underground conduits, and electrical single-line diagrams, panel schedules and related arrangement details at site. Other responsibilities included preparing the contract specifications and construction cost estimate.
- **Port Authority of New York & New Jersey, Building 79-Modification of Truck Wash Bay 10, Newark International Airport, NJ.** Principal Engineer responsible for development of construction documents to allow for an outdoor wash-pad that separates storm water from wash water. Specific civil design work included site grading, drainage and pavement design. Electrical and Mechanical support included design of pumps, motor operated valves, and flow switches. Structural support included design of a steel portal frame around the bay opening designed to absorb impact from maintenance vehicles. Other responsibilities included preparing the contract specifications and construction cost estimate.

Louis Berger & Assoc PC

ANDREW CANGIANO P.E., P.P.
Program/Project Manager - Aviation

EDUCATION
B.S., Civil Engineering – New Jersey Institute of Technology-1995

CERTIFICATIONS
Professional Engineer, States of NJ & NY, Professional Planner, State of NJ

YEARS EXPERIENCE: 15

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. – 2009-Present
Corestates, Inc. – 2008–2009
Keller & Kirkpatrick, Inc. –1997-2008
Sverdrup & Parcel (Jacobs) – 1995-1997

PROFESSIONAL EXPERIENCE

Mr. Cangiano has over 15 years of engineering, planning and project management experience in civil engineering related projects. His experience covers a wide-range of construction and engineering projects and was previously responsible for the planning, engineering design and construction administration associated with wide variety of public and private sector projects. Mr. Cangiano is a licensed professional engineer and a licensed professional planner.

This work included airport planning and feasibility studies, airport security improvements, airport utility infrastructure assessments, development of new roads and infrastructure, sewer rehabilitations, pavement rehabilitation, commercial and residential land development, land acquisitions and property subdivisions. Other associated assignments included land use permitting such as, freshwater wetland, coastal area, flood-hazard area and water front development permitting. Mr. Cangiano has routinely provided professional testimony for municipal land use boards and public forum meetings.

- **Terminal A Modernization & Expansion Program at Newark Liberty International Airport (EWR), Port Authority of NY & NJ.** Senior Airport Engineer, the project includes planning of a new terminal, parking garages, new roadway system and associated infrastructure improvements. Responsible for management of a preferred roadway system and utility infrastructure system. Including the analysis of the frontage conditions at the existing terminal, relocation of existing roadways and evaluation of existing utility systems, including fuel delivery/hydrant system, sanitary sewers, storm sewers, water and other utilities. Also assisted in the scheduling, cost estimating and construction phasing for alternate scheme to rehabilitate the elevated roadways at existing terminal.
- **First Aviation Services, Terminal Upgrade, Teterboro Airport (TEB), Teterboro, NJ.** Task Manager, scope included field evaluation of the existing facilities. Prepared plans for the expansion of pavement for taxiways, aircraft parking and drainage infrastructure. Coordinated with client, airport operator and the Port Authority personnel. Design improvements were in accordance with Port Authority and FAA design standards.

- **Inspection of Accessory Structures, Port Authority of NY & NJ**. Project entailed inspection and structural analysis of the accessory structures on the Gothals, Bayonne, and Outer bridge Crossing. Performed in-depth structural condition surveys on the overhead signage and lighting structures on the bridge spans and approaches. Structural condition surveys included extensive field notes and photographs, noting estimated deficiencies and recommended repairs.
- **Security Improvements, Orange County Airport (MGJ), Orange County, NY.** Project Manager responsible for the development of the airport security improvement project. The project scope consists of engineering design and construction inspection services to provide much needed security features to Orange County Airport, improvements include barbed wire security fencing, automated slide gates with keypad access control, a DVR monitoring system, security lighting, security cameras, a card badge system and associated electrical/communication wiring and conduits. The system will monitor gates, administration building and four hangers.
- **PFC Application Assistance, Long Island MacArthur Airport(ISP), Islip, NY** Task Manager, responsible for facility and infrastructure assessment and evaluation. The project provides Long Island MacArthur Airport with PFC application assistance and the related steps necessary for implementation. The program includes capital program and AIP and PFC program review, preparation of an airport capital and financial plan, prepare ALP updates, FAA staff consultation and review prepare and coordination for final application for FAA.
- **On-Call Planning Services, Ball field Feasibility Analysis, T.F. Green Airport (PVD), Rhode Island Airport Corporation ("RIAC"), Warwick RI**. Senior Airport engineer, provided RIAC with a feasibility analysis regarding the of relocating existing baseball fields and two soccer fields located south of the Airport, to alternate sites located at either the Community College of Rhode Island, Knight Campus, or two other nearby sites. The effort addressed the suitability of the sites to accommodate the ball fields, parking needs and other associated amenities. Site boundaries, topography, environmental issues and existing conditions were taken into consideration when developing new ball field schemes. Responsible for the evaluation of the properties, design of conceptual plans and preparation of construction cost estimates.
- **Program Status Reporting, Florida Department of Transportation, Distrct-6**. Task Manager in support of a District-wide Public Transportation Consultant agreement with the Florida Department of Transportation (FDOT). Performed Project Management Site Visits and prepared associated reports for FDOT Aviation Program funded projects in Dade and Monroe Counties. Project and airport managers were interviewed and verified compliance with Joint Participation Agreements and other project documents.
- **St. Philips Academy, Newark, NJ.** Project Manager, responsible for zoning and site plan approvals and for developing site plans and construction documents for a private elementary school. This project includes rehabilitation of an existing factory building for conversion to a private school, a multifunction play area and a parking facility across the street. The project was designed to be a “green” project meeting the requirements for LEEDS certification. Specifically designed the site infrastructure, roof drainage system and stormwater management measures to meet the LEED certification goals. Additional responsibilities include construction administration during the construction period.

Louis Berger & Assoc PC

H. WAYNE VALENTINE, P.E.
Program/Project Manager - TBT

EDUCATION
M.S., Civil Engineering, New Jersey Institute of Technology, 1983
B.S., Civil Engineering Technology, Fairleigh Dickinson University, 1974

PROFESSIONAL REGISTRATIONS
Professional Engineer – NJ

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. - January 1998 – Present

YEARS EXPERIENCE: 36

PROFESSIONAL EXPERIENCE
Mr. Valentine has over 36 years experience in construction and engineering design. He has experience in project and construction management and quality control for a wide range of public and private agencies, as well as experience in administration of construction contracts. Mr. Valentine has additional experience in procurement, negotiation of subcontracts, financial forecasts, scheduling, cost estimating and claims. Mr. Valentine also performs administrative oversight for five-onsite construction inspectors located out of state, provides constructability reviews of plans and specifications and assists the marketing department in performing site inspections. His Previous experience includes on-site contract administration and construction management, the structural design of large natural draft and mechanical draft cooling towers, tall chimneys and large silos. His overall experience also includes seven years experience with the inspection, rehabilitation and structural design of fixed span and movable span bridges and concrete culverts. Relevant project experience includes the following:

- **The Port Authority of New York & New Jersey, Security System Replacement at Journal Square Transportation Center and Upper Level of the Hackensack River Bridge.** *Project Manager* for the Stage 3 and Stage 4 services. Provided on site inspection of the existing security system at over 50 locations, provided recommended repairs and replacement of entrance- ways and security upgrades for the PATH wide standard Lenel Security system. Security upgrade includes doors, grates and frames, access control modules, such as card readers, door contacts, motion detectors, duress buttons wiring and tie –in to existing system while maintaining security. Existing CCTV cameras were also integrated into the Lenel security system. Project involved preparing contract plans and specifications and cost estimate for demolition of existing facilities, installing new system, up-grading or replacement of doorways.
- **Port Authority of New York & New Jersey, On Call Construction Management Services.** *Project Manager* providing Construction Administration and Inspection on the construction of the various new and maintenance type projects at Newark Liberty Airport and the Brooklyn Marine Terminal. Projects have included installation of fire alarm system upgrades, emergency repairs to waterlines, drainage improvements, resurfacing parking lots, installation of security devices and CCTV cameras in Terminals A and C at the Airport, and piling repairs and restoration along with structural repairs to existing bulkheads and piers at the Marine Terminal.

Responsible for overall supervision of four on-site construction inspectors and providing contract administration with the PANYNJ Construction Management Department.

- **Red Bull – New York, Inc: Harrison, New Jersey**. *Project Manager/Resident Engineer providing Construction Administration and Inspection* on the construction of a large sports and entertainment stadium. Performed inspections to verify that construction is in accordance with the plans, specifications, local codes and standards of the Owner. Provided progress reports to the Corporate Representative. Assisted client in reviewing construction costs. Monitored project schedules, evaluated change orders and assisted client in the buy-out of the project, and interfaced with the Contractor's Project Manager and Facility Coordinator. Scope of responsibilities on site include but were not limited to monitoring of all concrete work (below/above grade); structural steel fabrication and erection; precast stadia fabrication and erection; precast plank fabrication and installation; all MEP installations; all building envelope installations (stadium skin, canopy skin, building skin, all roofs); soccer field construction including drainage and underground heating systems; site utility and drainage installation; all audio-visual, security, telecast, broadcasting systems; installation of stadium seating as well as overseeing the architectural finishes of the arena's integrated 5 story multi-use building that is to hold the player locker rooms, kitchen/catering areas, Red Bull New York offices, luxury suites, restaurant/bar areas as well as broadcast facilities. This effort includes direct management of a team of an Resident Engineer,(4) field inspectors additional to a subcontractor inspection/laboratory team of NJ State certified DCA Special Inspectors for (1) structural steel bolting/welding, (2) concrete placement & testing laboratory, (3) concrete reinforcement pre-placement inspection (1) spray-on fireproofing which totaled 11nspectors Additional team members were utilized when structural steel fabrication (in Canada) and precast concrete fabrication (in Bethlehem, PA and Gettysburg PA) were active. Completion Date: January 2010.

- **City of Newark, New Jersey, Wilson Ave Drainage Improvements, Pierson's Creek.** *Projec*t *Construction Manager/Resident Engineer* for Phase 1 of this $8.3 million project involving the removal and replacement of concrete curbs and sidewalks; installation of 1,800 linear feet of 4' by 10' precast box culvert; installing 48-inch pipe; open channel grading and excavation; micro-tunneling of two –60-inch diameter pipes; coordination with numerous public and private utilities, Conrail, and local business owners; relocation of existing utilities; and milling and resurfacing. Provided construction administration, construction inspection, coordination of materials testing, and coordination of maintenance and protection of traffic with local police. Evaluated and approved pay requests. Responsible for overall supervision of one on-site construction inspector and coordination with City of Newark Engineering Department.

- **NJ Turnpike Authority, Interchange No. 1 Toll Plaza Relocation Wetland Mitigation, Carneys Point, Salem County, NJ.** *Resident Engineer* for construction of a 13-acre wetland mitigation project to compensate for wetland impacts due to the relocation of the Interchange 1 Toll Plaza. Provided assistance during bid, shop drawing and submittal reviews, review and approval of contractor's project schedule, processing of construction progress payments, and construction inspection and administration in accordance with the NJTA *Construction Procedures Manual*. Responsible for overall supervision of on-site construction inspectors and coordination with the NJTA Project Manager.

Louis Berger & Assoc PC

JOHN C. HASSELMANN, P.E.
Program/Project Manager - TBT

EDUCATION
B.S., Civil Engineering, Old Dominion University, 1988

PROFESSIONAL REGISTRATION
Professional Engineer, New Jersey [redacted] and Virginia [redacted]

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. – April 2006 - Present

YEARS EXPERIENCE: 28

PROFESSIONAL EXPERIENCE
Mr. Hasselmann is a licensed civil engineer with 20 years of professional experience in engineering, management, design and construction. Mr. Hasselmann manages multi-discipline Architect-Engineer teams for planning and design of facilities in New York and New Jersey, and manages construction support services including engineering during design services, and inspection and scheduling. He was with US Army Corps of Engineers (USACE) in Baltimore, Europe and North Atlantic Division in New York. Mr. Hasselmann has extensive management experience including broad oversight of regional programs, management of Architect/Engineer and Construction contracts at numerous sites, and leadership and management of design-build project delivery teams.

- **New York District Army Corps of Engineers, Facility Renovations, Fort Hamilton, NY.** *Program Manager* for renovations to heating ventilation and air conditioning systems to three (3) buildings: Bldg #114 Administrative Medical, valued at $3,000,000; Bldg # 230 Army Harbor Defense Museum valued at $200,000; and Bldg # 402 the MWR Gymnasium valued at $2,500,000. Mr. Hasselmann led the design teams to evaluate existing system equipment conditions and the presence of hazardous materials, best value evaluation of system replacement options, and provide the complete design for system replacements.
- **New York District Army Corps of Engineers, All Weather Marksmanship Facility, Fort Drum, NY.** *Charrette Facilitator and Program Manager* for planning charrette services to provide three (3) in-door marksmanship facilities valued at $5,000,000 each, and that meet Range Operations requirements, minimize range down time and maintenance issues, and meet Fort Drum master planning requirements, as well USACE design and cost estimating requirements. Mr. Hasselmann managed a multi-disciplined design team to provide three (3) preliminary site locations, structural considerations, utility identification, storm water drainage plan, and firing range safety appurtenances as well as concept design and drawings, design analysis and recommendations, and a PACES cost estimate to validate the DoD 1391 document.
- **New York District Army Corps of Engineers, Picatinny Conference Center, Picatinny Arsenal, Dover, NJ.** *Project Manager* for design and construction support of renovation and expansion plan to an existing building. Renovations valued at $4 million. Design included damage assessment, structural shoring and rehabilitation, design of catering facilities and conference space. Considerations during design included existing structure, lines-of-sight for Command Town Hall meetings, multi-media equipment and lighting levels. Construction phase

services include demolition and shoring plan approval, and on-site demolition phase structural inspection.

- **Armament Technology Facility, Armament Integration Concept and Full Design, Picatinny Arsenal, Dover, NJ**. *Project Manager* for Armament Technology Facility, Armament Integration Concept Design, Picatinny Arsenal, Dover, NJ. Charrette Facilitator and Project Manager for Code 3 Parametric Design (15%), and Full Design (100%) to construct a testing and simulation laboratory and indoor firing range that sustains high pressures caused by large caliber weaponry. Construction valued at $9 million. Mr. Hasselmann managed multi-disciplined design team to provide preliminary Lab and Range site location, structural considerations, utility identification, storm water drainage plan, and firing range safety appurtenances as well as concept design and drawings, design analysis and recommendations, and a PACES cost estimate to validate the DoD 1391 document. Full Design was approved in Federal Fiscal Year 2007, and Mr. Hasselmann led design team for progress submittals including DoD Explosive Safety Board. Design considerations include aggressive ventilation in range to abate industrial hygiene hazards created by air borne lead and silica dust.
- **USACE Resident Office Construction Support Services, Picatinny Arsenal, NJ.** *Program Manager*. Supported Resident Construction Office with construction schedule review, claims analysis, and construction inspection services including daily reports, RFI responses, and contractor manpower analyses.
- **Pyrotechnics Research Facility Design, Picatinny Arsenal**. **Pyrotechnics Research Facility Design, Picatinny Arsenal**. *Technical Reviewer* for the design of $10 million, 5-building complex for testing, research and development of pyrotechnic flares at Picatinny Arsenal. Facility is designed with substantial dividing walls for blast protection in accordance with DA PAM 385-64 base on hazardous operations involving classified explosives. Supporting facilities include ultra high speed deluge fire protection, fire service tanks/pumps/piping, intrinsically safe electrical fixtures, explosion-proof HVAC systems, fugitive emissions controls, storm and sanitary sewers, access roads, potable water, electrical service, natural gas service, fiber optics/information systems, security systems and industrial gases.
- **Design for the Modified Record Fire (MRF) Range, West Point Military Academy.** *Technical Reviewer and Construction Phase Support Manager* for Design to upgrade USMA's historic firing range to meet current US Army standards. Design included upgrading range with options for fiber optics and SIT targetry, solutions for site drainage and flooding problems, electrical wiring malfunctions, and environmental permitting requirements for Long Pond Brook. Site improvements included demolition, Design for Instruction Building, Latrine, and Covered Mess. Final design of MRF Range which has MCA construction funding of $4,000,000. Construction Phase Support included submittal review and RFI responses.
- **Emergency Program Manager, US Army Corps of Engineers, Northeast Regional Office (North Atlantic Division), Emergency Management, Brooklyn, NY**. Managed Emergency Flood Control Program for Northeast, as well as ongoing relationship with FEMA, under which several million dollars are assigned for recovery efforts including emergency temporary housing, power, and other utility connections. Mr. Hasselmann ensured that Regional Office was prepared to manage responses to hurricanes, local floods, river ice jams, oil spills, and national security events.

Louis Berger & Assoc PC

RICHARD W. LAW, P.E.

Program/Project Manager - TBT

EDUCATION

B.S., Civil Engineering, Stevens Institute of Technology, New Jersey, 1986

PROFESSIONAL LICENSES

Professional Engineer – NY and NJ

HISTORY OF EMPLOYMENT

Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. - April 1998 to Present
Amercom Corp. - October 1991 to April 1998
NH Bettigole, PA - August 1986 to October 1991

YEARS EXPERIENCE: 24

PROFESSIONAL EXPERIENCE

Mr. Law has over 24 years of technical and management experience in civil engineering related projects. The majority of his experience is on projects in the New Jersey and New York metropolitan area. He has also spent 9 years working overseas managing some most noteworthy and high profile projects. As a designer and project manager, he has worked on all aspects of civil engineering and has prepared many designs and complete bidding documents on many different types of projects. While serving as a Resident Engineer, he has gained a significant amount of field experience, which he has reflected on the designs under his supervision.

- **Port Authority of New York & New Jersey (PANYNJ), Lower Manhattan Reconstruction Project, New York City.** *Construction and Design Management Specialist* preparing Project Management Manuals for WTC Memorial and One World Trade Center (Freedom Tower). Task included compilation of all procedures, controls, roles, responsibilities and technical obligations required for these two major components of this extremely high-profile project. Included numerous technical review/evaluation meetings necessary to providing realistic and useful Project Management Manuals, which will be primary management resource during lifespan of projects.
- **Port Authority of New York & New Jersey (PANYNJ), Lot G Reconstruction, Newark Airport, NJ.** *Project Manager* for design of reconfiguration of access roads to and including Lot G at Newark Airport to provide safe access road and organized parking facility consistent with ongoing airport expansion. Involved monitoring existing and proposed traffic management systems, design of parking facility including layout, temporary traffic control (including detours), lighting and construction staging and multiple discipline coordination with adjacent roads, parking garages and access roads. Traffic management for these projects challenging due to necessity of extremely efficient traffic control to limit impact in these heavily trafficked areas.
- **Port Authority of New York & New Jersey (PANYNJ), George Washington Bridge Deck Repairs and Approach Reconstruction.** *Project Manager* for design for construction staging and traffic control for overall project, which involved sub-consultants and agencies. Project included designing desirable traffic control measures for each construction stage, designing detours for more problematic and/or critical construction stages, temporary and permanent signage and striping, and safety improvements. Project required multiple and inter-governmental coordination for George Washington Bridge as well as Palisades Interstate Parkway and NJDOT

Approach Roads. Project was in one of most heavily travelled corridor which serves as main approach to New York City. High traffic volumes, restricted working areas, high traffic demands and stringent restraints from local opposition to project made this work particularly challenging.

- **Port Authority of New York & New Jersey (PANYNJ), Goethals Bridge and Outerbridge Crossing Lighting and Impact Attenuation Replacement Project and the Bayonne Bridge Toll Plaza Impact Attenuation Replacement Project**. *Project Manager* for each contract, including design of most desirable traffic control measures, construction staging, and detouring for problematic/critical construction stages. Complex traffic control measures were required at each site, especially Goethals Bridge due to numerous access roads and connectors in this highly urban, heavily travelled area.
- **General Services Administration, General Services Office Manhattan Office, New York City.** *Construction Manager* for various building reconstruction/renovation projects for two GSA primary government buildings in Manhattan. Included day-to-day inspection of contractor's construction operation, progress schedule, and chairing progress meetings attended by all relevant parties. Several projects were simultaneously ongoing. Position included numerous technical review/evaluation meetings, addressing all construction-related issues and disputes including providing responses to all RFIs, issuing of RFPs and negotiation of Contract Modifications.
- **PM Design Phase, RE Construction Phase, World Bank, Hanoi Urban Transport Improvement Project, Hanoi, Vietnam.** *Project Manager/Resident Engineer* responsible for the supervision of construction works for full reconstruction of 7.4km urban highway through most densely populated and congested sections of Hanoi. Project involved major intersection reconfigurations, full roadway reconstruction including a complete urban drainage system, multiple utility relocations and many new ramps and retaining wall structures. Coordination between many various agencies was required to ensure compliance with local regulations and permit requirements.
- **Asian Development Bank, Second Highway No. 1 Improvement Project, Hanoi to Lang-Son, Vietnam.** *Project Manager* for supervision of completion of construction works for new highway corridor extending 160km south from China to Hanoi. This new rural highway serves Northern Vietnam as primary north-south route in region. Roadway was constructed in area with varying terrain from mountainous sections with very high cut and fill sections to flatlands with poor soil conditions, requiring numerous soft soil treatment measures. Numerous large bridge structures, box culverts and highway overpasses/interchanges were included.
- **World Bank, Hanoi South Development Corridor Project, Vietnam.** *Project Manager/Resident Engineer* for Contract Management and Supervision of completion of construction works for new highway corridor extending 26 km south from the City of Hanoi. Project involved coordination and supervision of 4 main contractors and numerous sub-contractors.
- **World Bank, PM Design Phase/RE Construction Phase, Hanoi Urban Transport Improvement Project, Vietnam.** *Project Manager/Roadway Design Engineer* for design of roadway traffic and safety improvements in Hanoi. Project included 42km of highway and local street redesigns in three main Corridors and two Quarters of city's most densely populated and congested sections. Project also included preparation of 4 procurement packages including Traffic Signals (at 76 intersections), Vehicles, Enforcement Equipment, and Communications Equipment.

Louis Berger & Assoc PC

RICHARD BARRINGTON, P.E.
Program/Project Manager - TBT

EDUCATION
B.S./1996/Civil and Environmental Engineering Cornell University

PROFESSIONAL REGISTRATION
Professional Engineer – NJ

PROFESSIONAL ASSOCIATIONS
American Society of Civil Engineers

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.– Nov.2004 to Present

YEARS EXPERIENCE: 14

PROFESSIONAL EXPERIENCE
Mr. Barrington is a licensed principal engineer with over fourteen (14) years experience in design services for civil and environmental engineering. He has been involved in a wide variety of projects for both private and public sector clients. His experience ranges from preliminary investigations and conceptual plans, through design and preparation of contract documents, to construction phase services. He has specific technical expertise pertaining to both the regulatory end and the private developer end of site development. Relevant project experience includes the following:

- **Port Authority of New York & New Jersey, On-Call Civil Engineering Services.** *Project Manager* responsible for civil engineering and design associated with roadway, drainage and pavement design at JFK, Newark and LaGuardia Airports. Performed engineering assessments and development of design plans, specifications and cost estimates for EWR Baywater Piping Removal, Building 141 Site/Civil and Parking Design.
- **Port Authority of New York & New Jersey, On-Call Security Engineering Services, EWR Unmanned Gates Stage 1 through 4.** *Project Manager* responsible for civil engineering and design associated with security improvements at three (3) Unmanned Gate Locations at Newark Liberty International Airport. The project included both physical and technical improvements consistent with existing PANYNJ technology requirements and design based threat requirements.
- **Port Authority of New York & New Jersey, On-Call Security Engineering Services, LGA Unmanned Gates Stage 1 through 4.** *Project Manager* responsible for civil engineering and design associated with security improvements at two (2) Unmanned Gate Locations at LaGuardia Airport. The project included both physical and technical improvements consistent with existing PANYNJ technology requirements and design based threat requirements.
- **Port Authority of New York & New Jersey, On-Call Security Engineering Services, Holland & Lincoln Tunnel Strengthening Stage 1 through 4.** *Project Manager* responsible for developing Stage 1 Report inclusive of multiple modifications addressing strengthening of elements at both facilities consistent with PANYNJ requirements. Additionally, civil engineer responsible for drainage improvements at certain portal locations including Lincoln Tunnel Dyer

Plaza.

- **PANYNJ, Perimeter Intrusion Detection Systems, Design/Build Project.** Civil/Structural Engineer responsible for providing lead design engineering services for civil/utilities and environmental/permitting aspects as well mechanical and electrical engineering support services within the command and control rooms for this **confidential** security PIDS design/build project for all major NY and NJ airports.
- **Red Bull New York, Pro Soccer Training Facility, Hanover Township, NJ.** Responsible for the permitting and construction documents associated with the creation of a professional soccer training facility in Hanover Township New Jersey. In addition to site design and layout, the project also included design of a new pump station and force main in addition to utility services for the site buildings and fields, icnlsuive of booster pumps to facilitate irrigation design.
- **Bryant Park Development Corporation, Bryant Park Subterranean Switchgear Room, New York NY.** *Civil/Structural Engineer* responsible for providing lead engineering services associated with the planning and NYCDOT permitting for a new underground office/maintenance spaces including a new switchgear room. The work included coordination with Con Edison and NYCDOT to obtain permits to place transformers within City right of way and to facilitate relocation of utilities with City ROW.
- **New York City Law Department, Staten Island Bluebelt, Staten Island, NY.** *Civil Engineer* responsible for preparation of subdivision plans, roadway improvement plans, site plans, utility plans, grading and drainage, and expert witness testimony for condemnation of over ten (10) parcels as acquired by the City of New York in areas within the Richmond Terrace Region. Additionally, provided consulting and review services to respond to questions and rebuttals from opposing legal counsel.
- **College Point Associates, Waldbaum's Plaza, College Point NY.** *Civil Engineer* responsible for preparation of roadway improvement plans, site plans, utility plans, grading and drainage, and zoning applications forms for private client to aid in the redevelopment of the College Point Plaza in College Point NY.
- **DEVCO, Transit Village / Gateway Redevelopment Project, New Brunswick, NJ.** Responsible for the permitting and site civil construction documents associated with the creation of a mixed use redevelopment site in New Brunswick New Jersey. In addition to site design and layout, the project also included incorporation of various perimeter security devices such as bollards to control vehicular and pedestrian traffic.
- **Readington Board of Education, Pump Station and Forcemain Installation, Readington, NJ.** *Civil/Structural Engineer* responsible for providing lead design engineering services for the decommissioning of an existing wastewater treatment plant and the construction of a new pump station and one mile long force main to convey sanitary wastewater from the existing school facility to the existing township gravity sewer system. The project included the development of plans, specifications, cost estimates, and permits for the sanitary sewer project.
- **Hudson-Bergen Light Rail Transit System, Hudson County, New Jersey.** *Design Manager* responsible for the conceptual analysis and preliminary engineering for a 1 mile extension of the existing Light Rail System through the City of Bayonne New Jersey. Led a team of engineers and subconsultants through the initial stages of the design build process. Tasks include technical development of the proposed concepts, preparation of schedules, budgets, progress reports in addition to billing and coordination with both internal engineers and subconsultants.

Louis Berger & Assoc PC

VINAY MUDHOLKAR

Program/Project Manager - PATH

EDUCATION

MBA; Northeastern University, Boston, Mass, 1972
M.S., Civil Engineering, Worcester Polytechnic, 1970
Advanced Engineering at Mass Institute Technology, Cambridge, Mass; US
B.S., Civil Engineering, Poona, India

PROFESSIONAL CERTIFICATIONS

American Society of Civil Engineers
American Railway Engineering Association
UK Permanent Way Institute: Fellow
Amtrak: Safety Certified
OSHA: Safety Certified
UK: Track Certified

YEARS OF EXPERIENCE: 35

EMPLOYMENT HISOTRY

Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- 2006 – Present
Amtrak; 2004 – 2005
Bechtel Limited; 2000 – 2002
Bechtel Civil Company; 1997 – 2000
Massachusetts Bay Transportation Authority; 1996 – 1997
Guilford Transportation Industry; 1970 – 1996

PROFESSIONAL EXPERIENCE:

Mr. Mudholkar has over thirty five (35) years experience in Railway industry and consulting services in management of Railway in public as well as private sector, for freight and passenger operations in US as well as international. Prior to joining consulting services for Railways, held responsible positions in Freight and Passenger Railways. Recognized in industry for innovation and successful delivery of international railway programs. Relevant project experience includes the following:

- **International Rail Programs.** Implementation of Freight and Passenger Railway Programs from design to construction to final hand-back to operator. Preparation of construction contracts, technical review of bids, recommendations to Employer and award of contracts for execution. Construction supervision and management for quality, safety and design compliance for heavy axle freight and high speed passenger service. Selection and award of Freight and Passenger Rolling stock; coordination with stake holders: public officials and private shippers. Program management, project controls and finance. Selection of Operator for operation and Maintenance of railway. Mr. Mudholkar was Technical Manager for North-South Railway Project in Saudi Arabia from 2006 to 2010. Over 6 Billion USD new railway. Freight speed: 80-100 kmh; Passenger: 200 kmh. Mr. Mudholkar also worked on the Egypt National Railway, where he conducted safety assessment study for US TDA; recommendations accepted by ENR for implementation.

- **Amtrak, New York, Philadelphia.** *Director, Construction Program Management.* Managed infrastructure improvement program for Keystone Corridor (Philadelphia to Harrisburg) to deliver speed of 200 kmh. Received recognition from Commonwealth of Pennsylvania. Managed construction programs around New York: Eastside access project and other major construction development.

- **Bechtel Limited, London, UK, Network Rail Programs.** *Principal Engineer.* West Coast Main Line upgrade for 200kmh $10 Billion US program value; provided engineering and construction management support to Client for 4 years. Management of works under heavy traffic where safety was of utmost importance. As the principal engineer of Bechtel, managed activities of multi-functional consultants, contractors for the implementation of engineering upgrades for high corridor delivery to 200 kmh. Obtained approvals of various Railway Authorities, Government agencies, Strategic Rail authority, Environmental agencies and other Public agencies.

- **Bechtel Civil Company, San Francisco, US.** *Manager Engineering, Global Rail and Transit Group.* As rail specialist, participated in winning proposals of rail projects. In US: Yucca Mountain rail development, Nevada; Alameda Corridor, LA, California; New Jersey Light Rail; Portland Light Rail, Oregon. International projects: Chile copper mine RR; Korea HS Rail; Mexico Iron ore railway; Bangalore LRT, India; Brazil rail transport plan.

- **Massachusetts Bay Transport Authority (MBTA), Boston, US.** *Deputy Director of Commuter Railway.* Responsibilities included management of Transportation, Mechanical and Engineering departments of Commuter Rail service; responsible for on-time performance, safety, capital programs etc. Management of special construction programs: Central Artery rail projects, Fleet center development at North station, Boston; Passenger engine/ coach terminal facility; freight service interface. Management of New services starts: Portland, Maine; Old Colony, Worcester line in Massachusetts; New Jersey Transit.

- **Guilford Transport Co: B&M, Maine Central, D&H Railways.** *Chief Engineer and Asst Vice President Engineering.* Managed functional engineering responsibility of 2,000 mile railway in Northeast US: Design, Construction, Maintenance, Capital Programs. Responsible for safety and operational support. Managed design and construction of projects over 500 USD. Major civil works included rehabilitation of tunnels, bridges, tracks, yards and terminals, mechanical shops; construction of facilities for shippers; installation of fiber optics and signaling works. Managed Passenger service projects: new lines and stations. Recognized by Federal Railway Administration for safety.

Louis Berger & Assoc PC

MICHAEL SOLIMAN, P.E.
Program/Project Manager - PATH

EDUCATION
B.S., Civil Engineering, New Jersey Institute of Technology, 1990

PROFESSIONAL REGISTRATION
Professional Engineer - NJ, NY

YEARS OF EXPERIENCE: 20

EMPLOYMENT HISTORY
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. – August 2010 – Present
NYC Transit, Capital Program Management - 2008 – 2010
NYC Department of Transportation - 2007 – 2008
NYCDOT, Division of Bridges - 2004 – 2007
Parsons Transportation Group - 2000 – 2004
NYCDOT, Division of Bridges - 1994 – 2000
NYCDOT, Division of Highways - 1990 - 1994

PROFESSIONAL EXPERIENCE
Mr. Soliman's experience includes Bridge/Highway Design; Design/Construction Management; Design/Build of Bridges; Project Controls; Emergency Highway/Bridge Repair; and Code Compliance. Relevant project experience includes the following:

- **NYC Department of Transportation, New York, NY.** *Assistant Commissioner – Capital Program Management & Land Use.* Mr. Soliman's responsibilities included the following: Provided executive level direction to a staff of engineering, planning, and administrative professionals in the development of the City's $1.5 billion capital reconstruction plan; Managed the Departments Land Use unit, which oversees all external use of DOT owned mapped streets, including environmental/land use applications, Board of Standards & Appeals and leases; Served as the chief agency representative with the Department of Design and Construction (DDC) in the completion of designs and the contracting for construction of DOT-funded street projects. Additionally served as chief representative with other city agencies involved in street reconstruction, including the Department of Environmental Protection (DEP), the Department of Parks & Recreation (DPR), the Economic Development Corporation (EDC), etc.; Ensured proper reporting to Federal, State, and local oversight and grantor agencies involved in street reconstruction projects; In coordination with the inter-governmental staff and the Borough Commissioners, served as the agency representative with elected officials and community groups regarding street reconstruction projects; and Prepared complex engineering reports and evaluated emergency conditions for roadways. Provided additional technical support at the direction of the Deputy Commissioner for FCPM and the Commissioner.
- **NYC Department of Transportation, Division of Bridges, New York, NY.** *Director – Manhattan and Brooklyn Roadway Bridges.* Mr. Soliman's responsibilities included the following: Responsible for overseeing the $1.25 billion capital program related to all Manhattan and Brooklyn roadway bridges and related structures; Managed all activities related to consultant supervision, contract oversight and contract management for design, construction, reconstruction and rehabilitation

projects; Provided oversight to ensure that all phases of projects were performed in accordance with City, State, and Federal rules and regulations; Reviewed structural plans submitted by private developers, governmental agencies and public utility companies; Served as a representative of the Division of Bridges on several interagency and intra-agency boards, committees and technical organizations/task forces; Performed other related engineering, administrative and managerial duties at the direction of the Deputy Chief Engineer for Roadway Bridges and Chief Engineer of Bridges; As a representative of the Division of Bridges, presented projects to community boards, elected officials, affected community groups.

- **NYC Transit, Capital Program Management, New York, NY.** *Deputy Vice President – Contract Services.* Mr. Soliman's responsibilities included the following: Oversee the Contract Services Division comprised of six units: Program Coordination, Code Compliance, Specifications, ADA, Public/Private Projects, and Contractor / Consultant Issues; Work in coordination with Procurement and Law units to resolve issues arising from capital procurements and expand the bidder's pool; Analyze complex engineering, construction and contractual information to discern the relevant issues related to the adjudication of claims brought by contractors. Advise the Senior Vice President on the pertinent technical and contractual issues and recommend a course of action for the SVP to render a determination; Ensure that capital projects are in compliance with the Americans with Disability Act (ADA) and with NYS Building Codes; Perform other related engineering, and administrative duties at the direction of the SVP.

- **NYC Department of Transportation, Division of Bridges, New York, NY.** *Director – Design Build and Emergency Contracts.* Mr. Soliman's responsibilities included the following: Developed and implemented the Division's $250 million Design Build program, including all aspects of scoping, contract development, programming, design, construction and staff management; Concurrently responsible for the initiation, procurement and, if necessary, supervision of emergency contracts within the division; Managed interactions between consultants, contractors, city agencies and community groups involved in a project. Relevant projects included the following:

  - ✓ Design/Build of Ridge Boulevard and Third Avenue Bridges
  - ✓ Design/Build Pedestrian Bridges, New York City
  - ✓ Emergency Design/Build Brooklyn Bridge Suspended Span Deck Replacement
  - ✓ Emergency Shore Road Fender Replacement
  - ✓ Saint Felix Street Emergency Forensic Engineering Study
  - ✓ Design/Build of Six Bridges over NYCT Franklin Avenue Shuttle
  - ✓ Design/Build Belt Parkway over Ocean Parkway
  - ✓ Saint Felix Street Emergency Design and Construction Phases I & II Grouting - Street Reconstruction
  - ✓ Emergency Queensboro Bridge Bulkhead Stabilization
  - ✓ Emergency West 23rd Street, Street Failure Contract
  - ✓ East 128th Street/3rd Avenue
  - ✓ 86th Street/NYCT
  - ✓ Williamsburg Bridge/East River, Structural Steel Flag Repairs
  - ✓ Avenue T/NYCT
  - ✓ Avenue U/NYCT

ROBERT J. THIEL P.E.
Program/Project Manager - PATH

EDUCATION
M.S., Construction Management, Stevens Institute of Technology, May 1998
B.E., Civil Engineering, Stevens Institute of Technology, May 1996

PROFESSIONAL REGISTRATIONS / CERTIFICATIONS
Professional Engineer, New Jersey, Pennsylvania, New York, Virginia, District of Columbia, Maryland, North Carolina, Florida and Michigan
Module I Value Engineering Training Workshop (2006)
Context Sensitive Solutions, 2005
Utility Design – NJDOT 2003
The new Utility Process, NJDOT 2002
Introduction to AutoCAD LDD 2002, 2002
OSHA Safety Training (10 hour), 1997

YEARS OF EXPERIENCE: 14

EMPLOYMENT HISOTRY
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- 1999 – Present
Boswell Engineering- 1996 – 1999
Port Authority of New York & New Jersey- 1995 – 1996 (Intern)

PROFESSIONAL EXPERIENCE
Mr. Thiel's experience in civil engineering design includes roadway alignment, preparation of construction contract documents for public bidding, including design of construction staging and traffic control plans. He is thoroughly knowledgeable in New Jersey Turnpike Authority (NJTA), Port Authority of NY & NJ (PANYNJ) and New Jersey Department of Transportation (NJDOT) Procedures, and the application of CAD Standards – both AutoCAD and MicroStation. Relevant project experience includes the following:

- **Port Authority of New York & New Jersey, Stage I, PATH-EWR Connection, Essex County.** *Civil Task Leader* for preliminary design of $500 million in construction. Developed the transportation component to the Lower Manhattan Recovery Effort. Particular Focus was placed on extending the existing South Street tail tracks on a new alignment between the Northeast Corridor and the McCarter Highway with multiple bridge crossings, an alignment under NJ 21, US 22, the CSX truss bridge, and I-78 with a short tunnel section under NJ Transit's Raritan Valley Line. Major considerations included the yard configuration and location, Rail Link Station, platform modifications, ROW requirements, cut and cover vs. NATM tunneling, embankment vs. structured cantilever bridges. Focus was placed on a one seat ride from Newark Liberty Airport to Lower Manhattan. The project refined the recommended alternatives from the feasibility study and the conceptual design was refined for the 2.1 mile extension of the PATH system between Newark Penn Station and the Newark Liberty Airport's Rail Link Station.
- **Port Authority of New York & New Jersey, Stage III, JFK Cargo Road Service Road Reconstruction, Phase I and Phase II, NYC.** *Civil Task Leader* for the final roadway design of new connection to JFK intermodal facility at JFK Rail Link Federal Circle Station, including temporary

connection to existing Rental Car Lane. Final design of connection between intermodal facility and existing JFK Cargo Road, including reconstruction of JFK Cargo Road and construction of a new intersection. Major considerations include ROW requirements, superelevation study for intersection with curved roadway, drainage, utility conflicts, accommodation of existing lease holders.

- **Port Authority of New York & New Jersey, Port Newark and Port Elizabeth, Essex and Union County.** *Project Engineer*. Performed traffic studies and conceptual design for various safety projects at Port Newark and Elizabeth. Performed conceptual design of realignment of North Avenue and McClester Avenue substandard roadway curve, including ROW taking study.
- **Port Authority of New York & New Jersey, WTC Parking Modifications and West Street River Water Line, NY.** *Project Engineer*. Designed layout for surface and subsurface parking facilities for the former World Trade Center in New York. In addition, the project included inspection and placement of maintenance and protection of traffic devices for the River Water Line project on West Street. Assisted in the preparation of traffic studies, traffic counts and performed level of service calculations.
- **New Jersey Turnpike Authority, Interchange 6 to 9 Widening, Preliminary Engineering and Environmental Services**. *Engineering Design Task Leader* responsible for the Preliminary Engineering and Environmental Services for 35-mile study to widen the Turnpike from six (6) to twelve (12) lanes between Pearl Harbor Memorial Turnpike Extension and Interchange 8A and from ten (10) to twelve (12) lanes between Interchanges 8A and 9. Responsible for coordination of multiple project engineers and sub-consultants in development of conceptual design and preliminary engineering with an aggressive schedule, as well as personally leading the design efforts for the Interchange 7A (Section 4), Interchange 6 and Merge (Section 1) Design Elements. Liaison with environmental, traffic engineering and public involvement tasks. Assisted the Authority in development of program approach, preliminary cost estimate and program standards.
- **New Jersey Turnpike Authority, Interchange 6 to 9 Widening, Section No. 4 Final Design, Interchange 7A**. *Deputy Project Manager (8/07-1/2010); Project Manager (1/2010-Present)* for the 2.3-mile segment of the Widening Program that reconfigures Interchange 7A. This section includes all ramp connections and mainline widening for connections with Interchange 7A and Route I-195 including expansion of the existing toll plaza from 10 to 13 lanes. Section No. 4 also includes the construction and/or replacement of 13 bridge structures, retaining walls, sign structures and noise barriers. Mr. Thiel recently ascended to Project Manager for this project in January 2010.
- **New Jersey Turnpike Authority, Secaucus Interchange, Final Design Documents for Section 3, Phase B/C/D.** *Project Engineer* for the new interchange near the Secaucus Transfer Station in the Meadowlands. The critical issues associated with this section are: the structural design of the various structures; coordination with NJ Transit and Seaview Drive (being designed by others); identification of site access for construction; and establishing a design that is compatible with future transportation improvements under consideration by the NJDOT for the connection to the Bergen Arches, Tonnelle Avenue and/or other roadways.
- **New Jersey Department of Transportation, Route U.S 9, Section 1M, Edison Bridge Rehabilitation, Middlesex County.** *Project Engineer* for final scope development, initial and final design and construction support to reconstruct the historic Edison Bridge over the Raritan River. This high level fixed structure consists of 29-spans with total length of 4280 feet. The facility will be the new northbound roadway for Route 9. Extensive staging and coordination was required on each side of the bridge. This $43 million construction project resulted in a client commendation letter for a quality of service and acceleration of schedule.

Louis Berger & Assoc PC

KEN FAVARO

Program/Project Manager – Ports/Commerce

EDUCATION

Masters, City and Regional Planning, Urban Design, Rutgers University, 2009
B.A., City Planning & Political Science, Rutgers University, 1977

HISTORY OF EMPLOYMENT

The Louis Berger Group, Inc. - March, 2009 – Present
RM Hospitality Group – DBA Rosa Mexicano – September, 2006 – October, 2008
NY Waterway/ Arcorp Properties, Inc. - May, 1984 – September, 2006
Bergen County Planning Board – September 1977 – May 1984

YEARS EXPERIENCE: 33

PROFESSIONAL EXPERIENCE

- **Brooklyn Terminal Pier Reconstruction – Port Authority of New York and New Jersey.** *Senior Construction Inspector – Marine, Brooklyn, NY.* Responsible for monitoring the activities of the marine construction contractor including repairs and rehabilitation of the piles, structural repairs to existing piers and bulkheads. This is a commercial terminal where cargo loading and unloading is performed and transfers to trucking operations occur. Reviews materials and contractor's means and methods for compliance with specifications and confirms that the installations are performed in accordance with plans and specs. Reviews the contractor's water quality control during construction, including the integrity of turbidity curtains and other environmental controls. Also responsible for review for compliance with OSHA guidelines and safety.
- **RM Hospitality Group – DBA Rosa Mexicano.** *Director of Construction*, New York, NY**.** Served as Company Director, responsible for the construction of new restaurants and the upgrades of a total of then restaurants in New York City and along the Eastern seaboard with total annual sales of $55 Million. Pertinent Construction Management skills included: ability to secure all required permits in a complex regulatory environment; design, scheduling, and construction of 3 units per year; selection of General Contractors; value engineering; preparation of job cost estimates developed through blue print take-offs and contract/labor negotiations; development of capital expense and repair and maintenance budgets; generation and management of job schedules and task coordination time lines; negotiation of repair and maintenance (R&M) contracts with all mechanical and service contractors, including scope of work, schedule and price, which resulted in zero increase in cost of R&M contracts during the time managing this task (2007-2009 contracts); implementation of warranty procedures and protection; drafting O&M manuals written with emphasis on safety procedures and compliance with OSHA requirements; and review of leases for compliance with Landlords' requirements relative to tenant responsibilities for shell improvements and maintenance.
- **NY Waterway / Romulus Development Corp. / ARCORP Properties, Inc. / Port Imperial Marina / Drydock Corp. / New York Splash Tours.** *Director of Construction,* Weehawken, NJ.

- **NY Waterway.** Responsible for permitting, design, construction and maintenance of 37 ferry terminals / maintenance facilities. Responsible for the procurement of all regulatory and environmental permits from: Army Corps of Engineers, Section 10 Permits (Rivers and Harbors Act) and Section 404 Permits (Clean Water Act); NY Department of Environmental Conservation (Waterfront Development Permits); and the NJ Department of Environmental Protection (Waterfront Development Permits / CAFRA Compliance). Specific construction and environmental related issues reviewed by the Federal and State agencies include: demolition and removal of debris posing potential hazard to navigation; dredging and dredge spoils remediation; installation of turbidity curtains / environmental controls during construction; pile driving / bulkhead and breakwater construction; water quality control; conformance with seasonal construction and dredging windows; shoreline stabilization / erosion control.
- **WTC Terrorist Attack Action and Construction.** Directed Ferry activity during the emergency evacuation of approximately 180,000 people fleeing NYC using all fleet vessels after the WTC attacks. Immediately identified the locations for new and relocated upgraded ferry terminals in the NY Harbor as described in the Ferry Project List. Worked closely with the Army Corps of Engineers and other Federal, State and Municipal Agencies to fast track plans to expedite construction and/or relocation of these ferry terminals to meet commuter needs due to the closure of major train tunnels.
- **International Naval Review 2000.** Had direct interface with the commander of the Naval Supply Corps, relative to the installation of ferry berthing facilities throughout the NYC Harbor to transport naval personnel, dignitaries and invited public to board and tour the JFK Aircraft Carrier, USS Whitney, and the USS Nassau. Worked closely with the Naval Purchasing Department and captains of the above mentioned ships to field inspect, design and install intricate floating berthing facilities to accommodate NY Waterway Ferries transporting guests and crew to the three ships moored in the NYC Harbor to celebrate the International Naval Review 2000. Project cost: $3.5 Million.
- **MTA Transit Strike.** Directed the fast track installation of six temporary ferry terminals in the NYC Harbor to handle increased commuter demand generated by the 2000 MTA transit strike. Project cost: $1.5 Million.
- **Romulus Development Corp. / Arcorp Properties, Inc.** Shoreline stabilization or bulk heading of approximately 2 miles of the Hudson River waterfront. Filling and grading of approximately 300 acres of waterfront property in preparation for development. Construction of approximately three miles of road. Construction of 2,000+ stall ferry parking lot, automated access control systems and parking lot office. Conversion of the existing Company's corporate offices and ferry and bus maintenance facility including OSHA compliant fueling depot and body/paint shop. Construction of a 305 slip full service Marina. Installation of site infrastructure including electric, power, water, fiber optic and phone/data. Construction of fine dining restaurants including Arthurs Landing, Spirito Grill and Arthurs Downtown. Also constructed Cafes at most of the Ferry Terminals. Served as Owner's Representative to upland mixed use development in a joint venture with Roseland Development Corp., including high-rise/condo/rental residential, hotel-conference center, and retail and office space. Worked closely with regulatory agencies to comply with environmental remediation requirements prior to construction.

Louis Berger & Assoc PC

MICHAEL J. DONOVAN, P.E.
Program/Project Manager – World Trade Center

EDUCATION
MS, Civil Engineering, Georgia Institute of Technology
MA, National Security and Strategic Studies, U.S. Army War College
BS, Civil Engineering, Clarkson College of Technology

PROFESSIONAL CERTIFICATIONS:
Registered Professional Engineer, Commonwealth of Virginia

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers
Society of American Military Engineers, Life Member
Army Engineer Association, Life Member
Association of the United States Military

YEARS OF EXPERIENCE: 20

HISTORY OF EMPLOYMENT
The Louis Berger Group, Inc Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. – 2008 - Present
Assistant Secretary of the Army (Civil Works), Washington, DC – 2005- 2008
Operations Officer – Gulf Region Division, Corps of Engineers, Baghdad, Iraq – 2004-2005
Commander – 479th Engineer Battalion, Fort Drum, NY – 2001-2004
Deputy Chief Of Staff – 10th Mountain Division, Fort Drum, NY – 2000-2001
Executive Officer – Engineer Brigade, 1st Armored Division, Germany – 1999-2000
Operations Officer – Deputy Chief of Staff, Engineer, Heidelberg, Germany – 1998- 1999
Executive Officer – 82nd Engineer Battalion, Germany – 1997-1998
Deputy District Engineer, New York District, Corps of Engineers – 1995 -1996
Project Engineer – Corps of Engineers, West Point, NY – 1994-1995
Leadership positions of increasing responsibility and technical skills, including assignments with underwater construction, topographic and horizontal construction units. Instruction experience – Navy Diving and Salvage School – 1982-1994

PROFESSIONAL OF QUALIFICATIONS
Mr. Michael Donovan possesses over 20 years of experience as a senior Army officer managing diverse engineering organizations both in the United States and abroad. He is an experienced planner and administrator/leader with a focus on innovative problem solving, customer satisfaction and quality. Mr. Donovan has demonstrated success working with high-profile Congressional, Federal, state and local officials. He also possesses strong problem solving and consensus building abilities and has excellent computer and communication skills.

Executive Leadership / Organizational Leadership and Management

- Communicated extensively and frequently with a wide array of customers, stakeholders, and

project partners. Routinely interacted with the Executive Office of the President, Members of Congress, Federal and state officials, and industry experts.

- As Operation Officer for the Corps of Engineers reconstruction effort in Iraq, built and maintained a good working relationship with all military commands, Project Contracting Office and United States Agency for International Development. This relationship enabled the Corps and all stakeholders to successfully coordinate the myriad of complex issues associated with the $21B+ reconstruction program throughout Iraq.
- Mediated a group of contractors, designers, and users in order to surface and analyze difficult installation and test problems on a critical test facility at the U.S. Army Natick Soldier Research, Development and Engineering Center. Avoided litigation and allowed for critical design changes and project completion.

Program and Project Management

- Monitored and updated reporting procedures for over 3,000 projects ($11.4B) throughout Iraq in support of the Iraqi Relief and Reconstruction Fund and Accelerated Iraqi Reconstruction Program projects throughout Iraq. Worked closely with the Project Contracting Office and the State Department to ensure proper and accurate construction progress reporting throughout a highly volatile Iraq.
- Managed the construction management, contract administration and quality assurance for a major $23M dining facility renovation (earning Corps partnership award), packaged water treatment plant, pedestrian bridge over a New York City commuter route, and environmental restoration projects at West Point.
- Managed an annual military construction and environmental remediation program the resulted in the award of over $350M in projects. Program included upgrade of barracks at West Point, new ranges at Fort Drum, test facilities at Picatinny Arsenal and Natick Labs, runway expansion at McGuire AFB and update of facilities in Thule, Greenland. Demonstrated sophisticated management skills by focusing the organization's engineers, real estate specialists and contracting specialists to better support a number of closing installations and their surrounding communities.
- Coordinated the master planning for U.S. Army facilities in Macedonia. Analysis and planning enabled the improvement of Soldier billets, force protection and upgrades to utility systems during an extremely turbulent period in the region.

Resource and Staff Management

- Executive Officer for the Assistant Secretary of the Army for Civil Works, maintaining policy level oversight of the Corps of Engineers $5.3B civil work program and worldwide work for other programs. Responsible for the flow of information and requirements among the Executive Office of the President, Congress, the Corps of Engineers as well as national and local stakeholders.
- Planned and executed logistical support for extended construction missions in Panama and Honduras. Managed construction, underwater salvage and well drilling operations throughout South and Central America.
- Developed and executed annual operating budgets ranging from $2M to $8M for organizations that ranged from 25 to 1,000 employees.

Louis Berger & Assoc PC

JASON BROWN

Program/Project Manager – World Trade Center

EDUCATION

Bachelor of Arts, Political Science, Kansas State University, 1992

TECHNICAL SKILLS

@ Risk, Contract Manager, Microsoft Office, Master Builder Accounting, Pertmaster, Primavera 6.0, Primavera Project Planner, Primavera SureTrak, Prolog

HISTORY OF EMPLOYMENT

Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.– Sept. 2008 – Present
Jacobs Engineering Group/Carter & Burgess – Janaury 2004 – September 2008
Stonewall Contracting Corp. – October 1999 – December 2003
The Mackroyce Group – February 1996 – September 1999
Energy Efficiency Services, Inc. – June 1994 – January 1996
Stelle & Associates – October 1993 – January 1995

YEARS EXPERIENCE: 17

PROFESSIONAL EXPERIENCE

Mr. Brown possesses approximately 17 years of experience in senior level project and program management positions for over $20 Billion in design and construction projects. He has substantial additional experience including contract controls and information technology systems. Sectors of project oversight include transportation, commercial, educational, financial, hospitality, medical, and municipal.

- **Downtown Restoration Program, Port Authority of New York & New Jersey, New York, NY.** *Senior Program Scheduler.* Functional lead for the development and implementation of a unified multi-platform system to manage budget, cost and schedule towards World Trade Center Redevelopment and the PANYNJ Capital Plan. Chief responsibility for management and oversight of the National September 11th Memorial Museum; including a comprehensive re-baseline effort at inception to ensure acceptable resource planning and production rate levels could be maintained towards project completion. Design and implementation of a production-based system for monitoring progress and concerns towards the successful completion of Master Development Agreement Milestones established between PANYNJ and Silverstein Properties; as well as Federal Transportation Administration milestones and other key sitewide deliverables. Comprehensive program modeling for Risk Assessments and analysis. Liaising with Program and Construction Management teams regarding overall program scheduling and planning, cost and schedule maintenance and mitigation efforts, claims avoidance techniques and solutions, and construction logistics planning. Reviewing Construction Manager, General Contractor, and Subcontractor schedules for validation, coordination and acceptance purposes. Issuing monthly status reports, schedule analyses, and "what-if" scenarios and solutions.
- **FTA Project Management Oversight: Lower Manhattan Recovery Organization, World Trade Center PATH Terminal and Vehicle Security Center, New York, NY.** *Construction Manager.* Provide oversight and guidance to the Port Authority of New York and New Jersey regarding the design and construction of these two programs; and within the larger World Trade Center Redevelopment Program. Participate in constructability reviews, schedule and estimate

reconciliation workshops, and develop solutions towards the prompt and efficient completion of the programs. Identify, define and assess potential program risks and impacts; offer mitigation strategies and monitor implementation and success. Direct coordination with scheduling and project management staff for CPM scheduling methods, cost control, earned value analysis, claims avoidance, and risk mitigation techniques. Monitor construction progress to determine adequacy of performance with regards to cost, schedule, quality, and planning. Execute forensic and analytical reviews of engineering and construction schedules to determine compliance with Project Management Oversight Guidelines. Participation in the development of CM/GC and other contract documents to ensure compliance with Federal Acquisition Regulations and minimize the potential for disputes and claims. Monitor, assess and participate in the development of Site Safety policies and protocols.

- **Washington Dulles International Airport, 4th Runway Final Design, Washington, DC.** *Senior Scheduler / Cost Analyst.* Provided detailed design and construction schedules; as well as quantitative and qualitative oversight and review of engineers' estimates for each of four primary design and construction packages including: earthwords, paving, transitions, and navigational aid systems. Performed monthly schedule updates, including earned vale measurement, resource utilization and forecasting, and cost-to-complete analyses. Determined areas of schedule slip and developed and implemented alternative means of achieving critical contract milestones. Evaluated design-milestone construction cost estimates and provided contractor pricing support. Reviewed design documents and performed constructability analyses for cost and schedule reconciliation efforts.
- **University of Chicago, West and South Campus Combined Chiller Plants, Chicago, IL.** *Senior Cost / Schedule Analyst.* Developed overall program schedule from inception through closeout for the design and construction of two new combined chiller plants and central utility corridor. Reviewed design documents towards developing a staging and logistics plan which supported the prompt construction of the two plants and corridor while maintaining compliance with all city requirements and minimizing impacts to campus operations. Reviewed and monitored both Construction Manager and General Contractor CPM schedule submissions. Developed work around schedules where delays became evident to support the completion target date established by the University.
- **Project Management System, New York, NY.** *Project Manager*. Participated in development, implementation and training for a proprietary project controls system, designed to integrate corporate project schedules with existing timekeeping system to improve project and profitability. Conducted multi-office interviews to determine needs and constraints across multiple client types. Trained corporate project management staff in system principles, techniques and utilization.
- **Various Projects, College Point, NY.** *Senior Project Manager*. Direct P&L responsibility for all public sector projects including transportation, education, and municipal facilities for a combined value exceeding $150 Million over four years. Responsible charge for oversight, management and guidance of a twenty-person project management and supervision team across multiple concurrent projects. Led estimating, contract and project management efforts; including guidance and direction on constructability and change resolution issues; staging and logistics plans; and, client and subcontract management techniques and practices. Negotiation and award of all subcontracts, including adjudication and negotiation of all change order requests. Review and approval of all subcontractor and supplier payments.

Louis Berger & Assoc PC

JOSEPH A. CADILLAC
Program / Project Management

EDUCATION
B.S., Business Administration, Cum Laude, Ramapo College of New Jersey, 2001

PROFESSIONAL REGISTRATION
New Jersey Real Estate License

PROFESSIONAL MEMBERSHIPS
Delta Mu Delta – National Business Honor Society
AACE – The Association for the Advancement of Cost Engineers

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. – April 2007 – Present
Washington Group International (formerly Raytheon Engineers & Constructors, (RE&C) Princeton, NJ – 21st Century Rail Corporation – 1990 – April 2007
Classic Properties – 1986 – 1990
Ten Cees, Inc. d/b/a/ Garden Motor Inn – 1975 – 1986
Burlington Northern Air Freight – 1973 - 1975

YEARS EXPERIENCE: 10

PROFESSIONAL EXPERIENCE
Mr. Cadillac is a is a senior executive with over 24 years of successful, progressive experience leading and managing engineering and construction programs. He has had successful experience in design, programs and budgets, leading teams, managing contracts and conducting multi-level negotiations. He has demonstrated executive competence in quickly identifying key issues and developing innovative strategies. An innovator having special expertise in project controls and cost management, strategic planning, start-ups and entrepreneurial environments, building and managing effective operations-oriented teams, and designing and directing project evaluation and development processes and systems. Projects include process, power, commercial and infrastructure facilities. He has achieved increasingly responsible levels of corporate, program and project management assignments on engineering/procurement/construction (EPC) projects. Responsibilities within project management include all elements of project control including planning and scheduling, project cost reporting and forecasting, financial trends and projections as well as resource management.

- **PANYNJ Downtown Restoration Program – World Trade Center, New York, NY.** *Deputy Program Manager* **(Manager of Project Controls).** Executive position reporting to Consulting Program Manger, PA Assistant Director and Project Director. Managing, developing, and delivering a cross functional team for this world class marquee project. Responsibilities include key interfaces with client project executives, program managers, and a myriad of stakeholders including the FTA. This position involves the daily operational management of the Program Project Controls Team addressing scope, schedule and budget issues and evaluating the ongoing project conditions along with providing problem resolution analysis with Client Operations Management. In addition the LBG team provides program support services including document

control and record management, general and communications services. The LBG WTCC team also includes the firms of Hill International, Stellar Services, Team Support Services, MAST Construction Services, Merritt Construction Services, STV and HNTB.

Achievements: Developed of a comprehensive cost database system to track the $16 Billion program development.

- **Hudson-Bergen Light Rail Project – Client New Jersey Transit.** *Project Controls Manager***.** An outstanding record of managing, developing, and delivering a cross functional team approach to cost and progress measurement systems for Home Office and field projects. Responsibilities include key interfaces with client project cost & schedule controls management teams and the evaluation of ongoing project conditions with Corporate Operations Management. In addition, cost and scheduling, cash flows and project financial analysis, supervising the preparation of all executive summary reports, trouble shooting and training personnel in maintaining all corporate procedures. Report to Corporate CEO and Product Line Presidents.

Achievements:

- 2003 Lions Award Recipient for Performance Excellence.
- Developed a comprehensive invoicing program that generated double-digit positive cash flow.
- Mastered Cost Control Programs and systems. Streamlined process integrating multiple applications, resulting in a 20% increase in productivity and demonstrable increase in cash flow.
- Developed retrospective analysis format, which has become corporate standard.
- Developed and implemented the conversion and training of all personnel on five on going projects to new financial reporting systems and procedures in record time with minimum disruption to the projects.
- Contributed to the development of the Corporate Standard Structure and Procedures Manual.
- Developed Corporate Software Procedure Manual for Proprietary Application.
- Mastered the successful linking of multiple software programs to eliminate redundant entries.
- RAYTHEON SIX SIGMA SPECIALIST Training

Partial listing of Project Experience:

- Hudson Bergen Light Rail Project - ($1.4 Billion) New Jersey Transit, Jersey City, NJ
- Merck Ballydine Pharmaceutical Expansion Project ($211 Million) Ballydine Ireland
- Umatilla Chemical Weapons Demilitarization Plant ($262 Million) Umatilla Oregon.
- PP9 (1000 Mega Watt) Combined Cycle Power Plant Project ($350 Million) Kingdom of Saudi Arabia
- Tangshan Coal Fired Power Plant (300Mega Watt) ($280 Million)Tangshan China
- Uch Power Plant (100 Mega Watt) ($160 Million) Uch Pakistan
- Independence Facility (1000 Mega Watt) Combined Cycle Power Plant ($517 Million), Oswego, NY.
- Ogden Martin Waste to Energy Facility, (20 Mega Watt) Lee County, Fl ($28 Million).
- Harry Allen Power Project, Las Vegas, NV Simple Cycle Energy Project.
- Brandywine Cogeneration Project (230 Mega Watt), Brandywine MD Simple Cycle Energy Project.
- Gordonsville Peaker Plant, (240 Mega Watt) Gordonsville, VA. ($140 Million)
- Exxon Bayway Project,(614 Mega Watt) Linden, NJ.($339 Million)
- Schering Plough Cogeneration Facility(28 Mega Watt), Kenilworth, NJ($26.4 Million)
- Marcal Paper Cogeneration Facility (60 Mega Watt), Elmwood Park, NJ($43.2 Million)

Louis Berger & Assoc PC

STEVEN BALWIN
Specialist - Aviation

EDUCATION
MPA, State University of New York
B.S., Air Commerce, Florida Institute of Technology, 1981

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- August 1996 – Present
New York State Department of Transportation – 1982 – 1996
New York State Office of Regulatory Reform – 1980 - 1982

YEARS EXPERIENCE: 29

PROFESSIONAL EXPERIENCE
Mr. Baldwin is responsible for the firm's domestic aviation practice. Mr. Baldwin specializes in airport planning and design. He maintains a strong emphasis on aviation/airport related economic development planning performed in a multi-modal setting and also providing management and financial feasibility support to airport operators.

Mr. Baldwin served 14 years in the New York State Department of Transportation's Aviation Division where he was primarily responsible for the activities involved with the development and management of Stewart and Republic Airports. Additionally, he served for two years as Assistant Deputy Director of the NYS Office of Regulatory Reform. Here, he provided high-level decision-makers policy advice regarding regulatory proposals submitted by various state agencies, including matters related to aviation.

- **Port Authority of New York & New Jersey, Newark Liberty International Airport, Terminal A Redevelopment.** As the Principal-in-Charge for the PFC-funded Terminal A Redevelopment Program at Newark Liberty International Airport, Mr. Baldwin is responsible for the performance on-site in an extension-of staff role, he leads a group of 12 staff planners and engineers and 10 sub-consulting firms in developing an airport-wide terminal-area plan for the capacity-constrained facility. The effort has encompassed forecasting, determining future needs, assessing the role of future technologies, developing the business plan, sustainable development and environmental planning, and project design through schematics.
- **Port Authority of New York & New Jersey, Redevelopment Program, Newark International Airport.** Mr. Baldwin served as the Principal-in-Charge for the Port Authority of NY & NJ's Redevelopment Program where he was responsible for overseeing all aspects of the planning, design and construction of Continental Airlines' expansion of Terminal C at Newark International Airport. The work, exceeding $620 million in development costs, included the modifications to the existing Terminal to incorporate a new, at-grade, arrivals and multiple departures levels, as well as the construction of a new C3 concourse, 1,500 passenger/hour Federal inspection facility, a 134-foot operations control tower, expansion of the existing terminal over the airside restricted service road resulting in a double-height airside corridor connecting all three concourses, and the construction of a new outbound baggage handling facility.
- **Terminal B Modernization Program.** *Newark International Airport.* Mr. Baldwin currently

performs the duties of Principal-in-Charge for the Port Authority's Terminal B Modernization Program. In this capacity, he is responsible for overseeing the t transformation of the existing mid and upper departures levels of the facility, as well as the expansion of the existing meter-greeter hall. The current scope of the program calls for the relocation of the domestic baggage claims facilities to a new lower level, shifting domestic ticketing to the mid-level and devoting the upper level to international departure ticketing. On the upper level, the existing ticketing positions and baggage belts will be pushed back from their current locations resulting in enlarged queuing areas and increasing the total number of international ticket counters by capturing the positions currently used for domestic departures. "Back-of-house" airline office space will be relocated to newly created mezzanine areas constructed above the new international ticketing counters. Similarly, the domestic baggage claim area on the mid-level will be relocated to the newly created lower level freeing up space to accommodate up to sixty additional ticketing positions with ample room for queuing in front of the counters.

- **Newark Liberty International Airport Continental Global Gateway Program.** As Project Director, Mr. Baldwin led the planning efforts for the Continental Global Gateway Program including the redevelopment of Terminal C. Program services included landside and airside planning, terminal area planning, Remain Overnight (RON) aircraft parking analysis, the evaluation of vehicular parking alternatives including structural parking alternatives at EWR, project financing and airline lease negotiation support to the General Manager's office.
- **Port Authority of New York & New Jersey, Planning Studies.** Mr. Baldwin has served as *the Project Director or Principal-in-Charge* for the development of a number of the Authority's most recent planning initiatives including the development of the PANYNJ's "Issues and Options" papers for EWR and TEB; LaGuardia Part 77 obstruction analysis; the Development of the most recent PFC application for JFK, LGA and EWR; LaGuardia Runway 13 Approach Study; JFK ILS Benefit Cost Study; JFK Hotel Site Selection Study; LaGuardia Regional Jet Impact Analysis; JFK, LGA, EWR Parking Rate and Capacity Study, and several others.
- **Benefit Cost Analysis, Delay Reduction Strategy Study, John F. Kennedy International Airport, NY.** *Principal-in-Charge* in completing the Benefit Cost Analysis on the selected alternatives for this study. This study analyzed the airports' physical and operational constraints associated with aircraft delay. A combination of simulation analysis using the Total Airspace and Airport Modeler (TAAM) and other analytical tools were used to define delay savings for each identified possible improvement at each airport. Order of magnitude cost estimates for each improvement were developed and were used in concert with the identified delay savings in the benefit cost analysis for the improvements.
- **Benefit Cost Analysis, Delay Reduction Strategy Study, LaGuardia Airport, NY.** *Principal-in-Charge* in completing the Benefit Cost Analysis on the selected alternatives for this study. This study analyzed the airports' physical and operational constraints associated with aircraft delay. A combination of simulation analysis using the Total Airspace and Airport Modeler (TAAM) and other analytical tools were used to define delay savings for each identified possible improvement at each airport. Order of magnitude cost estimates for each improvement were developed and were used in concert with the delay savings in the benefit cost analysis for the improvements.

Louis Berger & Assoc PC

COSEMA (CONNIE) CRAWFORD, P.E.
Specialist - Transit

EDUCATION
M.S.E., Princeton University, 1981
B.S.E, Princeton University

PROFESSIONAL REGISTRATION
Professional Engineer - NY

PROFESSIONAL ASSOCIATIONS
American Society of Civil Engineers
American Public Transportation Association
Women's Transportation Seminar
The Moles
Construction Management Association of America

YEARS OF EXPERIENCE: 30

EMPLOYMENT HISTORY
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. - 2009 – Present
MTA New York City Transit - 2001 – 2009
Parsons Transportation Group - 1999 – 2001
New York City Department of Transportation - 1997 – 1998
Steinman Boynton Gronquist & Birdsall - 1981 – 1997

PROFESSIONAL EXPERIENCE
Ms. Crawford has 30 years of experience with the public and private sectors in the management, design and construction of large scale transportation programs. Relevant project experience includes the following:

- **MTA-New York City Transit, Corona Rail Maintenance Shop, New York, NY.** *Chief Engineer* responsible for design/build construction of a new LEED certified rail shop serving the NYC Transit Flushing Line, with interior capacity for five 600' long trains, and featuring photovoltaic panels, fuel cells, natural ventilation and lighting, and use of harvested and recycled rainwater.
- **MTA-New York City Transit, Bleecker Street Station, Passenger Transfer and ADA Accessibility, New York, NY.** *Chief Engineer* responsible for rehabilitation design and construction of the landmark Bleecker Street Subway Station in Lower Manhattan, including the construction of a new underground transfer connection to the Lafayette Street Station, and the installation of five elevators and other accessibility components to bring the station complex into compliance with the Americans with Disabilities Act (ADA).
- **MTA-New York City Transit, South Ferry Terminal Station, New York, NY.** *Chief Engineer* responsible for owner's review and acceptance of design and construction of a new underground two track subway terminal station in Lower Manhattan. The new station alignment involved underpinning three active subway tunnels.

- **MTA-New York City Transit, Rockwell Place Ventilation Facilities, Brooklyn, NY.** *Chief Engineer* responsible for the $55 million rehabilitation of two vent plants at Lafayette Street on the Fulton Street Line in Brooklyn for emergency smoke removal on two subway lines.
- **MTA-New York City Transit, Grand Avenue Central Maintenance Facility and Bus Depot, New York, NY.** *Chief Engineer* responsible for design/build construction of the $263 million combined central maintenance facility and bus depot in Maspeth, Queens. The depot provides the ability to maintain and upgrade all types of fleet vehicles, and is designed to adapt to new technologies.
- **MTA-New York City Transit, Stillwell Avenue Terminal Station, Coney Island, NY.** *Chief Engineer* responsible for reconstruction of a major above ground station serving four subway lines in Coney Island. The arched glass roof, one of world's largest for a transit facility, is formed of photovoltaic panels providing 250 kW of power to the station.
- **New York City Department of Transportation, Brooklyn Bridge, New York, NY.** *Chief Engineer* responsible for design/build emergency deck replacement and realignment of Manhattan approach. Project Engineer for rehabilitation of main cables and replacement of suspenders and cable stays.
- **MTA-New York City Transit, Fulton Street Transit Center, New York, NY.** *Chief Engineer* responsible for owner's review and acceptance of design and construction of a $1.4 million major Lower Manhattan station complex serving twelve subway lines and 275,000 riders to improve circulation and safety.
- **MTA-New York City Transit, Transit Police Precinct Buildings, Coney Island, NY.** *Chief Engineer* responsible for design and construction of new Transit Police Precinct buildings in Coney Island, Brooklyn and the Rockaways, Queens.
- **MTA-New York City Transit, 207th Street Rail Maintenance Shop, New York, NY.** *Chief Engineer* responsible for major rehabilitation and upgrade of the 207th Street Rail Maintenance Shop in New York, NY.
- **MTA-New York City Transit, 38th Street Rail Maintenance Shop, New York, NY.** *Chief Engineer* responsible for design and construction of mechanical and electrical upgrades at the 38th Street Rail Maintenance Shop.
- **MTA-New York City Transit, Communications Based Train Control Signaling (CBTC) on the Canarsie (L) Line, New York, NY.** *Chief Engineer* responsible for installation of a CBTC signaling system, including the development of new standards for interoperability specifications to accommodate the flexible multi-track NYC Transit network. CBTC will improve throughput, safety and control. Also provided installation and interface with public address customer information screens (PA/CIS) to relay train arrival times to customers.
- **MTA-New York City Transit, Culver Line Rehabilitation, New York, NY.** *Chief Engineer* responsible for rehabilitation design and construction of a mile long elevated concrete-encased viaduct, including deck and structural steel repairs, new track, and replacement of a major interlocking.

Louis Berger & Assoc PC

JAMES J. MURRAY, P.E.
Specialist - FTA

EDUCATION
B.S.C.E, New Jersey Institute of Technology

PROFESSIONAL REGISTRATIONS
Professional Engineer, New Jersey
Professional Planner, New Jersey (inactive)

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. – Sept. 2005 – Present
Gannet Fleming – 2004–2005
Parsons Transportation Group – 1986–2004

YEARS EXPERIENCE: 30

PROFESSIONAL EXPERIENCE
Mr. Jim Murray is a Project Manager and Professional Engineer with thirty years of increasing responsibility on widely diversified transportation infrastructure projects, including both highway and transit, for a variety of city, state and federal transportation agencies in the greater New York Metropolitan area. Project work includes feasibility studies through final design and construction, with estimated construction costs exceeding $1 billion, for clients including PANYNJ, NYSDOT, MTA NYCT, MTA LIRR, NYCDOT, NJDOT, NJTA and NJHA. Managed contract negotiation, planning, scheduling, project controls, supervision and financial performance as well as business development. Technical skills include planning, analysis, design, specifications and estimates for highway and transit projects.

- **Port Authority of New York and New Jersey, WTC Transportation Hub, New York, NY**. Provided Assistant Program Manager services including the resolution of cost, schedule, process, quality and reporting concerns, as well as strategies and managing FTA and related issues. Accomplishments include: Prepared monthly WTC Program status reports on design, construction, budgets, forecasts, schedules, coordination, agreements, risks, etc.; Prepared the WTC Transportation Hub FTA Construction Agreement and grant actions; Monitored project FEIS / ROD / MOA compliance including historic elements, archeological treatment plans; prepared documents for consulting party review, public newsletters, design change justifications, construction and resource protection plans; Coordinated the preparation of FTA deliverables including project cost and schedule; Major rewrite of the Program Management Plan and design and configuration control procedures.
- **City Island Bridge Value Engineering Study.** *Lead Civil Engineer*. Reviewed the civil / highway aspects of a proposed replacement of the City Island Bridge with a cable-stayed bridge option for NYCOMB. The project included development, review and presentation of a number of alternatives for structure types, alignments, utility impacts and construction methods.
- **Cross Bronx Expressway Signing and Lighting.** *Project Manager*. The project included construction of sign structures and roadway lighting for NYSDOT on portions of the Cross Bronx Expressway, Hutchinson River Parkway and Bruckner Expressway.
- **Traffic Engineering and Design.** *Project Manager*. Miscellaneous task order assignments for

NYCDOT including pedestrian and safety improvements on Atlantic Avenue, Brooklyn and Queens, safety improvements on Hylan Boulevard, Staten Island. Work included traffic data collection, surveys, alternatives analysis and conceptual design. Prepared Primavera Suretrak schedules and Excel spreadsheets for project management.

- **Route 9A Program Management and Coordination.** *Deputy Project Manager*, PMC² JV. Provided program management and coordination services to NYSDOT for the reconstruction of Route 9A adjacent to the World Trade Center. The project included bypass tunnel and at-grade alternatives with a total cost of approximately $1 billion. Responsible for coordination of project elements with adjacent projects including the PANYNJ for the WTC site and permanent PATH Station, and the MTA for the Fulton Transit Center and South Ferry project, as well as public and private utilities affected by the project. Wrote procedures for NYSDOT to coordinate Route 9A work with external partners, targeting levels of responsibility for decision making within the NYSDOT team. Coordinated Route 9A work with PANYNJ projects, focusing on issues such as ventilation, security, and construction phasing and estimates. Coordinated the design and construction schedule for the work of the NYSDOT design teams and with external parties. Prepared Primavera (P3) project schedules and developed standardized management reports. Coordinated computer visualization efforts and prepared document control procedures. Utility coordination included meeting with stakeholders, Con Ed, ECS, Verizon, NYC DEP and others, to identify needs and concerns of all parties, with the goal of streamlining the utility construction necessary to facilitate the Route 9A reconstruction.

- **East Side Access to Grand Central Terminal.** *Deputy Director, Systems Design*. On LIRR's project to construct a $6.3 billion tunnel into Grand Central Terminal, responsible for coordinating designs for power, communications, signals, fire life safety and mechanical designs with heavy civil and structural designs. Responsibilities included identifying and tracking systems design elements to ensure integration with facilities and tunnel designs both in terms of design schedules and design responsibilities with the Tunnel Engineer, as well as the spatial integration of construction. Prepared Primavera (P3) project schedules to validate the master schedule and verify interfaces between the Systems and Tunnel Engineering teams. A significant accomplishment included writing a space allocation plan for the tunnels and ancillary spaces for railroad and support utilities, culminating in a detailed presentation of the report to the engineering department. The allocation plan included traction and facility power, communications, signals, fire suppression and life safety, and facility power and HVAC. The required facilities included space for conduit and pipe, splice chambers for the distribution systems as well as the sizing of the facility rooms themselves, and developed a database for the tracking and management those spaces. As a quality management function, created a CAD drawing set to establish a regimented way to investigate interdisciplinary interfaces. Coordinated the contract packaging and estimating of systems contracts, including trending changes to scope and construction cost.

- **LaGuardia Airport Subway Access.** *Design Manager, Infrastructure and Systems Engineer*ing, HDU JV. On behalf of NYCT, provided conceptual design and evaluation of new transit service options to LaGuardia Airport, including N Line subway extension. Responsibilities included preliminary track alignments, construction methods, impact assessments, and coordination of engineering and architectural disciplines. Special requirements of the project included coordination with the PANYNJ for reviews of possible above grade and underground construction on and adjacent to the airport.

Louis Berger & Assoc PC

FREDRICK McCARTHY, P.E.
Specialist - Security

EDUCATION
B.E., Civil Engineering, Manhattan College, 1983

PROFESSIONAL REGISTRATIONS
Professional Engineer - NJ, NY, PA, DE, RI and FL
OSHA HAZWOPER 40-Hour Health and Safety Training
8-Hour OSHA Supervisor Training
NJ DEP UST Certification - Subsurface Evaluation and Closure
DISCO Security Clearance - Secret

PROFESSIONAL ASSOCIATIONS
American Society of Civil Engineers
National Society of Professional Engineers
NCEES Member No. [redacted]

YEARS OF EXPERIENCE: 27

EMPLOYMENT HISOTRY:
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. - 1993 – Present
Oxford Engineering (no longer in business) - 1990 – 1993
Holzmacher, McClendon and Murrell - 1988 – 1990
Robert Silman Associates - 1986 - 1988
Lev Zetlin Associates (Office of Thornton Tomasetti) - 1984 - 1986

PROFESSIONAL EXPERIENC
Mr. McCarthy is Vice President and in charge of Facilities Engineering including remedial design services with over 27 years of facilities, structural and security engineering experience. He has performed and managed numerous facility evaluations, upgrades and designs involving buildings, utilities and site restoration and has conducted environmental investigations and remediation system designs for private industries as part of plant operations and maintenance. Relevant project experience includes the following:

- **Port Authority of NY & NJ, Professional Design and Technical Services for Security Capital Programs on a "Call-In" Basis.** *Director* in responsible charge for providing various confidential security related design services for various tunnel, bridge, airport, rail (PATH) and port facilities projects in NY and NJ. Under this contract, presently preparing Stage I reports and design documents for construction and installation of crash barriers, perimeter intruder detection systems, structural hardening of access points, Infographics systems, ventilations systems safeguards and landside improvements.
- **Port Authority of New York & New Jersey, On-Call Civil Engineering Services.** *Program Director* responsible for QA/QC of civil engineering services involving roadway, drainage and pavement design at JFK, Newark and LaGuardia Airports. In responsible charge of engineers and in the performance of engineering assessments and development of design plans,

specifications and cost estimates. Representative projects included JFK Airport Service Road and Taxiway Rehabilitation, LaGuardia Airport Service Road Restoration, Oil/Water Separator Installations at Buildings 14, 75 and 79 at Newark International Airport, JFK Cargo Road Rehabilitation and Guard Post Crash Barriers at JFK.

- **Port Authority of NY & NJ, Perimeter Intrusion Detection Systems, Design/Build Project.** *Principal – In-Charge and Director* responsible for providing lead design engineering services for civil/utilities and environmental/permitting aspects as well mechanical and electrical engineering support services within the command and control rooms for this confidential security PIDS design/build project for all major New York and New Jersey airports.
- **Port Authority of New York & New Jersey, Facility Condition Surveys, Waterfront Facilities Surveys Program.** *Program Director* responsible for structural and mechanical evaluations of wharfs, piers and related marine building structures. In responsible charge of engineers and building and underwater inspection teams in the performance of physical surveys, detailed reporting and remedial analysis and reinforcement/upgrading of deficiency elements and supporting systems. Responsible for fast tracked survey of Red Hook Wharf in Brooklyn, New York and Howland Hook Wharf in Staten Island, New York involving underwater pile and bulkhead evaluations, underdeck and above deck inspections and lighting towers.
- **Port Authority of New York & New Jersey, Crash Barriers at Guard Posts A-1 & A-2, H, J, O, P, R, S, V, W, Z and Gate 106 – JFK International Airport.** *QA Manager* responsible for oversight of contract documents development for the installation of Vehicular Crash Barriers at 11 of the 17 Guard Post locations at John F. Kennedy International Airport. The Guard Posts provide secured access to airside areas of the airport. Work involved civil, structural, mechanical, electrical and traffic engineering and design as well as CM services.
- **Port Authority of New York & New Jersey, JFK and LGA Building Conditions Assessment.** *Director* in responsible charge of this facilities engineering project which involved the survey and evaluation of numerous cargo hangars, buildings and terminals at JFK International Airport and LaGuardia Airport to inventory architectural/civil/structural and environmental items and ascertain equipment and general compliance deficiencies. Evaluated deficiencies with recommendations for repair or replacement, assessed remaining useful life and provided cost estimates for the repair and replacement of deficient items and equipment. Comprehensive facilities engineering reports were prepared for each facility documenting the findings. The hangar and building facilities evaluated at JFK included Buildings 72 (Citibank), 111 (FAA Building), 261 (Lufthansa Cargo) and 263 (Asiana Cargo), the Hangar 12 Complex with ancillary Buildings 94, 95 and 96, Buildings 6, 66 (British Airways Cargo), 67 (Delta Air Cargo), 215 (Greenwich Air Services), 262 (Federal Express) and Terminal 6 (TWA's domestic passenger terminal). At LGA, evaluated Hangar 4 and Building 17.
- **Metro North Railroad – Installation of Access Control Points at Yards Facilities.** *Principal* responsible for project oversight of this on-going design effort at the Brewster and North White Plains Facilities involving civil engineering associated with roadway access re-configuration and electrical/electronics design associated with the security gates.

Louis Berger & Assoc PC

ALBERT RACCIATTI, P.P., AICP
Economics

EDUCATION
M.C.R.P., City and Regional Planning, Rutgers University, 1999
M.A., International Relations (Concentration in Political Economy), University of Chicago, 1991
B.S., Industrial and Labor Relations, Cornell University, 1989

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS
Licensed Professional Planner (P.P.), New Jersey (License No.: [redacted]
American Institute of Certified Planners (AICP)
New Jersey and New York Metro Chapters, American Planning Association

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc.- Director; 2009 to Present
Ambac Financial Group, Inc., New York, NY; Vice President, Project Finance- 2007-2009
The Louis Berger Group, Inc., New York, NY; Planner - Principal Planner- 1999 to 2007
New York City Department of City Planning, New York, NY; Intern - 1998 to 1999
Practising Law Institute, New York, NY; Managing Editor - 1991 to 1997

YEARS EXPERIENCE: 11

PROFESSIONAL EXPERIENCE
Mr. Racciatti is Director of Financial and Regional Analysis in the transportation and regional planning practice, specializing in regional economics, transportation planning, transportation finance, and market research. Since joining the firm in 1999, he has managed projects and lead tasks in traffic and revenue forecasting, demographic forecasting, risk assessment, indirect and cumulative impact analysis, economic impact assessment and survey research. Relevant project experience includes the following:

- **Port Authority of New York & New Jersey, World Trade Center Program Financial and Schedule Risk Analysis, New York, NY.** *Deputy Project Manager.* Served on Risk Management Team for the reconstruction of permanent commuter railway station, common infrastructure, memorial, and commercial towers under construction at the World Trade Center site in Lower Manhattan. Prepared project risk register and monthly tracking tools through interviews and coordination meetings with project managers, schedulers, cost estimators, and stakeholders. Assembled cost simulation model (using @Risk spreadsheet software) to evaluate uncertainty in the budget for activities in design, procurement and construction. Participated in development of risk schedules (using PertMaster schedule tool for Primavera 6) and identified linkages between project schedule and cost. Coordinated with FTA on elements of Project Execution Plan (PEP) including Risk Management and Contingency Management Plans.
- **Port Authority of New York & New Jersey, Regional Cost-Benefit Framework Development, New York, NY.** *Analyst.* Compiled literature review and recommended performance measures/input assumptions for use in agency's standardized cost benefit framework. Measures evaluated included: value of time and value of reliability for roadway, transit, and goods movement projects. Reviewed research and measures assembled for value of statistical life, operations of passenger/cargo aircraft, and airport parking.

- **Port Authority of New York & New Jersey, Goethals Bridge Replacement Project EIS – Employment Forecast and Alternatives Screening.** *Task Leader.* Developed refinements to the regional employment forecast for Staten Island to reflect recent economic and development trends. Compiled and evaluated available employment forecast information and worked with stakeholders (Port Authority of New York and New Jersey, NYC Economic Development Corporation, Department of City Planning) to identify recent trends and future economic development initiatives. Developed screening criteria and toll pricing/congestion pricing scenarios and traffic demand management TDM components of Action Alternatives to be screened for further analysis.
- **Port Authority of New York & New Jersey, PATH-EWR Connection Stage I Design Cost-Benefit Considerations, Newark, NJ.** *Task Manager.* Prepared evaluation of the cost/benefit considerations of various alternatives for the extension of PATH commuter rail service to Newark Liberty International Airport. Estimated the regional economic impacts of construction and operation alternatives using input-output modeling techniques.
- **Port Authority of New York & New Jersey, PATH Reconstruction Alternatives Risk Analysis, New York, NY.** *Task Manager.* Developed project cost and financial model to evaluate risks in the estimates compiled for two alternative site proposals for reconstruction of the Port Authority Trans Hudson (PATH) permanent commuter railway station at the World Trade Center site in Lower Manhattan.
- **Port Authority of New York & New Jersey, Newark Airport AirTrain Ridership Forecast, Newark, NJ.** *Project Manager.* Developed forecast model of hourly ridership by station link for airport monorail system to evaluate need for system capacity improvements.
- **Port Authority of New York & New Jersey, Commercial Vehicle Study, New York, NY.** *Project Manager.* Conducted study of recent patterns in commercial vehicle traffic at the interstate bridge and tunnel crossings to assess PANYNJ market share vis-à-vis other regional crossings and develop recommendations for strategies to promote efficient use of facilities, and effective revenue forecasting.
- **Port Authority of New York & New Jersey, Interstate Crossings Toll Revenue Forecasting Program, New York, NY.** *Project Director.* Managed and participated in ongoing project (initiated in 2001) to provide monthly, quarterly, and annual forecasts of traffic and revenue at the six Port Authority of New York and New Jersey interstate bridge and tunnel crossings with annual revenues of over $700 million.
- **USACE Institute for Water Resources, *Ec*onomic Impact of Civil Works Projects.** *Task Leader.* Designed and developed a database model to assess the economic impacts of US Army Corps of Engineers (USACE) American Recovery and Reinvestment Act (ARRA) spending on Civil Works programs. Conducted workshops on impact estimation needs, developed model *documentation and training sessions for end* users..
- **Metropolitan Washington Airports Authority, Metropolitan Washington Airports Authority Economic Impact Study.** *Project Manager.* Using input-output modeling techniques to estimate regional economic impacts of MWAA facilities, capital investment programs and operations, including Reagan National and Dulles International Airports, the Dulles Toll road and first phase construction of the Metro Link rail transit system. Visitor spending impacts and airport-related impacts of firms utilizing the airport for air freight shipments are considered.

Louis Berger & Assoc PC

NICHOLAS C. VERAART, AICP, ASLA
Planning

EDUCATION
M.Sc., Regional Planning and Land Planning, Wageningen University, Netherlands
B.Sc., Land Planning and Landscape Architecture, Wageningen University, Netherlands

PROFESSIONAL REGISTRATIONS AND AFFILIATIONS
A.I.C.P. American Institute of Certified Planners
I.A.I.A. International Association for Impact Assessment
A.S.L.A American Society of Landscape Architects

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. - October 1995 – Present

YEARS EXPERIENCE: 24

PROFESSIONAL EXPERIENCE
Mr. Veraart has extensive experience with urban planning and transportation project planning and development and has applied his expertise to a broad range of transportation and development projects, including the Fulton Street Transit Center in Lower Manhattan. Mr. Veraart has also been the lead person on large-scale mixed use development projects including the World Trade Center Memorial and Redevelopment Plan, the Meadowlands Mills project in the NJ Meadowlands and the Waterside development near the United Nations on the East River in Manhattan. He has planning experience in both NJ and NY, including conceptual plans for facilities such as the Harrison NY MTA Train Station TOD, combining parking with residential and retail development and large scale rezonings and redevelopment projects such as Broadway Triangle in Brooklyn and downtown revitalization such as the Elizabeth NJ Waterfront Redevelopment Plan. Mr. Veraart is also experience with environmental analyses for infrastructure projects such as bridges, tunnels and intermodal facilities. Mr. Veraart's regulatory background in SEQRA/CEQR and NEPA environmental impact analysis (including FTA compliant analyses) and permitting further broadens his basis for urban planning and development, especially as it relates to transportation. He is currently part of a team developing solutions for the Nassau Hub project; a proposed new BRT/LRT transit service in suburban Long Island. Relevant project experience includes:

- **Port Authority of New York & New Jersey, Integrated Sustainable Design & Strategies for the Terminal A Expansion and Modernization Program, Newark Liberty International Airport, Newark, NJ.** *Environmental Compliance Advisor***.** Development of an integrated framework for sustainability guidelines/LEED requirements and Federal and State Environmental Review Compliance Requirements. Specific focus areas included wetland and stormwater impacts, integration of wetland mitigation concepts with sustainable site development and building design concepts, including stormwater capture and wetland pre-treatment concepts and permitting strategies.
- **World Trade Center Memorial and Redevelopment Plan, New York, NY.** *Project Director*. Mr. Veraart led services to LMDC for the preparation of the GEIS for the World Trade Center Memorial and Redevelopment Plan.

- **MTA / NYCT Fulton Street Transit Center Environmental Impact Statement, NY.** *Project Director*. Directed the preparation of the FEIS and Section 4(f) for $750 million federally funded Fulton Street Transit Center (FSTC) in Lower Manhattan. Mr. Veraart presented the analysis of cumulative construction in Lower Manhattan to a National Panel of government agencies under auspices of the Federal Transit Administration. Other key aspects included interagency coordination related to traffic and circulation and impacts of businesses and residents.
- **WTC Memorial Pedestrian Modeling**. Mr. Veraart led services to the Memorial Foundation for the computer simulation of pedestrian movements of thousands of visitors expected at the Memorial site.
- **Access to the Region's Core (ARC) FEIS Section 4(f) Evaluation, NJ.** Mr. Veraart co-authored the Section 4(f) Evaluation for the project.
- **NYS Public Service Commission, Waterside Development, New York, NY.** *Project Manager.* Mr. Veraart led the preparation of the EIS for a large-scale, nine-acre, multi-block 5 million square feet of mixed use development between East 35th Street and East 41st Street in Manhattan, on behalf of the NYS Public Service Commission.
- **MTA New York City Transit, Lower Manhattan Jamaica/JFK Airport Transportation Project Environmental Impact Statement (EIS), New York, NY.** *Task Manager*. Alternatives analyses included construction of a new rail tunnel under the East River to provide a direct connection between Jamaica Queens and Lower Manhattan. The EIS is sponsored by the Metropolitan Transportation Authority, New York City Transit, Long Island Rail Road, Port Authority of New York and New Jersey, and the Lower Manhattan Development Corporation and supported by the New York City Economic Development Corporation.
- **MTA Long Island Rail Road Intermodal Center. Mineola, NY.** *Project Manager.* Mr. Veraart led a multidisciplinary team for the planning, preliminary design, environmental review and transportation analyses for a 1,000 car intermodal bus and parking facility adjacent to the MTA/Long Island Railroad Mineola train station. Mr. Veraart was involved from preliminary design through construction services and supported LIRR with public involvement and interagency coordination.
- **Ridgewood Station Environmental Assessment. Ridgewood. NJ.** *Project Manager.* Mr. Veraart prepared the Environmental Assessment and coordinated with the FTA for the environmental review and historic resource (Section 106) review process under contract to Urbahn Associates for NJ TRANSIT.
- **Final Environmental Impact Statement (FEIS - SEQRA, NEPA) Gull Hazard Reduction Program, JFK International Airport, Jamaica, NY.** Project Manager. Managed the preparation of the SEQRA/NEPA EIS for the implementation of the Gull Hazard Reduction Program at JFK International Airport in New York City. *Client: U.S. Department of Agriculture*
- **MTA Metro-North Railroad, Harrison Station TOD Concept Plan, Harrison, NY.** *Landscape Architect.* Prepared development scenarios, conceptual architectural design, and zoning guidelines for Metro North's 150,000-ft2 train station property in downtown Harrison. The proposed development included retail and professional offices, residences for the elderly, parking facilities, as well as landscape plans for an existing park and improvement of pedestrian circulation and platform access.

Louis Berger & Assoc PC

JAMES G. BACH, P.P., AICP
Planning

EDUCATION
M.C.R.P., City and Regional Planning, Rutgers University, 1975
B.A., Journalism and Urban Sociology, Fordham University, 1973

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
Licensed Professional Planner, New Jersey [redacted]
Member, American Institute of Certified Planners

PROFESSIONAL AFFILIATIONS
American Planning Association
Transportation Research Board

HISTORY OF EMPLOYMENT
Louis Berger & Assoc., P.C., in association with The Louis Berger Group, Inc. - July 1983 – Present

YEARS EXPERIENCE: 37

PROFESSIONAL EXPERIENCE
Mr. Bach has 37 years of experience, starting his career as a Senior Planner. During his career, Mr. Bach has managed and directed large, complex projects throughout the United States. He also served as the Principal-in-Charge for the Port Authority of New York and New Jersey's reconstruction of the World Trade Center site. In 1993, Mr. Bach led a team of economists, planners and financial specialists analyzing the potential financial and economic impacts to the Port Authority and the region of the World Trade Center bombing and the subsequent damage and temporary closure of the facilities.

He is a recognized leader in project delivery systems, project evaluation techniques and the planning and environmental approval process for major infrastructure projects, such as the light rail system serving John F. Kennedy International Airport, (JFK AirTrain) the U.S. Department of Defense's Strategic Defense Initiative Organization (Star Wars) and deployment of the MX (Peace Keeper) Missile System at Francis E. Warren Air Force Base in Wyoming and numerous facility and transportation infrastructure projects encompassing highways, transit, airports and ports. Relevant projects include:

- **Port Authority of NY & NJ, Downtown Restoration Program, New York, New York**. *Principal-in-Charge* on the FTA funded $3.2B World Trade Center (WTC) PATH Terminal Project, the $478M WTC Security Center and Tour Bus Facility Project, and WTC Site Planning and Development. Responsibilities include coordination with over $16B in Lower Manhattan projects, including the World trade center PATH station, Freedom Tower, the WTC Memorial, the Vehicle Security Center and associated World trade Center related development. Mr. Bach also served as the *Principal-in-Charge* to the initial $544M Downtown Restoration Program consisting of three projects: the expansion of the Exchange Place Station (tunneling, new switches and extended platforms); the restoration of the tunnels under the Hudson River connecting Exchange Place

with New York; and the construction of a new temporary terminal at the site of the former World Trade Center. Responsible for executive over-site of compliance, capital reporting, cost controls, project budget oversight, scheduling, public relations and coordination among the various stake holders.

- **Port Authority of NY & NJ, Program Management, Newark International Airport Redevelopment Program.** *Principal-in-Charge* for the program management for the Port Authority of New York and New Jersey's $1.5 billion airport redevelopment program. Activities include the full complement of project controls, budgetary and financial analysis and scheduling functions in addition to technical support in the areas of environmental documentation and permitting, aviation planning and engineering design and review. The program also includes outreach activities targeted to the public and aviation community and includes WEB page, signage, banners, press releases, 3-D models and public service announcements.

- **U.S. Department of Defense, Strategic Defense Initiative Organization (SDIO), Washington, D.C.** *Deputy Program Manager* for National Environmental Policy Act (NEPA) Compliance for the SDIO (Star Wars) Program. Included among the responsibilities was the preparation of environmental documentation and other studies for public review of highly complex and technical materials on this often controversial program.

- **Federal Aviation Administration/New York State Department of Transportation, Environmental Impact Statement, Airport Access Automated Guideway Transit System (AirTrain).** *Project Manager*. Federal Aviation Administration/NEPA- and New York State Department of Transportation/SEQRA-required Environmental Impact Statement for the Port Authority of New York and New Jersey's proposed $2.4 billion Airport Access Automated Guideway Transit System between JFK and Jamaica Station. This project, currently in its final phase, includes extensive interagency coordination, multiple and complex regulatory jurisdictions and criteria, and a significant public information/outreach program. Key environmental issues associated with the 20 + mile-long alignment include wetlands/open waters impacts, cultural resources, air quality, visual intrusion, hazardous properties, and traffic and construction impacts. An in-depth alternatives analysis was also a major component of the work.

- **New York State Department of Transportation, Stewart Airport Properties Development Plan and Environmental Studies.** *Project Manager*, supervising preparation of site development alternatives for approximately 2,000 acres of the 8,000-acre airport properties and the environmental studies necessary to secure associated development permits. Scope includes re-evaluation and refinement of marketing studies, formulation of a site master plan, formulation of development alternatives, implementation of a public participation program, preparation of a Federal/SEQRA EIS and preparation of permit applications**.**

- **Federal Highway Administration (FHWA) Environmental Research Support Open-Ended Contracts.** Responsible for managing a two consecutive open-ended environmental research contracts performed at a national level, one covering three years and the second covering at least five years. A total of 40 individual task orders have been prepared under these two contracts to date including: developing Environmental Justice training materials for FHWA, including case studies demonstrating the application of Environmental Justice techniques and principles; the preparation of case studies highlighting the use of public-private partnerships for CMAQ projects; the preparation of public involvement guidance materials, including the preparation of case studies demonstrating public involvement techniques and principles for design-build projects.

STELLAR

57 West 38th Street, 11th Floor
New York, NY 10018
Tel# 212 432 2848
Fax# 212 432 2846

YUMIN DING

Cost Control Specialist

Ms. Yumin Ding possesses excellent analytical skills in the finance area. She is dedicated, organized and has great experiences working with vendors/clients at different levels including State and Local government agencies. Ms. Ding performs budget planning and resource management, and supports contract administration and cost control to MTA Second Avenue Subway Project. She supervised the monthly requisition process, oversees data collecting & input into JD Edwards system and accounts payable, updates and maintains project database, and provides cost analysis.

EDUCATION

Master, Management,
Graduate School of Business of Grenoble, France — Sept 2001 – May 2003
B.A., French Language and International Economics,
Beijing University, China — Sept 1997 – July 2001

PROFESSIONAL WORKING EXPERIENCE

Stellar Services New York, NY — July 2004 - Present
Cost Control Specialist

2nd Avenue Subway Project - *Financial Analyst/Project Analyst*

- Manage the implementation of project control on finance/accounting team
- Coordinate cost estimates, preliminary and final contract documentation
- Update and review monthly actual and forecasted project costs
- Prepare monthly status reports addressing accomplishments, issues, schedule and budget status
- Manage and analyze labor reports to budget costs
- Responsible for the monthly requisition process
- Provide support to contract administration and cost control
- Oversee collection and input of data into JD Edwards system and accounts payable
- Update and maintain project database providing detailed tracking of man-hours and costs, including data feeds to the project cost management system
- Provide support covering a wide range of cost analysis and tracking to satisfy project reporting requirement, including ad-hoc requests

Steller Corporate Office - *Business Analyst*

- In charge of hardware/software sales to New York State & New York City government and Higher Education accounts. Responsible for the whole circle of hardware/software bids, invoicing and account receivable follow-up.
- Worked closely with State and Local government agencies' procurement department, responded to solicitations released by those agencies.
- Coordinated with inside sales representatives of Dell, Gateway, Cisco, Veritas, BMC
- Responsible for monitoring the business opportunities from INPUT for any Federal and state procurement requirement
- Designed the work flow charts of document control process for City of Atlanta Clean Water project

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- Analyzed the work process of program development for Forest City Ratner Company
- Participated in data analysis project for Pfizer
- Special coordination for government requisition project
- Established monthly P&L report of sales staff and major projects of the company
- Oversaw monthly invoicing/bill payment of the company

China Marketing Research Inc. Shanghai, China March 2004 – June 2004
Research Executive

- Participated in several marketing research projects for automobile companies' marketing strategy
- Designed questionnaires and conducted interviews with customers and suppliers for clients.
- Conducted qualitative and quantitative research.

Keria Luminaries SA Grenoble, France June 2003 – Dec 2003
Assistant Manager of Marketing Intern

- Business development in market of China.
- In charge of the outsourcing in Asia, successfully reduced the sourcing cycle by 10 months.
- Analyzed the company's old web site; designed and made a new web site for the company (www.keria.fr).

APPLICATIONS
Microsoft Office Suite (Access, Excel, Word, PowerPoint)
Web Design: Macromedia Dreamweaver, Fireworks and Flash; Adobe Photoshop

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New York, NY 10018
Tel# 212 432 2848
Fax# 212 432 2846

HAO JIANG

Cost Control Specialist

Mr. Hao Jiang specializes in financial and cost accounting, operational auditing and project management. He has strong analytical research and investigative skills, and has in depth knowledge in GAAP, FASB and SOX. He is extremely well organized and detail oriented, with strong time management and prioritizing skills, and confident in decision making while exercising discretion, reliability and prudent judgment, and highly merited on maintaining high unit standards and complying with guidelines, policies and procedures.

EDUCATION

McGill University, Montreal, QC, Canada 2006-2007
Diploma in Accounting/Graduate Certificate in Treasure and Finance

McGill University, Montreal, QC, Canada 2004-2005
Master of Library and Information Study

Memorial University of Newfoundland, St. John's, NL, Canada 2003-2004
Master of Business Administration

Memorial University of Newfoundland, St. John's, NL, Canada 2001-2002
Master of Arts in Economics

Nankai University, Tianjin P.R. China 1991-1995
Bachelor of Arts in Economics/Bachelor of Arts in Literature

TECHNICAL SKILLS

- QuickBooks, Simply Accounting, Payroll and Tax Software
- Primaver6
- MS Office (Word, Excel, Outlook, Visio and PowerPoint)

PROFESSIONAL DESIGNATIONS

- Certified Public Accountant (CPA)
- Certified Management Accountant (CMA)
- Certified Internal Auditor (CIA)
- Certified Information System Auditor (CISA) Candidate
- Certified Cost Consultant/Certified Cost Engineer (CCC/CCE) Candidate
- Microsoft MCP/MCSE/MCSD/MCDBA (Expired)

PROFESSIONAL WORKING EXPERIENCE

Stellar Services New York, NY 2008 - present
Cost Control Specialist

- Manage projects cost by reviewing project-related cost details and purchase orders, liaising between accounting department and project management team, ensuring all costs are accurately charged and appropriated.
- Reclassify and reallocate mischarged items, update revenue schedule for the projects which includes reconciliation of cost with the journal, ledger, work in progress, cost in excess, invoice and contract billing.

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- Collect and compilate timesheets and work orders from management, field services and third party contractors.
- Coordinate with project managers and principals for invoice approval and work authorization.
- Input all consultant invoices and reconcile invoice discrepancies with the consultants, review labor cost and expenses with the project managers, analyze/compare cost against budget allocation for multiple projects, evaluate accrual levels and earned value calculation report, variances to project managers, and forecast cost plan.
- Perform General Ledger review and maintenance including coding, adjusting, closing and balancing accounts, and provide analysis and reconciliation of all ledger accounts.
- Manage the entire monthly, quarterly, and yearly close process to ensure GAAP compliance.
- Compile and analyze financial information to prepare accurate and timely monthly, quarterly and yearly financial statements in compliance with GAAP, such as footnotes and related financial disclosures.
- Maintain and prepare supporting schedules for various balance sheet and income statements accounts, including amortizations schedule, AR and AP aging schedule, inventory and fixed assets schedules, pre-paid expenses, accrued liabilities, interest, defer Revenue account, realized and unrealized gain/loss of investment accounts, and others.
- Review and analyze financial reports to ensure appropriate selection, application and consistency of accounting principles, such as capitalization policy, estimate of AFDA and timely accruals throughout the year, and work closely with the operational departments to ensure that all financial transactions are captured and properly recorded in the appropriate period.
- Produce statistics data and various ad hoc financial reports, such as profit centers P&L report and fixed asset report, to support management decision-making.
- Manage AP/AR to ensure timely AR collection and payment to vendors.
- Manage payroll function for company employees and 1099 contractors and issue required 1099s and W-2s at year end.
- Prepare annual revenue forecast and budgeting, and perform monthly variance analysis.
- Establish and monitor the implementation and maintenance of accounting control procedures to ensure SOX compliance.
- Perform company annual federal and states tax return analysis and provide supporting documents to accounting firm for tax return filing
- Interact with external auditors during quarterly reviews and year-end audits including financial audit preparation and coordination of audit process

Jianmin & Association C.G.A., Toronto, ON, Canada 2007 - 2008
Staff Accountant

- Handled full cycle accounting transaction, including Journal Entries Preparation, Bank Reconciliations, A/P, A/R, General Ledger posting, Trial Balance analysis, Financial Statement generation and Year-end closing and tax remittances.
- Managed payroll function.
- Prepared personal and Corporation Income Tax Returns.
- Managed clients relationship and information.
- Ensured compliance with the necessary statutory regulation and practices.

ELIZABETH BOVINO
COST/SYSTEMS ANALYST

Ms. Elizabeth Bovino is currently the Cost/Systems Analyst for the Downtown Restoration Program (WTC Construction). Previously, she performed this function for Phase II of the EWR Redevelopment Program, and the AirTrain Newark Program. Responsibilities included design and development of database systems for all aspects of these Programs, with special emphasis in the cost control, budgeting and document control areas. Other responsibilities included public relations, report writing and software training.

Education:
M.B.A./MIS
St. Peter's College
Jersey City, NJ

B.S. MIS
Dominican College
Orangeburg, NY
Magna Cum Laude

Licenses/Certification
DBE
WBE

Professional Affiliations:
Professional Women of Construction USA

Employment History:
Team Support Services, Inc.,
President, 1998 – Present

Relevant Experience

Downtown Restoration Program. *PANYNJ.* Track expenditures for all WTC Site projects including the $3.2 billion WTC Transportation Hub Program and the $633 million WTC Vehicular Security Center Program. Maintain work breakdown structure and create corresponding charge codes for these projects using InCAPs. Prepare monthly and quarterly reports, including FTA Activity Line Item and Encumbrance reports. Track actual versus budgeted costs using SAP as a source. Prepare consultant and construction drawdown documentation for FTA funded projects. Review and process invoices and prepare Journal Vouchers as necessary in SAP. Prepare monthly accrual report. In addition, establish internal orders and track operating expenses for the WTC Site Work projects. (Ongoing)

Newark Liberty International Airport Redevelopment Program – Phase II. *PANYNJ.* Prepared weekly, monthly and quarterly reports. Opened and closed charge codes based on Program Work Breakdown structure. Prepared monthly accrual report. Processed Terminal A Improvement/Relifing payments in SAP. Audited invoices submitted by Continental for the Terminal C Roadways and Lot C Garage projects. Tracked actual costs versus budget information. Designed and developed Program database, which included the following components: Document Control, Invoice Tracking (Program Management and Continental), Authorizations, Cost Control, Daily Casip Log and Follow-up/Action Item Lists. Downloaded actuals on a monthly basis from Captrak (InCAPS), and uploaded information into the Program database for budget tracking and incorporation into the Program monthly report. Used Contrak reports to capture earned value information for each project. Developed and maintained a Program press kit including updated narrative fact sheets and current construction photography for each project. Coordinated site tours and presentations for external groups, as well as participated in community outreach events. Prepared articles for submission into various publications. Reviewed all presentation materials including slides, videos, press releases and posters that were used for informing the public on the status of the Program. (2001-2002)

Newark Liberty International Airport Redevelopment Program. *PANYNJ.* Prepared yearly budgets for the $415 million EWR AirTrain Program. Prepared budget updates to the Capital Plan and modified data in the Captrak (InCAPs) System. Prepared weekly, monthly, quarterly and ad-hoc reports. Prepared biweekly status meeting minutes. Opened and closed charge codes, which were developed based on a Program Work Breakdown structure. Downloaded actual costs from SAP on a monthly basis and audited expenditures. Designed a Program database that included the following components:

Document Control, Cost Control, and System Vendor Letter Tracking. Using the Cost Control component of the database, tracked budget versus actual performance for incorporation into various reports. (1997-2001)

Newark Liberty International Airport Redevelopment Program – Phase I. Prepared status reports, ranging from weekly to yearly, for all active projects on the Program. Developed initial drafts of reports for review by the Project Managers. Prepared final narrative sections, updated schedules and collected cost data. Integrated all information to produce final reports; distributed reports in both electronic and hard copy formats. Designed and conducted training classes for electronic mail, calendar, spreadsheet, graphics and word processing software programs. Provided "help desk" software troubleshooting support for approximately sixty end users. In addition, provided administration backup support on a Novell 4.1 network. Designed and developed Program database including the components listed below. (1988-1997)

Employee Administration System -- This system tracked computer hardware and software inventory, petty cash disbursements, company vehicle usage and personnel information.

Document Control Tracking System --The document control module was comprised of a resource library, circulation control monitoring and document location indexing.

Invoice/Budgeting System -- This application provided for the creation of invoices to the client and produced budget reports.

Lease Management System Designed and developed a lease tracking system which monitors airport tenant lease activity including expiration look-ahead reports. This system also has the capability to produce a tenant directory and yield mailing labels. This system is currently being used at EWR, JFK and LGA airports. A similar system was installed at Atlanta Hartsfield International Airport.

MARGARITA MORERA
REPORTS / PRESENTATION SPECIALIST

Ms. Margarita Morera possesses over eight years of experience in the preparation, editing and distribution of program reports, which ranged from weekly reports to executive status reports. She is well versed in SAP, Visio and PowerPoint and has assisted in the preparation of numerous presentations. As a Marketing and Administrative Manager of Team Support Services, Margarita is also responsible for recruiting, representing the company at conventions, meetings and public forms for business development purposes. In addition, she developed the company brochure, policy manual and other marketing materials. Moreover, Ms. Morera has more than 25 years of experience in the administrative and clerical fields, and has worked in the private, financial and government sectors.

Education:
Computer Software Applications, Union County Community College

Licenses/Certifications:
MS Office Certified 2000
Notary Public, New Jersey

Professional Affiliations:

Employment History:
Team Support Services Inc., Manager – Marketing, Reporting & Administration, 2000 – Present

Hudson Environmental Services, Inc., Office Manager, 1991 – 1999

Merrill Lynch Capital Markets, Senior Secretary to Vice President, 1987 – 1989

U.S. Environmental Protection Agency, Secretary to Deputy Director, 1984 – 1987

Relevant Experience

Newark Liberty International Airport – Modernization & Expansion of Terminal A. *PANYNJ.* Executive Administrative Assistant responsible for attending bi-weekly project meetings to record minutes, transcribe and prepare final version. Assisted in the preparation of project reports and presentations. Provided general administrative support including mail distribution, typing, copying, faxing and scanning to project executives and managers. Ordered supplies using the Port Authority corporate system. (2009)

Downtown Restoration Program. *PANYNJ.* Worked on the following projects: Temporary WTC Path Station, Exchange Place, WTC Transportation Hub, WTC Vehicular Security Center / Tour Bus Parking Facility, WTC Freedom Tower, and the WTC Memorial / Memorial Museum / Visitor's Orientation and Education Center. As the Reports Specialist, I prepared, edited, and distributed the weekly Program, monthly Executive status and accrual reports. Compiled data from various sources into monthly and quarterly Program status reports. Supported the Program Director and other senior staff in the set up and implementation of public outreach PowerPoint presentations. Prepared memos and spreadsheets and scanned documents. Entered invoices into SAP for payment. Queried/printed reports from SAP regarding status of purchase orders, payments and actual costs. Ordered supplies using Port Authority corporate system and set up telephone service / equipment requests. (2006)

Newark Liberty International Airport Redevelopment Program, Phase I. *PANYNJ.* Worked on the Northeast Corridor Connection / AirTrain Newark Program where I performed the following: Collected data from various departments for use in the preparation of the weekly status report. Responsible for proofreading the report for accuracy and final distribution. Gathered Application for Payment data from contractors, including Minority and Women Business Enterprises (M/WBE) information for incorporation into the monthly report. Utilized SAP to verify data for use in the preparation of monthly accrual reports and consultant invoices. Processed System Vendor Technical Consultant invoices. Maintained supervisor calendar and scheduled meetings accordingly. Prepared memos, general correspondence and expense vouchers. Responsible for the manipulation of actual cost data in Excel, which was downloaded from Captrak, for future uploading into the Program database. Incorporated narrative data from project managers into the monthly report. Proofread monthly report for accuracy and final distribution. Prepared and verified monthly payment memos for Terminal A Improvements invoices and Continental Lot C Garage and Terminal C Roadway invoices.

Hudson Environmental Services, Inc. Responsible for automated accounts payable, accounts receivable, billing and petty cash. Maintained record of all incoming cash and check payments and bank reconciliation. Responsible for procuring office supplies and equipment. Supervised secretary, provided computer support and handled customer inquiries. Arranged travel and prepared expense vouchers. Prepared memos and general correspondence.

Merrill Lynch Capital Markets. Responsible for special procurement requests. Screened incoming calls, arranged travel and prepared expense vouchers. Maintained appointment book and scheduled meetings accordingly.

U.S. Environmental Protection Agency. Supervised and trained new clerical employees. Arranged travel and prepared expense vouchers. Maintained personnel records, employee timesheets, personnel position control, and personnel action logging systems. Assisted with budget preparation.

Licenses

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

LOUIS BERGER & ASSOC PC
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PO BOX 1946
MORRISTOWN, NJ 07960-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0006121

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

Office of the Professions

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License Information *

10/20/2010

Name : KING CHARLES FRANCIS
Address : POUND RIDGE NY
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 10/14/94
Additional Qualification :
Status : REGISTERED
Registered through last day of : 04/12

Certificate of Authorization to provide Professional Engineering Services in New York State :
YES CERT# [redacted] EXPIRES 07/13

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- Note: The Board of Regents does not discipline *physicians(medicine), physician assistants,* or *specialist assistants.* The status of individuals in these professions may be impacted by information provided by the NYS Department of Health. To search for the latest discipline actions against individuals in these professions, please check the New York State Department of Health's Office of Professional Medical Conduct homepage.

License Information

Return to Search Results

Name: CHARLES F KING

Address: Pound Ridge,NY

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 7/1/1987

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

Office of the Professions

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License Information *

10/20/2010

Name : STAMATIS DEMETRIOS J
Address : MORRISTOWN NJ
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 05/24/05
Additional Qualification :
Status : REGISTERED
Registered through last day of : 01/11

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- Note: The Board of Regents does not discipline *physicians(medicine), physician assistants,* or *specialist assistants.* The status of individuals in these professions may be impacted by information provided by the NYS Department of Health. To search for the latest discipline actions against individuals in these professions, please check the New York State Department of Health's Office of Professional Medical Conduct homepage.

License Information

Return to Search Results

Name: DEMETRIOS J STAMATIS

Address: Mountainside,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 4/25/1991

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

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License Information *

10/20/2010

Name : CANGIANO ANDREW
Address : LANDING NJ
Profession : PROFESSIONAL ENGINEERING
License [redacted]
Date of Licensure : 05/05/09
Additional Qualification :
Status : REGISTERED
Registered through last day of : 04/12

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License Information

Return to Search Results

Name: Andrew Cangiano

Address: LANDING,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 8/6/2001

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

THE STATE OF NEW JERSEY
DEPARTMENT OF LAW & PUBLIC SAFETY
DIVISION OF CONSUMER AFFAIRS

License Information

Return to Search Results

Name: Andrew Cangiano

Address: Landing,NJ

Profession/License Type: Professional Planners,Professional Planner

License No: [redacted]

License Status: Active

Issue Date: 10/10/2007

Expiration Date: 5/31/2012

For more information contact the New Jersey State Board of Professional Planners (973)504-6465

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DEPARTMENT OF LAW & PUBLIC SAFETY
DIVISION OF CONSUMER AFFAIRS

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License Information

Return to Search Results

Name: HAROLD WAYNE VALENTINE

Address: STANHOPE,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

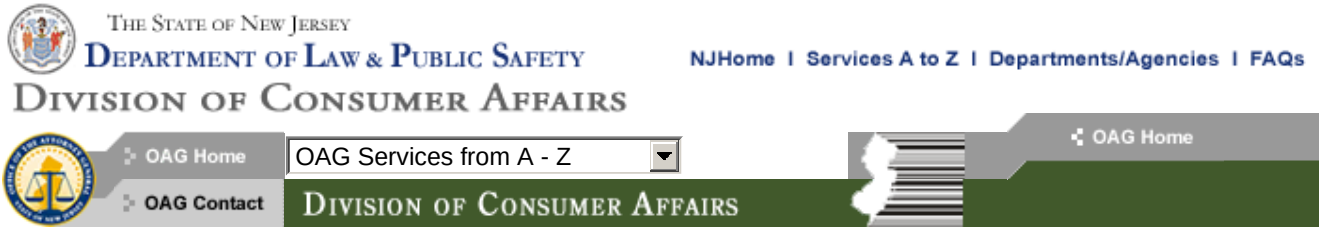
License No: [redacted]

License Status: Active

Issue Date: 4/1/1997

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460



License Information

Return to Search Results

Name: John Hasselmann

Address: Sparta,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 6/27/2006

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

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License Information *

10/20/2010

Name : LAW RICHARD WARREN
Address : RIDGEWOOD NJ
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 05/21/92
Additional Qualification :
Status : REGISTERED
Registered through last day of : 06/11

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License Information

Return to Search Results

Name: RICHARD W LAW

Address: Ridgewood,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 4/25/1991

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

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License Information

Return to Search Results

Name: RICHARD J BARRINGTON

Address: New Providence,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 9/4/2001

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

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License Information *

10/20/2010

Name : SOLIMAN MICHAEL M
Address : MILLINGTON NJ
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 08/08/97
Additional Qualification :
Status : REGISTERED
Registered through last day of : 09/11

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- Note: The Board of Regents does not discipline *physicians(medicine), physician assistants,* or *specialist assistants.* The status of individuals in these professions may be impacted by information provided by the NYS Department of Health. To search for the latest discipline actions against individuals in these professions, please check the New York State Department of Health's Office of Professional Medical Conduct homepage.

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License Information

Return to Search Results

Name: Michael M Soliman

Address: Millington,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 8/4/2004

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

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License Information *

10/20/2010

Name : THIEL ROBERT J
Address : WHIPPANY NJ
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 10/06/04
Additional Qualification :
Status : REGISTERED
Registered through last day of : 11/12

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Office of the Professions

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License Information *

10/20/2010

Name : CRAWFORD COSEMA E
Address : BERKELEY HEIGHTS NJ
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 03/12/84
Additional Qualification :
Status : REGISTERED
Registered through last day of : 12/12

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THE STATE OF NEW JERSEY
DEPARTMENT OF LAW & PUBLIC SAFETY
DIVISION OF CONSUMER AFFAIRS

License Information

Return to Search Results

Name: JAMES J MURRAY

Address: Montville,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 7/1/1983

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

Office of the Professions

Verification Searches

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License Information *

10/20/2010

Name : MCCARTHY FREDRICK H
Address : WALL NJ
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 04/27/01
Additional Qualification :
Status : REGISTERED
Registered through last day of : 10/12

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License Information

Return to Search Results

Name: Albert John Racciatti

Address: Leonia,NJ

Profession/License Type: Professional Planners,Professional Planner

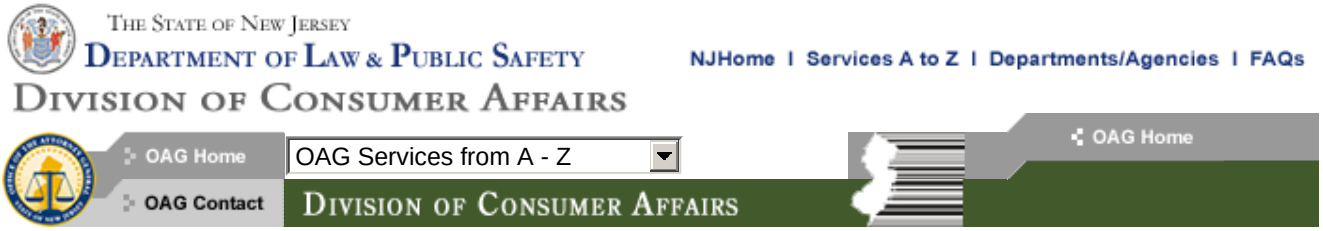
License No: [redacted]

License Status: Active

Issue Date: 5/24/2002

Expiration Date: 5/31/2012

For more information contact the New Jersey State Board of Professional Planners (973)504-6465



License Information

Return to Search Results

Name: Nicolaas Veraart

Address: Manhasset,NY

Profession/License Type: Professional Planners,Professional Planner

License No:

License Status: Pending

Issue Date:

Expiration Date:

For more information contact the New Jersey State Board of Professional Planners (973)504-6465

Specific Relevant Experience of the Firm

Specific Relevant Experience of the Firm

Introduction

Our Team is well positioned to provide the referenced services based on our experience working on other "Call In" Service contracts with PANYNJ. Our Team members have served the PANYNJ on various "Call In" contracts since the early 1990's, including several Project Management Services "Call In" contracts. We most recently served PANYNJ on the Project Management "Call In" during 2006-2010. Under this contract, we provided Project Management staff at Newark Airport and performed critical studies for PANYNJ, such as the Project Management Office Assessment in 2009.

LBA, P.C., authorized to perform engineering and design services in the state of New York and New Jersey, provides planning, environmental, engineering, construction and program management services to clients in the New York City metropolitan area and works in cooperation with The Louis Berger Group, Inc. (collectively comprising the **LBA, P.C. Team**). With support from The Louis Berger Group, Inc.'s offices in New York City and Morristown, New Jersey, the LBA, P.C. Team is a leading service provider in the greater New York City metropolitan area, including numerous New York City, NY State and NJ State agencies. Working with The Louis Berger Group, Inc., LBA, P.C. has access to the entire Berger family of professional engineers, as well as technical and support staff.

For some of the Authority's most visible and complex programs, the LBA, P.C. Team and our partners have been entrusted as a preferred provider of Program/Project Management Services. LBA, P.C. Team members have served as Program Manager on several high profile projects. Since the 9/11 attacks, LBA, P.C. Team member, The Louis Berger Group, Inc., has served as the PANYNJ's Program Manager for **Phase I of the World Trade Center Reconstruction,** where PATH service was restored to Lower Manhattan and for **Phase II of the World Trade Center Reconstruction** for the design and construction of the Memorial, Transit Hall and WTC Towers 1 through 4. Our Team members have also served for nearly 20 years as Program Manager for the **Newark Liberty Airport Redevelopment.** Our Team Members are also presently a part of a Joint Venture Partnership for **Program Management Services on the PATH Capital Budget Program**.

We have been providing highly trained and experienced Program and Project Management personnel to the PANYNJ in all the Line Departments. At Newark Airport, we have provided personnel for the planning work at Terminal A and the Terminal B redevelopment. Under our PATH PM contract, we are working with PATH to identify Project Managers for the Capital Program. We presently have personnel working with Tunnels, Bridges and Terminals at the One Madison Ave on the George Washington Bridge Bus Station Redevelopment. Under our Construction Management "Call In" contract, we are providing personnel on the Brooklyn Piers, Stewart Airport and CPM scheduling assistance from the Tech Center for all the TBT programs, including the George Washington Bridge programs.

Enhancing the LBA, P.C. Team will be our subconsultants, Stellar Services (MBE) and Team Support Services (WBE). Both firms have long standing relations with the LBA, P.C. Team and have served as trusted subs for our Program Management teams at the World Trade Center and

Newark Airport.

Program Management Services for the George Washington Bridge Bus Station, Port Authority of NY & NJ

LBA, P.C. Team member, The Louis Berger Group, Inc. is providing Program Management services to the Port Authority of New York and New Jersey for the redevelopment of the George Washington Bridge Bus Station located on 178th St in upper Manhattan, directly on the George Washington Bridge approach. The Station, designed by Pietro Nervi, was originally constructed in the 1950's, it now serves 20,000 daily commuters as a connection point for trips from NJ to Manhattan. In a Public-Private partnership, the PANYNJ has contracted with a Retail Developer to modernize the Bus Station and introduce a retail shopping complex to the serve the Washington Heights community.

GWB Bus Station – Broadway View Facing West

GWB Bus Station – Aerial View Facing East

The developer is responsible for design and construction of the new bus pavilion and concourse for 30 buses to a specified Design Criteria. This relationship is similar to a CM/GMP agreement. Once a Guaranteed Maximum Price is agreed upon, the developer takes all the risk to deliver.

The team is providing Project Management services, document control and reporting services through TBT as part of the PANYNJ Program Management team.

Assessment of the Project Management Office and the Project Manager's Role Port Authority of NY & NJ

As a Task under the Project Management Service "On Call" contract, LBA, P.C. Team member The Louis Berger Group, Inc. was contracted by the Port Authority of New York and New Jersey (PANYNJ) to review the existing configuration of their Project Management Office (PMO) and its sufficiency to support the delivery of projects within scope, schedule and budget. The PANYNJ sought to identify whether the scope of their PMO services were consistent

Project Scope:

- Review of existing configuration of the PMO
- Conduct interviews with PA executives and staff
- Analyze PMO's current and proposed staffing
- Develop an objective criteria for evaluating proposed structure/staffing/services of the PMO
- Evaluate the present Project Management structure within the Port Authority

Results:

- Documented the history of Project Management at PA
- Identified areas for improvement in current PMO
- Compared Port Authority project management with other agencies of similar size and mission
- Provided recommendations for making the PMO more effective within the Agency

with industry best practices per Project Management Institute and whereupon improvements would be necessary to improve their current practices.

The team gathered data on the current practices of the PMO and documented the evolution of its structure within the PANYNJ. The different methods employed by the PANYNJ were analyzed and benchmarked against current industry standards to identify areas of potential improvement within the current system.

The team carried out a total of 33 interviews with 46 PANYNJ executives and staff. Participants were asked their knowledge on a variety of topics including:

- The evolution of the PM function in the PANYNJ
- The overall role of the Project Manager in the PANYNJ
- The consistency of the role for Project Managers
- The clarity of a career path for PMs within the PMO
- The role of the Engineering Department
- The understanding of the PM's role
- The perceptions of the PMO

From the results of these interviews and comparisons carried out from interviews with individuals in other agencies the team indicated the weaknesses of the current PMO and recommended areas of improvement to the PANYNJ to achieve their goal of industry best practices.

World Trade Center Reconstruction, Port Authority of NY & NJ

LBA, P.C. Team member, The Louis Berger Group, Inc. is presently serving as **Program Manager for the World Trade Center Reconstruction** and has served in this role since immediately after the 9/11 terrorist attack. A major early success for the Program Management team was the restoration of PATH service to Lower Manhattan within a year after the attacks. The team is now managing the complex reconstruction program consisting of the Transit Hub, World Trade Center One, 9/11 Memorial and the Vehicle Security Center, totaling $16 billion construction value.

World Trade Center Reconstruction
Port Authority of NY & NJ

Program Management Services

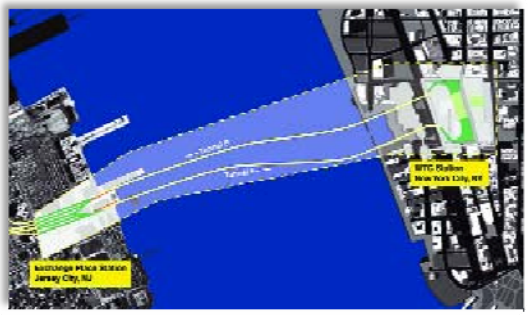
- $16B Construction
- PATH Transit System Restoration
- 50+ Construction Contracts
- Integrated Master CPM Schedule
- Cost Control
- Progress Status Reporting

Project Background:

The Port Authority Trans-Hudson (PATH) Commuter Rail System was a key component of the transportation infrastructure of the New York Metropolitan Area, and particularly important to the economy of Lower Manhattan. It carried thousands of commuters between New Jersey and New York. One of its two terminus points in New York City (Lower Manhattan) was eliminated by the events of September 11, 2001.

In an effort to re-establish this service, the Authority embarked on an extremely "fast track" program to: (1) construct a Temporary PATH Station at the site of the former World Trade Center; (2) restore the two miles of tunnels beneath the Hudson River connecting this terminal with New Jersey; and (3) improve the first station in New Jersey, Exchange Place Station, to operate as an interim terminal and handle the size trains needed to provide the level of service required by this key rail artery. These three projects represented the first phase of the overall program for redevelopment of the World Trade Center site and restoration of transit services.

The team was contracted to provide Program Management Support to both the Authority's Office of Priority Capital Programs and the Engineering Department. In addition to overall program and project level cost, schedule and scope control, the team's responsibilities included program definition, management of in-house staff, review of consultant staff design and reports, coordination of a PEER review by national rail experts, validation review of the signal technology with heavy rail signal experts, system integration, implementation of engineering technologies for information management and team communication / collaboration.



Rehabilitation of Tunnels E and F: The tunnels, connecting New Jersey to Lower Manhattan, ran under the Hudson River from Exchange Place Station to the site of the Temporary World Trade Center Station. Because of flooding following the September 11, 2001 terrorist attacks on the World Trade Center, the project required the demolition and removal of the entire infrastructure, track work and systems within the tunnels and restoration of all cables and wires, tracks, lighting, drainage, fire protection, and signal and communication systems. Nearly 20 miles of cables (including high voltage, traction power, communications and signal) and over four miles of track were replaced.

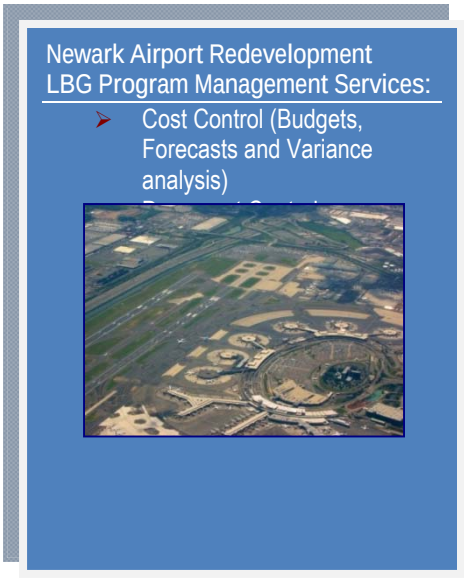
Exchange Place Station Improvements: Exchange Place Station was the last station in New Jersey before the PATH tunnels cross the Hudson River into lower Manhattan. Because it was not configured as a last-stop terminal station, service was lost to this station when the World Trade Center was destroyed. Loss of service to Exchange Place Station had adversely affected the large commercial and residential complex on what is called the "Gold Coast" of New Jersey. The project scope included construction of several cross-tunnels to connect the existing five tunnels and allow installation of track crossovers to connect the tracks serving Exchange Place Station and the replacement of an existing signal relay room in the way of the proposed connecting tracks. The Program called for the early opening of the Exchange Place Station as a terminal facility so the Authority could provide a more effective and balanced operating system and enhanced patron services. In addition to the new tunnel

crossovers, the Exchange Place Station platforms were lengthened to accommodate 10-car trains, increasing commuter capacity from its earlier 8-car train design. Additionally, the Station was completely refurbished, including vertical circulation, lighting, wayfaring signage, floors and finishes, and utilities and systems.

Temporary WTC PATH Station: A new temporary station at the World Trade Center site was opened for service on November 23, 2003. The station was constructed at the same location as the damaged facility to expedite alignment and configuration design and mitigate the need for additional property acquisition. The design and construction of a temporary WTC PATH Station, including a track and platform configuration similar to the former World Trade Center station, was planned to ensure restoration of PATH service to Manhattan within 24 months. The Station has a mezzanine (with fare control area) above the platforms, with stair and elevator access connecting the two levels. From the mezzanine, passengers follow the previous circulation route, to escalators/elevators/stairs which provide access up to street level under a new canopied plaza on the west side of Church Street. Though an "open-to-air" design with minimal exterior walls, the temporary station features semi-opaque fabric enclosures to provide protection from both inclement weather and the anticipated construction at the surrounding site.

Newark Liberty International Airport (EWR) Redevelopment Program Port Authority of NY & NJ

For nearly 20 years, starting in 1990, the team has provided **Program Management services for the Newark Liberty Airport Redevelopment Program** (EG245A). During this time the team managed planning, design and construction phases of three separate expansion and improvement programs which included the Monorail, Parking Garages, International Terminal, Administration Building, Taxiway Expansions, and Access Roadway and Bridge Improvements.



Project Background:

During the past decade, passenger growth at Newark International Airport has risen by more than 35% to 34 million. In response, the Authority has begun an ambitious redevelopment program to provide more parking, easier access to and around the airport, and better terminal facilities. The program is being accomplished in conjunction with the Continental Airlines Global Gateway Project at Terminal C, the extension of the Monorail to NJ Transit and Amtrak rail lines, improvements to all terminals, and a new control tower being constructed by the FAA. Most projects, including the parking garages, the Terminal C expansion, the Monorail extension, and many other terminal improvements, were completed during 2001, and the balance of work was phased through 2004.

Parking: The Program provides thousands of additional, conveniently located, parking spaces at two locations: A 6-level structure, adjacent to Monorail Station E, which is accessible directly from I-78. It features easy access to all airline terminals via the Monorail, as well as an expanded valet

parking service. A 4-level structure in front of Terminal C has direct pedestrian access to Terminal C.

Roadways and Frontages: The airport entrance was expanded, as were roadways leading to the Monorail stations and rental car facilities. A new multi-lane, grade level roadway, passing directly in front of all terminals, provides direct access to hourly and daily parking, and to the new parking garage at Terminal C. Commercial vehicles also use this roadway for pick-up and drop-off, and have three special lanes at Terminal C. Private vehicles reach the new at-grade five-lane arrivals level at Terminal C via a new ramp. Passengers for departing flights are able to use both the second and third levels; passengers on arriving flights claim baggage on the ground level, which is served by a new 5-lane road for private cars. The second level departures roadway was expanded to four lanes. To alleviate the traffic back-ups common during peak travel hours, cars are separated from buses and other commercial traffic. The roadways and bridges connecting the airport entrance with NJ Turnpike Interchange 13A, Routes 1&9, and I-78 were also improved. Phase 1 of the project included the addition of a new ramp and bridge at the airport entrance, the widening of Brewster Road near the entrance, and the construction of new roadways south of the airport. During Phase 2, a new fly-over was built on North Avenue, and a new ramp was constructed at Interchange 13A of the New Jersey Turnpike. Phase 3 included new ramps at the McClellan Street Interchange with Routes 1&9.

Terminal Facilities: Terminal C was expanded to include a new concourse and immigration facility. Continental Airlines added a 12 wide-body gate concourse, a new baggage handling system, a 20,000- square-foot Presidents Club and a Customs and Immigration area.

Airside Facilities: The site of the former control tower and administrative complex, as well as adjoining roadway and parking areas, were converted to airside operations. This provides needed space for aircraft parking and additional taxiways, and improves aircraft traffic flow. A new tower was erected at Terminal C to improve ramp utilization and manage the servicing of aircraft. This facility alleviates taxiway congestion and makes better use of all Terminal C gates. A new administration/airport rescue and fire-fighting facility houses the central nerve center for the airport. All operations, from roadway traffic conditions, to the Monorail and passenger terminal activities, are monitored from this facility, which also houses the airport's police force. The structure is a composite of a new building, joined to the original central passenger terminal at the airport (an historic building).

Stellar Services (MBE)

Contact: Anna Hu, Stellar Services, (212) 432-2848

Stellar Services is a Port Authority of New York and New Jersey certified S/MBE Information Technology consulting firm with extensive experience in the transit industry, including multiple assignments working with LBA, P.C. Team member, The Louis Berger Group, Inc.. Their track record proves that they have the ability to finish every project to the satisfaction of their clients. They are proud to claim more than 16 years of experience providing a comprehensive range of innovative and effective IT consulting, procurement and professional services for government agencies at the federal, state and local levels. Since their beginning, they have achieved success on all of their projects, to date, and distinguished themselves in project management, software development, engineering and construction planning and management, document management system consulting and systems integration, hardware/software procurement, asset management, logistical support, and quality control process. Stellar has been growing steadily and currently possesses an annual revenue of $12.8 million and has one-hundred highly educated and experienced IT professionals, whose broad range of specialties make developing elegant and effective solutions for their clients possible.

Stellar Services is a Capability Maturity Model® Integration certified firm. They have formed several strategic partnerships with industry leaders such as Open Text Corporation and Primavera Technology Premier Partnership and the Microsoft Gold Partnership. Working together with their clients as project partners, they offer them unsurpassed services and go beyond their requirements by delivering solutions of the highest caliber.

They bring an arsenal of sophisticated technology to the field and work one-on-one with their clients to make sure that their solutions fit their client's unique needs and that their clients can fully manage their implementations after they leave. Their goal is to balance the cutting-edge with the practical, while always delivering value. They have provided premiere consulting and advisory services to transportation and aviation clients such as the Port Authority of New York and New Jersey, New York City Metropolitan Transportation Authority, New Jersey Transit, Metropolitan Washington Airports Authority, Department of Aviation City of Atlanta, to name a few.

Their company's core is its team of highly educated and experienced IT professionals, whose broad range of specialties make developing elegant and effective solutions for our varied client base possible. Over 85% of their employees possess advanced Master or Post-Baccalaureate degrees as well as solid experience in IT consulting. Their dedicated competent team of professionals is comprised of project managers, system and network engineers, programmers, content management specialists, business process analysts and subject matter specialists fully equipped with superior technical and interpersonal skills.

Team Support Services (WBE)

Contact: Beth Bovino, (908) 256-2902

Team Support Services, Inc. (TSS) has worked with major corporations in both New York and New Jersey for over ten years. As a certified Woman-owned and Disadvantaged Business Enterprise, TSS has supported the EWR Redevelopment Program, the AirTrain Newark Program and the Downtown Restoration Program (Phases I and II) providing cost management and administrative services. Other clients relying on TSS for administrative, clerical, or technical support include nationally known financial management institutions, and major airports in New York, New Jersey and Atlanta. TSS has also provided technical (database application development and implementation) services for engineering and construction corporations.

TSS staff members have decades of service work-years at major facilities performing office administration and reception; database application development; data processing; records management system support; document coding, scanning, distribution and filing; management report design and product; software training, budgeting and cost control.

Management Approach

Management Approach

A core business of the Louis Berger & Assoc., P.C. Team (LBA, P.C. Team) is Project Management for all sizes and types of facility and transportation projects. As experienced Program and Project Managers, we have successfully served the Port Authority of New York & New Jersey (PANYNJ) on several projects, including all phases of the World Trade Center Reconstruction and Newark Liberty International Airport Redevelopment.

PRINCIPLES: ***The LBA, P.C. Team has a standardized, proven approach to Program Management Services that protects our clients' interests and achieves overall project success.***

An integral part of the LBA, P.C. Team's Program/Project Management service is the delivery and implementation of reliable, state-of-the-art Project Controls to monitor risk, quality, cost and schedule. To sustain quality and ability to respond to our client's needs for Project Management, the LBA, P.C. Team maintains a qualified in-house staff of Project Managers and Project Control Specialists. The LBA, P.C. Team's expert services include Cost Estimating, Cost Control, Planning, Scheduling, Document Control and Project Management Services.

The Project Management and Owner's Representation services provided by the LBA, P.C. Team include pre-planning, programming, design management, design review, procurement support, construction management, commissioning and post-construction support. The LBA, P.C. Team establishes all necessary liaisons, coordination and support with project-related agencies and representatives at the federal, state, regional and local levels as appropriate for each specific assignment.

Within the LBA, P.C. Team, Project Management is a discipline taught and nurtured. We select promising candidates from our engineering staff that show interest, leadership, communication and organizational skills necessary to master the role of the Project Manager. In training our Project Management candidates, we follow the Project Management Institute (PMI) principles for Project Management. This discipline includes learning the tools to manage schedule and budgetary performance. Our Project Managers are all technical experts with good managerial skills. These managerial skills are acquired through PMI course and in-house training in cost and schedule control that includes advanced training with the systems (P6, Cost Manager, etc.) used to monitor cost and schedule. We also conduct regular management reviews to ensure that our projects are performing to our clients' expectations.

An essential part of our PM training includes effective communications, internally with management and staff and externally with clients and other stakeholders. Our communication procedures include meetings and written communications such as regular project status reports, meeting minutes, public presentations and financial reports. As an example of our approach to this type work, LBA, P.C. Team members presently prepare all the weekly, monthly and quarterly reports for the highly complex World Trade Center Site Reconstruction.

We are intimately familiar with all Port Authority facilities, having performed Program and Project Management services for every Line Department in the Port District. Our Project Management services have consisted of various types and sizes of programs and projects ranging in value from approximately $50,000 to over $100 million for, but not limited to, the following Authority line businesses with our representative projects:

A. Aviation (***Newark Airport PM Services for Terminal B and the Airtrain***)
B. Tunnels, Bridges and Terminals (***Goethal's Bridge, GWB Bus Station***)
C. Port Commerce (***Brooklyn Piers***)
D. PATH (***PM for Capital Plan***)
E. World Trade Center (***Downtown Redevelopment Program Phase I and II***)

The following Management Approach is based on our guiding principles for our Program Management services:

- **Experienced and Qualified Leadership** – The LBA, P.C. Team always assigns leaders who understand the PANYNJ and its expectations for internal and external communications on projects. Additionally we serve as advisors to PANYNJ Directors and Staff for the managerial and procedural issues. The LBA, P.C. Team personnel work in concert with PA Management to achieve project success.

- **Robust Project Controls** – The LBA, P.C. Team immediately implements Project Controls systems compatible with the PANYNJ's SAP accounting system and incorporates, as appropriate, a cost model, progress reports and an Integrated Master CPM Schedule. Developed for use on the WTC Reconstruction and Newark Airport projects by the LBA, P.C. Team Cost Engineers and CPM Schedulers, our proven systems and procedures will be applied to the projects in all Line Departments.

- **Timely and Informative Project Reports** – Regular communications and reporting are part of our Program Management services. We prepare weekly progress and monthly financial reports that identify project issues that impact scope, cost and schedule. They also inform stakeholders of evolving successes and provide PANYNJ an important Public relations tool. At the WTC project data, pictures and statements are ready for PA's Public Affairs Division, before requested.

- **Web Based Document Management and Sharing** – The LBA, P.C. Team develops Web Portals for centralized access to all program related software and data. Secure controlled procedures are set up so documents can be checked-in and checked-out. All project communications, including RFI's, Shop Drawings and correspondence are tracked in Contract Manager and posted on the Web Portal. With regular updates, this portal provides a window into the project issues and status.

- **Quality Control** – At the earliest opportunity, we will develop Project Specific Quality Assurance Plans for use on the programs or projects to which our PMs are assigned.

- **Safety Monitoring** – Critical to the success of the project is its safety record. Our PMs are trained to monitor or all critical project operations and the impact on construction safety as well as reviewing the impacts on all types of the facilities.

Using these guiding Program Management principles, the following narratives outline our specific approach to each Task identified in the RFP.

TASK A. PROJECT INITIATION SERVICES

The LBA, P.C. Team members are well-known as providers of planning and environmental services for transportation projects. We have prepared several Major Investment Studies, Environmental Assessments, Environmental Impact Statements and Permitting Applications. These studies are holistic analyses of proposed projects that include evaluations of both the design and construction phases of the jobs. This experience is critical to project planning, as permits and regulations drive the sequence and project logistics of any transportation project. Our project management personnel bring this experience to bear on projects, including those projects on which we served as Environmental Consultants (e.g., the Goethal's Bridge, Stewart Airport, the PATH extension to Newark Liberty Airport, the Fulton Street Transit Center and the No. 7 Line Extension). Our Planners and Engineers who developed these EIS documents are available to serve as Project Managers, if needed, for this "On Call" Services assignment.

Our Project Initiation services include: Initial planning; feasibility studies; economic studies; site studies; environmental studies; site investigations; site surveys; preparation of budget and cost estimates; preparation of preliminary schedules; cost modeling and analysis; and cost control management.

The LBA, P.C. Team also provides Project Management analysis and oversight services that are not related to a specific project. We perform studies and analyses of staffing needs and project performance to help our clients achieve maximum efficiency from their own Program/Project Managers. These services include:

- Developing, updating and reviewing of PANYNJ handbooks, guides, manuals and/or policies.
- Providing special consultant or special inspection services, such as assessments of hazardous materials, or reviewing historically significant matters in existing buildings, etc.
- Performing special studies and/or updates to prior studies.
- Performing other specialized services such as updates to master or environmental plans, interior space planning, existing site surveys, site models, etc.
- Providing tenant relocation and moving services at facilities other than those associated with a specific project.
- Providing photographic records beyond the normal scope of presentation and inspection services required.
- Providing expertise as required in unusual situations from specialty disciplines, such as expert testimony for hearings.

- Providing certification services of trade societies, institutes, organizations.
- Providing scheduling and/or estimating services.
- Performing market research studies.
- Provide functional support/expertise in areas such as sustainability, fire safety, physical security, geotechnical stability, seismic safety, historic preservation, moisture control, accessibility, building automation, materials evaluation.

Initiating projects requires an understanding of design and construction risks to ensure schedules and costs are realistic and reliable..

This is where the LBA, P.C. Team comes in. Our project planners have served in responsible positions within several NYC-based design and construction companies; therefore, we understand the most effective manner to organize and execute design/construction work in the NYC metropolitan area.

TASK B. PROJECT IMPLEMENTATION SERVICES

As part of the project implementation, the Project Managers will work with the Engineering and Facilities groups to monitor design compliance with the PANYNJ expectations and project "Design Criteria".

Along with technical understanding of design and construction required for the assignments, our Project Managers bring with an in-depth understanding of CPM Scheduling and familiarity with the construction means and methods. As indicated in the PANYNJ's Scope of Work document, Project Managers will, in summary, be required to support the following services:

- Scope analysis, coordination and development of Work Breakdown Structures to align with project budgets.
- Conduct regular meetings, including bi-weekly progress meetings, design review meetings, etc.
- Prepare regular reports, including but not limited to Monthly Status Reports, financial status reports, minutes of meetings.
- Prepare presentations for executive management, including Board presentations.
- Prepare communications for third party stakeholders.
- Review monthly status reports, monitor issue resolution meetings and actions.
- Monitor change orders and claims for impact to project budget and schedule.
- Assist with FTA meetings and reports, including monthly/quarterly progress reports.
- Monitor construction budgets and schedule to evaluate performance.

During the execution of the work, our Project Managers will perform design management; technical reviews; code compliance reviews; constructability reviews; conducting/participating in Value Engineering workshops; analysis of Value Engineering proposals; preparation of cost estimates (including independent check estimates); cost analysis; cost control/monitoring; energy studies; utility studies; site investigations; site surveys; hazardous material surveys/analysis; scheduling (including preparation of schedules and schedule reviews); design problem resolution; review of

design scope changes (including analysis of schedule impact); scheduling/conducting/ documenting design-related meetings; participation in Time of Performance meetings to establish construction durations; participation in all "Partnering" activities during design (workshops, meetings, etc.); and performing market studies (material availability, contractor interest, etc.).

During the bid stages, if required, our PMs will assist the Contracting Officer in contract procurement; answering bid/RFP questions; attending/participating in site visits; attending/ participating in pre-bid conferences; preparing and issuing solicitation amendments; and performing cost/bid/proposal analysis.

Within our diversified engineering practice, the LBA, P.C. Team includes several constructability experts who have experience in infrastructure and building projects. These professionals work within our organization checking our designs to ensure that they can be built and helping develop work plans that can be set up in Critical Path Method schedules. Design documents generally identify what to build, not how to build it. We are able to provide thought to construction means and methods during Project Implementation and help incorporate the latest technology or techniques into project plans.

Our planning engineers utilize Work Breakdown Structures that are compatible with CPM scheduling procedures. This approach permits our engineers to use the tasks as blocks within the scheduling software and analyze various sequences to find an optimum scheme.

This discipline also requires an understanding of construction equipment access and staging requirements to evaluate the predecessor and successor activities. In the construction business, there are many ways to "skin a cat", but finding the one that gets the job done the most efficiently and with the least impact requires the type of knowledge that the LBA, P.C. Team's Planners can bring.

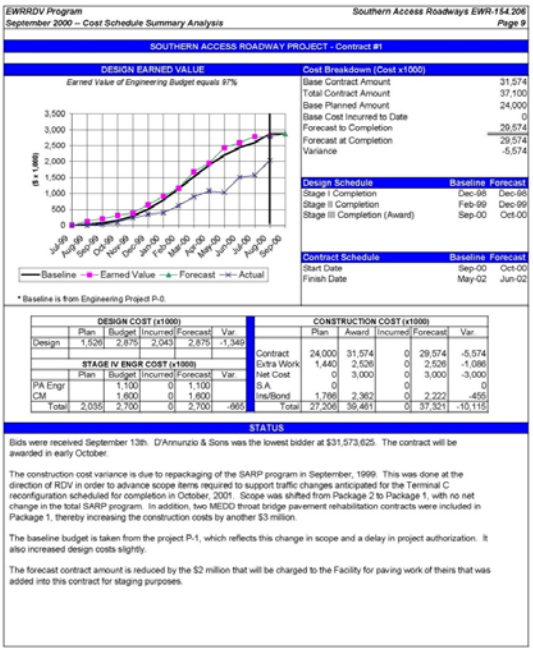
During the Construction Stage of Projects, the LBA, P.C. Team is capable of establishing temporary field offices; setting up job files, working folders, and record keeping systems; maintaining organized construction files; scheduling and conducting preconstruction meetings; handling/ preparing project correspondence to respond to the parties involved with each project, confirm verbal discussions/directives, document actions taken and decisions made, etc.; preparing and maintaining daily dairies for project activities noting events affecting construction progress (weather, manpower, site equipment, work performed, etc.); monitoring the submittal review process including maintenance of submittal logs; review and monitoring of project schedules for construction progress with emphasis on milestone completion dates, phasing requirements, work flow, material deliveries, test dates, etc.; assisting in problem resolution and handling of disputed issues (including development of Government position, drafting final decision letter, etc.); maintaining marked up sets of project plans and specifications for future as-built drawings; performing routine inspections of construction as work proceeds, taking action to identify work that does not conform to the contract requirements, and notifying the contractors when work requires correction; compiling, through site inspections, lists of defects and omissions related to the work performed and providing these lists to the contractor for correction; review of construction contractor payment requests (including preparation of necessary forms for payment processing by

PANYNJ); monitoring project financial data and budgetary cost accounting (maintain spread sheets indicating project fund allowances, obligations, payments, balances, planned expenditures, etc.); administration of construction contract change orders (issuing proposal requests, preparing cost estimates, reviewing cost proposals, assisting GSA in negotiations, preparing change order packages for processing); scheduling, conducting, and documenting regular progress meetings with all interested parties to review project status, discuss problems and resolve issues; scheduling, conducting and documenting (prepare minutes, etc. for distribution) construction related project meetings; monitoring construction contractor compliance with established safety standards (note and report unsafe working conditions, failures to adhere to safety plan required by construction contract); monitoring construction contractor's compliance with contract labor standards (including performing site labor interviews, collecting, reviewing and maintaining weekly payrolls for all project contractors and subcontractors, reporting potential wage violations to PANYNJ personnel); coordination of construction activities with Building Managers and occupying agency personnel; monitoring the design and construction clarification process and, when appropriate, reminding the A/E and other parties involved of the need for timely actions; participation in all "Partnering" activities during construction (workshops, meetings, etc.); preparing special reports and regular project status reports; providing for progress and/or final photographs of project work; perform site surveys using a registered surveyor (establish building lines, elevations, approaches, utility locations, etc.); provide drafting services with CADD support (as-built drawings, survey layouts, utility plans); provide assistance in obtaining permits; perform hazardous material assessments and monitoring of hazardous material abatement work; and provide cost estimating assistance.

TASK C. PROJECT MONITORING AND REPORTING SERVICES

The LBA, P.C. Team offers a robust capability to prepare various reports to maintain cost and schedule performance as well as providing status reports for management.

We will develop tools for reporting that are similar to our ongoing work for the PANYNJ at WTC and EWR, we will take the information gleaned from the initial discussions and create mock-up report templates to review with management. The LBA, P.C. Team understands the types of reports that PANYNJ desires in order to keep track of the real estate projects.


EWRRDV Program — Southern Access Roadways EWR-154.206
September 2000 -- Cost Schedule Summary Analysis — Page 9

SOUTHERN ACCESS ROADWAY PROJECT - Contract #1

DESIGN EARNED VALUE

Earned Value of Engineering Budget equals 97%

($ x 1,000): 3,500; 3,000; 2,500; 2,000; 1,500; 1,000; 500; 0

Jul-99 Aug-99 Sep-99 Oct-99 Nov-99 Dec-99 Jan-00 Feb-00 Mar-00 Apr-00 May-00 Jun-00 Jul-00 Aug-00 Sep-00

Baseline — Earned Value — Forecast — Actual

* Baseline is from Engineering Project P-0.

Cost Breakdown (Cost x1000)

Base Contract Amount	31,574
Total Contract Amount	37,100
Base Planned Amount	24,000
Base Cost Incurred to Date	0
Forecast to Completion	29,574
Forecast at Completion	29,574
Variance	-5,574

Design Schedule	Baseline	Forecast
Stage I Completion	Dec-98	Dec-98
Stage II Completion	Feb-99	Dec-99
Stage III Completion (Award)	Sep-00	Oct-00

Contract Schedule	Baseline	Forecast
Start Date	Sep-00	Oct-00
Finish Date	May-02	Jun-02

DESIGN COST (x1000)

	Plan	Budget	Incurred	Forecast	Var
Design	1,526	2,675	2,043	2,675	-1,349

STAGE IV ENGR COST (x1000)

	Plan	Budget	Incurred	Forecast	Var
PA Engr		1,100	0	1,100	
CM		1,600	0	1,600	
Total	2,035	2,700	0	2,700	-665

CONSTRUCTION COST (x1000)

	Plan	Award	Incurred	Forecast	Var
Contract	24,000	31,574	0	29,574	-5,574
Extra Work	1,440	2,526	0	2,526	-1,086
Net Cost	0	3,000	0	3,000	-3,000
S A	0		0		0
Ins/Bond	1,766	2,362	0	2,222	-456
Total	27,206	39,461	0	37,321	-10,115

STATUS

Bids were received September 13th. D'Annunzio & Sons was the lowest bidder at $31,573,625. The contract will be awarded in early October.

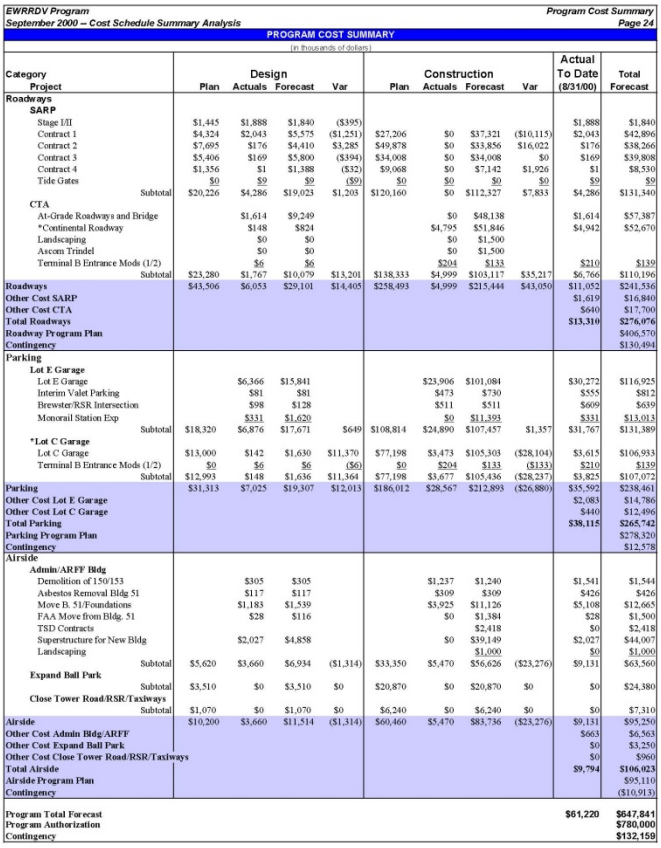
The construction cost variance is due to repackaging of the SARP program in September, 1999. This was done at the direction of RDV in order to advance scope items required to support traffic changes anticipated for the Terminal C reconfiguration scheduled for completion in October, 2001. Scope was shifted from Package 2 to Package 1, with no net change in the total SARP program. In addition, two MEDD throat bridge pavement rehabilitation contracts were included in Package 1, thereby increasing the construction costs by another $3 million.

The baseline budget is taken from the project P-1, which reflects this change in scope and a delay in project authorization. It also increased design costs slightly.

The forecast contract amount is reduced by the $2 million that will be charged to the Facility for paving work of theirs that was added into this contract for staging purposes.

For the EWR Redevelopment project, the LBA, P.C. Team developed the report shown in Example 1. This was part of a monthly progress report on a group of roadway, garage, and building projects. Over the life of these projects, there were environmental, permitting and general coordination issues that were identified and addressed. Earned value was used during both the design and construction stages. Status information and issues were collected and discussed with Project Managers. If appropriate, the LBA, P.C. Team can develop a similar type of report for Real Estate. An Executive Summary or Exception Report can also be prepared that will highlight those projects in danger of not meeting funding requirements.

Another type of report that can be developed is a one-page summary of all projects, similar to Example 2. This particular report developed by the LBA, P.C. Team tracked only cost information, but one could be created that addresses schedule status, subregional FHWA reporting status, or other project information.



EWRRDV Program — *Program Cost Summary*
September 2000 – Cost Schedule Summary Analysis — *Page 24*

PROGRAM COST SUMMARY

(in thousands of dollars)

Category / Project	Design Plan	Design Actuals	Design Forecast	Design Var	Construction Plan	Construction Actuals	Construction Forecast	Construction Var	Actual To Date (8/31/00)	Total Forecast
Roadways										
SARP										
Stage I/II	$1,445	$1,888	$1,840	($395)					$1,888	$1,840
Contract 1	$4,324	$2,043	$5,575	($1,251)	$27,206	$0	$37,321	($10,115)	$2,043	$42,896
Contract 2	$7,695	$176	$4,410	$3,285	$49,878	$0	$33,856	$16,022	$176	$38,266
Contract 3	$5,406	$169	$5,800	($394)	$34,008	$0	$34,008	$0	$169	$39,808
Contract 4	$1,356	$1	$1,388	($32)	$9,068	$0	$7,142	$1,926	$1	$8,530
Tide Gates	$0	$9	$9	($9)	$0	$0	$0	$0	$9	$9
Subtotal	$20,226	$4,286	$19,023	$1,203	$120,160	$0	$112,327	$7,833	$4,286	$131,340
CTA										
At-Grade Roadways and Bridge		$1,614	$9,249			$0	$48,138		$1,614	$57,387
*Continental Roadway		$148	$824			$4,795	$51,846		$4,942	$52,670
Landscaping		$0	$0			$0	$1,500			
Ascom Trindel		$0	$0			$0	$1,500			
Terminal B Entrance Mods (1/2)		$6	$6			$204	$133		$210	$139
Subtotal	$23,280	$1,767	$10,079	$13,201	$138,333	$4,999	$103,117	$35,217	$6,766	$110,196
Roadways	$43,506	$6,053	$29,101	$14,405	$258,493	$4,999	$215,444	$43,050	$11,052	$241,536
Other Cost SARP									$1,619	$16,840
Other Cost CTA									$640	$17,700
Total Roadways									**$13,310**	**$276,076**
Roadway Program Plan										$406,570
Contingency										$130,494
Parking										
Lot E Garage										
Lot E Garage		$6,366	$15,841			$23,906	$101,084		$30,272	$116,925
Interim Valet Parking		$81	$81			$473	$730		$555	$812
Brewster/RSR Intersection		$98	$128			$511	$511		$609	$639
Monorail Station Exp		$331	$1,620			$0	$1,393		$331	$13,013
Subtotal	$18,320	$6,876	$17,671	$649	$108,814	$24,890	$107,457	$1,357	$31,767	$131,389
***Lot C Garage**										
Lot C Garage	$13,000	$142	$1,630	$11,370	$77,198	$3,473	$105,303	($28,104)	$3,615	$106,933
Terminal B Entrance Mods (1/2)	$0	$6	$6	($6)	$0	$204	$133	($133)	$210	$139
Subtotal	$12,993	$148	$1,636	$11,364	$77,198	$3,677	$105,436	($28,237)	$3,825	$107,072
Parking	$31,313	$7,025	$19,307	$12,013	$186,012	$28,567	$212,893	($26,880)	$35,592	$238,461
Other Cost Lot E Garage									$2,083	$14,786
Other Cost Lot C Garage									$440	$12,496
Total Parking									**$38,115**	**$265,742**
Parking Program Plan										$278,320
Contingency										$12,578
Airside										
Admin/ARFF Bldg										
Demolition of 150/153		$305	$305			$1,237	$1,240		$1,541	$1,544
Asbestos Removal Bldg 51		$117	$117			$309	$309		$426	$426
Move B. 51/Foundations		$1,183	$1,539			$3,925	$11,126		$5,108	$12,665
FAA Move from Bldg. 51		$28	$116			$0	$1,384		$28	$1,500
TSD Contracts							$2,418		$0	$2,418
Superstructure for New Bldg		$2,027	$4,858			$0	$39,149		$2,027	$44,007
Landscaping							$1,050		$0	$1,050
Subtotal	$5,620	$3,660	$6,934	($1,314)	$33,350	$5,470	$56,626	($23,276)	$9,131	$63,560
Expand Ball Park										
Subtotal	$3,510	$0	$3,510	$0	$20,870	$0	$20,870	$0	$0	$24,380
Close Tower Road/RSR/Taxiways										
Subtotal	$1,070	$0	$1,070	$0	$6,240	$0	$6,240	$0	$0	$7,310
Airside	$10,200	$3,660	$11,514	($1,314)	$60,460	$5,470	$83,736	($23,276)	$9,131	$95,250
Other Cost Admin Bldg/ARFF									$663	$6,563
Other Cost Expand Ball Park									$0	$3,250
Other Cost Close Tower Road/RSR/Taxiways									$0	$960
Total Airside									**$9,794**	**$106,023**
Airside Program Plan										$95,110
Contingency										($10,913)
Program Total Forecast									**$61,220**	**$647,841**
Program Authorization										**$780,000**
Contingency										**$132,159**

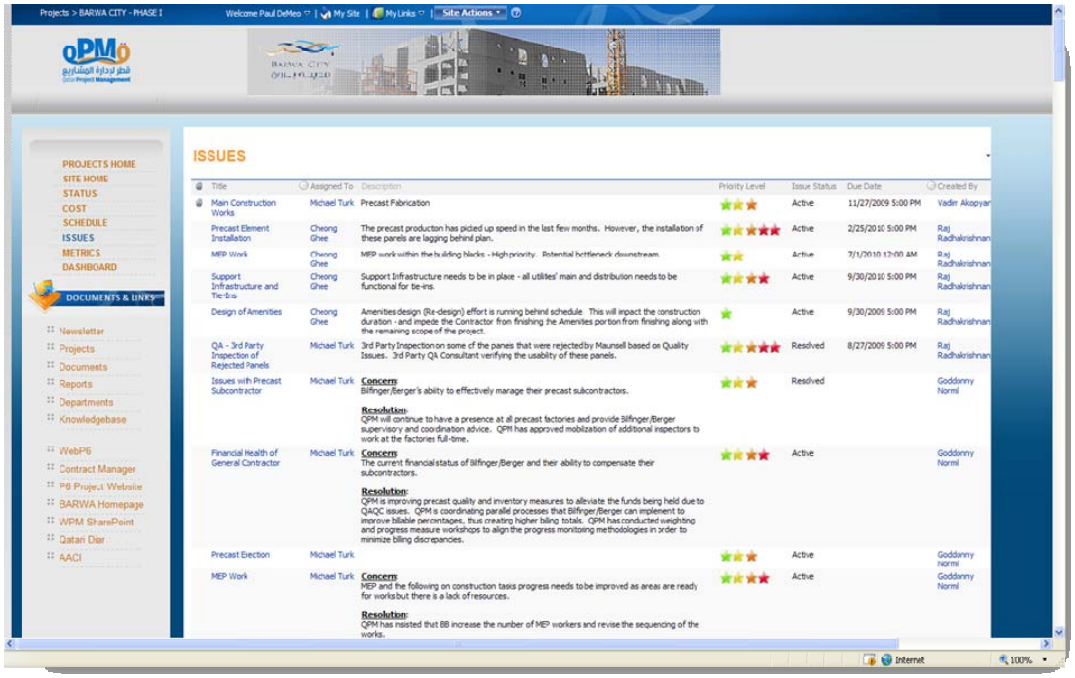
*** Estimated - Costs TBD**

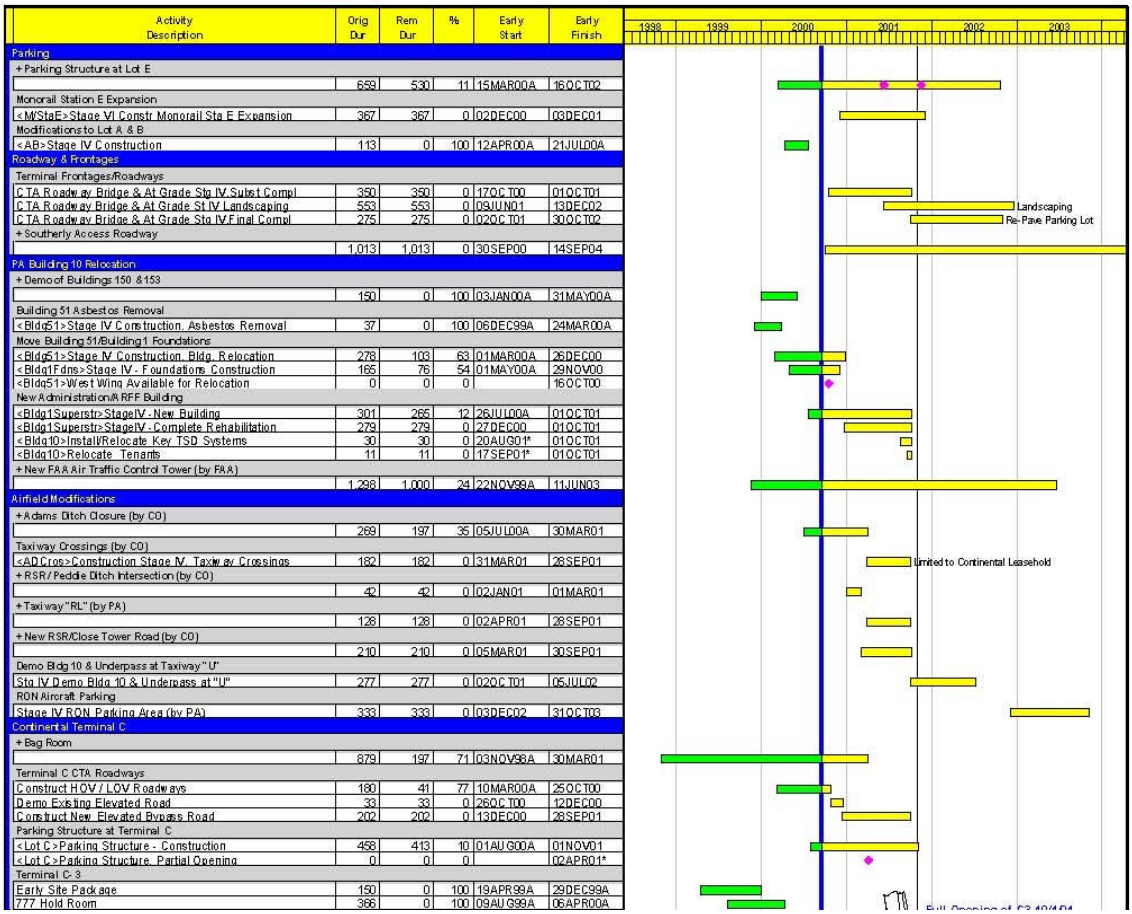
'Other' costs are comprised of RDV, General and Administrative, and Financial Expense Charges.

Following the development of status reports, the LBA, P.C. Team can also create a baseline master schedule comprised of all relevant projects, similar to the one in Example 3.

Key milestones for each project will be represented. At some point, with the agreement of management, this baseline will be finalized and all future schedule updates will be compared to it. In this way, projects that are falling behind schedule will be easily identified.

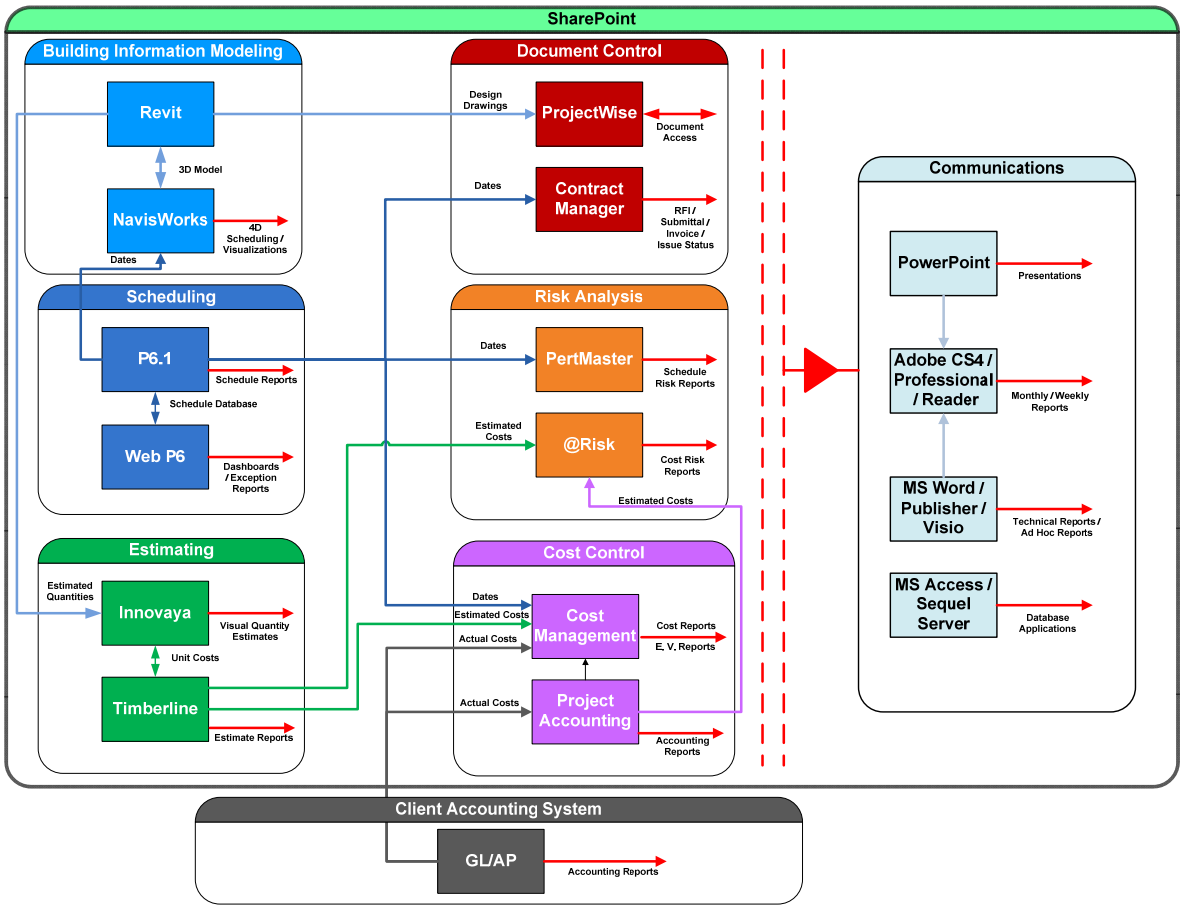
If detailed "issue" tracking is necessary, the LBA, P.C. Team has tools to create a database for this purpose, or we can utilize SharePoint, which the LBA, P.C. Team has been introducing on our Program Management assignments. The following images are shots from our Middle East projects where Microsoft SharePoint has been introduced as the platform for file sharing. Example 4 shows how SharePoint can be used for issue tracking. The owner of the issue is clearly shown, as well as the priority and due dates. This can be customized to meet PANYNJ's needs.



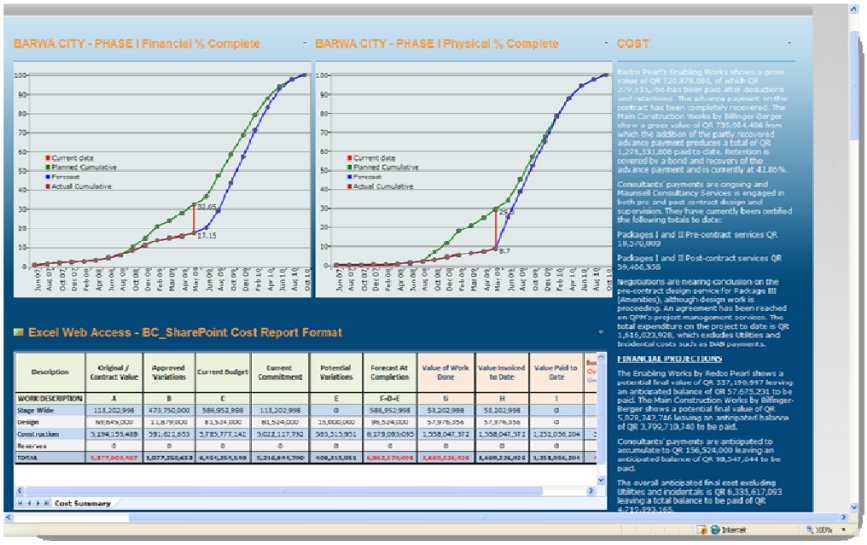


Activity Description	Orig Dur	Rem Dur	%	Early Start	Early Finish
Parking					
+ Parking Structure at Lot E					
	659	530	11	15MAR00A	16OCT02
Monorail Station E Expansion					
<M/StaE>Stage VI Constr Monorail Sta E Expansion	367	367	0	02DEC00	03DEC01
Modifications to Lot A & B					
<AB>Stage IV Construction	113	0	100	12APR00A	21JUL00A
Roadway & Frontages					
Terminal Frontages/Roadways					
C TA Roadway Bridge & At Grade Stg IV Substr Compl	350	350	0	17OCT00	01OCT01
C TA Roadway Bridge & At Grade St IV Landscaping	553	553	0	09JUN01	13DEC02
C TA Roadway Bridge & At Grade Stg IV Final Compl	275	275	0	02OCT01	30OCT02
+ Southerly Access Roadway					
	1,013	1,013	0	30SEP00	14SEP04
PA Building 10 Relocation					
+ Demo of Buildings 150 & 153					
	150	0	100	03JAN00A	31MAY00A
Building 51 Asbestos Removal					
<Bldg51>Stage IV Construction, Asbestos Removal	37	0	100	06DEC99A	24MAR00A
Move Building 51/Building 1 Foundations					
<Bldg51>Stage IV Construction, Bldg. Relocation	278	103	63	01MAR00A	26DEC00
<Bldg1Fdns>Stage IV - Foundations Construction	165	76	54	01MAY00A	29NOV00
<Bldg51>West Wing Available for Relocation	0	0	0		16OCT00
New Administration/ARFF Building					
<Bldg1Superstr>StageIV - New Building	301	265	12	26JUL00A	01OCT01
<Bldg1Superstr>StageIV - Complete Rehabilitation	279	279	0	27DEC00	01OCT01
<Bldg10>Install/Relocate Key TSD Systems	30	30	0	20AUG01*	01OCT01
<Bldg10>Relocate Tenants	11	11	0	17SEP01*	01OCT01
+ New FAA Air Traffic Control Tower (by FAA)					
	1,298	1,000	24	22NOV99A	11JUN03
Airfield Modifications					
+ Adams Ditch Closure (by CO)					
	269	197	35	05JUL00A	30MAR01
Taxiway Crossings (by CO)					
<ADCros>Construction Stage IV, Taxiway Crossings	182	182	0	31MAR01	28SEP01
+ RSR/Peddie Ditch Intersection (by CO)					
	42	42	0	02JAN01	01MAR01
+ Taxiway "RL" (by PA)					
	128	128	0	02APR01	28SEP01
+ New RSR/Close Tower Road (by CO)					
	210	210	0	05MAR01	30SEP01
Demo Bldg 10 & Underpass at Taxiway "U"					
Stg IV Demo Bldg 10 & Underpass at "U"	277	277	0	02OCT01	05JUL02
RON Aircraft Parking					
Stage IV RON Parking Area (by PA)	333	333	0	03DEC02	31OCT03
Continental Terminal C					
+ Bag Room					
	879	197	71	03NOV98A	30MAR01
Terminal C CTA Roadways					
Construct HOV / LOV Roadways	180	41	77	10MAR00A	25OCT00
Demo Existing Elevated Road	33	33	0	26OCT00	12DEC00
Construct New Elevated Byuass Road	202	202	0	13DEC00	28SEP01
Parking Structure at Terminal C					
<Lot C>Parking Structure - Construction	458	413	10	01AUG00A	01NOV01
<Lot C>Parking Structure, Partial Opening	0	0	0		02APR01*
Terminal C-3					
Early Site Package	150	0	100	19APR99A	29DEC99A
777 Hold Room	366	0	100	09AUG99A	06APR00A

Example 5 shows how SharePoint pulls information from a myriad of systems into one central location. A system like this could be helpful to the PANYNJ. The next two examples illustrate how some of the outside data looks from the SharePoint screen.



Projects > BARWA CITY - PHASE I
Welcome Paul DeMeo
My Site
My Links
oPM
PROJECTS HOME
SITE HOME
STATUS
COST
SCHEDULE
ISSUES
METRICS
DASHBOARD
DOCUMENTS & LINKS
Newsletter
Projects
Documents
Reports
Departments
Knowledgebase
WebP6
Contract Manager
P6 Project Website
BARWA Homepage
WPM SharePoint
Qatari Diar
AACI
Panorama Viewer
CPI 0.71
SPI 0.66
VIDEO GALLERY
IMAGE GALLERY
OVERVIEW
QPM is providing Project Management services in support of the development of BARWA City Phase 1 by the BARWA Real Estate Development Company. BARWA CITY is considered to be the largest civil project in Qatar. Budgeted at QAR 5 billion, Phase I is being developed within an approximately 2.7 million square meter tract in the Muzaneer area. The Phase I development will offer housing for more than 35,000 residents in 5,968 apartments, along with various public services and amenities including health clubs, shopping centers, parks and playgrounds, commercial banks, and other similar uses. Phase I is currently under construction and is due for completion in 2011. Phase II of the BARWA City development consists of a 250-bed hospital, a large commercial shopping mall, schools and hotels within an adjoining 1.5 million square meter tract. The Phase II portion of the development is estimated at QAR 7 billion and is scheduled for completion by 2015.
Internet
100%


BARWA CITY - PHASE I Financial % Complete
BARWA CITY - PHASE I Physical % Complete
COST
Current date
Planned Cumulative
Forecast
Actual Cumulative
32.65
17.15
Excel Web Access - BC_SharePoint Cost Report Format
Description
Original / Contract Value
Approved Variations
Current Budget
Current Commitment
Potential Variations
Forecast At Completion
Value of Work Done
Value Invoiced to Date
Value Paid to Date
WORK DESCRIPTION
Stage Wide
Design
Construction
Reserves
TOTAL
Cost Summary
FINANCIAL PROJECTIONS
Internet
100%

TASK D. PROGRAM LEVEL MANAGEMENT SERVICES

We are accustomed to providing Program Management services to the PANYNJ. Our Program Management experience includes the Newark Airport Redevelopment, where for the past 20 years, we have helped the PANYNJ initiate and implement the Monorail project and the air and land side improvements and the Terminal C Parking Garage. We were also the Program manager for Phase I and II of the Downtown Redevelopment Program (World Trade Center Reconstruction). We assisted with the planning and programming of the Temporary Transit Station phase and the ongoing Transit Hall, WTC Towers 1 through 4 and the Memorial/Museum.

For the World Trade Center Reconstruction Program, our Program Management services include providing multi-discipline professional and technical staff to support executive and Federal Transit Administration documentation and reporting; technical support to advance design and construction, management of multi-discipline professional and technical staff to support; Project Controls, including program and project level scheduling, scheduling integration, resource allocation analysis and status and progress monitoring; Project Cost Analysis, Cost Estimating, Financial Monitoring, Budgeting, invoice reviews, earned value analysis and cost control; document control and associated tracking systems for all WTC Redevelopment Projects, Quality Assurance, Management Support Services, WTC Program-wide Communications & Graphical Visualization Support, WTC Program-wide Risk Assessment Support, Claims Management Support and Assistance.

We are presently serving as the Program Manager for the Redevelopment of the George Washington Bridge Bus Station, a public/private partnership with a New York City based real estate developer.

TASK E. PROGRAM MANAGEMENT SERVICES

In our ongoing program management services for the PANYNJ, our team performs several activities to assist with managing the programs. Our team is multi-disciplined and set up to provide comprehensive services as needed for the complex programs that the PANYNJ undertakes. A representative sample of these activities includes:

- Project Planning & Scoping
- Project Management Information System Management, including Web Based Systems
- Permitting
- Contract Administration
- Budget Analysis
- CPM Scheduling
- Document Control
- Project Accounting
- Risk Assessment
- Design Management
- Reporting – Project and executive level reports.
- Construction Management Services
- Procurement (Bid/Award) Services

Claims Services. The LBA, P.C. Team provides Claims Services when and as required by the PANYNJ for specific projects. Claims Services apply to providing technical support (not legal assistance) in handling disputed matters once a contractor has made written demand for payment or other relief under the contract and submitted it to the Contracting Officer for decision in accordance with the Contractual Disputes clauses. The LBA, P.C. Team reviews disputes and claims from the A-E and/or construction contractor(s) and renders all assistance including the following:

- Furnishing reports with supporting information necessary to resolve disputes or defend against the claims.
- Preparation and assembly of appeal files.
- Participation in meetings or negotiations with claimants.
- Appearance in legal proceedings.
- Preparation of cost estimates for use in claims negotiations.
- Preparation of risk assessments/analyses relative to claim exposures.
- Preparation of findings of fact and any other documentation required by the PANYNJ

Post Construction Services. At or near substantial completion of project construction, the LBA, P.C. Team provides services such as:

- Performing Post Occupancy Evaluations (POE's)
- Assisting PANYNJ in the formulation of lessons learned
- Providing occupancy planning including development of move schedules, cost estimates, inventory lists, etc.
- Providing move coordination, relocation assistance, and/or furniture coordination
- Providing telecommunication and computer coordination

Salary Rates

Hourly Rates - Names, Titles and Rates for Technical Personnel

The LBA, P.C. Team's proposed technical personnel for this Project Management "On Call" Services Agreement are listed in the following Salary Rate Schedule. The staff includes the personnel shown in our Project Organization Chart and other staff who may become available for assignment during the duration of the contract.

SALARY MULTIPLIER FOR PROJECT STAFF

The proposed multiplier for the Home Office staff working on this project is **2.67**. The following is a derivation of the salary multiplier based on the most recent consolidated, independently audited office overhead rate for Louis Berger & Assoc., P.C. and The Louis Berger Group (Domestic), Inc.:

DERIVATION OF OFFICE SALARY MULTIPLIER

Base Salary	1.00
Overhead Rate (Audited)	1.4379
Total	2.4379
Profit at 10%	0.24
Total	**2.67**

The proposed multiplier for personnel working in the PANYNJ offices (i.e., the "field") for this project is **2.36**. The following is a derivation of the field overhead salary multiplier based on the most recent consolidated, independently audited field overhead rate for Louis Berger & Assoc., P.C. and Louis Berger Group (Domestic), Inc.:

DERIVATION OF FIELD SALARY MULTIPLIER

Base Salary	1.00
Overhead Rate (Audited)	1.1468
Total	2.1468
Profit at 10%	0.21
Total	**2.36**

STATEMENT OF PREMIUM PAY

As required by the Port Authority's RFP to provide a company policy for compensation for premium pay (i.e., holidays, shift differentials, regular days, weekends and night work or union required payments), the LBA, P.C. Team is as follows:

"The LBA, P.C. Team's overtime policy is to pay overtime in compliance with FLSA regulations. Non-exempt employees are paid premium pay (time and a half) for all hours worked in excess of 40 in an FLSA workweek (Sunday through Saturday).

Although not required by the FLSA, when Exempt employees work in excess of 40 hours in an FLSA workweek, they are paid for the additional hours at their usual hourly rate.

Employees who work on a company Holiday may receive Holiday pay in addition to work pay, at their usual rate. No premium pay applies.

Employees who work at night or on weekends generally receive pay for hours worked at their usual rate without any premium. However, in some circumstances, they may receive premium pay if the client or employment contract includes premium pay because of special conditions."

HOURLY SALARY RATES TABLE

The hourly rates table for our proposed technical personnel, including key personnel indicated on our project organization chart, is provided below.

Project Management Services as Requested on an "On Call" Basis For 2011 through 2014			
Salary Rate Schedule Louis Berger & Assoc., P.C. Team			
Name	**Title**	**Company**	**Hourly Rate**
D. James Stamatis, P.E.	Principal (President)	LBA, P.C.	150.00*
Charles "Chuck" King, P.E.	Project Manager	LBG	110.58
Louis Hannigan	Quality Assurance Manager	LBG	50.75
Project Controls			
Paul DeMeo	PM Information Systems Specialist	LBG	103.37
Raj Radhakrishnan	Project Controls Manager	LBG	71.80
Ian Baldwin	Sr. Scheduler	LBG	74.97
James Murphy	Sr. Scheduler	LBG	88.05
Raghuram Kandula	Scheduler	LBG	33.92
Snigdha Nandivada	Scheduler	LBG	39.23
Swadeep C. Rachoor	Scheduler	LBG	28.85
Jody Williams	Scheduler/Risk Assessment	LBG	36.78
Roni Kitchell	Cost Control Engineer	LBG	51.13
Joi Koenig	Cost Control Engineer	LBG	46.50
Ayotunde B. Fapohunda	Cost Control Engineer	LBG	34.66
Orville Randolph	Project Accountant	LBG	33.50
Claudine O. Anderson-Gethers	Project Accountant	LBG	35.00
Bryan Parola	Communications Director	LBG	52.01
Vadim Akopyan	SharePoint Technician	LBG	40.87
Jerry Drey Reaves	Document Control Manager	LBG	40.14
Ivan V. Roca	Document Control Technician	LBG	27.65
Diego Andrade	Document Control Technician	LBG	23.50
Ava Blake	Document Control Technician	LBG	26.31
Trayce Spencer	Document Control Technician	LBG	20.31
Blanche R. Harvey	Document Control Technician	LBG	24.52

Program/Project Managers			
Gerard Salernitano	Project Manager - Aviation	LBG	65.31
Andrew Cangiano	Project Manager - Aviation	LBG	62.22
John C. Hasselmann, P.E.	Project Manager – Civil & Facilities	LBG	64.38
H. Wayne Valentine, P.E.	Project Manager – Civil & Facilities	LBG	63.14
Richard Law, PE	Project Manager – Civil & Facilities	LBG	63.65
James J. Murray, P.E.	Program/Project Manager – Civil & Rail	LBG	73.51
Richard Barrington, P.E.	Project Manager - Civil & Facilities	LBG	63.70
Michael Soliman, P.E.	Program/Project Manager - Rail	LBG	79.32
Vinay Mudholkar	Program/Project Manager - Rail	LBG	64.42
Robert J. Thiel, P.E.	Program/Project Manager - Rail	LBG	63.46
Kenneth W. Favaro	Project Manager - Ports	LBG	51.50
Michael Donovan, P.E.	Program Manager	LBG	103.37
Jason Brown	Program Manager	LBG	84.59
Joe Cadillac	Program Manager	LBG	101.64
Technical Specialists			
Steven Baldwin	Aviation Planning & Operations	LBG	94.95
Cosema (Connie) Crawford, P.E.	Transit Program Advisor	LBG	108.17
James J. Murray, P.E.	Program/Project Manager – FTA	LBG	73.51
Fredrick McCarthy, P.E.	Engineering Manager - Security	LBG	81.73
Al Racciatti	Economist	LBG	66.35
Niek Veraart, ASLA, AICP	Sr. Planner	LBG	69.58
Jim Bach, AICP	Principal Planner	LBG	198.58

Name	Title	Company	Actual Hourly Rate
Technical Resources			
Daniel D. Ramage, Jr.	BIM	LBG	$59.42
Wayne A. Sullivan	BIM	LBG	$39.37
Adam Faust Bailey	Graphics	LBG	$20.69
Brian P. Murphy, CIH, CSP	Safety Manager	LBG	$56.73
Ryan C. Cleary	Office/Project Engineer	LBG	$37.60
Craig Napolitano	E/A – Hazardous Material Mgr.	LBG	$57.94
Gene Makavoz	E/A – Hazardous Material	LBG	$41.89
Joseph L. Sbarra, CIH	CM – Air Quality	LBG	$56.65
Yuri Snihur	Electrical Engineer	LBG	$48.53
Luis Correia, P.E.	Electrical Engineer	LBG	$68.09
Elena Burg	Electrical Engineer	LBG	$53.23
Ion Ilie	Electrical Engineer	LBG	$39.62
Joseph Masucci, P.E.	Mechanical Engineer	LBG	$68.09
Jay Juluru, P.E., C.E.M.	Mechanical Engineer	LBG	$52.00
Kenneth H. Weber	Mechanical Engineer	LBG	$41.60
Tu Nguyen, P.E.	Mechanical Engineer	LBG	$43.08
John McGhee, EIT	Mechanical Engineer	LBG	$30.21
Deborah Van Steen	Architectural Historian	LBG	$30.87
Michael T. Malloy, RLA	Landscape Architect	LBG	$33.17
Christian T. Chan, EIT	Civil Engineer	LBG	$49.42
Joshua Lanning	Civil Engineer	LBG	$34.38
Angelica S. Wilson	Civil Engineer	LBG	$28.37
Naveen L. Gumadelli, P.E.	Civil Engineer	LBG	$43.27
Urie Ridgeway	Engineer	LBG	$40.87
Jose Hernandez, P.E., S.E.	Engineer	LBG	$55.05
Chrissa D. Roessner, P.E.	Engineer	LBG	$43.75
Eduardo (Ed) Szmurlo, P.E.	Engineer	LBG	$44.47
Hong Y. Sun, P.E.	Engineer	LBG	$66.35
John Tan, P.E.	Structural Engineer	LBG	$73.56
Christopher L. Erickson, EIT	Structural Engineer	LBG	$34.38
Rodolpho Gils, P.E.	Structural Engineer	LBG	$67.79

STELLAR

57 West 38th Street, 11th Floor
New York, NY 10018
Tel# 212 432 2848
Fax# 212 432 2846

Rates Schedule/Multiplier

Staff Name	Technical Role	Hourly Salary	Multiplier
Yumin Ding	Cost Control Specialist	$ 35.22	2.4
Hao Jiang	Cost Control Specialist	$ 25.69	2.4
Bova Lee	Document Management Specialist / Cost Control Specialist	$ 26.74	2.4
Onna Kung	Document Management Specialist / Cost Control Specialist	$ 26.74	2.4
Ke Tang	Senior Developer / Reporting Specialist	$ 49.45	2.4
Rozaliya Kiperman	Schedule Control Manager / Contract Manager / Reporting / Trainer	$ 49.32	2.4

Team Support Services, Inc.

1 Charleston Ct.
Basking Ridge, NJ 07920

WBE / DBE Certified

"Team Support Services Premium Time Company Policy is such that all hours (regular and premium) are billed at the hourly pay rate times the multiplier of 2.0. The premium hours are also billed at an additional ½ of the hourly pay rate with no multiplier."

NAME	TITLE	RATE
Elizabeth Bovino	Cost Analyst	$55.81/hr
Dawn Hedgespeth	Contract Manager/Records Management Specialist	$32.19/hr
Margarita Morera	Reports, Presentations & Communications	$31.25/hr
Sheketa Daniels	Senior Executive Administrative Assistant	$31.25/hr

M/WBE Participation

M/WBE Participation

The Authority has set a goal of 12 percent participation by qualified and certified MBEs and 5 percent to qualified and certified WBEs for this technical service project. Louis Berger & Assoc., P.C. (LBA, P.C.) has a long history of meeting or exceeding M/WBE goals for contract participation by Minority- and Women-owned Business Enterprises. This contract will not be an exception. The subconsultants selected to assist us on this assignment were chosen for their abilities in their specialized areas.

Firm	Role	Type	PANYNJ Certificate #	Estimated Contract %
Stellar Services	Systems Implementation	MBE	PA-20128	12%
Team Support Services, Inc.	Administrative Support	WBE	PA-21285	5%

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Kenneth J. Ringler, Jr.
Executive Director

Certified

by

Small Business Programs

4 U Services, Inc. d/b/a Stellar Services

Certificate PA-20128

This certificate acknowledges that the above named firm is certified as a **Minority-owned Business Enterprise.** This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
General Manager
Certified: August 4, 2006

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: August 3, 2011

Form: 6/10/93

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

by

Office of Business & Job Opportunity

Team Support Services, Incorporated

Certificate PA-21285

This certificate acknowledges that the above named firm is recertified as a **Woman-owned Business Enterprise.** This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: September 4, 2008

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: September 4, 2013

Form: 6/10/93 RAL

Listing of Firm's Affiliates

Louis Berger & Assoc PC

LISTING OF AFFILIATES

Louis Berger & Assoc., P.C. (a PA Co.),
320 Eagleview Blvd., Suite 250
Exton, PA 19341
EIN#: [redacted]

Berger Group West, P.C.
412 Mt. Kemble Avenue
Morristown, NJ 07962
EIN#: [redacted]

Conflict of Interest Statement

Louis Berger & Assoc PC
One Seaport Plaza, 199 Water Street, 23rd Floor, New York, New York 10038
Tel (212) 612-7900 Fax (212) 363-4341 www.louisberger.com

October 20, 2010

The Port Authority of New York and New Jersey
One Madison Avenue
Seventh Floor
New York, NY 10010
Attention: RFP Custodian

RE: Request For Proposals For Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014 (RFP #22388)

Dear Sir/Madam:

To the best of our knowledge, Louis Berger & Assoc., P.C. (LBA, P.C.) does not have any Conflicts of Interest or potential Conflicts of Interest which might arise should LBA, P.C. be awarded this Agreement.

Sincerely,
LOUIS BERGER & ASSOC., P.C.

Thomas Lewis, P.E., JD
Director/Secretary

STELLAR

Stellar Services
57 West 38th Street, 11th Floor
New York, NY 10018
Tel# 212 432 2848
Fax# 212 432 2846

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

THE Louis Berger Group, INC
199 Water Street, 23rd Floor
New York, New York 10038

RE: REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

Dear Sir or Madam,

Stellar Services or any of its employee, agent or subcontractor, does not have any conflict of interest as defined in the P.A. Agreement for this solicitation.

Sincerely,

Liang Chen
President

Team Support Services, Inc.

1 Charleston Ct.
Basking Ridge, NJ 07920

WBE / DBE Certified

FROM: Elizabeth Bovino, President, Team Support Services, Inc.

TO: Charles "Chuck" King, P.E., Project Manager

Re: Performance of Expert Professional Project Management Services, as Requested, on a "Call-In" Basis During 2011, 2012, 2013 and 2014 (RFP#22388) for the Port Authority of New York & New Jersey

Gentlemen:

I, Elizabeth Bovino, certify that Team Support Services has no Conflicts of Interest with the Port Authority of New York and New Jersey and/or Louis Berger & Assoc., P.C.

Sincerely,

Elizabeth Bovino
President

Exceptions to Standard Agreement

Louis Berger & Assoc PC
One Seaport Plaza, 199 Water Street, 23rd Floor, New York, New York 10038
Tel (212) 612-7900 Fax (212) 363-4341 www.louisberger.com

October 20, 2010

The Port Authority of New York and New Jersey
One Madison Avenue
Seventh Floor
New York, NY 10010
Attention: RFP Custodian

RE: Request For Proposals For Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014 (RFP #22388)

Dear Sir/Madam:

Louis Berger & Assoc., P.C. (LBA, P.C.) agrees with the standard agreement and its terms and conditions without any exceptions with the following notice:

> **24. CERTIFICATION OF NO INVESTIGATION (CRIMINAL OR CIVIL ANTI-TRUST), INDICTMENT, CONVICTION, DEBARMENT, SUSPENSION, DISQUALIFICATION AND DISCLOSURE OF OTHER INFORMATION**
>
> **By proposing on this Agreement, each Consultant and each person signing on behalf of any Consultant certifies, and in the case of a joint proposal each party thereto certifies as to its own organization, that the Consultant and each parent and/or affiliate of the Consultant has not:**
>
> **...**
>
> **G. been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency.**

Louis Berger & Assoc., P.C. is not the subject of any investigation. However, in the interest of full disclosure, LBA, P.C. shares office space and resources with The Louis Berger Group, Inc. (LBG), which is under investigation by the US Attorney's Office for the District of New Jersey for alleged overbilling relating to its contracts with the United States Agency for International Development ("USAID"). Neither LBG nor any of its current directors, officers, or employees have been charged with any crime. A search warrant was executed at the New Jersey office of the company in August, 2007. Additionally, LBG has been required to produce documents relating to contracts for international work in Iraq and Afghanistan for USAID and the Department of Defense. On August 23, 2010, Derish Wolff, the then Chairman of the holding company of LBG, Berger Group Holdings, Inc. resigned as an officer, director and employee of the holding company and its subsidiaries and affiliates.

Although LBG is a potential target of the investigation, it is currently in settlement negotiations with the USAO for the District of New Jersey and other agencies that are involved in the investigation.

Sincerely,
LOUIS BERGER & ASSOC., P.C.

Thomas Lewis, P.E., JD
Director/Secretary

October 21, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, New York 10010

Attn: RFP Custodian

Re: RFP Number 22388: Request for Proposal for Performance of Expert Professional Project Management Services on an "As-Needed" Basis During 2011, 2012, 2013, 2014

Dear Mr. Volonakis:

The facilities The Port Authority of New York and New Jersey operates, throughout the bi-state New York and New Jersey area, are absolutely critical to the well being of this region as businesses. For decades the Authority has provided the highest quality, most efficient transportation and port commerce facilities in the world. The ports, bridges, tunnels, airports, terminals and rail facilities the Authority operates are vital pillars for commerce in the region. We understand how important it is that they be maintained, protected and expanded. Therefore, URS would be proud to work closely with the Authority, as an extension of your staff, to provide the project management services that will be needed to ensure their optimum operation well into the 21st Century.

We believe URS is particularly well qualified to assist you, as we have been working collaboratively with the Port Authority for decades providing environmental, planning, design, security, inspection, program and construction management services for your facilities.

During this time we have worked at virtually every Port Authority facility, on billions of dollars of maintenance, renovation, expansion and new construction projects for every Line Department. We, therefore, know your mission, your people, your culture, and your methods of operation. Perhaps most importantly, we know how to work as an efficient member of your team.

As you review our proposal you will find we have identified a large cadre of key staff who have worked with the Authority and who collectively have experience on virtually every type of Port Authority Line Department project. In responding to your RFP we strived to identify individuals who would be immediately available and be able to meet any requirement you may have.

URS is committed to meet or exceed the Authority's MBE/WBE participation goals. To attain this goal we have teamed with the Maitra Associates (MBE) and LPE Enterprises (WBE). Both firms already have extensive experience working with both URS and the Authority.

URS Corporation – New York
One Penn Plaza, Suite 610
New York, NY 10119-3904
Tel: 212.736.4444
Fax: 212.629.4249
www.urscorp.com

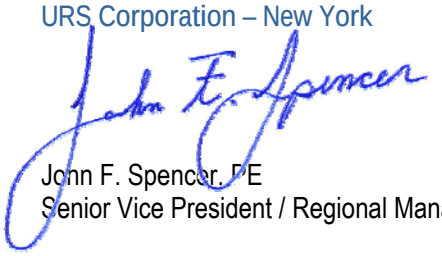
To make certain we efficiently supply personnel who will provide you satisfactory service, we have assigned David Beckett, a URS Vice President, to oversee the execution of our work. Dave has worked on numerous Port Authority projects and currently is effectively filling a very similar role overseeing our work on the Authority's 2007 - 2010 "As-Needed" Project Management Program.

In summary, we believe we have the staff, the plan, and certainly the desire to meet your needs, and we would be proud to be a part of your team.

We look forward to continuing our long history of working successfully with you.

Very truly yours,

URS Corporation – New York



John F. Spencer, P.E.
Senior Vice President / Regional Manager

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

URS Corporation - New York
(Company)

John T. Spencer
(Signature)

Senior Vice President
(Title)

October 21, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. **Company Name (print or type):**

   URS Corporation – New York

2. **Business Address (to receive mail for this RFP):**

   One Penn Plaza, Suite 610

   New York, NY 10119-0698

3. **Business Telephone Number:** (212) 736-4444

4. **Business Fax Number:** (212) 629-4249

5. **Firm website:** www.urscorp.com

6. **Federal Employer Identification Number (EIN):** [redacted]

7. **Date (MM/DD/YYYY) Firm was Established:** 08/29/1934

8. **Name, Address and EIN of Affiliates or Subsidiaries:**

   See attached list

9. **`Officer or Principal of Firm and Title:**

   John F. Spencer, PE, Senior Vice President

10. **Name, telephone number, and email address of contact for questions:**

    Jay M. Gewirtzman, PE, Vice President

    (212) 330-1986

    jay_gewirtzman@urscorp.com

11. **Is your firm certified by the Authority as a Minority-owned, Woman-owned, or Small Business Enterprise (M/W/SBE)?** ☐ Yes ☑ No

    If yes, please attach **Port Authority** certification as part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's website – http://www.panynj.gov/business-opportunities/supplier-diversity.html to receive information and apply for certification.

SECTION C. QUALIFICATIONS & EXPERIENCE OF STAFF

JOHN SPENCER, PE

Executive Management

Years of Experience
40 Years

Education
MBA, Fairleigh Dickinson University, 1979
BCE, Manhattan College, 1970

Registration/Certification
Professional Engineer:
New York, 1975
New Jersey, 1975

Chronology
2005-Present: URS Corporation
2003-2005: NJSCA
1970-2003: The Port Authority of NY & NJ

URS

Mr. Spencer has 40 years of engineering experience, which includes engineering design and construction programs in the New York/New Jersey Metro area, 33 years with the Port Authority. Prior to joining URS, he held senior positions with the Port Authority of New York & New Jersey (PANY&NJ) and the New Jersey School Construction Corporation (NJSCC), where he was responsible for the management and implementation of capital design and construction programs valued at $10-15 billion. Mr. Spencer is also familiar with the New York design and construction communities and is adept at forging the partnerships necessary to make a project successful.

RELEVANT PROJECTS:

World Trade Center Transportation Hub Project and Other World Trade Center Site Projects, New York, NY - $2,200,000,000: Principal-in-Charge for the WTC Transportation Hub Project. URS, as part of a joint venture, is providing construction management services to the PANY&NJ for the World Trade Center Transportation Hub and other WTC site projects. The Hub is being built to replace the temporary PATH station that was constructed after the previous PATH station under the World Trade Center was destroyed on September 11, 2001. The PATH station is the major transportation hub that transports New Jersey commuters to lower Manhattan and visa versa.

Other World Trade Center projects include:

- Common Infrastructure Projects (vehicular security center, new streets and open spaces, and CH&RP)
- WTC Memorial, Memorial Museum, Performing Arts Center
- Freedom Tower, Tower 2, 3 & 4, and retail development

Construction management tasks include QA/QC, inspection services, preconstruction phase services, support services, technical services, site safety monitoring, scheduling, cost management, document control, cost estimating, site construction, logistics, project closeout, environmental reporting and coordination with NYCDOT/NYSDOT, New York City Transit, Lower Manhattan Construction Command Center, NYC Department of Environmental Protection, Con Edison, FTA, and local businesses and communities.

New Jersey School Construction Corporation, Trenton, NJ: As Chief Executive Officer, he was responsible for this $8.6 billion program to construct much needed quality schools throughout New Jersey. The program is the

largest public construction program ever undertaken by New Jersey and one of the largest programs of its type in the nation. In 2004, the NJSCC:

- Initiated 47 design awards for 55 schools (renovation/new construction), worth approximately $835 million.
- Awarded 104 construction contracts valued at $930 million.
- Acquired 205 sites for 15 school projects worth $100 million.

Port Authority of New York & New Jersey, Newark, NJ: Deputy Chief Engineer - Directed the engineering/architectural design, project and construction management, quality assurance and general operations of the Engineering Department, which included a staff of approximately 700 engineers, architects, technical, and support employees and an equivalent staff of architectural, engineering and technical consultants and job shoppers. Engineering provided the professional services to deliver the Authority's 2002-2006 $9 billion five-year Capital Program. In 2002, engineering awarded $1.2 billion in new construction contracts and placed $1.1 billion of construction in place. Major programs included:

- John F. Kennedy Airtrain
- Newark Liberty International Airport Monorail
- John F. Kennedy Redevelopment Program - A $3 billion redevelopment program including extensive roadway and terminal improvements.
- Newark Liberty International Airport - A $2 billion redevelopment program including Terminal B expansion, entrance and central terminal area roadway improvements and off airport access modifications.
- World Trade Center PATH Restoration including Exchange Place.

DAVID BECKETT, PE, LEED AP

Project Executive

Years of Experience
30 Years

Education
MS/1988/Civil Engineering/ Brooklyn Polytechnic

BS/1980/Environmental Engineering/Syracuse University

Registration/Certification
Professional Engineer: New York, 1988

Chronology
4/1988 - present - URS

9/1982 - 3/1988 - Nassau County DPW

8/1981 - 8/1982 - Beltran Associates

URS

Mr. Beckett has 30 years of experience in program, project and construction management for both public and private clients, and in all phases of the project delivery process. This experience has included the management of cost, schedule, and quality on a wide variety of project types. He is currently the Deputy Manager of the New York Construction Management Group.

RELEVANT PROJECTS:

Deputy Manager URS Construction Management Group, New York, NY: Deputy Manager directly supports the operations of a 400-person construction management group with a portfolio valued at more than $8 billion. In addition, serves as the Project Executive on a number of significant projects for the Port authority, such as: Redevelopment of JFK Airport; PATH On-Call; Construction Management On-Call; and Project Management On-Call.

John F. Kennedy International Airport Redevelopment Program, Jamaica, NY - $9,500,000,000: As Project Manager, approved contract change orders and designer and construction manager budgets; chaired weekly status meetings with the designer and construction manager; provided direction to the contractor for issues that were not resolved by the construction manager; and reported project status to senior management. As Control Engineer, managed the cost and schedule of the $234 million People-mover system, a major component of the redevelopment program. Prepared and updated project schedules, monitored project budgets and prepared project status reports.

Confidential Financial Services Client, New York, NY - $155,000,000: As Project Manager he was responsible for all aspects of the design and construction of this 22-story, 525,000 sq. ft. interior renovation project. This project included the complete rebuilding of the base building infrastructure including: HVAC, electrical, telecommunications, plumbing, complete interior fit-out, and an addition of a new cafeteria and Wellness Facility.

Doral Inn, New York, NY) - $120,000,000: Project Manager for Starwood Lodgings $120 million renovation of a 75 year old hotel located in midtown Manhattan. Project included the renovation of 663 guest rooms, the addition of 59 rooms, a world class restaurant, ballroom and business center, while under continuous occupancy. URS services included project management, bid review, scheduling, budgeting, estimating, and change order management.

Underground Storage Tank Program, New York, NY - $20,000,000: Project Manager responsible for the design and construction of upgrades on this project, to bring New York City Department of Design and Construction's underground storage tanks and related piping systems at 25 sites into compliance with regulatory requirements. Previously performed the same role for URS's first contract, which involved 70 tanks at 26 sites.

New York City School Construction Authority Capital Improvement Program, New York, NY - $7,500,000,000: Manager of Project Assessments for URS's Independent Program Review team. Reviewed cost, schedule, quality, and management performance of several of the program's 150 major projects.

Department of Public Works, Nassau County, NY - $500,000,000: Resident Engineer/Project Engineer/Claims Engineer for a large municipality under a federal consent order to complete capital improvements to wastewater treatment facility. As Resident Engineer, managed the construction of a $22 million expansion to the Bay Park Wastewater Treatment Plant. As Project Engineer, oversaw design consultants' preparation of contract documents. As Claims Engineer, handled approximately $6 million in construction claims.

Manufacturing Firm: As Project Engineer, coordinated the fabrication, installation and startup of industrial electrostatic precipitation equipment for a manufacturer of industrial air pollution control equipment.

JOSEPH DIXON, PE

Project Manager

Years of Experience
22 Years

Education
BS/1975 Marine Engineering/Transportation (dual major) U.S. Merchant Marine Academy

Registration/Certification
New York/Professional Engineer - Mechanical Engieering/1998 [redacted]

Chronology
April 1988 - Present: URS Corporation Project Engineer, Controls Engineer, Controls Manager, Project Manager, Program Manager

January 1977 - March 1988: Ocean Ships, Inc. - Third Officer/Mate, Second Officer, Chief Officer, Captain

July 1975 - October 1976: Naval Ship Engineering Center - Engineer In Training

URS

Mr. Dixon has 22 years of diverse experience in project management, contract administration, scheduling, cost control, value engineering, claims support and personnel management and operations. He has used his management and engineering skills on a wide variety of projects. From 1997 until this year, Mr. Dixon served as Program Manager on the multi-billion John F. Kennedy International Airport Redevelopment Program in New York. The multifaceted program has increaseed JFK air travel capacity from 30 to 50+ million passengers annually while the airport remained fully operational. Prior to his two decades in the construction industry, he gained worldwide experience in ship operations and multicultural exposure as a ship captain..

PROJECT EXPERIENCE

Port Authority of NY&NJ, John F. Kennedy International Airport Redevelopment Program, Queens, NY: Program Manager responsible for managing a staff, coordination and project management on a wide range of airport projects. Long term assignment on the Program through various stages of development in positions of increasing responsibility. Responsibilities include:

Project Management - Provide project management to the Port Authority Aviation Department for oversight of design and oversight of construction management activities;
Schedule Management - Coordinate and monitor schedules on multiple projects for both design and construction;
Cost Management - Establish budgets, develop capital plans; monitor spending on macro and micro levels; and provide trend and variance analyses;
Financial Analysis - Participated in feasibility studies and risk analysis to determine viability of various capital investments;
Private Development - Promote private development opportunities. Contributed to development of request for qualifications and request for proposal documents, selection criteria, negotiation, contract development and administration.

Other Elements of the Program include:
Terminal 4 - International Arrivals Building - $1.4 billion - A new three-level terminal building totaling 1.5 million square feet. The building was constructed in phases to maintain on-going operations consisting of five million international passengers annually;
Terminals 5 & 6 - $875 million - Phased redevelopment to provide roads, utilities, parking, and a new terminal while preserving the landmark TWA Flight Center designed by Eero Saarinen;
Planning for the redevelopment of Terminal 6;

Airport Roadway and Infrastructure - $550 million - A total of 32 lane miles of approach and frontage roads coordinated with a comprehensive upgrade of the Central Terminal Areas utility system;
Air Traffic Control Tower - $60 million - The 321 foot structure features state-of-the-art communications, radar display and windshear alert systems;
Cogeneration Plant Privatization- $250 million - Conversion of the heating and refrigeration plant into a new 90MW cogeneration facility providing heating and cooling to JFKs terminals and power to the regional grid;
Parking Facilities - $280 million - Four multi-level parking garages, one single-level deck and surface parking totaling over 7,000 spaces.

Other Terminal Improvements:
Terminal One - A new 650,000 square foot passenger terminal constructed by Terminal One Group Associates;
American Airlines Terminals - A completely new terminal estimated at $1.8 billion was completed by American in phases through 2007;
British Air Terminal: Two phased airline renovations and an expansion of their terminal.

Port Authority of NY&NJ, John F. Kennedy International Airport / International Arrivals Building, Queens, NY - $1,400,000,000: Assistant Project Manager for the redevelopment of the International Arrivals Building for multiple stages of the project, from conceptual design through start of construction.

Port Authority of NY&NJ, John F. Kennedy International Airport / Air Traffic Control Tower, Queens, NY - $60,000,000: Project Manager responsible for the completion of construction, Facility and FAA acceptance, fit-out and transition of operations to the new facility.

Port Authority of NY&NJ, John F. Kennedy International Airport / Schedules and Budgets, Queens, NY: Controls Engineer responsible for developing project schedules and budgets; monitored and tracked expenditures; and prepared variance analyses. Promoted to Manager of Controls responsible for providing cost and scheduling services for the program. Developed budgets, prepared capital plan input, tracked and analyzed cost trends. Prepared and integrated schedules and monitored progress.

NYC Department of Design & Construction, Rikers Island Correctional Facility, Queens, NY - $82,000,000: Project Engineer for the court-ordered expansion project for low- and medium-security jail space. Scheduled day-to-day contractor work, expedited shop drawing reviews and modular construction, and resolved mechanical conflicts. Handled change orders, payment requests, documentation and contract administration; monitored contract compliance; and coordinated security to controlled access areas.

K. JOSEPH JBEILI

Project Manager

Years of Experience
21 Years

Education

MSCE Civil Engineering/1990/ Construction Management/ Northeastern University,Boston MA

BSCE Civil Engineering/1988/ Civil Engineering/Northeastern University, Boston MA

Chronology

10/02-Present: URS Corporation, Project Manager

10/92-10/02: Port Authority of New York & New Jersey, Project Manger

9/90 10/92: FGA, P.C., NY, Project Manager

12/89-9/90:Sciaba Construction, Boston, MA, Project Engineer

7/87-12/89: Morse Diesel, Boston, MA, Field Engineer

7/86-6/87: HNTB, Boston, MA, Assistant Engineer

URS

Mr. Jbeili has more than 21 years of experience in managing public and private projects thru all stages including feasibility studies, planning, design development, and construction management..

PROJECT EXPERIENCE

PANY&NJ - George Washington Bridge On-Call Contract, New York and New Jersey - $20,000,000: Project Manager overseeing design and construction activities for George Washington Bridge. Work consist of replacing bridge rope of the main span, roadway steel joint replacement, upgrade to the traffic signs (Electronic and static signs), roadways pavements, and various site work. Responsible of overseeing the design and construction.

PANY&NJ - Lincoln/Bus Terminal Ramps On-Call Contract, New York, NY - $120,000,000: Project Manager overseeing the design and construction activities for the replacement of the concrete deck for the bus ramps including the embedded snow melting system in the ramps, renovating the Bus Terminal facade and structural seismic upgrades to the Bus Terminal building and Bus Ramps. Responsible of overseeing the design and construction.

PANY&NJ - #7 Subway Line Design Criteria On-Call Contract, New York, NY - $2,000,000,000: Project Manager overseeing design and construction activities for the No. 7 subway tunnel from Times Square to 25th St (under 11th Ave). The proposed tunnel will run under the Bus Terminal and under the Lincoln Tunnel. Responsible of reviewing design documents, coordinating the design criteria and assessing the construction staging.

PANY&NJ - Access to the Region Core (ARC) On-Call Contract, New York, NY - $5,000,000,000: Project Manager overseeing design and construction activities for Access to the Region Core (ARC)project. Planning design consisted of Drafting the Environmental Impact Study (DEIS) of the proposed extension of a new passenger rail tunnel from New Jersey to Penn Station in New York City. Responsible of reviewing and coordinating the various Engineering design criteria documents for the EIS, coordinating the design criteria with PANY&NJ / NJ Transit and their designers, Parsons Brinckerhoff.

PANY&NJ - Jacob Javits Center Expansion On-Call Contract, New York, NY - $1,500,000,000: Project Manager. Preliminary designs consisted of expanding the Jacob Javits Center north and abut close to the Lincoln Tunnel ventilation buildings. Responsible of reviewing preliminary design plans, coordinating the design criteria and assessing the construction staging (including easements rights, real estate acquisitions) with PANY&NJ and Javits Centre designers, HOK.

PANY&NJ - Hoboken Waterfront Development On-Call Contract, Hoboken, NJ - $570,000,000: Senior Project Manager for construction project of a mixed-use residential (350 units) and commercial development (over 1Million sqft) on 50 acres of prime waterfront. Oversaw the engineering and construction on behalf of the landowner, the PANY&NJ. Interacted with the developers, SJP and The Applied Company and with their contractors (Bovis, Skanska) and the designers (HOK, Tomasetti Eng, Mueser Rutledge).

PANY&NJ - Queens West Waterfront Project On-Call Contract, Long Island City, NY - $2,800,000,000: Senior Project Manager. Planning project located along the East River on 74 acres of prime waterfront directly across from Midtown Manhattan made up of 19 parcels planned for residential and commercial development. Oversaw the engineering planning on behalf of the landowner, the PANY&NJ. Interacted with the other stakeholders, Empire State Development and NYCEDC and the developers.

PANY&NJ - Port Authority Bus Terminal, New York, NY - $350,000,000: Project Manager overseeing design and construction activities for the Port Authority Bus Terminal project. Planning project to build a 35-story building over the Port Authority Bus Terminal. Coordinated the design criteria and preliminary design. Interacted with the Developer Vornado and their designers (SOM, YES, KPF) and the contractors (Tishman, Turner).

PANY&NJ - Holland Tunnel / Lincoln Tunnel/Bus Terminal, New York and New Jersey - $120,000,000: Project Manager overseeing design and construction activities. Work consisted of upgrade to the existing facility infrastructure, implementation of the KROLL security recommendations, buildings rehabilitation and tunnels rehabilitations. Responsible of overseeing the design and construction of multiple transportation projects.

Newark Liberty International Airport, Roadways Phase 1A, Newark, NJ - $60,000,000: Project Manager. Work consisted of widening roadways and bridges entering Newark Airport. Upgrade to the parking facilities and existing internal roadways. Responsible of overseeing the design and construction.

PANY&NJ - World Trade Center Recovery & Restoration, New York, NY - $350,000,000: Project Control Engineer. Work consisted of gathering and analyzing schedule, budget and technical data to support the restoration effort after the bombing at the sublevels. Responsible for assisting Design and Construction Executives at the command center at ground zero.

PANY&NJ - PATH and Tunnels and Bridges Division, New York and New Jersey - $200,000,000: Project Control Engineer for the Port Authority of NY & NJ. Work consisted of gathering and analyzing schedule, budget and resources data to support the senior management in running the PATH and Tunnels Bridges Capital programs.

TERRENCE DUNN

Project Manager

Years of Experience
27 Years

Education
Bachelor of Architecture/1983/University of Notre Dame; College of Engineering; School of Architecture

Chronology
08/09 - Present: URS Corporation, Assistant Director

11/04 08/09: Tishman Speyer, Director

09/99 11/04: Bovis Lend Lease, LMB, Inc., Construction Project Manager

02/97 09/99: Skidmore, Owings & Merrill, Project Manager/Associate

03/90 02/97: Swanke Hayden Connell Architects, Project Manager/Associate

03/86 03/90: Edward Durrell Stone Associates, Designer

08/83 11/85: U.S.Peace Corps, Yemen Arab Republic

URS

Mr.. Dunn has over ten years experience in on-site project management as both an Owners Representative and Construction Manager and over twenty years of construction-related work experience on a variety of commercial real estate transactions ranging in scale and complexity in the U.S., Europe, Latin America and the Mideast. Previous experiences as an Owners Representative for a major international development firm; Project Manager for a large international architectural firm and as a Construction Manager for a major New York based construction management firm provides a strong baseline in the management of all aspects of the development of new projects from site identification through final tenant build-out..

PROJECT EXPERIENCE

World Trade Center Redevelopment/ New York, New York- Port Authority of NY&NJ - $11,000,000,000: Assistant Director; Planning Design & Construction for the World Trade Center Site working for the Port Authority of NY & NJ. Ongoing Work includes review and operational overview of all projects under the direct management of the Port Authority of New York & New Jersey (PA) inclusive of 1 World Trade Center; the HUB; the PA/Westfield JV Retail Mall; and the Vehicle Security Center (VSC.) Responsible for the negotiation of all awarded Construction Agreements held by the Department and for the Planning, Design & Construction at the World Trade Center Redevelopment inclusive of all coordination with PA affected departments (i.e. World Trade Center Construction; Procurement; Legal; Engineering; TSD, OEM , Risk); with affected Stakeholders (i.e. Silverstein Properties, Brookfield Properties, Metropolitan Transportation Authority (MTA) and with affected City, State and Federal Agencies.

Yankee Stadium, Bronx, NY - $1,500,000,000: Project Manager for this project for the New York Yankees. Work consisted of the design, construction and fit-out for the new Yankee Stadium, seating approximately 53,000 fans, on four levels stretching from foul pole to foul pole, with nearly 30,000 seats in the first two levels and approximately 60 luxury suites. Responsible for Phase 1 and Phase 2 Environmental Surveys; the coordination of the Yankee consultant, legal teams, and multiple affected NYC and NYS Agencies. Responsible for the ULURP (Uniform Land Use Review Process) and the FEIS (Final Environmental Impact Statement) processes. Responsible for the development of the security program from initial threat assessments and comparable benchmarked institutions to the development of Standard Operating Procedures (SOPs.) Responsible for the management of all Architectural trades (approximately $250m dollars) during bid & award; including review of scopes, bidders, all requisitions and day to day management of field conditions through project close-out.

Site 26; Goldman Sachs Corporate Headquarters, New York, NY - $2,400,000,000: Design Project Manager on this project for Goldman Sachs. Work consisted of the design management of Pei Cobb Freed & Partners, Adamson & Associates and ShoP Architects for the core & shell for Goldman Sachs new corporate headquarters located opposite the proposed One World Trade on West Street in lower Manhattan. Responsible for the day to day management of the design team from preliminary presentations through completion of Construction Documents.

Fulton Street Transit Center, New York, NY - $750,000,000: Design Project Manager on this project for the Metropolitan Transportation Authority (MTA). Work consisted of the design management of Grimshaw Architects, Arup Consulting Engineers and James Carpenter design Associates for the design of the new transit center facility at the southeast corner of Fulton Street and Broadway. Responsibilities included Budgeting, Estimating, Value Engineering, Logistics Planning, Design Management, Project Scheduling and Construction Engineering Services.

PS1, The Contemporary Art Museum, Long Island City, NY - $17,000,000: Construction Manager on this project for the New York City Department of Cultural Affairs New York City Department of Design & Construction and the Museum of Modern Art. Work consisted of the structural reinforcement and/or replacement of roof trusses and parapets; window replacement and exterior facade stabilization/replacement for a culture center housed in what had been Long Island City's First Ward elementary school. Responsibilities included client and sub-consultant coordination and management and construction management services which included value engineering services, estimating, logistics planning (to maintain the continued operation of the Museum during construction), bidding, purchase of subcontracts, negotiation of change orders and closeout of all subcontracts.

Hudson River Park, New York, NY - $330,000,000: Program Manager on this project for the Hudson River Park Trust. Work consisted of the Project Management of a multi-phase design and construction program of both land-side and water side projects adjacent the Hudson River from Battery Park City in the south to Pier 96 to the north. Responsible for the management of multiple-design teams; Services included Design Coordination Services, Project Scheduling Services, Construction Engineering Services, Survey and Mapping Services, Geotechnical and Soils Investigation Services, Project Record Management Services, Environmental and Historical Resource Analysis Services, Landscape Architecture / Architectural / Engineering Services, Community Outreach and Participation Services, Agency Coordination Services, and Facilities/ Operations Planning Services.

JOSEPH SOAVE, PE

Project Manager

Years of Experience
33 Years

Education
MBA / 1984 / Management / Manhattan College, Riverdale, New York

ME / 1980 / Civil Engineering / Manhattan College, Riverdale, New York

BE / 1976 / Civil Engineering / The City College of New York, New York

Registration/Certification
NY / Professional Engineer, No. [redacted]

NJ / Professional Engineer, No. [redacted]

CT / Professional Engineer, No. [redacted]

Chronology
1995 - Present : URS/OBrien Kreitzberg, Project Manager-Program Manager

1985 - 1995 : Frederic R. Harris, Inc., Associate Vice President/Project Manager/Manager, Civil Engineering

1981 - 1984 : Parsons, Brinckherhoff, Quade & Douglas, Inc., Senior Engineer

1979 - 1981 : Richard Browne Associates (presently RBA Group), Senior Engineer

1977 - 1979 : Vollmer Associates, Junior Engineer

URS

Mr. Soave has more than 30 years of experience in the management, planning, design and construction of large projects, including over 20 years experience on multi-billion dollar Port Authority aviation projects. Program Management experience includes planning a new $4 billion air terminal program at LGA; a $1 billion dollar air terminal expansion program at EWR as well as implementation of a three-year $175 million airfield improvement program at JFK. Program Management responsibilities have included the development of project scopes, management of budgets and schedules; allocation of resources; earned value review; change order review; quality control; client liaison; and staff hiring and supervision. He also has experience as Project Manager of $550 million roadways/utilities improvements at JFK and $60 million roadways/utilities improvements at EWR.. He has also served as Manager of Civil Engineering with full responsibility for the management of a staff of designers. Mr. Soave is currently providing Program Management services for the $4 billion LaGuardia Airport Central Terminal Building Modernization Program..

PROJECT EXPERIENCE

JFK International Airport Redevelopment Program, Jamaica, NY - $2,000,000,000: As Client Project Manager, directed the development and implementation of $550 million in roadway and utility improvements while fully coordinating with airport operations and other components of the program, including new terminals and a people-mover system. Provides for the phased implementation of the roads and utilities; develops updates and maintains planning parameters for roads, parking lots and terminal frontages. Assesses earned value of active design efforts and compares to baseline schedules and budgets; reviews and evaluates cost proposals submitted by the design entities; reviews, evaluates and modifies the baseline budget and schedule. Recommends corrective action to senior client staff; coordinates design issues with the airport operator and tenants; reviews and evaluates the technical content of construction documents; monitors the performance of all components of each contract (designer, construction manager and contractor); evaluates earned value versus baseline schedules and budgets; participates in the development of recovery plans for schedule slippages; reviews all construction change orders; advises senior client staff; and coordinates construction issues with airport operator and tenants

LaGuardia Airport Modernization Program, Port Authority of NY & NJ, Flushing, NY - $4,000,000,000: Program Manager/Project Manager for URS (as part of a joint venture) providing planning, engineering and program management for the $4 billion program to modernize facilities at LaGuardia Airport. Provides on-site program management services and has full budget and schedule responsibility. The main focus of the project is expansion and

improvement of the Central Terminal Building (CTB) and its concourses to increase the types of aircraft that can be accommodated and to provide greater flexibility in adapting to programmatic changes of the airlines served by the facility. Modifications also are planned for the head house to meet increased passenger volumes as well as security needs for screening passengers and baggage. Landside improvements are planned for the roadways and frontages to accommodate increased vehicular volumes. URS is also studying the operational and financial feasibility of a facility that will screen all deliveries to the airport. The services include analyzing existing plans for redevelopment of the CTB and associated facilities, providing updated cost estimates and schedules for potential improvements, providing cost/benefit analyses, preparing a business and financing plan for the program, and assisting in the effort to obtain future authorizations to proceed with design and construction.

Terminal C Roadways, Continental Global Gateway Program - Newark Intl Airport, Newark, NJ - $1,000,000,000: As Program Manager, oversees the closeout of this multi-faceted terminal program. Responsibilities include: cost and schedule control; document control and general office administration.
As Client Project Manager, has full responsibility for the development and implementation of $60 million in roadway and utility improvements while fully coordinating with airport operations and interfacing with the terminal and parking garage projects. Works closely with Continental Airlines and the airport operator (Port Authority of New York and New Jersey) to solve numerous logistical and construction phasing problems arising from confined site conditions. The roadway construction site is located between an active terminal being expanded towards the roadway and the construction of a parking garage with two pedestrian bridge towers within the roadway site. Establishes scope, budgets and schedules for multiple construction contracts; and monitors the budget and schedule for all phases of design and construction. Evaluates all activities and initiates corrective action for technical, schedule and budget issues associated with the designer, construction manager and the contractor.

Engineering Firm, New York, NY: As Project Manager, responsibility encompassed budgeting, staffing, scheduling, technical requirements and client relations. Successfully increased project size through the sale of additional services. As Department Manager, directed a professional/technical staff in technical and administrative areas including project staffing and quality control; increased the timely completion of projects; recruited, hired and supervised the professional staff; and participated in overall strategic planning.

WILLIAM APRICENO, PE

Project Manager

Years of Experience
28 Years

Education
MBA/1988/Finance/Manhattan College
MEME/1982/Mechanical Engineering/Manhattan College
BEME/1981/Mechanical Engineering/Manhattan College

Registration/Certification
NY/Professional Engineer/1990
New York City Site Safety Manager, NY 2003

Chronology
1996 - Present: URS Corporation
1986 - 1996: John McCarthy, Inc. Consulting Engineers. Consulting Engineer.
1985 -1986: Peterson & Company. Cost and Schedule Engineer
1982 -1985: Westinghouse Electric Corp., Design Engineer

URS

Mr. Apriceno has 28 years of experience in the engineering, project management and construction field. His background includes project and construction management; resolving complex construction, engineering and financial issues; assisting clients in contract administration, review of plans and specifications; preparation of design changes and modifications; critical path method (CPM) scheduling and analysis; estimating and preparation / review of construction claims..

PROJECT EXPERIENCE

LaGuardia Airport Central Terminal Building Modernization Program - PANYNJ, Queens, NY - $5,000,000,000: Assistant to the Program Manager for Central Terminal Building modernization planning effort to replace the Central Terminal Building at LaGuardia Airport. Analyzed four alternative concepts of a new 38 gate terminal, 6,500 space parking garage, new Central Heating and Refrigeration Plant, reconfigured airport roadways, utilities, taxiways and apron. Evaluated the four alternative concepts for their ability to accommodate forecasted passenger volumes, current/future generation aircraft and provide modern terminal amenities and functions with efficient/flexible operations. Provided support for the client project authorization process and agency coordination.

LaGuardia Airport Project - PANYNJ, Queens, NY - $80,000,000: Served as Project Manager for LaGuardia Airport Projects for the Port Authority of New York and New Jersey's Capital and Operations Programs. Responsibilities included organizing and managing the design team, developing project schedule, establishing and monitoring project budget, awarding contracts, and providing construction management of the work and claims avoidance.

New York City Department of Citywide Administrative Services, New York NY - $23,000,000: Served as Project Manager for the exterior rehabilitation of a landmark quality building in a busy downtown area. Responsibilities include project management, contract preparation, pre-qualification of subcontractors, bid and award of work, construction management of work, quality assurance/quality control and claims resolution.

New York City Department of Design and Constructions Schools Task Force, New York, NY - $180,000,000: Served as Project Manager for the New York City Department of Design and Constructions Schools Task Force $180 million exterior repair and renovation program for various elementary and middle schools throughout New York City. Responsibilities included pre-construction review of design documents, contract preparation, pre-qualification of subcontractors, bid and award of work, construction management of work and quality assurance/quality control.

New York City School Construction Authority Capital Improvement Program, New York, NY (01/1996 - 03/1997) - $7,500,000,000: Served as Senior Project Engineer for the New York City School Construction Authority's $7.5 billion Capital Improvement Program for the renovation, modernization and new construction of New York City's public schools. Responsibilities include the resolution of construction claims, construction audits, cost and schedule reviews of ongoing projects.

John McCarthy, Inc., Consulting Firm, Hoboken, NJ: Served as Engineering Consultant, performed resolution of complex engineering and construction claims. Assisted clients in contract administration and construction management on difficult projects. Tasks included review of plans and specifications, assistance in preparation of design changes and modifications, tracking of project progress, schedule analysis and financial analysis of construction activities

Peterson & Company, Inc., New York, NY: Served as Cost and Schedule Engineer, performed resolution of complex engineering claims. Assisted clients in contract administration and claim preparation on troubled projects. Tasks included review of plans and specifications, and assistance in preparation of design changes.

Westinghouse Electric Corporation, Bridgeport, CT (06/1982 - 11/1985): Served as Design Engineer, provided design, analysis, and testing of switchgear and electro-mechanical devices. Responsible for project development, including marketing interface, national electric code and other regulatory agency review, cost investigation and evaluation, tooling and equipment approval, assembly implementation and quality assurance test preparation. Related tasks included exposure to CAD/CAM and shop floor experience.

MOIN AHMED, PE

Project Manager

Years of Experience
29 Years

Education
BS / 1974/ Mech. Engineering / NED Engineering College
MS /1981 / Mech. Engineering / University of Washington

Registration/Certification
Washington/Professional Engineer-Mech Engineering/1982

Chronology
1992-present: URS Corporation, New York, Senior Project Manager
1989 - 1992: Tishman Construction, New York, Mechanical PM
1982-1989: Holaday Parks, Inc. - Seattle, Assistant Engineer Manager

URS

Mr. Ahmed has over 28 years of experience in the construction and program management field relating to airports, K-12, higher education, hotels, hospitals, correctional facilities, office buildings, industrial complexes, United States Postal facilities, and investment banks. Currently he is the Port Authority Project Liaison for the construction of he $1.2 billion American Airlines Terminal and the Terminal 5 parking garage at John F. Kennedy International Airport. He was responsible for the $200 million renovation of 277 Park Avenue, a 50 story JP Morgan Chase Bank building, where he was the Owner's Representative and managed the construction work for the Real Estate and Business Development Department of the Bank.

PROJECT EXPERIENCE

John F. Kennedy International Airport, American Airlines Terminal and Terminal 5 Parking Garage, Jamaica, NY - $1,200,000,000: Project Liaison managing construction of the new American Airlines Terminal and the $65 million, 1500 space parking garage at Terminal 5 (JetBlue) for the Port Authority of NY & NJ at JFK Airport. Responsibilities include coordination with American Airlines/JetBlue and the various PA departments, managing day-to-day construction issues, ensuring compliance of all PA and JFK standards, resolution of lease and contract issues, schedule compliance, closeouts and Occupancy Certifications.

New York City Housing Authority - Ocean Bay Apartment Complex, Far Rockaway, NY - $60,000,000: Project Manager responsible for managing exterior renovation of 14 buildings in the Ocean Bay Apartment Complex in Far Rockaway, Queens. Exterior work included roofing, parapets, windows and asbestos removal. Infrastructure work included upgrades for electric and telephone systems.

New York City School Construction Authority - IS2R, PS2Q, Law & Gov. High School, PS68X, IS131Q and PAL High School, New York, NY: On-Call Design Contract. Program Manager for numerous schools. As Program Manager worked with SCA and URS personnel to streamline client relations, paper flow and accountability issues. Implemented steps within URS design department to improve quality of final product to client. Eliminated schedule slips and met all deadlines. Conducted ongoing negotiations on behalf of URS on past disputed issues and payments. Recovered unbilled and pending moneys owed to URS. Participated in design review meetings and performed final and substantial completion walk-throughs with the SCA and contractors. Successfully managed several design projects to 100% completion. Coordinated closeouts and processing of final payments. Other responsibilities

included preparing estimates, proposals and schedules for additional services, and changes to contract.

New Jersey School Construction Corporation, Jersey City, NJ - $42,000,000: Assigned as Project Manager on an emergency basis to the Freshman Academy project, to revive a stalled project with a non-performing contractor. Responsibilities included approval of contractor and consultant payments and change orders, coordination between SCC, contractor and consultant, managing day-to-day construction, reporting to client on progress and quality control issues, and generating weekly and monthly reports for client.

JP Morgan Chase Bank, Midtown Campus, New York, NY - $200,000,000: As Project Manager, acted as liaison between the bank's Real Estate and Business Development Department and the Contractor. Responsible for monitoring progress, field conditions and schedules. Approved change orders and requisitions. Maintained and monitored project costs. Actively interfaced with contractor, consultants and the various Department staff on issues relating to labor, delivery of furniture and MEP equipment, site conditions, changes and claims, and mass migration of Department onto completed floors.

NYC Department of Design & Construction Reconstruction of Webster Ave. Vehicle Maintenance Facility for DOT, Bronx, NY - $22,000,000: Project Manager for this maintenance facility project. Responsibilities included design review, estimating, managing of project schedule, quality control, coordination between contractors, consultants and DDC, punch list and final closeout.

Columbia University Program Management, New York, NY - $40,000,000: As Project Manager, had full responsible for overseeing Campus-wide construction of several Capital & Infrastructure projects from pre-construction to end user occupancy. The key projects included:

* 11-story Engineering school renovation of the 40 year old HVAC system.
* Laboratory exhaust and electrical upgrades to 90 year old, 9-story Chandler Chemistry Labs, including upgrades to main electric switch gear, replacement of 96 fume hood exhaust fans, improvements to heating & cooling systems and improved laboratory lighting.
* Campus chilled water loop upgrade, including addition of an 18" diameter underground CHW pipe loop to connect the N and E campuses. 500-feet of the loop was run thru bedrock under Amsterdam Avenue.
* Addition of a 2,000 ton steam chiller in the Uris Hall MER, including upgrades to steam and CHW piping and pumps.
* Campus condenser water upgrade, included addition of a new 36" diameter CW loop, four 1200 ton cooling towers, CW pumps and electrical upgrades.

MARK OSPALA

Project Manager

Years of Experience
34 Years

Education
BS/1976/Construction Engineering/Polytechnic of Central London, London, England
Diploma in Real Estate and Investment Analysis/1985/New York University/New York, NY

Chronology
Sep-08-Present: URS Corp
Nov-06-Sep-08: Department of Environmental Protection
2003-2006: Property Pride, LLC
2002-2003: Jeffrey Brown Associates
1996-2002: Lehrer McGovern Bovis, Inc
1993-1996: Hanscomb Associates, Inc
1991-1993: CRSS
1986-1991: York Hunter, Inc
1983-1986: Lehrer McGovern, Inc
1979-1983: Negav Airbase Constructors (NAC) and Facilities And Support Team (FAST)
1976-1979: Wates Construction, Ltd

URS

Mr. Ospala has over 33 years of U.S. and international construction and program management experience. Managed the lifecycle of many projects from conceptual stage through design, construction and closeout. Program management assignments on large scale programs. Projects included commercial, residential, institutional and mixed-use buildings as well as transportation and water/waste water facilities. Experienced in both the private and public sectors. Skilled in directing the design, construction and program management processes to ensure completion on time, within budget and to the satisfaction of ownership. Possesses strong leadership, management and communication skills. Develops excellent rapport with individuals of all levels. Entrepreneurial thinker and proactive manager, able to develop creative solutions to challenging problems.

PROJECT EXPERIENCE

PANYNJ - World Trade Center Project: Cost Engineer on specific projects as well as setting up the overall cost sharing procedure and its implementation. Consulting to the PANYNJ project management and executive staff.

Ben Gurion International Airport, Tel Aviv, Israel: Managed large team of engineering firms for the design of the $600 million passenger terminal at Ben Gurion Int'l Airport. Areas of responsibility were the roads, bridges, multi-level approach roadway, parking structures/revenue system, sewer pump station and utility infrastructure. Also managed the preparation of the construction schedule for the entire project for all landside and airside facilities (4000 activities).

Port Authority of New York and New Jersey, Capital Redevelopment Program, $970 million: Senior Project Manager/Program Manager assigned to develop and implement management controls, cost controls, scheduling and progress reporting systems for the World Trade Department. Prepared and monitored the scheduling/cost tracking of all work associated with the recovery of the World Trade Center and Vista Hotel from the February 1993 bomb blast, including preparation of supporting documentation for the insurance claims. Construction consulting as owner's representative on means, methods and project controls for various projects such as the Windows on the World and Observation Deck Redevelopments, Vista Hotel, tenant spaces, asbestos abatement and sprinkler programs.

NYC Department of Environmental Protection, Queens, NY - $23,000,000,000: Director, Capital Program Management Bureau of Engineering, Design and Construction immediately established the Program Management division to provide support for the $23 billion, ten year, Capital

Program. Appointed staff to create/manage a new centralized permitting group and estimating unit. Provide project controls for cost, schedule and issues management. Developing a PMIS (Program Management Information System) to monitor and report on the entire Capital Program. Accurately evaluate areas of innovation for improved project delivery.

Property Pride, LIC (Royce Group), Fort Lee, NJ: Principal Construction consulting/real estate investment company. Regularly consulted on large and medium size construction and alteration projects in NYC, Connecticut and Puerto Rico. Successfully developed and renovated several projects in NJ and PA. Made several real estate acquisitions and sales.

Tiffany and Company, Customer Fulfillment Center, Hanover, NJ - $70,000,000: Project Executive/Senior Project Manager for a complex $70 million, 275,000 SF Customer Fulfillment Center on a 38-acre partial landfill site. The building has a distribution area, 30,000 SF of offices, cafeteria, training rooms, specialty facility areas and shops, etc. Included extensive site work, storm management and landscaping as well as a $20 million material handling system from Austria.

American Museum of Natural History, New York, NY - $10,000,000: Project Manager for the installation of an 8,500 SF mezzanine between the existing forth and fifth floors of the original 100-year-old building. Involved intricate installation of new structural steel columns through the occupied public galleries and offices. Concurrently managed the construction of interior spaces for Government Relations, Visitors Services and Ornithology Departments.

Manhattan Psychiatric Center, New York, NY - $105,000,000: General Superintendent responsible for full site operations for the $105 million rehabilitation during patient occupation. Work included the addition of 17-story structural steel building, 800,000 SF of tenant work, chilled water main line and restoration of the Energy Center.

ALAN DIETZ

Project Manager

Years of Experience
35 Years

Education
BA/1971/Architecture/
University of Washington

Chronology
1971 - 1973 - Alderman & MacNinsh Architects

1973-1974 - Philip Lanes & Assoc. Architects

1974 - 1981 - Dietz Design Group

1981- 1984 - Hoffritz for Cutlery - Retail Construction Owners Rep

1984 - 1986 - Michael Lynn Assoc. Architect/Interior Designers

1986 - 1990 -Atmore Construction - Retail Construction - Millwork (New York area)

1990 - Present - URS Corp.

URS

Mr. Dietz is a Senior Project Manager with over 30 year of extensive experience, in project management, master and logistic planning, construction administration, field observation, constructability and value engineering, hazardous material remediation, project direction and design of institutional, commercial and residential facilities. Skilled Manager of large-scale complex construction projects.

PROJECT EXPERIENCE

Redevelopment of the WTC Trade Center Site: Responsible for coordination of the site logistic and integration for the Port Authority of New York and New Jersey of the key element of the construction for the seven billion redevelopment effort at the WTC site. Primary responsibility was project integration and logistic for the new Calatrava PATH Station and HUB, Freedom Tower, East West Corridor, realignment of the West Side Highway(9A), New Memorial to the victims of 9/11, redevelopment of towers two through five.

Deconstruction of 130 Liberty Street for the Lower Manhattan Development Corp., New York, NY - $110,000,000: Sr. Project Manager for 130 Liberty Street Demolition. Worked closely with Lower Manhattan Development Corporation to develop a strategy to deconstructed 130 Liberty Street physically damaged and became highly contaminated by dust when the South World Trade Center Tower collapsed on 9-11-01. Assisted in the preparation of bidding documents for the scaffolding and deconstruction of the building. Managed a six man team responsible for supervision and oversight of Regional/Safeway Environmental the Scaffolding Contractor and Bovis Lend Lease the Deconstruction Construction Contractor. Played a key role in attaining building department permits for the scaffolding and deconstruction of the building. Prepared and monitored detailed schedules for both the scaffolding and deconstruction of the building. Acting as the owners representative our team was responsible for monitoring and supervisions of all aspect of the work on a daily basis from field work activities, safety and environmental management.

Terminal E - Logan International Airport, Boston, MA - $200,000,000: Director of Construction Planning & Logistics for 200 million expansion and renovation of Terminal E. Worked closely with Logan Modernization International Gateway to develop the strategy for the completion of renovation of Terminal E from previous General Contractor/CM to a new CM at risk. Worked closely with the Architect to assess and assist in the assemblage of the multi-discipline conditions surveys and as-built drawing for the Terminal. Directed construction activities in order to secure the project by completing critical building envelope mechanical and electrical work. Directed the

development and preparation of logistic and phasing documents to be turned over to a future CM at risk.

NJEDA School Construction Program, Jersey City, NJ - $1,000,000,000: Construction Executive for the first phase of Jersey City's Schools, ten year, $1 billion Rehabilitation Program. Provided initial preparation of bid documents, logistic, constructability review, value engineering, cost estimating, hazardous material remediation planning and oversight and operational planning with joint venture partner Turner Construction in establishing the project teams for the Health and Safety phase of the work.

Newark Liberty International Airport Construction Management Services, Newark, NJ - $940,000,000: Provided critical in-depth analysis, assisted in planning, detailed schedules, constructability and value engineering review for the Aviation Engineering Department for the Central Terminal Projects (CTA) for the New Lot C Garage, Central Toll Plaza and Terminal C Roadway. Participated in the planning efforts for the $350 million Renovation and Expansion of Terminal B and $500 million to $1 billion Renovation and Expansion for Terminal A. Provided schematic scheme analysis and evaluation, constructability reviews, cost, planning and schedule analysis for both projects. Served as the Assistant Resident Engineer for Construction Management Division at Newark International Airport providing scheduling, logistic and construction oversight for CTA Projects to include the monitoring and removal of hazardous materials. Projects under my direct management were the following:

- $110 million Parking Facility at Terminal C.
- $765 million Expansion to Continental Airlines, Terminal C.
- $30 million Replacement and Expansion of the CTA Roadways at Newark Airport.
- $35 million new FAA Tower.

P.S 217, Brooklyn, NY: Senior Project Manager for the construction management of this school for the New York City School Construction Authority. Renovation and 36,000 sf. Addition to a five story 80,000 sf. 1926 exiting historic school while in operation. Public School 217 was a 42-month renovation and expansion that included the removal of all of the asbestos containing floor tile, insulation and windows in the building and modernization of the 1926, 900-student historic building. The project was especially challenging when enrollment went from 900 to 1,200 students during the course of construction. Because operations at the school could not be curtailed, responsibilities included meeting with principal, UFT representative, parents association and school district personnel to plan and coordinate the phasing process. Analyzed the plans and made several recommendations, such as consolidation of HVAC equipment into space in the new building, which enabled renovations to proceed smoothly and to meet the construction schedules.

JACOB ROSENKRANZ

Project Manager

Years of Experience
42 Years

Education
Juris Doctor (JD)/1973/New York Law School
BSCE/1968/Civil Engineering/Polytechnic Institute of Brooklyn

Chronology
2006 - Present: URS Corporation
2004 - 2005: Aviation Consultant
2001 - 2004: Washington Group International, Inc.,
1968 -2 000: Port Authority of NY&NJ

URS

Mr. Rosenkranz has 41 years of experience in the engineering and construction fields. His background includes managing the planning, design and delivery of numerous projects with complex engineering, construction and financial issues; contract administration, project management and construction management; preparation and review of construction claims; assisting in the preparation of design changes and modifications; and financial analysis of construction activities and entire projects.

PROJECT EXPERIENCE

John F. Kennedy International Airport, Queens, NY - $179,000,000: Project Manager for this New Large Aircraft (NLA) Program at JFKIA for the Port Authority of New York and New Jersey's Project Management Department. Program includes the relocation of a primary taxiway, rehabilitation of an additional taxiway, and the replacement of several taxiway bridge decks. Responsibilities include managing the project schedule, monitoring the project budget, managing contract changes and claims avoidance.

Essex County Airport Essex County Improvement Authority (ECIA), Fairfield, NJ: Aviation Consultant for the ECIA responsible for developing and managing the airports capital program; advised management on operations matters; and administered the airports State and Federal grant programs.

Hudson-Bergen Light Rail Transit System, New Jersey: Contract Manager - Managed contract related design-build and O&M issues. Included preparing and settling contract claims and change orders with the client (New Jersey Transit) and subcontractors; negotiating and composing rights of entry and easements with owners of properties adjacent to the rail right-of-way to permit access for construction and management of the light rail system; creating and monitoring agreements with developers and property owners constructing projects adjacent to the right-of-way to assure integrity of the light rail system; advising staff regarding property matters; managing the insurance claims process; negotiating leases for project office space and parking areas.

Newark International Airport - Port Authority of New York and New Jersey, Newark, NJ: Program Manager - Successfully managed the planning, design and delivery of numerous projects with aggressive deadlines and conflicting priorities. Included directing the development of project scope, budget and schedule. Required management of diverse professional resources and resolution of issues resulting from the conflict between operational needs and budgetary or constructability constraints. Project examples include:

- New Maintenance Facility. A $25 million project to create a series of structures to house staff and equipment. Was first major design-build project in Port Authority.
- Runway Rehabilitations. Three separate projects totalling more than $150 million requiring innovative extended runway closures.
- Central Terminal Area Roadway Rehabilitation. A $25 million project to reconstruct roadways and terminal frontages while maintaining access to all terminals and parking.

Managed the review, permitting and oversight of tenant construction at International Airport and Teterboro Airport. Projects included:

- Rehabilitation of Terminal A by Tenant Airlines - A $30 million project to upgrade building systems, architectural treatments and passenger amenities. Required close oversight and cooperation between terminal tenants.
- Terminals A, B and C Concessions Programs - Projects to upgrade all concessions in the three main terminals. Supervised by consulting firms, but required close control to assure that schedules were met, budgets not exceeded and design criteria adhered to.
- The staged development of a new major tenant complex at Teterboro Airport. Required inordinate oversight to assure that private sector goals were met.

Traffic Engineering Division, Engineering Department Port Authority of New York and New Jersey: Designed and managed the implementation of traffic control systems at all Port Authority facilities. Responsibilities included:

- Wayfinding and regulatory signing and pavement markings for the first Newark International Airport Redevelopment Program.
- Traffic staging during construction of the World Trade Center. Required close cooperation with numerous New York City agencies.
- Wayfinding and regulatory signing for the World Trade Center Complex.
- The design of a contemporary "trailblazer" signing system for Port Authority facilities.

THOMAS PULVIRENTI

Project Manager

Years of Experience
30 Years

Education

BA, Architecture, University of Catania, Italy

BS, Building Technologies

Pratt Institute, Brooklyn, N.Y., Courses on Methods, Construction and Techniques

ESI International School of Business and Public Management, Project Management Applications

Chronology

Maitra Associates, PC, 2007-Present

McKeon Grano Assoc., 1997-2006

Paul W. Reilly Architects, 1991-1997

McKeon Grano Assoc., 1978-1991

Mr. Pulvirenti has 30 years of experience in architecture, project management, and construction management of public and private facilities. His experience includes multiple discipline work for new construction and renovation of school, transportation, industrial, institutional, retail, office, and entertainment facilities. Mr. Pulvirenti has hands-on responsibility for cost, schedule, and quality of projects through various delivery systems, including lump sum, unit cost, and time and material. He is familiar with New York Building Codes and applicable computer software such as MS Word, Excel spreadsheets, and Primavera Expedition.

PROJECT EXPERIENCE

The Port Authority of New York & New Jersey, Newark Liberty International Airport - Project Manager. Managed multi-discipline projects from inception to completion, including tenant fit-out, retail, kiosks, restaurants, control tower, and security installation in terminal connectors for passenger screening. Inspected installation of high resolution CCTV security cameras. Developed and updated project plans, including scheduling and budgeting. Monitored and reported progress by frequent site visits and progress meeting. Implemented appropriate recovery actions when project plans were deviated.

The Port Authority of New York & New Jersey, WTC Disaster Forensic Recovery, Fresh Kills, Staten Island, New York - Site Representative. Established relations with the numerous Agencies such as FEMA, USACE (United States Army Corps of Engineers), Contractors and unions. Assigned tasks to contractors with the proper equipment and the proper sub-contractor. Kept precise records following the hours of work force and equipment. Monitored maintenance of the site equipment to control and limit wasteful downtime. Managed efficient Safety Operation by coordinating with Environmental and Geosciences specialty contractors monitoring air quality, safety, traffic and engineering support.

The Port Authority of New York & New Jersey, World Trade Department, Construction of Tenant Facilities - Project Manager. Identified sequence of projects to meet budget targets. Performed overall management of construction related activities. Analyzed drawings submissions before being reviewed by the Code Compliance Office, and other Base Building Departments. Established Client-Architect-Contractor relations. Responsible for all renovation for Morgan Stanley facilities in Tower No. 2 including office relocations, reconfiguration, special architectural features, installation of HVAC, lighting, power, wiring, and panels.

New York City School Construction Authority, PS 861, Staten Island – Construction Manager/Project Officer. Served as Project Officer for new four story new school building for the City of New York School Construction Authority. It is located in the Borough of Staten Island, will provide facilities for students in grades P-K through grade 8. The building has Administrative offices, Auditorium, Cafeteria/Kitchen and Library located on the first floor and all classrooms located on floors 1-4 totaling 109.000 square feet costing $ 52,000,000.00. Responsibilities include: Staging, Correspondence, Field Instructions, Project Progress Meetings, Schedule and Phasing, Permit Requirements, Insurance/Subcontractors Approvals, Safety, Product Substitution, Shop drawings, RFI Quality Control, Change Order Procedures, Dispute Resolution Process, Payments Requisitions and Performance Evaluation.

New York City School Construction Authority, Midwood High School Annex, Brooklyn – Project Officer. Served as Project Officer for this $43 million, 3-story, 24,000 SF building addition. The scope of work includes a 2-story connecting pedestrian bridge over Bedford Avenue. The facility consists of classrooms, science lab, and library. Managed multi discipline trades including civil, mechanical, electrical, plumbing, masonry, and curtain wall. Monitored cost, schedule, and quality on a weekly basis. Issued comprehensive status and progress reports.

US Army Corps of Engineers, Ft. Monmouth, New Jersey - Construction Manager. Managed multi-discipline construction trades from inception to completion for Building 603 at Ft. Monmouth, NJ. Building 603 consisted of a prefabricated secure metal building warehouse (109'L x 101'W x 30'H) for the R&D organization. The office portion is 101' x 26'-6". The building's offices are heated and cooled using geothermal well while the warehouse uses two IR gas heaters.

NBC STUDIOS, New York City - Senior Construction Manager. Managed and directed various projects in New York City and Brooklyn with budgets ranging from $100,000 to $10 million. Notable projects include Studio 1 in Rockefeller Center and Bill Cosby Show Studio in Brooklyn. Oversaw installation by all trades and special materials of construction, including sound proofing materials, lighting, power, HVAC, and architectural features. Prepared project progress reports including budget, earned value, accomplishments, and issues.

The Port Authority of New York & New Jersey, World Trade Department – Project Manager. Managed multi-disciplines projects from inception to completion for Port Authority offices, conference rooms, and various work areas in Tower No. 1.

NELSON PARADA, PE

Project Manager

Years of Experience
29 Years

Education
New Jersey Institute of Technology, Newark, New Jersey , Bachelor of Science in Civil Engineering & Construction Technology. 2000

Central American Institute of Technology, El Salvador, Central America.

Advanced Associate of Science in Civil Engineering and Construction Technology, 1981

Registrations/Certifications
New Jersey State Board of Professional Engineers and Land Surveyors

Professional Engineering Certification Awarded in Jan. 2010, P.E. Lic. # [redacted]

Chronology
Hirani Engineering & Land Surveying, PC. 2000 – 2010

Somerset County Engineering Department, 1999 – 2000

Medina Consultants, P.C.,1997 – 1999

Metsky & Zuckerman, 1996 - 1997

Certified Engineering and Land Surveying, Inc., 1990 - 1996

Shimel and Sor, Consulting Engineers, 1989 - 1990

PROJECT EXPERIENCE

Newark Int'l Airport, PANYNJ. Site Utility Program Coordinator

- Performed coordination of field and office activities in connection with the Utility Mapping Program and the Utility Damage Prevention Plan of EWR.
- Directed by-weekly utility coordination meetings and submitted weekly One Call Ticket status reports to over 150 PANYNJ representatives.
- Directed kick-off meetings, and performed inspection of field procedures in connection with underground utility exploration and One Call utility mark outs.
- Developed a field procedure manual called "EWR One Call Damage Prevention Plan Additional Requirements"

Newark Int'l Airport, PANYNJ. Utility Program Coordinator / CADD Assistant

- Reviewed final reports and CADD submittals of SUE and Surveying consultants engaged in the utility mapping program of EWR.
- Managed and maintained the Underground Utility Mapping and the One Call Ticket databases.
- Developed a manual called "PANYNJ Data Collection and Data Depiction Standards Additional Requirements"

Somerset County Roadway & Highway Reconstruction. Project Designer

- Performed design and preparation of reconstruction plans of municipal and capital roadway and highway reconstruction projects.
- Prepared and analyzed topographic maps, and digital terrain models to provide, an economical and safe reconstruction plan conforming to the design criteria of Somerset County Engineering Department.
- Performed Quantity Take-offs, and prepared Engineer's Estimates.

CAD Technician/Engineer in training, Medina Consultants, P.C.

- Prepared Cad drawings of Land Development and Highway design projects.
- Assisted Project Engineers in the design and storm drainage systems, site grading, and geometric design of roadways.

Junior Engineer, Metsky & Zuckerman

- Involved in the application of site engineering to the design and preparation of construction plans of Multi-Fuel/Car Wash facilities. Prepared grading plans, layout of storm water drainage systems and parking lot layouts.

Civil Engineering Technician, Certified Engineering and Land Surveying, Inc.

- Performed Survey Layouts and Coordinate Geometry calculations of Highway/Roadway, Bridge and Building construction.
- Conducted inspection of grading, and survey layout of highway, bridge, and building construction projects.
- Supervised Construction Survey Layouts performed by Local Union, and Staff surveyors.
- Reviewed and revised plans and designs of Land Development and Roadway Reconstruction projects.
- Attended Planning board meetings and coordinated with owners and township engineers to facilitate the approval process.
-

Construction Inspector, Shimel and Sor, Consulting Engineers

- Performed inspection of Reinforced Concrete construction, Foundations, Piles, Grading, and Soils.
- Prepared test reports and daily activity reports.
- Performed material sampling, field and lab testing of Geotechnical, Concrete, and other construction materials.

TABLE OF KEY PERSONNEL EXPERIENCE

NAME	PROJECT	COST
Joseph Dixon, PE	JFK International Airport Redevelopment Program:	See below
	Terminal 4 – International Arrivals Building	$1.4 billion
	Terminals 5 & 6 – Phased Redevelopment	$875 million
	Airport Roadway and Infrastructure	$550 million
	Air Traffic Control Tower	$60 million
	Cogeneration Plant Privatization	$250 million
	Parking Facilities	$280 million
	Oversight & coordination of private airline terminal construction and renovation	N/A
K. Joseph Jbeili	Port Authority Bus Terminal/#7 Line Connection	$2 billion
	Port Authority Lincoln Tunnel/Bus Terminal Ramps	$120 million
	PANYNJ George Washington Bridge On-Call Contract	$20 million
	PANYNJ Access to Region Core On-Call Contract	$5 million
	PANYNJ Javits Center Expansion On-Call Contract	$1.5 billion
	PANYNJ Hoboken Waterfront Development On-Call	$570 million
	PANYNJ Queens West Waterfront Project On-Call	$2.8 billion
Terrence Dunn	World Trade Center Redevelopment	$11 billion
	Site 26 Goldman Sachs Corporate HQ	$2.5 billion
	Fulton Street Transit Center	$750 million
Moin Ahmed, PE	JFK International Airport, American Airlines Terminal & Terminal 6 Parking Garage	$1.2 billion
	NYC Housing Authority, Ocean Bay Complex	$60 million
Mark Ospala	PANYNJ World Trade Center Project	$11 billion
	PANYNJ Capital Redevelopment Program	$970 million
Alan Dietz	PANYNJ WTC Redevelopment	$11 billion
	Terminal #, Logan International Airport, Boston, MA	$200 million
	Newark Liberty International Airport Construction Management Services	$940 million
Jacob Rosenkranz	JFK International Airport, Large Aircraft Program	$179 million
	PANYNJ Newark International Airport Program Manager for multiple projects	$230 million+
Joseph Soave, PE	JFK International Airport Redevelopment Plan	$2 billion
	LaGuardia Airport Modernization Program	$4 billion
	Terminal C Roadways, Continental Global Gateway Program, Newark International Airport	$1 billion
William Apriceno, PE	LaGuardia Airport Central Terminal Building Modernization Program	$5 billion
	LaGuardia Airport Projects	$80 million
	NYC Dept of Citywide Administrative Services	$23 million
	NYC DDC Schools Task Force	$180 million

Thomas Pulvirenti	PANYNJ Newark Liberty International Airport	N/A
	PANYNJ WTC Disaster Forensic Recovery, Fresh Kills, Staten Island	N/A
	PANYNJ WTC Construction of Tenant Facilities	N/A
Nelson Parada, PE	PANYNJ Newark International Airport, Site Utility coordinator	N/A
	PANYNJ Newark International Airport Utility Program Coordinator	N/A

SECTION D: FIRM EXPERIENCE

URS maintains a large Project Management staff that posses the experience required for the successful delivery of the Port Authority's capital project portfolio. These seasoned managers are part of a pool of over 2500 professionals located in the Port District and are available on an On-call basis.

The experience of our Project Managers is continually refined in performing our current portfolio of capital projects which has a construction value of over $7 billion. The nature of these projects, which include Port Authority work, is similar. The projects that URS undertakes in New York are primarily infrastructure and public facilities, including: rail systems, roads and bridges, airports, water and waste water, marine facilities and public buildings. Our clients include all of the major agencies that operate in the New York City area.

To demonstrate the experience of the firm, we have provided the most relevant projects that we have - projects where we are currently providing the Port Authority with Project Management services. For each project we have provided a description of the assignment, start and end dates, total cost of the assignment, and a contact. The projects provided are as follows:

- Project Management On-Call 2007 – 2010
- LaGuardia Airport Central Terminal Building Modernization Program — Program Management
- John F. Kennedy International Airport Redevelopment Program
- World Trade Center Transportation Hub and Site Redevelopment
- Goethals Bridge

Port Authority Project Management On-Call

Services
Project Management Services

Client
Port Authority of New York & New Jersey

#7 Line @ PA Bus Terminal
Mr. Paul Crist, Program Director of Tunnels, Bridges & Terminals
(973) 792-4724
jcrist@panynj.gov

WTC Real Estate Group
Mr. Richard Gladstone
rgladsto@panynj.gov

Project Value
NA

Status
Ongoing

Under the current Project Management Call-In contract, URS manages projects for the various Port Authority Line Departments; Aviation, World Trade, Ports and TBT (Tunnels, Bridges and Terminals) from inception (Stage I) through construction (Stage IV) for the Project Management Office (PMO). Provided below are the two task assignments that we are currently performing.

NYCT #7 Line at Port Authority Bus Terminal

New York, NY

URS was designated by the Tunnels, Bridges & Terminals Department to represent them in managing the interface with MTA and Hudson Yard Development Corporation (HYDC) on the #7 subway extension project. This assignment started in 2003. Within PANYNJ, URS managed the review of the EIS and of the preliminary design drawings. URS' services were continued to manage the review of the final design document in 2005. In 2007, URS managed the real estate transaction process of the multiple Easement agreements with Hudson Yards and MTA. Following award of the contract in 2008, URS represented the Agency in coordinating the construction work at the Bus Terminal and managed the review of the shop drawings that affected the Port Authority assets, the Bus Terminal and Lincoln Tunnels. This included review of the construction means and methods affecting the Bus terminal sublevel. Working hand in hand with MTA and their Contractor, S3II, we coordinated the construction progress to minimize impact to the PA facility operation at the sublevel (aka Greyhound level). The cut and cover excavation was accelerated from 24-36 months to 9 months. Seven (7) Greyhound bus gates were closed and the lower level traffic flow was reconfigured to allow a dedicated space for the contractor to excavate 24/7 the needed receiving tunnel chamber underneath. With supervision from the FDNY, a 150 ft x 50 ft area was blasted and drilled to a depth of 40ft. Temporary precast concrete deck followed so the bus operation resumed normally afterward.

We have continued on as liaison with HYDC and the MTA, representing the PANYNJ during the cutting of the two tunnels (with Tunnel Boring Machines) under the Terminal during July-August 2010.
Key to our success has been the creation of a productive relationship with the HYDC executive staff and MTA Program Managers and Construction Manager's staff.

WTC Real Estate Group

New York, NY

URS, acting as Assistant Director of Planning, Design & Construction for World Trade Center Redevelopment (WTCRD); World Trade Center Construction is responsible for the design and construction of the assets under Port Authority of NY & NJ control: (Central Chiller Plant, HUB, Vehicle Security Center (VSC); Vehicle Roadway Network (VRN), Tower 1 (now being managed by Durst), WTC Retail (in a Joint Venture - currently in negotiation – with The Westfield Group); and WTCStreets (i.e. Liberty Park, i.e. the Wedge of Light Park.) Once the Assets are constructed, WTCRD will take ownership and operate the facility. WTCRD is also responsible for negotiations with SPI, Durst, tenant leases and the completion of any and all operating agreements with adjacent stakeholders and affected public agencies and public utilities (i.e. SPI, NS11Mem, MTA, Brookfield, ECS, etc.)

Our responsibilities include:

- Ongoing support for SPI MDA negotiations:
- Ongoing support for Durst in Tower 1 assessments of operational efficiencies;
- Ongoing support in Tower 1 Lease negotiations;
- Ongoing support in NS11Mem operating agreements;
- Ongoing support for WTC Retail in contract negotiations with the CM for Retail;
- Ongoing support in the development of the RFP for the site wide property manager;
- Ongoing conversations with PA Procurement and PA Legal in the development of alternate strategies to minimize operational expenditures upon completion:
- Ongoing support of WTCRD Operations to ensure that the facilities operate efficiently when constructed which entails:
    - Review of all building systems (both architectural and MEP) that have cost impact on ongoing operations and associated recommendations for modifications which includes the preparation of and internal coordination with all affected PA Departments of all necessary Board Items to finance the same;
    - Review of material shop drawings and manufacturers' data to ensure that submittals are equivalent to contract specifications and any and all suggested substitutions don't unduly impact operational cost;
    - Development of strategies for operational hand-off to accommodate the phased opening.
    - Development of scopes of work and RFP's for site tel/data systems;
    - Development of scopes of work for the renegotiation of the TNAS Wireless contract for Boingo Wireless Services at the Trade Center;

LaGuardia Airport Central Terminal Building Modernization Program — Program Management

Queens, NY

Services
Project Management Services

Client
Port Authority of New York & New Jersey

Mr. Warren Kroeppel, General Manager
(718) 533-3402
wkroeppe@panynj.gov

Project Value
$4-5 billion

Status
Ongoing

On schedule and within budget

URS is providing program management services to the Port Authority of New York and New Jersey (PANYNJ for an extensive program to modernize facilities at LaGuardia Airport in New York City. LaGuardia Airport is one of the New York area's three primary commercial airports, serving passengers through its 72 aircraft gates on the 680 acres site bordering on Flushing and Bowery Bays in northern Queens.

The main focus of the project is the $4 - $5 billion program to replace the 45 year-old Central Terminal Building (CTB) and its concourses to increase the types of aircraft that can be accommodated and to provide greater flexibility in adapting to programmatic changes of the airlines served by the facility.

URS is also studying the operational and financial feasibility of a facility that will screen all deliveries to the airport to conform to TSA requirements. URS has extensive aviation experience in the New York metropolitan area having worked on projects at the other two major airports in the area - Newark Liberty International Airport and John F. Kennedy International Airport.

URS provides services on an "as-needed" basis, including analyzing previous plans for redevelopment of the CTB; developing new conceptual plans for the CTB; providing updated cost estimates and schedules for potential improvements; preparing a business and financing plan for the program, and assisting in the effort to obtain authorizations to proceed with design and construction.

Additional Information

As part of the LaGuardia Airport Central Building Modernization Program, URS analyzed the curbside operations of the Central Terminal Building frontage roadways for two proposed airside future concept reconfigurations. The goal of the study was to determine if the existing terminal curbside frontage along both the departures and arrivals levels could accommodate future vehicular traffic demand associated with an increase in annual air passengers.

To evaluate the terminal curbside operations, URS utilized Curb_Plan; an analytical tool developed by URS to analyze airport frontages (used previously by the PANYNJ at JFK). As part of this study, forecasted air passengers, existing passenger survey data and existing vehicular traffic counts were utilized to develop the vehicular traffic demand for future analysis. Existing conditions models for both the peak period arrivals and departures roadways were calibrated to determine the appropriate Curb_Plan settings. The calibrated Curb_Plan models then served as a basis to estimate the minimum curbside frontage requirements for future preferred alternatives.

John F. Kennedy International Airport Redevelopment Program

Services
Program Management Services

Client
Port Authority of New York & New Jersey

Mr. James Steven
PA Program Director
(718) 244-4502
jsteven@panynj.gov

Project Value
$9.4billion

Status
1998-2010

On schedule and within budget

For over 20 years, URS served as Program Manager for the Port Authority of New York & New Jersey (Port Authority) for the large and complex Redevelopment Program at John F. Kennedy International Airport (JFK). The goal of this multi-phased Redevelopment Program was to balance and integrate the capacity of the landside access system with that of the existing airside system to improve passenger service levels. The program reinforced JFK's position as the nation's premier international gateway and contributed to the long-term economic growth and vitality of the region. In 2009 alone, the airport handled 46 million passengers.

The landside access plan and infrastructure upgrade anticipates serving the 50+ million annual air passengers projected to pass through JFK by 2015. The improvements included roadways and utilities, terminal buildings, parking facilities and a new AirTrain Light Rail System interface that optimize the movement of passengers, cargo, tenants and employees while on-going airport operations were maintained.

The program consisted of these major elements:

- A new Air Traffic Control Tower
- Terminal Improvements, encompassing new terminal construction and complete redevelopment
- Interfaces between Terminal complexes and the AirTrain Light Rail System (providing multiple access points to the regional mass transit system)
- New Parking Facilities
- Reconfiguration of Airport Roadways and Terminal Frontages
- Upgrade and Modernization of the Airport Utility Infrastructure
- A 90-Megawatt Cogeneration Plant
- Private Investment Projects

URS responsibilities included program management; developing and implementing a cost management system; monitoring program and project schedules; controlling cost, including estimating; developing budgets; developing and implementing program policies and procedures; developing and maintaining a records management system; project management; financial management; developing public/private partnership and privatization procedures and support; and public information for the program.

The JFK Redevelopment Program included the accomplishment of major improvements to the Central Terminal Area (CTA) of the airport. The roadways for access and internal distribution to the terminal complexes have been reconfigured for greater capacity and efficiency. The utilities that serve the CTA, including the terminals, have been upgraded with capacity added to accommodate growth. In addition, 5 of the 8 terminals have been completely redeveloped and expanded to handle forecast traffic, and the others received interim improvements. Terminal developments included frontage roadways (mostly grade separated), terminal buildings, significant retail components and airside ramp areas, and aviation fuel distribution systems. Five parking garages have been constructed to meet growing demand. A new air traffic control tower was constructed and provides an excellent vantage point for operations. A light-rail people mover system (AirTrain JFK) was completed and provides convenient service for passengers connecting among terminals within the CTA, long-term economy parking facilities, and connections to two regional mass transit nodes outside of the airport campus. Additional work has covered aeronautical areas including taxiways and related infrastructure.

PROGRAM ELEMENT DETAILS

Air Traffic Control Tower*:* The new Air Traffic Control Tower (ATCT) is located on what was formerly an aircraft ramp area behind Terminal 4. The tower complements the Federal Aviation Administration's (FAA) plan to modernize the nation's air traffic control system. The tower is equipped with state-of-the-art communications, radar display and wind shear alert systems and a computerized flight data system. All of the air traffic control equipment was supplied and installed by the FAA.

The tower has a 34' x 34' shaft constructed of white architectural and structural concrete, with wall thickness ranging from 10 to 20 inches. Totaling 1,620 yards, the cast-in-place concrete soars 291-feet and supports the FAA cab and an Airport Surface Detection Equipment (ASDE) radar unit rising an additional 30 feet. The new ASDE radar system is particularly important in assisting with control of aircraft on the ground during periods of limited visibility and low ceilings.

The tower's three-story base building contains FAA administrative offices and is connected via a pedestrian bridge to Terminal 4. Tenant operations directly related to ramp control at Terminal 4 are also located in the tower. The ramp control station is situated 113 feet above grade, and the FAA occupies the cab and additional upper levels.

Terminals 5 & 6: The Port Authority authorized planning for the redevelopment of Terminal 5 & 6 complex in September 2000. Following conceptual design, an airline tenant was engaged and a long-term lease was signed in 2005. URS provided Program Management to the Terminal 5 & 6 redevelopments, which included the environmental assessment, historical preservation, conceptual design, and coordination with the tenant (JetBlue Airlines). Due to the historical significance of the TWA Flight Center, URS coordinated with PA, FAA, NY State Historic Preservation Office, and the Advisory Council on Historic Preservation to mitigate impacts of the redevelopment on the landmark facility. Peripheral portions of the original facility were demolished to make space for a new 625,000-s.f. facility, which includes 26 gates to accommodate up to 250 flights per day and 20 million passengers annually.

New Terminal 5 Building

- 640,000–s.f. including 50,000-s.f. for concession space, Jet Blue operations, arrivals and departures functions on separate, dedicated pre-security levels; common single level arrival/departure public concourse post security; baggage conveying system incorporating in-line EDS security scanning and a 3-level security inspection protocol, baggage processing and make-up/stripping below airside public concourse; baggage claim devices, sized to suit arrivals schedule; ticketing via conventional attended desks and electronic kiosks

Terminal 5 Related Roadways/Site Improvements

- Terminal access roadways, which includes 5-lane, grade separated arrivals and departures curbs in front of the terminal building, passenger canopies at arrivals and departures sidewalks, and a loading dock accessible from landside roadways
- Airport apron and ramp layout, which includes taxiways and aircraft movement clearances based on FAA standards, 26 loading gates, on-apron aircraft remote parking, hydrant fueling capability at all aircraft loading gates
- A parking garage, which includes 1,500 spaces in a multi-story parking structure, associated access and egress roadways, and recirculation roadway connection
- Pedestrian connector from the Terminal to AirTrain and the Parking Garage with automated moving walkways

Terminal 4/International Arrivals Terminal (IAT): URS provided Project Management support through the conceptual study and preliminary design stages. These were subjected to value management (VP & VE) exercises to validate the project. Authorizations were obtained to advance the project, which resulted in direction to investigate the potential for a public/private partnership for redevelopment of the facility.

Through a competitive process, a private developer was selected to redevelop Terminal 4. The plan introduced a new three-level facility for ticketing, baggage handling and Federal Inspection Service (FIS) facilities, with a consolidated retail core and new concourses. The project plan resulted in the construction of a 1.5 million s.f. facility.

Among the many benefits of the plan are: dramatically improved landside passenger service through the provision of separate levels for departing and arriving passengers; consolidated ticketing and baggage operations; correction of space shortages in the former terminal for FIS, meeter/greeter and baggage handling areas; provision of 16 contact gates in new flight wings; attractive retail space for passengers; addition of domestic and commuter accommodations within Terminal 4 for enhanced flexibility; and incorporation of the AirTrain Light Rail System directly in the terminal, with easy access for arriving and departing passengers.

Separate arrivals and departures roadways serve the new three-level main terminal building. It was constructed immediately north of the existing Terminal 4, allowing construction to occur while maintaining operation of the former terminal and roadways. The new two-level roadway system fits between the new terminal and the existing parking garage. The project included full depth replacement of major portions of the airside ramp and associated utilities.

Financial Planning: URS performed an in-depth financial feasibility analysis to evaluate the viability of a major capital investment for a new Terminal 4. The results enabled the project to go forward, and URS assisted the Port Authority throughout the entire process of private developer selection and negotiation.

The financial planning entailed the development of a comprehensive financial/risk model to determine if the project would be at the very least self-sustaining under various market-driven scenarios. A computer-generated model was developed to test the financial pro forma by establishing ranges for key variables. The major variables included:

1) International Enplanements: NY Region; JFK Market Share: IAT Share
2) Domestic Enplanements

3) Revenue per Enplanement: International and Domestic
4) Capital Investment
5) Operating and Maintenance Expense
6) Concession Revenue
7) Other Revenue: i.e. Handling
8) Project Schedule
9) Inflation Index
10) Coupon Rate on Special Project Bonds
11) Present Value Analysis Discount Rate
12) Investment Rate on Fund Balances

The model was developed to permit ranging of variables and simulating a range of outcomes. The output included a financial pro forma, bond sizing module, cash flow projections, Net Present Value analysis, and debt service coverage ratios. The model incorporated the revenues, expenses, debt service, reserve funds and various revenue and income sharing arrangements.

Results/Lease Agreement: The model was further employed during negotiations of the financial terms of a long-term lease agreement for development and future operations of the site. As financial proposals were put forth, the model was used as an analytic tool to determine the associated financial impacts. With the benefit of understanding the probable range of financial impacts from what-if scenarios, counter proposals were developed and presented. The model also allowed for the impact on project economics of variable factors such as project cost, revenue and expense items and interest rates to be evaluated.

Roadways and Utilities: URS has provided project management, design management coordination with operations and utility work and oversight of construction for the $500 million Roadways and the $150+ million Utilities project. A new roadway system was constructed in the airport's CTA. The new configuration divides the roadway network into terminal complexes, eliminating the need to drive through multiple terminal frontages to arrive at a particular terminal. The new configuration allows motorists to make direct connections to individual terminals and parking lots from the Van Wyck and JFK Expressways, the two main entrances into the airport. The roadway project also upgraded and expanded the JFK Expressway, increasing the use of the improved Nassau Expressway/Belt Parkway interchange and alleviating congestion on the Van Wyck.

The widths and capacities of the arrivals and departures level roadways have been expanded as needed at the terminals. This moves local terminal traffic more efficiently and reduces traffic congestion. Crosswalks between the parking lots and terminals are protected from the elements by canopies; bus stops and other outdoor waiting areas are enclosed; and parking lot entrances, exits and toll plazas realigned.

A total of 32 land miles – 24 land miles of access roads and 8 miles of terminal frontages – have been built or reconfigured under the program to accommodate a designed capacity of 45-50 million annual air passengers (MAAP).

Much of the airport's utilities infrastructure was nearing the end of its useful life. Therefore, to continue providing reliable service, new utility installations (water, electrical, storm, sanitary and communications systems) became a key element of the JFK Redevelopment Program. The new installations accommodate the many improvements at JFK and avoided placing a burden on existing facilities used by the neighboring community. Wherever possible, utility improvements were integrated with the roadway packages to minimize disruption to the airport and inconvenience to travelers.

Signage: Signage plays a significant part in the overall passenger experience of the airport. The roadway reconfiguration project included both temporary and permanent signs including variable message signs. In addition, a comprehensive signage standard for the airport and terminals now provides a uniform and user friendly appearance that makes the passenger experience less stressful.

AirTrain/Rail Access: The automated AirTrain Light Rail System that links the individual passenger terminals, providing a fast and convenient means of traveling between terminals and other stations on the system was completed in 2003. This was a separate program for which URS provided design reviews and utility coordination services to ensure that airport operations were not adversely affected by any required utility construction or service shutdowns for tie-ins. Passenger travel time between terminals has been cut dramatically, and congestion on the airport roadways has been reduced. The system consists of a loop around the central terminal area, extending to the car rental facilities, employee and long-term parking lots, the Howard Beach Station and off-airport to a transportation center at Jamaica.

Howard Beach and Jamaica Stations connect the JFK AirTrain with the existing regional mass transportation system, providing JFK's passengers and employees with direct access to the Long Island Rail Road and the city subway system. The cost of the AirTrain construction was funded through the Passenger Facility Charge, a fee collected from departing air passengers.

Parking Garages: A total of five parking garages have been completed to replace at grade parking displaced by development and to accommodate growing passenger traffic in the Central Terminal Area (CTA). The garage in Area 2 with 1,400 spaces was opened in 1990 and another 1,400-space garage in Area 1 opened in 1998.

A parking deck with 750 spaces in Area 4 was completed in 2000 as part of the roadway contract related to the British Airways terminal expansion.

A 1,900-space garage in Area 3 opened in November 2006. Construction was coordinated with the new Terminal 8 work.

A garage was also constructed in conjunction with the Terminal 5 and 6 project. This garage has 1,500 spaces and was completed in late 2008. Future parking facilities may be built as terminal development and passenger growth requires.

Private Investment: Terminal 1: Air France, Japan Airlines, Korean Air and Lufthansa joined forces to construct the first new terminal at JFK in more than twenty years. Construction of the 11-gate, two-level terminal is complete and the terminal was opened in 1998.

American Airlines: American Airlines began construction on a new $1.2 billion, 36-gate terminal, 1.5 million s.f. terminal in late 1999. Construction of the new terminal was completed in phases. The main terminal was opened in 2005 and the balance was completed and placed in service in 2007. Demolition of the old terminal and restoration of the site was completed in 2009.

Delta's Terminals 2 and 3: The major goal of their $150 million terminal renovation program several years ago was to realign passenger processing and security functions in each building. Elements included: redesigned first and business class lounges, new ticket counters, new lighting and interior finishes. Delta

also replaced all jet bridges, modernized its baggage facilities, and modified the existing ramp space to allow for additional aircraft parking.

Japan Air Lines/Building 14 Development: The project provided the most advanced cargo facility at JFK with 260,000 square feet of cargo space; rehabilitation and construction of Port Authority Administrative offices and construction of a new General Aviation Terminal.

Cogeneration: The CTA redevelopment included the construction of a $250M cogeneration plant, at which both electric power and thermal energy are generated using natural gas-fired turbines. Additionally, medium temperature hot water and chilled water (thermal energy) is distributed to the terminals in the CTA via direct buried pipe. Overall, the plant has a capacity of 90 megawatts of electric power. URS provided analysis and support for the privatization effort of the plant, including technical and business input and project management support.

URS' ROLE/INNOVATIONS

Document Control: Used as an important Program tool, the document control system is designed to capture all program documentation for legal, fiscal, administrative and historical purposes. This system provides a method of document storage and retrieval for program coordination and management. *The success of the document control system at JFK led URS to develop similar systems for managing projects at major airports in Boston, San Francisco and Fort Lauderdale.*

MIS Solutions: URS, through its program controls group, established a state-of-the-art computerized document archiving system that was utilized by the Port Authority and the various project team members. In addition to establishing and administering a Local Area Network, URS developed and implemented an innovative computerized executive level Management report system: Aviation Project Management System, a Microsoft Windows-based program geared specifically for project management reporting. This proprietary information-management software operated on a local area network that links more than 200 workstations. The retrieval of data was simplified by the ability of project team members to obtain cost, schedule and project information.

In addition, the interrelationship of data was developed through graphical displays, such as bar charts of budgeted-versus-actual costs. The system accessed a comprehensive range of information, from the status of a design contract to the costs expended on a multimillion-dollar construction contract. Users could access self-contained modules including: Schedule Management, Budget and Cost Management, and Project Reference Materials.

Complementing these performance measurement systems was the utilization of a CADD system which enabled personnel to graphically display the construction phasing and planning efforts that were necessary to meld the construction of new facilities into the existing airport while minimizing the impact on ongoing operations and passenger flow.

Utility Management System (UMS): A Utility Management System based on a Geographical Information System, AutoCAD and a relational database has been developed to facilitate ongoing design and construction activities and provide a comprehensive record of utility systems. Data collected from various sources is assessed and analyzed. Anomalies or information deficiencies are identified and researched. Upon verification, which may entail field surveys, data is confirmed, reviewed for accuracy and completeness, and then incorporated into the UMS. This system has documented previously overlooked or

abandoned utilities and airport managers have also found it to be very useful in the operation and maintenance of the various utility systems, including avoiding damage during construction.

Construction Contract Audits: On-site construction contract audits were performed to confirm that the contractors were in compliance with the management plans that established the scope, cost, schedule, and quality goals for the program.

Public Information: URS prepared public information bulletins in conjunction with Port Authority staff to inform primary users (e.g. taxis, buses, tenants, etc.) of upcoming changes that affect landside operations. Presentations are prepared for diverse audiences, ranging from domestic and foreign airport authorities, to airlines, professional and civic organizations.

Working in Occupied Facilities and 24/7 Operations: Virtually all of the construction described above, involved either the reconstruction or replacement of utilities, roadways or buildings that were, in most cases, operating at or near capacity. This was accomplished with extensive planning to provide swing areas and temporary facilities to minimize the disruption to airport operations.

Hazmat Abatement: JFK's terminal buildings were constructed in the 1950's and 60's and therefore required complete asbestos abatement of fire proofing, insulation of mechanical equipment and piping, building partitions and roofing materials.

Complex MEP Program: Work in the CH&RP included the staged removal and replacement of all chillers and boilers in addition to the installation of cogeneration equipment. Since it was not feasible to construct a new facility, all of this work had to be accomplished while the
plant was kept in continuous operation.

Management of Multiple Design and Construction Teams: The numerous individual projects comprising this program were achieved with the combination of Port Authority in-house engineering, Redevelopment Team design consultants, design and construction groups engaged by airlines and DBOM agreements negotiated by the Redevelopment Program.

Security of Operations: As the largest international airport in the US, the FAA included JFK in the select group of airports required to comply with the highest standards for security. This meant that security associated with airport construction had to be distinguished among three categories; public areas, aeronautical operations and federal control zones. Extensive planning and coordination was required as construction regularly spanned across security zone boundaries.

The creation of the Transportation Security Administration (TSA) introduced a variety of enhanced security requirements on the airport facility. Numerous projects were undertaken with URS management to facilitate implementation. Work ranged from passenger screening equipment to in-line baggage screening. Overall airport operations were also examined with respect to set-back space requirements during heightened security levels.

Commendations/Awards

2007 ASCE Quality of Life Award for Radiant De-Icing Facility
2002 Project of the Year – Terminal 4 from Construction Management Association of America
2001 Grand Conceptor Award for Terminal 4 from American Council of Engineering Companies
2001 New Construction Award (Public/Government Category) JFK Terminal 4 from Buildings Magazine
1996 CRSI Design Award for Air Traffic Control Tower
1991 Concrete Industry Board Award for Air Traffic Control Tower

World Trade Center Transportation Hub and Site Redevelopment

Services
Construction Management

Client
Port Authority of New York & New Jersey

Mr. William Foley
PANYNJ Engineering & Construction
(718) 244-4757
wfoley@panynj.gov

Project Value
$2.5 billion: Transportation Hub
$15 billion: Other site development projects

Status
Ongoing. Expected completion: 2014

On schedule and within budget

Until September 11, 2001, the World Trade Center (WTC) site in Lower Manhattan was comprised of 7 buildings within a 16-acre area. Below these buildings was the Mall with 427,000 s.f. of retail space and concourses that connected commuters from the New Jersey Port Authority Trans-Hudson (PATH) train system to the New York City subway system. URS, as part of a joint venture, is providing construction management and construction coordination services to the Port Authority of New York and New Jersey (PANYNJ) to rebuild the World Trade Center (WTC) site and surrounding streetscape in lower Manhattan. The program is one of the largest public/private urban infrastructure developments in the US and includes more than $10 billion in capital investment in the 16-acre site over a ten-year period:

- WTC Transportation Hub/New PATH Terminal – A $3 Billion Transportation Hub equivalent in size to Grand Central Station comprising a new PATH subway station serving approximately 100,000 daily commuters with additional underground concourse connections to 13 NYC MTA subway lines, the Hudson River ferry, and the World Financial Center . The Hub will include 500,000 square feet of retail facilities. The Federal Transit Administration (FTA) provides funding and oversight of procurement and administration of the program.
- National September 11 Memorial and Museum: The 8-acre memorial site, at grade and seven stories underground includes the Memorial plaza and cascading waterfalls within the voids of the

original Twin Tower footprints, as well as a state of the art museum with artifacts, interactive exhibitions and a resource center.

- Four Commercial Office Towers totaling approximately 10 Million square feet of commercial and retail space. The towers include the 1 WTC (formerly called the Freedom Tower) which will be the tallest building in the US when completed.
- Vehicle Security Center: An underground structure for screening all buses, trucks and cars entering the WTC complex. The Center will connect to underground roadway ramps serving all office towers and facilities within the site. The Center provides state of the art safety and security for all vehicle access to the site.
- Site Infrastructure: Approximately $1 Billion for construction of a new central chiller plant, temporary and permanent power supply and distribution to support the site developments along with new and reconfigured streets, roads and utilities to improve the infrastructure and surface transportation for pedestrians and vehicles throughout lower Manhattan.

Coordination of Site Logistics:

URS is responsible for coordinating all site and construction logistics for this mammoth undertaking involving a myriad of challenges to allow construction to proceed on budget and schedule. Presently, more than 1300 construction trade workers access the site daily, along with more than 400 truck deliveries. At peak in 2011, there will be more than 3000 tradespersons and 500-600 daily truck deliveries. Among the unique logistical challenges are:

- Staging and sequencing of interconnected, interdependent construction elements above and below grade on a constricted site with little on-site staging or laydown areas
- Constructing below and above several active subway lines carrying hundreds of thousands of daily commuters that cannot be disrupted, requiring complex, intricate scheduling of all underpinning and structural work.
- Providing unprecedented security and screening for the workers and deliveries entering and exiting the site due to the sensitive nature of the work being undertaken.
- Coordination with several significant and concurrent infrastructure construction efforts adjacent to the site including the rebuilding of the west side access road adjacent to the site by NYSDOT

URS is employing the latest technology and sophisticated management methods to coordinate these logistics including:

- Developing and maintaining site logistics plans using 4-D Cad models. This allows us to coordinate work zones, crane placements and operations, laydown areas, shared access and delivery routes on a daily basis among numerous contractors on the congested site.
- Using resource-loaded CPM schedules to forecast manpower requirements by trade and shift, and forecast truck deliveries for all key materials and equipment
- Development and use of advanced traffic modeling and simulation software to model truck access and egress with minimal impacts to surrounding local traffic operations
- Using sophisticated dispatching software to prioritize and schedule all truck deliveries in fifteen minute intervals at the shared construction gates. This helps avoid conflicts among contractors and subcontractors and minimize truck queuing outside the gates. This supports "just in time" deliveries and minimizes the need for staging space on site.
- Chairing daily and weekly site coordination meetings among contractors to compare weekly look ahead schedules and avoid potential conflicts and delays
- Creation of a site logistics operations center with full access to site security video cameras and scheduling software to manage the dynamic construction operations 24 hours per day.

- Using the 4-D models and the traffic simulations and animations to hold regular briefings with the community and other Lower Manhattan stakeholders to agree upon mitigation strategies to support the around-the-clock construction

Independent Schedule Management – As a result of the complex site logistics, construction activities must be scheduled by shift each day to allow coordination with stakeholders and avoid interferences or conflicts among contractors. For example, URS maintains a daily CPM detail of all construction activities affecting the PATH subway operations. This allows coordination with subway operations and avoids potential contractor conflicts.

Construction Contractor Schedule Review – URS reviews and analyzes the CPM schedules developed by each contractor for consistency with the program master schedule milestones reported to all stakeholders. URS also incorporates the contractor detailed schedules into the logistics models described above to allow coordination of all site operations. The detailed schedules are reviewed jointly at weekly contractor coordination meetings.

Estimating Services: The URS team provides a full range of cost estimating services including preconstruction cost estimates to validate compliance with program budgets and suggest value engineering savings alternatives. URS estimators also provide independent estimates for all construction change order proposals to support the negotiations with the contractors.

Quality Assurance Services – URS provides teams of construction inspectors for all disciplines that oversee the quality of all installed construction and document all controlled inspections. This is required for the ultimate acceptance of the facilities by the PANYNJ and receipt of certificates of occupancy. URS also provides quality assurance inspections for work performed by the private developers (tenants) to verify compliance with PANYNJ standards. All inspectors have the required licenses and certifications consistent with the current NYC building code requirements.

Construction Safety Oversight –URS safety specialists provide review and comments to each site contractor's safety plan. URS also provides daily safety audits of contractor compliance. URS developed a web-based safety performance database that is used by each subcontractor on the site and generates real-time comprehensive safety metrics and all required OSHA submittals.

Security Measures – URS is assisting the Port Authority in maintaining site security, including requiring all workers to undergo background investigation and wear badges. Automated screening is now being tested at the site gates including iris scan technology to speed the flow of worker access while maintaining strict security. All delivery trucks are screened at the gate or at off-site staging areas.

Cost Management – URS provides cost control and cost engineering services for the Port Authority including forecasting for all future commitments and potential scope changes. These detailed cost reports are provided for internal use and for regular quarterly reviews with the Federal Transit Administration. A key component of this cost management is a detailed cost allocation mechanism for each bid item and change to justify cost allocations among federal, state and private funding sources. These cost allocations are managed through a special database tool developed by URS for this purpose.

Document Control – URS maintains electronic document management industry standard software for all program documentation including design documents and submittals. Special rules for confidential documentation are strictly enforced, given the sensitive nature of the site and the improvements planned.

Goethals Bridge Modernization Program

Services
Program Management Consultant

Client
Port Authority of New York & New Jersey

Mr. James Blackmore
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(973) 792-4774
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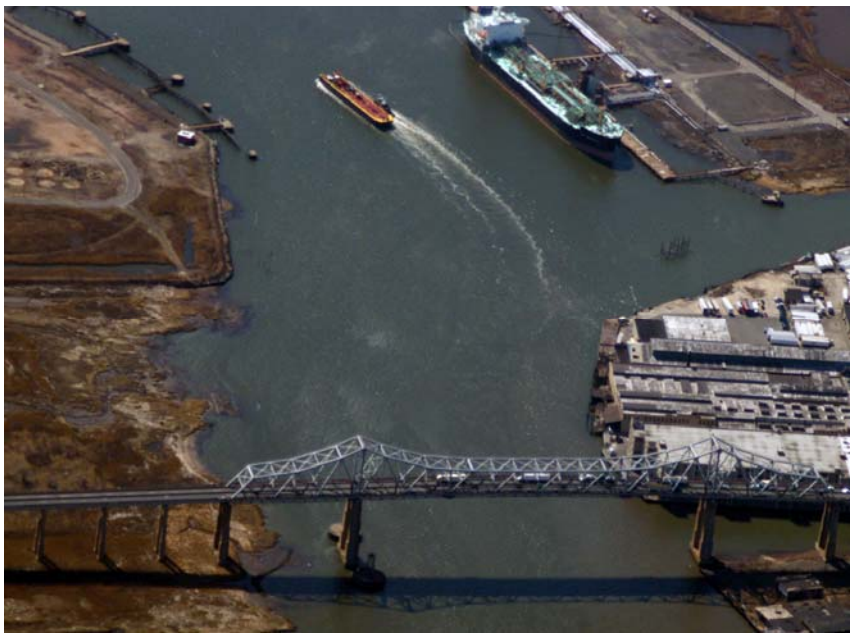
Project Value
$47 million (Project Planning)

Status
Ongoing. Expected completion: 2014

On schedule and within budget



URS is the Program Manager for this project to replace the 79-year-old Goethals Bridge. To provide efficient and safe passage to meet the current and anticipated future transportation system needs of this significant link in the regional transportation network, the Port Authority of New York and New Jersey (PA) will invest almost $1 billion in the planning, design and construction of the Goethals Bridge Modernization Program (GBMP).

In the current Environmental Impact Statement (EIS) phase, URS is assisting the PA with expert project management support services and as an extension of technical staff services. As the project moves into the next stages, URS services will include developing and maintaining a program level master schedule that integrates all program activities, program implementation, coordination and technical support and program administration and controls. Preparation of regular program reports, document control and records management, program budget and cost and schedule management are additional services covered under this contract. Additionally, URS has contracted to provide technical services on an as- needed basis for contract packaging strategy, value engineering, constructability reviews, public outreach support and property acquisition assistance.

Project Challenges:

- *Environment Impact Study* – bi-state and multi-agency coordination with public input. Two bridge concepts for review are based on data and comments received from the above entities that incorporate economic and population growth data into the transportation model.
- *Design* – due to bridge proximity to Newark Liberty International Airport, height consideration with respect to airport operations were coordinated with the various local and federal agencies involved in the operation of these facilities.
- *Planning/Construction* - maintain access for up to 80,000 vehicles daily while work on the demolition of existing bridge and construction of new bridge is performed.

Innovations:

- *Program Schedule* - Creation of an Integrated Program Schedule in Primavera that merges preliminary design, program management and environmental impact activities into one master schedule that can identify the impact on the overall program from changes in any of the program's activities.
- *Cost System* - Creation of a global spreadsheet that captures cost data from different sources to accurately track program costs and predict future cash flows for budgeting. This automated cost system collects and calculates monthly expenses from numerous client and consultant groups (from sources such as SAP and INCAPS), then consolidates the data into a monthly Program Performance Report.
- *Document Control* – Use of LiveLink for the Program's document control management system and graphics archives. LiveLink training is provided to other participating consultants, agencies and client staff. As the design effort further develops, the URS team will provide technical support for constructability review, value engineering, sustainable design initiatives, construction cost reviews and contract delivery methods.
- Creation of an Issues Management System that allows URS to track issues and corresponding resolutions to concerns raised at committee and public meetings.
- Creation of a Deliverable Tracking Log to monitor and track deliverables throughout the submission and *review process.*

SECTION E. MANAGEMENT APPROACH

The Port Authority Project Management Department requested URS to provide Project Management and Related Support Services for Aviation, Tunnels Bridges and Terminals, Port Commerce, PATH, World Trade Center, Economic Development and Security on an "as needed" basis for various projects and/or programs. These services can be performed at the Authority's offices or remotely from URS's offices at One Penn Plaza in New York, NY. These locations are convenient to the Authority's offices at 2 Gateway Center in Newark, NJ and many of the Authority's Facilities.

URS professional staff will be assigned on an as-needed basis and will be responsible for programs and/or multiple projects. The number of professional staff will be a function of the number of programs and the size and complexity of the projects. It is understood that each assigned individual will manage a program or projects in accordance with the Port Authority Project Management Department Policies and Procedures. The URS Project Executive, David Beckett, PE, will serve as the point of contact for the Authority and will supervise the activities of the URS Project Managers. As the point-of-contact, Mr. Beckett will also attend meetings in the Authority's offices related to the administration and coordination of the projects in response to requests from the Port Authority Project Management Department Engineers of Projects and Program Directors.

Mr. Beckett will conduct regular coordination meetings with the URS Project Managers to review the status of the program and/or each project. The meetings will be conducted as a group, as well as on an individual basis. Additional meetings will be conducted on an as-needed basis. URS Project Managers will report on scope, schedule, budget, progress, concerns and suggested corrective actions. The Project Managers will report this information to the Engineers of Project and Program Directors on a monthly basis, or more often if needed. Urgent issues will be addressed immediately. Mr. Beckett will also be responsible for the administrative aspects of the effort to ensure compliance with the Authority's requirements.

Mr. Beckett will meet with the URS staff providing support services on a regular basis to ensure that these services meet the needs of the program or projects to which they are assigned. Any issues will be addressed promptly.

TASK A – PROJECT INITIATION SERVICES

The URS Project Managers will establish the Project Management Plans and Project Teams consistent with the Port Authority Project Management Department Policy and Procedures for their assigned projects. URS will assist the Authority in the preparation of Requests for Qualifications (RFQs) and Requests for Proposals (RFPs) for the retention of expert professional design services. The URS Project Manager will develop the project scope, schedule and budget for each stage of each project. The URS Project Manager will conduct presentations and prepare required documentation to obtain approval for the project plan.

TASK B – PROJECT IMPLEMENTATION SERVICES

The URS Project Manager will coordinate the implementation of the management plans and the work performed by the project members, conduct kick-off and regularly scheduled progress meetings with the project team, maintain minutes of all meetings, coordinate the preparation of Stage I reports including construction cost estimates and review Stage I reports with the respective Facility Staff as required. The URS Project Manager will review studies and preliminary designs to the conformance with the approved scope and

budget, coordinate the preliminary and final contract documents, including the involvement of the Facility personnel for staging restrictions/requirements based upon operational and maintenance constraints. The URS Project Managers will collect the necessary documentation and correspondence to maintain a complete project file, and verify final design documents conform to the approved scope.

The URS Project Managers will review and recommend the procurement options for each project, coordinate the bidding of each project, including the preparation of Addenda, if any, evaluate bids and prepare the necessary award authorization documents and briefing materials for the executive staff.

The URS Project Managers will attend the construction kick-off meeting, coordinate and monitor the shop drawing review process, respond to the Contractor's Request for Information (RFIs), coordinate the preparation of Post Award Contract Changes (PACCs), coordinate facility force account work as required and coordinate the preparation of Record Drawings at the conclusion of the project.

TASK C – PROJECT MONITORING AND REPORTING SERVICES

The URS Project Managers will monitor and report during each stage of each project the actual performance of the project team members by comparison to the approved management plan, and when necessary, recommend corrective action. The URS Project Manager/Cost Engineer/Scheduler will review and update the actual and forecasted project costs and schedules on a monthly basis using the Present & Planned Workload and Monthly Progress Report Summary.

The URS Project Manager/Cost Engineer will review and evaluate consultant invoices for earned value and recommend payment, evaluate the impact of changes on the approved scope, schedule and budget, prepare the necessary documentation, obtain approval of any changes and brief the executive staff on the status of each project.

TASK D – PROGRAM LEVEL MANAGEMENT SERVICES

URS will provide to the Authority Program Level Management Services on an as needed basis for selected programs. Those services consist of, but are not limited to, defining/refining the scope of work, developing and maintaining a program level Master Schedule to integrate all program activities, program implementation, resource requirements, coordination, technical support, program administration and controls which include preparing regular program reports, document controls and record management, program budget and cost management.

The integrated Primavera schedule would include staffing requirements and identify any impact on the program due to changes in any of the stages in the program. An automated cost system would be utilized where the monthly expenses from the various program groups would be automatically collected from such sources as SAP and CAPTRAK and consolidated into the monthly Program Performance Report.

URS would evaluate and recommend appropriate M/WBE subcontractor goals for the program consistent with the type of work to be performed.

TASK E – PROGRAM MANAGEMENT SERVICES

URS will provide the necessary ancillary program management support services for the program, including biddibility and constructability reviews, preparation of technical presentations and responses to public or agency inquiries, use Expedition to track shop drawing submittals, request for information and contract changes, establish project controls, including Primavera schedule and update regularly and maintain documentation for and preparation of Record Drawings.

URS will maintain and update, on an as-needed basis, the Authority's Program Management Manual and provide Project Management training and/or workshops for the Program staff.

SECTION F. HOURLY RATES

Name	Title	Hourly Rate
John Spencer, PE	Executive Management	$136.20*
David Beckett, PE	Project Executive	$95.80*
Joseph Dixon, PE	Project Manager	$82.04
K. Joseph Jbelli	Project Manager	$60.20
Terrence Dunn	Project Manager	$84.16
Joseph Soave, PE	Project Manager	$82.88
William Apriceno, PE	Project Manager	$66.04
Moin Ahamed, PE	Project Manager	$63.36
Mark Ospala	Project Manager	$93.48
Alan Dietz	Project Manager	$71.00
Jacob Rosenkranz	Project Manager	$50.40
Thomas Pulvirenti	Project Manager	$51.40
Nelson Parada, PE	Project Manager	$45.50

**Represents billing rate with no multiplier*

All rates effective through the end of 2010

URS POLICY ON COMPENSATION FOR PREMIUM PAY

For employees classified as Non-Exempt (basically, all hourly employees)

For hours greater than 40 in one week during the employee's regularly scheduled shift, compensation will be at the rate of 1.5 times regular pay

For required work on holidays, if hours for the week exceed 40, compensation will be at the rate of 1.5 times regular pay

For employees classified as Exempt (basically salaried employees)

For hours greater than 40 in one week, compensation will be at 1.0 times regular pay

For required work on holidays, compensation will be at 1.0 times regular pay

A certain number of Exempt employees are not eligible for additional compensation under any circumstances.

MULTIPLIER

The proposed multiplier to be used, times the actual salaries paid by URS as referenced in the first line of Subparagraph 8A of the contract is provided below. The factors that comprise the multiplier include direct technical labor, burden and fringes, overhead and profit are summarized below.

HOME OFFICE

- Direct Labor - 100%.
- Burden and Fringe Benefits – 43.61% (vacation, holiday, sick, workmen's compensation medical and life insurance, employee welfare, FICA and unemployment insurance).
- Overhead – 74.53% (indirect labor; supplies; administrative, financial and legal costs; rent, leases and repairs; utilities, travel and relocation; taxes; insurance and permits; postage and freight; general and administrative assessment; depreciation and amortization; and internal services).
- Profit – 7.73% of direct labor, burden, fringe and overhead.
- Composite Labor Multiplier – 2.35

FIELD OFFICE

- Direct Labor - 100%.
- Burden and Fringe Benefits – 43.61% (vacation, holiday, sick, workmen's compensation medical and life insurance, employee welfare, FICA and unemployment insurance).
- Overhead – 54.68% (indirect labor; supplies; administrative, financial and legal costs; rent, leases and repairs; utilities, travel and relocation; taxes; insurance and permits; postage and freight; general and administrative assessment; depreciation and amortization; and internal services).
- Profit – 8.43% of direct labor, burden, fringe and overhead.
- Composite Labor Multiplier – 2.15

STATEMENT OF DIRECT LABOR, FRINGE BENEFITS & OVERHEAD

Year End January 1, 2010

Statement of Direct Labor, Fringe Benefits & Overhead

Year End January 1, 2010

	Home Office		Field Office	
Direct Labor	489,377,130		125,882,022	
Fringe Benefits				
Vacation	44,878,927		11,544,164	
Sick	14,513,190		3,733,214	
Holiday	23,320,862		5,998,804	
Workers Compensation Insurance	1,141,817		293,708	
Medical and Life Insurance	55,047,805		14,159,896	
Employee Welfare and Development	15,164,212		3,900,676	
Employers Taxes	54,631,965		14,052,929	
Unemployment and Disability Insurance	4,701,745		1,209,426	
Total Fringe Benefits	213,400,523	43.61%	54,892,817	43.61%
General Overhead				
Indirect Labor	164,520,849		42,319,544	
Premium Overtime	2,354,833		605,731	
Operating and Reproduction Supplies	8,024,072		519,264	

Administrative, Financial and Legal	19,428,078		4,997,467	
Facilities Costs	59,251,772		3,834,376	
Other Rents and/Leases	7,417,319		479,999	
Repairs and Maintenance	8,476,961		548,572	
Repairs and Maintenance - Field Office	--		79,129	
Telephone and Utilities	9,792,972		633,735	
Travel, Entertainment and Relocation	12,278,858		794,605	
Advertising and Business Taxes	4,591,519		1,181,072	
Professional Activities	2,170,100		558,213	
Insurance and Permits	15,274,991		3,929,172	
Postage, Freight and Other Expenses	2,468,277		159,730	
Corporate G&A Assessment	20,245,929		5,207,842	
Depreciation and Amortization	22,480,722		1,454,801	
Internal Services	1,937,834		498,467	
Bad Debts	--		--	
Gains/Losses; Bank charges and Other	(250,905)		(64,540)	
Interest expense	--		--	
State and Local Taxes	4,251,003		1,093,482	
Total General Overhead	364,715,184	74.53%	68,830,661	54.68%
Total Burden, Fringe and Overhead Costs	578,115,707	118.14%	123,723,478	98.29%

SUBCONSULTANTS

Maitra Associates, P.C

Home Office	2.35
Field Office	2.15

LPE Enterprises, Ltd

Home Office	2.35
Field Office	2.15

SECTION G. M/WBE PARTICIPATION

URS is committed to achieving the Authority's MBE and WBE goals of 12% and 5% respectively. URS plans to utilize the resources of M/WBE firms that we have worked with successfully in the past. A number of the program management support tasks would be performed by or with the assistance of one or more of our M/WBE subconsultant firms. These tasks include biddability and constructability reviews, preparation of technical presentations, responding to inquiries from outside entities, document control and other project control functions.

URS Corporation – New York intends on using Maitra Associates and LPE Enterprises. Both firms are certified by Authority as MBE/WBE-qualified business entities. The names, titles, hourly rates, resumes and relevant experience have been included in the prior sections of this proposal.

Maitra Associates, Maitra Associates, P.C., a certified MBE founded in 1982, is a multi-discipline engineering and construction management/construction inspection firm with offices in New York City and New Jersey. With licensed engineers, planners, surveyors, designers, technicians and construction inspection personnel, Maitra is able to present an outstanding portfolio of successfully completed or on-going contracts involving infrastructure and transportation projects. A representative list of our many clients includes the Port Authority of New York and New Jersey, Triborough Bridge and Tunnel Authority, Delaware River Port Authority, New York City Transit Authority, Long Island Rail Road, New Jersey Transit, New York City and New York State Departments of Transportation, the New Jersey Department of Transportation, and Metro North Railroad..

LPE Enterprises, Ltd., a New York based WBE/DBE program management & construction management support services firm, identifies and serves the needs of construction management and engineering companies for skilled and experienced project-based personnel. The firm's staff members, all of whom are actively engaged on projects in the New York and New Jersey and South Florida areas, are full-time employees of LPE.

SECTION H. FIRM'S AFFILIATES

URS Corporation – New York is 100% owned by URS Corporation (a Nevada corporation). The companies listed below, also owned by the Nevada company, are affiliates of URS Corporation—New York.

Forerunner Corporation (a Colorado corporation)
(FEIN [redacted] – owned from 10-23-09 to present

Geotesting Services, Inc. (a California corporation)
(FEIN [redacted]) – owned from 10-14-85 to present

URS Construction Services, Inc. (a Florida corporation)
(FEIN [redacted] – owned from 12-14-99 to present

URS Corporation – Ohio (an Ohio corporation)
(FEIN [redacted] – owned from 1-15-02 to present

URS Corporation Great Lakes (a Michigan corporation)
(FEIN [redacted]) – owned from 1-15-02 to present

URS Greiner Woodward-Clyde Consultants, Inc. (a New York corporation)
(FEIN [redacted]) – owned from 9-11-96 to present

URS International, Inc. (a Delaware corporation)
(FEIN: [redacted] – owned from 4-15-91 to present

URS Architecture – Oregon, Inc. (an Oregon corporation)
(FEIN [redacted] – owned from 9-16-03 to present

URS Alaska, LLC (an Alaska limited liability company)
(FEIN [redacted] – owned from 3-21-08 to present

LopezGarcia Group, Inc. (a Texas corporation)
(FEIN [redacted] – owned from 8-22-08 to present)

In addition, the Nevada company is the partial owner of the following:

33.33% of URS Architects/Engineers, Inc. (a New Jersey corporation)
(FEIN [redacted] – owned from 1-15-02 to present

33.33% of URS Corporation Services (a Pennsylvania corporation)
(FEIN [redacted]) – owned from 12-28-01 to present

25% of URS Corporation AES (a Connecticut corporation)
(FEIN [redacted] – owned from 12-28-01 to present

The principal executive address of all the above corporations (except URS Alaska) is:
600 Montgomery Street, 25th Floor
San Francisco, CA 94111

The principal executive address for URS Alaska, LLC is
911 West Eighth Avenue
Anchorage, AK 99501

SECTION I. CONFLICT OF INTEREST DECLARATION

Neither URS Corporation – New York, its employees, agents, or subcontractors have any known conflict of interest or appearance of conflict of interest which would adversely affect the work sought under RFP # 22388 Should any such conflict be created or become known, URS Corporation – New York will promptly notify the Port Authority of New York and New Jersey for its evaluation.

SECTION J. EXCEPTIONS TO CONTRACT

Exceptions taken by URS Corporation – New York to the contract included as part of RFP #22388 are delineated in a separate letter, as instructed in the RFP. This letter is provided immediately following.

October 21, 2010

Ms. Mary Lou K. Rivera
Principal Contract Specialist
Professional, Technical and Advisory Services Division
Procurement Department
The Port Authority of New York and New Jersey
One Madison Avenue, 7th floor
New York, NY 10010

Re: Requested Contract Changes to Call-In Contract for RFP No.22388 – Project Management Services As Requested During 2011, 2012, 2013 and 2014

Dear Ms. Rivera:

We have reviewed the contract language and request that the following changes be considered:

1. **Insurance provisions (as provided by our insurance broker):**
   Section 23. A 1.: Insert "and Workers' Compensation & Employers' Liability" after "Professional Liability" in parentheses in the fourteenth line. Delete the second to last sentence in its entirety. (URS has an ISO Commercial General Liability policy. It is written on form CG 00 01 10 01. It, like all other ISO General Liability policies, contains many exclusions other than the exclusion for Professional Services. The ISO General Liability policy is a base form. Exclusions and endorsements are added to the policy to tailor coverage to a particular insured in a particular industry. It is not possible to provide an unendorsed ISO General Liability policy form.)

   Section 23. D. 1.: Delete "including the provisions establishing premiums." URS does not release its premium information to third parties.

2. **Indemnification provisions**
   Section 22, first paragraph: Delete "or willful intentional".

   Sections 22A: Insert "Consultant's or Subconsultants' negligent" before "performance".

   Section 22D: Insert "bodily" before "injuries" on second line. Replace "of any kind whatsoever arising in connection with the performance," with "to tangible property to the extent arising or alleged to arise out of or in connection with the Consultant's or Subconsultants' negligent performance."

URS Corporation
One Penn Plaza, Suite 610
New York, NY 10119-0698
Tel: 212.736.4444
Fax: 212.629.4249
www.urscorp.com

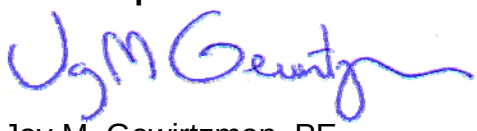
URS

3. **Insert the following sentence within the Contract:**
   "Furthermore, the Contract Documents shall require Contractor to name the Authority and Consultant as Additional Insureds on the General Commercial Liability and Automobile Liability Insurance Policies obtained by Contractor."

We are available to discuss these requested changes at your convenience.

Very truly yours,

URS Corporation – New York



Jay M. Gewirtzman, PE
Vice President

URS Corporation
One Penn Plaza, Suite 610
New York, NY 10119-0698
Tel: 212.736.4444
Fax: 212.629.4249
www.urscorp.com

OCTOBER 2010

Proposal for the Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014

RFP #22388

SUBMITTED TO:

THE PORT AUTHORITY OF NY & NJ

SUBMITTED BY:

PB Americas, Inc.

Parsons Brinckerhoff

One Penn Plaza
New York, NY
10119-0061
212-465-5000
Fax: 212-465-5096

October 21, 2010
The Port Authority of New York & New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attention: Tim Volonakis

Re: Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014 (RFP # 22388)

Dear Mr. Volonakis:

PB Americas, Inc. (PB) is pleased to submit this proposal in response to RFP # 22388. We are ready to perform project management services on a variety of projects to assist the Authority as part of its capital program. We meet the requirement of licensure to practice architecture or engineering services in both New York and New Jersey in that PB Americas, Inc. is licensed to provide engineering in both states.

PB brings to this effort a wealth of experience in project/program management, design, inspection, and construction support. Our vast experience with managing projects, ranging from signature, state-of-the-art facilities, combined with our extensive hands-on experience and comprehensive knowledge of Authority infrastructure, provides PB with the requisite skill set necessary to efficiently address the needs of the Authority's various projects.

We assembled a local team of experienced project/program management experts supported by project controls/administration, business analysis, and technical discipline specialists to work with Authority staff. Our **Project Manager, Peter Sweeney, P.E.** has a decade of experience as a PANYNJ project and program manager and has managed or directly supervised Agency and Consultant project managers on aviation, economic development, and World Trade Center assignments. As **Principal-in-Charge**, I will ensure that Peter has the resources necessary to complete Authority projects on time and within budget.

PB has a history of supporting the Authority's goal of providing business opportunities to Minority and Women-owned Businesses Enterprises (WBE/MBE). When selected to submit a proposal, qualified and certified MBE/WBE firms will be added to our team to meet the Authority's goals and guidelines.

PB acknowledges Addendum #1, dated October 13, 2010. If you have any questions, please call me at 212-465-5033 or email me at lucey@pbworld.com. We appreciate the opportunity to continue our relationship with the Authority through this important call-in contract.

Very truly yours,
PB Americas, Inc.

Neil J. Lucey, P.E.
Senior Vice President / New York Area Manager

A

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

PB Americas, Inc.

(Company)

(Signature)

Senior Vice President / New York Area Manager

(Title)

10/21/10

(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

B

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):
   PB Americas, Inc.

2. Business Address (to receive mail for this RFP):
   One Penn Plaza, New York, NY 10119

3. Business Telephone Number: 212-465-5000

4. Business Fax Number: 212-631-3720

5. Firm website: www.pbworld.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 10 / 05 / 1933 (date of incorporation)

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):
   Please see Section H of our proposal for our list of affiliates and subsidiaries with corresponding address and EIN

9. Officer or Principal of Firm and Title:
   Neil Lucey, Senior Vice President / New York Area Manager

10. Name, telephone number, and email address of contact for questions:
    Neil Lucey, 212-465-5033, lucey@pbworld.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

C

C. Qualifications and Experience of Staff

For this contract we have assigned a strong, experienced team of professionals, including: engineers; as well as specialists in the areas of program/project management; program controls/administration; financial/economic business analysis; as well as technical resources and discipline support, whose backgrounds and representative project experience enable them to expertly address the critical issues of this contract. Our criteria for personnel selection are: (a) demonstrated skills in the type of work involved; (b) hands-on experience with the required facility type; and (c) familiarity with the guidelines, philosophy, and technical specifications of the Authority. A considerable percentage of our workload comes from call-in projects, and we are organized to handle assignments of a short duration and limited scope, as well as to handle the larger projects that clients request of us.

Our **Project Manager, Peter Sweeney, P.E.,** has extensive experience as a PANYNJ Project and Program Manager, having personally managed or directly supervised Authority and Consultant project managers on aviation, economic development, and World Trade Center assignments. Peter subsequently served as a vice president of New York City's School Construction Authority before joining PB. As vice president and senior engineering manager, he served for the past eight years as program director on a PB-led joint venture assignment for the New Jersey Schools Development Authority. In this capacity, Peter directed a staff of 30 project management and support personnel responsible for planning, design and construction management of projects with budgets ranging from several thousand through $100 million.

Peter will be supported by our **Principal-in-Charge, Neil Lucey, P.E.** He brings a strong background in transportation management and more than 35 years of experience in planning, design and construction of public and private projects totaling more than $3 billion in construction. He brings a former career of 30 years in the consulting engineering industry, most recently serving as northeast transportation area manager for a national firm. Mr. Lucey guided projects that earned national awards for engineering excellence and New York City Design Commission awards for design excellence.

In order to address various task assignments, we have identified program managers for each facility type, all of whom have task and project management experience, and they can all lead tasks to successful completion. These managers will be supported by project managers and deputy project managers familiar with all PANYNJ lines of businesses. Our organization chart is included in Section E. Management Approach.

Included in our team are architects, environmental specialists, and various other resources and engineering discipline support professionals who will assist these managers with projects in aviation; tunnels, bridges, and terminals; PATH; Port Commerce; WTC; and economic development. Our key personnel's experience on similar projects is summarized in the table below with respect to project, project role, and project cost. Complete resumes of our key personnel are included after the table.

Key Personnel Project Experience		
Neil Lucey		
Project Name	**Project Role**	**Project Cost**
FDR Drive	Principal-In-Charge / Project Manager	Const. Cost $150 M
BQE Approach to Williamsburg Bridge	Principal-In-Charge / Project Manager	Const. Cost $80 M
Rout 9A Segment 6	Principal-In-Charge / Project Manager	Const. Cost $45 M
East 153rd Street Cable-Stayed Bridge	Principal-In-Charge / Project Manager	Unknown
Avenue of the Americas	Principal-In-Charge / Project Manager	Unknown
Columbus Avenue	Principal-In-Charge / Project Manager	Unknown
Hunts Point Area Streets	Principal-In-Charge / Project Manager	Unknown
Peter Sweeney		
Project Name	**Project Role**	**Project Cost**
PANYNJ WTC	Engineering Program Manager	Total Cost $1 B
Newark Schools Program Mgmt.	Program Director	Total Cost $1.6 B
NYCSCA	Vice President A/E Dept.	Total Cost $1.4 B
World Trade & Regional Develop.	Engineer of Projects	Unknown
JFK Airport Redevelopment	Senior Project Manager	Total Cost $266 M
Comanche Peak Steam Electric Station	Program Manager	$4 B
George Colban		
Project Name	**Project Role**	**Project Cost**
PANYNJ Security PM Services on an Call-in Basis	Project Executive	Total Cost $500 M
AirTrain JFK	Deputy Project Manager	Total Cost $1.9 B
Charlie Van Cook		
Project Name	**Project Role**	**Project Cost**
FAA Regional Air Service Demand Study	Project Manager	Fee $3 M
JetBlue Terminal Program Mgmt.	Principal-In-Charge	Const. Cost $800 M
Stewart Airport Redevelopment Plan	Project Manager	Fee $1 M
PANYNJ Airport Call-In Services	Project Manager	TO Based Fee Approx. $1 M
JFK International Airport	Program Manager	Const. Cost $1.2 B

James Falvey		
Project Name	**Project Role**	**Project Cost**
RIAC Taxiway Reconstruction	Project Manager	Const. Cost $869,000
RIAC Taxiway Foxtrot Rehabilitation	Deputy Project Manager	Const. Cost $400,000
Susquehanna Regional Airports Authority Call-in	Project Manager	Const. Cost $300,000
Aviation Planning & Business Development	Project Manager	Fee $120,000
PANYNJ Stewart Airport Redevelopment Plan	Engineering Technical Lead	Fee $700,000
Denver IA Taxiway L&M Reconstruction	Construction Admin. Technical Support	Const. Cost $12.5 M
A/E Call-in Services, Statewide RIAC	Project Manager	Const. Cost $5 M
EIS Improvements at T.G. Green Airport	Engineering Lead for Preliminary Design	Fee $1.2 M
GEC New Castle Airport	Project Manager	Const. Cost $5 M
Airfield Improvements, Manchester Airport	Project Manager/Engineer	Unknown
Airfield Improvements, Bangor International Airport	Project Manager	Unknown
Jeff Schechtman		
Project Name	**Project Role**	**Project Cost**
Bridgeport Port Security Systems	Project Manager	Fee $406,000
Port of New Orleans, PP Advisory Services	Project Manager	$300,000
Port Newark Container Terminal Modernization	Principal-in-Charge	Const. Value $50 M
Project Harbour Due Diligence of Container Terminal	Technical Reviewer	Fee $750,000
Port of Guam Owner's Agent/Engineer	Principal-In-Charge	Fee $12 M
Port Freeport Truck Queuing Study	Principal-In-Charge	Fee $132,000
Boston Cargo Terminal Development	Project Engineer	Fee $758,000
Luke Mahier		
Project Name	**Project Role**	**Project Cost**
Levee Flood Control Structure Inspections &Design	Project Manager	Fee $1.1 M
Pier G Mega Terminal Expansion	Construction Manager	Fee $2.5 M
Port of Long Beach Piers Program Management	Program Manager	Fee $2.2. M
Port of Long Beach Pier G Cold Ironing	Program Manager	Fee $350,000
Staten Island Esplanade Contract	Resident Engineer	Fee $350,000
Hyannis Ferry Terminal	Project Manager	Const. Cost $10 M

John Fedun		
Project Name	**Project Role**	**Project Cost**
WTC Transportation HUB Site	Project Engineer	Total Cost $1 B
Newark Regional Schools Program Management Services	Project Executive	Total Cost $1.6 B
Security Strengthening at UN Headquarters	Project Executive	Const. Cost $60 M
Dover Township Industrial Park	Resident Engineer	Const. Cost $25 M
Newark Arts High School Modernization and Expansion	Project Manager	Const. Cost $45 M
James Hickey		
Project Name	**Project Role**	**Project Cost**
WTC Transportation HUB Site	Senior PM / CM	Total Cost $1 B
New Songdo City	Site Director / Senior PM	CM Services $18.4 M
Gerry Chi		
Project Name	**Project Role**	**Project Cost**
PANYNJ CM On-Call Services	Project Manager	Fee $5 M
NYCSCA	Project Executive	Total $50 M
NJ Schools Program	Program Manager	Total Cost $1.6 B
Taiwan High Speed Rail	Project Manager	Const. Cost $15 B
GSA Construction Quality Management	Project Executive	Fee $5 M
NYS OGS CM Program	Downstate Mgr.	Fee $36 M
Foster Nichols		
Project Name	**Project Role**	**Project Cost**
California High-Speed Train Project	Task Leader	Fee $10 M
Amtrak National Market-Based Network Analysis	Project Manager	Fee $400K
Long Island Rail Road	Project Manager	Total $2 M
MARC Commuter Rail System, Maryland	Project Manager	Total $3 M
Virginia Railway Express	Project Manager	Total $2 M
Northeast Ohio Commuter Rail Feasibility (NEORAIL) Study	Project Manager	Total $1 M
NECorridor and Newark Penn Station Operations Study	Deputy Project Manager	Total $2 M
MARC Maintenance Facility Economic Analysis	Task Manager	Total $500,000
ARC Study (initial planning phase)	Task Leader	Fee $500,000

Maryland Strategic Rail Framework	Task Leader, Rail Operations	Fee $500,000
New York State High Speed Rail Study	Task Leader	Fee $1 M
Freight Rail Realignment Feasibility Study	Task Leader	Fee $1 M
Ira Hirschman		
Project Name	**Project Role**	**Project Cost**
TIGER Grant Applications – Economic Analyses	Technical Director	Fee $500,000
PANYNJ Bayonne Bridge Regional Benefit Cost Analysis	Economist	Fee $100,000
MNR Feasibility and Cost Benefit of Cross-Hudson Rail Links	Economist	Fee $250,000
New York City EDC Strategic Investment Options	Economist	Fee $250,000
MDOT – Maryland Strategic Rail Action Agenda Study	Economist	Fee $250,000
Regional Transportation Authority Chicago	Economist	Fee $300,000
Bonner Bridge Replacement Study Economic Impact Report	Economist	Fee $100,000
Panama Canal Master Plan & Third Locks Development	Economist	Fee $750,000
Front Range Railroad Relocation Project	Economist	Fee $250,000
Stephen Grant		
Project Name	**Project Role**	**Project Cost**
MTA Security Hardening Program	Task Manager	Total Cost $9 M
Feasibility Study for Floodgate @ the 148th St. Station	Task Manager	Fee $1.9 M
New Drain Line Valve Installations Around NYC	Task Manager	Const. $6 M
NJ School Construction Corporation	Construction Manager	Total Cost $1.6 B
Governors Island Preservation and Education Corporation	Project Manager	Fee $300,000
NYCSCA	Director of Capital Improvement Prog.	$1 B per year
Newark Schools Program Management	A/E Cap. Improvements Program Dir.	Total Cost $1.6 B
Jenny Kapelyan		
Project Name	**Project Role**	**Project Cost**
NYCT No. 7 Subway Line Extension	Civil Engineer	Cont. Cost $167 M
No. 1 & 9 Subway Line Restoration	Civil Engineer	Unknown
Myrtle Wyckoff Station rehabilitation	Civil Engineer	$1.4 M
Rehabilitation of 1st Ave. & Long Island City Vent. Shafts	Civil Engineer	Unknown
Pelham Parkway Station Rehabilitation	Civil Engineer	$764,000

North River Railroad Tunnels Rehabilitation	Civil Engineer	$4.8 M
42nd Street & Eighth Avenue Station Rehabilitation	Civil Engineer	$615,000
Metro-North Railroad Croton-Harmon Maintenance Facility	Civil Engineer	$5.9 M
Long Island Expressway Development Study	Deputy Project Manager	$4.5 M
Ferdinand Portguez		
Project Name	**Project Role**	**Project Cost**
Rehabilitation/Reconstruction of the Park Avenue Tunnel	Deputy Project Manager	Const. Cost $4.3 M
Brooklyn Battery Tunnel Rehabilitation	Deputy Project Manager	Const. Cost $4.1 M
Queens Midtown Tunnel Inspection Services	TM/ Inspection Team Leader	Const. Cost $120 M
East River Tunnels Leak Repair	Engineer	Const. Cost $7.3 M
Fort Drum Vehicle Maintenance Facility	Inspector	Const. Cost $1.3 M
Myrtle-Wyckoff Station Rehabilitation	Engineer	Const. Cost $1.4 M
LIRR Projects	Engineer	Unknown
Rehabilitation of Beacon Station	Engineering Design	Unknown
Kurt Kauffman		
Project Name	**Project Role**	**Project Cost**
Baldwin Avenue Roadway Improvements	Project Engineer	Const. Cost $7 M
Louisiana Coastal Area Ecosystem Restoration	DPM	Const. Cost $1.6 B
Newark City Subway Broad Street Extension (NERL MOS-1)	Program Manager	Const. Cost $200 M
Newark City Subway Station Renovation, Reconstruction	Project Manager	Const. Cost $23 M
New Jersey Transit Key Station Program/ADA Compliance	Project Manager	Const. Cost $22 M
Anca Baron		
Project Name	**Project Role**	**Project Cost**
Farley Building (Penn Station) Redevelopment	Deputy Project Manager	Const. Cost Est. $550 million
Hilton Corridor Improvement (Penn Station)	Deputy Project Manager	
Amtrak East River Vent. Shaft Rehabilitation	Project Manager	Cont. Cost $212 million
City Tunnel No. 1 Shaft 23 Value/Distribution Project	Deputy Project Manager	Const. Cost $26 million
WTC Disaster Area	On-Site Structural Support	Total Cost $1 B

Neil J. Lucey, P.E.
Principal-in-Charge

Neil is PB's New York area manager responsible for client management and project performance of the firm's New York operation, the largest office in the United States. Throughout his career, he has been a hands-on manager, guiding projects and programs ranging in construction value from $50,000 to more than $2 billion. His diversified experience is focused on work in the New York City metropolitan area, Connecticut and New Jersey and, as such, he is very knowledgeable of local agencies, policies, codes and practices. As a manager, he has led multi-firm teams of architects, engineers, and support specialists in the design of significant projects for highways and bridges, transit and commuter rail, and community and waterfront revitalization involving multi-agency coordination, community involvement, distinctive aesthetics, and phased implementation.

Fast Facts

Years of Experience
37

Education
M.S., Transportation and Engineering, Polytechnic University of New York, 1973; B.E., Civil Engineering, Manhattan College, 1970

Licenses/Registrations
Professional Engineer: New York, 1975 [redacted] New Jersey, 1995 ([redacted] Connecticut, 2010 [redacted]

Professional Affiliations
American Society of Civil Engineers; Society of Municipal Engineers; Women's Transportation Seminar; American Council of Engineering Companies, New York: Chairman

History of Employment
Bronx Boro President Office 1973 - 1979
Daniel Frankfurt 1979 – 2006
HDR 2006 – 2010
PB 2010 – current

Representative Project Experience

- Long Island Rail Road (LIRR), New York: principal-in-charge/project director for:
  - Woodside Station Complex/Joint New York City Transit (NYCT) Intermodal Facility
  - Forest Hills Station Renovation
  - Huntington Station Expansion and Modernization
  - Jamaica Station Renovation
  - New High-Level Platforms for 35 stations
  - Merrick Station E & H project
  - Valley Stream Station Parking Facility
  - Long Beach Parking Facility
  - Huntington Station
  - Historic rehabilitation of Sea Cliff and St. James Stations
- Metro-North Commuter Railroad, New York: project manager for:
  - Yonkers Station Elderly and Handicapped (E&H) project
  - Tarrytown Station E&H project
  - Croton-Harmon Station Expansion and Modernization

  - Yonkers Viaduct Repairs
- New Jersey Transit, New Jersey: joint venture principal/engineering director for:
  - Newark City Subway Stations
  - Kearny Rail Control Center
  - Ridgewood Station Improvements
  - Madison-Morristown Station Improvements
- NYCT: principal-in-charge/project director for:
  - West 72nd Street Station Expansion
  - Court Street/Borough Hall Station
  - Hunts Point Avenue Station
  - Jay/Lawrence Street Complex
  - Lenox Avenue Stations Rehabilitation
  - Lower White Plains Road Stations
  - West 96th Street Station

Neil served as project manager and principal-in-charge on the following:

- FDR Drive East 53rd to 63rd Streets with Outboard Detour for New York State Department of Transportation (NYSDOT).
- BQE Approach to Williamsburg Bridge Brooklyn for NYSDOT: first post-tensioned segmental concrete vehicular bridge structure in New York State.
- Route 9A Segment 6, West 23rd to 42nd Streets for NYSDOT
- East 153rd Street Cable-Stayed Bridge for New York City Department of Transportation (NYCDOT)

Peter Sweeney, Ph.D., P.E.
Project Manager

Peter (Pete) has more than four decades of experience in leadership positions including Officer-In-Charge of U.S. Navy combat construction projects; Supervising Engineer, Project Manager and Division Manager functions with ENR top ten Architect / Engineering / Construction Management firms; Engineering Program Manager for PANYNJ; Vice President, NYC School Construction Authority. A leader in the field, Pete has directed projects comprising as many as 400 multi-disciplinary professionals and regularly transfers his experience to PB clients and aspiring managers through academic service as an adjunct professor.

Fast Facts

Years of Experience
45

Education
Ph.D., New York University, 1991; MPA, New York University, 1986; MS (Management), Manhattan College, 1979; Master of Engineering (Nuclear Engineering), New York University, 1965; Bachelor of Engineering (Electrical), Manhattan College, 1964

Licenses/Registrations
Professional Engineer: New York, 1972 [redacted]; New Jersey, 1974 [redacted]

Professional Affiliations
Municipal Engineers of the City of New York; National Society of Professional Engineers; Society of American Military Engineers, Order of the Engineer

History of Employment
Dravo/Gibbs & Hill 1965 - 1987
PANYNJ 1987 – 1998
NYC School Const 1998 – 2001
PB 2001 -current

Representative Project Experience

- PANYNJ, WTC: as engineering program manager, he marshaled and delivered design and construction management resources required to implement a $1 billion Capital Improvement Program for the 12 million square foot office, commercial, retail, hotel, and public transportation center complex. This program included $22 million in new security enhancements and buttressed the status of the WTC towers as Class A office space. Also oversaw Consultant team which developed design renovations for the VISTA Hotel portion of the complex: project was selected as Construction Management Association of America's 1994 regional Project of the Year. Recipient of 1997 P.A. Engineering Excellence award.
- NJ Schools Program Management, Newark, New Jersey: program director for the $1.6 billion initiative to design, renovate, repair and construct new primary and secondary schools. Repairs and improvements in excess of $130 million were completed in seventy operating schools during 2002 and 2003. A $75 million state of the art Science High School was opened in fall 2006 and a $43 million elementary school, which incorporated NJ homeland security features, was opened in September 2007. Classes commenced in September 2008 at a new multi-academy high school in the city's Central ward. Work in place at three other school sites exceeded $20 million. Designs for 19 projects were advanced consistent with state funding.

- New York City School Construction Authority: as vice president of architecture and engineering department, revitalized the department, facilitating delivery of a record breaking $1.4 billion capital plan for 1999 and a paid construction placement of over $1 billion. New records were again achieved in 2000 and 2001. Directed the efforts of a 200+ person department and oversaw the work of 75 Professional Services firms tasked with design of new schools and modernizations for the nation's largest school system. He was also PM on two, $200,000 management consulting Task Orders for President of New York City School Construction Authority.
- PANYNJ Engineer of Projects, World Trade & Regional Development: supervised project managers directing multi-disciplinary teams of Consultant and P.A. staff developing new, and rehabilitating existing, infrastructure at the Trade Center, Bathgate, Yonkers and Elizabeth Industrial Parks, Newark Legal Center, and the Teleport. Coordinated design, material procurement, construction and operational testing of a temporary refrigeration plant and emergency repairs to essential building service systems allowing WTC towers to reopen within weeks of the 1993 bombing. Recipient of P.A. Exceptional Service award.
- PANYNJ JFK Airport Redevelopment: as Senior Project Manager, he managed diverse design projects including a cogeneration plant, new public roadway segment, replacement of underground fuel storage tanks, and electrical substation refurbishment. ($266 million)
- Mass Burn Resource Recovery: he directed the proposal development, responded to post bid inquiries, and effected presentations to entities seeking to reduce solid waste via Mass Burn Resource Recovery projects.
- Comanche Peak Steam Electric Station , Glen Rose, Texas: Peter managed the permitting, design, QC, and administrative support team for Unit 1 of this $4 billion grassroots power generation complex near Glen Rose, Texas. Monthly staff averaged 400 and billings exceeded $2.5 million.
- Manhattan College: Peter is an adjunct professor, specializing in post graduate construction management courses.
- Directed Purchasing, Estimating, Project Controls, and Technology Transfer Departments - Modernized project management systems, trained internal and client personnel, prepared five year plans, and authored studies contrasting company performance vs. peer group.
- Lecture / seminar presentations to ASCE and Sigma Xi Research Society chapters, US Navy and Department of Commerce conferences, 2004 International Conference on Post Terrorist Attacks, and 2005 Linking Workplace Ethics and Education symposium.

Stephen Grant, P.E.
Quality Assurance/Quality Control
Economic Development Program Manager
Procurement Support

Stephen has 31 years of experience in civil engineering with a strong background in project and program management. As an astute manager, he has varied experience in the development and administration of multi-year capital plans establishing program scopes, budgets and schedules. He has advanced agency's capital programs to comply with organizational objectives, priorities relating to improving customer service, revenue generation and infrastructure maintenance. Stephen is particularly effective in managing workload plans by assessing staff capabilities, delegating assignments commensurate with staff skill and abilities, and providing ongoing support for the project duration, all to ensure that the project objectives are achieved.

Fast Facts

Years of Experience
31

Education
B.S., Civil Engineering, Manhattan College, 1978
Graduate studies in Regional Master Planning, Polytechnic Institute of New York

Licenses/Registrations
New York, 1987 [redacted] New Jersey, 1988 ([redacted])

History of Employment
PANYNJ 1979 – 1998
NYCSCA 1998 – 2002
PB 2002 – current

Representative Project Experience

- Security Hardening Program, New York, New York: in light of the events of September 11, 2001, as part of a MTA Security Program Task Order Contract to improve security at their most critical and vulnerable infrastructure, Steve, as task manager, managed the profession service effort for the design development and contract document preparation phases for the installation of security hardening devices around the perimeter of three facilities in New York City.
- Feasibility Study for the Installation of a Floodgate @ the 148th St. Station, New York, New York: as task manager, Steve managed the development and preparation of a comprehensive feasibility study to identify appropriate flood control measures in the track and yard areas adjacent to the Harlem River to mitigate the impact of flood events due to the 100 yr storm and 100 yr flood. In the past storm conditions in conjunction with high tides caused extensive flooding for an extended period of time causing significant service disruptions and flooding in the tunnel as well as associated land based tunnel and stations.
- New Drain Line Valve Installations at Nine Locations: to preclude future track and station flooding due to backup discharges from the NYC combined sewer system mains at several locations in Manhattan, Brooklyn and the Bronx, Steve, as task manager, is currently managing the preliminary and final design efforts to replace and / or upgrade archaic and deteriorated storm drainage pipe valving and associated appurtenances that provide direct connections to the New York City combined system.
- NJ School Construction Corporation, NJ: Stephen was part of a program management team, as an extension of the New Jersey School Construction Corporation staff, for this $1.6

billion initiative to design, renovate, repair and construct new primary and secondary schools in Newark. Stephen managed the efforts of several architectural firms through all phases of design for the New Science Park High School, McKinley Elementary School, Harold Wilson PreK-8 School and the renovation / addition to West Side High School. He was responsible for ensuring strict compliance with the Department of Education approved model program and delivery of the project within budget and schedule. For the McKinley Elementary School project which involves challenging phasing sequences, Stephen also served as the Construction Manager.

- Governors Island Preservation and Education Corporation South Island Demolition Project: project manager, maintains oversight responsibilities for the preparation of contract documents to demolish 49 buildings situated in the southern portion of the 150 acres under the jurisdiction of GIPEC. The phased demolition is in preparation for a mixed use development in the southern region of the island. The 49 non-historic and non-contributing buildings include low and high rise residential buildings, a school and recreational buildings, and industrial buildings totaling approximately 1.13 million square feet.
- NYCSCA, New York: as the architectural and engineering capital improvement program director, Stephen managed professional and administrative staff, project design teams and consultants with a commitment to delivering the NYC Board of Education's Annual Capital Plan. Improvement projects included, in part, building envelope modernizations, building system upgrades, boiler conversions and physical education facility rehabilitations. Range of projects in design development database in a given year varied between $500 million to over $900 million with a project dollar value ranging from $50 thousand to $20 million. In his first year as Director, Stephen recorded unparalleled levels of design for project completions estimated in excess of $520 million. In his second year as Director, he surpassed preceding SCA record level accomplishment, having completed projects valued at over $600 million including an aggressive boiler conversion program at over 130 schools. Of the schools in this boiler program, thirty-five were completed with the accelerated schedule of 150 days from contract execution. Achieved a milestone never accomplished in the history of the organization by completing design for all Fiscal Year 2001 project identified in the Third Five Year Plan.
- PANYNJ Various Projects: as engineer of projects, he supervised and managed a professional staff of 14 project managers and support groups dedicated to the delivery of capital and expense programs totaling $123 million at LaGuardia and Kennedy Airports. The projects included the JFK Building 208 Improvements for Multi Tenant Occupancy, LGA Terminal Building Garage Improvement Program and the LGA Taxiway Deck Strengthening for New Large Aircrafts.

Charles Van Cook, P.E.
Aviation Program Manager

Charles is a vice president and senior technical manager with PB. His extensive aviation background includes comprehensive management, planning, design and program/construction management (PM/CM) for the development of terminals and landside and airside facilities for domestic and international airports. He has expertise in a variety of project delivery systems, including design-build and design-build-operate-maintain (DBOM) for major airports and other multimodal transportation systems. He is also PB's principal airport security specialist.

Fast Facts

Years of Experience
39

Education
M.A., Economics, New York University, 1980; B.S.C.E., Civil Engineering, Polytechnic Institute of Brooklyn, 1968
Additional Studies: Graduate Studies in Transportation Planning, Polytechnic Institute of Brooklyn, 1971

Licenses/Registrations
Professional Engineer: New York, 1976 [redacted]

History of Employment
Tams Consultants 1971 – 2001
PB 2001 – current

Representative Project Experience

- Federal Aviation Administration (FAA) Regional Air Service Demand Study, New York/New Jersey/Pennsylvania: as project manager, led an 11-member consulting team that analyzed the capacity of nine commercial service airports in the New York, New Jersey and Eastern Pennsylvania region. The ultimate goal of this study was to provide baseline data and demand/capacity analyses to establish the role that each airport will play in providing new capacity to the overall regional aviation system. The project included: aviation demand forecasting, airport demand/capacity analysis, airport passenger and business surveys, regional transportation modeling, and economic and socioeconomic modeling and planning. The project, sponsored by the FAA, the Port Authority of New York and New Jersey, the State of New York, and the Delaware Valley Regional Planning Commission, covers the following commercial services airports:
  - John F. Kennedy International Airport
  - LaGuardia Airport
  - Newark Liberty International Airport
  - Stewart International Airport
  - Atlantic City International Airport
  - Lehigh Valley International Airport
  - Westchester County Airport
  - Long Island/MacArthur Airport
  - Trenton-Mercer Airport

- JetBlue Terminal Program Management: principal-in-charge for PB of JetBlue's new, $800 million Terminal 5 at John F. Kennedy International Airport. The 26 gate, 640,000 square foot facility provides capacity for 20 million passengers annually, and is complemented by a 1,500 space garage and a direct skywalk connection to the JFK Air Train.
- Stewart Airport Redevelopment Plan: project manager for the preparation of a high-level alternatives analysis for phased development of SWF over a 25-year period from 2010 through 2035. The plan will provide the framework for advancing infrastructure projects as growth in passengers and operations is achieved, as facilitated by the PANYNJ Strategic Air Service Development Plan, to ensure the airport fulfills its mission. The study emphasized economical, functional, and sustainable development, with a focus on terminal, landside, intermodal, general aviation, corporate and cargo development opportunities.
- Port Authority of New York & New Jersey Airport Call-In Services: project manager for call-in agreements for 2003-2007 and 2008-2012. Charlie provided strategic consulting services to the Authority in the development of its 10-year capital plan for aviation; led workshops on the redevelopment of Stewart International Airport; and is serving as a peer reviewer for the development of the $4 billion+ Terminal A project at Newark Liberty International Airport, including defining sustainability guidelines for its implementation and operation.
- JFK International Airport, Jamaica, New York: performed the following projects at JFK Airport:
  - International Arrivals Terminal (IAT) Redevelopment: in charge of the design team for the engineering and architectural design/preparation of construction documents, including all terminal facility, landside, and airside elements. The new $1.2 billion, privatized facility will consist of a four-level, 1.5-million-square-foot terminal, 16 aircraft contact gates, and ten handstands. The scope included providing the logistics and proper space for future EDS equipment, one of the first U.S. terminals to address this requirement. A light rail system (AirTrain) station was incorporated within the envelope of the new terminal. A key element involved the development of a detailed construction staging plan to allow the continuous operation of the existing IAT, while constructing the new IAT on the same site, with an overlapping terminal footprint. This project received the ACEC Grand Conceptor Award, the nation's top engineering project honor.
  - American Airlines Terminal Redevelopment: served as project director for alternatives analysis and design of a new, comprehensive $1.2 billion redevelopment of the American Airlines terminal complex, including all terminal facility, landside and airside elements. The redevelopment facility will have a floor area of approximately 2 million square feet and will accommodate 54 contact gates. The design will be fully integrated with a light rail system (AirTrain) that will be constructed concurrently with the new terminal. Staging/phasing plans were prepared that will allow for continuous operation of existing Terminals 8 and 9, throughout the construction period.

James Falvey, P.E.
Aviation Program Manager
Project Manager/Management Support

James has worked on aviation design and construction projects throughout his career. His experience includes the management, design, permitting and construction administration for new and reconstructed runways, taxiways, aircraft aprons and associated landside facilities at various size airports ranging from single runway municipal fields to large international airports. Work for these projects has encompassed pavement designs, design of plans and profiles, layout of runway and taxiway lighting systems, design of site grading and drainage, conducting soil testing, compiling construction cost estimates for requesting funding assistance, assisting in the bidding process, as well as construction phase services. He has also held the position of resident engineer responsible for inspection and acceptance of work during the construction phase of numerous airport projects.

Fast Facts

Years of Experience
23

Education
B.S., Civil Engineering, University of New Hampshire, 1987

Licenses/Registrations
Rhode Island, 2003
Connecticut, 2006
Delaware, 2002
Maryland, 2001 (New Hampshire, 1991

Professional Affiliations
American Society of Civil Engineers; American Association of Airport Executives, Northeast Chapter

History of Employment
Hoyle Tanner 1987 – 1996
Edwards & Kelcey 1996 – 2007
PB 2007 – current

Representative Project Experience

- PANYNJ, Stewart Airport Redevelopment Plan, New Windsor, New York: engineering technical lead.
- South Jersey Transportation Authority, Call-in Airfield Engineering Contract, Atlantic City International Airport, Egg Harbor, New Jersey: deputy project manager.
- Rhode Island Airport Corporation (RIAC) Taxiway A Reconstruction, Quonset Airport, North Kingstown, Rhode Island: project manager.
- RIAC Taxiway Foxtrot Rehabilitation, T.F. Green Airport, Warwick, Rhode Island: deputy project manager.
- Susquehanna Area Regional Airports Authority, Call-in Airport Engineering Consultant, Harrisburg International Airport, Middletown, Pennsylvania: project manager.
- Confidential Client, Aviation Planning and Business Plan Development, Midway Airport Privatization, Chicago, Illinois: project manager.
- Denver International Airport, Taxiway L & M Reconstruction, Denver, Colorado: construction administration technical support.
- A/E Call-in Services, Statewide, RIAC, Rhode Island: project manager for all engineering assignments under a multi-year call-in services contract with RIAC. Projects included the reconstruction of three runways; the construction of new and relocated taxiways; and the

construction of an airfield vehicle service road, building renovations and a fuel farm expansion study. These projects were located at the T.F. Green Airport (PVD) and several of the five reliever and general aviation airports operated by RIAC.

- Environmental Impact Study for Airfield Improvements, T.F. Green Airport, RIAC, Warwick, Rhode Island: engineering lead on preliminary design and analysis for multiple alternative development programs, each one representing over $500 million of possible future improvements. These programs include a major runway extension and possible shifts, significant runway safety area improvements, an eight-gate terminal building expansion, new air cargo and GSE facilities, a new 2-million-gallon fuel farm, a new 2,000-car parking garage, and expansion and realignment of the airport circulation roadways.
- General Engineering Consultant, New Castle Airport, Delaware River & Bay Authority, New Castle, Delaware: project manager responsible for providing full airport design, planning and construction administration services for multi-year, call-in service contract. Projects included designing and permitting over 3,400 linear feet (1,040 meters) of new taxiways; rehabilitating existing taxiways; managing development of the authority-wide (five airports) Airport Pavement Management System; reconstructing Runway 14-32; reconstructing Runway 1-19; developing an Airfield Comprehensive Electrical and Signage Plan; overseeing several small building renovation projects; and constructing safety area improvements. These tasks included pavement analysis and design, drainage, airfield lighting and signage, environmental permitting, and compliance to local land use regulations.
- Miscellaneous Airfield Improvements, Manchester Airport, Manchester, New Hampshire: project manager/engineer on numerous airfield improvements, including drainage system repairs/expansion, security fencing, taxiway and apron construction and reconstruction, and an airfield signage project. Responsibilities also included review of construction documents and phasing as part of program management/construction management assignment for over $350 million in projects at Manchester Airport.
- Miscellaneous Airfield Improvements, Bangor International Airport, Bangor, Maine: project manager on numerous airfield projects at BGR from 1990 to 2000. Projects included taxiway and apron reconstruction, drainage improvements, airfield lighting upgrades, terminal building and airfield maintenance building expansions, equipment procurement, roadway design and general engineering assistance. In addition to overseeing design and construction projects, responsibilities included airfield planning, an airfield electrical study, PFC project justifications, and production of a runway reconstruction method analysis report.

Jeffrey Schechtman, P.E.
Port Commerce Program Manager

As the manager of PB's Ports & Marine Division and a senior program/project manager, Jeffrey (Jeff) provides oversight, management, design, and coordination services for major projects involving port and marine facilities throughout the United States and internationally. He has been responsible for feasibility studies, evaluation, design, and rehabilitation of a number of port and marine facilities, including piers and platforms, fender systems, bulkheads, port security systems, and a confined dredged material disposal facility.

Representative Project Experience

- Bridgeport Port Security Systems: project manager for the design and installation of port security systems for the Bridgeport (CT) Port Authority's facilities, which include a ferry terminal, shipyard, and container barge facility. PB's responsibilities include design and construction supervision for access control systems, CCTV monitoring systems, lighting and fencing. PB also was responsible for developing solicitations and managing the procurement process for the selection of a security systems integrator responsible for installation of the specified systems.
- Port of New Orleans Public-Private Partnership Strategic Advisory Services, New Orleans, Louisiana: project manager responsible for providing advisory services to the Port of New Orleans to develop a business case for expansion of the Napoleon Avenue Container Terminal, determine the infrastructure requirements for the expansion, and identify suitable financing strategies for the expansion utilizing public-private partnership mechanisms.
- Port Newark Container Terminal Modernization, Newark, NJ: principal-in-charge for several projects associated with the modernization and expansion of PNCT including the 15 Acres and West End container yard developments. As Owner's Engineer for the initial phases and Engineer of Record for latter phases of development, PB was responsible for preparation of TAA applications and managing the TAA process on behalf of PNCT, overseeing design and construction of terminal yard pavement, drainage, lighting, an electrical ring main for the terminal, and a welfare building for the straddle carrier operators.

Fast Facts

Years of Experience
19

Education
M.S., Civil Engineering (Structural Concentration), University of California at Davis, 1995;
B.S., Civil Engineering, Columbia University, 1994

Licenses/Registrations
Connecticut, 2001 ([redacted]

Professional Affiliations
American Society of Civil Engineers
American Association of Port Authorities
ASCE Coast, Oceans, Ports, and Rivers Institute (Member, Ports & Harbors Committee)
American Road and Transportation Builders Association

History of Employment
QC, Inc. 1991
Technology Edge Magazine 1992 – 1993
PB 1993; 1995 – current

- Project Harbour (Due Diligence of Container Terminal Facilities in United States & Canada): conducted technical reviews of asset condition assessments, operational efficiency reviews, and expansion opportunities for due diligence activities associated with the acquisition of four container terminals in New York Harbor and Vancouver, British Columbia. The client was not only the successful bidder, but the transaction was awarded Project Finance Magazine's highest honor in the Americas, "Overall Americas Deal of the Year."
- Port of Guam Owner's Agent/Engineer, Guam, Northern Marianas: principal-in-charge for the $200 million modernization of the commercial port facilities owned by the Port Authority of Guam. The upgrade and expansion of the port facilities is being performed to accommodate both population growth and the need to import increased tonnage of construction materials in conjunction with the Defense Policy Review Initiative (DPRI) entailing the relocation of US military personnel to the island. PB's responsibilities include environmental documentation terminal planning, preliminary design to support design/build tenders, and quality assurance during construction on behalf of the Port Authority of Guam.
- Truck Queuing Study, Port Freeport, Texas: principal-in-charge for this study that identified and evaluated potential solutions to truck queuing challenges at Port Freeport. PB's activities included analysis of the port's current and future truck traffic demand using the Texas Statewide Analysis Model (TXSAM); review of port operations and circulation patterns; and future planning for mitigating truck traffic by developing an offsite truck queuing area, truck reservation system, and other measures. PB also outlined a strategy for financing and developing the recommended solution to decrease port truck congestion by more than 50 percent.
- Boston Cargo Terminal Development, South Boston, Massachusetts: project engineer responsible for the inspection, hydrographic survey, condition assessment, and rehabilitation of an 830-foot-long marginal wharf at the Boston Cargo Terminal. Rehabilitation of the wharf includes repairs to the piles, superstructure, and a steel sheetpile bulkhead at the inshore edge of the wharf.
- Floating Drydock Mooring Arm Repairs, Newport News, Virginia: project manager for the investigation of a mooring arm failure at the Northrop Grumman Newport News Shipyard, identification of possible failure mechanisms, and development of repairs.
- Waterfront Street Terminal Evaluation and Upgrade, New Haven, Connecticut: project manager and project engineer for the evaluation and upgrade of an existing waterfront petroleum terminal in New Haven Harbor, currently serving 40,000 deadweight-ton (DWT) vessels. PB performed a study to determine if the berthing structures at the terminal, consisting of steel H-pile mooring and breasting dolphins, are capable of receiving 85,000 DWT vessels. The study included data collection, inspection, mooring and berthing analyses, and the preparation of a report documenting findings and recommendations. As a result of our recommendations, PB was asked to provide engineering services associated with upgrading the fender system at the terminal to accommodate 85,000 DWT vessels.

Luke Mahier, P.G.
Port Commerce Program Manager
Ports Constructibility/Biddability/Staging

Luke has 26 years of experience in domestic and international engineering, program and construction management, and environmental remediation. Some of his specific experience includes construction and project management on marine construction and heavy civil harbor and design-build bridge projects; resident engineering and quality control on offshore structures; and geotechnical and environmental investigations and design on industrial expansion and environmental cleanup projects. Luke's responsibilities have included engineering feasibility reviews, construction supervision, field engineering, and contract/ subcontract administration on projects throughout the United States, Kuwait, Aruba, Bahamas, Chile, Dominican Republic, and Mexico.

Representative Project Experience

- JFK Marina Bulkhead at Trevor Park, Yonkers, New York: project manager for the engineering/underwater inspection. The work consisted of above and below water diver inspection of a 1,100-foot steel sheet-pile bulkhead with many sinkholes developing as a result of soil loss through the bulkhead; engineering analysis of as-built conditions and overall stability of the wall.
- Northeast Regional Manager for Ports & Marine Division of PB, New York City: managing a staff of marine and civil engineers specializing in ports, marine facilities and coastal transportation design and construction projects for public and private sector clients.
- Levee and Flood Control Structure Inspections and Design, USACE, New York and New Jersey: project manager on the NY District portion of a nationwide program to inspect levees and flood control structures using a new computer tablet and software developed for all levee system inspections to be conducted following the same procedures throughout. For the inspection, historical data including design memorandum, construction records, and design criteria are compared to current USACE standards.

Fast Facts

Years of Experience
28

Education
M.S., Civil Engineering, B.S., Geology, minor in Marine Science
Additional Studies: Professional Development Seminars – I & II

Licenses/Registrations
Professional Geologist: Tennessee, 1994 ([redacted]

Professional Affiliations
Construction Management Association of America (CMAA); American Society of Civil Engineers (ASCE); American Institute of Professional Geologist (AIPG)

History of Employment
Dames & Moore 1982 – 1990
ICF – Kaiser Engineers 1990 – 1992; 1995 – 1996
H&R Technical Associates 1993 – 1993
Belfort Engineering 1993 – 1994
AGM Marine Construction 1996 – 1997
Misener Marine 1997 – 1999
Han-Padron Associates 1999 – 2002
PB 2002 - current

- Pier G Mega Terminal Expansion – Phase II, Port of Long Beach, Long Beach, California: construction manager responsible for the construction management and contract administration of a construction contract valued at $46 million. The project scope includes the construction of Berth G232, a 1,343-linear-foot marginal wharf and container terminal backlands for loading and unloading container ships. Construction work involved: dredging; land reclamation; concrete wharf construction; gantry crane rail installation; uplands paving and improvements; electrical substation installation and distribution system for gantry crane power, cold ironing and high mast lighting. Luke's responsibilities included all aspects of construction management, cost and scheduling, subcontract administration, change order and claim processing.
- Port of Long Beach Piers G and J Program Management, Long Beach, California: program manager responsible for numerous individual projects in the Port's Mega Terminal Development Program. These projects include development and design package document preparation for: new wharfs and container terminal expansion, dredging and landfill design, container terminal rail yard expansion, new terminal administration building, new maintenance and repair facilities and new container terminal main entry gate facilities.
- Port of Long Beach Pier G Cold Ironing, Long Beach, California: program manager for the Port's first container wharf project to include cold ironing, also referred to as shore-to-ship power supply. The new wharf will have a new electrical substation and infrastructure to supply ships at berth with electrical power, thereby allowing the ship to turn off its ship-board generators which will reduce air emissions and subsequently improve air quality in the region. Luke's responsibilities included managing in-house and consultant design engineers to complete the design and secure building department permits for construction.
- Esplanade Contract adjacent to the new Ballpark at St. George Station, Staten Island, New York: resident engineer responsible for the construction management and contract administration for the New York City Economic Development Corporation on a $5 million waterfront improvement construction contract. The project scope included the construction of a 20,000-square-foot pile-supported boardwalk bound by two plazas that extend out over New York Harbor; construction and landscaping of a 3,000-linear-foot waterfront park with shoreline stabilization and stone revetment; supervision of all quality control inspections including pile driving, onsite material testing, precast superstructure assembly, utilities, and landscaping. Luke's responsibilities included construction management, cost and scheduling, subcontract administration, change order and claim processing.
- Hyannis Ferry Terminal, Hyannis, Massachusetts: project manager for the construction of a $10 million DOT/Steamship Authority concrete pier and ferry terminal; vehicle transfer bridge and new public timber pier. The project included dredging a new ferry slip and turning basing; reconstruction of site access driveways; parking, drainage; utilities and landscaping. Luke's responsibilities included construction management; cost and scheduling; subcontract administration; and change order and claim processing.

John Fedun, P.E.
WTC Program Manager

John is a senior engineering manager with over 30 years of experience in the construction management of public facilities including landfills, highways and infrastructure projects courthouses, office buildings and schools. In addition, his experience includes constructibility/ biddability and on-site construction management including cost estimating, change-order claims analysis, computerized scheduling, resident engineering and shop drawing review.

Fast Facts

Years of Experience
35

Education
B.S., Civil Engineering, Polytechnic Institute of Brooklyn, 1967; MSCE Credits, Rutgers University
Continuing Education Credits: Bridge Inspector Training; Reinforcing Steel Institute; American Concrete Institute, Hazardous Waste Site Training

Licenses/Registrations
Professional Engineer: New York, 1993 ([redacted] New Jersey, 1982 [redacted]

Professional Affiliations
American Society of Civil Engineers, Member; American Concrete Institute, Member

History of Employment
URS Corporation 1982 – 2004
PB 2004 – current

Representative Project Experience

- Port of New Orleans Public-Private Partnership Strategic WTC Transportation Hub and Site Projects, Manhattan, New York: project engineer for the site coordination projects at the WTC site. The overall WTC Site Redevelopment comprises two primary phases. The first phase of the redevelopment anticipates projects for beneficial occupancy by the end of 2009/early 2010 and provides for:
  - Proposed common infrastructure projects, including a Security Center for vehicular access, with a below grade roadway network and parking areas, new streets, central plant equipment, and other (primarily below grade) structures and systems, all required to support the transportation, commercial, memorial, and cultural facilities.
  - Proposed individual facilities including but not limited to the WTC Memorial, Memorial Center (museum), WTC Cultural Center, Freedom Tower, Tower 2, retail development (in addition to the WTC Transportation Hub), the 9A West Street Reconstruction, Fulton Transit Center connection at Dey Street, as well as IR T Cortlandt Street Station.

  For all projects at the WTC site, John's responsibilities will primarily consist of the day-to-day management and coordination of all construction activities by the PANYNJ and others throughout the WTC site, including site logistics, access, security and safety, coordination with PANYNJ WTC site management and coordination with external entities such as the Lower Manhattan Construction Command Center.
- Newark Regional Schools Program Management Services, Newark, New Jersey: project executive for the City of Newark's school modernization program. PB, in joint venture, was selected to provide project management services, oversight, direction, coordination and

reporting on projects undertaken by the New Jersey School Construction Corporation (NJSCC) for the Newark Public Schools. The work included the construction of 20 new elementary schools, additions/alterations to six existing elementary schools, construction of 15 new elementary/middle schools, additions/alterations to eight elementary/middle schools, construction of five new middle schools, additions/alterations to four existing middle schools, construction of three new high schools, additions/alterations to nine existing high schools, and additions/alterations to two existing special education schools.

- Security Strengthening at UN Headquarters, New York, New York: project executive for the project management services to the United Nations for this $24 million project to increase the level of security preparedness at the New York headquarters of the United Nations. Project scope includes: installation of security cameras; installation of new turnstiles and mantrap gates at all pedestrian entrances to the buildings; a complete upgrade of all exterior lighting; installation of an ID badge system with video display; installation of quick action vehicle barriers at all roadway entrances to the complex, replacement of the perimeter fence including a motion detection system and a relocation and technology upgrade of the central security office.
- Industrial Park, Dover Township, New Jersey: resident engineer for the construction of an $18 million, multi-building industrial park. John was responsible for CPM scheduling, cost estimating, value engineering, cost control, evaluation of change orders, and contract administration.
- Newark Arts High School Modernization and Expansion, Newark, New Jersey: project manager for a major renovation to Newark Arts High School and the construction of a three-story wing to house a new gymnasium, a media center, an experimental theater and administrative and classroom areas for the Newark Board of Education. Newark Arts High School was the first school in the State of New Jersey to specialize in teaching music, theater and graphic arts. John was responsible for design review services including code compliance, program review, constructibility and value engineering and prepared independent estimates during the design phase to monitor the overall $25 million budget. He managed the preparation of the project master schedule for bid purposes and maintained the master schedule incorporating the contractor's monthly updates. He also assisted the Newark Board of Education with bid phase services, including review and analysis. During the construction phase, John provided for on-site construction management, administration and project controls and the verified the quality of the work.

James Hickey, P.E., LEED AP
WTC Program Manager

James (Jim) is a senior project manager PB with over three decades of experience in leadership and management positions of increasing responsibility, focused upon generating and implementing solutions in a rapid paced environment.

He develops relationships with emphasis on up-front team building, clear definition of common objectives, synchronized systems for rapid issue resolution, and frequent joint evaluation of effectiveness. Jim transforms strategic goals into executable operational plans to sustain safety, quality, schedule and budget.

Mr. Hickey is experienced in executive leadership, program and project management, team building, staff development and process innovation. He is a skilled, effective facilitator, communicator and presenter.

His project management experience includes directing activities for the U.S. Army Corps of Engineers for the U.S. Forces Korea program (design and construction) with a total value of over $300 million annually. In addition, Jim led construction management activities at the King Faisal Naval Base, Jeddah, Saudi Arabia.

His program management experience includes directing activities for the development and procurement of fighting systems at the Department of Army level and for the development and procurement of joint warfighting systems at the Department of Defense level (The Joint Staff).

Fast Facts

Years of Experience
38

Education
M.B.A., General Business, Long Island University; M.A., National Security & Strategic Studies, United States Naval War College; M.S., Engineering Science & Mechanics, Georgia Institute of Technology; B.S., Civil Engineering, United States Military Academy

Licenses/Registrations
Virginia [redacted]
Leadership in Energy and Environmental Design, Accredited Professional

Professional Affiliations
Society of American Military Engineers; Association of the U.S. Army

History of Employment
USACE 1972 – 1999
NDC Health 1999 – 2002
Rochester & Associates 2002 – 2007
PB 2007 – current

Representative Project Experience

- World Trade Center Transportation Hub and Site, New York City: senior project manager/construction manager providing program and project management services for the transportation hub and site-wide facilities. Leads the staff integrated on the team of the client, The Port Authority of New York and New Jersey. The staff consists of 3 resident engineers, 3 assistant resident engineers, 6 office engineers, 44 field inspectors, 1 project controls manager, 3 logistics coordinators, 5 - 3D/4D modeling technicians, and 10 document control associates.

- New Songdo City, Incheon, Korea: as site director/senior project manager he provided construction management services for four projects: International School, Central Park, D22 Residential Towers, and North East Asia Trade Tower. Led the growth of the Songdo project office, from 26 to 58 people. Provided Leadership in Energy & Environmental Design (LEED) services for New Songdo City. The staff consisted of 4 expatriate senior project managers, 6 senior Korean construction managers, 40 Korean inspectors and 8 Korean administrative associates.
- South Atlanta Director, Fayetteville, Georgia: provided surveying and site civil engineering services for developers of master planned single family residential communities. Led the growth of the Fayetteville office, from 4 to 12 surveying crews, from 0 to 3 engineers, from 2 to 5 office surveyors and from 0 to 1 dedicated project manager while sustaining a work backlog of 11 months. Responsible for client relationship management, business development, strategic planning and implementation, marketing, program management, contract administration, budget management, cash flow, and invoice and receivables management.
- Director of Strategic Planning Atlanta, Georgia: transformed the vision and mission into operational plans and goals. Led the development and implementation of the corporate Balanced Scorecard Strategic Management System and cascaded the system to 5 strategic business units.
- The Pentagon, Army Staff, Washington, DC: as Director of Modernization, transformed the corporate vision into a five-year plan of operational goals of defined requirements and funding priorities.
- District Commander, US Army Corps of Engineers Seoul, South Korea: provided life-cycle facilities management services for United States Forces Korea and Ministry of National Defense, Korea, including capital construction, major repair and renovation and contracting services. Exercised profit/loss responsibility of a project funded organization ($330 million annually).

George Colban, P.E.
Tunnels, Bridges & Terminals Program Manager

George is a senior engineering manager with PB, with three decades of experience in engineering, management, and construction in the transportation, infrastructure, and power industries. His diverse background has included positions and responsibilities in executive management, program/project management, construction management, engineering, and marketing/business development. He possesses technical expertise and sound judgment, and has developed client relationships based on trust and integrity, established through timely and cost-effective project execution as well as an understanding of clients' needs in both the public and private sectors. He is experienced in management of multiyear capital programs and monitoring program scopes, budgets and schedules with the goal of advancing the client's objectives and priorities. George is effective in assessing staff requirements and capabilities, managing workload and providing support as necessary. He is also familiar with the political arena that shapes the transportation industry and has particular expertise in the New York Tri-state region.

His broad background includes program management oversight, where he served as New York office manager interfacing with the both the NY Metropolitan Transportation Authority (MTA) and the Federal Transit Administration (FTA) and reviewing several landmark projects including the rehabilitation of Grand Central Terminal, and Grand Central's North End Access program. He also has experience at a Railroad property where he was responsible for the rehabilitation of the traction power system, including design and construction of 32 DC traction power substations, contact rail construction, overhead catenary construction, along with ancillary systems including SCADA and communications.

Representative Project Experience

- PANYNJ Security Program Management Services on an Call-in Basis, New York and New Jersey: project executive providing expert professional program management services for the Port Authority of New York and New Jersey's 5-year, $500 million Security Capital

Fast Facts

Years of Experience
38

Education
B.S., Electrical Engineering, Northeastern University
Additional Studies: Engineering Project Management; Construction Law; Defending Contract Claims; Presentation Skills; Federal Transit Administration Project Manager Workshop; Occupational Safety and Health Administration Safety Training

Licenses/Registrations
New Jersey, 1992 [redacted]
New York, 1988 [redacted])

Professional Affiliations
American Public Transportation Association (APTA); American Society of Industrial Security International (ASIS); American Council of Engineering Companies of NY (ACEC); New York Railway Club

History of Employment
Ebasco Services 1972 – 1974
Gibbs & Hill, Inc. 1974 – 1984
Metro North RR 1984– 1991
Stone & Webster 1991 –1995
Day & Zimmermann 1995 – 2000
PB 2000 - current

Program. Working directly with Authority personnel he is responsible for all consultant activity as well as managing, coordinating, scheduling and monitoring the design, systems integration and construction phases of the agency's 2003-2007 Security Capital Program. Program elements include asset strengthening at Port Authority facilities including airports, bridges, tunnels, marine terminals and transit rail; operations and Security Command and Communications centers, intercommunication and public address systems; multi-technology access credentials and integrated CCTV; and integrated perimeter security, including fencing, barriers, detection, deterrent/notification/ apprehension assistance technologies. He is also in charge of developing and implementing project procedures and control systems to allow PANYNJ managers to advance the Security Program forward in a coordinated fashion.

- AirTrain JFK, New York City: deputy project manager responsible for the engineering management for the $400 million rehabilitation of LIRR's Jamaica Station and the intermodal aspects of the AirTrain Jamaica Station with connections to the LIRR, NYCT Subway and MTA and local bus routes. George was engineering project manager for the intermodal station at Jamaica, which included a seven story building that provided the link to the Air Train station at Jamaica and the future site of a new train control center for the LIRR, replacement of the LIRR Jamaica station complex, and new connections to the NYCT Sutphin Blvd. station. His responsibilities included the management of design preparation and engineering support for Jamaica Station construction encompassing all engineering disciplines and LIRR systems. These systems included electrical distribution, lighting, fire protection, CCTV-security, public address, Solari message boards, LIRR TVMs, elevators/escalators, telephone and communications. In this role, George was the liaison between PANYNJ engineering, LIRR, NYCT, and the contractor to ensure that design reflected the requirements of the LIRR, NYCT, and local community groups. He was involved in daily interactions with LIRR operating personnel to facilitate force account activities and systems design.
- Management Consulting, Program Management, and Construction Management Firm - New York: office manager responsible for developing and executing annual business plans and corporate forecasts/budgets to satisfy the objectives and financial goals of the company. He prepared board level reports, monitored and controlled corporate overhead, evaluated and adjusted staffing levels, and supported business development goals. During George's term as vice president, corporate performance met or exceeded forecasts, revenues increased by 25%, and staffing increased by 33%. Projections for the final year of George's service indicated continued growth, with an increase in net contribution of over 50 percent. George was also responsible for day-to-day management of the New York office and the supervision of 30 senior, executive-level personnel, providing oversight for all ongoing projects, including program management. He managed a staff of 18 senior professionals directly responsible to the Metropolitan Transportation Authority (MTA) Board for oversight of the $15 billion MTA capital improvement program.

Thomas Marko, P.E.
Tunnels, Bridges, & Terminals Program Manager
PATH Program Manager
Transit & Rail Constructibility/Biddability/Staging

Tom has a broad base of high quality experience in program/project management for transit, bridge and a variety of facilities, including industrial, commercial and health care. During his career, he has been responsible for project delivery from inception through completion and has served in the capacities of resident engineer, senior resident engineer, construction manager and project manager on assignments including: railroad electrification, industrial facilities, bridges, health care facilities, education facilities and commercial buildings. He is particularly skilled in the management of multiple prime contracts, with all assignments completed on time and within budget. Tom is experienced in coordinating projects with various state and federal agencies as well as with private clients, other consultants, contractors and financial institutions. He has managed an area design office with assignments in the design of industrial, traction power and commercial facilities.

Fast Facts

Years of Experience
29

Education
M.S.C.E., New Jersey Institute of Technology, 1981; B.S.C.E., Newark College of Engineering, 1974

Licenses/Registrations
Professional Engineer: New Jersey, 1980 [redacted] New York, 1988 [redacted]

Professional Affiliations
American Society of Civil Engineers (ASCE)

History of Employment
Gannett Fleming 1981 – 1984
Morrison Knudsen Corp. 1984 – 1995
Frederic Harris 1995 – 1997
PB 1997 – current

Representative Project Experience

- LIRR Maintenance of Way Facility Upper Holban Yard – Hillside, New York: resident engineer on this $11 million call-in project. Work includes the addition of an 8,800-square-foot prefabricated steel building, two new service tracks, roll up doors, an overhead 50-ton gantry crane, interior systems, locker rooms, restroom facilities, and sprinkler systems.
- Morrisville Yard Improvements – Phase II, Morrisville, Pennsylvania: construction manager for complete construction management services for the expansion of the Morrisville Yard facility under Phase 2 of a three phase program. The completed facility, in combination with the NJT Meadows Maintenance Complex, will provide storage capacity near each end of the railroad's NEC service area. The $97 million in planned improvements will provide storage for 250 rail commuter cars as well as service and inspection facilities and wheel truing capabilities at the west end of the NJT NEC service area and will provide the capacity to improve and consolidate storage and running repair functions now served at two different locations, as well as provide adequate capacity to accommodate immediate and long-term service growth on the NEC and Atlantic City lines.
- Woodside Station Rehabilitation, Queens, New York: project manager for the $25 million reconstruction of a joint LIRR and NYCT station serving more than 5,000 daily commuters.

The project was designed to allow 12-car LIRR trains to platform and included bridge rehabilitation, mezzanine expansion over active railroad tracks, and installation of five elevators for compliance with ADA legislation.

- South Boston Piers Transitway, Boston, Massachusetts: design project manager for a new 6.5-mile underground trackless trolley system connecting downtown Boston with the South Boston piers. Responsible for preparation of specifications and development of design parameters for the overhead contact and traction power systems, and for fixed facilities estimating and constructibility reviews during design development.
- Meadows Maintenance Complex, Kearny, New Jersey: construction manager, later project manager, responsible for construction management of a new $150 million rail-car maintenance facility designed to accommodate 1,000 vehicles on an 80-acre site. Overall project included the construction of eight primary buildings, development of a 77-acre tract, including electrification of layover yards at two voltages, and construction of an 800-foot railroad bridge over active PATH and Conrail tracks. Tom had complete responsibility for a field staff of 20, including 3 resident engineers and 12 professional/technical employees assigned to 8 construction contracts and 14 major equipment supply/installation contracts. He supervised construction and determined contract compliance including: engineered fills, pile foundations, general building construction, building mechanical and electrical systems, finish trades, electric traction, site electrical and primary distribution, site utilities, roadways, and access bridges. Tom proposed/implemented several innovative solutions for coordination problems brought on by accelerated owner occupancy requirements. He scheduled and coordinated $7.5 million of railroad force account work for the construction of 15 track-miles of yard and running track. Tom led the project from groundbreaking through owner acceptance.
- Reverse Kearny Connection: supervised the construction of an 800-foot deck girder railroad bridge over active PATH and Conrail tracks. Project included an extension of the Amtrak Northeast Corridor embankment to accommodate a New Jersey Transit lead into the Meadows Maintenance Facility from the Northeast Corridor.

Foster Nichols, Jr.
PATH Program Manager

Fast Facts

Years of Experience
32

Education
B.S.E., Civil Engineering,
Princeton University, 1978

Professional Affiliations
American Society of Civil Engineers; Sigma XI

History of Employment
Tippets Abbett Mccarhty
1978 - 1986
PB 1986 – current

Foster is an experienced program and project manager, with proven expertise in preparing transportation strategic plans and managing complex projects involving engineering, business and policy issues. Foster is an expert in multimodal transportation systems planning, particularly passenger rail transportation and intermodal terminal facilities. He has directed the development of long range strategic plans for four major commuter rail systems—the Long Island Rail Road in New York, the MARC system in Maryland, the Virginia Railway Express, and the Metrorail system in Cape Town, South Africa. He was responsible for the development of an $8 billion, 20-year strategic capital investment plan for Amtrak's Northeast Corridor between New York City and Washington, DC.

Foster's wide-ranging experience has included developing the transport plan for New York's bid for the 2012 Summer Olympics, identifying and prioritizing transportation system investments to catalyze the redevelopment of Lower Manhattan following the events of September 11, 2001, developing a plan for implementing congestion pricing in New York City, and designing new rail passenger facilities for the proposed Moynihan Station development project at Penn Station, New York. His transportation systems planning experience encompasses commuter rail new start proposals in Northeast Ohio, Georgia and North Carolina, intercity rail system planning for the Amtrak U.S. national network and the West Coast high-speed Main Line in the UK, and heavy and light rail transit systems in New York, New Jersey, Maryland, Washington, DC, Chicago and Los Angeles.

Foster has participated in the design of numerous passenger terminal and station facilities in the U.S. and worldwide. He is experienced in the analysis and simulation of pedestrian flows, the analysis and simulation of rail and transit vehicle operations, ridership forecasting, project evaluation and benefit-cost analysis. Foster also spearheaded the development and use of geographic information systems (GIS) in PB's New York and Baltimore offices, and he continually identifies new transportation-related applications for capturing, storing, retrieving and analyzing spatially organized data.

Since 2005, Foster has served on the Citizen's Advisory Committee to the Baltimore Region Transportation Board, the metropolitan planning organization for Baltimore and the five surrounding counties, and has been vice chairman since 2007. He also serves on the board of the Valleys Planning Council, an organization that promotes smart growth and agricultural and rural land preservation in Baltimore County.

Representative Project Experience

- Foster has managed the development of strategic plans and capital investment programs for the following railway systems:
  - Long Island Rail Road
  - Virginia Railway Express
  - MARC Commuter Rail System, Maryland
  - Amtrak Northeast Corridor
  - Cape Town Metropolitan Railway, South Africa
- Foster's operations analysis and systems planning experience also includes management and key technical roles on the following projects:
  - Amtrak National Market-Based Network Analysis
  - California High Speed Train Project
  - New York State High Speed Rail Study
  - Maryland Strategic Rail Framework
  - Access to Region's Core Study, New York City
  - Northeast Ohio Commuter Rail Feasibility (NEORAIL) Study, Cleveland, Ohio
  - Triad Intercity Passenger Rail Study, North Carolina
  - Tri-Rail Operations and Capital Investment Plan, South Florida
  - Commuter Rail Implementation Planning, Atlanta, Georgia
  - Johannesburg International Airport Rail Links Study, South Africa
  - Cross-Hudson and Stewart Airport Rail Links Feasibility and Cost Benefits Study
  - Northeast Corridor and Newark Penn Station Operations Study, New Jersey
  - MARC Maintenance Facility Economic Analysis, Baltimore, Maryland
  - Freight Rail Operations Analysis, Orlando, Florida
- California High-Speed Train Project: task leader responsible for developing operating plans and train schedules for the California high-speed rail network, an 800-mile, $40 billion system linking major urban areas. Foster also is responsible for developing design standards for the 25 planned stations.
- MARC Growth and Investment Plan, Maryland Transit Administration: formulated a comprehensive, multi-phase investment plan to triple the passenger-carrying capacity of the MARC commuter system, which encompasses three branch lines, 210 route-miles and over 40 stations. The plan calls for adding track capacity, expanding station parking, constructing new stations and multi-modal transit connections, more than doubling the size of the rolling stock fleet, and building new fleet storage and maintenance facilities.

Ira Hirschman, Ph.D.
Economic Development Program Manager

Dr. Hirschman heads the Economics practice within PB's Strategic Consulting group. He is the firm's senior leader and practitioner in the field of economic impact analysis, freight and intermodal economic analysis, benefit-cost analysis, transportation pricing, and related areas of transportation economics.

Fast Facts

Years of Experience
30

Education
Ph.D., Urban and Regional Planning, Rutgers University, 1991; M.S. /B.S., Economics, Rutgers University, 1978/1976

Professional Affiliations
Transportation Research Board (TRB), Committee on Transportation and Economic Development committee member; New York Regional Plan Association; American Planning Association (New York Metro Chapter)

History of Employment
New York City Transit Authority – 1980-1984
PB 1984 – current

Representative Project Experience

- TIGER Grant Applications – Economic Analyses, Various Locations, United States: provided technical direction for economics and benefit cost evaluations for multiple TIGER grant applications. Several of these were successful, reflecting PB's nearly 20% overall success rate in TIGER applications for its clients. Recently, managed the economic analysis for highway realignment study in downtown New Haven, a successful TIGER II application.
- Port Authority of NY NJ Bayonne Bridge Regional Benefit Cost Analysis: Member of team of senior economists spearheading the Benefit –Cost Analysis of options to remove or mitigate the channel clearance restrictions posed by the Bayonne Bridge to navigation by mega container ships, especially following expansion of the Panama Canal.
- Economic Impact Study for the Georgia Regional Transportation Authority, Atlanta, Georgia: conducted an economic impacts analysis of the Governor's proposed $8.3 billion program of transportation projects, utilizing innovative financing techniques.
- New York City Movable Bridge Study, New York, New York: responsible for the design and implementation of cost benefit analysis of options to eliminate or improve New York City Department of Transportation-owned movable bridges spanning New York City waterways.
- Brockport-Albion Economic Impacts Study, West of Rochester, New York: principal economic analyst responsible for economic and fiscal impact analyses of a proposed highway extension, including forecasts of land-use impacts in the Rochester region.
- Metro-North Commuter Railroad Feasibility and Cost-Benefit of Cross-Hudson Rail Links, New York: led the economic evaluation of alternative options for rail service from Orange and Rockland Counties to Grand Central Terminal.

- Amtrak Penn Station Redevelopment, Phase II, New York, New York: Dr. Hirschman analyzed the regional, city, and state economic and fiscal impacts of the relocation and development on behalf of the developer.
- New York City EDC Strategic Investment Options - Master Plan – lead analysis of the economic development benefits of congestion pricing and other strategies to reduce core congestion in New York City.
- Maryland Department of Transportation – Maryland Strategic Rail Action Agenda study: conducted strategic analysis of freight, commuter, and Amtrak (intercity) rail service requirements and investments through Maryland. Benefit cost and logistics analysis.
- Regional Transportation Authority Chicago - economic impact and cost benefit analyses of alternative investment programs for the RTA and its service boards.
- Bonner Bridge Replacement Study, Economic Impact Report - local economic impact study of bridge replacement options.
- Panama Canal Master Plan & Third Locks Development Project, Panama: technical lead for the development of the Panama Canal Authority (ACP)'s demand forecasting model. The model is being used by a major financial institution to support financing for the multibillion dollar project. The assessments and forecasts included Panama Canal shipping and cargo transit forecasts, including container traffic, solid and liquid bulk cargo vessels, and auto carriers, and canal tariff structure.
- Front Range Railroad Relocation Project, Colorado: lead economist for the benefit cost assessment of private, public, and public sector benefits and costs of relocating the existing north south freight railroads now operating near Denver to areas further to the east of the state.

Gerald Chi
Project Manager/Management Support

Gerald (Gerry) Chi has extensive experience in planning, design, management, operations and maintenance, and condition auditing of physical plants for transit maintenance facilities, educational facilities, commercial buildings, industrial facilities, power facilities, municipal properties, and bridges and tunnels. He has performed design and construction management for these facilities as well as comprehensive management, staffing, and workflow analysis for maintenance operation and capital improvement programs. His experience also allows him to contribute to the balancing of capital investments and annual operation and maintenance budgets. Gerry has also served as discipline leader, deputy project manager, project manager and project executive for several facilities design and audit projects. His speciality is in mechanical systems but he is also knowledgeable in architectural, civil/structural, electrical, and environmental systems. Gerry has a proven record of managing projects, supervising multidisciplinary operations and completing projects under budget and within schedule and scope.

Fast Facts

Years of Experience
26

Education
M.S., Industrial and Operation Management, University of Michigan, 1986; M.S., Mechanical Engineering, University of Michigan, 1985; B.S., Mechanical Engineering, Fung Chia University, Taiwan, 1982

Profession Affiliations
American Society of Mechanical Engineers; International Society for Pharmaceutical Engineering, Construction Management Association of America

History of Employment
Electrowatt A.G 1985 – 1986
CTCI 1986 – 1987
PB 1987 – current

Representative Project Experience

- PANYNJ CM On-Call services contract, NY/NJ areas: project manager responsible for providing construction managers, inspectors to PANYNJ facilities around NY/NJ area. The staff manage/inspect civil, structural, mechanical and electrical constructions in PANYNJ facilities

- New York City School Construction Authority (SCA), New York: project executive for supplying/managing project officers staff at SCA for construction and management of schools construction projects. There are over 60 construction managers working on the project currently. Gerry manages three consecutive three-year contracts for SCA. $50 million total contract cost.

- New Jersey Schools Program, Newark City, New Jersey: program manager for pre-design and design responsible for planning the 10 years, $1.6 billion, 80 schools program in Newark, New Jersey. Gerry managed the pre-design services with feasibility studies and support land acquisition activities, and managed new schools design through the program phase to construction award. Three of the schools are Green buildings with special equipment and

materials. PB in joint venture with 3DI serves as the Program Management firm for the City of Newark on behalf of the State.

- Taiwan High Speed Rail, Taiwan: acting PB project manager responsible for managing the PB specialists working for the Taiwan High Speed Rail Corporation. The project is a US$16 billion, 250 mile-long high speed rail line with a 186 mile/hour (300 kilometer/hour) average speed. It is one of the largest build-operate-transfer (BOT) projects in the world. Taiwan High Speed Rail.

- General Service Administration (GSA) Region 2 Construction Quality Management Services, Northeast US: project executive for GSA project which includes spaces for the Department of Homeland Security in various locations in New York area, U.S. Court of Appeals, New York, New York; various GSA space alterations projects at 26 Federal Plaza and other projects in NY City, Newark and other areas.

- NYS OGS Construction Management Program: downstate manager for staffing, managing the project staff performance and activities. Coordinate with OGS managers to ensure that capable staff are assigned to the needed projects, manage to the staff to perform to OGS expectation. Gerry manages three consecutive three-year contracts for OGS.

John Taylor, P.E.
Project Manager/Management Support

John is a senior manager and civil engineer with PB experienced in program and project management with federal agencies, industrial clients, and state and local governments for civil works projects, facilities infrastructure, hazardous waste remediation, and environmental studies. His program and project management duties have included supervising and coordinating the work of teams of engineers, technical personnel, and subcontractors. Mr. Taylor's responsibilities have included schematic through final design development; quality control; project scheduling; progress reporting; public presentations; preparing subcontractor agreements and budgets; performing feasibility studies; and preparing final contract documents and construction cost estimates.

Representative Project Experience

- Program Management Services for Security Capital Programs for the Port Authority of New York and New Jersey (PANYNJ): on-site project manager in PANYNJ facility to assist in implementing rail transit and tunnel security improvements. For the tunnel program, he has provided management of design consultant technical teams; coordination with PANYNJ engineering and operations staff; scheduling; cost control and monitoring; report preparation; constructibility reviews; and quality assurance. Mr. Taylor prepared grant applications for the American Recovery and Reinvestment Act of 2009 (ARRA) Transit Grant Security Program that resulted in the award of two grants to the PANYNJ totaling over $48 million for PATH tunnel security projects. He prepared another grant application for FY 2010 that is pending.
- U.S. Army Corps of Engineers (USACE), Norfolk: quality assurance and client relations support for Fort Drum access control design, ammunition supply point, and utilities upgrade charrettes under the indefinite delivery contract (IDC) for multidisciplinary A/E design services. When the New York District approached PB for fast-track task orders to develop alternatives for security, traffic, and utility upgrades, Mr. Taylor coordinated with district contract staff to transfer contract capacity. He reviewed task order requirements, assisted in assembling a PB team and developed subcontracts for surveys and cost estimating services. He also provided QA support to the team.

Fast Facts

Years of Experience
34

Education
M.S.E, Civil Engineering, University of Pennsylvania, 1985; B.S., United States Military Academy, 1976

Licenses/Registrations
Pennsylvania, 1986 ([redacted] Virginia, 1987 [redacted] Maryland 1988 [redacted]; New Jersey, 1997 [redacted] New York, 2006 ([redacted]

Professional Affiliations
American Society of Civil Engineers; Society of American Military Engineers: Director, Philadelphia Post

History of Employment
US Army Corps of Engineers 1976 – 1982
Naval Facil ENCC 1982 – 1986
Wilbur Smith 1986 – 1990
Black & Veatch 1990 – 2007
PB 2007 – current

- 1745 Bathgate Avenue Phase I and II Environmental Site Investigations, Bronx, New York: quality assurance reviewer under MTA NYCT contract. This site was being considered for renovation/conversion of a warehouse building into a depot for the storage of bus and maintenance parts and equipment. Mr. Taylor reviewed work plan documents, draft reports, and final reports of soil and groundwater investigations by PB staff.
- Grass Dale Ecosystem Restoration, USACE Philadelphia District, Chesapeake City, Delaware: program and project manager for IDC that included several tasks for this Water Resource Development Act project.
- Intracoastal Waterway Dredged Material Disposal Facilities Geotechnical Investigation, New Jersey: project manager for a geotechnical investigation of five disposal sites located between Cape May and Tuckerton on the NJ Intracoastal Waterway.
- Aircraft De-Icing Study, Dover Air Force Base, Delaware: project manager for a study to evaluate the impact of aircraft de-icing on storm water run off. The base National Pollutant Discharge Elimination System (NPDES) permit was being evaluated by regulators for renewal, and the base was required to decrease the impact of de-icing fluids on BOD in run off.
- IDC for Naval Facilities Engineering Command, Washington, DC: project engineer and task manager for civil/structural services at facilities in the Washington, DC, area. Projects included an erosion control study at Chesapeake Beach, Maryland; septic system tie-in design plans and specifications; White Oak Naval Weapons Station; design plans and specifications for pavement, curb, and gutter repairs at Henderson Hall; structural analysis of gymnasium roof truss at Bethesda Naval Hospital; design plans and specifications for a new drinking water well and structural analysis of swimming pool cracking at the U.S. Naval Academy; and pavement repair study and recommendations at White Oak Naval Weapons Station.
- USEPA Region III Remedial Action Contract: program manager for $28 million contract that included coordination of various disciplines, civil engineering, and contract management.
- North Penn Area 6 Operable Unit 1 Superfund Site Remedial Design, Lansdale, Pennsylvania: project manager for the design of soil and underground storage tank removal for four locations.
- North Penn Area 6 Operable Unit 3 Superfund Site Remedial Design, Lansdale, Pennsylvania: project manager for the groundwater extraction and treatment systems for four locations.

Jamil Ahmed, P.E.
Project Manager/Management Suport

Jamil is a project manager for PB with experience in managing major projects, including transportation facilities, light rail transit, tunnels, security projects, buildings, design/build projects and condition assessments. His experience is noted below.

Fast Facts

Years of Experience
22

Education
Master of Engineering, Civil Engineering, Texas A&M University, 1986; B.S., Civil Engineering, Purdue University, 1983
Additional Studies: Management Training Program, New York City Leadership Institute; Value Engineering Workshop Training Program; Pursuit Management; Presentation Skills

Licenses/Registrations
New York, 1994 [redacted]

History of Employment
Office of Management and Budget 1988 – 1996
Department of Environmental Protection 1986 - 1988
PB 1996 – current

Representative Project Experience

- Tappan Zee Bridge, New York: project manager for the design of a security surveillance system for the critical elements of the bridge. The project includes cameras, video servers and LAN switches, lighting, motion detectors and fiber optic cabling. To detect any breaches in the security corridors, video analytic software will be used. The surveillance system will transmit video and alarm conditions via the Thruway Authority WAN to remote monitoring workstations.
- Airport Access Program, JFK International Airport, New York City: project manager/project engineer for this PANYNJ design-build-operate-maintain (DBOM) project to improve public access to JFK. The 8.4-mile (13.5-kilometer), ten-station light rail line connects JFK with other local and regional rail systems. PB provided program management services for this $1.8 billion project, while also helping to jointly operate a program office with PANYNJ staff members. Jamil's responsibilities have included:
  - Early Action Contract: managed the preliminary and final designs, and design services during construction for the 1,900-foot-long (580-meter-long) twin cell cut-and-cover tunnel and retained cut sections under Taxiways `A' and `B' and the relocation of the Van Wyck Expressway North Service Road. Construction cost $100 million.
  - DBOM Contract: managed design reviews by interdisciplinary teams comprised of PB and PANYNJ technical staff for structural, geotechnical, architectural, mechanical, electrical, civil, utilities, noise and vibration analysis, construction management disciplines, for all design submittals and contract deliverables. Managed review of over 260 separate design submittals. Construction cost $950 million.
  - Program Management: assisted the program manager in establishment of management and tracking procedures. Prepared monthly progress reports on critical project issues, package closeout and acceptance criteria.

  - DBOM Procurement Services: prepared RFP and addenda documents for DBOM procurement; managed the evaluation of technical proposals; prepared detailed and summary reports of evaluation results for the selection committee; and coordinated efforts with other ongoing and planned construction projects at JFK and third party agreements. Also prepared the form of contract, technical provisions, and management provisions for the DBOM contract.
  - NYC Economic Development Corporation, Municipal Land Use Study: project manager for this municipal land use study for NYC based on a projected 25 year population growth of 1 million. Assess the existing industrial land utilization practices and operations of the City's largest operating agencies, identify common land uses or functions to multiple agencies, identify under-utilized sites and recommend specific proposals to improve land use efficiencies and reduce space needs as projected through 2030. A compendium of global best practices including centralization, technological innovations and improving processes and operations was also compiled.
  - Underriver NYCT (MTA) Tunnels, New York: project manager for design of protection systems for 9 underriver tunnels located in the East River and Harlem River. Tunnel hardening designs were developed and constructed to provide exterior and interior protection for the tunnels. Protection systems for vent shaft structures were also developed. Blast analysis was conducted to model failure analysis of structures and mitigation designs were developed based on results obtained.

- George Washington Bridge, New York and New Jersey: project manager for design of protection and security systems for the suspender cables and tower bases for the George Washington Bridge for PANYNJ. A sleeve protection system for 1,200 suspender cables was designed and tested to withstand possible attacks. Design was completed and construction contract was awarded for this first-of-its-kind project in the U.S.
- Bayonne Bridge, New York and New Jersey: project manager for design of protection and security systems for the suspender cables, upper and bottom arch cords and abutments for the Bayonne Bridge for PANYNJ.
- Holland and Lincoln Tunnels, New York and New Jersey: project manager for design of cross passage protection systems for PANYNJ. Provide protection of individual tubes of the two tunnels in the case of a breach in one of the two tubes of the Holland Tunnel or the three tubes of the Lincoln Tunnel. Protection systems for doors, walls, sump chambers and utility penetrations are to be provided in the cross passageways to prevent cross infiltration of water in the event one of the tubes is damaged.

Stephen Denes, P.E.
Project Manager/Management Support

Stephen (Steve) is a senior engineering manager with PB and has been involved in managing the planning, design and construction of complex airport infrastructure and aviation facilities. His experience includes managing the design of a new runway complex at Washington Dulles International Airport and managing the development of a wide variety of airline facilities projects in the US and abroad. As an active pilot, Steve has a keen understanding of the aviation environment and the unique challenges of working on airports and with aviation customers.

Representative Project Experience

- Quonset Airport Taxiway A (North) and Taxiway N Reconstruction, North Kingstown, Rhode Island: reviewed final contract documents for quality control and compliance with FAA airfield design criteria and guidelines.
- Los Angeles International Airport Development Program, Los Angeles, California: developed program design criteria manual, including general requirements; codes, standards and regulations; architecture; civil, environmental, structural, mechanical, electrical, and fire protection engineering; fueling; and communications and security systems. Also provided third-party reviews of drawings, specifications and engineers' design reports for two major crossfield taxiway design projects.
- Chicago Midway Airport Privatization Study, Chicago, Illinois: estimated potential airfield and rental car development work for potential privatization of airport. Analyzed existing documents and developed cost estimating model for pavement maintenance, rehabilitation and replacement program.

Fast Facts

Years of Experience
26

Education
Master of Real Estate and Construction Management, University of Denver, Colorado, 1995, which included a course in airport management through Embry-Riddle Aeronautical University; B.S., Civil Engineering Technology, Metropolitan State College of Denver, Colorado, 1985

Licenses/Registrations
Professional Engineer: Colorado; Virginia; New York

Professional Affiliations
American Society of Civil Engineers
Airport Consultants Council, Safety and Security Committee, Safety Management Systems Subcommittee

History of Employment
US Airways 1984– 2002
Carter & Burgess 2002 –2005
Hertz Corp 2005 – 2008
PB 2008 - current

- Rental Car Company, Park Ridge, New Jersey: eastern region director of construction overseeing all business management responsibilities related to the design and construction of corporate facilities in the eastern United States for both rent-a-car and equipment rental divisions. He reviewed and approved budgets and program requirements. He also drafted, reviewed, and approved contracts, change orders, and purchasing commitments for architects, engineers, contractors, and related vendors. He reviewed and approved all invoices for payment, reviewed and negotiated claims, and resolved any controversies. One of his key contributions was rewriting the company's construction management procedures to incorporate elements of more than two dozen corporate policies and procedures, along with best management practices for project management, into one cohesive how-to manual for project managers. He also worked with the legal and risk management departments to ensure company contracts were up-to-date.
- International Architectural and Engineering Firm, Washington, DC: northeast regional aviation services manager. Steve managed the technical activities and internal resources for aviation projects assigned to the New York and Washington offices. He established budgets for design and construction-phase services, managed the assignment and progress of engineering work, and ensured client satisfaction with services performed and products delivered. His key projects included:
  - New Runway and Associated Taxiways, Washington Dulles International Airport: managed the work of staff engineers and subconsultants on the preliminary and final design of a new air carrier runway and associated taxiways and facilities. The preliminary engineering phase consisted of an engineering study of two potential runway alignments and configurations. The project included the design of the runway and taxiway system, airfield lighting, aircraft deicing pad and building, airport maintenance building, service roads for maintenance and emergency vehicles, and navigational aids. As the design team project manager, he interfaced with the client on all technical, managerial and contractual issues and coordinated the work of all design task leaders and consultants. He was responsible for detailed monthly reports to the client and company management, updating the schedule, preparing client invoices, negotiating consultant subcontracts, and processing consultant invoices.
  - US Airways Baggage Screening Room Improvements, Philadelphia International Airport: managed the work of staff engineers and architects on a project to design building improvements to a baggage screening room to accommodate automated baggage screening devices for international arrivals. He coordinated activities with the airline, TSA, City of Philadelphia Division of Aviation, other design consultants, and contractors.

Albert Himaia
Project Manager/Management Support

Albert (Al) has worked in the construction engineering field with an emphasis on highway and bridge construction. He has served in a variety of positions including inspector, assistant office engineer, and design engineer on projects involving bridge rehabilitation, highway expansion to accommodate high occupancy vehicle (HOV) lanes, and highway drainage improvements. Albert is also experienced in residential, watermain and sanitary and storm drainage system construction.

Fast Facts

Years of Experience
21

Education
B.S., Civil Engineering, New Jersey Institute of Technology, 1988; A.A.S., Civil Engineering, Middlesex County College, 1986; Paralegal Degree, Middlesex County College, 1994

Licenses/Registrations
Residential Real Estate License: Edison School of Real Estate, 1995

Professional Affiliations
American Engineering Alliance

History of Employment
AMERTECH Engineering 1989
Marcel Cleaners 1989 - 1993
Raytheon Engineers 1993–1997
PB 1997 – current

Representative Project Experience

- Newark Abbott School District, Newark, New Jersey: planner on a $1.6 billion program. Al is responsible for assisting the New Jersey School Construction Corporation (NJSCC) in acquiring the necessary property to construct new schools. As planner, Al reviews and oversees feasibility studies, conducts progress meetings and coordinates efforts with DEP and DOE for fast track approvals. He also reviews and approves consultant's invoices and assists the NJSCC in the appraisal, purchase and relocation of homes and manufacturing facilities that are displaced through property acquisition.
- Parsons Brinckerhoff Construction Services, Inc., Northeast Region, New York, New York: as senior marketing coordinator, Al took on new responsibilities that included coordinating, preparing, and developing proposal documents for the northeast office. He prepared and maintained bi-weekly reports on submittal status and business development, developed an active listing of all project opportunities with information gathered, developed monthly input for the Activities Report, projected new business, and best prospects list. Al also prepared and maintained a database of possible client, proposal and staff additions.
- New Jersey Department of Motor Vehicles Inspection and Maintenance Facility Retrofit Program Management, New Jersey: lead engineer assigned to this project which involved the retrofitting of centralized and private inspection and maintenance facilities statewide to meet the new USEPA emissions standards. In this position, Al was responsible for reviewing subcontracts and scopes of work completed by subconsultants. He also developed and implemented the Project Management Plan; developed and implemented quality assurance/quality control procedures and plan; reviewed contract documents and field

construction to confirm drawings were being followed; and performed quality assurance on construction activities.

- Installation of Electronic Toll Collection System (E-ZPASS) on the New Jersey Turnpike, Garden State Parkway, Atlantic City Expressway, along with tie-ins to a portion of NJ Route 73, DelDOT and PANYNJ facilities: as a resident engineer his responsibilities included planning, reviewing, and assignments of work of subordinate field personnel. Al reviewed all construction processes and engineering layouts, reviewed project activities with the client representative and contractor field supervisor resolving disputes and daily issues, and reviewed daily inspector reports and prepared resident engineers summary report from his/her comments as well as data compiled from the inspection reports.
- Manhattan Bridge Painting & Interim Rehabilitation, New York, New York: assistant office engineer responsible for preparation of partial payments using the project's computerized engineering estimate system (CEES) for preparing, as well as for processing of change orders and time and material sheets. Al also certified all material brought to the site, reviewed shop drawings, and monitored the progress of the job through progress meetings and correspondence between the field office and all involved agencies. Parsons Brinckerhoff (PB) served on the resident engineer inspection team on this $124 million project for the New York City Department of Transportation.
- Manhattan Bridge West Upper Roadway Rehabilitation, New York, New York: assistant office engineer on this $96 million project to rehabilitate the entire west upper roadway of the Manhattan Bridge including replacement of the suspended span deck. Working with the project's CEES program, Al processed payments to the contractor for work performed, as well as changes orders and time and material costs. He also certified all material brought to the site to ensure it met contract specifications, reviewed shop drawings, attended project progress meetings, and reviewed contractor progress against bar charts and the critical path method (CPM) schedule.
- N.J. Turnpike Exit 13A Expansion, Elizabeth, New Jersey: inspector on this $24 million highway expansion project to accommodate HOV lanes for the New Jersey Turnpike Authority. Al's responsibilities included overseeing and inspecting highway expansion, working with steel members crossing over several interior streets in the town of Elizabeth, and latex-modified concrete.
- Garden State Parkway Drainage Rehabilitation, New Jersey: inspector on this $45 million project to rehabilitate storm drainage systems running along and underneath the Garden State Parkway from Exit 122 to Exit 38, a length of 100 miles (161 kilometers). Al's responsibilities included overseeing the contractor during the rehabilitation of the drainage systems.

Derick Hallahan, P.E.
Deputy Project Manager

Derick's experience includes transportation project planning and preliminary engineering assignments, encompassing alternatives analyses, traffic analyses, and environmental impacts assessment and documentation. Derick has also been extensively involved with the design of Intelligent Transportation Systems (ITS) along major New York City highways. His experience includes engineering assignments using AASHTO geometric design criteria, traffic analysis using Highway Capacity Manual (HCM) software, Synchro, and critical lane intersection capacity analyses; development and preliminary design of improvement alternatives; and analysis and documentation of environmental and cost impacts. Derick has prepared ITS final design plans, environmental impact statements, as well as roadway, traffic, transit, and parking studies for federal, state, and local agencies.

Fast Facts

Years of Experience
16

Education
B.S., Civil Engineering, Lehigh University, 1994

Licenses/Registrations
Professional Engineer, Maryland, 2001 [redacted]

History of Employment
IT Corporation 1994 – 1995
RK&K Engineers 1995 – 2002
PB 2002-current

Representative Project Experience

- Access to the Region's Core (ARC)/Trans-Hudson Express (THE) Tunnel Project, NJ TRANSIT /PANYNJ: Derick is the contract package manager as part of a joint venture performing final design services for a new commuter rail tunnel under the Hudson River to a new rail station adjacent to Penn Station. Other project responsibilities included work as a configuration manager to develop a project configuration management plan to monitor and track project design changes that impact overall project costs and/or schedule. He also worked with the project controls group to coordinate with the joint venture team and NJ TRANSIT, PANYNJ and FTA personnel to manage monthly progress reporting and invoicing requirements for the entire project.
- Bronx and Manhattan ITS, New York, New York: involved with design, preparation of plans, construction feasibility, safety reviews of proposed equipment locations, maintenance and protection of traffic (MPT) issues, and field data collection. Extensively involved in coordination efforts NYS and NYC agencies, including NYS/NYC DOT and NYC Department of Parks and Recreation, as well as with other consultants. Responsible for preparing design plans, specifications, and cost estimates for ITS equipment and a dedicated fiber optic communications network along the Cross Bronx Expressway, Major Deegan Expressway, and Harlem River Drive for submittal to the NYSDOT. The system's purpose is to provide traffic management tools including surveillance (CCTV cameras), incident detection (radar detectors), motorist information (variable message signs and hazard alert radio broadcast) and collection of traffic data (vehicle number and classification).

- I-270/US 15 Multi-Modal Corridor Study – Montgomery/Frederick Counties, Maryland: performing deputy project management responsibilities for a corridor planning study consisting of approximately 31 miles of highway improvements (estimated cost of over $2 Billion) and a proposed 14 mile transitway alignment (either Bus Rapid Transit or Light Rail Transit; estimated costs of $792 Million to $857 Million, respectively) in suburban Washington, D.C. Developing scope, schedule, and budget information for submittal to Maryland State Highway Administration and Maryland Transit Administration. Creating and maintaining project schedule. Assisting with the development of initial plans for addressing Federal Transit Administration New Starts Criteria for funding assistance with transit preliminary engineering.
- Montrose Road/Randolph Road Value Engineering Study, Maryland: participated in a value engineering study for the State Highway Administration (SHA) on the proposed $95 Million intersection improvement study for the MD 355/Montrose Road/Randolph Road intersection. Helped to identify and develop potential cost saving improvement options of up to $24 Million for further evaluation by SHA.
- East Street Extended, Maryland: performed project planning responsibilities for the extension of East Street. Prepared an environmental assessment/Section 4(f) Evaluation document and coordinated with the cultural resources subconsultant for the development of a draft Cultural Resources Assessment. Participated in presentations to federal, state, and local representatives, as well as at a Location/Design Public Hearing.
- MD 6 Feasibility Study, Maryland: performed a feasibility study for the evaluation of existing geometric and safety conditions along a one mile portion of MD 6 in Charles County; developed improvement concepts; reviewed accident analyses; and determined engineering feasibility and environmental impacts of the proposed improvements. Evaluated right-of-way impacts, environmental impacts, and costs for each alternative. Presented results at several meetings and prepared a final report summarizing the analyses performed, alternates developed, and results of the study.
- Baltimore Regional Rail System Plan Study, Maryland: involved in a technical analysis and study process to create a 40-year rail system plan for Baltimore. Worked closely with Maryland Transit Administration staff and a 23-member advisory committee to create a rail plan to strengthen transit accessibility and connectivity. Participated and presented at multiple public meetings in the Baltimore metropolitan area. The rail plan was successfully developed and increases Metro and Light Rail from 43 to 109 miles and from 54 to 122 stations.
- Glen Burnie LRT Expansion, Maryland: performed traffic analyses for a proposed light rail extension route. Analyzed major intersections using Highway Capacity Manual techniques and software for unsignalized and signalized intersections, as well as the Maryland State Highway Administration's critical lane and queuing analysis methodologies. Mitigated intersections that resulted in poor levels of service due to the light rail train (build scenario) by altering lane usage and providing additional intersection capacity. All results were documented and included in a Draft Environmental Impact Statement.

Jenny Kapelyan, P.E.
Assistant Project Manager/Management Support

Jenny is a project controls manager with PB experienced with cost control, subcontract administration, subconsultant coordination, documentation, presentation preparation, and project office management. Her previous experience was as a civil engineer experienced in Right-of-Way determination, preparing profiles and cross sections; site grading; roadway drainage; utility relocation; maintenance and protection of traffic schemes; and corresponding calculations, details, and estimating engineering quantities for major highway and transit projects. She is also familiar with conducting hydraulic and hydrologic analyses, investigating environmental claims, and analyzing remediation processes. Jenny is familiar with several computer software packages and applications, including Microsoft Office, Microstation, AutoCAD 14, Visio, and Visual Basic. All duties are carried out in accordance with ISO 9000 quality assurance procedures.

Fast Facts

Years of Experience
13

Education
B.S., Civil and Environmental Engineering, Cornell University, 1997

Licenses/Registrations
New York, 2003 [redacted]

Professional Affiliations
Women's Transportation Seminar: Director-At-Large

History of Employment
Leonard Jackson Associate 1997
PB 1994 – current

Representative Project Experience

- No. 7 Subway Line Extension, NYCT, New York City: project controls manager responsible for cost control, subcontract administration, subconsultant coordination, documentation, presentation preparation, and project office management. In her previous role as civil engineer, she was responsible for Right-Of-Way determination, interagency coordination, and all forms of civil design and support associated with EIS, conceptual and preliminary engineering design for a design/build package and a design-bid-build package. This project included the EIS and preliminary engineering design for the extension of an existing subway within Manhattan and is associated with the rezoning/redevelopment of the west side of Manhattan.
- No. 1 & 9 Subway Line Restoration, New York City Transit (NYCT), New York City: civil engineer responsible for maintenance and protection of traffic scheme, street grading, combined sewer cross-sections and profiles, and temporary and permanent utility relocations as part of a project exploring the reconstruction of a portion of existing subway track by adding a bellmouth structure to accommodate an additional turnaround track.
- Myrtle/Wyckoff Station Rehabilitation, Brooklyn, New York: civil engineer responsible for maintenance and protection of traffic scheme, street grading, utility relocations, and interagency coordination during the rehabilitation of this NYCT subway station. Potential street conflicts include placement of new elevator shafts to improve Americans with Disabilities Act (ADA) station accessibility.

- Rehabilitation of First Avenue and Long Island City Ventilation Shafts, New York City: civil engineer responsible for interagency coordination, utility relocations, new service connections, site grading, maintenance and protection of traffic schemes, and correspondence with project surveyor for the rehabilitation of Amtrak and Long Island Rail Road (LIRR) ventilation shafts and buildings in the boroughs of Manhattan and Queens.
- Pelham Parkway Station Rehabilitation, Bronx, New York: civil engineer responsible for maintenance and protection of traffic scheme, street grading, and utility relocations for rehabilitating this NYCT subway station. Potential street conflicts include placement of new elevator shafts to improve ADA station accessibility.
- Rehabilitation of North River Railroad Tunnels and Facilities at Weehawken Ventilation Shaft, Weehawken, New Jersey: civil engineer responsible for interagency coordination, utility relocations, new service connections, site grading, and correspondence with the project surveyor for the rehabilitation of Amtrak's ventilation shafts and buildings in Weehawken.
- 42nd Street and Eighth Avenue Station Rehabilitation, New York City: civil engineer responsible for design of a temporary maintenance and protection of traffic scheme, street grading, and utility relocations for this NYCT subway complex.
- Metro-North Railroad Croton-Harmon Maintenance Facility, New York: civil engineer responsible for correspondence with the project surveyor, design of utility relocations, new utility service connections, site grading, preparation of details, cross sections, drainage calculations, and an existing utility assessment report for the rehabilitation of Metro-North's Croton-Harmon Yard and maintenance repair facility. In addition, the project also included the preparation of a master plan for the entire 100-acre site, for which she assisted in reviewing the design and construction impacts to the stormwater collection system.
- Long Island Expressway Development Study, New York City: deputy project manager responsible for assisting with the preparation of technical reports and public presentation information. In addition, Jenny directly interfaced with the client and was responsible for cost control and reporting. This project investigated the feasibility of upgrading a portion of the Grand Central Parkway (GCP) between the Triborough Bridge and the West Spur of the Brooklyn Queens Expressway (BQE) to interstate highway standards.

Kurt Kauffman, P.E.
Project Managewr/Management Support

Kurt is a civil engineer at PB with over 17 years of professional experience in the management of transportation projects, specifically in the area of public transit facilities and infrastructure. He also has experience in right-of-way engineering, utility relocation engineering and permit preparations. Furthermore, as a commissioned officer in the United States Navy, Civil Engineer Corps Mr. Kauffman had proven leadership skills and a proven track record in contingency engineering.

Fast Facts

Years of Experience
17

Education
M.S., Engineering Management, New Jersey Institute of Technology, 2003; B.S., Civil Engineering, New Jersey Institute of Technology, January 1992

Licenses/Registrations
New Jersey, 1996

Professional Affiliations
American Society of Civil Engineers, Member; Society of Military Engineers, Member

History of Employment
NJ Transit 1992– 2008
US Navy 1999Stuart Consulting 2009
PB 2009 - current

Representative Project Experience

- Louisiana Coastal Area Ecosystem Restoration, Coastal Parishes, Louisiana: deputy program manager for the US Army Corp of Engineers (USACE) responsible for program oversight of USACE project managers to deliver coastal restoration studies authorized by the Water Resources Development Act of 2007. Responsibilities included monitoring of schedules, budgets and deliverable products, regular reporting to the Branch Chief for program progress and tracking, periodic reporting and preparation of briefing material for the New Orleans District Commanding Officer and technical oversight of study engineering activities.
- Newark City Subway Broad Street Extension (NERL MOS-1), City of Newark, New Jersey: program manager for the final design and construction of a 1-mile (1.6 kilometer) extension of the Newark City Subway from Penn Station to NJ TRANSIT's Broad Street Station on the Morristown Line. Responsibilities included management of a multi-disciplinary team overseeing issues such as right of way engineering, signal design, track design, electric traction power, facilities, and communications. Also responsible for the management of a Federal Transit Administration (FTA) full funding grant agreement and maintenance of the project management plan.
- Newark City Subway, Station Renovation, Reconstruction and Americans with Disabilities Act (ADA) Compliance, City of Newark, New Jersey: project manager for preliminary and final design, and construction of major renovations or new construction of passenger facilities. Duties included contract procurement for design and construction services, right-of-way engineering, trackwork engineering, coordination with signal design and installation, coordination with installation of a new catenary system, facilities design and real estate procurement.

- New Jersey Transit Key Station Program/ADA Compliance, New Jersey: project manager for final design and implementation of measure to bring NJ TRANSIT's passenger rail system into compliance with the ADA. Features of the program included new passenger facility construction, renovations of historic faciliaites, development of compliance standards, and coordination with citizens' advocacy groups. Duties included contract management for final design and construction of 10 contract packages, trackwork engineering, facilities engineering, and coordination with railroad entities for design and construction, site planning, and accessibility surveys.
- Hurricane Katrina Recovery, Gulfport, Mississippi: orders and reports writer for the US Naval Construction Force's role in the recovery from the effects of Hurricane Katrina on the Gulf Coast from New Orleans, Loisiana to Bayou LaBatre, Alabama. Duties included preparation of daily engineering situation reports from subordinate units in the field, presentation of recovery efforts and plans to higher headquarters and general staff, coordination with adjacent Army, Navy, and Air Force commands for assistance in the recovery efforts and preparation of project plans and orders to subordinate operating units.
- Operation Enduring Freedom, 22 Naval Construction Regiment, Gulfport, Mississippi: assistant operations officer for Naval Construction Regiment in support of Operation Enduring Freedom and Iraqi Freedom. Duties included assisting the operations officer in preparation of regimental operating plans and orders for subordinate units operating in CENTCOM and the United States, tracking and monitoring of over 45 projects in support of ongoing operations and reporting to customers such as the Army and other Navy units operating under the regimental command.
- Baldwin Avenue Roadway Improvements, Township of Weehawken, New Jersey: project engineer responsible for environmental compliance issues and site utility coordination. Responsibilities include coordination with utility and environmental sub-consultants, preparation of right-of-way (ROW) documents, environmental permit plans and coordination/preparation of contract plans and documents.

Steven Kaufman, P.E.
Assistant Project Manager/Management Support

Steven specializes in bridge analysis and design, and inspection and rehabilitation of long-span and complex rail and highway bridges. Bridge types he has worked on include segmental concrete box girders, suspension, truss, arch and cable stay. He is skilled in the use of FORTRAN, GTSTRUDL, TANGO, and STAAD, and has participated in on-site emergency inspections and construction inspection operations.

Fast Facts

Years of Experience
28

Education
M.S., Civil Engineering, City College of New York, 1987;
B.S., Civil Engineering, City College of New York, 1982

Licenses/Registrations
New York, 198 [redacted]
Michigan, 1997 [redacted]

History of Employment
Hardesty & Hanover 1982 – 1983
Steinman 1987 – 1994
DRC Consultants 1994 - 1998
PB 1983 – 1987; 1998 – current

Representative Project Experience

- New York State Department of Transportation, Region 10, New York: project manager and team leader for inspection of approximately 150 sign support structures of various framing and support configurations, and fabricated primarily of welded aluminum or steel elements. A bucket truck, free climbing, digital cameras, a D-meter and dye penetrant testing were used to identify and record cracks, and other structural deficiencies.
- Jamestown-Verrazzano Bridge, Jamestown, Rhode Island: deputy project manager and task manager for the biennial inspection and evaluation of the structure performed in May 2009 Inspection utilized Advitam Scanprint bridge inspection and data management system, a laptop PC-based system that permits direct input of data into digital files saving time, improving efficiency and eliminating subsequent office transcription of hand-written data into digital format with the extensive time and potential opportunities for inaccuracy inherent in this process. Structure comprises segmental concrete box girder main structure and precast AASHTO girder approach structure. Together, the bridge measures approximately 7,355 feet (2,242 meters) in length. Steven's primary responsibilities included planning, scheduling, on-site coordination and supervision, developing protocols associated with use of the Scanprint system that were compatible with RIDOT requirements, quality control and report preparation.
- MTA-Long Island Rail Road (LIRR) 2002 Comprehensive Assessment of Line Structures, New York: team leader on this $2.3 million LIRR project to assess the existing structural condition of 513 undergrade bridges, 29 viaducts, four tunnels and 182 culverts.
- Manhattan Bridge Biennial Inspection, New York, New York: team leader for inspection of the roadway and NYCT railway portions of the structure. The inspection was performed in accordance with American Association of State Highway and Transportation Officials

(AASHTO), New York State Department of Transportation (NYSDOT), and Uniform Code of Bridge Inspection requirements.

- Long-Term Bridge Performance Project, Federal Highway Administration, nation-wide: task manager for development and implementation of program inspection plan and associated training. The LTBP program is envisioned as a 20-year research study to expand quality information available on bridge performance in order to help bridge and highway managers make better decisions. This study will be the first to collect uniform bridge performance data at the national level. The funding for this contract was authorized by Congress in 2005 under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Among the study's objectives are improved life-cycle cost and predictive models, better understanding of bridge deterioration and more effective maintenance and repair strategies. LTBP results should also support improved design methods and bridge preservation practices and help develop the next generation of bridges and bridge management systems. Over the next five years, the program partners will inspect, document, evaluate and periodically monitor a representative sample of bridges nationwide, taking advantage of advanced condition monitoring technologies in addition to detailed visual inspections. The high-quality data gathered in the process and the subsequent data analysis and mining aim to significantly enhance knowledge of bridge performance.
- Mount Macdonald Tunnel, British Columbia, Canada: analyzed, designed and checked portions of the reinforced concrete cut-and-cover rectangular sections of the longest railroad tunnel—9.1 miles (14.6 kilometers) long—in North America. Steven designed a tied-back reinforced concrete panel retaining wall and designed and checked members of a steel-framed tunnel ventilation building.
- A lead auditor for the firm's New York office ISO9001-2001-certified quality management system and ISO14001-2001-certified environmental management system.
- A lead auditor for the firm's New York office ISO9001-2001-certified quality management system and ISO14001-2001-certified environmental management system.
- Passenger Ship Terminal Piers 40, 88, 90, 92 and 94, New York, New York: responsible for inspection.
- Brooklyn Terminal Piers, New York, New York: responsible for inspection.
- Port Elizabeth and Port Newark Shipping Terminals, New Jersey: responsible for inspection.
- Newport News Shipyard, Virginia: checked design of reinforced concrete apron structure resting on an elastic foundation, designed portions of reinforced concrete electrical vault structures, and modeled portions of gantry crane structure supported on piles on elastic foundation.

Thomas Li, P.E., C.Eng.
Project Manager/Management Support

Thomas has extensive professional experience in the field of electrical engineering gained in the United States of America, South America, United Kingdom, and Hong Kong. He has performed conceptual and detailed engineering, including the development of design criteria, design reports, specifications, and standard, directive, and contract drawings. He has provided these services for electrical systems on a variety of transportation and commercial projects. He has developed proficiency in computer simulation operation for modelling both train operations and traction power systems. Thomas is also an experienced project manager who has successfully led design teams in undertaking transit and building services related projects.

Representative Project Experience

- Newark-Elizabeth Rail Link, New Jersey Transit, Newark, New Jersey: project manager for construction phase services to provide tunnel ventilation in the existing subway and incorporate a new jet fan-based ventilation system for the extension. Project elements include: 4.16-kV medium and low voltage power distribution, supervisory control and data acquisition (SCADA) system, tunnel ventilation, plumbing, fire protection and other disciplines.
- Amtrak Pennsylvania Station, New York City: project manager for construction phase services for the rehabilitation of Penn Station serving Amtrak, LIRR, and NJ TRANSIT lines. Closely coordinated with Amtrak, LIRR, the construction manager, the contractor, and subcontractors for immediate resolution of construction issues and evaluation of contractor claims for additional services.
- PATH Tunnel Negative Return Simulation, PANYNJ, New York City: performed computer simulation and analysis on traction power negative return system to establish negative supplementary cabling requirements for multiple-car transit operation. Simulation required innovative adaptation of configuration to model established sectionalization scheme to obtain desired

Fast Facts

Years of Experience
30

Education
B.S. (Honors), Electrical and Electronic Engineering, Nottingham University, U.K., 1980

Licenses/Registrations
Professional Engineer: New York, 1993 [redacted] New Jersey, 1996 [redacted] Missouri, 2003 [redacted] ; Pennsylvania, 2006 [redacted] Chartered Engineer (Building Services, Electrical): UK; Professional Engineer (Building Services, Electrical

Professional Affiliations
Institute of Electrical and Electronics Engineers; Illuminating Engineering Society of North America; Hong Kong Institution of Engineers; Institution of Electrical Engineers, UK; Chartered Institution of Building Services Engineers, UK; European Federation of National Engineering Associations

History of Employment
Jardine Engineering Corp Ltd
1980 – 1981
PB 1982 – current

results.

- Brooklyn Arena/ Vanderbilt Avenue (VD) Yard Replacement, Long Island Rail Road (LIRR), Brooklyn, New York: project electrical engineer for the design and construction support services to relocate LIRR's VD Yard to facilitate construction of an arena designed by Frank Gehry for use by the Brooklyn Nets basketball team. The relocated yard must be constructed in a phased manner to allow continuance of LIRR's fleet storage and maintenance on the Atlantic Branch.
- PATH Harrison Rail Car Maintenance Facility Rehabilitation, PANYNJ, New Jersey: supervised the design of the 650V DC traction power system for the truing machine facility and yard tracks. Also performed QA/QC review of all other electrical and communications system designs.
- No. 7 Subway Line Extension, New York City: as project electrical engineer for design of electrical systems, Thomas leads a group of engineers responsible for the preliminary design of all electrical systems and coordination with the mechanical engineers for this project.
- Hudson-Bergen Light Rail Transit (LRT) System, New Jersey: participated in the conceptual and detail design of DC traction power system. This project for NJ TRANSIT involves providing general design consultant services for a $1.2 billion, 20.5-mile light rail transit system.
- AirTrain, New York City: supervised the conceptual and detail design of the electrical power system for the restricted service road/tunnel and the automated light rail transit tunnel at John F. Kennedy International Airport. Prepared the detail design of the approaches and tunnel lighting systems.
- Blue Mountain and Kittatinny Mountain Tunnels, Franklin County, Pennsylvania: project engineer responsible for the design report for complete renovation of tunnel lighting systems for these two twin-bore tunnels, 4,339 feet and 4,727 feet in length, respectively. Supervised the detail design of the tunnel lighting system.
- Port Newark Container Terminal – 13.2 KV Ring Main, PANYNJ, New Jersey: project electrical engineer responsible for supervising the design of the electrical infrastructure consisting of a medium voltage ring main, duct banks, manholes and splicing to MV switches. Reviewed main substation loads including 13.2 kV port cranes, RTG (Gantry Crane) power, high mast lighting, and duct bank systems. Coordinated with existing and future load growth and prepared construction documents. Also provided support services during construction, including review of shop drawings and witnessing of field tests.
- Proposed Duplin County Cogeneration Facility, North Carolina: preliminary electrical design for a 26-MVA coal-fired steam turbine generator and associated plant equipment.

Ruth Lu, P.E.
Project Manager/Management Support

Ruth is the manager of the structures group of PB and she has extensive experience in the engineering and management of transit and rail structures, facilities and bridge projects.

Fast Facts

Years of Experience
20

Education
M.E., Civil Engineering, Manhattan College, 1988
B.S., Civil Engineering, Union College, 1983

Licenses/Registrations
New Jersey, 1998 [redacted] New York, 1989 [redacted]

History of Employment
Metro-North RR 1990 – 1995
Systra Consulting 1995 – 2000
NYCT 1995
PB 2000 – current

Representative Project Experience

- Amtrak, Old Saybrook, Connecticut: project manager for the final design of trackwork configurations, high-level platforms, and a pedestrian overpass at the historic Old Saybrook Station.
- NJ TRANSIT Lyons Station, New Jersey: project manager for final design of Lyons Station. The design elements included station rehabilitation, improved low-level platform, a new mini high-level platform, and site improvement.
- NJ TRANSIT Union Station, New Jersey: project manager for preliminary design of Union Station, a new facility for NJ TRANSIT's Raritan Valley Line between Roselle Park and Newark's Pennsylvania Station. The design included total site development, a pedestrian underpass, a high-level platform on an embankment, station building, and track and signal design. The project also included preparation of an environmental report that was approved by the Federal Transit Administration.
- Northern New Jersey Maintenance Facility, Clifton, New Jersey: supervising structural engineer for the foundation design of bus maintenance facility for 250 buses.
- Greenville Bus Facility, New Jersey: project manager during construction phase for NJ TRANSIT's Greenville bus facility. Ruth's responsibilities included regularly scheduled construction meetings with the client and the contractor, resolution of conflicts, and shop drawing review.
- New Jersey Schools Construction Corporation (NJSCC), Newark, New Jersey: project manager in the design phase of new Pre-Kindergarten to 8th grade schools for the Newark Public Schools. Ruth's projects included the First Avenue School, Ann Street School and Hawkins Street School. PB is providing program management services to the NJSCC.
- West 42nd Street Development Overbuild, NYC: providing catenary modification options to a developer for replacement of existing structures over the Amtrak's Empire Line right-of-way. Tasks include schematic and final design which may include dead-end of existing catenary, lowering the existing catenary during construction, coordination with design team

on catenary location, temporary and final support and heights and also coordination with Amtrak on the proposed catenary modifications.

- Schalk's Crossing, Princeton, New Jersey: PB is providing engineering design of bridge superstructure replacement and widening over the Northeast Corridor. The overhead catenary system (OCS) work includes developing options to relocate the existing catenary systems wires attached to the existing bridge, field measurement of the catenary wires and developing wire profiles to clear the proposed bridge widening. Ruth provided engineering design on this project.
- New Haven Rail Yard Improvement, New Haven, Connecticut: lead catenary engineer for the design of the overhead catenary system and task lead for the systems design. PB is providing engineering services to reconfigure and improve the existing Metro-North Rail Yard to increase capacity to support the expansion of the MNR fleet.
- Hampton Roads Transit (HRT), Norfolk, Virginia: senior catenary engineer providing the design of the OCS layout plans. PB is providing engineering services for the new approximate 7 miles of new light rail transit system including OCS, traction power and signals and communications.
- Hudson-Bergen Light Rail Transit System, New Jersey: supervising structural engineer for MOS-3 which encompassed an extension from 21st Street to 8th Street in Bayonne, and a 12-mile extension from Tonnelle Avenue Station to Tenafly. Work includes viaduct structures and station facilities.
- Southern New Jersey Light Rail Transit, New Jersey: lead structural engineer for final design of station facilities from Camden to Trenton.
- Massachusetts Bay Transportation Authority (MBTA), Wilmington, Massachusetts: project lead structural engineer for the design of MBTA's Wilmington Station.
- North Avenue Corridor Improvements, New Jersey: supervising structural engineer in final design of four new bridges located at NJ Turnpike Interchange 13A.

Christopher MacDonnell, P.E.
Assistant Project Manager/Management Support

Christopher (Chris) has spent 19 years designing, rehabilitating and inspecting bridges, with a focus on long-span, complex, suspension and cable-supported bridges. In the U.S., he has worked on structures throughout New York, Connecticut, Pennsylvania, Rhode Island and Minnesota. He has also worked in Scotland, Denmark and Panama, providing him experience with addressing a variety of different cultural and agency needs.

Chris spent 10 years working for the Connecticut Department of Transportation and the Triborough Bridge and Tunnel Authority, a major public authority that owns and operates seven major bridges and two tunnels in New York City. This firsthand experience gives him a thorough understanding of the needs of a public agency. With much of his project experience centered in high population urban centers, Chris is also familiar with the high traffic demands and variety of needs of the public that come into play in bridge projects in these areas.

He approaches projects with a 'big picture' point of view, taking into account design and construction concerns, as well as those of the client and public. He has experience with the preparation of design documents and inspection and rehabilitation reports; developing contract drawings; and has been a team leader and site and field coordinator on various inspections.

Fast Facts

Years of Experience
19

Education
B.S., Civil Engineering, Worcester Polytechnic Institute, 1986

Licenses/Registrations
New York, 1996 ([redacted];
Connecticut, 1994 [redacted]

History of Employment
MTA Bridge & Tunnel 1991 – 1997
Leonard Jackson Associate 1997
Monberg & Thursen 1998 – 2000
Amman & Whitney 2000 – 2006
PB 2006 -current

As part of Minnesota's emergency bridge inspections that followed the Interstate 35W bridge collapse, he participated in a compliance review of the Minnesota Department of Transportation's (MnDOT) inspection program. He also helped develop procedures surrounding emergency gusset plate inspection for a number of MnDOT's truss bridges.

Representative Project Experience

- Throgs Neck Bridge Special Inspection, New York City: project manager for the interim inspection of the Throgs Neck Bridge for the TBTA. He prepared invoicing, monthly schedule and budget updates, while also providing quality control for flag and final reports. He scheduled and coordinated with equipment and maintenance and protection of traffic (MPT) vendors for access and lane closures, and he closely coordinated activities with facility operations personnel, including advanced notice for all lane closure and access to high-security areas.

- East Side Access, New York City: package manager for the 55th street ventilation facility. As part of this tunnel mega-project he leads a multi-discipline team to produce design documents for an underground ventilation facility that included street excavation in a sensitive location of midtown Manhattan.
- Newport Pell Bridge, Rhode Island: structural inspection, team leader and field coordinator for structural inspection of the suspenders and main span structural elements anchorage. The inspections also included the fracture critical approach truss spans.
- Emergency Bridge Inspection, Minneapolis, Minnesota: field coordinator and team leader for the inspection of MnDOT's Hennepin Avenue suspension bridge. Inspections included the main cable, suspender ropes and sockets of the main cable in the anchorage; the suspender ropes of three cable supported arch bridges; and multiple fracture critical trusses. He also participated in the compliance review and process improvement.
- Robert Moses Causeway Bridge, Islip, New York: as part of rehabilitation design for the New York State Department of Transportation (NYSDOT), performed an in-depth inspection of this arch bridge over the Fire Island inlet.
- Hoboken Blocks Inspection, Hoboken, New Jersey: team leader for a façade inspection of two residential structures for the Port Authority of New York and New Jersey, located on Port Authority land on the Hoboken River.
- Henry Hudson Bridge Call-in Inspection and Design Services, New York: task manager for two assignments at the Henry Hudson Bridge for the TBTA. These projects included the preparation of budgets and schedules, inspections, and coordination with in-house design staff in the preparation of plans and specifications. Work also included concrete repairs and the inspection and repair of underground tanks.
- Bridge of the Americas, Balboa, Panama: he was project engineer and local site manager for inspection of bridge suspenders, cables and substructure elements for the Panama Canal Authority. His responsibility included managing local subcontractors for rigging and access, and interfacing with local officials for MPT. The project also included preparation of a report for the client that recommended repair alternatives for replacement and cost estimates for each alternative.
- Triborough Bridge Biennial Inspection, New York City: team leader for inspection of the anchorages and various other structural elements. The inspection included paint condition and structural ratings, preparation of flag reports and participation in writing the inspection report.

Ferdinand Portuguez, P.E.
Assistant Project Manager\Management Support

Ferdinand offers extensive field and rehabilitation experience. He has worked on many local projects, including transportation, structural and civil disciplines. He is currently serving as deputy project manager for PB's work on the rehabilitation/ reconstruction of the Park Avenue Tunnel in New York City. Ferdinand is certified as a PB Internal Auditor and conduct quality audits within PB.

Fast Facts

Years of Experience
20

Education
M.S., Structural Engineering, The City College of New York, June 1996; B.S., Civil Engineering, Polytechnic University, June 1990; B.S., Physical Science, St. John's University, June 1990

Licenses/Registrations
New York, 2001 [redacted]

Professional Affiliations
American Society of Civil Engineers (ASCE)
American Institute of Steel Construction (AISC)

History of Employment
Slattery Associates 1990 – 1995
Goodkind & O'dea 1996 – 2001
PB 2001 -current

Representative Project Experience

- Rehabilitation/ Reconstruction of the Park Avenue Tunnel, New York: deputy project manager for NYCDOT project as well as inspection team leader for an in-depth hands-on inspection of structural elements. Project involves preparation of structural inspection report, test pit investigation report, environmental site assessment report, emergency ventilation analysis report, electrical power, lighting, and traffic systems inspection report, final design drawings, specifications and cost estimate for the rehabilitation of the Park Avenue Tunnel. Reports include condition evaluations and recommendations. Key elements are structural repair to the tunnel elements, analysis of brick arch and strengthening techniques, concrete and brick coring investigation, evaluate waterproofing techniques and waterproof tunnel, replacement of roadway, geotechnical soils investigation, environmental/ hazmat investigation/ mitigation, design tunnel lighting system, re-examine existing heat detection system, re-examine CO sensors and tubing, analyze existing ventilation system and vehicles emissions, design of new standpipe system.
- Brooklyn Battery Tunnel Rehabilitation, New York: deputy project manager for the rehabilitation of the tunnel walls, roadway and drainage system and the rebuilding of the tunnel water system. Key field elements included an environmental site assessment, hands-on field inspection, material testing including concrete coring and compressive strength tests, unit weight measurements, chloride content tests and petrographic examinations, ultrasonic steel thickness measurements, half-cell corrosion measurements, impact-echo tests, preparing an inspection report including conclusions and recommendations, top of roadway slab repair evaluation report and ceramic wall tiles replacement/ repair report. Ferdinand was responsible for developing contract documents, including drawings, specifications and construction cost estimate take-offs and was responsible for the shop

drawing review and document control for the construction support services phase. He attended progress meetings, directed subconsultants and maintained a dialogue with the client during the design phase which was successfully completed.

- Queens Midtown Tunnel Inspection Services, New York City: task manager and inspection team leader responsible for developing an inspection program for various civil/ structural elements of the tunnel including, assessment of the existing molten zinc corrosion protection system located on the underside of the roadway slab, the hanger assemblies supporting the precast roadway ceiling panels, concrete surfaces in the Fresh Air and Exhaust Air Ducts, as well as roadway level elements. Developed an inspection and recommendation report.
- East River Tunnels Leak Repair between 1st Avenue Shaft and 7th Avenue Portals, New York: responsibilities included developing an existing condition plans based on survey performed at track level, preparation of final design drawings and preparation of technical specifications and support during construction.
- La Guardia Airport Inspection Services, New York: performed inspections of Hangar Building 19. Inspection included the roof truss members and connections, and attachments from roof truss. Inspection access was performed from 135 foot manlift.
- Myrtle-Wyckoff Station Rehabilitation, New York: assisted with girder retrofit design and platform rehabilitation.
- LIRR Projects, New York: projects included rehabilitation of and construction phase services for Grand Avenue and DB Bridges, in Queens New York; rehabilitation of and construction phase services for eight Queens bridges; and replacement and construction phase services for the Manhasset Avenue Bridge in Manhasset, New York. For these LIRR projects Ferdinand coordinated with and requested permits from the New York City Department of Transportation; coordinated with and requested flagmen and track outages from LIRR; performed field inspection at track level and below track level including a swing bridge; prepared flag reports; prepared coring plan and inspection findings report with rehabilitation recommendations; designed thru girder-floorbeam-stringer bridge carrying two railroad tracks over two directional roadways; checked design of reinforced concrete pivot pier for swing bridge carrying railroad over waterway; prepared design plans and specifications using CSI format; prepared progress schedules; reviewed submittals; attended construction progress meetings; performed site visits for field condition inspection; and responded to Request for Information issues.
- Rehabilitation of Beacon Station, Beacon, New York: responsibilities for this Metro-North project included the design of the Beacon Station temporary timber passenger platform including access ramp in conformance to Americans with Disabilities Act (ADA) standards.

Therese Edwards, P.E.
Assistant Project Manager\Management Support

Therese is a civil engineer experienced in preparing preliminary and final designs for highways, conducting major transportation planning studies, Intelligent Transportation Systems (ITS) and site design. Therese is also experienced in project controls and is familiar with computer-aided design software.

Fast Facts

Years of Experience
23

Education
B.S., Civil Engineering, University of Notre Dame, 1997

Licenses/Registrations
Professional Engineer: Pennsylvania, 2003

History of Employment
JCA Associates Inc. 1987-1998
PB 1998-current

Representative Project Experience

- No. 7 Subway Extension, New York: assistant project controller and subconsultant coordinator during the Preliminary Engineering and DGEIS development of the 7 Subway Extension Project and Midtown Manhattan Rezoning. Therese's duties included development of cost proposal documents and Prime Contract Modifications, Subconsultant and Per Diem Contracts and Modifications, budget and staff tracking, preparation of monthly progress reports, invoicing.
- Access to the Region's Core, New York/New Jersey Region: developed plans and profiles for different alternative routes for improving commuter and freight access to the core of the New York/New Jersey Metropolitan region. Alternatives included rapid transit, commuter rail, and freight rail which linked existing lines in New Jersey, Manhattan and Queens.
- No. 1 & 9 Subway Rehabilitation, New York: project engineer working on the conceptual studies of rehabilitating the Lower Manhattan subway line and stations damaged on 9/11. Therese developed track and station plans and profiles for different reconstruction and rehabilitation alternatives.
- New York Metropolitan Region ITS Full Deployment Plan, Bronx and Northern Manhattan, New York: project engineer responsible for the preparation of plans, specifications, and estimates (PS&E) documents. This effort included detailed design of field equipment such as incident detection, variable message signs (VMS), classification detection, closed circuit television surveillance cameras, and weather and pavement icing detectors on the region's limited access highways. She performed and oversaw data collection for contract documents; guiderail design; and equipment, ramp meter equipment location, basic conduit, and sign structure layout. In addition, she supervised the CADD staff assigned to the project and developed the final estimate of quantities. The project, which required extensive coordination with multiple consultants, introduced her to NYSDOT policies and procedures. Therese's assistance was instrumental during this process.
- Traffic Signal and Coordination System Installation, New Rochelle, New York: project engineer responsible for configuration of the traffic signal layout for new traffic signals

along North Avenue. Therese also assisted in re-striping design and preparing bid documents, quantity take-offs, and cost estimates.

- Staten Island Expressway Bus Lane, New York: assisted in the development of the design report for the extension of a bus lane, new bus ramps and rehabilitation of mainline bridges. This work included studies of different bus lane/ramp configurations, drainage analyses, quantity/cost estimates, coordination with different disciplines and report writing. Work also included development of a project presentation for a Public Information Meeting.
- Long Island Expressway Capacity Improvement Project Exits 36-40, New York: project engineer responsible for design of guiderail and barriers for the project corridor. Therese assisted in the development of the contract drawings including plans, profiles, special details and tables, and engineering quantity and cost estimates.
- I-84/I-87 Interchange Design, New York: assisted in the development of horizontal and vertical alignments using Microstation and InRoads for a new highway interchange.
- Central Westchester Parkway Safety Improvements, Westchester County, New York: project engineer for schematic design of the Central Westchester Parkway widening to accommodate placement of a corrugated beam mall barrier and asphaltic concrete overlay on the parkway between Grant Avenue and State Route (SR) 22 in the city of White Plains and the town of New Castle. Therese assisted in preparing PS&E documents. This effort involved site investigations to determine present drainage conditions and potential impacts to landscaping, altering the existing stormwater management system, and preparing quantity take-offs and cost estimates.
- Long Island Transportation Management Center, New York: assisted in preparing PS&E documents for reconstructing an existing building and site work for the NYSDOT Region 10 Transportation Management Center. Her role included stormwater management design, and development of profiles. Therese also prepared quantity take-offs and developed cost estimates using the NYSDOT's PES (design cost estimating) Program.
- Southern New Jersey Light Rail Transit, New Jersey: project engineer for the planning, engineering, and design of station stops along the new light rail line. Therese's responsibilities have included design of access roads, parking lots and station layouts, as well as design of site stormwater management systems.

Anca Baron
Assistant Project Manager\Management Support

Anca, a lead engineer at PB, possesses extensive experience in the field of civil/structural engineering design, project management, and jobsite construction supervision. Her background includes a variety of commercial, residential, and institutional projects. Her professional experience includes the analysis and design of new steel and concrete buildings, as well as the renovation and rehabilitation of existing structures.

Fast Facts

Years of Experience
26

Education
M.S.C.E., Civil/Structural Engineering, Institute of Construction, Bucharest, Romania, 1979

Professional Affiliations
Structural Engineers Association of New York

History of Employment
WSP Cantor Seinuk
1984 – 2001
PB 2001 - current

Representative Project Experience

- Farley Building (Pennsylvania Station) Redevelopment, New York City: served as a deputy project manager for engineering and worked with teams of architects, engineers, and specialty consultants to redevelop the historic James. A. Farley Post Office into a state-of-the-art intermodal transportation facility from the conceptual phase through project implementation. The project includes restoration of the building's historic exterior and public spaces and construction of a new concourse level above active Amtrak railroad tracks and a major redesign of the United States Postal Service (USPS) truck dock parking facility. Responsibilities included managing and coordinating the structural and mechanical, electrical, plumbing (MEP) design effort; agency review and coordination; reviewing cost estimating and construction schedules; coordinating postal and rail operations; and developing the master phasing/staging plans for the railroads and USPS.
- Hilton Corridor Improvement at Penn Station, New York City: as part of the Farley Building redevelopment, this involved renovating an existing corridor to improve circulation and access in the station. She worked with architects and other engineering consultants to develop the implementation and phasing plan to allow for the renovation while minimizing impacts on railroads, passenger safety, and comfort.
- Amtrak East River Tunnel Ventilation Shaft Rehabilitation, New York City: serving as deputy project manager, she is responsible for managing and coordinating the structural, architectural, and MEP design effort for the reconstruction of Amtrak's East River tunnel ventilation shafts at Long Island City, Queens and First Avenue in Manhattan (four shafts at each site). The shafts will be reconstructed with new emergency ventilation plants and evacuation stairwells.
- City Tunnel No. 1, Shaft 23 Value/Distribution Project, Brooklyn, New York: deputy project manager for a critical New York City Department of Environmental Protection (NYCDEP)

water supply project involving valve/distribution chambers 23 and 16A, shaft sites on city water tunnels 1 and 2.

- World Trade Center Disaster Area, New York City: responsible for on-site structural support during contractor's debris removal efforts.
- Performing Arts Center of Greater Miami, Florida: facility includes a 200,000-square-foot concert hall and 300,000-square-foot ballet/opera house with a connecting pedestrian bridge. Both buildings are framed in steel supporting concrete and metal deck floor slabs. This is a highly unique structure tailored to the special acoustical needs of the performing arts environment.
- Court Street Development, Brooklyn, New York: involved in the construction of a 13-story structural steel building, retail space, and 12 cinema theaters framed in lightweight steel.
- 383 Madison Avenue, New York City: 1.2 million-square-foot, 45-story structural steel building constructed over Metropolitan Transportation Authority/Metro-North Railroad tracks to house Bear Stearns Companies Inc.'s new corporate headquarters. The 800-foot-high structure features a steel frame with a concrete shear wall lateral system. The project was awarded the *New York Construction News* 2001 Award of Merit.
- Grand Central Terminal Revitalization, New York City: this major renovation of the landmark Grand Central Terminal building was awarded the *New York Construction News* 1998 Project of the Year Award.
- Steinway Street Theaters, Astoria, Queens: two-story parking garage and a structure to house an 11-cinema theater.
- Mellon Bank Center, Philadelphia, Pennsylvania: 55-story, composite structure. The project was awarded the New York Association of Consulting Engineers 1991 Award of Engineering Excellence.
- Brooklyn Union Gas Building, Brooklyn, New York: 22-story steel structure.
- 1325 Avenue of the Americas, New York City: 47-story structural steel building.
- Newport Office Tower, Newport, New Jersey: 47-story steel structure.
- 425 Lexington Avenue, New York City: 38-story structural steel building.
- 7 World Trade Center, New York City: 46-story structural steel building. The project was awarded the New York Association of Consulting Engineers 1987 Award of Engineering Excellence.

David Hiester
Assistant Project Manager/Management Support
Document Control

David is a senior technical specialist and environmental engineer with PB. He possesses extensive knowledge of lead and asbestos regulatory compliance and remediation, and is well versed in the scientific methodologies regarding the sampling, reporting, and finalizing of field generated data. David has also conducted risk assessments for hazardous lead-based paint conditions; consulted on the legal and regulatory ramifications associated with risks; and managed steel structure abrasive blasting projects involving total suspended particulate (TSP) and particulate matter (PM-10) monitoring. In addition, drawing on excellent technical writing and communications skills, he has created formats and designs to clearly present concepts, methodologies, and procedures to clients and staff.

Fast Facts

Years of Experience
22

Education
B.A., Environmental Science, Planning, and Management of Natural Resources, Plattsburgh State College, 1988

Licenses/Registrations
New York State Department of Labor: Project Designer, Asbestos Inspector, Asbestos Management Planner

History of Employment
Ambient Labs 1988 – 1989
ATC Associates 1989 – 1998
PB 1998-current

Representative Project Experience

- NYCT Indefinite Quantity Environmental Engineering Services, New York City: responsible for coordinating all aspects of environmental survey and design services provided by PB and sub consultants. David is responsible for interacting with sub consultants and NYCT to ensure contractual compliance and product delivery.
- State University Construction Fund, SUNY Binghamton and Purchase, New York (Various): responsible for reviewing and approving asbestos contractor credentials for performing asbestos abatement at SUNY campuses.
- Miller Highway Project Final Environmental Impact Statement (FEIS), New York City: responsible for providing an assessment of potential impacts that the positive identification of asbestos would have on the Miller Highway project. Responsibilities included review of existing reports and a visual site inspection to determine the potential for project impacts.
- Airport Access Program, JFK Airport, Queens, New York: lead design document control coordinator responsible for the distribution of all Contract documents, shop drawings, and RFIs to lead disciplines for review and comment. Responsibilities involve the use of Expedition Software for tracking shop drawing and RFI review schedules and preparation of status reports. Associated tasks involve coordination of multi-discipline review documents into one consolidated package for the General Contractor's use during construction. Additional responsibilities include the coordination and distribution of Post Award Contract Changes and Non-Conformance documents resulting from inspections performed by the Resident Engineer's Office. All of these responsibilities involve extensive coordination with

the design team, Contractor, LIRR, and NYCT to ensure timely turnaround of design documents to remain within the scope, schedule, and budget.

- Port Authority Security Capital Program, Jersey City, New Jersey: as part of the project controls group, responsibilities include financial and contract authorization for call-in design consultants, weekly and monthly program status reporting, and development of contract bid documents to facilitate implementation of the Security Capital Program. Project authorization and reporting covers tasks from preliminary design through construction and implementation. Duties involve the standardization of reporting and task order authorization processes to facilitate the execution of the program while maintaining adherence to Port Authority guidelines and policies. Responsible for standardizing internal budget proposals, development of standardized reporting methodologies, and coordination for the implementation of Stage IV construction submittals and RFIs via Expedition Software.
- New York City Department of General Services, New York City: managed and supervised a $750,000 asbestos contract. Services ranged from environmental assessments to all aspects of lead and asbestos services for properties throughout New York City. Environmental services were performed on a variety of facilities ranging from health clinics, fire departments, museums, educational facilities and transportation terminals.
- Metropolitan Transportation Authority (MTA), NYCT, New York City: managed and supervised an $800,000 asbestos contract with this major mass transit agency. Responsibilities included the supervision and oversight of asbestos abatement projects throughout various facilities in New York City. Services included quality control of contractor services, deployment of technician staff responsible for monitoring the project, development of design documents detailing procedures associated with hazardous waste materials, and all administrative duties associated with the contract.
- MTA Bridges and Tunnels, New York City: provided quality assurance testing for lead-based paint clean-up projects at agency facilities throughout New York City.
- Risk Assessment Studies: managed and supervised risk assessment studies to evaluate the liability associated with lead insurance programs provided by Home Insurance and RSA.

Erik Metzger
Assistant Project Manager/Management Support

Erik is a transportation engineer with PB with considerable experience in conducting traffic and transportation analyses for New York City and New York State environmental impact studies (CEQR/SEQRA). He has also undertaken a variety of roles in urban development projects, including the forecasting of travel demand, the simulation of traffic networks using VISSIM, and the development of transportation master plans.

Representative Project Experience

- Sunrise Highway Corridor Sustainable Transportation Study, Suffolk County, New York: transportation engineer for a NYSDOT study to develop near term and long term transportation solutions for the Route 27 corridor in the Town of Brookhaven. The project involved the development of a VISSIM micro-simulation model for 11 miles of limited access highway, service roads, nine grade separated interchanges, and more than 50 signalized intersections. He worked on the calibration of the base year models, which were based on dynamic trip assignments using origin-destination tables, and also compiled Measures of Effectiveness (MOE) statistics for evaluation purposes.
- Logan Airport ConRAC Concept Design Study, Boston, Massachusetts: transportation engineer for a study to develop a consolidated rental car (ConRAC) facility at Logan International Airport. Using VISSIM, a detailed simulation model was developed for on-airport roadways to simulate traffic conditions and assess how the consolidation of shuttle buses serving individual rental car companies into a common busing system serving the proposed ConRAC facility would affect congestion levels at terminal curbsides and travel times on potential shuttle bus routes. The study required a sophisticated data collection program to support the development and calibration of the traffic simulation model. He also developed a 3D model of the airport that was used to create videos of the traffic simulations for presentation purposes and prepared a technical report summarizing the results of the simulation model. As part of the final design phase, he used the VISSIM model to evaluate configuration options for new ramp junctions and

Fast Facts

Years of Experience
10

Education
M.E., Civil Engineering, Rensselaer Polytechnic Institute, 2000; B.S. (Cum Laude), Civil Engineering, Rensselaer Polytechnic Institute, 1998

Licenses/Registrations
Engineer-in-Training: New York, 1998 [redacted]

Professional Affiliations
American Society of Civil Engineers, Metropolitan Section: Listserv Coordinator (2006-), Website Coordinator (2008-), Technology Committee Chair (2009-), Younger Member Forum Secretary (2004-06), Younger Member Forum President (2003-04), Younger Member Forum Student Outreach Coordinator (2002-03); Institute of Transportation Engineers

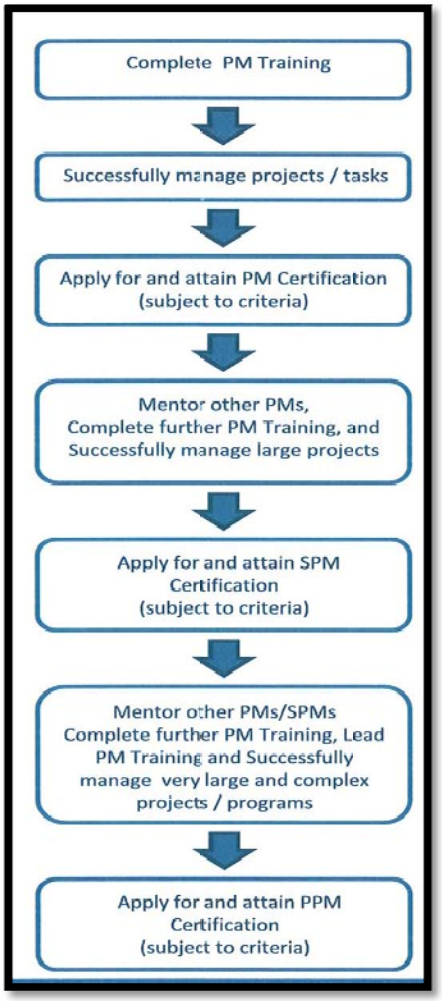
History of Employment
Philip Habib & Associates from 2000-2003
PB – 2003 –current

weaving segments, assess the effects of temporarily relocating the taxi pool during the construction phase, and analyze potential options in changes to bus routings.

- Southern Staten Island Traffic Study, New York City: project engineer responsible for the development of short and long-term strategies to address increasing traffic demand to and from the Charleston area. He developed and evaluated conceptual alternatives involving new and relocated ramp connections to the West Shore Expressway and Korean War Veterans Parkway as well as improvements to service roads and local streets accessing the existing and proposed ramps. The study included land use and traffic data collection, traffic forecasting, traffic capacity and operational analysis including micro simulation, accident and safety analysis, and the development of Transportation System Management (TSM) measures for immediate-term improvements.
- No. 7 Subway Extension - Hudson Yards Rezoning and Development Program FEIS, New York City: transportation engineer for the PB-led team that prepared an environmental impact statement for an extension of the No. 7 subway line and a rezoning of the west side of Manhattan. Erik's responsibilities included developing trip generation forecasts, traffic assignments, and parking accumulation projections for multiple land uses as well as traffic engineering support for a generic EIS to assess the impacts of a $1.5 billion extension of the No. 7 subway line from Times Square. The proposed project included a rezoning of the Hudson Yards area to permit 40 million square feet of residential and commercial development, a 1 million square foot expansion and modernization of the Jacob Javits Convention Center, and a 75,000-seat multi-use sports and exhibition facility. He was also involved with analyzing maintenance and protection of traffic (MPT) schemes for construction phasing as part of the preliminary and final engineering design services.
- NYCSCA Call-in SEQRA, New York City: responsible for traffic and transportation analyses in conjunction with the proposed development of new early childhood centers, elementary, intermediate and high schools or expansions to existing public schools. He prepared data collection plans, managed the development of balanced traffic volume networks, developed trip generation forecasts, conducted traffic, parking, transit, and pedestrian impact analyses, and prepared final reports for various schools in the Bronx, Manhattan, and Queens with enrollments ranging from 400 to 1,200 students.
- Access to the Region's Core DEIS, New York City: prepared the traffic analysis associated with the development of a new commuter rail terminal in the midtown Manhattan core. He developed traffic assignments for taxi trips by New Jersey Transit riders at the new station and prepared a traffic impact analysis for the environmental impact statement.
- Lincoln Tunnel Exclusive Bus Lane (XBL) Capacity Enhancement Feasibility Study, New York/New Jersey: provided technical support in the development of traffic volume and vehicle classification data for the complex network of access and egress roadways at the New York portal and direct ramps leading to/from the Port Authority Bus Terminal.

D

D. Firm Experience



Anticipated specific tasks are grouped under five major headings in the RFP:

1. Project Initiation (Task A)
2. Project Implementation (Task B)
3. Project Monitoring and Reporting (Task C)
4. Program Level Management (Task D)
5. Program Management (Task E)

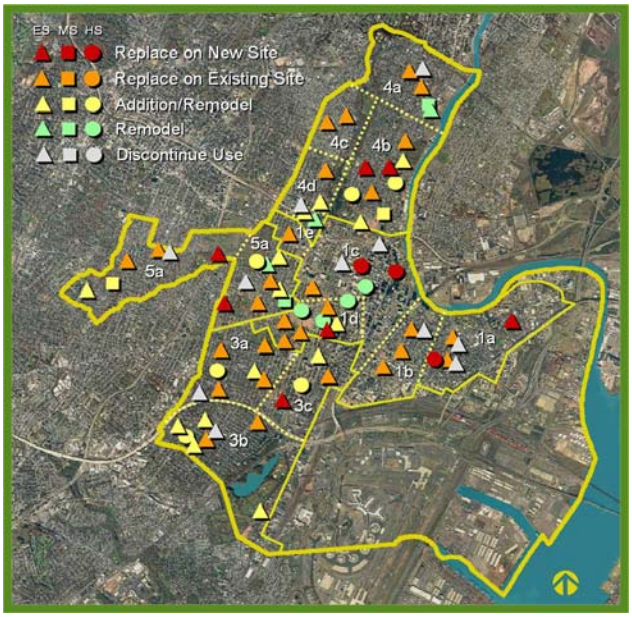
Specific services cited under Tasks B (ex. RFI processing) and C (ex. Invoice review) epitomize core competencies expected of a professional project manager. PB's Project Manager Certification Process is founded on ***demonstrated successful project management performance,*** completion of a robust suite of ***PM Training Courses,*** and prescribed ***criteria on mentoring, education, and licensing.*** This process is illustrated in the graphic to the right. Training alone is an insufficient achievement to qualify for PB's PM certification. The Authority should expect no less from any selected PM services provider.

From the vantage point of a prospective service provider, the experienced resources required to successfully deliver Tasks A, D, and E are what differentiates the best-in-class responders from those who simply have PM skill sets at the good industry practice level. Of the three, Task A, Project Initiation Services, is arguably most important because of its specific services 1 through 5 are not executed exceptionally well, subsequent project and program services will entail more challenges than should be the case.

Project Initiation Services (Task A)

PB personnel have recent relevant experience developing project scopes, schedules, and budgets for hundreds of projects in the Port District, all done with the realization that these individuals would subsequently be responsible for managing the projects from design initiation through turnover to the owner. Particularly noteworthy is our program management assignment for the New Jersey Schools Development Authority, led by our project manager, Pete Sweeney, which required preparation of scopes, schedules and budgets for:

- Existing buildings with emergent issues requiring prompt action to restore them to a state of good repair
- New LEED compliant buildings featuring geothermal, photovoltaic, and ice storage systems as part of their heating and cooling design.



We also performed an independent assessment of a proposed $1.6 billion construction program comprising new buildings, addition –renovation, and alteration projects involving more than 70 sites in the city of Newark, shown below.

PB is engaged as Program Manager the Port Authority's Security Capital Program and has provided overall support and guidance to the PA in the development, budgeting, scoping and execution of the $900M program for the Past six years.

In this role PB staff have been involved in the management of projects, ranging from $500,000 up to over $300 million (total project cost), from project implementation through construction.

With the PANYNJ having gone through significant organizational change with respect to its project / program management approach during the past few years, and given the potential impact of its ongoing early retirement initiative, team alignment and team building workshops can help to fundamentally improve the way a team members relate to each other and the project team as a whole. PB recently completed a similar organizational development assignment for the New York City School Construction Authority. This engagement initially focused on the Authority's in-house A/E division and was expanded to include improvements throughout the capital program delivery pipeline.

Nominated project management personnel such as Gerry Chi, Stephen Grant, and Tom Marko, among others, are experienced in the preparation of professional A/E service RFPs, having regularly done this type of work on various projects. PB staff have been instrumental in preparing RFPs for technical design services and construction management/general contractor contracts. We prepared scope documents, dealt with Authority contracts personnel, and have a thorough knowledge of the Authority's processes that must be followed to release an RFP, including Board requirements.

Overall success lies in managing the risks. Experience has taught us that project/program implementation presents a continuing succession of risks and options faced by the project owner and users, and successful project management must recognize and work diligently and collaboratively to mitigate those risks and clarify those options.

For program-level tasks that may arise from this agreement, PB can conduct, as required, an internal team risk management workshop to initiate the process of defining risks to the successful implementation of the program, describe potential threats to that success, and

probability of occurrence—and thereby provide a basis for defining mitigative action. At the project level, our Project Managers have a thorough understanding of the risks inherent in the execution of projects. It is critical that the project risks be identified early on in scope and budget development so that actions to mitigate the risk can be taken.

There are many potential benefits of conducting a joint risk management workshop with senior Authority personnel and other key stakeholders, as deemed appropriate, early in the program initiation phase. Our key team members can thereby identify mitigating measures that will reduce the potential impact of the identified risk, with the overall goal that high probability and high impact risks be eliminated.

Program Level and Program Management Services (Tasks D and E)

PB is well versed in scheduling and overseeing the implementation of programs /groups of projects. On the Newark Schools program, PB project management staff assembled numerous small project work scopes first into design bundles for A/E services and subsequently into construction bid packages that were within the capabilities of local M/WBE design firms and contractors. PB personnel are currently providing construction management services on a major segment of the NJ Turnpike widening program. We have the experience to concurrently manage large and small projects. Currently, we are managing the PANYNJ Security program, where we helped develop and deliver multiple security projects for the $900 million security capital program in six years.

For the past decade, PB has assisted the NYCSCA in establish annual program requirements for its capital improvement program by collecting current condition assessment data , prioritizing repair needs, and developing construction cost estimates for each work element.

PB project control staff will provide advance alerts to the PANYNJ/ PB Program Management team members regarding the need to mobilize and properly staff projects as needed to meet schedule commitments and will regularly update program level schedules. They will also track the submittal of contractor markups required for preparation of Record Documents

PB's construction services experts will evaluate and recommend appropriate M/WBE sub-contractor goals, provide staging assistance, and coordinate biddability/constructability reviews and force account matters as needed by facility type:

- Tom Marko/Martin Hall – rail transportation projects
- Mark Schultz – general aviation projects
- Ron Duncan/Daniel Lochard – aviation terminal projects
- Luke Maher/Craig Johnson – port and marine projects
- Ray Moran/Dhia Shubber – tunnel, road, and bridge projects
- Paul Dickens – building projects and rail transportation projects on aviation facilities
- Ian Hubbard – major bridges
- Tom Peyton – major tunnels

It is our understanding that the Authority's PM Manual of Standards currently reflects the policies and procedures in force at the time the former PMD unit was disbanded. PB is prepared to develop updates and new procedures as requested.
PB's project controls personnel such as Chiri Fitzpatrick have Authority specific experience with Oracle Primavera Contracts Manager and the full portfolio of Oracle Primavera PM software products and stand ready to provide support service as needed.

Our nominated program managers are trained and experienced presenters who are accustomed to dealing with inquiries from the general public and other external stakeholders. They have also completed PB's Presentation Training and are prepared to lend response assistance necessary consistent with Authority policy on the particular topic of inquiry.

As noted under the discussion of PB's Project Manager certification process, mentoring / PM peer development and training is a criteria used in our internal process. PB staff will be delighted to provide PM training as requested. Our project manager, Pete Sweeney, an experienced trainer, first began serving as an adjunct professor while an Authority employee and has continued to "give back" to local institutions of higher education ever since. PMO can be assured that training provided under his watch will be nothing short of excellent.

PB understands the enormity of the challenges faced by PANYNJ and is committed to helping ensure its continued success. Below is a table of some of our representative projects similar to work under this contract.

	Project Scoping	Program Scoping	Cost & Schedule Control	Oversight: Conceptual Design to Contract Prep.	Oversight: NTP to Contract Closeout
PANYNJ Security Program Management	X	X	X	X	X
Ronald Reagan Washington National / Dulles International Airports	X	X	X	X	X
JFK JetBlue Terminal 5 Redevelopment	X	X	X		X
PANYNJ JFK AirTrain	X	X	X	X	X
Louisiana Department of Transportation and Development TIMED Program	X	X	X	X	X
MARTA Transit System	X	X	X	X	X
South Carolina DOT Construction and Resource Manager Program	X	X	X	X	X

PANYNJ Security Program Management

Client Reference
PANYNJ
Michael Valletta, Program Director
Security Capital Program
201-595-4748
mvallett@panynj.gov

Project Schedule
5/2004 – ongoing

Total Cost
$500 million

PB, as program manager, has been providing a team of project managers, project engineers and controls specialists to assist the PANYNJ with the development and implementation of the agency's security capital improvement program to address the post 9/11 needs since 2003. The program includes upgrades at all Port Authority facilities, including the metropolitan region's airports, the Hudson River Bridge and tunnel crossings (George Washington Bridge, Lincoln Tunnel, Holland Tunnel), the PATH rail transit system, and the regions ports and Staten Island Bridges (Bayonne Bridge). Services include project management, coordinating, scheduling, and monitoring the design, systems integration, and construction support services of the Agency's Security Capital Program currently valued at approximately $1.0 Billion. PB also performed off-site inspection, conflict resolution, management of design consultants and other services as needed in support of the massive undertaking.

PB's initial agreement covered a period from 2003-2007, however with the continuation of the Security Capital Program, PB was awarded an amendment to continue services through 2012. Upon project completion PB will have assisted in the management of approximately $1.0 Billion in security upgrades for the PANYNJ.

Typical projects for the PANYNJ include various methods of facility hardening, upgrades and new installations to access control systems and CCTV systems, electronic perimeter protection and detection, perimeter strengthening, physical barriers, bridge abutment, bridge strengthening and CCTV surveillance, extending and installation of pile systems for collision protection, installation of crash rated roadway barriers, fencing, lights, hardened gates, vehicle access control systems, laser intrusion detection at PATH, and integration of new with existing security systems such as access control/alarm monitoring, and communication systems. More specific information cannot be divulged due to Confidentiality issues.

For the PANYNJ tunnels, PB provided services including management of design consultant technical teams; coordination with PANYNJ engineering and operations staff; scheduling; cost control and monitoring; report preparation; and constructibility reviews with consultants. Projects included the installation of CCTV systems, event detection systems, and hardening of miscellaneous facilities.

The PB team also developed and implemented the Security Program Handbook and Information Security Handbook which set the standard for Agency wide security practices and document control. The system is used to handle and distribute confidential project information and provides training in security protocol.

Ronald Reagan Washington National/Dulles International Airports

To meet the ever-increasing passenger demands at the two DC-area airports, the Metropolitan Washington Airports Authority (MWAA) was created in 1987 through an act of Congress. The mission of this entity is to plan, provide, and actively manager world-class access to the global aviation system in a way that anticipates and servies the needs ot the National Capital area, an area experiencing increasing growth.

Client Reference
MWAA
Frank Holly
Vice President of Engineering
[redacted]

Project Schedule
03/1988 – 8/2008

Total Cost
$9.1 billion

Since 1988, PB, as part of a joint venture, has been continuously retained by MWAA as a partner firm to provide comprehensive PM services for capital development programs at the Ronald Reagan Washington National and Washington Dulles International Airports.

The original Capital Development Program was completed in 1999 at a program budget of $2 billion. In 2000, the Authority commenced a new $4.2 billion capital construction program, commonly known as the Dulles Development Program, that has grown to $7.1 billion with more than $3.1 billion complted. The developmnet works at these airports are one of the largest ongoing capital improvement programs in the world. A total of $5 billion has been expended at the two airports on more than 165 design and 484 construction contrtacts. PB's joint venture has served as an effective asset to MWAA, helping to put in place more than 150 projects at the two airports since 1988, with a total value of construction work in place of more than $3.5 billion.

JFK JetBlue Terminal 5 Redevelopment

Due to increasing demand, JetBlue will soon outgrow its 13 contact gates at Terminal 5 at JFK, and initiated an expansion program to double this capacity – its largest infrastructure investment since its inception. JetBlue's new $800 million Terminal 5 was designed to put customers first. Open to passenger traffic in October 2008, it supports 500 daily departures and arrivals and features a spacious check-in lobby, and a 20-lane security checkpoint – one of the largest in the US. It also features wide roadway access, a 1,500-space car park, and a direct skywalk connection to the JFK AirTrain (a project which PB was also a part of).

Client Reference
PANYNJ
Steve Plate
718-244-4196
splate@panynj.gov

Project Schedule
05/2006 – 03/2009

Total Cost
$800 million

PB assisted JetBlue with PM services for the terminal as well as access roadways, an airside apron, ramp layout, a parking structure, and a pedestrian connector to the garage and AirTrain. Terminal 5 is JetBlue's larges infrastructure investment.

With a relatively short time frame for such an ambitious project, PB's primary challenge was to keep the project on time and under budget. A challenge accepted and fully completed. PB also provided a scheduler and cost controller to establish and maintain the project's baseline schedule and cost control system.

AirTrain JFK

An 8.1-mile, 10-station light rail line links JFK International Airport terminals, car rental agencies, and employee/long-term parking lot with New York's mass transit system and the LIRR. The system is a key element in a multi-year, multibillion-dollar program designed to upgrade New York's primary airport.

Client Reference
PANYNJ
Hugh McCann
718-244-4274
hmccann@panynj.gov

Project Schedule
3/1995 – 12/2003

Total Cost
$1.9 billion

PANYNJ retained PB as its general engineering consultant for the DBOM Airport Access Program. PB's participation involved providing planning, design, environmental analysis, construction management, and procurement activities, while also helping to operate a program office jointly with Authority staff members, including the agency's program director. We also assisted the Authority to effectively respond to revisions in project scope necessitated by budget issues, service considerations, and input from local and regional governmental entities. Various services are also being performed by other PB offices on a task order basis.

Noteworthy features included:

- Markedly improves public transportation access between JFK and Manhattan, other New York City boroughs, and Long Island
- Greatly enhances circulation within JFK's central terminal area, benefiting air travelers making domestic and international air carrier transfers
- Expected to ease surface traffic congestion trying to reach JFK as well as lessen the number of private cars and taxis negotiating terminal roadways
- Program features state-of-the-art systems as well as turnkey procurement methods in combination with traditional U.S. civil works construction techniques

Louisiana Department of Transportation and Development (LA DOTD) TIMED Program

The PB-led LTM joint venture is an extension of the LA DOTD's staff to complete the remaining TIMED Program 20 years ahead of schedule. LA DOTD selected LTM to accelerate the remaining construction and to provide support staff in program controls, financial management, public outreach, and engineering. In

Client Reference
Michael Bridges
LA DOTD
1201 Capitol Access Road
(PO Box 94245)
Baton Rouge, Louisiana 70804-9245
[redacted]

Project Schedule
02/2002 – 12/2012

Total Cost
$4.7 billion program

addition, LTM will perform extended work on 55 project segments, including design oversight, environ-mental permitting, real estate acquisition and relocation, utility relocation, and construction engineering and inspection services.

The project team is supporting alternate project delivery methods to encourage further acceleration of the TIMED program. Implementation of lump sum bidding and design-build delivery pilot projects is bringing innovation to LA DOTD. The team has evaluated all cost saving and innovative elements applied through the program management contract and, to date, estimate a total added value to the LA DOTD of $500 million.

Noteworthy features included:
- Louisiana's largest transportation program in state history.
- LA DOTD's first design-build delivery project, the $404 million John James Audubon Bridge.

Metropolitan Atlanta Rapid Transit Authority (MARTA) Transit System

The MARTA heavy rail system was planned in a cruciform design with an East-West Line and a North/Northeast-South Line intersecting in Atlanta's downtown. Integrated with a 1,500-mile bus network, the fully built rail system has 45 passenger stations designed to facilitate transferring between buses and trains.

Client Reference
MARTA
Jayant Patel
Director of Quality Assurance and Configuration Management
[redacted]
Davis Allen
[redacted]

Project Schedule
1966 – 2008

Total Cost
$1.9 million

The MARTA rapid transit system was developed in phases:
- Phase A "starter" system consisted of an East-West Line and a portion of the North-South Line. Phase A included 17 stations, a major yard/shop facility and 13.7 miles
- Phase B, part of the North-South Line, adding 10 miles of track and seven stations
- Phase C, also part of the North-South Line, added 10 miles of track, six stations and a major yard/shop facility
- Phase D, extension of the East Line, a West Line Branch and the north corridor, largely in Georgia DOT right-of-way, added 11 miles of track and five stations
- Phase E included extension of the North Line

The system continues to be expanded as funding becomes available. PB, in joint venture, has been involved in the MARTA system for over 40 years. We have provided services to MARTA for planning assistance, design, and construction of the Authority's rapid transit system.

Services include:

- Project and program management
- Planning assistance
- Design
- Quality control
- Procurement management for select contracts
- Construction management
- Testing and start-up support
- Infrastructure rehabilitation and renovation to include security enhancement
- Information technology
- Other GEC support

South Carolina Department of Transportation (SCDOT) Construction and Resource Manager Program

PB, as a CRM, is acting as an extension of the SCDOT's staff to complete 200 construction projects in 7 years. The CRM contract is a lump sum for management functions over 5 years, paid on a schedule of payments. Preliminary engineering (PE) and construction engineering and inspection functions (CEI) are fixed price by identified project, paid upon physical progress of each project. Right-of-way services are provided on a per parcel fee basis. There are two option periods of 2 years each. An incentive/ disincentive bonus/penalty program is included with achievements in innovation, schedule, cost control and customer satisfaction being evaluated.

Client Reference
SCDOT
Clem Watson
CRM Program Manager
[redacted]

Project Schedule
07-1999 – 01/2008

Total Cost
$750 million includes the cost of prelim/final design, ROW, CRM PM/FM/CM, CRM CEI and construction costs of projects

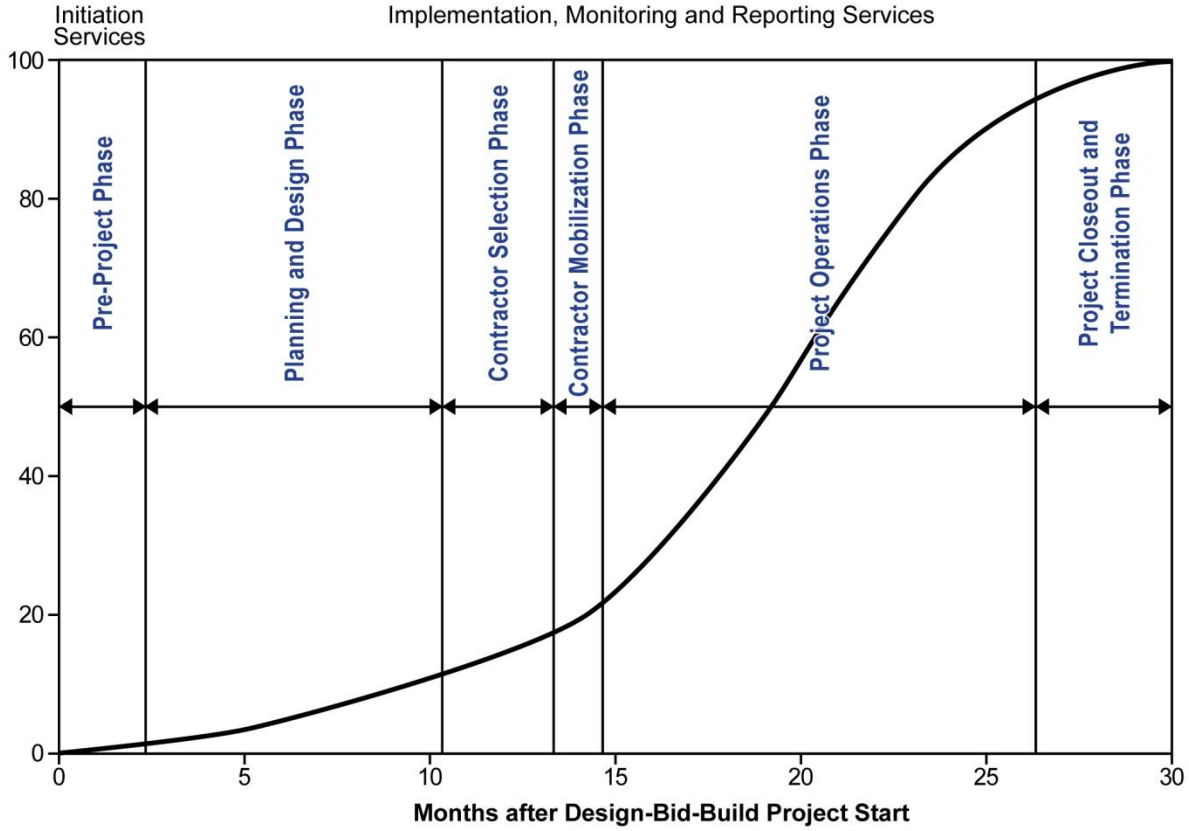
The CRM is responsible for right-of-way acquisition, although contracts and payments are executed by the DOT. Construction contract preparation and administration will be performed by the CRM; however, the actual letting of the contract will be performed by the DOT. The CRM is also tasked with other selected support services such as CEI for DOT-developed projects and information management assistance and advice. The CRM consultant may not perform final design or construction. This work must be performed by a third party under contract to the DOT, but managed by the CRM. Projects can be added and removed from the CRM program by the DOT with no change in the management fees unless such actions exceed +/- 20 percent of the initial project numbers.

Advantages of the CRM concept are:

- The owner receives a rapid expansion of its capacity. As appropriate, the capacity can also be rapidly shrunk when the contracted program is completed.
- The owner receives expertise that may not otherwise be obtainable or affordable. (Some DOTs cannot attract, hire and retain adequate engineering staff in today's marketplace.)
- The owner receives a highly agile capability. Concerns for "leveling the workload" and "moving the work where the people are" characterize resource planning and management. A CRM tailors its work force to the job at hand, near the work and the client. As the work shifts, the CRM shifts. As the work ends, the CRM goes elsewhere.

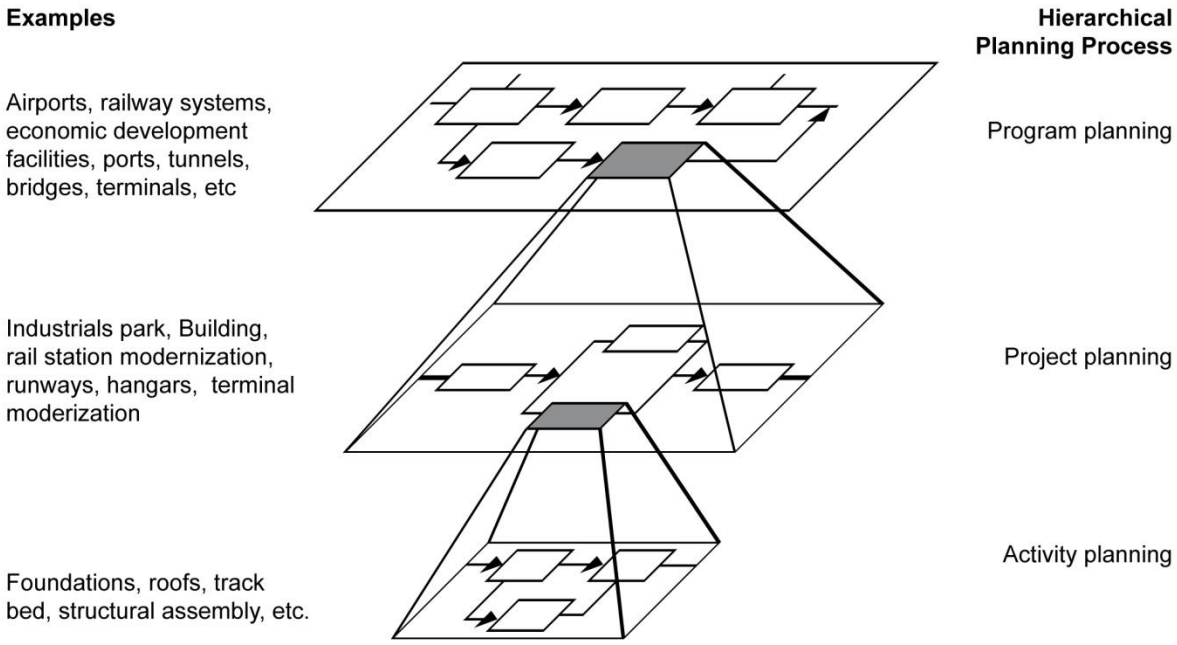
E. Management Approach

All call-in agreements inherently require that selected firms have the experience and resources needed to promptly and effectively respond to a client summons for assistance or consultation. This reality is further underscored in RFP 22388, which contemplates a need for services through the entire construction project life cycle, from project initiation through preparations for closeout.



Typical Design Bid Build Construction Project Life Cycle was adapted from The Management of Construction: A Project Life Cycle Approach, F. Lawrence Bennett, 2007 reprint published by Butterworth Heinemann, p. 7

The anticipated need for services across multiple Authority business lines, at both the project ($50,000 and greater) and program (up to $100 million) levels, further demands a service provider capable of marshalling appropriate expertise across the full construction project planning spectrum from activity level (e.g. constructability review of a novel design element) through program level (e.g. schedule and resource updates).



Hierarchical Planning process was adapted from Construction Planning for Engineers, F.H. (Bud) Griffis and John V. Farr, McGraw-Hill 2000, p. 4

When selected project/program management services are outsourced, three distinct approaches have commonly been followed as outlined below:

- An external PM firm is given responsibility for part of the program, typically a project or set of projects
- Owner retains one or more PM firms who report to a client manager familiar with industry best practices and who has the capabilities and experience to direct the work
- Staff augmentation occurs whereby positions from basic to key are filled by individuals available from one or multiple consultant organizations

Below is a graphic representation of three approaches the Authority can take for this contract. PB is prepared to serve the PANYNJ PMO using any of the foregoing approaches or a combination of them.

Finding and Placing Senior PM Staff

Over the last 50 years, PB has placed staff in senior level, public sector; program management positions all reporting to executive – level client personnel. For example, the current need to replace obsolescent facilities throughout the nation's largest urban public school systems has generated significant use of senior staff augmentation. PB has been at the forefront, helping to fulfill needs at the Los Angeles Unified School District, Orange County (Florida) Public Schools, Miami-Dade County Public Schools, and the New York City School Construction

Authority. In addition to the education sector, PB has placed more than 80 senior professionals in other public sector and transportation PM programs, most notably:

PROGRAM - VALUE	KEY SENIOR STAFF AND REPORTING
Louisiana Department of Transportation Timed Program - $4.9B	Program Director, Deputy Program Director, Deputy Finance Director, Deputy Director Major Bridges, Deputy Operations, and Deputy Director Communications reporting to LA DOT's Program Manager
Smithsonian Institution - $310M	Program Director and Project Manager reporting to Construction Divison Director
Orange County Toll Roads - $3B	Project Director reporting to Interim Chief Engineer
Metropolitan Washington Airports Authority (Dulles International and Ronald Reagon National Airports) - $7.2B	Program Controls Manager, Construction Site Manager, Resident Engineers (3), Design Task Managers (2) and Quality Assurance Manager reporting up to the Vice President, Engineering and Construction
California High Speed Rail - $40B - 45B	Program Manager, Engineering Manager, and Environmental Manager reporting to the Executive Director
NY State Office of General Services - $5B	Two Project Directors reporting to Director of Construction

Key staff that filled the majority of these positions were selected from PB's leadership ranks. On average, less than one in five was recruited from outside. PB has the flexibility to support both internal and client staffing requirements with equal emphasis.

PB has a proven record of successful collaboration with the PANYNJ in the completion of call-in separately procured projects involving all of the Authority facilities, including structures, tunnels, buildings, bridges, airport facilities, ports and marine facilities and the PATH and AirTrain systems. PB has a long standing culture geared toward maintaining a strong focus on project delivery which includes continual confirmation of client's needs, development of staff for technical excellence, consistent quality control and assurance protocols and delivering in accordance with contracts (scope/schedule/budget) and commitments. The success of our work with the Authority has been achieved by using a proven management approach to meeting the Authority's objectives. This approach is based on careful planning, continuous communication, scheduling and managing of costs, strict budget and quality control, team commitment, and conflict avoidance. We are confident that the combination of technical skill, the depth of PB's staff resources, management ability, and PB's knowledge of the Authority's facilities, personnel and needs, make PB ideally suited to serve the Authority for this call-in assignment. The management process and approach that will be followed to control project performance is presented below.

Assignment of Skilled Personnel

PB can offer qualified staff from our offices in New York and New Jersey that can respond quickly and effectively to assignment requests from the Authority. This staff will be led by our proposed Project manager, Pete Sweeney. From his experience working at the Authority and with other Regional Authorities, Pete knows that marshalling the project team is the key to a

successful project. In selecting his highly qualified team for this assignment, he has the resources to assign individuals with relevant experience and expertise in delivering any of the services outlined in the Scope of Work included in the RFP.

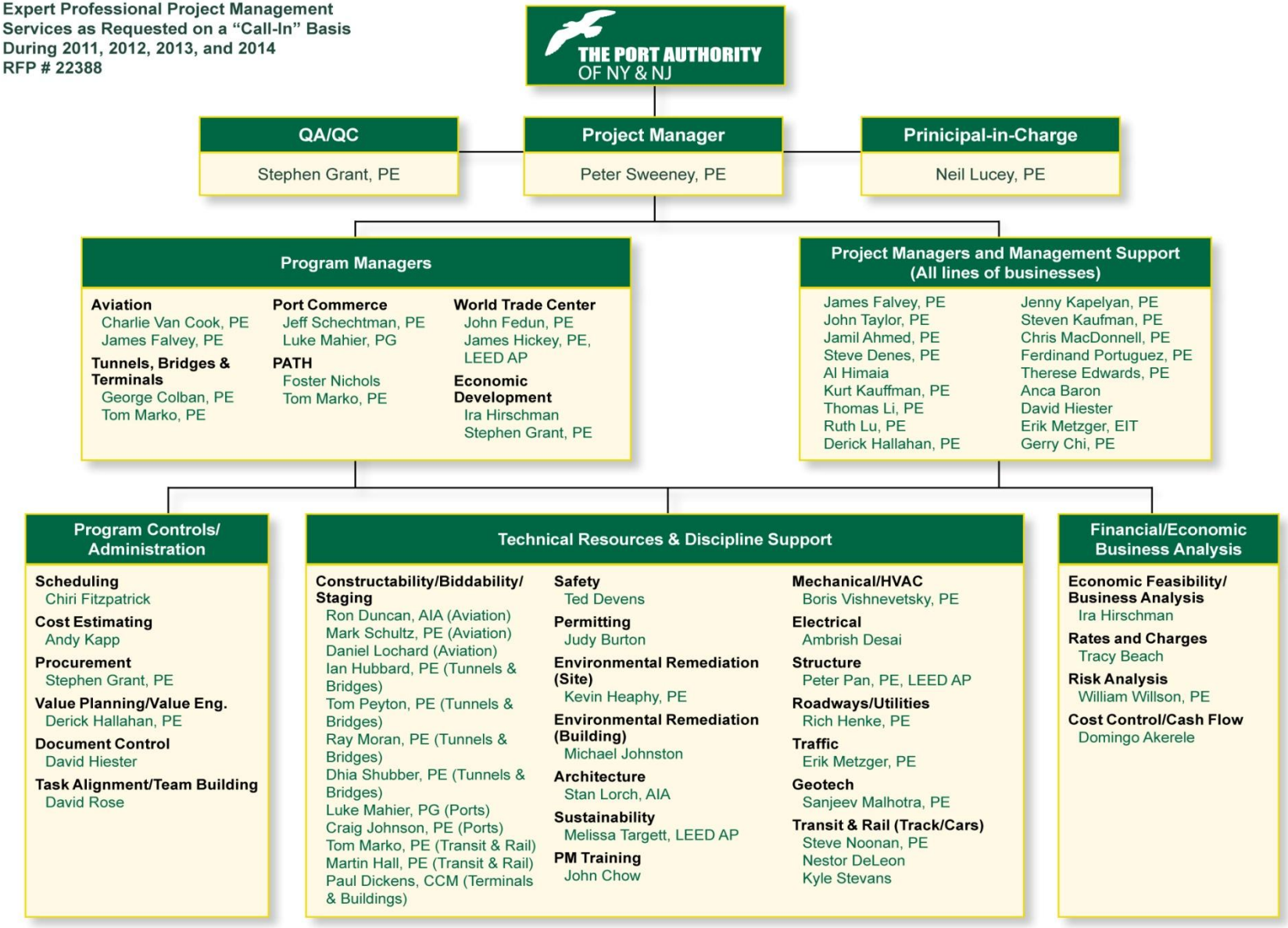
The PB Team offers the Authority the ideal combination of field/design project management and support staff who bring to the Authority:

- Project management and professional expertise in all the technical areas associated with each task/project.
- Extensive experience in performing call-in structural inspection, evaluation, design and construction phase services for the Authority and other agencies in the region and across the country.
- Assured availability, since PB's team is comprised entirely of local resources resident in the New York/New Jersey metropolitan area who can be on-site within hours of notice.
- Exceptional leadership proven through the successful completion of similar projects throughout the New York/New Jersey metropolitan area as well as across the U.S.
- Proven ability to respond to multiple task orders simultaneously, made possible by the depth and breadth of experience of our proposed project team, backed by a group of over 700 professionals and support personnel in the New York/New Jersey area.

Through the leadership of our project manager, we will deliver a support staff that collectively possess the proven technical skills, management expertise and interpersonal skills that are required for assigned call-in tasks. We are confident that the combination of technical skill, management ability, and PB's knowledge of the Authority's facilities, personnel and needs, make PB ideally suited to serve the Authority for this call-in assignment.

Our organization chart is included below, detailing how the PB team will be responsive to the Authority's needs and perform tasks. Resumes for our key personnel are included in Section C. Qualifications and Experience of Staff. While we only show resumes for our key personnel, all personnel selected for this assignment have extensive experience in their specialty.

Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014 RFP # 22388



Strong Project Management

Effective project management starts at the top with thorough planning and continuous communication with the Authority. PB has developed a rigorous Project Delivery Management System as part of our overall Quality Assurance Program that will be implemented for each task assigned under this call-in contract. This system defines the roles and responsibilities of all project participants and is the formula for the success that we have enjoyed with the Authority and other clients throughout the metropolitan area.

Project Manager — Peter Sweeney, P.E. will be the main point of contact with the Authority on all project-related matters. He will be responsible for managing the assigned tasks in accordance with the Authority's objectives and ensuring that the project team provides all required services to the professional quality that the Authority has come to expect from PB. He will provide personal leadership to the project team and will be accountable for and drive the project's technical success, financial success, schedule compliance, and client coordination. At the outset of the project and through the execution of all assigned task orders, Peter will be responsible for:

- Communicating with the Authority on a regular basis and resolving any issues that may arise.
- Developing and maintaining the Project Management Plan (in collaboration with the Authority's Project manager), which is distributed to all project staff and becomes the document that governs all project-related activities.
- Developing, managing and tracking the scope, schedule and budget for each task order.
- Administering the prime contract and any subcontracts, including billing and collecting, so that all project parties adhere to the terms of the contract and subcontracts.
- Ensuring use of the agreed-upon systems for risk, quality, peer and technical reviews and verification.
- Establishing and maintaining a quality control program for the project and required deliverables.
- Meeting with task leaders at the outset of each task order assignment and regularly during the execution of each task order to keep them on track.
- Coordinating with the Principal-in-Charge to ensure that project resource requirements are addressed in a timely fashion to meet all Authority needs.
- Closing out each task order in a timely fashion.

Principal-in-Charge — Neil Lucey, P.E. will serve as Principal-in-Charge for this assignment. He will provide a dual role: (1) to obtain feedback from the Authority on the performance of the project team and ensure that the appropriate action is being taken to resolve any technical and financial issues, and (2) to ensure that our Project manager, Peter Sweeney, has the resources he needs to satisfy the requirements of all task orders assigned to PB under this contract. Should PB be responding to several task-orders simultaneously, Neil will ensure that Peter has the full resources of the company at his disposal to complete all task orders in a timely and cost-effective manner.

Project Management Plan

The project management approach for this call-in project begins with the preparation of a project management plan (PMP) by the PM for the overall contract which meets with the Authority's established procedures. The PMP will cover the items that apply to all task assignments, such as lines communication protocol; document control procedures; quality review procedures; invoicing procedures and discipline disagreement resolution hierarchy procedures. As tasks are assigned by the Authority, the plan will be updated to include the specific requirements for each task. The update will clearly define the goals of the assignment down to the subtask levels, identify the personnel assigned to each task, and establish operational and communication guidelines to be used throughout the life of the assignment. It will include task information such as the scope of work, the organization chart, schedule, budget and documentation of the project control and administration processes specific to the particular task. It will also cover key areas such as: the understanding of issues and objectives of the task; the roles/responsibilities of the team members; schedule of deliverables.

The PMP will identify a protocol agreed to by the Authority regarding the frequency and forum for routine progress updates, via meetings, telephone or email, based on the preference of the Authority's assignment manager. The plan will be reviewed and approved by the Principal-in-Charge prior to distribution, and will be updated as-needed throughout the life of the contract. All the personnel assigned to the project will implement the PMP on their routine work. PMPs have been successfully implemented for call-in contracts requiring quick mobilization and delivery on simultaneous assignments. The thoroughness and effectiveness of those plans allowed the successful completion of the required services with no surprises or unanticipated difficulties.

Development of Task Scope, Budget and Schedule

PB knows that to be successful, we must first get a full understanding of the Authority's task objectives, so that a clear and concise scope of work can be established. Working closely with the Authority's PM, PB will provide an approach to the task that meets the Authority's objectives as well as your budget and schedule constraints.

PB's method of project management of call-in projects is simple and straight forward:

- A seasoned Task Leader (TL) is placed in charge of each task assignment and participates in the development of the scope, budget and schedule. Providing highly qualified project manager level Task Leaders is one of PB's strengths.
- An experienced team of professionals is assigned to the task. Having the full gamut of professionals locally in-house is another of PB's strengths, allowing the most appropriate staff with the right skills to be assigned to each task.
- The PMP will be updated for the specific task and distributed to the task team members so that the task can be executed within the established PMP and Authority protocols.

Schedule and Cost Control

Call-in assignments often require immediate and professional responses to situations as they develop, making schedule and cost control imperative. PB is highly adept at assembling a team of qualified personnel on short notice and starting an assignment promptly upon authorization from the client. We are equally adept at managing staff performance to meet specific deadlines for deliverables while emphasizing schedule and cost control. The task schedule will show the sub-tasks identified for the assignment, durations and relationships, deliverables and key milestones. It will also identify regularly scheduled progress meetings, to facilitate keeping Authority staff apprised of key task activities and findings. While our PM provides oversight for each task, the TL has budget and schedule responsibility for his assignment. The schedule will be closely monitored and updated throughout the life of the project. The TL will be guided by PB's policies, procedures and standards as detailed in PB's Business Management Systems and the PB Quality Systems Manual and Procedures. The main cost control tool will be PB's computerized management information system (PBIS), which provides data on charges for labor and expenses by task on a weekly basis. This can be supplemented with spreadsheets adapted to the needs of a specific assignment. The actual job charges will be tracked and compared to the task budgets by the TL, and timely corrective measures will be taken if potential deviations from the plan are detected.

Quality Assurance and Quality Control

Of paramount importance on every PB project is a strict program of quality assurance and quality control (QA/QC). The proposed call-in contract work will be no exception. PB is an ISO-9000 and ISO-14001 (environmental) certified firm that ensures strict quality control procedures. The Project Quality Control Plan (PQCP) will be put into execution on assignments received throughout the life of the agreement. Quality control will be performed in terms of technical adequacy of the work, conformance to the standards of the Authority, and adherence to PB's established procedures. All members of the project team will be responsible for quality control starting with the project and task managers.

Regular QA/QC reviews will be performed for the project. The interval between reviews will be set to suit the specific requirements of each task and to ensure that all submittals are preceded by a review confirming that the quality control standards established in the PQCP plan are being enforced properly. PB's long-standing commitment to quality is at the heart of the firm's culture and it's the basis of more than a century of client satisfaction. The quality control plan is but one element of our total quality management (TQM) system, which is applied to all PB projects and has qualified it to receive and maintain the ISO certification from the International Standards Organization. Another key element of PB's quality system is the internal and external auditing performed routinely to confirm policies are being followed.

Invoicing

Invoice formats and schedules for PB services, as well as sub-consultants, contractors, and vendors, will be consistent with formats currently used on existing Authority call-in agreements. When requested, the format will be modified to comply with new Authority

requirements. At the beginning of the project, our PM and invoice support staff will meet with and provide each service provider a sample invoice, progress report outline, and invoicing schedule. This time invested, particularly with MBE and WBE firms to establish invoicing protocols will benefit all parties. PB will submit updated salary rosters on a regular basis so that invoices can be processed efficiently. PB's invoices will include subconsultants' invoices after review by PB's TL and project manager. It is assumed that invoices will be submitted electronically.

Project Third-Parties

With PB's experience in working with the Authority we know that there are many layers of "clients" within the Authority, besides the assignment manager, who all have significant objectives that we must consider. PB's project management approach will allow us to accommodate multiple objectives with professional attention to detail. During the early stages of each assignment our task managers will establish, and maintain, close working relationships with the Authority's individual assignment managers and confirm their support of the various unit's objectives as they are identified. There may also be "third-party" participants involved in implementation of some project elements including, but not limited to, the New York State, New Jersey and New York City Departments of Transportation; MTA Capital Construction; New York City DEP; NJ Transit; other local, state or regional agencies; utility companies; Port Authority tenants and consultants working on adjacent projects. Management of the roles and participation of third-party participants will be crucial to project success. PB has many existing relationships with these parties stemming from our work with them on other projects and will implement a collaborative environment with all parties to facilitate implementation.

F

F. Names, Titles, and Hourly Rates

Overtime pay for PB and subcontractor's non-exempt employees is paid at 1.5 times direct labor (with 0.5 time direct labor being premium pay) and exempt employees paid at 1.0 times direct labor (both include wages, payroll taxes and payroll insurance). Premium pay is billed as a direct expense when permitted per contract. Holiday policy: regular full-time employees and temporary full-time employees are eligible for holiday pay. Observed holidays are considered a day of work regarding computing overtime pay. All work over 40 hours is considered overtime (regardless of weekends/night work). PB does not employ union workers.

Name	Title	NY/NJ PE	Hourly Rate
Neil Lucey	Principal-in-Charge	NY/NY	$250.00*
Peter Sweeney	Project Manager	NY/NJ	$98.66
Stephen Grant	QA/QC; Economic Development; Procurement	NY/NJ	$83.11
Charlie Van Cook	Aviation Program Manager	NY	$100.03
James Falvey	Aviation Program Manager / Project Manager/Management Support		$61.99
Jeff Schechtman	Port Commerce Program Manager		$86.54
Luke Mahier	Port Commerce Program Manager Constructibility/Biddability/Staging (Ports)		$75.00
John Fedun	WTC Program Manager	NY/NJ	$106.18
James Hickey	WTC Program Manager		$108.17
George Colban	Tunnels, Bridges & Terminals	NY/NJ	$100.72
Thomas Marko	Tunnels, Bridges, & Terminals Program Manager / PATH Program Manager Constructibility/Biddability/Staging (Transit & Rail)	NY/NJ	$74.82
Foster Nichols	PATH Program Manager		$87.66
Ira Hirschman	Economic Development Economic Feasibility / Business Analysis		$89.42
John Taylor	Project Manager/Management Support	NY/NJ	$75.99
Jamil Ahmed	Project Manager/Management Support	NY	$68.78
Steve Denes	Project Manager/Management Support	NY	$74.87
Al Himaia	Project Manager/Management Support		$51.70
Kurt Kauffman	Project Manager/Management Support	NJ	$52.25
Thomas Li	Project Manager/Management Support	NY/NJ	$85.32
Ruth Lu	Project Manager/Management Support	NY/NJ	$69.51
Derick Hallahan	Project Manager/Management Support Value Planning / Value Form		$69.61

Jenny Kapelyan	Project Manager/Management Support	NY	$51.44
Steven Kaufman	Project Manager/Management Support	NY	$59.89
Chris MacDonnell	Project Manager/Management Support	NY	$56.51
Ferdinand Portuguez	Project Manager/Management Support	NY	$47.97
Therese Edwards	Project Manager/Management Support		$52.89
Anca Baron	Project Manager/Management Support		$58.77
David Hiester	Project Manager/Management Support Document Control		$53.84
Erik Metzger	Project Manager/Management Support\ Traffic		$40.48
Gerry Chi	Tunnels, Bridges, & Terminals Program Manager		$72.28
Chiri Fitzpatrick	Scheduling		$59.20
Andy Kapp	Cost Estimating		$77.13
David Rose	Task Alignment / Team Building		$112.02
Ron Duncan	Constructibility/Biddability/Staging (Aviation)		$73.82
Mark Schultz	Constructibility/Biddability/Staging (Aviation)		$73.66
Daniel Lochard	Constructibility/Biddability/Staging (Aviation)		$57.00
Ian Hubbard	Constructibility/Biddability/Staging (Tunnels & Bridges)	NY	$86.22
Tom Peyton	Constructibility/Biddability/Staging (Tunnels & Bridges)	NY/NJ	$126.38
Ray Moran	Constructibility/Biddability/Staging (Tunnels & Bridges)	NY/NJ	$69.15
Diaa Shubber	Constructibility/Biddability/Staging (Tunnels & Bridges)	NY	$88.33
Craig Johnson	Constructibility/Biddability/Staging (Ports)		$80.38
Martin Hall	Constructibility/Biddability/Staging (Transit & Rail)		$84.75
Paul Dickens	Constructibility/Biddability/Staging (Terminals & Buildings)		$87.22
Ted Devens	Safety		$73.61
Judy Burton	Permitting		$54.62
Kevin Heaphy	Environmental Remediation (Site)	NY/NJ	$54.75
Michael Johnston	Environmental Remediation (Building)		$54.61
Stan Lorch	Architecture		$81.75
Melissa Targett	Sustainability		$30.38
John Chow	PM Training		$72.56

Boris Vishnevetsky	Mechanical / HVAC	NY	$64.42
Ambrish Desai	Electrical		$60.34
Peter Pan	Structure	NY/NJ	$68.07
Rich Henke	Roadways/Utilities	NY	$78.79
Erik Metzger	Traffic		$40.48
Sanjeev Malhotra	Geotech	NY	$62.82
Steve Noonan	Transit & Rail (Track/Cars)	NY/NJ	$91.29
Nestor DeLeon	Transit & Rail (Track/Cars)		$45.44
Kyle Stevans	Transit & Rail (Track/Cars)		$27.55
Tracy Beach	Rates and Charges		$47.12
William Willson	Risk Analysis		$71.81
Domingo Akerele	Cost Control / Cash Flow		$52.03

*the rates for principals are hourly billing rates without the multiplier

Multiplier and Breakdown (Authority's Office)

Direct Labor Base	$70,520,143	Percentage of Direct Labor
Fringe Benefits (Direct Labor)		
Payroll Taxes	5,942,832	8.4%
Group Insurance and Workers' Compensation	5,902,685	8.4%
Fringe Salaries	8,794,609	12.5%
Other Employee Benefits	2,625,469	3.7%
Total Fringe Benefits (Direct Labor)	**$23,265,595**	**33.0%**
General Overhead Expenses		
Office Rent	3,524,766	5.0%
Depreciation	650,542	0.9%
Amortization	384,943	0.5%
Repairs and Maintenance	996,946	1.4%
Indirect Salaries	22,197,188	31.7%
Fringe Benefits (Administrative)	7,348,128	10.4%
Computer, Supplies, Reproduction	1,663,784	2.4%
Travel and Related Expenses	1,650,440	2.3%
Office Relocation and Moving	159,254	0.2%
Communications	454,700	0.6%
Subscriptions, Books, Publications	276,157	0.4%
Consultant Fees	1,097,940	1.6%
Additional Compensation	4,828,915	6.8%
Miscellaneous Expenses	(17,290)	0.0%
General Insurance Others	848,385	1.2%
E & O Insurance	1,936,716	2.7%
Other Taxes	484,394	0.7%
State & Local Income Taxes	1,351,424	1.9%
Audit and Legal	872,431	1.2%
Bids and Proposals/Research and Development	6,652,638	9.4%
Total General Overhead Expenses	$57,362,401	81.3%
Total Allowable Overhead For Profit Calculation	**$80,627,996**	**114.3%**
Profit		**6.6%**
Multiplier		**2.28**

Multiplier and Breakdown (Consultant's Office)

	PB	PB's Percentage
Direct Labor Base	**$172,854,737**	**Of Direct Labor**
Fringe Benefits (Direct Labor)		
Payroll Taxes	14,566,713	8.4%
Group Insurance &Workers' Compensation	14,468,308	8.4%
Fringe Salaries	21,556,817	12.5%
Other Employee Benefits	6,435,391	3.7%
Total Fringe Benefits (Direct Labor)	**$57,027,229**	**33.0%**
General Overhead		
Office Rent	29,944,486	17.3%
Depreciation	4,907,761	2.8%
Amortization	2,851,734	1.6%
Repairs and Maintenance	4,180,440	2.4%
Indirect Salaries	70,650,918	41.0%
Fringe Benefits (Administrative)	22,786,334	13.2%
Computer, Supplies, Reproduction	12,529,882	7.2%
Travel & Related Expenses	4,972,864	2.9%
Office Relocation &Moving	390,355	0.2%
Communications	4,038,521	2.3%
Subscriptions, Books, Publications	859,837	0.5%
Consultant Fees	3,398,326	2.0%
Additional Compensation	15,067,792	8.7%
Miscellaneous Expenses	637,585	0.4%
General Insurance Others	2,079,510	1.2%
E & O Insurance	12,372,254	7.2%
Other Taxes	1,386,368	0.8%
State & Local Income Tax	4,455,653	2.6%
Audit and Legal	2,138,451	1.2%
Bids & Proposals/R&D	16,306,548	9.4%
Total General Overhead	$215,955,619	124.9%
Total Allowable Overhead For Profit Calculation	**$272,982,848**	**157.9%**
Profit		**6.6%**
Multiplier		**2.75**

G. M/WBE Participation

Commitment to MBE/WBE Goals

PB also recognizes, accepts and takes very seriously the Authority's MBE/WBE goals. It is our expectation that for assigned tasks, numerous appropriate opportunities will be available in areas such as scheduling, cost estimating, and document control to enable PB to meet the Authority's goals. PB has worked with many MBE/WBE firms and has supported their development and growth. PB will add firms to our team for specific assignments that have the needed expertise and have provided timely and technically excellent work for our clients to meet the 12% MBE and 5% WBE goals of this project. The PB project manager will identify opportunities for these firms (and others, as may be appropriate) and will monitor and periodically report the results.

H

H. List of Affiliates

Name of Affiliated Company	Address	Ownership
Parsons Brinckerhoff Inc. [redacted]	One Penn Plaza, New York, NY 10119 (212) 465-5000	Parent of PB Americas, Inc. and its affiliates; Parsons Brinckerhoff, Inc. is owned 100% by Balfour Beatty Group, Inc.
PB Power, Inc. [redacted]		100% by Parsons Brinckerhoff Inc.
Parsons Brinckerhoff Development Corporation [redacted]		100% by Parsons Brinckerhoff Inc.
Parsons Brinckerhoff Group Administration, Inc [redacted]		100% by Parsons Brinckerhoff Inc.
Parsons Brinckerhoff International, Inc. [redacted]		100% by Parsons Brinckerhoff Inc.
Parsons Brinckerhoff Infrastructure Development Company, Inc. [redacted]		100% by Parsons Brinckerhoff Inc.
PB Consult, In [redacted]	1401 K Street NW, Suite 300, Washington, DC 20005 (202) 661-5308	100% by Parsons Brinckerhoff Inc.
PB Constructors Inc. [redacted]	465 Spring Park Place, Herndon, VA 20170 (703) 742-5700	100% by Parsons Brinckerhoff Inc.
Alltech, Inc. [redacted]	465 Spring Park Place, Herndon, VA 20170 (703) 742-5700	100% by Parsons Brinckerhoff Inc.
PB Services Inc. [redacted]	One Penn Plaza, New York, NY 10119 (212) 465-5000	100% by Parsons Brinckerhoff Inc.
Parsons Brinckerhoff-FG, Inc. [redacted]	506 Carnegie Center Boulevard, 2nd Floor Princeton, NJ 08540 (609) 734-7000	100% by Parsons Brinckerhoff Inc.
Parsons Brinckerhoff Ohio, Inc. [redacted]	6235 Enterprise Court, Dublin, OH 43016 (614) 793-0191	100% by PB Americas, Inc.

Name of Affiliated Company	Address	Ownership
PB Booker Associates Inc. 4[redacted]	1831 Chestnut Street, Suite 700, St. Louis, MO 63103-2225 (314) 421-1476	100% by PB Americas, Inc.
Parsons Brinkerhoff Michigan, Inc. [redacted]	535 Griswold Street, Suite 1940, Detroit, MI 48226 (313) 963-5760	100% by PB Americas, Inc.
PB Energy Storage Services, Inc. [redacted]	11757 Katy Freeway, Suite 600 , Houston, TX (281) 589-5803	6% by Parsons Brinckerhoff Inc. 74% by ALLTECH, Inc. 20% PB Network Services, Inc.
PB Transit & Rail Systems, Inc. [redacted]	Two Gateway Center, 4th Floor, Newark, NJ 07102 (973) 648-8700	100% by PB Americas, Inc.
PB Facilities Inc.[redacted]	One Penn Plaza, New York, NY 10119 (212) 465-5000	100% by Parsons Brinckerhoff Inc.
PB Architecture, Inc. [redacted]	One Penn Plaza, New York, NY 10119 (212) 465-5000	33% by PB Americas, Inc.
Associated Engineers, Inc.[redacted]	3311 E. Shelby Street, Ontario, CA 91764	100% by PB Americas, Inc.
Keystone Environmental Planning, Inc. [redacted]	One Penn Plaza, New York, NY 10119 (212) 465-5000	100% by PB Americas, Inc.
Avid Engineering, Inc. [redacted]		100% by PB Americas, Inc.
Parsons Brinckerhoff Canada, Inc. (No US Tax ID Number)		100% by PB Americas, Inc.
PB Panama S.A (No US Tax ID Number)		100% by PB Americas, Inc.

"PB Americas, Inc. formerly did business as Parsons Brinckerhoff Quade & Douglas, Inc. (PBQD) and Parsons Brinckerhoff Construction Services, Inc.(PBCS). On November 14, 2006, PBQD and PBCS merged to form PB Americas, Inc. which retained the EIN number for PBQD [redacted]."

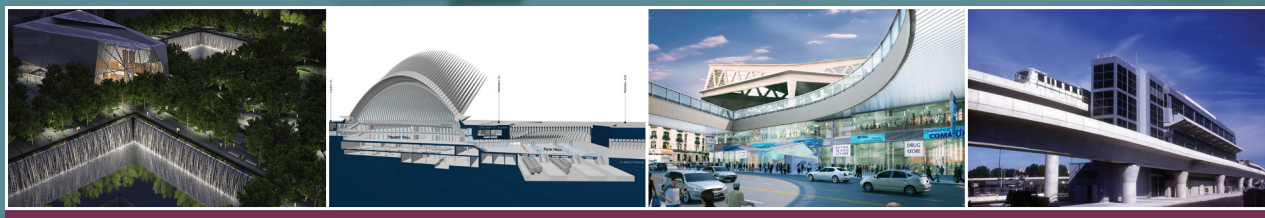
I. Conflict of Interest

Neither PB Americas, Inc., nor any of its employees, agents, or possible subcontractors is aware of any possible conflict of interest or appearance of conflict of interest relating to the provision of expert professional project management services as requested on a call-in basis during 2011, 2012, 2013, and 2014, as defined in III. I of this Request for Proposal (RFP #22388). If we become aware of a conflict, or the appearance of a conflict, we will immediately notify the Authority as required, giving full details thereof. Also, as prospective assignments are identified, PB will review each for potential conflicts.

J. Contract Exceptions

PB Americas, Inc. has reviewed the form of contract and its terms and conditions included with RFP Number 22388. PB Americas, Inc. takes no exceptions.

THE PORT AUTHORITY
OF NY & NJ



PROPOSAL

Expert Professional Services As Requested On A "Call-In" Basis
During 2011, 2012, 2013 & 2014

PROJECT MANAGEMENT SERVICES

RFP NO: 22388

STV Incorporated

STV

October 21, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attention: RFP Custodian

Re: RFP No. 22388, Performance of Expert Professional Project Management Services on a "Call-In" Basis During 2011, 2012, 2013, and 2014

Dear RFP Custodian:

STV Incorporated (STV) understands the importance to the Port Authority of New York and New Jersey (PANYNJ) of meeting the transportation needs of the bi-state region to provide safe and efficient service to its patrons at all times, and to attract business users from around the world. To successfully implement projects and programs to maintain and improve its numerous Port facilities, it is necessary for the Port Authority, at times, to obtain project management services from outside professional consultants to assist its in-house staff.

As an incumbent for this contract, STV believes that there is no better provider of project management services than our firm. In fact, STV's relationship with the PANYNJ dates back to the 1980s, when the company helped the improve PATH facilities. Since that time, we have worked with the PANYNJ's Project Management Department (PMD) on projects in virtually all of its line businesses, including Aviation, Tunnels, Bridges & Terminals, Port Commerce, PATH, and World Trade Center. We have been responsible for performing project management services on several high-profile, complex projects including:

- *One World Trade Center and the National September 11th Memorial and Museum* projects, where we have been supporting the PANYNJ's mission to construct the building and museum on time, on budget, and with high quality.

- *AirTrain JFK Design-Build-Operate-Maintain* project for which we instituted a program to effectively administer the more than 20 subconsultants working on the project, including identification of each subconsultant's role and scope of work, the timely establishment of budgets, and fast-track negotiation of all contracts. These efforts resulted in an award-winning project that was on time and within the approved budget.

This experience, coupled with our similar experience on other projects, such as our role as Program Managment Oversight consultants for the Federal Transit Administration for many years, our Project Management contract on the reconstruction of Route 9A which phased into a construction management project, has made STV an industry leader in the delivery of multidisciplinary project management, architectural, engineering, and construction management services, especially for "call-in" contracts.

We have the depth and breadth of resources to augment the Project Management Department's own staff's capabilities in maintaining the PANYNJ's line businesses. STV has the technical, professional and managerial experience, as planners, architects, and engineers with facilities and services comparable to each of the PANYNJ's areas of operations. As a result, we can hit the ground running and work closely with you to maintain safe and continuous operations at all your facilities.

225 PARK AVENUE SOUTH
NEW YORK, NEW YORK 10003-1604
(212) 777-4400 FAX: (212) 529-5237

Qualifications and Experience of Staff

We have proposed **David Frank, P.E.** as our Project Director and Task Leader for World Trade Center projects. He has more than 20 years of experience overseeing, coordinating, and inspecting construction for a wide variety of transportation projects. Mr. Frank is Deputy Project Executive at the World Trade Center (WTC) Site on the National September 11th Memorial and Museum projects currently serving the PANYNJ as an owner's project manager. Through his involvement with the WTC site reconstruction, he has become familiar with the existing stakeholders involved in all of the WTC projects, and has become fully versed in PANYNJ policies, procedures, quality assurance requirements, and the specific security requirements of the site.

To further define STV's commitment to the Port Authority, we have assigned four additional Task Leaders. These include **Ted Kleiner, AIA (Aviation)**, who prior to joining STV held senior management positions with PANYNJ, incluidng 3 years as the Assistant Director of Aviation for Capital Programs; **Luigi Brasacchio, P.E. (Tunnels, Bridges & Terminals)**, who brings more than 30 years of experience in the rehabilitation of bridges, viaducts, and highways including major suspension bridges in New York for various state agencies; **Tarek Hatab, P.E. (Port Commerce)**, who has more than 20 years of experience in program, project, and construction management, with a strong emphasis on marine terminals and piers transportation facilities, tunnels, and waterfront projects; and **David Augustine, AIA, LEED® AP (PATH)**, who brings more than 35 years of experience in the design and construction of new and renovated transportation facilities.

Mr. Frank and our designated Task Leaders will be supported by a team of project executives, managers, and support personnel whose expertise will provide the PANYNJ with a knowledgeable, diversified team that is able to respond to all tasks under this contract. Included in this pool of resources is the staff from our carefully selected subconsultants: Halcrow, Inc.; SCI Engineering, P.C.(MBE); Jenny Engineering Corporation (MBE); Metron Incorporation (MBE); DACK Consulting LLC (WBE). These carefully selected subconsultants will augment our services and help us meet the PANYNJ's 12% MBE and 5% WBE participation goals.

Qualifications and Experience of the Firm

STV recognizes that to successfully manage a project of this magnitude and complexity, the Project Management Consultant, as a team, must address the issues necessary to meet the PANYNJ's goals, and must have the capacity and experience to oversee, administer, and seamlessly integrate every component of the "call-in" program. Because we are a multidisciplinary firm with over 600 project management professionals, architects, planners, environmental specialists, and engineers in our New York office alone, we have the capacity and experience to manage various types of assignments.

Management Approach

STV's management approach will provide the PANYNJ with effective and timely solutions to the project requirements. This will be accomplished by appropriate project personnel who have a thorough understanding of the tasks required, and who have a history of working together in similar assignments. Furthermore, we have chosen qualified subconsultants for this project who will work under the direction of STV's Principal-in-Charge and Project Director, both of whom are experienced with managing multiple and concurrent assignments for PANYNJ and for other "call-in" contracts. Moreover, STV has

in-place project control systems to track costs, schedules, staff commitments, and subcontractor assignments. Our approach to "call-in" contracts reflects an understanding of the processes and procedures that must be implemented to facilitate thorough, expedient, and effective execution of the work assignments.

Cost

We believe that our choice of staffing, hourly rates, and multipliers indicate a realistic and efficient application of STV's resources for assisting with project management services for this contract. Furthermore, we believe that our choice of subconsultants provides greater service capabilities without any overlap in staffing or redundancy of services.

Acknowledgements

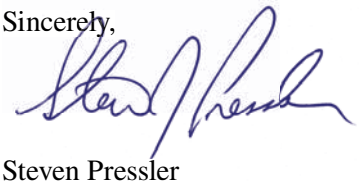
We acknowledge the receipt of Addendum #1 dated October 13, 2010. Please find enclosed a separately sealed letter in response to Article 24(c) of the Agreement.

Oral Presentations

Steven Pressler, Executive Vice President, should be contacted for presentation scheduling by phone at (212) 614-3319 or by e-mail at steven.pressler@stvinc.com.

We look forward to continuing our successful relationship with the PANYNJ through this contract for Project Management Services as Requested on a "Call-In" Basis.

Sincerely,



Steven Pressler
Executive Vice President

A. Attachment B

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

STV Incorporated
(Company)

(Signature)

Steven J. Pressler

Executive Vice President
(Title)

October 18, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

B. Attachment C

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   STV Incorporated

2. Business Address (to receive mail for this RFP):

   225 Park Avenue South

   New York, New York 10003-1604

3. Business Telephone Number: (212) 777-4400

4. Business Fax Number: (212) 529-5237

5. Firm website: www.stvinc.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 05 / 12 / 1932 (Incorporated) 1912 (Established)

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   A complete list of affiliates and subsidiaries is provided in Section H.

9. Officer or Principal of Firm and Title:

   Steven J. Pressler, Executive Vice President

10. Name, telephone number, and email address of contact for questions:
    Steven J. Pressler, (212) 614-3319

    steven.pressler@stvinc.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

C. Personnel

C. Personnel

STV understands that our role on this project will be to solely represent the needs and interests of the PANYNJ's Departments by acting as your representative through all stages of any project. The skills of our team enable us to anticipate the many technical, logistical, and administrative issues the project will pose and to develop and assess alternative solutions to address those issues effectively. STV brings not only the technical expertise necessary to provide these services but also a thorough knowledge and familiarity with the locality, both of which will be essential to make sure of the success of services provided under this call-in contract.

STV understands our role as Project Manager and Owner's Representative and will work to achieve the PANYNJ's goals for improving your infrastructure and facilities. Accordingly, the first step in making this project a success is retaining the services of a Project Management firm with unsurpassed local agency experience as well as PANYNJ knowledge and familiarity. The second step will be to have that Project Manager provide its insight and expertise to the PANYNJ so that the day-to-day issues associated with the call-in program are resolved quickly and efficiently.

STV's role is to become an integrated member of the PANYNJ's team—working as an extension of staff—providing resources and expertise in key areas, from project definition and problem solving, through construction and close-out. We will bring unique skills and experience to the PANYNJ's project management efforts, as well as the additional resources you may need. We will work side-by-side with your in-house staff—in a seamless organization. We firmly believe in the philosophy that all team members "wear the same hard hat," whether they are employees of the PANYNJ or STV. STV will be proactive in its approach to providing the PANYNJ with Project Management/Owner Representative Services. For this program, we have developed an approach based on our expertise with PANYNJ facilities and on-call projects. This approach has worked on other complex assignments and we are confident it will allow us to meet and/or exceed the PANYNJ's expectations.

STV has chosen **David Frank, P.E.** to serve as **Project Director**. Mr. Frank is a Senior Associate at STV and the Deputy Project Executive at the World Trade Center (WTC) Site on the National September 11th Memorial and Museum project, currently serving the PANYNJ as an owner's project manager. He brings over 20 years of experience to this assignment and has both in-depth and broad experience working on stations, terminals, airports, and roadways from the vantage point of a contractor, project manager, and public sector owner. Through his involvement with the WTC site reconstruction, he has become familiar with the existing stakeholders involved in all of the WTC projects, and has become fully versed in PANYNJ policies, procedures, quality assurance requirements, and the specific security requirements of the site.

Our hand-picked team of professionals, working under the direction of Mr. Frank**,** have many years of experience, significant public sector experience, and all have experience in iinfrastructure design and construction work. In addition, most have worked in transportation-related facilities, ports and terminals, and other PANYNJ facilities. As the organization chart on the following page indicates, this team has a diversity of expertise in all necessary disciplines available under one roof within the New York metropolitan area.

Finally, many of STV's professionals have experience working in different roles within the industry—many have been owners or contractors in past points in their careers. This provides the PANYNJ with professionals that have a better understanding of the motivations and needs of project stakeholders as a project moves forward, resulting in a team that can forge the necessary relationships more efficiently and productively to deliver projects right the first time.

Resumes & Project Experience

Resumes of key personnel follow the organization chart and project experience matrix.

THE PORT AUTHORITY OF NY & NJ

Principal-in-Charge
S. Pressler, PE*

Project Director
D. Frank, PE*

QA/QC
D. Cooksley*

Task Leader Aviation
T. Kleiner, AIA*

Task Leader Tunnels, Bridges & Terminals
L. Brasacchio, PE*

Task Leader Port Commerce
T. Hatab, PE (Metron)*

Task Leader WTC
D. Frank, PE*

Task Leader PATH
D. Augustine, AIA, LEED®AP*

Program & Project Initiation, Implementation, Monitoring & Reporting Services

Project Executives
B. Fox*
G. Maimis*
C. Ludlow*
D. Nazzaro*
G. Koerner*
R. Davidson, FAIA*

Senior Project Managers
J. Anserian, PE*
A. Basta, PE, CCM*
M. El Wakil, RA (Metron)*
D. Dillon, PE*
C. Kneaves, PE*
J. Valerio*
J. Cenzoprano
M. Colban, RA
J. Hauser

Project Managers
T. Gardner*
T. Savas*
A. Robson (Metron)*
S. Manii*
A. Overholser, PE*
M. Joye, PE (JEC)*
S. Figueroa*
R. Durante (SCI)*
J. Cohen, PE (SCI)*
T. Abed*
K. Patel (SCI)*

MEP Project Managers
C. Mohacsi*
R. Dries*

Resident Engineers
S. Prest, PE*
R. Rajapaske, PE, CCM, CCE, AVS*
E. Marra,Jr. PE*

Superintendents
R. DePaoli*
R. Stalcoskie*
V. Ruggiero*
M. Seelig*
J. Graves*
A. Calderon
K. Falowski
S. Hilal
G. Blutner
K. Baumgarten

Inspectors
T. Motyka*
K. Gaspar, PE (JEC)*
G. Saninocencio
M. Maiorano
Y. Portman
Z. Saliby
P. Jarmak
A. Ranginwala
G. Sumner (SCI)

Safety Specialist
G. Garbarino

Project Engineers
M. McDonald*
K. McPherson (JEC)*
J. Tookmanian, CMIT*
M. Verhagen*
R. Kelly*
L. Porcelli
M. Nguyen
A. Gaddi
S. Constaninou
R. Krause
S. Dreher

Project Controls & Support

Estimating
K. Baldivia*
A. Chancy (DACK)*
R. Aviles, PE
M. Finkelstein
V. Tornatore
R. Holder (DACK)

Senior Risk Assessor/Value Engineer
D. Kirk, AIA, CCC, CCS, CVS, LEED®AP*

FTA Funding Specialist
W. King*

Scheduling
A. Boyajian*
A. Sehic*
R. Quickel
E. Christodoulou
S. Janjua

Document Control
Y. Dennis*
D. Abbate
N. Constantino
M. Rodriguez

Accounting
D. Ohrsell
M. Salvador
M. Chen

Clerical
F. Jordan
Y. Candelario
S. Garrison-Toye

Technical Support

Diving
D. Friend (Halcrow)
A. Austin (Halcrow)

Architectural
B. Jabbonsky, RA

Mechanical
C. Romano, PE

Fire Protection/Plumbing
L. Matlick, PE

Electrical
M. Friedman, PE, LEED®AP

Structural
J. Chen, PE

Site/Civil
D. Yue, PE

Coastal
C. Carr, PE (Halcrow)

Tunneling
S. Niemiec, PE (JEC)*

Legend:
DACK – DACK Consulting, LLC (WBE)
Halcrow – Halcrow, Inc
JEC – Jenny Engineering Corporation (MBE)
Metron – Metron Incorporated (MBE)
SCI – SCI Engineering, P.C. (MBE)

Key Personnel Experience Matrix

Job Title	Name	Years Experience	Licenses &/or Certifications	Safety Training	PANYNJ	NYC Public Sector	$50K-$100M	Aviation	Tunnels, Bridges & Terminals	Port Commerce	PATH	World Trade Center	Key Projects Managed	Project Management	Project Monitoring
Project Director	D. Frank, PE	20	PE	X	X	X	X	X	X	X	X	X	X	X	X
Task Manager - Aviation	T. Kleiner, AIA	38	AIA		X	X	X	X					X	X	X
Task Manager - Tunnels, Bridges & Terminals	L. Brasacchio, PE	31	PE	X		X	X		X				X	X	X
Task Manager - Port Commerce	T. Hatab, PE (Metron)	22	PE	X		X	X			X	X		X	X	X
Task Manager - WTC Site	D. Frank, PE	20	PE	X	X	X	X		X		X	X	X	X	X
Task Manager - PATH	D. Augustine, AIA, LEED® AP	38	AIA/LEED® AP	X	X	X	X		X		X	X	X	X	X
Principal-in-Change	S. Pressler	32		X		X	X	X	X	X			X	X	X
QA/QC	D. Cooksley	25		X		X	X						X	X	X
Project Executives	B. Fox, PE	30	PE		X	X	X				X	X	X	X	
	G. Maimis	25		X	X	X	X					X	X	X	
	C. Ludlow	30												X	
	D. Nazzaro	35		X		X	X		X					X	
	G. Koerner	32		X		X	X	X						X	X
	R. Davidson, FAIA	41	FAIA		X		X	X	X		X		X	X	X
Senior Project Managers	J. Anserian, PE, PMP	34	PE/PMP		X	X	X	X	X				X	X	
	A. Basta, PE, CCM	25	PE/CCM	X	X	X	X	X	X		X	X	X		
	M. El Wakil, RA (Metron)	30	RA			X	X		X					X	
	D. Dillon, PE	28	PE	X		X	X		X	X			X	X	X
	C. Kneaves, PE	15	PE	X	X	X	X				X	X		X	
	J. Valerio, LEED®AP	25	LEED® AP	X	X	X	X					X	X	X	
Project Managers	T. Gardner	8		X	X	X	X		X	X	X	X	X	X	
	T. Savas	25		X	X	X	X		X		X	X	X	X	
	A. Robson (Metron)	20		X		X	X		X	X			X	X	X
	S. Manii	20		X	X	X	X				X	X	X	X	
	A. Overholser, PE	17	PE	X	X	X	X		X						
	M. Joye, P.E. (JEC)	31	PE	X	X	X	X		X				X	X	X
	S. Figueroa	15		X	X	X	X				X	X		X	
	R. Durante (SCI)	23		X	X	X	X	X	X		X	X	X	X	X
	J. Cohen, PE (SCI)	53	PE		X		X	X	X		X		X	X	X
	K. Patel (SCI)	35			X	X	X	X	X		X		X	X	
	T. Abed	12	ACI	X	X	X	X	X							X
MEP Project Managers	C. Mohacsi	30		X	X	X	X	X			X	X	X	X	
	R. Dries	25		X	X	X	X				X	X	X	X	
Resident Engineer	S. Prest, PE	30	PE	X	X	X	X	X	X				X		
	R. Rajapaske, PE, CCM, CCE, AVS	15	PE/CCM/CCE/ AVS	X	X	X	X		X			X	X		X
	E. Marra, Jr., PE	30	PE	X		X	X		X						X
Superintendents	R. DePaoli	14		X		X	X								
	R. Stalcoskie	25		X		X	X						X		X
	V. Ruggiero	20		X	X	X									
	M. Seelig	20		X	X	X	X	X				X		X	X
	J. Graves	35		X	X	X	X	X							
Inspectors	T. Motyka	20	NICET IV	X		X	X		X						X
	K.Gaspar, PE (JEC)	13	PE	X	X	X	X		X		X	X	X	X	X
Project Engineers	M. McDonald	15			X	X	X				X	X	X		
	K. McPherson, (JEC)	17		X	X	X	X		X		X		X	X	X
	J. Tookmanian	8	LEED® AP	X			X		X					X	
	M. Verhagen	2		X	X	X	X					X	X		
	R. Kelly	5		X	X	X	X					X	X		
Estimators	K. Baldivia	12		X	X	X	X	X	X	X		X	X	X	
	A. Chancy (DACK)	27		X	X	X	X	X	X		X	X	X		
Senior Risk Assessor/Value Engineer	D. Kirk, AIA, CCC, CCS, CVS, LEED®AP	40	AIA/CCC/CCS		X	X	X	X	X	X			X	X	
FTA Funding Specialist	W. King	25	CVS/LEED® AP			X	X		X					X	
Schedulers	A. Boyajian, PE	52	PE		X	X	X	X	X	X	X	X			
	A. Sehic	11		X	X	X	X				X	X	X		
Document Control	Y. Dennis	42			X		X	X	X		X	X			
Tunnel Engineering	S. Niemiec, PE (JEC)	27	PE	X	X	X	X		X		X	X	X	X	X

D. Firm Experience

The Team

STV

STV Incorporated (STV) is a leading multidisciplinary construction management, engineering, architectural, planning, and environmental firm of over 1,700 personnel in 33 offices throughout North America, and a staff of more than 600 in New York City. STV Construction, Inc., located in New York City, was established in 1996 as a wholly-owned subsidiary of STV Incorporated.

STV has performed a variety of services for the Port Authority of NY & NJ (PANYNJ), some under on-call contracts, at the Port Authority Bus Terminal, One World Trade Center (WTC) (formerly named Freedom Tower) and the National September 11th Memorial and Museum, JFK Intermodal Airport, LaGuardia Airport, the Lincoln Tunnel, and the George Washington Bridge Bus Station, among others. Drawing on this experience and on many other completed PANYNJ transportation facility improvement projects, STV has become well-versed in the PANYNJ organization of client departments and their relationship to the engineering department and its various divisions; PANYNJ procedures and regulations; and the overall PANYNJ organizational structure.

STV is noted for providing flexible, focused project management and technical services that our clients depend on time and again. With resources of over 160 local project management professionals, The firm is currently managing projects with construction costs ranging from $50,000 to $2.5 billion. STV provides the flexibility to serve as the CM, CM/builder, or Owner's Representative offering in-house technical skills in cost estimating, scheduling, risk analysis, and value engineering.

STV's Project Controls Department provides all of STV and its clients with the specialized tools and expertise needed to successfully manage projects. Incorporating the guidance of recognized industry standards and practices with our in-house staff of professional estimators, cost engineers, risk assessment managers, and value engineering professionals, and utilizing the latest advancements in software and related technology, this department supports our project managers and project-specific control staff in developing and monitoring cost and schedule data, resource allocation methodologies, risk assessments, value engineering, and related reviews. The department also offers assistance in the utilization of documents and project data control formats such as Expedition or Prolog.

Subconsultants

We have chosen the following subconsultants based on a successful working relationship with STV and our staff members in the past while considering our commitment to utilizing M/WBE firms where possible. We will provide PANYNJ with a seamlessly integrated project team, resulting in a coherently organized and efficient final product. A brief profile of each of these team members follows.

SCI Engineering, P.C. (MBE)

SCI Engineering, P.C. (SCI) offers comprehensive engineering services and construction management services that include bridge engineering, construction inspection, highway, traffic, and transportation engineering, green energy management, intelligent transportation systems (ITS), project control solutions, and construction management. Founded in 1981, SCI has built a formidable public sector market client base that includes federal, state, county, and local government agencies.

SCI's multidisciplinary engineering professionals bring experience to the team in the areas of civil, electrical, mechanical, and structural engineering. SCI's construction management team consists of experienced professionals who are trained in a variety of disciplines allowing them to provide preconstruction services through master scheduling, cost estimating, constructability reviews and value engineering, as well as project management and inspection during the construction phases.

Jenny Engineering Corporation (MBE)

Jenny Engineering Corporation (JEC) is an internationally recognized consulting engineering firm specializing in the planning, design, and construction management of tunnels and underground structures. JEC has more than 45 years experience in design and construction phases of a project. JEC provides a full range of services as applied to feasibility studies, construction methods, design and cost estimates, the preparation of plans and specifications, construction management and contract administration for new structures and the rehabilitation of existing facilities.

For over 15 years, JEC has maintained an exceptional working relationship with PANYNJ on many projects and has performed condition surveys/inspections, rehabilitation, design, and construction engineering services on many of the major tunnels in the New York metropolitan area including the Lincoln, Holland, and PATH Tunnels. Other services provided include the WTC Transportation Hub project where JEC was responsible for the structural design of various foundation elements and earth support systems during construction, including 60-foot-high shear wall bracing, shoring for grade slab construction, retaining walls, temporary support of existing 78-foot-diameter sanitary sewer, and bracing of various north projection elements during demolition.

Metron Incorporated (MBE-Pending)

Founded in 1994, Metron Incorporated (formerly Madnet Corp) is a New York-based, small-sized firm specializing in construction, project management, resident engineering, and Owner's Representative services for high-end private and public sector commercial, transportation, sports facilities, and recreational projects. Management services provided are furnished during early design development and continue through completion of construction. A highly qualified team of architects, engineers, and construction professionals give Metron the reputation of being among the small and highly sought after construction management firms in New York City.

Metron's range of projects and clients includes the New York City Economic Development Corporation (NYCEDC) for which Metron provided Owner's representative and construction management services for the East River Bikeway, Stuyvesant Cove Waterfront project, and the Mets Minor League Stadium/Keyspan Park at Coney Island, the West Midtown Ferry Terminal, the Staten Island St George Ferry Terminal, the MTA's Rockaway Park Police Headquarters Station, and the Randall's island Sports Fields Development project

DACK Consulting, LLC (WBE)

Established in 1997, DACK Consulting (DACK) provides estimating, scheduling, and project management services to agencies, municipalities, developers, construction managers, general contractors, and architects for governmental, institutional, commercial, industrial, and residential projects. DACK has provided estimating and construction services for projects such as the Bronx Criminal Courthouse Renovation, World Trade Center HUB, NYCHA Change Order Evaluation, Westchester County Courthouse, and Battery Park Site #3.

Halcrow, Inc.

Halcrow was founded more than 140 years ago and is now a global multidisciplined engineering firm with more than 500 staff in 24 offices in North America. In the 2010 rankings of port/marine engineering firms by *Engineering News-Record,* Halcrow is ranked as the fifth largest in the United States. Halcrow has carried out more waterfront projects than any other consulting engineering firm in the New York region.

Halcrow is known for providing cutting-edge designs and services for projects in the marine environment and has a long history of working in New York City with government agencies, architects, developers, corporations and contractors. Halcrow's projects vary from rehabilitation, repair, or upgrade of existing facilities, to brownfield and greenfield developments and new facilities.

Halcrow works with all of the Authority's line departments and divisions and currently holds "call-in" contracts for the design of waterfront structures, the inspection of waterfront structures, port planning, and asset management, and is currently undertaking the Runway Safety Areas Improvement Analysis at LaGuardia Airport, the New York Regional Goods

Movement Plan, and the Interagency Study of Regional Private Passenger Ferry Services in the New York Metropolitan Area.

Project Experience

The STV team is extremely well qualified for this important PANYNJ Project Management Services Call-In contract. We combine extensive experience and leadership in owner's representative projects, a history working on similar facilities, and past relationships with PANYNJ. A matrix is included at the end of the section comparing team experience to PANYNJ needs.

One World Trade Center & National September 11th Memorial and Museum Program Management

New York, NY [2006 - Ongoing]

Client: *PANYNJ*
Reference: *Steven Plate, Director, World Trade Center Construction, (212) 435-5529*

- Repeat client
- Complex project stakeholder

STV is the expert program manager and owner's representative for the construction of the tower at One World Trade Center and the National September 11th Memorial and Museum in Lower Manhattan, NY. One World Trade Center comprises more than 3.6 million gross sf, some 2.6 million sf of which will be available for office space, restaurants, an observation deck, and broadcast facilities. The building will also house below-grade shopping, access to the PATH transit system, and the World Financial Center (WFC).

As the program manager and owner's representative since August 2006, STV's team has been supporting the PANYNJ's mission to construct the building on time, on budget, and with high quality. One World Trade Center encompasses a sophisticated array of sustainable design elements, a unique curtainwall system, and advanced building control systems.

$85 M IN PACCS SAVINGS

STV's careful review and negotiation of PACCS has generated a savings of over $85 million to the PANYNJ, over 55% of the original value of the PACCs' submitted.

Complementing the Memorial, a state-of-the-art museum will offer visitors an opportunity to deepen their experience of the site.

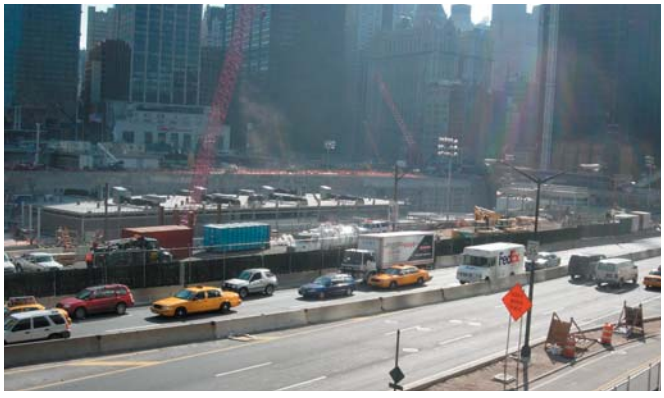
Route 9A Construction Management

New York, NY [2004 - Ongoing]

Client: *NYSDOT*
Reference: Joseph Brown, Project Director [redacted]

- Repeat client
- Program management
- Construction in operating environment
- Complex agency coordination

After being damaged by the September 11th attacks, Route 9A (West Street), a major artery in Lower Manhattan, was reopened in March, 2002 with temporary facilities. STV, in joint venture, is serving as CM for this complex project to restore Route 9A's traffic capacity, reconstruct the utility infrastructure, and improve pedestrian circulation. Temporary



bridges across West Street are being replaced by wide, architecturally delineated, at-grade crossings; a new underground pedestrian concourse will provide Battery Park City residents and workers with a safe means to cross West Street; and an appealing tree-lined pedestrian promenade will connect to Hudson River Park.

STV's wide-ranging responsibilities include implementing complex traffic management strategies during roadway realignment, reviewing erection plans for pedestrian bridges, and designing a temporary traffic surveillance system. When construction of Route 9A from West Thames to Chambers Street required work at the frontage of the WTC Memorial, the WFC, and several new high rise office buildings concurrently under construction, STV coordinated with agencies, developers, and their contractors. Executing complex traffic and construction access strategies and strict adherence to schedule commitments have been critical throughout the project.

Amtrak East and North River Tunnel Fire Standpipe Installation CM

New York, NY [2002 - 2005]

Client: *Amtrak*
Reference: Stephen Riley, Project Manager
[redacted]

- Repeat client

Fire suppression capabilities in Amtrak's century old, 16-mile tunnel system under the New York City region were lacking. In response, STV, in joint venture, provided CM services during the installation of dry fire standpipes in 72,500 feet of the East and North River tunnels. The new dry fire standpipes, served by fire department connections on shore, extend into the tunnels from both ends. New risers and connections were constructed as needed. In addition, 2,500-feet of old standpipe was removed to complete the rehabilitation of the East River Tunnel's ventilation systems. Because of STV's successful performance on this assignment, the firm was awarded the second phase of this contract.

To maintain weekday service in the three tunnels, work was performed during 55-hour weekend shifts. STV made sure that work areas were ready for construction at the beginning of each shift and that Amtrak service could resume at the end of each shift. The firm is currently managing Phases III and IV, of this project; a $22.5 million effort to add deluge valve and air monitoring systems, along with several mechanical equipment rooms to the existing fire standpipe systems.

Newark Light Rail Broad Street Extension CM

Newark, NJ [2002 - 2007]

Client: *NJ TRANSIT*
Reference: Joseph Marcello, Project Manager
[redacted]

- Construction adjacent to heavy congestion
- Rail coordination
- Complex agency coordination

The 1.5-mile link from Broad Street to Newark Penn Station is the first of three planned additions on the Newark City Subway Line, which will eventually extend to Newark Airport. STV, in joint venture, provided program and construction management services for the $120 million extension. The project entailed utility relocations, open-cut tunnel construction, street reconstruction, and coordination of the new line with the current transit system. To minimize disruption to vehicular traffic, STV worked nights and weekends and helped the City and the police department design traffic detours. Thorough review of the range of motion for equipment, types of barricades to be used, and flagging requirements prior to commencement of any work, resulted in the project's exemplary safety record.

STV made every effort to bring the efficiency and low operations and maintenance costs of the current system to the expanded network. In 2008, the American Council of Engineering Companies of New York awarded STV the Platinum Award for Engineering Excellence in Transportation for the project.

Federal Transit Administration Project Management Oversight

New York, NY [2004 - Ongoing]

Client: *FTA*
Reference: Steve Asatoorian, Director, PMO [redacted]

For more than 20 years, STV has been responsible for providing expert consultant services to the Federal Transit Administration (FTA) for new transit investments throughout the U.S. Key assignments have ranged in scope from the analysis and feasibility of new transit lines, to the oversight of new multi-million dollar transit systems serving major U.S. cities.

Working directly with the FTA, STV has been involved in evaluating the ability of various transportation agencies to carry out specific FTA-funded capital projects, including New Starts and Small Starts; determining how well the Grantee is following its own Project Management Plan; and generally monitoring the procedures, processes and activities to ensure that the overall programs result in timely, quality products delivered within budget.

STV has performed Project Management Oversight (PMO) services for a number of FTA initiatives, including the following:

- Salt Lake City LRT - $209 million construction
- Downtown Seattle Transit Project - $2.4 billion construction
- San Francisco Muni Metro Turnaround Facility - $160 million construction
- San Francisco Bay Area Rapid Transit Capital Projects - $2.2 billion construction
- Denver-RTD/CDOT Capital Program - $1.7 billion construction
- New Orleans St. Charles and Riverfront Streetcar Line Rehabilitations - $51.8 million construction

CM/Builder Call-in Requirements Contract

New York, NY [2005 - Ongoing]

Client: *NYCHA*
Reference: Douglas McNevin, Program Director- Bronx/ Queens Program Unit, [redacted]

- Repeat client
- Construction in operating environment

The New York City Housing Authority (NYCHA) provides affordable low- and moderate-income housing for residents throughout New York City. STV is serving as CM on a task-order basis for NYCHA as part of a CM/builder requirements contract. The firm provided pre-construction, CPM scheduling, cost estimating, claims analysis, and change order preparation services for various roofing, brickwork repairs, concrete structural rehabilitation, and interior modification projects. In addition, STV provided pre-qualification, project management, and procurement services.

Under this on-call contract, the firm managed the $41.5 million renovation of the Johnson Houses, which

was completed six months ahead of schedule and approximately $3 million under budget, and is currently managing renovations to six additional buildings in the complex. STV also managed $9.8 million exterior renovations at Surfside Gardens, in Brooklyn; a $7.3 million renovation of five buildings in the Bronx, NY; and the $10 million rehabilitation of five buildings at the Washington Heights housing development in Manhattan.

Because of STV's performance under the contract, the firm was awarded an additional $150 million worth of construction to manage.

Roslyn Viaduct Construction Monitoring

Roslyn, Nassau County, NY [2005 - 2009]

Client: *NYSDOT*
Reference: Charles Maas, Engineer-in-Charge
[redacted]

- Repeat client
- Significant construction staging

STV, in joint venture provided resident engineering and inspection (REI) services during construction of the $133 million Roslyn Viaduct carrying Route 25A over Hempstead Harbor. The, 4-lane, 0.5-mile structure features twin segmental precast concrete viaducts on bored-in piles. After staged demolition of the existing steel viaduct, approaches were re-profiled and realigned to improve highway geometry. Access to a local shopping district surrounding the structure had to be maintained during construction. Facing a restrictive construction footprint and an aggressive schedule, STV implemented several measures to minimize construction congestion; oversaw installation of intelligent transportation system (ITS) infrastructure; completed required field inspections and testing; and prepared progress payments. In addition, STV developed a proactive inspection and maintenance manual intended to help regional maintenance personnel manage defects before they lead to roadway closures. The manual identifies trouble-prone areas and links repairs for typical problems to a tabulated level of severity. A first for the region, the manual has allowed in-house staff to function without external assistance.

WTC Transportation Hub

New York, NY [2003 - Ongoing]

Client: *PANYNJ*
Reference: Steven Plate, Director, World Trade Center Construction, (212) 435-5529

- Complex security
- Operating environment
- Complex agency coordination

The WTC Transportation Hub is an integral part of the reconstruction of the WTC site. STV, in joint venture, is providing engineering design services and serving as Architect-of-Record for the Hub, which will house a permanent Port Authority Trans-Hudson (PATH) terminal, connect to 13 subway lines, and link pedestrians to the World Financial Center (WFC) and its ferries through an underground concourse.

STV used a variety of computer simulation programs during the design process. Pedestrian flow was modeled to minimize queuing at stairs and escalators during rush hours. Complex roof mechanisms required to open and close the steel wings on September 11th, in memory of the attacks, are being simulated. The firm is also using Computational Fluid Dynamics (CFD) modeling to make sure smoke and heat do not impede the evacuation of the facility during an emergency.

As a high-profile facility, security considerations for the WTC Transportation Hub—not only in the design, but in the management of the project—are paramount. STV has worked with the PANYNJ to develop a handbook for proper document control and tracking.

Lincoln Center Projects Program Management

New York, NY [2008 - 2010]

Client: *NYCEDC*
Reference: Corinna Cole, Senior Project Manager
[redacted]

- Federal funding
- Repeat client
- Construction in operating environment
- Complex agency coordination

A triumph of city planning in the 1950s, Manhattan's aging 16-acre Lincoln Center campus is undergoing a massive renovation and upgrade. The design for total transformation of Lincoln Center's primary entryways and access points — known as the "Promenade Project, calls for sinking the existing service road leading up to the plaza to below street level and expanding the current monumental steps to the plaza.

STV, in joint venture, is serving as the Funding Agency's Representative, monitoring the expenditure of $240 million of city and federal funding to expand and modernize facilities. The firm has recommended several ways to improve contractor performance, such as the implementation of a contractor's schedule of values to avoid front loading of vendor requisitions. In addition, Lincoln Center's adoption of an STV-developed structured format for all design changes and agreement to enlist the services of an independent estimating firm, helped streamline the change order process. With respect to funding applications, STV designed a format, adopted by Lincoln Center, to account for multiple levels of detail, including vendor payments, sources of public funding, and segregation of non-eligible costs. The firm is currently overseeing transformation of the West 65th Street corridor into a more pedestrian-oriented thoroughfare.

East Side Access

Manhattan and Queens, NY [1999 - Ongoing]

Client: *MTACC/LIRR*
Reference: Alan Paskoff, Program Manager
[redacted]

- Complex agency coordination

The $7.2 billion East Side Access (ESA) project will ease congestion at Penn Station by bringing LIRR service to Grand Central Station, in Manhattan STV was involved in all of the prior planning studies for this project, which involves construction of new soft-ground tunnels in Queens, new hard-rock tunnels, rehabilitation of the existing 63rd Street tunnel, multiple crossovers, as well as access, emergency egress, and ventilation tunnels. To determine the design criteria, the firm undertook the largest geotechnical site investigation and characterization at the time in New York City, employing such innovative approaches as in-situ stress measurement and borehole core orientation.

STV's services include conceptual through final design, including construction staging and noise mitigation plans, for a variety of structures to accommodate the new alignment of the main line tracks in Queens. STV also developed the conceptual design for the new line's signal, communications, and traction power systems. For the tunnel's terminus in Grand Central Terminal, STV developed conceptual designs for train platforms, cross-passageways, and entranceways, with consideration given to the intermodal requirements of the terminal, which presently serves Metro-North and New York City Transit (NYCT) subway lines.

JFK AirTrain Project Controls

New York, NY [1998 - 2004]

Client: *PANYNJ*

Reference: *Steven Plate, Director, World Trade Center Construction, (212) 435-5529*

- Managing more than 20 subconsultants
- Coordination with multiple agency stakeholders
- On-time project delivery

To link remote parking, car rental services, and commuter rail, subway and bus systems that service the New York metropolitan area, the PANYNJ commissioned the design-build of a $1.3 billion light rail transit (LRT) system to serve the central terminal area of John F. Kennedy International Airport. The project features an innovative elevated track structure, 10 award-winning stations, and a sophisticated operations, maintenance, and storage facility (OMSF). STV developed a state-of-the-art, performance-based design approach to meet the stringent design criteria required by the client,

To manage a project of this scope, STV established three groups of management teams; section design, technical resources, and project controls. Committed to the effective administration of more than 20 subconsultants working on the project, STV instituted a program to identify each subconsultant's role and scope of work; establish budgets; and manage the fast-track negotiation of all contracts for the Project Controls Group. The firm used a combination of industry-standard software and sophisticated in-house systems to manage the project controls of this massive program. Expedition software was used for overall project management; Primavera software for master scheduling; and in-house systems with full Expedition interface capabilities for document control, configuration management, contract administration, and financial reporting. The software was used to manage extensive project data, the firm scheduled the release of more than 217 design packages to correspond with the construction schedule.

Innovative resource and cost-loading analysis techniques enabled the firm to allocate budgets and resources (including all professional and support personnel) efficiently. Related to this was the firm's management of all contract deliverables, verifying their proper submission to and approval by the client. With STV's aggressive subconsultant progress and budget tracking, quick resolution of all claims for additional services, and timely approval and payment of all submitted invoices, the project was completed on schedule and within the approved budget.

Willis Avenue Bridge Reconstruction Resident Engineering and Inspection

New York, NY [2007 - 2011]

Client: *NYCDOT*

Reference: *Robert Collyer, P.E., (Deputy Director, Movable Bridges)*

- Complex agency coordination
- Construction adjacent to operating environment

As part of a joint venture, STV is providing resident engineering and inspection (REI) services for the replacement of the Willis Avenue Bridge over the Harlem River in Manhattan with a new, 11-span structure consisting of a composite reinforced concrete deck, concrete barriers, steel-rolled sections, steel-welded girders, and transverse steel box girders. The project includes reconstruction of the bridge's interchanges; construction of a new connector ramp bridge to the northbound Major Deegan Expressway; and replacement of a 2-span bridge over the Major Deegan Expressway with a 4-span, 400-foot-long, continuous curved girder bridge. The waterway spans of the swing-span bridge over the Harlem River, Bronx approach spans, and approach ramps will be demolished.

With an emphasis on foundations, substructures, and superstructures of the fixed spans and approaches, STV will also oversee mechanical and electrical inspection of the movable span. STV has direct re-

sponsibility for CPM scheduling, geotechnical and environmental engineering, and architectural elements during the demolition and reconstruction of the bridges; providing qualified inspectors with expertise on the fabrication and installation of components for heavy movable bridges and other related structures. The firm performs visual quality, tolerance, compatibility, and functionality inspections of the bridge components.

Emergency Project and Construction Management Services Program

New York, NY [2005 - 2008]

Client: *NYCSCA*

Reference: Mary Ann Motto, Manager of Operations - SCA Emergency Work, [redacted]

- Repeat client
- Construction in operating environment
- Call-in contract

STV was the construction manager (CM) throughout a $65.5 million Emergency On-Call Construction Management Program Contract for the NYCSCA. The projects varied from small interior room conversions and renovations to large reconstructions of school buildings. Under this program, STV held more than 36 master subcontractor agreements with on-call prequalified contractors, and executed and administered more than 115 task-order agreements over the life of the program. The most challenging aspect of these projects was maintaining a safe and secure work environment for the adjacent K-12 community. STV completed all assignments on or ahead of schedule, and met the quality and budget expectations of the NYCSCA.

STV's scope of services included design review, construction administration, procurement, and project management.

Cost Control for WTC Projects

New York, NY [2006 - Ongoing]

Client: *PANYNJ*

Reference: Steven Plate, Director, World Trade Center Construction, (212) 435-5529

- Cost controls for complex PANYNJ project
- Coordination with multiple contractors and stakeholders

On behalf of the Port Authority of New York and New Jersey (PANYNJ), STV is developing, implementing, and managing a cost engineering and cost estimating program to integrate and control costs among all projects composing the redevelopment of the 16-acre WTC site. The firm's services include comprehensive cost engineering reports and trend analyses, independent estimate evaluations, analysis of bids, and independent scheduling and logistics review.

Construction of this highly complex WTC redevelopment project has already begun within the logistically challenging project site. To assist PANYNJ in facilitating a guaranteed maximum price (GMP) and maintaining rigorous budgetary control, the leadership of STV's Project Controls department has been engaged to independently evaluate the cost of the entire project.

Through the course of this task, STV has chaired numerous reconciliation and negotiation meetings with the construction management team, independent cost consultants, and contractors, as well as actively participated in design meetings to clarify specific elements of the project that have the potential to escalate the cost.

Rehabilitation of St. George Ferry Terminal
Staten Island, NY [2001 - 2006]

Client: *NYCEDC*
Reference: Eve Michel, Assistant Deputy Manager, NYCHA, [redacted]

- Owner's Representative
- Monitored contractor and CM's performance
- Coordinated agency reviews

Public and private ferries, the Staten Island Railway, New York City Transit buses, and taxis converge at the St. George Ferry Terminal in Staten Island, NY. To provide a more welcoming experience for travelers, the terminal was converted into a state-of-the-art intermodal transportation facility. This $150 million renovation included a 20,000-sf addition of public space, infrastructure upgrades, replacement of the Terminal's piers, rehabilitation of the private ferry slip, and site improvements.

As Owner's Representative for the New York City Economic Development Corporation, Madnet helped manage this project from design kickoff through close-out. The firm coordinated the design process to make sure the New York City Department of Transportation's concerns were addressed. As the project progressed, Madnet assisted with selection of the construction manager and contractors, made sure that the requirements of various City agencies were met, and monitored the contractor's and construction manager's performance. This successful project has been commended by the New York City Arts commission for its innovative design.

Hudson River Park Marine Inspection, Design, and Construction Administration
New York, NY [Ongoing]

Client: *Hudson River Park Trust*
Reference: Marc Boddewyn, [redacted]

- Inspection & design of waterfront structures

The 5-mile Hudson River Park, under development by the Hudson River Park Trust (HRPT), will stretch along the Hudson River from Battery Park City to 59th Street, in Manhattan. When completed, the park will encompass over 550 acres of riverfront property and include thirteen pier structures.

Halcrow is performing inspection, engineering, design, and construction administration services for the marine structures throughout the full length of the park. Included in the scope of this work are condition surveys to monitor structures that are scheduled for replacement; inspection and rehabilitation design of structures that will remain in use by the park; inspection and design of demolition for structures that will be removed; and monitoring of pile fields for previously demolished piers. Structures to be inspected within the park include timber and steel pile supported piers, granite block seawalls, and timber pile fields.

On-Call Waterfront Facility Condition Surveys
New York, NY [1998 - Ongoing]

Client: *PANYNJ*
Reference: Barry Feldman, [redacted]

- PANYNJ On-Call Contract
- Waterfront Structures

Halcrow has worked with the Design Division of the PANYNJ continuously since 1998 under annual "Call-In" contracts to provide professional waterfront structural engineering services. This is the twelfth consecutive, annual, open-ended, multi-task contract that has been awarded to Halcrow by the PANYNJ's Quality Assurance Division. Under this contract, Halcrow performs above water and underwater condition surveys and prepares Condition Survey Reports for the specified waterfront installations. These reports outline the condition of the facilities at the time of inspection, identify deficiencies which may present a hazard to personnel or the environment, and include recommendations and cost estimates for correcting such deficiencies.

In many cases, the inspection projects have continued to the design stage and Halcrow has designed repairs to piers, wharves, bulkheads, buildings, bridges, bridge pier protection, and other miscellaneous structures. Some notable assignments include: design of bridge pier protection cell replacement for Outerbridge Crossing; upgrade of Howland Hook Container Terminal; inspection/evaluation of the 230,000 sf Brooklyn Pier 12 and adjacent 700-foot seawall; and inspection/evaluation of the relieving platform-type seawall that constitutes the wharf for 57 ship berths at Port Elizabeth and Port Newark.

How the STV Team Experience meets PANYNJ Needs

Project Name	PROJECT SIZE		NY local Public Sector	SERVICES PROVIDED						PROJECT TYPE					
	Project Value $50,000-$100 million	Project Value greater than $100M		Pre-construction/ Design Management	Construction Completion/ Monitoring	Project Controls - Cost & Schedule Management	Document Control	Program Level Management	Program Management Support	Public Transportation	Major Facilities/ Infrastructure	Marine	Aviation	Tunnels, Bridges / Terminals	Rail Facilities
One World Trade Center		X	X	X	X	X	X	X	X		X				
National September 11th Memorial & Museum		X	X	X	X	X	X	X	X		X				
Route 9A Program & Construction Management		X	X	X	X	X	X	X	X	X	X			X	
Amtrak East & North River Tunnel Fire Standpipe Installation	X		X	X	X	X	X			X	X			X	X
Newark Light Rail Broad Street Extension		X	X	X	X	X	X			X	X			X	X
FTA PMO		X		X	X	X		X	X	X	X			X	X
NYCHA CM/Build Requirements Contract	X		X	X	X	X	X	X			X				
Roslyn Viaduct		X	X		X	X	X			X	X			X	
WTC Transportation HUB		X	X	X		X	X			X	X			X	X
Lincoln Center Program Management		X	X	X	X	X		X	X	X	X				
East Side Access		X	X			X	X		X	X	X			X	X
JFK Airtrain		X	X			X	X		X	X	X		X	X	X
Willis Avenue Bridge Replacement		X	X		X	X	X			X	X			X	
SCA Emergency Call In Contract	X		X	X	X	X	X	X	X		X				
Cost Control for WTC Projects		X	X			X				X	X				X

E. Management Approach

Project Understanding

This consultant services contract involves the performance of project management and related project/program and support services for the Port Authority's Project Management Department (PMD) on an "as needed" basis for various projects and/or programs at the Authority's facilities. These "call-in" services will be provided for projects/programs relating to the Authority's Aviation; Tunnels, Bridges and Terminals (TB&T); Port Commerce, PATH; World Trade Center, Economic; and Security line businesses, and will be performed during calendar years 2007-2010.

We understand that these services will be predominately performed at the Authority's facilities within the Port District but may, in some instances, be performed at the consultant's offices. Progress and projects will consist of various types, sizes, and complexities ranging in value from approximately $50,000 to $100 million. Under authorized task orders issued by the Port Authority for assignment of professional staff on an individual project manager or team basis, the required services will include responsibility for managing the following engineering and business activities, from conceptual and preliminary (Stage I & II) design through contract preparation (Stage III) and construction (Stage IV) completion:

- *Establishment of Project Management Plans*, including staff resource planning; design procurement documents (RFQs/RFPs); project controls (scope, schedule, budget); and presentation/reports.
- *Program Level Management Services*, including implementation; staff requirements; scheduling; budgeting; administrative oversight and evaluation/recommendation of M/WBE goals.

STV will implement proven operating procedures with which we can manage a multitude of small or large task assignments simultaneously. We have demonstrated this capability on numerous call-in contracts in the past for such clients as:

- Port Authority of New York and New Jersey
- New Jersey Transit
- New York City Transit
- Metro-North Railroad
- Long Island Rail Road
- NYC Department of Transportation
- NYC Economic Development Corporation
- NYC Department of Design and Construction
- NYC School Construction Authority
- NYC Department of Citywide Administrative Services
- US Army Corps of Engineers
- US Postal Service

Currently, a major segment of STV's work consists of call-in assignments under requirements and general engineering consultant contracts; accordingly, we have developed specific methodologies for work of this type. As an experienced call-in consultant for local public agencies, STV recognizes that there is no such thing as a "minor" task; all tasks—no matter how large or small—play a significant part in the daily operation of public facilities. We pride ourselves on our ability to mobilize our resources quickly and address all bridge, tunnel, and site issues successfully.

Key Issues

STV recognizes that, in order to meet the Port Authority's goals, the following key issues must be addressed as expeditiously as possible.

- *Augmenting the Port Authority's staff, increasing the Port Authority's reach and ability to meet its schedules:* STV has made available a team of senior level managers and project managers, from its New York and New Jersey offices, ready for immediate assignment to the Port Authority. These individuals will be selected based on their PM experienced and trade discipline background, in response to the Authority's task requests, and upon PA acceptance will receive orientation and

training from the Project Director and his senior PM staff prior to their assignment.

- *Handling a diverse range of projects, providing the range of services needed to meet the needs of six different lines of business:* Our Project Managers possess a wide range of technical backgrounds. Complementing these skills, those individuals also have extensive experience in managing the non-technical, programmatic and business elements of successful projects, dealing with both internal and external interfaces. These responsibilities, for both public and private clients, relate to transportation and building facilities, over the entire spectrum of the Port Authority's regional mission. Given the recent re-organization of the Port's project management functions in establishing the Project Management Department, STV's broad range of project management abilities become even more beneficial.
- *Handle Multiple Projects Simultaneously, freeing the Port Authority from the administrative burden of managing more than one consultant:* STV has formed a team of Senior Project Managers and Project Managers, with the necessary administrative, managerial and supervisory skills, to handle and track multiple involving projects simultaneously, involving different consultants and multidisciplinary trades. In order to accomplish this most efficiently, and to deliver the quality of deliverable that is expected, these individuals must have the experience working in dynamic professional environments, be proficient in the most recent engineering management systems, and be able to lead teams of diverse architectural/engineering functional staff. Our proposed project managers possess those qualities and will be supported if requested, with experienced project management control systems, provided by both STV and its M/WBE subconsultants.

An alternate approach to handling multiple projects is to set up a complete project team, led by an STV Senior Project Manager, and compromised of several STV assigned project managers, to manage a number of projects of similar type, program or Port facility. Under this arrangement, the STV "squad" would report to a PMD Program Manager, and could be located either in Port facility or STV New York or New Jersey offices.

- *Complying with Port Authority Policies and Procedures, eliminating the need for the Port Authority to adjust to different management styles:* As previously stated, it is the intent of STV to assign Project Managers who, through prior Port Authority employment or experience, and for orientation by our Project Director, Jerry Dinkels, and his senior project management staff, are familiar with the Port Authority's capital authorization process; reporting structure; management style; policies and procedures; quality standards and work ethic. It is essential that these individuals are able to perform their assigned duties in an efficient, professional and competent manner, under the direction of the Port Authority and to the satisfaction of their PA supervisor.

The PANYNJ must have absolute confidence in the managerial and technical talent of its call-in consultants. The team must have the depth and breadth of resources to respond to any request for service, a clearly predefined and field-tested management plan, and strong management capabilities to keep all project activities on track.

Our Project Director will work with our Task Leaders to direct and coordinate the project teams and monitor progress.

A call-in contract differs from a standard construction program in that the consultant needs to react quickly to the PANYNJ's specific request for services, and be able to be responsive to the widely varying needs and concerns that arise. Therefore, the program must be managed and staffed by seasoned personnel who are experienced with PANYNJ standards and operations. Project work will often be performed in a condensed time period and a project learning curve will be virtually nonexistent. Work may include the provision of a wide variety of project management and technical support professionals on projects ranging in value from $50,000 to $100 million. These services may be performed for any of the PANYNJ's 32 potential locations with a particular emphasis on five lines of businesses: aviation; tunnels, bridges & terminals; port commerce; PATH, and the World Trade Center site.

The Team

The team on this assignment is led by STV's highly seasoned professionals, all with experience serving the Authority and with expertise in each of the five lines of businesses identified above. This team is also complemented by handpicked subconsultants with specific PANYNJ expertise relevant to the lines of business this contract is meant to serve.

Management Structure

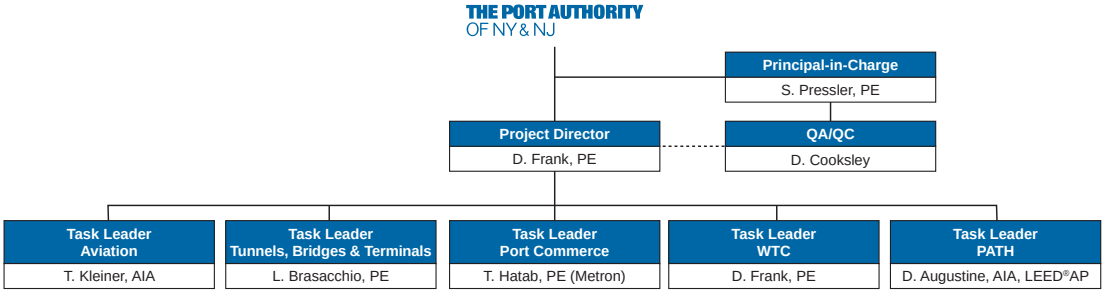
STV has developed a proven approach to manage call-in contracts for task services. This approach is based on STV's experience working with many different programs and agencies. Our management approach is geared toward rapid response to task proposals, assignment of the correct staff, and project execution through adherence to a management plan and work plan drafted specifically for each assignment and geared to understand and represent the best interests of the lines of businesses for which this contract may be utilized. In addition, this structure incorporates a total quality approach to the provision of our services, such that the senior level leaders are active participants in the Quality Assurance/Quality Control (QA/QC) plan for the contract. (See Task Leadership Organization below)

Management Plan

Successful project execution depends on planning and communication, in addition to sound management and engineering principles and practices. In conformance with PANYNJ's Quality Assurance Division, our management plan has been specifically developed for successful completion of the tasks using the best owner representative professional for each specific assignment. The objectives of our management approach are to:

- Allocate necessary resources in a timely manner and secure on-time task completion
- Define all project goals and work towards those goals on the PANYNJ's behalf at all times
- Satisfy task technical requirements
- Comply with budgetary limits and invoicing requirements
- Comply with PANYNJ and STV quality standards
- Monitor construction management and/or contractor enforcement of safety regulations
- Communicate and report regularly to PANYNJ regarding key project issues

The team's management approach will provide the PANYNJ with effective and timely solutions



Task Leadership Organization

to whatever project requirements arise in any of the PANYNJ's lines of business. This will be accomplished by appropriate technical specialists who have a thorough understanding of the tasks required, working under experienced task managers and project leaders and the team's Project Director, David Frank, P.E. Mr. Frank is a Senior Associate at STV and the Deputy Project Executive at the WTC site on the National September 11th Memorial and Museum project, currently serving the PANYNJ as an owner's project manager. He brings to this assignment over 20 years of experience and has both in-depth and broad experience working on stations, terminals, airports, and roadways, as a contractor, project manager, and public-sector owner. Through his involvement with the WTC site reconstruction, he has become familiar with the existing stakeholders involved in all of the WTC projects, and has become fully versed in PANYNJ policies, procedures, quality assurance requirements, and the specific security requirements of the site.

Supporting Mr. Frank will be a team of highly experienced task managers, all senior managers in the lines of business identified in this specific assignment.

Task Management

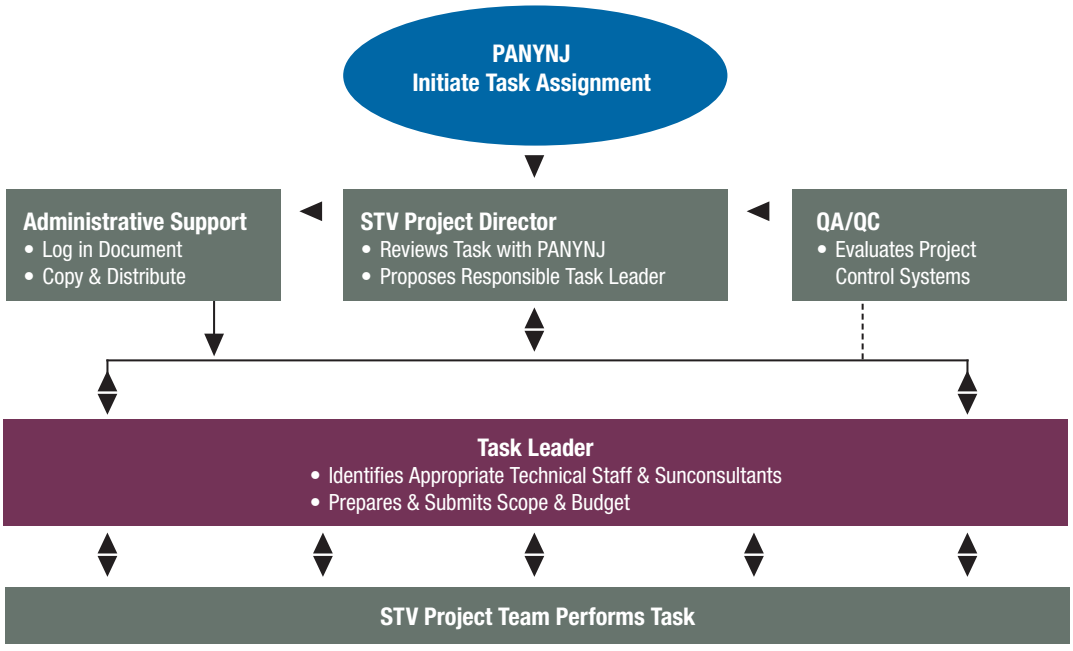
Upon receiving a task from the PANYNJ, Mr. Frank will assess and coordinate the assignment with the appropriate task manager and subconsultants, on this project and will begin the planning and scheduling activities and allocate the necessary owner representative and project professionals to effectively complete the task assigned as indicated in the Task Management Flow Chart below.

The following questions will be addressed:

- What is the work to be done?
- When is this work to be done?
- How much will the execution of the work cost?
- Who will perform the work?

Project Definition

Upon receiving a task assignment, the Task Manager will define the project's requirements and the methodology to be utilized during each task and activity. We recognize that particular assignments will vary in terms of complexity, duration and types of resources required.



Task Management Flow Chart

Project Staff Selection

We will select the appropriate staff from our large pool of qualified individuals. The project team members will be selected based on the following criteria:

- Their technical skills and expertise
- Their familiarity with the project issues involved
- Their availability at the time of the assignment

Managing Multiple Projects

We are aware that this contract will require managing multiple tasks simultaneously. The STV team offers the breadth and depth of staff resources to manage and execute multiple and diverse assignments concurrently. Our project management procedures and on-line communications capability facilitate the close coordination needed to manage multiple assignments effectively. Mr. Drygulski will receive weekly updates of work completed versus work planned for all project assignments, enabling him to maintain cost and schedule control, anticipate problems before they arise, and take corrective action when necessary. This management information will be compiled and sent to the PANYNJ as an indication of the staff loading and time spent versus work completed for each task order.

Work Plan

For this specific assignment, the work plan will directly correlate with the programmatic and/or project needs of the PANYNJ's line business and all project goals. Our professionals will work alongside the PANYNJ and fill the areas of expertise requested to accomplish the goals at hand.

Regardless of the phase, many of STV's professionals have worked as owner's project managers, and almost all have worked during all project phases - from concept to preconstruction, construction, and closeout. The STV team has developed a general approach to project management and owner's representative services, inclusive of keeping the PANYNJ apprised of project status, maintaining service delivery, and assuring the quality of work. Understanding the nature of a call-in contract, we will modify the approach according to the complexity and duration of each task to which we are assigned.

Establishing Project Guidelines

At the beginning of the project, STV will assist the PANYNJ in establishing responsibilities for the project team members, other project stakeholders, and the PANYNJ. We will develop and implement a comprehensive task-specific project management plan and an outline of procedures covering all aspects of communication, coordination, distribution of project paperwork, schedule of meetings, organizational responsibilities, and lines of authority for project personnel.

RFP Development & Preparation

For a specific task, the STV team may assist the PANYNJ with the development, compilation, and preparation of Request for Proposals on projects that the team is managing. These RFPs will integrate the PANYNJ's requirements while incorporating project specific parameters and requirements.

Review of Project Requirements

The STV team will review all design documents, PANYNJ's quality assurance plan, capital project operating procedures and the project management plan. We will also review design criteria for each of the projects and the construction contract documents.

Design Review

The STV team will review design criteria for each task, if required. In this systematic manner, we will develop a complete understanding of all aspects of the construction efforts including the related environmental issues and the scope of work to be performed. We have included, as part of the team, engineers in a variety of disciplines who will perform shop drawing reviews.

Coordination with Outside Agencies & Organizations

The STV team will coordinate all project activities among the designer, contractor, adjacent owners, utility companies and various public agencies, as deemed appropriate by the PANYNJ. In addition, our team will work on the specific business line's behalf and interface with the PANYNJ's Quality Assurance Division, Construction Management Division, and all other departmental project stakeholders.

Communication & Reporting Requirements & Implementation

Communication for any call-in contract requires a multi-pronged approach. STV will identify in the project management plan the level and frequency of communication throughout the life of the assignment with all PANYNJ and project-related stakeholders. In addition, the owner representative team will communicate and report regularly to STV's Project Director the progress of all assignments. This communication will include STV's monthly report and weekly or biweekly meetings.

Daily, Weekly & Monthly Reports

The primary purpose of STV's reports is to provide a complete chronological history of all significant events during the construction period. These reports will be considered documents of record in possible future claims hearing or court cases. Therefore, the writing style will feature clear and concise presentation of facts in a neat and legible handwriting. By noon on the Wednesday of the week following any construction work on the site, we will furnish to the PANYNJ a weekly activity report. We will also prepare and deliver a detailed monthly report to the PANYNJ. Copies of the report will be submitted by the 10th of each month covering the work performed during the previous month.

Contractor Monitoring & Coordination during Construction

On the PANYNJ's behalf, STV's professionals will monitor, review, and evaluate the actual construction by the contractor in accordance with contract documents, PANYNJ requirements, and industry procedures. To achieve close coordination of all work activities among the numerous parties, we will participate in contractor coordination meetings. Attendees may include our field representatives, the construction manager or contractor's representatives, PANYNJ representatives, and design team members, as appropriate.

Additional activities which STV's project management and technical professionals may complete during the construction phase will include but not be limited to:

- Monitor that work is performed in accordance with the contract documents, with PANYNJ requirements and with previously agreed-to methodology
- Verify the contractor has obtained all necessary easements, permits, and variances
- Make sure of the contractor's compliance with contractual reporting requirement
- Facilitate the resolution of outstanding submittals and/or RFIs

Safety

The STV team cannot overemphasize the prime importance of safety on any construction site. Hard hats, safety vests, eye protection, ear protection, respirators, work shoes, emergency telephone numbers, tool box meetings, and OSHA, to name a few things related to safety, are common topics of discussion on a construction project. Throughout the life of the project, and during each task, we will continue to maintain safe work conditions.

The STV team will monitor the contractor's compliance with their own safety guidelines, standard industry safety practices, and client site safety regulations. To verify the contractor's understanding of the job site safety regulations and procedures, we will make sure that the contractor submits a project safety program.

In the process of monitoring the contractor's adherence to safety practices, the STV team will notify the contractor and the PANYNJ's safety department of any safety violations or noncompliance observed by filing a safety infraction report. Safety issues or violations will also be reported in the monthly reports that we will prepare for the PANYNJ.

Change Orders & Claims Management

It is anticipated that contract change orders may result from design revisions, field changes, or claims. The STV team will establish a case file for each potential change and accumulate all information and data relevant to that case.

The STV team will maintain a file for each item for which the contractor may claim a contract change for additional costs and/or time. The STV team will

review each contractor's claim and will prepare and submit a claim analysis to the PANYNJ Contract Manager. Our Project Manager will be responsible for preparing the claim analysis. He/she will coordinate our comments and those from the PANYNJ.

Post-Construction, Closeout & Acceptance

For completion and acceptance of each portion of the work, we will develop a detailed plan and schedule for the completion and acceptance of each stage, and of the closeout of the construction contract. The development of the completion plan will be initiated at least 60 days prior to scheduled completion of each phase.

The completion plan will establish the administrative and management activities necessary to accomplish the remaining work and will provide for a coordinated turnover to the PANYNJ. The plan will be completed and submitted to the PANYNJ, 30 calendar days prior to completion of each phase.

Contract Closeout

Our final inspection and acceptance of work will certify completion of punchlists and will close out the contract when the construction and installation contract is completed. The STV team will consider a contract to be closed out when the following items have been finished:

- Final punch list has been completed and signed
- Contract closeout checklist has been completed and signed off by the appropriate entity
- Final amendment has been approved, issued and signed
- Final progress payment request has been checked and agreed upon and paid, including retention
- Function or performance of equipment installed has been verified
- All claims have been resolved

Construction Records

Throughout the course of the project, the STV team will maintain records in accordance with the requirements set forth in the QA Plan. Using this method, we will constantly maintain the records so that they are easily accessible to all involved parties. At project completion, we will inventory and document all records so that they can be easily transferred and used in the PANYNJ archives.

Quality Assurance & Quality Control

The team's mission will be to provide high quality products and services that meet your requirements. We accomplish this on each project by integrating a high level of vision, innovation, and integrity with a quality system that is based on clear objectives and a commitment to continual improvement. The STV quality manual, for example, adheres to the latest applicable standards and procedures defined in ANSI/ASQ Q9001.

Port Authority Bus Terminal

With extensive quality assurance guidelines defined within the PANYNJ's Quality Assurance Department, our job will be to identify all necessary QA/QC requirements on the project from the onset, recognize the role each member of the project team plays in the QA/QC program's implementation, and then manage and report on the quality of the work product to be produced. This is done through the development of the Quality Management Plan, a document which we will develop based on criteria indicated

in the project plans and specifications and within the PANYNJ's quality assurance requirements. After review and approval by the PANYNJ, we will clearly define the plan to all project team members, especially all consultants, construction manager and contractor. If necessary on the assignment, the field oriented team, superintendents, or the inspection staff, will use the plan as a guideline to carry out their duties and responsibilities and to determine if the work is being performed in accordance with the construction contract documents. The assigned project manager or owner's representative will audit the activity of the field team who will have no authority for allowing deviations from the contract requirements. The field team will also assist the project manager in verifying quantities of work performed, materials used, fabrication dimensions, consistency with contract documents and adequacy of the contractor's resources.

The field team will be trained in our project specific QA Plan and will become familiar with the contractor's plan and procedures. They will monitor the work of the contractor using these documents as a basis. We will provide the services of a survey party, if required, to monitor the layout of the placement structures, verify elevations and confirm accuracy of the contractor's survey control. Other services we may provide to assist PANYNJ include:

Facility Inspection - Based on the requirements of the PANYNJ and the complexity and importance of the specific component being fabricated, we will determine if full- or part-time inspection will be required at the facility.

Materials Monitoring - We will monitor the contractor's placement of material orders to determine if scheduled delivery will support the project milestones. We will review any early procurement items or long-lead items.

Maintenance & Protection of Traffic (MPT) - If required, we are able to call in our expertise to mitigate potential situations.

Night & Weekend Work - STV is accustomed to performing work in multiple shifts, such as night work and weekend work. We are aware of the importance of revenue collections and the need to keep buildings occupied with tenants.

Security - The STV team understands the need to maintain a secure work site. We are aware of additional security measures that have been instituted as a result of 9/11 and will carefully follow and observe all rules, regulations and measures. We will be ever mindful to "lock the gate behind us." We will follow security control protocol by coordinating with facility police; by issuing ID badges to personnel cleared to be present in the work zones and making sure that personnel carry that identification while on site and by making sure proper identification is displayed on vehicles and equipment to be used on the site.

Project Controls

Cost Control

The STV team's proven systems provide for total cost control from task inception through completion. Cost reports will provide the owner's representative with detailed analysis, as well as an overall summary, of all functional task areas. Monitoring these reports, along with weekly meetings with project staff, will be used to keep tasks on schedule and within budget. The basic control document, a Work Breakdown Structure (WBS), will be prepared defining responsibilities, design progress schedule, direct cost, and direct labor budgets for functional areas. The WBS is updated to reflect current task status, and is used to incorporate task data into the computerized control reports. Project reports are generated to show budget hours and dollars; hours and dollars, to date; hours and dollars, for the week; total hours and dollars; estimate to complete; total estimate; and hours and dollars over/under budget.

These reports will provide the Project Manager with sufficient cost and man-hour data to control the task.

Schedule Control

STV recognizes that schedule control is an essential element for the successful execution of project task assignments. To provide necessary schedule control for a given task, we will utilize a scheduling system appropriate to the task. A Milestone Project Schedule will be developed for all applicable task assignments.

This schedule will be utilized as a guide for further planning and scheduling. From this schedule, a master CPM network diagram or bar schedule will be developed setting the priorities and pace of individual task elements to meet the requirements for completion of the task. The master CPM network diagram or bar schedule will be updated periodically as deemed necessary by the Project Manager, and is thoroughly reevaluated immediately before work begins on each phase.

Document Control

Information and directions received by the assigned Project Manager will be copied, distributed, and filed according to the needs of the PANYNJ. Documents will be filed in a central file. The team has capabilities for secure document handling and control, when necessary. We have implemented a system for maintaining strict controls for confidential projects, including under projects serving the PANYNJ.

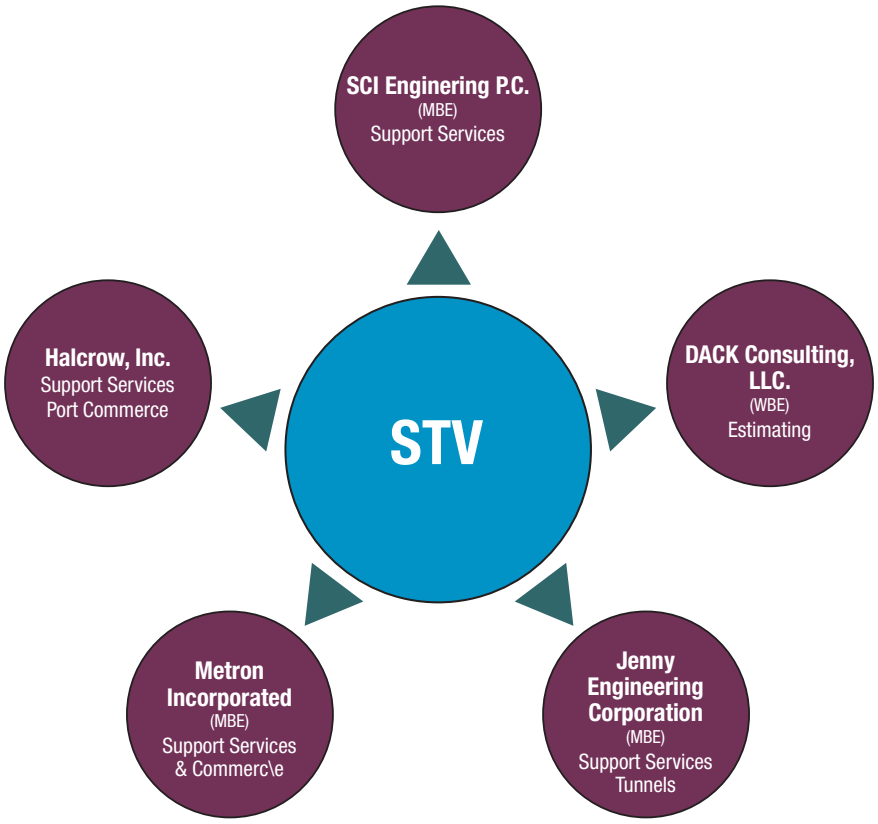
Managing Our Subconsultants

STV recognizes the Authority's need to have a "call-in" consultant with the greatest possible depth and breadth of engineering capability at its disposal so that resources are always available to respond to the PANYNJ's project requirements in a timely manner. To meet this need, STV has carefully selected a team of specialty subconsultants, including M/WBE firms, to assist us in providing specialized services. The subconsultants who will augment our team are SCI Engineering, P.C. (MBE), Jenny Engineering Corporation (MBE), Metron Incoproration (MBE-pending), and DACK Consulting LLC (WBE).

Summary

STV is uniquely qualified to undertake the variety of assignments that may result from this "call-in" contract. Our firm offers the range of expertise required to creatively address all of the key issues for this contract because we offer the depth of experience and the management capabilities need to respond to diverse needs in a timely manner. The STV team, conveniently located in Manhattan (over 600 personnel at our 225/233 Park Avenue South location) near the PANYNJ's executive offices and facilities, can provide a rapid response team to provide you with needed and critical staff support. Additionally, our multidisciplined staff members and subconsultants will function together cohesively as a team, reporting to a single point of Port Authority contact, STV's Program Director.

The STV Team



F. Rates & Multiplier

F. Rates/Multipliers

Name	Role	Hourly Rate
STV		
S. Pressler, PE	Principal-in-Charge	N/A
D. Frank, PE	Project Director/Task Leader WTC	200.08
T. Kleiner, AIA**	Task Leader Aviation	306.11
L. Brasacchio, PE**	Task Leader Tunnels, Bridges & Terminals	238.82
D. Augustine, AIA, LEED® AP**	Task Leader PATH	226.58
D. Cooksley	QA/QC	108.89
B. Fox	Project Executive	308.81
G. Maimis	Project Executive	251.53
C. Ludlow	Project Executive	271.60
D. Nazzaro	Project Executive	206.76
G. Koerner	Project Executive	271.60
R. Davidson, FAIA**	Project Executive	383.40
J. Anserian, PE	Senior Project Manager	153.95
A. Basta, PE, CCM	Senior Project Manager	208.00
D. Dillon, PE	Senior Project Manager	179.55
C. Kneaves, PE	Senior Project Manager	236.68
J. Valerio	Senior Project Manager	215.24
J. Cenzoprano	Senior Project Manager	165.41
M. Colban, RA	Senior Project Manager	173.17
J. Hauser	Senior Project Manager	152.35
T. Gardner	Project Manager	131.50
T. Savas	Project Manager	128.85
S. Manii	Project Manager	181.18
A. Overholser, PE	Project Manager	130.60
S. Figueroa	Project Manager	142.68
T. Abed	Project Manager	98.14
C. Mohacsi	MEP Project Manager	185.16
R. Dries	MEP Project Manager	163.23
S. Prest	Resident Engineer	141.46
R. Rajapaske, PE, CCM, CCE, AVS	Resident Engineer	119.73
E. Marra, Jr. PE	Resident Engineer	173.81
R. DePaoli	Superintendent	97.37
R. Stalcoskie	Superintendent	90.83
V. Ruggiero	Superintendent	97.17
M. Seelig	Superintendent	99.88
J. Graves	Superintendent	562.26
A. Calderon	Superintendent	119.71
K. Falowski	Superintendent	108.82
S. Hilal	Superintendent	87.07
G. Blutner	Superintendent	130.60
K. Baumgarten	Superintendent	120.86
T. Motyka	Inspector	127.62
G. Saninocencio	Inspector	122.76
M. Maiorano	Inspector	122.76
Y. Portman	Inspector	100.64
Z. Saliby	Inspector	72.93
P. Jarmak	Inspector	123.13
A. Ranginwala	Inspector	89.94
G. Garbarino	Safety Specialist	118.92
M. McDonald	Project Engineer	65.30

Name	Role	Hourly Rate
J. Tookmanian	Project Engineer	77.02
M. Verhagen	Project Engineer	56.58
R. Kelly	Project Engineer	56.58
L. Porcelli	Project Engineer	58.78
M. Nguyen	Project Engineer	67.00
A. Gaddi	Project Engineer	58.78
S. Constaninou	Project Engineer	58.78
R. Krause	Project Engineer	58.78
S. Dreher	Project Engineer	56.58
K. Baldivia	Estimator	109.18
R. AViles, PE	Estimator	118.87
M. Finkelstein	Estimator	127.25
V. Tonatore	Estimator	156.10
D. Kirk, AIA, CCC, CCS, CVS, LEED® AP	Senior Risk Assessor/Value Engineer	166.36
W. King	FTA Funding Specialist	150.06
A. Byajian	Scheduler	172.49
A. Sehic	Scheduler	81.64
R. Quickel	Scheduler	87.59
E. Christodoulou	Scheduler	96.60
S. Janjua	Scheduler	91.94
Y. Dennis	Document Control Specialist	73.36
D. Abbate	Document Control Specialist	66.25
N. Constantino	Document Control Specialist	105.74
M. Rodriguez	Document Control Specialist	86.73
D. Ohrsell	Accountant	51.79
M.Salvador	Accountant	86.69
M. Chen	Accountant	53.12
F. Jordan	Clerical Support	45.18
Y. Candelario	Clerical Support	59.71
S. Garrison-Toye	Clerical Support	56.58
B. Jabbonsky, RA	Architectural Support	211.23
C. Romano, PE	Mechanical Support	171.60
L. Matlick, PE	Fire Protection/Plumbing Support	196.01
M. Friedman, PE, LEED® AP	Electrical Support	201.98
J. Chen, PE	Structural Support	165.63
D. Yue, PE	Site/Civil Support	271.57
DACK Consulting, LLC		
A. Chancy	Estimator	160.38
R. Holder	Estimator	106.92
Halcrow, Inc.		
D. Friend	Diver	265.03
A. Austin	Diver	217.14
C. Carr, PE	Coastal Support	494.94
Jenny Engineering Corporation		
M. Joye, PE	Project Manager	194.30
K. Gaspar, PE	Inspector	127.55
K. McPherson	Project Engineer	101.59
S. Niemiec, PE	Tunneling Support	221.19
Metron Incorporated		
T. Harab, PE	Task Leader Port Commerce	174.81
M. El Wakil, RA	Senior Project Manager	168.64
A. Robson	Project Manager	131.62

Name	Role	Hourly Rate
SCI Engineering, P.C.		
R. Durante	Project Manager	143.69
J. Cohen, PE	Project Manager	192.40
K. Patel	Project Manager	121.77
G. Sumner	Inspector	73.23

* Maximum Hourly Billing Rate includes 2% escalation per year in addition to the applicable multiplier.

** Home multipliers were applied to these hourly rates.

Company Policy for Premium Pay

STV employees do not normally receive differential compensation for working on weekends or at night. If a contract has a provision for differential compensation, STV will abide by the terms of the contract. Full-time salaried employees who work more than 40 hours per week receive overtime pay at their normal rate. If an employee is classified as an non-exempt employee, they are paid at the premium rate of time-and-one-half their rate for all hours worked in excess of 40 hours worked per work week, except where state law requires over-time pay in excess of 8 hours worked per day.

Multipliers

	Field	Home
STV Incorporated	2.25	2.53
STV Construction, Inc.	2.09	2.43

All multipliers include 7.5% profit.

The contract will be held by STV Incorporated; however, where construction management staff members are needed, they will be supplied by STV Construction, Inc., a wholly-owned subsidiary of STV Incorporated. Following are STV's projected financial STV's multipliers are as follows:

STV Incorporated

FIELD MULTIPLIER	
DIRECT LABOR (Field Office)	1.0000
Field Overhead 79.55% (times Direct Labor)	0.7955
Subtotal	1.7955
G&A 29.32% (times Direct Labor)	0.2932
Subtotal	2.0887
FCCM Overhead and G&A 0.0426% (times Direct Labor)	0.0004
Total Contract Field Office	2.0891
Profit at 7.5%	1.075
TOTAL FIELD MULTIPLIER	**2.25**
HOME MULTIPLIER	
DIRECT LABOR (Home Office)	1.0000
Home Overhead 105.70% (times Direct Labor)	1.0570
Subtotal	2.0570
G&A 29.32% (times Direct Labor)	0.2932
Subtotal	2.3502
FCCM Overhead and G&A 0.18% (times Direct Labor)	0.0018
Total Contract Home Office	2.3520
Profit at 7.5%	1.075
TOTAL HOME MULTIPLIER	**2.53**

STV Construction, Inc.

FIELD MULTIPLIER	
DIRECT LABOR (Field Office)	1.0000
Field Overhead 77.16% (times Direct Labor)	0.7716
Subtotal	1.7716
G&A 17.34% (times Direct Labor)	0.1734
Subtotal	1.9450
FCCM Overhead and G&A 0.00137% (times Direct Labor)	0.0001
Total Contract Field Office	1.9451
Profit at 7.5%	1.075
TOTAL FIELD MULTIPLIER	**2.09**

HOME MULTIPLIER	
DIRECT LABOR (Home Office)	1.0000
Home Overhead 103.21% (times Direct Labor)	1.0321
Subtotal	2.0321
G&A 17.34% (times Direct Labor)	0.1734
Subtotal	2.2055
FCCM Overhead and G&A 0.0838% (times Direct Labor)	0.0008
Total Contract Home Office	2.2063
Profit at 7.5%	1.075
TOTAL HOME MULTIPLIER	**2.43**

G. M/WBE Participation

G. M/WBE Participation

STV is committed to the practice of engaging minority-owned and woman-owned business enterprises (M/WBE) as its subconsultants whenever possible. We typically meet or exceed our client's established guidelines for the meaningful participation of these types of business enterprises in the projects we undertake. STV has worked with hundreds of public agencies throughout the United States, during which we have established a well-documented record of engaging MBE, WBE, and other identified business enterprises to the mutual benefit of our clients and the communities we serve.

A Strong Relationship with M/WBE Firms

Our firm has established working relationships with numerous MBE and WBE business enterprises in many specialties. STV selects the most appropriate and qualified firms to enhance our capabilities as required to meet the particular needs of a project. In addition, STV actively solicits the participation of M/WBE firms and, as a long-established professional services firm, we are continually approached by these business enterprises to join our project teams.

STV has met or exceeded M/WBE goals on previous assignments by engaging firms with the appropriate certifications to provide required specialty services in areas that STV does not have expertise or to extend the reach and capabilities of STV's established services. For example, STV does not employ personnel for asbestos or lead-based paint abatement. This is a typical opportunity for STV to achieve M/WBE goals by engaging services in this appropriate category. To extend our own capabilities, STV typically engages minority-owned and woman-owned business enterprises in many architectural, engineering, and construction management disciplines such as cost estimating, document control, and printing and reproduction services—as we have for this "call-in" contract.

Meeting the PANYNJ's Goals

STV will meet, or exceed, the stated goals of 12% MBE and 5% WBE participation for this contract, through the meaningful participation of SCI Engineering, P.C. (MBE), Jenny Engineering Corporation (MBE), Metron Incoproration (MBE-pending), and DACK Consulting LLC (WBE). SCI will provide general support services. JEC and Metron will also provide general support focusing on tunnels and ports respectively. DACK will provide cost estimating services.

Our Project Director, David Frank, P.E., will work with our Task Leaders to assign appropriate resources to each task under this "call-in" contract. By assigning our subconsultants meaningful and appropriate roles, our project management staff will make sure these firms participate to the maximum extent possible and that the Port Authority's participation goals are met, or even exceeded.

STV has successfully led consultant teams for many projects, so we already have proven project management procedures and mechanisms in place. For example, each of the firms participating on the STV team for this contract will be bound as a subcontractor to STV. The terms and conditions of the contract with STV will be passed down contractually to the participating firms on the team. Furthermore, STV has strong existing relationships with each of the firms selected for this team. With the strength of these relationships and proven management techniques, the client will benefit from the expertise of the participating firms seamlessly integrated into one team focused on providing the highest quality of service. We will provide you with all requisite services in a quick, effective, and creative manner specially tailored to meet your needs.

H. Affiliates

H. List of Affiliates

STV Group, Incorporated (Parent Company)
225 Park Avenue South
New York, NY 10003-1604
EIN: [redacted]

STV Incorporated
225 Park Avenue South
New York, NY 10003-1604
EIN: [redacted]

STV Architects, P.C.
225 Park Avenue South
New York, NY 10003-1604
EIN: [redacted]

STV Architects, Inc.
205 West Welsh Drive
Douglassville, PA 19518-8713
EIN: [redacted]

STV Architects I, P.C.
1037 Raymond Boulevard, Suite 200
Newark, NJ 07102-5425
EIN: [redacted]

STV Engineering, Inc.
205 West Welsh Drive
Douglassville, PA 19518-8713
EIN: [redacted]

STV Silver & Ziskind
225 Park Avenue South
New York, NY 10003-1604
EIN: [redacted]

STV Silver & Ziskind Architects, P.C.
225 Park Avenue South
New York, NY 10003-1604
EIN [redacted]

STV Middle East, Inc.
205 West Welsh Drive
Douglassville, PA 19518-8713
EIN: [redacted]

STV Construction Services, Inc.
205 West Welsh Drive
Douglassville, PA 19518-8713
EIN: [redacted]

STV Construction, Inc.
225 Park Avenue South
New York, NY 10003-1604
EIN: [redacted]

STV Environmental, Inc.
205 West Welsh Drive
Douglassville, PA 19518-8713
EIN: [redacted]

STV International, Inc.
205 West Welsh Drive
Douglassville, PA 19518-8713
EIN: [redacted]

STV Massachusetts, Inc.
205 West Welsh Drive
Douglassville, PA 19518-8713
EIN: [redacted]

STV Michael Lynn Associates
205 West Welsh Drive
Douglassville, PA 19518-8713
EIN: [redacted]

STV Security Solutions Group, Inc.
2722 Merrilee Drive, Suite 350
Fairfax, VA 22031-4427
EIN: [redacted]

STV Canada Architects, Inc.
1920 Yonge Street, Suite 200
Office No. 220
Toronto, ON M4S 3E2, Canada
Ontario Corporation Number (OCN): [redacted]

STV Canada Construction, Inc.
1920 Yonge Street, Suite 200
Office No. 258
Toronto, ON M4S 3E2, Canada
Ontario Corporation Number (OCN): [redacted]

STV Canada Consulting, Inc.
1920 Yonge Street, Suite 200, Office No. 258
Toronto, ON M4S 3E2, Canada
Ontario Corporation Number (OCN): [redacted]

STV Architects Ireland Limited
2 Grand Canal Square
Dublin 2, Ireland
Registration Number: [redacted]

I. Conflict of Interest

Neither STV nor any employee, agent, or subcontractor of STV has any conflicts of interest to disclose regarding this contract. STV Incorporated, STV Construction, Inc and its affiliates, currently provide services to the PANYNJ on multiple projects. Some of these contracts include, but are not limited to the following:

- One World Trade Center and National September 11th Memorial and Museum Owner's Representative and Expert Program Management Service
- World Trade Center Chiller Plant
- World Trade Center Transportation Hub
- Cost Control and Project Management Services for World Trade Center (WTC) Projects
- World Trade Center Site-Wide Operations Control Center
- World Trade Center Vehicular Security Center and Tour Bus Parking Facility
- NYCT Cortland Street Station Reconstruction

As this is a call-in contract, it is possible that a particular assignment could conflict with STV's other contracts with the PANYNJ. Upon receipt of a call-in assignment, STV would review the assignment's scope of work against its prior and existing contracts with the PANYNJ to determine if there would be a potential conflict with the new assignment.

If there appeared to be a conflict of interest, or the appearance of one, STV would bring the matter to the attention of the PANYNJ and respond as directed, while implementing STV's conflict mitigation procedures.

HAKS Construction Management Engineers Architecture
Land Surveyors Material Testing

40 Wall Street, 11th Floor, New York, NY 10005 • Phone (212) 747-1997• Fax: (212) 747-0861• www.haks.net

October 21, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attn: RFP Custodian

Ref: Performance of Expert Professional Project/Program Management as Requested on a "Call In" Basis during 2011-2014 (RFP #22388)

Dear Sir/Madam:

In response to the port Authority of New York/New Jersey's (the Authority) Request for Proposals issued on September 30, 2010, HAKS is extremely interested in providing project/program management services on a "Call-In" Basis. We have assembled a multi-disciplinary team of experienced professionals and we are confident we can provide value added services to the Authority. The HAKS team has the expertise needed in key areas such as Program Management, Program Planning and Organization, Design Management, Construction Management, and Program Controls and Reporting. We are committed to providing the services described within the prescribed timeframe with the personnel specified in this submission.

Our team of professionals can provide support to the Authority at varying levels as necessary to augment and provide specialized expertise as needed. The size and depth of our team allows us to provide a wide range of options to meet the needs of the Authority as you move forward.

The HAKS Team

HAKS is one of the region's top construction management, engineering/architectural firms and employs more than 400 people. With more than 20 years of experience, the firm is a leader in providing engineering, design and construction solutions to clients in today's industries.

Also included on the HAKS team are Halcrow, which will provide its expertise in marine facilities, Burns Engineering will provide its expertise in aviation, and Delcan will provide its expertise in rail/transit. We have teamed with these firms because of the expertise and knowledge they bring having worked for the Authority in the past in similar capacities. Additionally, to meet the proscribed M/WBE goals we have added Ellena, a certified WBE firm and AG Consulting a certified MBE firm to augment our services, both Ellena and AG have also worked for the Authority on similar assignments.

Our focus from day one is co-operative proactive management. To that end we will work with the design teams to issue complete design packages, employ the best contracting strategies for optimum results, effectively manage the utilities infrastructure, encourage competitive bidding with the ultimate of obtaining for the Authority the best value achievable from the contracting community while minimizing risk for all parties and issuing well developed bid sets that provide for optimum bidability and constructability.

THE HAKS ADVANTAGE

The complexities of this program demand a team that can work alongside and effectively manage the design team's deliverables, perform comprehensive design and constructability reviews and manage the construction, commissioning, and start-up process. Consequently, the decisions made by our management team will result in known cost and schedule outcomes and lead to no surprises. HAKS has built a successful record of project execution and strong and continuing support for their clients. Our history of superb construction experience,

40 Wall Street, 11th Floor, New York, NY 10005 • Phone (212) 747-1997• Fax: (212) 747-0861• www.haks.net

along with our staff's knowledge, expertise and dedication, provide the tools and experience that will make this program a success for the Authority. In summary, HAKS will:

Provide the Right Leadership

- A Program Manager with the necessary expertise and leadership skills
- A team of experts, all leaders in their respective fields
- Relevant experience with all the project elements comprising the Authority's program
- Leadership that promotes a collaborative style with open communications that is response oriented and solution driven
- Leadership that understands the importance of exceeding safety, quality, time and cost parameters

Employ the Best Practices

- A management team that has managed nearly identical programs and knows how to DRIVE the program to a successful conclusion
- Expert document controls systems
- Schedule driven process utilizing best scheduling practices
- A process driven by uncovering and mitigating risk
- Expert change order strategies and negotiations
- Expert budget development, including proper contingencies

Lead the Team

- We bring and will maintain a positive win/win thinking and attitude
- Communicate critical information at all levels through project controls
- Promote and share a common vision
- Build and maintain momentum

We appreciate the opportunity to submit our Technical Proposal and look forward to your favorable response. We hope that we have fully expressed our interest and enthusiasm for assisting the Authority with this important project. In summary, HAKS has built a successful record of completing projects on budget, on-time and that work and, equally important, receiving strong and continuing support from our clients during and after working together.

Sincerely,
HAKS

Jeffrey Terzakis
Senior Vice President

THE PORT AUTHORITY OF NY & NJ

PROJECT MANAGEMENT SERVICES as REQUESTED on a "CALL-IN" BASIS DURING 2011-2014 (RFP No. 22388)

SECTION	SECTION NAME	PAGE NUMBER
	Cover Letter	
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B	Attachment C	
C	Key Personnel - Resumes	1- 85
	• *HAKS*	
	• *AG CONSULTING (MBE)*	
	• *BURNS GROUP*	
	• *DELCAN CORPORATION*	
	• *ELLANA, INC. (WBE)*	
	• *HALCROW, INC.*	
D	Firm Experience	86 - 93
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H	Affiliates	120
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H	Additional Forms and Certifications	
I	Acknowledgement of Addenda	

ATTACHMENT B

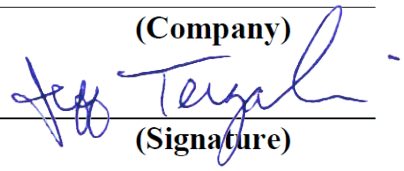
PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

HAKS
(Company)



(Signature)

Jeffrey Terzakis, Senior Vice President
(Title)

October 21, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   HAKS

2. Business Address (to receive mail for this RFP):

   40 Wall Street, 11th Floor

   New York, NY 10005

3. Business Telephone Number: (212) 747-1997

4. Business Fax Number: (212) 747-1960

5. Firm website: www.haks.net

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 07 / 25 / 1994

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See attached sheet.

9. Officer or Principal of Firm and Title:

   Husam Ahmad, PE, President/CEO

10. Name, telephone number, and email address of contact for questions:
    Jeffrey Terzakis

    Phone: (212) 747-1997 Email: jterzakis@haks.net

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☒ Yes ☐ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

HAKS LIST OF AFFILIATES

Entity: HAKS Engineers, P.C. (CT)
Address: 306 Industrial Park Road
Suite 201
Middletown, CT 06457 **EIN/TIN:** [redacted]

Entity: HAKS Engineers, Architects and Land Surveyors, P.C. (NJ)
Address: 570 Broad Street
Suite 401
Newark, NJ 07102 **EIN/TIN:** [redacted]

Entity: HAKS Stone & Webster (JV)
Address: 40 Wall Street
11th Floor
New York, NY 10005 **EIN/TIN:** [redacted]

HAKS

Entity: HAKS/DMJM + Harris (JV)
Address: 605 Third Avenue
New York, NY 10158 **EIN/TIN:** [redacted]

HASA

Entity: HAKS/Earth Tech (JV)
Address: 40 Wall Street
11th Floor
New York, NY 10005 **EIN/TIN:** [redacted]

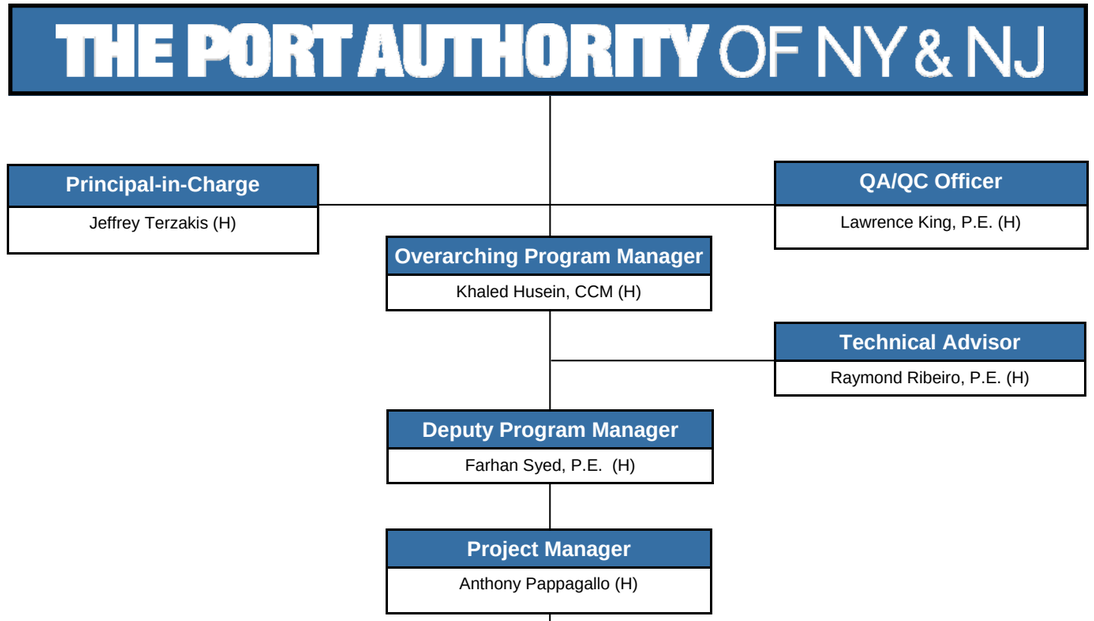
Entity: HASA Construction, LLC
Address: 40 Wall Street
11th Floor
New York, NY 10005 **EIN/TIN:** [redacted]

Entity: HASA Realty, LLC
Address: 22 Central Drive
Farmingdale, NY 11735 **EIN/TIN:** [redacted]

Entity: SIMCO Engineering, P.C.
Address: 80 Maiden Lane
Suite 501
New York, NY 10038 **EIN/TIN:** [redacted]

Entity: Washington Group/HAKS (JV)
Address: One Penn Plaza
32nd Floor
New York, NY 10119-2901 **EIN/TIN:** [redacted]

ORGANIZATION CHART
EXPERT PROFESSIONAL PROJECT/PROGRAM MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011-2014



Principal-in-Charge
Jeffrey Terzakis (H)

QA/QC Officer
Lawrence King, P.E. (H)

Overarching Program Manager
Khaled Husein, CCM (H)

Technical Advisor
Raymond Ribeiro, P.E. (H)

Deputy Program Manager
Farhan Syed, P.E. (H)

Project Manager
Anthony Pappagallo (H)

Marine

DEPUTY PROGRAM MANAGER
Jonathan Goldstick, P.E (HI)

PROJECT MANAGER
Bill Paparis, P.E. (HI)
Alan Waller, P.E. (HI)

COASTAL ENGINEER
Sean O'Neil, PhD (HI)

DIVE TEAM
Douglas Friend, P.E.—Team Leader/Engineer-Diver (HI)
Brett Sposito, P.E.—Engineer-Diver (HI)

MARINE - STRUCTURAL ENGINEER
Domenica Stasiak, EIT (HI)

Aviation

DEPUTY PROGRAM MANAGER
Henry Hessing, P.E. (H)

PROJECT MANAGER
Nilesh Shah, P.E. (H)
John Burns, P.E., LEED A.P. (B)
Brian Phillips, P.E., LEED A.P. (B)
David Ciervo, P.E., LEED A.P. (B)
Chuck Reed (B)
Raymond Kallberg, PE (AG)

Project Controls

PROJECT CONTROLS MANAGER
Saurin Pathak, R.A., AIA, LEED A.P. (H)

SENIOR PROJECT COST MANAGER
Henry Chin, R.A. (E)

CHIEF MEP ESTIMATOR
Walter A. Fitzer (E)

ESTIMATOR
Magdi Sidarous (H)

SENIOR SCHEDULER
William Niles (H)

DOCUMENT CONTROL
Hamid Erfani, EIT (H)

Bridges & Tunnels

DEPUTY PROGRAM MANAGER
Kamal Kishore, P.E. (H)

PROJECT MANAGERS
Jeffrey Wright, P.E. (H)
Frank Verdarame (H)

Rail & Transportation Facilities

DEPUTY PROGRAM MANAGER
Kent Haggas (D)

PROJECT MANAGERS
Ashraff Abdalla, P.E. (H)
Harry Lewis, P.E. (H)
Moustafa Rezk, P.E., LEED A.P. (H)
Harry Fosteris, P.E. – *Electrical* (H)
Robert Milo, P.E., LEED A.P. – *Mechanical* (H)
Peter Harrison, C.Eng. MIET, MIEEE (D)
Timothy Stokes, PE, PMP (D)
Lori Colangelo (D)
Jonathan Hulse (D)
Kulbinder Singh, LEED AP (AG)
Ardash Meguerdichian (AG)

H: HAKS **AG: AG Consulting (MBE)** **B: Burns Group**
D: Delcan Corporation **E: Ellana, Inc. (WBE)** **HI: Halcrow, Inc.**

STAFF INTRODUCTION

Mr. Husein was deeply involved in every facet of historic New York County Courthouse renovation project.

During the entire seven years, he displayed technical excellence, highly impressive interpersonal skills and dedication and devotion to the project.

Quite simply, it would be difficult for me to imagine us having completed this complex undertaking without his critical assistance.

- John F. Werner,
Supreme Court of the State of New York

If there is an outstanding set of skills which characterize his efforts it would include his ability to adapt to special circustances, to get tough but never to losee hsi cool under pressure. His personal approach to working with a variety of demanding personnel, including myself, has enabled the project to achieve smooth transitions.

- A. Jordan Barnes, Project Manager,
Bureau of Construction for the City New York

HAKS designated **Overarching Program Manager and Team Leader** for the PANYNJ's Professional Project/Program Management Services Contract will be one of our top managers, **Khaled Husein, CCM, Vice President.** Mr. Husein has planned and managed large, complex construction projects as well as multiple-site, multiple contractor public sector programs and projects. These include his assignment the DDC's School Rehabilitation Program where he managed the rehabilitation of 25 schools in three boroughs and his past assignment for the GSA managing multiple construction projects as part of the extensive Brooklyn Courthouse Program which required the demolition and removal of the Emanuel Cellar Federal Office Building, the new construction of a 18-story Federal Office Building, the modernization of the existing Federal Courthouse, and the renovation of the historic Brooklyn General Post Office. Additionally, Mr. Husein has more than 25 years of experience in all phases of construction and project management, including preconstruction, construction, and post-construction and is expert in developing comprehensive yet workable procedures for multiple-project, multiple-site construction programs.

Mr. Husein will employ HAKS successful management methods that embody key organizational principles used repeatedly as keystones to achieve a fully integrated effort. These management methods include:

- Setting clear lines of communication, responsibility and authority.
- Enforcing uniform means of collecting and disseminating information.
- Establishing and maintaining realistic baselines—cost estimates and schedules—against which performance can be measured.
- Promoting the use of standardized and disciplined work practices for all project participants and verifying compliance with these practices.
- Assigning personnel with proven leadership and experience whose first priority is to the project.

STAFF INTRODUCTION

Project/Program Management Personnel

The individuals who will fill the key positions on our team have been selected because of their many years of similar experience and their proven record of performance. HAKS has developed an organization and staffing plan to account for the different requirements of managing the overall program and managing the individual projects within it.

In selecting our staff to man this work, HAKS has drawn upon the collective experience of our top executives who have planned and managed large, complex design and construction projects. We will initially utilize senior management staff, all of whom have previously participated in planning similar programs. We have found that progress in the early days of an assignment is critical, especially to one such as this, and sets the tone for its duration.

HAKS core management and other key personnel will be supported by the full resources of our firm. We can muster the resources of more than 400 professional and technical staff members to support the project. Additionally, **HAKS has aligned itself with several notable firms to augment our capabilities and resources they include: Halcrow to provide expertise in port and marine facilities; Delcan to provide expertise in rail transit systems; Burns Engineering to provide expertise in aviation facilities and systems.** We sought to add firms that not only complimented the expertise and resources of HAKS, but added true value by sharing common visions, goals, attitudes and an overall corporate culture of dedication to comprehensively serve their clients, Halcrow, Delcan and Burns bring this element. The rationale for bringing these firms together to form a super team is based upon our respective complementary qualifications and corporate culture and values. This team will bring its direct knowledge of the Authority and in-depth understanding of all the legal and institutional arrangements under which the program will operate.

Providing overall support for the project will be our **Principal-in-Charge, Jeffrey Tezakis.** Mr. Terzakis offers a tremendous wealth of experience gleaned from years of providing the necessary senior management level oversight of major, world-class construction efforts. He also has a keen understanding of the factors that will influence the project. Leading HAKS core staff as Overarching Program Management will be Mr. Khaled Husein, CCM. Mr. Husein has more than 25 years of experience in all phases of construction and project management, including preconstruction, construction, and post-construction and is expert in developing comprehensive yet workable procedures for large programs. He has managed numerous multi-site projects and programs involving multiple prime contracts.

Supporting Mr. Husein will be his **Deputy Program Manager, Farhan Syed, PE.** He is a highly qualified construction professional, capable of interfacing with the Authority and providing executive oversight as a result of his decades of experience. His guiding hand will keep the professional staff focused on performing their duties; by anticipating project/program issues from the beginning, he manages outcomes through preparedness, consensus, and accountability.

Also supporting Mr. Husein will be **five Deputy Program Managers** assigned to specific project types: **the Deputy Program Manager for Marine will be Jonathan Goldstick, PE from Halcrow.** Mr. Goldstick has 30 years of domestic and international experience in waterfront engineering and project management. He has been involved in the design, analysis, construction, rehabilitation, and installation of a wide variety of waterfront structures worldwide. His expertise also includes project management and engineering support for urban waterfronts.

STAFF INTRODUCTION

The **Deputy Program Manager for Aviation will be Henry Hessing, PE** from HAKS. Mr. Hessing has over 34 years experience as a professional engineer with extensive knowledge of construction management and resident engineering for new and rehabilitated highways, bridge structures, rail line segments and transportation-related buildings and airports. He served as Program Manager for the $9.5 billion JFK redevelopment program

The **Deputy Program Manager for Bridges and Tunnels will be Kamal Kishore, PE** from HAKS. Mr. Kishore has over 40 years of experience working with various engineering organizations and was involved in approximately 500 bridges. He has served as New York City's Department of Transportation's Deputy Chief Engineer responsible for managing all activities associated with design and rehabilitation or replacement of all deficient bridges owned by the City of New York.

The Deputy Program Manager for Rail and Transportation Facilities will be Kent Haggas from Delcan. He has over 35 years of professional experience in the rail transit industry, in both major project and passenger operations executive management positions including extensive experience in the design, construction and test of large highly integrated rail transit projects which employ high technology control systems. In the last five years, his key responsibilities have focused on general design management, civil-systems design /construction integration and design program control.

HAKS will use a team approach to the coordination and integration of the program and the individual projects. Serving as an extension of the Authority's staff, our construction management team will provide the depth and variety of resources required to fully support this program. The Program Manager, Khaled Husein, CCM and his support staff will be responsible for performing the full scope of project/program management services. The project team will be appropriately staffed with the civil/structural, mechanical/electrical project managers and inspectors during the construction phase so that each project's quality standards are met. The project team will be responsible for delivering a fully integrated facility on-time, within budget, and in compliance with the objectives of the project. They will be the direct interface for the Authority in managing and overseeing the work of the various contractors. The key to our team's performance will be our Program Manager, Khaled Husein, who will have complete authority to act on behalf of the team in all matters relating to the services to be provided. The organization, led by Mr. Husein, will utilize a management structure incorporating established methods and techniques to mitigate future cost, schedule, and quality disputes. The organization is designed to simplify and streamline reporting and responsibility assignments and head-off an issue before it becomes a problem, thereby preventing surprises. It utilizes the concept of three functional levels of reporting:

- Design Management
- Construction Management
- Contract Administration

Supporting these three functional levels will be a support staff with the technical knowledge and expertise to provide the necessary services such as design review, value engineering, scheduling, contract administration, construction inspection and testing oversight. This organization uses a matrix system of checks and balances. Design management, project management, and contract administration are focused on the integration and interaction of the individual projects within the overall program, uniformly monitoring the overall quality, schedule, and cost of the project. Program Management is designed as a matrix management unit charged with managing the individual projects from initial planning through start-up. In essence, they will be responsible for delivering the required renovations and upgrades on-time, within budget, and in compliance with project objectives.

STAFF INTRODUCTION

During the design phase, Design Management will review designs for constructability and completeness, develop contract packaging, phasing and sequencing the work, and supporting the value engineering endeavors. As contracts are let for construction, Project Management will begin to take the lead in the day-to-day activities of implementing the job in the field. The group will be responsible for all construction coordination, contractor safety program oversight, inspection, systems and material testing oversight, and contract closeout. The Project Management group will also provide bid and procurement assistance and oversight of delivery of long-lead materials and equipment purchased directly for the Authority. Upon letting of contracts, this group will provide change order control and analysis.

Contract Administration will provide control of the schedule, cost/budget, estimating, and documentation from the beginning of the project through closeout of the final construction contract. They will also be responsible for the master schedule and project reporting functions.

HAKS understands that no project is formula-built or trouble-free. We have the experience, expertise, creativity and the dedication to control the schedule, the cost and quality. Our skills enable us to anticipate the many technical, logistical and administrative problems the program may pose and we will develop and assess alternative schemes to ward off those problems. We will work hand-in-hand with the Authority to develop a winning project team.

JEFFREY TERZAKIS, PRINCIPAL-IN-CHARGE

Mr. Terzakis has over 21 years of diversified experience in construction management and the inspection of facilities including airport terminals, transportation facilities, hospitals, schools, etc. He has proven effectiveness in project management, problem solving and leadership roles.His comprehensive experience in project management includes an emphasis on large capital programs, pre-construction services, and construction management. He offers clients a unique and customized approach to their project needs. By anticipating project issues from the beginning, he manages outcomes through preparedness, consensus, and accountability.

EDUCATION

MBA, Finance, Fordham University, New York, NY

B.S., Mechanical Engineering, Villanova University, Villanova, PA

THE RIGHT EXPERIENCE

Continental Airlines, Global Gateway Program, Newark International Airport, Newark, NJ

Managed the complete renovation of Terminal C at Newark International Airport as part of Continental's $1.4 Billion Global Getaway Project; responsibilities included managing the design team as required by the phasing of the work for an extremely aggressive 2-year schedule. Directed the construction manager in the coordination and phasing of the work while maintaining operations at one of America's busiest airports; managed scope reviews and buys for major subcontractors; championed cost control efforts by managing the forecasting and updating of the Paragon cost report on a daily basis. Negotiated directly with all subcontractors on change orders this resulted in saving millions of dollars; and negotiated subcontractor close-outs which resulted in cost savings over $2 million more than anticipated.

New York City Housing Authority Requirements Contract, New York, NY

Serving as Principal-in-Charge for a $80 million capital improvement program for the New York City Housing Authority (NYCHA); the work includes:

- Fort Washington Roofing Project, $6 million, requires the removal of existing asbestos-containing roofing materials, asbestos abatement, new roof installation and related work;
- Harlem River Brickwork Project, $7.6 million, entails extensive brickwork, the replacement of steel lintels and incidental roofing;
- Rangel Brickwork and Roofing Project, $8.6 million, calls for replacing roofs on all buildings and the parapets for two buildings, and selective replacement/repair of brickwork and steel lintels.
- Queensbridge Boiler Replacement Project, $20 million, boiler plant replacement project at the fully occupied Queensbridge Houses; the project consists of the removal of 9 existing Boilers/Burners and related control equipment and the replacement of 18 Boilers/Burners and related control equipment, at 6 Boiler Plants.

- Williams Plaza, $6.1 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Independence Towers, $6.1 million project requires replacing roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Bushwick Houses, $9.3 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Stapleton Houses, $7 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.

Miscellaneous Projects in the Downstate Area, New York

He serves as Project Executive providing Program/Construction Management services in the New York Downstate area; project assignments include:

- Barretto Point, $10 million, remediation project 15,000 cubic yards of contaminated soil were excavated and replaced with clean fill over 3 acres at the site, which in the past housed a paint and varnish making facility.
- Red Hook WPCP, $2.5 million project demolishing the existing system and installing a new state-of-the-art Fire Alarm System (Notifier) in nine designated plant areas.
- Sludge Dewatering Facilities Improvements at New York City Waste Water Treatment Plants, $12 million, upgrade the heating and ventilation system for air changes in chemical areas; installation of emergency eyewash stations and showers; installing chemical and containment piping with heat tracing system; raising chemical containment areas; installing ammonia detection alarm systems; modifications to sludge cake pumps; replacing sump pumps.
- Richmond Chlorination Facility, $2.5 million, modifications and upgrades to the following systems: automated hypo-chlorite, analyzer, liquid chemical feeds system, PLC/ MCC Automation Controls.
- Station 24, $24 million, principal items of work include: new recovery wells; well pumps for both the existing recovery well and the new recovery well; enclosures for well pump motors on both locations; 6 Granular Activated Carbon (GAC) treatment systems.

Facilities Development - NYC Health and Hospitals Corporation, New York, NY

Served as Senior Director responsible for managing the Office of Facilities Development's $1.2 billion 5-year Capital Plan; oversaw a $100 million-plus Major Modernization projects at two of the Corporation's Long-Term Care Facilities and managing a corporate-wide $80 million emergency generator system upgrade project. Coordinated and managed the design teams from master planning, to the production of final construction documents for major modernization projects. Organized, directed, and coordinated activities of Engineering Support and Technical Services staff to perform value engineering, constructability reviews, and estimating services for proposed construction projects. Responsible for reviewing project scope, zoning analysis, economic feasibility analysis, preparation of Request for Proposals, assist with Uniform Land Use Review Procedure (ULURP) process, participation in negotiation of lease/sale business terms, and assist Legal Affairs with drafting of real estate agreement; and directed all activities of the contract Services Group including the solicitation, processing, and award of all capital construction contracts.

KHALED HUSEIN, OVERARCHING PROGRAM MANAGER

Mr. Husein has 25 years of professional experience, both nationally and internationally, in the construction industry working on public and private sector projects. He has provided executive leadership for a general contracting firm where he solicited and negotiated joint ventures, solicited international partnerships, recruited upper management professionals and guided the restructuring efforts of the firm. Responsibilities have included project management, cost control, claim review, payment reviews, change orders, time impact analysis, and coordination between trade contractors. He performs various administrative duties including report preparation and maintaining project records; interpreting plans, drawings and specifications and negotiating contract adjustments. He is knowledgeable in proper construction practices, including safety practices, claim avoidance and claim mitigation and QA/QC procedures.

EDUCATION

BS, Civil Engineering, New Mexico State University, Las Cruces

AS, Applied Science, Rockland Community College, Suffern, New York

Engineer-In-Training, New York, Certificate [redacted]

Ordinary National Diploma in Engineering, United Kingdom

REGISTRATION

Certified Construction Manager (CCM) by CMCI/2005

Member, Construction Management Association of America (CMAA)

Member, American Society of Civil Engineers (ASCE)

Member, NYC Metro Building Information Modeling Forum (BIM)

40-hr OSHA Site Safety Managers Course

30-hr OSHA Construction Safety & Health

10-hr OSHA Construction Safety & Health

THE RIGHT EXPERIENCE

Brooklyn Courthouse Program, Brooklyn, NY

Served as Senior Project Manager for the General Services Administration's (GSA) $400 million construction program in downtown Brooklyn's Cadman Plaza area supervising a staff of 22 professionals. The scope of work included the demolition of the Emanuel Cellar Federal Office Building, construction of a new 18-story Federal Office Building, the modernization of the existing Federal Courthouse, and the renovation of the historic Brooklyn General Post Office. Program/Construction Management services included constructability analysis, schedule control, estimating, resolve construction issues, construction phasing, contractor coordination, cost control, quality assurance, dispute resolution, claim mitigation and acted as a liaison between the client, tenants, contractors and A/E team.

New York City Housing Authority Requirements Contract, New York, NY

Serving as Project Executive for a $80 million capital improvement program for the New York City Housing Authority (NYCHA); the work includes:

- Fort Washington Roofing Project, $6 million, requires the removal of existing asbestos-containing roofing materials, asbestos abatement, new roof installation and related work;
- Harlem River Brickwork Project, $7.6 million, entails extensive brickwork, the replacement of steel lintels and incidental roofing;
- Rangel Brickwork and Roofing Project, $8.6 million, calls for replacing roofs on all buildings and the parapets for two buildings, and selective replacement/repair of brickwork and steel lintels.
- Queensbridge Boiler Replacement Project, $20 million, boiler plant replacement project at the fully occupied Queensbridge Houses; the

project consists of the removal of 9 existing Boilers/Burners and related control equipment and the replacement of 18 Boilers/Burners and related control equipment, at 6 Boiler Plants.

- Williams Plaza, $6.1 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Independence Towers, $6.1 million project requires replacing roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
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- Stapleton Houses, $7 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.

Manhattan Supreme Court Reconstruction & Restoration, New York, NY

Served as General Superintendent for $45 million reconstruction and restoration of the Manhattan Supreme Court in downtown Manhattan; additionally, he served as a member of a team of engineers and inspectors responsible for overall management and coordination of multiple prime contracts for the three phases of work. Scope of work includes demolition, upgrade of heating, ventilation, and air-conditioning (HVAC), power distribution, and fire alarm systems; new lighting and service elevator; window and roof restoration and skylight replacement; waterproofing; and a new service ramp and sidewalk lift meeting Americans with Disability Act (ADA) compliance. Provided construction management service and was responsible for managing implementation of project scheduling, contractor coordination, cost control, quality assurance, dispute resolution, change orders, technical submittals, progress payments, and design reviews.

DDC Schools Construction Program, Brooklyn, NY

Served as Project/Program Manager for a series of school renovation projects; the program consisted of total of eight schools. The scope of work for this construction management assignment included new built-up roofing, brick repair and reconstruction, new reinforced concrete parapet walls, terracotta restoration, and plaster and paint work. The entire renovation program was completed under a fast track and accelerated schedule in order not to interfere with the new school year. He was responsible for overseeing field operations, which included: schedule control, resolution of construction issues, construction phasing, contractors' coordination, and quality assurance.

Rikers Island Kitchens, Queens, NY

He served as Project Manager for the $61.5 million construction of a new 40,000-sf kitchen facility capable of serving 15,000 meals per day; the 32,000-sf renovation of an existing kitchen as well as a new food delivery system and other kitchen renovations work. All work was performed within 4 active correctional facilities. Construction management services included constructability analysis, schedule control, estimating, resolve construction issues, construction phasing, contractor coordination, cost control, quality assurance, dispute resolution, and acted as a liaison between the client, the Department of Design and Construction, Department of Corrections, design consultants, vendors, and contractors.

FARHAN SYED, DEPUTY PROGRAM MANAGER

Mr. Syed has 20 years of professional experience, both nationally and internationally, in the construction industry. Additionally, he has managed complicated concrete and brick rehabilitation masonry projects concerning occupied multi-level buildings including designated landmark structures. Responsibilities have included project management, cost control, claim review, payment reviews, change orders, time impact analysis, coordination and various administrative duties such monthly reports and maintaining project records; interpreted plans, drawings and specifications, and negotiated contract adjustments. He is knowledgeable in proper construction practices, including safety practices, claim avoidance and claim mitigation and QA/QC procedures.

EDUCATION

M.S. Civil Engineering – New Jersey, Institute of Technology

B.S. in Civil Engineering, N.E.D. University of Engineering and Technology, Karachi Pakistan

REGISTRATION

Professional Engineer (PE)
New York - No. [redacted]

THE RIGHT EXPERIENCE

New York City Housing Authority, New York, NY

As a Capital Projects Division Project Administrator, provided guidance and leadership in administering capital and bond issues, funded contracts awarded to CM/Build firms and manage teams of NYCHA's in-house construction project managers to monitor construction contracts. As a Team Leader he provided reviews of technical specifications and proposals, feasibility analyses and budget allocations for each contract. Provided guidance at all stages of design development and preparation of final design documents; oversaw and managed bidding process, as well as construction through substantial completion and project close-out. These construction contracts ranged from $6 million to $50 million each depending on the scope of work. Program Management for Major Modernizations and Rehabilitations for Building Exteriors Program Unit included the following:

- Lillian Wald Houses -$45 million
- Johnson Houses -$47 million
- Washington Houses-$18 million
- Vladeck Houses Elevator Replacement and Upgrade - $11 million
- Miscellaneous Construction & Rehabilitation - $20 million

Miscellaneous Projects in the Downstate Area, New York

He serves as Project Executive providing Program/Construction Management services in the New York Downstate area; project assignments include:

- Barretto Point, $10 million, remediation project 15,000 cubic yards of contaminated soil were excavated and replaced with clean fill over 3 acres at the site, which in the past housed a paint and varnish making facility.

FARHAN SYED, DEPUTY PROGRAM MANAGER

- Red Hook WPCP, $2.5 million project demolishing the existing system and installing a new state-of-the-art Fire Alarm System (Notifier) in nine designated plant areas.
- Sludge Dewatering Facilities Improvements at New York City Waste Water Treatment Plants, $12 million, upgrade the heating and ventilation system for air changes in chemical areas; installation of emergency eyewash stations and showers; installing chemical and containment piping with heat tracing system; raising chemical containment areas; installing ammonia detection alarm systems; modifications to sludge cake pumps; replacing sump pumps.
- Richmond Chlorination Facility, $2.5 million, modifications and upgrades to the following systems: automated hypo-chlorite, analyzer, liquid chemical feeds system, PLC/ MCC Automation Controls.
- Station 24, $24 million, principal items of work include: new recovery wells; well pumps for both the existing recovery well and the new recovery well; enclosures for well pump motors on both locations; 6 Granular Activated Carbon (GAC) treatment systems.

New York State Division of Housing & Community Renewal, On-call Contract, New York, NY

He is serving as Project Executive to monitor the construction activities of 11 Task Order projects with a total construction value of $100 million. The projects include new construction as well as major rehabilitation of existing buildings in the following developments Spring Valley Senior Living, Sleepy Hollow, Odell Clark, Clinton Place, Melrose and Jefferson Street Senior Citizen Apartments.

New York City Housing Authority, New York, NY

Team leader for PSA/Major Structural Repairs Division, responsible for Capital Project contracts worth $65-$70 million; project included construction of new Police Service Areas, Modernization and Extension of Community Centers, Major Brick and Concrete Repairs Contracts, Construction of New Garages and Curtain Wall Systems. He was responsible for on time completion of the contacts, meeting the deadlines for spending the Grant funds and for overseeing the daily work of the construction team. The construction team consisted of 26 Project Managers, 4 Field Supervisors, 2 Professional Engineers, 3 Office Project Managers and Assistant Chief. Also, he was the point person to resolve technical as well as administrative issues for these contracts as well as resolving daily work issues and change of design issues with the contractors due to field conditions.

New York City Housing Authority, New York, NY

As Assistant Chief Engineer under the Guidance of the Division Chief managed all exterior brick repair, structural repair and requirement contracts city wide, numbering from 25 to 50 contracts at a time. Provided review of bid documents, oversaw contract drawings and specification reviews, review and recommend the qualifications of low bidders and approved and signed all payment requisitions, reviewed and signed-off contractor's performance evaluations. Guided and supervised office staff in all technical report writing and correspondence with contractors. Reviewed and signed off on all change orders and work with the office of Quality and Cost control for processing change orders. Resolved and administered all field related and technical issues and provided guidance to a total field staff of 37 field inspectors, project managers and field supervisors.

HENRY HESSING, PE, AVIATION-DEP. PROGRAM MGR.

Mr. Hessing will be your Deputy Program Manager for Aviation projects. He has over 34 years experience as a professional engineer with extensive knowledge of construction management and resident engineering for new and rehabilitated highways, bridge structures, rail line segments and transportation-related buildings and airports. Mr. Hessing has a strong background in design engineering, interdisciplinary coordination, transportation planning programs, highways and bridges, airports, rail lines, utilities and constructability review.

EDUCATION

Master of Science, Transportation Planning, Polytechnic Institute of New York

Bachelor of Science, Engineering, State University of New York, Stony Brook

REGISTRATION

Professional Engineer
New York, [redacted]
Pennsylvania, [redacted]
New Jersey, [redacted]

REGISTRATION

Outstanding Service Award for Project Management

Exceptional Service Team Award was given by PANYNJ

The Aviation Department - PANNYNJ - gave two letters of commendation

American Registry of Outstanding Professionals

ASCE L.I., NY Branch President

THE RIGHT EXPERIENCE

JFK International Airport Redevelopment Program, Queens, NY

Served as Program Manager for the $9.5 billion JFK redevelopment program; developed construction staging and maintenance of traffic plans for the passenger distribution systems; performed in house constructability review of the baggage handling tunnel, electrical substation and 27k V duct bank; prepared cost estimates for site work for the East Parking Garage and evaluated various alternatives for piles and foundations for the electrical substation. Other responsibilities included establishing budgets and schedules for multiple construction contracts; developing, updating and maintaining planning parameters; monitoring budgets and schedules for functional, preliminary and final design of all contracts. This included monitoring construction so that airport operations were not interrupted along with coordinating with other design/ construction projects. He also analyzed multi-million claims for the Port Authority and made recommendations for resolution. Individual projects included coordinating the performance of this work through the Port Authority's tenant alternation application process for each passenger and baggage screening check point at all nine terminals in the Central Terminal Area; also managing development and implementation of $550 million in roadway and utility improvements while fully coordinating with airport operations and other components of the program.

- Air Traffic Control Tower Demolition, $3.5 million, for the design and demolition phase of this project which was successfully completed with minimal impact to airport operations. The airports general manager described the job as, "a model for how construction should be undertaken in an operating airport environment. The job was well planned, the work site was properly managed and maintained and the communication of the project schedule to airport staff was very effective."
- Airport Deicing Facility, provided program management for the $9.5 million design/build/operate/maintain (DBOM) new, state-of-the-art, infrared aircraft deicing facility; the structure deices aircraft up to

and including 747-300. The project earned the "Quality of Life" award from ASCE Long Island in May of 2007.

- Explosive Detection Systems and Electronic Trace Detection, Transportation Security Administration installations of Explosive Detection Systems and Electronic Trace Detection for baggage screening IT rack installation at JFK International Airport; coordinated the performance of this work through the Authority's tenant alternation application process for each passenger and baggage screening check point at all nine terminals in the Central Terminal Area. This work included civil and traffic engineering technical reviews, evaluations, recommendation and administration for the various terminal redevelopments in the CTA.
- Air Train Light Rail System, the system links airport terminals with car rental facilities, parking areas and the New York City transportation network, including the LIRR and the NYC subway and bus network. Mr. Hessing was responsible for civil specifications, LRS drainage design, pavement design, civil details and permit reports.

Rehabilitation of Co-op City, Bronx, NY

Served as Program Manager responsible for managing contracts and staff for construction supervision and inspection of the replacement of dual temperature hot water (RIC-WEL System) and electric duct bank system for 55,000 unit housing project, six public garages and three shopping malls as part of this $200 million project which took 11 years to complete. Five miles of piping were replaced; using micro-tunneling, installed new 250 feet long, 60" diameter precast concrete pipe under Hutchinson River Parkway to accommodate the installation of new 48" diameter steel pipes heating and cooling piping; additionally, installed new 6", 8", 10" and 12" diameter water mains, new fire lines, storm, sewer and 2" diameter gas lines. Work also included roadway concrete pavement, interlocking concrete payers, asphalt roadway and landscaping.

KAMAL KISHORE, PE, BRIDGE & TUNNEL- DEP. PROGRAM MGR.

Mr. Kishore has over 40 years of experience working with various engineering organizations and was involved in approximately 500 bridges. Areas of specialized expertise include, but not limited to, Load Rating of bridges to establish the posting value and to establish criteria for allowing unusually heavy vehicles to travel on it; developing scope of work for acquiring consulting engineering services for various bridge projects, developing scope of work for acquiring expert engineering services for matters requiring highly complex studies related to policy decisions as owner of large inventory of bridge infrastructure; developing alternative schemes for a bridge project, clearly discussing merits and demerits of the schemes and recommending the best suited scheme; inspecting bridges to establish its condition rating based on NYSDOT and FHWA criteria; developing details for bridge structure that incorporates new technological advancements and blends with the long standing details being frequently used in bridges.

EDUCATION

Master of Technology Structures, Indian Institute of Technology, Kanpur, India

Bachelor of Science, Civil Engineering, Bihar College of Engineering, Patna, India

REGISTRATION

Professional Engineer –
New York 1988, [redacted]
New Jersey 1986, [redacted]

THE RIGHT EXPERIENCE

Bureau of Engineering Review and Supports, NYC Department of Transportation, Division of Bridges, New York, NY

Serving as Deputy Chief Engineer responsible for managing all activities associated with design and rehabilitation or replacement of all deficient bridges owned by the City of New York. NYC is responsible for about 687 bridges in the five boroughs. In charge of 100 engineers divided into four groups; In-House Design Group, Engineering Review Group, Engineering Support Group and Quality Assurance Group.

- In House Design Group – Responsible for design of the $90 million 145th Street Bridge over the East River, the design of the $200 million Paerdegat Basins Bridge over the Belt Parkway as well as supervising the consulting engineering firm designing the $8 million pedestrian ramp from Park Row to Police Plaza.
- Engineering Review Group – Responsible for the review of all bridges and establishing seismic design criteria for them; identifying land use issues; rehabilitating and inspecting retaining walls. The job of creating scopes of work for future bridge project lies with the Engineering Review Group; it also manages the development of bridge designs prepared by private developers who build bridges that become City property after acceptance including 7 bridges built by EXTELL/Trump New World in Manhattan at cost of $40 million and the construction of the $15 million Carlton Avenue Bridge in Brooklyn by Forest City Ratner.
- Engineering Support Group – Responsible for preparing the specifications for all construction contracts pertaining to bridge

construction and also maintains archived specifications and as-built drawings. This Group also includes a Survey Unit that is responsible for monitoring and surveying low-rated bridges. This group was responsible for managing the engineering consultant performing remediation and rehabilitating city-owned bridges infested with marine borers.

- Quality Assurance Group – Responsible for reviewing of fabrication shop drawings, spot inspections of the fabrication yard, maintaining concrete-mix records, inspection of the reinforcing bars and bearings; also responsible for painting inspections and enforcing compliance to environmental issues during construction.

Engineering Review, Bridge Design, NYC Department of Transportation, Bridges and Roadway Division, New York, NY

He served as Director managing four engineering sections, Engineering Estimating and Review, Geotechnical Engineering, Utilities and Permits Land Acquisition, consisting of fifteen engineers.

- Engineering Estimating and Review – Responsible for creating preliminary scopes of work and technical documents for the preparation of Request for Proposals for the rehabilitation of deficient bridges; establishing criteria for project initiation estimates; preparing standard fee curve for consultants; establishing and reviewing seismic design and retrofit criteria; reviewing load rating calculations; training employees in the use of the metric system to conform to NYSDOT/FHWA requirements.
- Geotechnical Engineering – Responsible for subsurface exploration, laboratory testing, geotechnical designs and reports, plans and specifications; modifications to documents; ensuring that the design documents comply to federal/state/city design standards; reviewing subsurface and foundation designs for conformance with AASHTO/ NYSDOT seismic design criteria; establishing criteria for foundation plans and proposals of complex nature prepared by others which may impact structures or facilities owned by the city.
- Utilities and Permits – Responsible for reviewing consultant submissions to establish conformance to city policies and ensuring that all bridge utilities can be accommodated without jeopardizing the bridge's structural integrity; interacting with utility companies to make them aware of Bureau's special requirements; and resolving all matters with the utilities.
- Land Acquisition – Responsible for reviewing each project for any possible land issues; requesting and tracking title searches, coordinating and processing ULURP activities, and the mapping and/or de-mapping of streets as required.

LAWRENCE KING, PE, QA/QC OFFICER

Mr. King has over 38 years of design, construction and quality assurance experience. He is currently HAKS' QA/QC Officer overseeing inspection and record keeping quality and safety on all company projects. Before joining HAKS he was Deputy Chief Engineer for the New York City Department of Transportation, responsible for consultant and contract supervision, management and quality control of design, construction and rehabilitation of all fixed land and waterway bridges under the City's jurisdiction, and a budget of $2.3 billion over the past 10 years. Before that he served for 10 years as Director of Quality Assurance in the Department's Division of Bridges, where he developed and initiated QA policy and Materials Acceptance Procedures.

EDUCATION

B.S. in Civil Engineering, CCNY – School of Engineering, NY

REGISTRATION

Professional Engineer
New York, [redacted]

THE RIGHT EXPERIENCE

Capital Commitment Program, Bureau of Roadway Bridges, NYC Department of Transportation, New York, NY

As the Deputy Chief Engineer/Assistant Commissioner of the NYCDOT Bureau of Roadway Bridges, he had responsibility for the Bureau's Capital Commitment Program which encompassed the 10 year Design/Bid/Build Plan for all fixed land and waterway bridges under DOT'S jurisdiction. In this capacity, he oversaw on a 3 time per year basis the updating of this plan, having ultimate latitude in the plans modifications so as to meet the NYCOMB target needs. This 10 year Program consisted of approximately 48 bridges in various stages of design valued at $1.3 billion, one of the most notable being the Manhattan Westside Bridges Program consisting of 21 bridges valued at $304 million. Additionally the construction arm of this Program managed some 15 - 20 bridges in rehabilitation through the 5 Boroughs valued at $450 million, the most notable project being the reconstruction of 3 Belt Parkway bridges registered for $365 million.

HAKS, New York, NY

He is serving as Quality Assurance, Quality Control Officer for all HAKS construction management, engineering, architecture, land surveying and material testing projects, ensures the quality of design, inspection and record keeping. Responsible for the development and implementation of processes that enable each Department to become ISO 9001 certified.

Alley Creek CSO Abatement Facilities, Queens, NY

Serving as Quality Assurance, Quality Control Officer for the complete upgrade of the existing Old Douglaston Pump Station (ODPS), including construction of an Interim Pump Station (IPS), with renovation and rehabilitation of the existing (ODPS) structure and process equipment, and HVAC, plumbing, electrical and associated control work; demolition,

rehabilitation and reconstruction of two existing outfalls, which will involve temporary roadway construction through adjacent wetlands to provide access; and activation of the CSO Retention Facility, which was constructed under Phase I of this work.

Alley Park Environmental Restoration and Oakland Lake Park Improvement, Queens, NY

He is serving as Quality Assurance, Quality Control Officer for this $12 million project at Alley Park that involves the excavation and stockpiling of the wetland area north of Northern Boulevard, transporting and disposing of the excavated material at the approved disposal facility, subgrade fine grading and spreading sand planting material in the Western Basin, planting in wetland salt marsh and maintaining erosion and sedimentation control facilities. Additional items to be undertaken include planning of trees, shrubs, warm season grass and wildflower seeding. Construction at Oakland Park involves restoring five isolated locations within Alley Park including reconstruction of sidewalks, remediation of gullies, removal of invasive plants, trees and common weed near the lake, modification of catch basins and shrub and tree plantings.

Bureau of Roadway Bridges, NYC Department of Transportation, New York, NY

So as to ensure the uninterrupted flow of design and construction services for this Program, I interfaced and problem solved with numerous stakeholders (City/State/Federal Agencies, Elected Officials, Community Boards, etc.). Areas of involvement included scheduling, cost negotiations, funding stream identification, quality of deliverables, site safety and quality of life issues.

He served as Deputy Chief Engineer for all fixed land and waterway bridges under jurisdiction of the Division of Bridges, directing all activities related to consultant supervision, contract supervision and contract management for design, construction, reconstruction and rehabilitation projects on all fixed land and waterway bridges and related structures; overseeing an ongoing program to reconstruct all fixed land and waterway bridges and related structures; executing structural, electrical and architectural design and related engineering work for the construction and/or rehabilitation of all fixed land and waterway bridges and related structures, at all times coordinating design efforts with interested public and private agencies; reviewing and commenting on structural plans submitted by private developers, governmental agencies, and public utility companies; managing all work of the Bureau under the terms of the Interfund Agreement (IFA), keeping its budget in line with fees charged by private consulting contractors.

Directly responsible for managing a technical staff of 75 Professional Engineers, Construction Managers and Administrators with a ten year capital budget approaching $2.3 billion dollars. At any given time some 90 projects were in various states of design with upwards of 20 projects in the construction phase. Major projects advanced during his tenure include:

- Reconstruction of Queens Boulevard and Honeywell Street over Sunnyside Yards – $81 million
- Reconstruction of the Grand Concourse over East 161 Street – $56 million
- Reconstruction of three Belt Parkway Bridges--Paerdegat Basin, Fresh Creek and Rockaway Parkway – $345 million
- City Island Cable Stayed Bridge – $100 to $120 million
- Protection against Marine Borers along the FDR – $80 to $100 million
- Reconstruction of three Belt Parkway Bridges--Gerritsen Inlet, Mill Basin and Nostrand Avenue – $350 to $400 million
- East 153 Street over Metro-North Rail Road, $100 to $120 million

RAYMOND A. RIBEIRO, P.E, TECHNICAL ADIVISOR

Mr. Ribeiero has 20 years of professional experience directing and managing public sector projects. His responsibilities have included project management, cost control, , change orders, time impact analysis, prepared reports and maintained project records; interpreted plans, drawings and specifications, and negotiated contract adjustments. He is knowledgeable in proper construction practices, including safety practices, claim avoidance and claim mitigation and QA/QC procedures.

EDUCATION

Bachelor of Science, Civil Engineering,
Polytechnic University, Farmingdale, NY

REGISTRATION

Professional Engineer
New York, [redacted]

THE RIGHT EXPERIENCE

Nassau County 4 year Capital Improvement Plan, Mineola, NY

Served as Commissioner responsible for the coordination, scheduling, fiscal control and implementation of the County's 4-year capital program worth a total of $800 million. The program included over 325 projects in roads, bridges, infrastructure, buildings, storm water and sewage treatment, park improvements and traffic/transportation. The program required coordination with many outside funding agencies/programs including STP, CMAQ, HBBR, SRF, ARRA, Earmarks, etc.

Environmental Bond Act, Mineola, NY

Served as Commissioner responsible for the overall management and implementation of all design and construction associated with two voter approved Environmental Bond Act programs worth $150 million. The Act funded 23 open space land acquisitions, 7 Brownfield remediation projects, 46 storm water improvement projects and 64 improvements.

Commissioner, Nassau County

Establish policy, direct operations and manage resources associated with a department of nearly 900 employees. General management of all engineering, construction and maintenance associated with public infrastructure including buildings, roads, bridges, traffic controls, passenger cars, emergency vehicles and heavy truck fleet, sewage treatment plants and collection systems, storm water management, groundwater monitoring and mosquito control. Responsible for developing and managing a 280 million dollar annual operating budget and an annual 160 million dollar capital budget; represent the department on all the above in meetings with the County Executive, Legislature, other elected officials and civic groups.

Assistant Director of Traffic Engineering

Managed daily operations of the entire traffic engineering unit, including supervision of a staff of nearly 60 employees; met and communicated with elected officials and civic groups regarding various traffic issues; coordinated federal aid programs with County Capital Transportation Funds.

ANTHONY PAPPAGALLO, PROJECT MANAGER

Mr. Pappagallo has over 33 years of experience in Construction Management. He has worked successfully at the executive level of management for governmental, private and employee-owned firms in the New York metropolitan area. Responsibilities have included project management, cost control, claim review, payment reviews, change orders, time impact analysis, coordination between the owner and the contractor, and various administrative duties including preparing reports and maintaining project records; interpreting plans, drawings and specifications, and negotiating contract adjustments. He is knowledgeable in proper construction practices, including safety practices, claim avoidance and claim mitigation and QA/QC procedures.

EDUCATION

MS, Structural Engineering,
Polytechnic Institute of Brooklyn, NY

BS, Civil Engineering, Polytechnic Institute, NY

REGISTRATION

American Society of Civil Engineers

Building Trades Association Member

National, Local, State Board of Realtors License

Path/PANYNJ-Roadway Worker Protection Certificate

NYC Department of Buildings 4-hour Supported Scaffold User Certificate

NYC Department of Buildings 8-hour Scaffold Safety Training Certificate
OSHA 30-hour Safety Training Course

Contract Changes-Extra Work Claims, Differing Site Conditions, Achievement Award

American Arbitration Association Member

THE RIGHT EXPERIENCE

WTC Memorial & Memorial Museum, New York, NY

Served as Project Manager for the new construction of the WTC Memorial and Museum in downtown Manhattan; responsibilities included extensive repair of existing slurry wall; second interior “liner wall” (keep out) Hudson River, to augment original “bathtub”, prior to permanent rebuilding. Over seven-lines of tiebacks were drilled and grouted to bedrock; excavated and installed guide walls for support of excavation wall for slurry wall at counter-fort, with seven reinforced pilasters, dewatering, excavation into bedrock, to 7-story depth, will support 62-ft of exposed slurry wall; utility and secant pile obstructions. Approximately 6600-cy of 5000-psi concrete, 500 tons of reinforcing steel, 300, steel rod tiebacks drilled, cased and grouted to bedrock. Project also required extensive coordination with major subway and PATH projects, and MTA’s #1 and #9-subway tunnel.

New York City Housing Authority Requirements Contract, NY, NY

Serving as Project Manager for a $80 million capital improvement program for the New York City Housing Authority (NYCHA); the work includes:

- Fort Washington Roofing Project, $6 million, requires the removal of existing asbestos-containing roofing materials, asbestos abatement, new roof installation and related work;
- Harlem River Brickwork Project, $7.6 million, entails extensive brickwork, the replacement of steel lintels and incidental roofing;
- Rangel Brickwork and Roofing Project, $8.6 million, calls for replacing roofs on all buildings and the parapets for two buildings, and selective replacement/repair of brickwork and steel lintels.
- Queensbridge Boiler Replacement Project, $20 million, boiler plant replacement project at the fully occupied Queensbridge Houses; the project consists of the removal of 9 existing Boilers/Burners and related control equipment and the replacement of 18 Boilers/Burners and related control equipment, at 6 Boiler Plants.

- Williams Plaza, $6.1 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Independence Towers, $6.1 million project requires replacing roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Bushwick Houses, $9.3 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Stapleton Houses, $7 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.

PS 269 Annex, Brooklyn, NY

He served as Senior Project Manager for the boiler retrofit and replacement of power-flame burners at 2 separate school boiler plants. Included removal and replacement of chemical feed-water tank, condensate receiver tanks, vacuum, recirculation and sump pumps; lead/lag controller, power distribution panels, and related piping. Coordinated, procured, managed, and inspected all activities, cost management, and final close-out, including the Bureau of Air Resources and Facilities Inspection Division for this Capital Improvement Project.

Namm Building, New York City College of Technology, Brooklyn, NY

As Project Manager, coordinated and managed the $19 million exterior modernization of the 12-story Namm Building for the Dormitory Authority of the State of New York's. This seven-phased project included replacement of limestone cladding, new windows; interior fit-up an extensive program of asbestos abatement in an occupied facility; included relocation of occupants into pre-constructed swing space. Attached, 6-Story (G/Bldg) included roofing, window replacements, and abatements at 200-station computer lab, new fire alarm system, GPR surveying prior to filling-sinkholes. Project completed five months ahead of schedule.

Fordham Road Station, Bronx, NY

Served as Project Manager for Metro-North Rail Road's Harlem Line-Rehabilitation of the Station and platform including lighting, communication & signal; foundation, and concrete renovations; ADA compliance.

Roosevelt Island, New York, NY

Served as Project Manager for various facilities renovations such as Goldwater Hospital, Blackwell Park, including de-watering, excavation and installations of seawall bulkheads, pilings, utility storm, sewer, security gates, guard booths, and landscaping.

Beneficial Management Headquarters, Peapack-Gladstone, NJ

Served as Project Manager responsible for design and construction of 5-story-retaining walls foundations, structural steel, metal deck, two-way waffle slabs, underground parking, computer, mechanical, site design, on pile caps, including water tank with clock tower of this eight-building office complex. This 1-million-sf facility consisted of structural steel framing/ concrete slab on metal deck, concrete waffle slabs, underground parking structures, computer rooms, remote mechanical buildings.

NILESH SHAH, PE, AVIATION - PROJECT MANAGER

Mr. Shah has 24 years of professional experience in the construction industry working. He is knowledgeable in proper construction practices, including safety practices and QA/QC procedures.

EDUCATION

Master of Science, Civil Engineering,
Stevens Institute of Technology,
New Jersey

Bachelor of Science, Civil Engineering,
Sardar Patel University, India

REGISTRATION

Professional Engineer –
New York [redacted]
Delaware, # [redacted]

THE RIGHT EXPERIENCE

Continental Airlines Global Gateway Program, Newark International Airport, NJ

Serving as Geotechnical Project Engineer responsibilities included oversight of the installation of over 4,000 piles which consisted of 12" diameter steel pipe and 8" diameter mini piles supporting the expansion of Terminal C, reconfiguration and the enclosure of an airside drainage ditch about a half-mile in length. When low overhead and/or vibrations to existing structures were an issue, mini piles were used. The threaded joint casing was installed to the full depth of the pile. After the tremie pipe was placed to the bottom of casing and flushed with water, grout was pumped through the tremie pipe to top of pile; after inserting a center reinforcing bar the casing was withdrawn to a specified elevation while pressure grouting continued; static load tests were later performed.

Terminal 4 Redevelopment and Landside Roadways, JFK International Airport, NY

Served as Senior Geotechnical Engineer, responsibilities included oversight of the installation of over 3,400 piles supporting the construction of a new $1.8 billion international arrivals terminal and the reconfiguration of the access roadway to the terminal. The pile-testing program included dynamic and pile integrity I compression, lateral and tension tests.

Removal of Northbound Tolls at Pascack Valley Toll Plaza, NJ

He is serving as Resident Engineer for the staged operations to remove the Northbound Toll Plaza on the Garden State Parkway at MP 165. Stage 1A includes removal of the four "EZ Pass Only" pavement markings; existing toll plaza advance signs and installation of temporary work zone. Stage 1B consists of the removal of remaining concrete barriers, removal of existing toll islands, booths and canopy. Stage 2 involves shifting traffic from Northbound Express lanes to Northbound lanes reconstructed in Stage 1. Other work involves drainage, sign structure foundations with drilled shafts and structure removals and installations, electrical lighting, conduit and wiring, rip-rap stone and sidewalks. Stage 3, the final stage, involves installing the final surface course of hot-mix asphalt with permanent traffic striping and signing. Traffic control and coordination with toll facility and Turnpike operations is a major responsibility.

Paulding Avenue Area, Bronx, NY

Served as Resident Engineer for the replacement and regarding of worn and deteriorated streets, curbs, pedestrian ramps and geometric alignment modifications, new street lighting, drainage and environmental studies, and study of traffic patterns.

Reconstruction of Step Street at East 183rd Street, Bronx, NY

He served as Resident Engineer responsibilities included demolition of the north and south stairs and replacement with new stairs, structural steel installation (box beam gutter) including expansion bearings, reconstruction of sidewalks, utility lines, replacing lights, traffic signals, roadway pavements, pavement markings, stabilization of the rock face by installing rock anchors and protection of the rock face by installing wire mesh and anti-climb fences.

Downtown Flushing Pedestrian Project, Queens, NY

Served as Resident Engineer for this project which provides pedestrian amenities at various locations in Historic Downtown Flushing; project includes rehabilitation of the Lippmann Arcade that connects Roosevelt Avenue to a municipal parking lot, sidewalk and roadway rehabilitation on 39th Avenue between Union Street and 138th Street and at the intersection of Bowne Street and 37th Avenue. In addition, 16 historic sites received pedestrian amenities such as lighting, signage, historic markers and inlaid thermoplastic crosswalks.

Rehabilitation of Lincoln Road Bridge, Brooklyn, NY

Served as Resident Engineer responsible for overseeing the removal and reconstruction of the existing bridge and its surrounding sidewalks, curbs and approach roadways, the bridge abutments will be demolished except for the upper portions which will remain as a retaining wall. The project required the construction of a new abutment on Steel H piles driven behind the existing abutment and a new parapet.

Bronx-Whitestone Bridge Rehabilitation, Bronx, NY

Served as Resident Engineer responsible for partial and full-depth repairs of deck and the oversight of the removal of existing overlay and its replacement with rapid setting LMC; work included replacement of missing gutter plates, installation of weep pipes, removal and replacement of deck expansion joints, bearings and damaged finger joint.

JEFFREY WRIGHT, PE, BRIDGE & TUNNEL- PROJECT MANAGER

Mr. Wright has 26 years of experience in the inspection of structural steel and reinforced concrete structures with an emphasis in bridges. His experience includes inspecting over 500 bridges and the load rating of over 150 bridges. He has been involved in the bridge inspection field from Assistant Team Leader to Project Manager. He has inspected bridges from simple spans to suspension and truss bridges. He is thoroughly familiar with the day-to-day operations of a biennial inspection projects including scheduling, cost control, coordination with railroads and utilities and client communication.

EDUCATION

Bachelor of Science, Civil Engineering, Rensselaer, Polytechnic Institute

REGISTRATION

Professional Engineer – New York, [redacted]

CERTIFICATION

NYSDOT Bridge Inspector's Training Course

Bridge Climbing Class

C3- Supervisor/ Competent Person Training for Deleading of Industrial Structures SSPC

MPT ATSSA Traffic Control Supervisor

OSHA 10-Hour Construction Safety and Health Training Course

OSHA Confined Space Awareness

NACE Coating Inspector Training, [redacted]

Individual Member of NACE - [redacted]

THE RIGHT EXPERIENCE

2009-2010 Biennial Bridge Inspection & Design of Miscellaneous Repairs at the Marine Parkway and Cross Bay Bridges, Queens, NY

Serving as Project Director for the inspection of bridges, preparing reports and reviewing all available plans, inventory updating, load rating verification and structural integrity evaluation of bridges which included updating NYCDOT database for various bridge elements.

2008-2009 Biennial and Interim Bridge Inspection, New York, NY

Served as Project Director for the inspection of 689 bridges in 7 counties located in Region 8 for the New York State DOT bridges, prepared reports, and reviewed all available plans, updated inventory, verified load ratings and structural integrity evaluations using BIPPI.

Biennial and Interim Bridge Inspections, New York County, NY

He served as Project Manager for the inspection of 200 bridges with 2,800 spans located in Region 11 for NYSDOT. Overall project responsibilities included ensuring quality of work; inspection; scheduling; maintenance and protection of traffic implementation and public notifications.

2007-2008 Biennial Bridge Inspection & Design of Miscellaneous Repairs, New York, NY

Served as Team Leader for the inspection of the Henry Hudson and Queens Midtown Tunnel Approach Bridges, prepared reports, reviewed available plans, updated the inventory, verified load ratings and structural integrity evaluations of the approach ramps which included updating database for various elements of the bridges and their approach ramps.

Superstructure Painting of Rip Van Winkle Bridge, Brooklyn, NY

Served as Resident Engineer for sandblasting the existing through truss portion of the bridge to a near white finish and painting with a zinc-rich epoxy primer and two-coat water based acrylic; additional work included cleaning and repainting 9,950-lineal feet of railings. The existing paint

contained lead, therefore class 1A containments were erected and all debris was classified as hazardous waste. The work was performed successfully over traffic and over the Hudson River. Rip Van Winkle Bridge is a cantilever bridge spanning the Hudson River between Hudson, NY and Catskill, New York

Biennial Bridge and Under Water Inspection, NY

Served as Team Leader for the inspection of the Tappan Zee Bridge underdeck elements of the through truss as well as the towers and caissons; the inspection utilized the existing travelers under the bridge to inspect the bottom chords, floor beams, stringers and curb support steel. The four main towers were inspected by climbing and the insides of the caissons were inspected by climbing ladders and utilizing flash lights.

Inspection Services for the West Approach Rehabilitation of Mid-Hudson Bridge, NY

He served as Resident Engineer responsible for budget, schedule, and quality of workmanship for replacing the concrete deck of the NYS Route 9W overpass to the Mid-Hudson Bridge with a new concrete deck, new approach slabs and concrete barriers. In addition to the bridge work, over five lane miles of asphalt concrete pavement were milled and filled. Work also included the installation of a half mile of fiber optic and electric power conduits for security work.

Kingston-Rhinecliff Bridge Superstructure Painting, Kingston and Rhinecliff, NY

Served as Resident Engineer for the blast cleaning and repainting the 5,200-feet of deck trusses of this Hudson River bridge. Work included utilizing class 1A containment during blasting operations, as the existing paint contains lead; hazardous waste removal and air quality were closely monitored. The paint system consisted of a moisture cure zinc primer followed by a sealer stripe coat and two coats of a waterborne latex paint.

Newburgh-Beacon Bridge Expansion Joint Construction Inspection, Newburgh-Beacon, NY

Served as Resident Engineer for the replacement of existing armored joints and plug joints with 10 new asphaltic plug joints, replacement of 12 existing modular expansion joints with new modular expansion joints, full-depth concrete repairs, and removal of concrete haunches at 47 floor beam locations.

Truss Removal, Aerodynamic Fairing Installation, Cable Inspection, Bronx-Whitestone Bridge, NY

Served as the Resident Engineer for the removal and disposal of the existing stiffening trusses, and temporary reinforcement of stiffening girders, paint removal for steel repairs and repainting on the Bronx-Whitestone Bridge. In addition, a new walkway, access platforms, temporary work platform, and ladders were installed, as were new vent holes and new access openings in the stiffening girder, removal and disposal of seizing wires from suspenders and stay ropes, and removal and resetting of rope collars.

FRANK VERDARAME, BRIDGE & TUNNEL- PROJECT MANAGER

Mr. Verderame has over 16 years of experience in construction management his responsibilities have included project management, cost control, payment reviews, change orders, time impact analysis, coordination between the trades and various administrative duties, prepared reports and maintained project records; interpreted plans, drawings and specifications, and negotiated contract adjustments. He is knowledgeable in proper construction practices, including safety practices and QA/QC procedures.

EDUCATION

BS Civil Engineering, Manhattan College, Riverdale, NY

CERTIFICATION

OSHA 10-Hour Construction Safety and Health Training Course

OSHA 40-Hour Construction Safety and Health Training Course

OSHA Confined Space Awareness

PATH Railroad Worker Safety Training

ACI NJ Chapter Concrete Construction Technology Course

NJSAT Asphalt Paving Construction Technologist

Rutgers Traffic Control Coordinator

Rutgers Traffic Control Coordinator – Refresher Course

Contract Administration and Management using Primavera Expedition –Etrac Solutions

Bentley ProjectWise Course

THE RIGHT EXPERIENCE

PANYNJ, Construction Management Services on a "Call-in" Basis, New York, NY

Served as Project Manager for an on-call construction management assignment at multiple Port Authority facilities in the metropolitan area; performed various tasks including Resident Engineering Inspection and Tenant Alteration Application (TAA) projects for the Authority. Responsibilities included monitoring pile installation, pile repairs, wrapping, jacking, relieving platforms rehabilitation, underwater and above-water pier repairs, bulkhead repairs and new construction, fender systems, buildings, digital video monitoring systems, paving, concrete, asphalt, and other site work. Fire Safety Engineers focused on maintaining a fire safe environment at Authority facilities for employees, tenants and patrons and on an effective HPR-(highly protected risk) based property loss prevention program. Work included conducting and witnessing annual and acceptance tests of fixed fire protection systems and equipment; reviewing and commenting on plans for fire code compliance, and participating in special technical investigations.

Construction Management for NY Projects on a Call-in Basis for PANYNJ, NY/NJ

Responsibilities included administration of pre-construction meetings and preparation of minutes; processing contractor payment; preparing contract change orders; preparing additional lump sum and unit price conversions; performing requests for additional funds for contracts, auditing contractor proposals, estimates and submittals; processing audit requests and assisting auditors; updating financial details and construction forecasts on a monthly basis to track budgets; issuing directives for on-call contracts; updating, preparing and filing contract correspondence, specifications, drawings & submittals; scheduling inspections for all contracts; verifying compliance with changing security regulations; researching information from closed-out contracts; closing out completed contracts including: verifying and processing final financial documents for payments and preparing completion memos, certificates, permits, audits for facility, Construction Managers and Chief Engineer's approvals. Scope of work on various

projects included installation of new piles, pile repairs, wrapping, jacking, rehabilitation of relieving platforms, underwater and above water pier repairs, bulkhead repairs and new construction, fender systems, fence, guide rail, lighting, signage, guard booths, building construction, sprinkler systems, roofing, digital fiber optic video monitoring systems, paving, etc for various contract assignments including:

- Brooklyn PA Marine Terminal, Pier 8 Roof and Sprinkler Rehabilitation
- Brooklyn PA Marine Terminal, Bulkhead Rehabilitation Between Piers 2 and 3 and Piers 4 and 5
- Brooklyn PA Marine Terminal, Piers 1, 2 and 3 Rehabilitation of Low Level Relieving Platforms
- Brooklyn PA Marine Terminal, Streetscape Program
- Brooklyn PA Marine Terminal, Rehabilitation of Piles-Piers 1, 2, 3 and 5
- Red Hook Marine Terminal, Wharf A, Bulkhead Rehabilitation
- Downtown Manhattan Heliport, Pier and Barge Repairs
- Port Commerce Department, New York Facilities, Asbestos Removal
- New York Marine Terminals, Priority Building Construction
- NY/NJ Marine Terminals, Wharf Repairs
- NY/NJ Marine Terminals, Underwater Wharf Repairs
- NY Marine Terminals, Wharf Repairs
- NY Marine Terminals, General Building Construction
- NY Marine Terminals, Underwater Wharf Repairs
- NY/NJ Marine Terminals, Multi-Facility Fender System Repairs
- NY Marine Terminal, Fencing, Guide Rail, Guard Booths, Lighting and Site Work
- Queens West Wharf Repairs
- Battery Park Ferry Landing, Pier A Landing Removal

Stewart International Airport Access Improvement Project, Stewart, NY

Served as Project Manager for the construction of a new interchange on Interstate 84 at Drury Lane with the staged reconstruction of Drury Lane and an access road from Drury Lane to Stewart International Airport; creation of new Federal Wetlands; drainage installations including box and pipe culverts; construction of MSES (mechanically stabilized earth system) walls; installation of extensive erosion control measures and environmental friendly features such as vernal pools and amphibian borders; installation of new utilities (overhead and buried) throughout project.

Reconstruction of Grand Concourse Bridge over East 161st Street, Bronx, NY

Served as Project Manager for a scope of work that included the demolition of arched bridge; demolition of the abutments, concrete deck, steel grating and steel stringers; construction of top of bridge abutment and back walls utilizing soldier piles and wood lagging; rehabilitation of existing concrete on abutment wall; construction of new stringer seat pedestals and installation of elastomeric bearings; construction of new superstructure; installation of a new water main crossing the bridge under Grand Concourse and a water main at E161st Street north service road; construction of Lou Gehrig Plaza, sidewalks, median island and bridge parapets with architectural fencing; demolition and reconstruction of concrete staircases at East and West portals of the bridge; reconstruction of the underpass roadway and sidewalks; construction of two new approach slabs; roadway resurfacing of both upper arteries at E161st Street; installation of new tunnel/street lighting system, pavement striping and traffic signals. Scope of work for the latter includes full depth reconstruction of the roadway; reconstruction of sidewalks and medians, installation of pedestrian ramps; construction of new combined sewer system, drainage, Con Edison duck banks and telephone systems; installation of new street lighting system, pavement striping and traffic signals.

ASHRAFF ABDALLA, PE, RAIL & TRANSPORTATION- PROJECT MANAGER

Mr. Abdalla has over 20 years of experience in the construction management of various facilities including police facilities, residential, hospitality facilities and airports. Responsibilities have included project management, cost control, payment reviews, change orders, trade coordination and various administrative duties, prepared reports and maintained project records; interpreted plans, drawings and specifications, and negotiated contract adjustments. He is knowledgeable in proper construction practices, including safety and QA/QC procedures.

EDUCATION

Bachelor of Science in Civil Engineering, Alexandria University, Egypt,

OSHA/EPA Lead Inspector Training

REGISTRATION

Professional Engineer, Pennsylvania, [redacted]

THE RIGHT EXPERIENCE

New Terminal at JFK Airport, Queens, NY

Provided field inspection in compliance with contract documents for the construction of a new international arrivals terminal; adhered to building codes and industry standards. Maintained extensive inspection and progress reports and follow-up to assure compliance with the contract documents and evaluated field conditions and provided solutions to conditions not detailed in drawings. Attended progress meetings on a weekly basis to discuss work progress and prepared meeting minutes as well as issued directives and field memos to contractors for non-compliance.

121st Precinct, Staten Island, NY

Serving as Superintendent for the new $52 million, 52,000-sf 121st Precinct which is being constructed under a CM/Build contract. The LEED Silver facility was designed by world renowned architect Rafael Vinoly and is expected to be completed within 33 months. As this project is a CM/Build assignment, HAKS will procure, hold and manage all contractor contracts. HAKS has completed the constructability review and reconciled the estimate with the design team and client. HAKS competitively bid the project and a notice to proceed was issued to the contractors and the project is presently under construction.

NJ State Police Facility, Holmdel, NJ

Served as Project Manager for a new $9 million state-of-the-art, three-level State Police barracks and headquarter which will house administrative offices, holding cells, training and conference rooms, interview rooms, ammunition storage, motorcycle and other vehicle storage, a sally port, an exercise room, lounges, elevators, and a new helipad. This project was constructed adjacent to an operating police facility and was carefully planned and phased to accommodate the existing operation. Responsibilities included complete oversight and management of the contractor to deliver the new barracks and headquarters on-time and within budget. Specific duties included conducting preconstruction and progress meetings, resolving field

issues, coordinating the work with the existing operations, processing contractor's payment requests, negotiating and processing of change orders, and all related project correspondence. This project was completed in November 2009 and is the recipient of an ACEC Distinguished Project Award for 2009.

Police Service Area No. 4, New York, NY

This new $23 million 5-story, 90,000-sf building with a separate 100-car parking located in lower Manhattan houses administrative offices, interview rooms, holding cells, conference/training rooms, recreational facilities, lounge areas, secured storage, etc. Responsibilities included monitoring and overseeing the construction from preconstruction through close-out, conduct progress meetings, reviewed field inspection reports, progress reports, submittals, and requests for payments, change orders and other related correspondence throughout the project. Discussed technical problems with consultants and developed practical solutions.

189 Stanton Street, New York, NY

Managed and supervised construction activities for the construction of a new $12 million residential building in compliance with contract documents and industry standards. Reviewed field inspection reports, progress reports, submittals, requests for payments, change orders and other related correspondence throughout the project; attended progress meetings with senior management and executives.

New York City Housing Authority, Brick Facades/Concrete Repairs Citywide, New York, NY

Responsible for administrating and managing construction projects from inception through to completion by serving as the single point of accountability during design, construction and closeout phases. Provided technical support and trained division staff responsible for preparing project status reports and logs. Reviewed change orders and payment requests; coordinated and supervised activities of designers and adherence to performance schedules, compliance with design criteria and satisfaction of end-user needs; resolved design-related issues and coordinated design process with consultants and end users. Monitored compliance with all safety rules and regulations; held weekly meeting, resolved all field issues with the designers and contractors, reviewed and approved contractor payments, reviewed, negotiated and approved change orders as required.

Trump New World, New York, NY

For the new construction of a 48-story residential tower provided inspection of concrete, reinforcement, masonry, waterproofing and installation of architectural reinforced concrete pre- cast panels; inspected all welded and bolted connections between the building and the pre-cast façade panels and monitored on-site material testing including concrete and backfill.

Building Condition Survey, NYC Housing Authority, New York, NY

Work included condition surveys of approximately 2,400 residential and facility buildings. The overall project objective was to provide NYCHA with a Capital Plan to maintain its building assets in a state of good repair for many years to come. Surveys were conducted for the sites, buildings and facilities (assets). Site inspections included paved and unpaved surfaces, landscaping, site drainage, lighting, playgrounds, and street furniture. Building and facilities inspections included all exterior and interior components such as facade, roof, stairs, structure, doors, windows, finishes, and electrical and mechanical systems.

HARRY LEWIS, PE, TRANSPORTATION FACILITIES- PROJECT MANAGER

Mr. Lewis has over 27 years experience in the construction industry. His background includes positions as Project Manager, Resident Engineer, Quality Control Manager and Design Engineer. He is expert in concrete construction with an emphasis on parking garages and similar structures. As a Project Manager, much of his experience includes site inspection and investigation and the development of practical engineering solutions to field issues. He is knowledgeable in proper construction practices, including safety, claim avoidance and QA/QC procedures.

EDUCATION

BS - Civil Engineering University of Florida

REGISTRATION

Professional Engineer,
New York - [redacted]
Connecticut - #[redacted]

THE RIGHT EXPERIENCE

New Haven Bus Maintenance, Storage and Administration Facility, Hamden, CT

Serving as Project Manager for the new construction of a $70 million 290,000-square-foot facility to be used for repairing and maintaining CT Transit buses, and will provide storage for up to 150 buses. It will be a state-of-the-art facility and include vehicle washing and cleaning, internal vehicle storage, vehicle inspection pits, 11 maintenance bays, maintenance shops, body repair, painting, parts storage and a two-story administration building. Responsibilities include coordinating the work of various trades so the work is completed in a logical, expeditious manner. Also protects the interests of the client by monitoring quality and compliance with the contract documents, resolving field issues, negotiating and processing change orders, managing cost and budget, and conducting regular progress meetings.

Willamette Distribution Center, Plant City, FL

Served as Project Manager for the construction of a concrete-clad steel frame regional distribution center with extremely aggressive construction schedule and initiated innovative project scheduling techniques in order to complete project on-time. By tightly coordinating the reviews and approval of drawings by contractor, architect and engineer of record, the project was completed within owner's time requirements. Coordinated the work of various trades so the work was completed in a logical, expeditious manner; responsibilities included protecting the interests of the client by monitoring quality and compliance with the contract documents, resolved field issues as they arose, negotiated and processed change orders as required, managed cost and budget, conducted periodic progress meetings.

City of Clearwater Municipal Parking Garage, Clearwater, FL

He served as Project Manager for the new construction of a 4-level garage which included a secure lower level for police vehicles designed to withstand a substantial blast load. Responsibilities included coordinating the work, protecting the interests of the client by monitoring quality and compliance

with the contract documents, resolved field issues as they arose, negotiated and processed change orders as required, managed cost and budget, conducted periodic progress meetings and reviewed and approved payment requests by the contractor.

Blake High School Parking Garage, Tampa, FL

Served as Project Manager for the construction of a new parking structure on an active high school campus that required an extensive redesign after the competitive bids far exceeded the project's budget. After all bids were rejected, the owner invited Mr. Lewis to redesign garage to lower the overall construction cost, while maintaining design footprint and number of spaces. By sizing materials more efficiently and improving structural layout (column spacing), he was able to increase the number of parking spaces and bring project back within budget. During construction phase he negotiated subcontracts and directed subcontractors for compliance with the contract documents as well as conducting periodic meetings to review progress and resolving field issues.

Shell Point Parking Garage, Fort Myers, FL

He served as Project Manager for the construction of a new parking structure designed to withstand a 100-year storm. This parking garage will also serve as a hurricane shelter for a neighboring progressive care retirement community. The extreme design required innovative approaches to the design of the precast components and their connections, as well as methods of construction. Responsibilities included coordinating the work, protecting the interests of the client, monitoring quality and compliance with the contract documents, resolving field issues, conducting progress meetings, and reviewed and approving payment requests by the contractor.

Concrete Quality Assurance Services, New York, NY

He served as Project Manager and project liaison between a joint venture team and the client for the monitoring of all concrete batched and placed at NYCDEP projects throughout New York City and the northern watershed areas. Reviewed/ coordinated design plans and specifications, coordinated processing and response to contractors' submittals regarding concrete and related contract items, special projects and related activities as required. Administrative responsibilities included manpower review and projection, financial analysis, invoice review and coordination with subconsultants and subcontractors, in addition to general contract administration.

Rock Remediation and Soil Slope Stabilization, Rockland County, NY

Mr. Lewis served as Resident Engineer supervising the inspection staff to see that the work complied with contract documents; reviewed shop drawings and calculations for conformance to contract documents as well as maintaining project documents as per MURK requirements. Organized and conducted preconstruction and progress meetings, in addition to ad hoc meetings required by execution of the work; submitted partial estimates based on work performed by use of CEES and processed change orders and orders-on-contract.

City of Fort Myers Municipal Parking Garage, Fort Myers, FL

Served as Engineer working as a consultant to the precast concrete subcontractor, designed a 5-level precast/prestressed concrete parking garage with post-tensioned shear walls, from the anchor bolts up. The design had to allow for future vertical expansion of two levels, with the possibility of alternate uses resulting in increased design loads; by using plant-cast prestressed concrete shear walls, post-tensioned in the field, we were able to achieve the owner's goals.

HARRY LEWIS, PE, TRANSPORTATION FACILITIES- PROJECT MANAGER

Mr. Lewis has over 27 years experience in the construction industry. His background includes positions as Project Manager, Resident Engineer, Quality Control Manager and Design Engineer. He is expert in concrete construction with an emphasis on parking garages and similar structures. As a Project Manager, much of his experience includes site inspection and investigation and the development of practical engineering solutions to field issues. He is knowledgeable in proper construction practices, including safety, claim avoidance and QA/QC procedures.

EDUCATION

BS - Civil Engineering University of Florida

REGISTRATION

Professional Engineer,
New York - #[redacted]
Connecticut - [redacted]

THE RIGHT EXPERIENCE

New Haven Bus Maintenance, Storage and Administration Facility, Hamden, CT

Serving as Project Manager for the new construction of a $70 million 290,000-square-foot facility to be used for repairing and maintaining CT Transit buses, and will provide storage for up to 150 buses. It will be a state-of-the-art facility and include vehicle washing and cleaning, internal vehicle storage, vehicle inspection pits, 11 maintenance bays, maintenance shops, body repair, painting, parts storage and a two-story administration building. Responsibilities include coordinating the work of various trades so the work is completed in a logical, expeditious manner. Also protects the interests of the client by monitoring quality and compliance with the contract documents, resolving field issues, negotiating and processing change orders, managing cost and budget, and conducting regular progress meetings.

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He served as Project Manager for the new construction of a 4-level garage which included a secure lower level for police vehicles designed to withstand a substantial blast load. Responsibilities included coordinating the work, protecting the interests of the client by monitoring quality and compliance

MOUSTAFA REZK, PE, TRANSPORTATION FACILITIES - PROJECT MGR.

Mr. Rezk has over 24 years providing construction management and construction inspection services for various public sector building projects and he has managed multiple construction contracts in New York City under the Wicks Law. As superintendent, Mr. Rezk successfully coordinates various contractors and subcontractors, conducts weekly meetings including prepares meeting minutes and completes projects on time and within budget. He is conversant with CPM scheduling and updating monthly construction schedules to maintain proper construction sequencing for building projects. He is knowledgeable in proper construction practices, including safety practices and QA/QC procedures.

EDUCATION

B.S Degree in Civil Engineering-
Alexandria University-Egypt

Construction Field Management – NYU

REGISTRATION

Professional Engineer
New York [redacted]

Certified Construction Site Safety Manager - NYC Dept. of Buildings - [redacted]

7-Hour Refresher Course for Site Safety Manager

Rooftop Quality Assurance - Roof Consultants Institute

THE RIGHT EXPERIENCE

Charleston Bus Depot Annex, Staten Island, NY

He is currently serving as Resident Engineer/superintendent for the new construction of a $113 million new bus annex for New York City Transit, the project will assist with meeting bus storage and service assignments in Staten Island. Duties include monitoring the contractor's work daily to assure conformance to the contract plans, specifications and quality requirements, review the contractor's payment requisitions and coordinating material testing on site and at independent testing labs, to assure the quality of materials going into the project.

Brooklyn Battery Tunnel Service Building, Brooklyn, NY

As Resident Engineer was responsible for construction supervision, inspection and coordination for this $15 million renovation project; which required extensive interaction with ongoing building activities to monitor tenant safety and maintain uninterrupted tunnel operations. Project work included removing the existing roofing to the roof deck, making deck repairs, and installing a new SBS built-up, modified-bitumen roof throughout. Other components included expanding the General Manager's office on the second floor, installing a new HVAC system, replacing window and door and installing new doors, the removal/replacement of the second floor façade—the new facade is insulated stainless steel panels, restoring and power washing the brick facade and stone, concrete repairs in the basement boiler room, and installing a new concrete floor slab. Work also included asbestos and incidental lead abatement.

Inspection at JFK Airport, Terminal 4 – Terminal 7, New York, NY

Resident Engineer for a scope of work which consisted of pile driving inspection, indicator piles, load test and production piles; civil work, utility lines, sewer system, water main and pavement as well as structural inspection, reinforcing steel, concrete, masonry, structural steel and soil subgrade.

Building Condition Assessment NYCSCA/Board of Education, New York, NY

As a Resident Engineer provided guidance and direction to a team of multi-disciplined inspectors to conduct condition surveys and submit comprehensive reports to the New York City School Construction Authority (SCA) regarding the needs assessment for the maintenance of schools and administrative facilities. Work includes physical surveys and preparation of assessment reports on building facades, interior and exterior structural elements, roofs, mechanical and electrical systems, ADA compliance and site improvements. These reports assist the SCA to maintain the current stock of schools and administrative buildings in structurally sound and water tight condition under the Capital Plan. Assessments were undertaken for site areas, building envelope (exterior), interior and transportable/temporary units. Site inspection includes paved and unpaved surfaces, landscape, site drainage, lighting, playgrounds, street furniture, etc. Building inspections include all exterior and interior components such as façade, roof, stairs, structure, doors, windows, finishes, electrical and mechanical systems. Inspections for electrical systems include building site and exterior security lighting; communication & security systems – which includes CCTV system, intrusion alarm system, remote annuciator, panic switches, ultrasonic sensors, etc.; fire alarm & emergency lighting systems.

Construction Inspection and Related Work at Vladeck Houses (Phase II & III), New York, NY

Served as Resident Engineer for the provision of structural inspection and trouble shooting for work at Vladeck Houses (Phases II & III) for NYCHA; work included comprehensive rehabilitation work of 1,600 apartments in 24 occupied housing development buildings. This project was completed with the utmost safety compliance and no disruptions to the facilities tenants. Items of work include architectural modifications; concrete; thru slab reconstruction; beams, columns and foundations; masonry repair; new building roof replacement and new concrete parapet wall.

Local Law 11/98 Facade Inspection for NYC Housing Authority, New York, NY

Work involves the facade inspections of 63 buildings in Manhattan to fulfill the requirements of New York City Local Law 11/98. Project consists of exterior facade inspection (critical examination) by scaffold and by binoculars. The project goal is to indicate the condition of building facades as either safe, or unsafe. Building components inspected include parapet wall, coping stones, windows sills, lintels, brickwork, mortar joints, caulking, awnings, cornices, flagpoles ornaments, A/C window units brackets and all other parts of exterior walls and any accessories.

Building Condition Survey, NYC Housing Authority, New York, NY

Work included condition surveys of approximately 3,500 residential and facility buildings. The overall project objective was to provide NYCHA with a Capital Plan to maintain its building assets in a state of good repair for many years to come. Surveys were undertaken for the site, buildings and facilities (assets). Site inspection included paved and unpaved surfaces, landscape, site drainage, lighting, playgrounds, street furniture, etc. Building and facilities inspections included all exterior and interior components such as facade, roof, stairs, structure, doors, windows, finishes and electrical and mechanical systems.

HARRY FOSTERIS PE, PROJECT MANAGER - ELECTRICAL

Mr. Fosteris is a Professional Engineer with more than 28 years of experience in the construction industry; he has provided various services including Resident Engineering, Construction Inspection, Project Engineering and Project Management for a variety of construction and project settings including railroad facilities and other transportation sector locations. He has experience in elevator work at New York City Transit stations and is knowledgeable in proper construction practices, including safety practices and QA/QC procedures.

EDUCATION

M.E. Engineering, City College City University of New York

B.E., Engineering, City College City University of New York

REGISTRATION

Professional Engineer
New York Registration [redacted]

THE RIGHT EXPERIENCE

Vanderbilt Yard Reconstruction, LIRR, Brooklyn, NY

Serving as Resident Engineer to support the Long Island Rail Road's Vanderbilt Yard Reconstruction Project; this project will make land available within the existing Vanderbilt Yard site for private commercial and residential development. Responsibilities include field inspections and daily monitoring of the construction, participating in and expediting shop drawing review, reviewing and making recommendations on contractor submittals, means of construction and standard practices, safety oversight, coordinating Force Account activities, and more.

Various Station Rehabilitation Projects, NYC Transit, NY, NY

Serving as the Resident Engineer for these projects, he supervised the construction of the rehabilitation of numerous stations and new electrical facilities and the installation of new elevators. Electrical work consisted of new conduit and wire, the installation of new transformers, rectifiers, switchgear, and emergency standby generator sets and automatic transfer switches (ATS), etc.

Rehabilitation of Bushwick-Boerum Substation, NYC Transit, Brooklyn, NY

Served as the Resident Engineer for this project where he supervised the installation of new electrical equipment, fire alarm, intrusion alarm and CCTV security systems as well as the testing and placing into service high tension transformers and rectifiers. Coordinated scheduled construction work, monitored the timely completion, prepared field surveys and payment estimates to the contractor.

Department of Capital Program Management, NYC Transit, NY, NY

Directly in charge of three major Tunnel Lighting Rehabilitation projects (over $50 million). Worked under the direction of the Construction Manager with great latitude to exercise independent judgment and was responsible for management of construction, as well as administration of these projects.

HARRY FOSTERIS PE, PROJECT MANAGER - ELECTRICAL

Department of Capital Project Management, NYC Transit, NY, NY

As Administrative Engineer he was in charge of the $12.8 million Rehabilitation of Tunnel Lighting, for NYCT's 8th Avenue Line. Supervised and supported a group of engineers executing this work, helped resolve problems that arose, prepared cost estimates, processed and negotiated change orders, etc.

Electrical Department, Capital Projects, NYC Transit, NY, NY

Served as the Railroad Signal Specialist where he directly supervised subordinates preparing and implementing plans and specifications for new signal equipment being repaired or altered. Responsibilities included reviewing plans, drawings, specifications with reference to safety, standardization and economy in construction, practicality of installation, and efficiency of maintenance and operation of equipment.

Rockaway Signal Modernization Project, NYC Transit, Queens, NY

As the Resident Engineer his responsibilities included supervision of the railroad signal engineering activities with other NYCT projects at the same location. Responsibilities included evaluating circuit and layout drawings, as well as quality of installation. While supervising construction on an operating railroad, was responsible to see that the work was performed in a manner to minimize interference and maximize safety to transit patrons.

Modernization of Signal Blocking at New Lots Line Project, NYC Transit, Brooklyn NY

Responsible for Design Engineering changes (as a result of field conditions); coordinated schedule of work activities for the contractor working in the same vicinity with other projects and monitored the timely completion of the work, preparation of field surveys and payment estimates to the contractor.

New York City School Construction Authority, Queens, NY

As Senior Engineer/Team Leader, he provided baseline building condition assessment survey for all school facilities throughout the city (1,520 buildings including school buildings, administrative buildings, lease facilities, annexes, mini schools and temporary buildings) for the New York City Department of Education's Division of School Facilities (DOE/DSF).

ROBERT MILO, PE, PROJECT MANAGER - MECHANICAL

Mr. Milo is a Professional Engineer in Mechanical Engineering and a LEED Green Associate. He has an in-depth understanding of mechanical systems and equipments, expertise with building systems for residential and commercial construction, solid understanding of mechanical and electrical installations, strong background in computer software and hardware, solid communication skills, strong organizational problem solving and follow-through skills and is able to work independently and as a cooperative team member. He is knowledgeable in proper construction practices, including safety practices and QA/QC procedures.

EDUCATION

BS Degree in Mechanical Engineering
University of Tirana, Tirana, Albania

Certificate in Computer Programming-
Mainframe Globe Institute of Technology, NY

REGISTRATION

Professional Engineer
New Jersey - [redacted]

LEED AP (BD&C), GBCI

OSHA 30 Hours Training - #600230348,

NYCDOB 4-Hour Supported Scaffold

THE RIGHT EXPERIENCE

Harmon Shop Replacement Program, Croton Harmon, NY

Served as Mechanical Inspector for this $300 million program constructing a new shop and maintenance facilities for the Metro North Rail Road; the new facility included a new Wheel Truing Facility, a new Locomotive Shop and a new Coach Shop. Responsible for providing HVAC, plumbing and fire protection (sprinkler) engineering expertise and coordination and inspection of the contractor's work as it pertains to all mechanical equipment and systems as well as all site utilities.

Alley Creek Pump Station Upgrade, Queens, NY

He is serving as Chief Inspector for a scope of work that includes the complete upgrade of the existing Old Douglaston Pump Station with renovation/ rehabilitation of the existing structure and process equipment, and HVAC, plumbing, electrical and associated controls work. Also, the assignment included the demolition, rehabilitation and reconstruction of two existing outfalls, which will involve temporary roadway construction through adjacent wetlands to provide access, start-up testing of mechanical, electrical and plumbing systems, balancing HVAC systems as well as instrumentation and commissioning.

Building Condition Assessment, New York, NY

He served as the Quality Control Engineer for this building assessment project in New York City Public Schools. He trained and mentored staff in assessing building conditions for mechanical discipline; monitored quality of work done by mechanical engineers on-site as well as providing solutions for eliminating or minimizing deficiencies that buildings may have in terms of initial cost and operating costs. Work included physical surveys and preparation of assessment reports on building facades, interior and exterior structural elements, roofs, mechanical and electrical systems, ADA compliance and site improvements. These reports assist the SCA to maintain the current stock of schools and administrative buildings in

ROBERT MILO, PE, PROJECT MANAGER - MECHANICAL

structurally sound and water tight condition under the Capital Plan. Assessments were undertaken for site areas, building envelope (exterior), interior and transportable/temporary units. Site inspection includes paved and unpaved surfaces, landscape, site drainage, lighting, playgrounds, street furniture, etc. Building inspections include all exterior and interior components such as façade, roof, stairs, structure, doors, windows, finishes and electrical and mechanical systems.

Mechanical Project Manager - Oversaw the administration of construction projects encompassing all phases of the construction project cycle. Supervised, provided guidance to, and coordinated efforts of the planning, design and construction management activities. Assigned personnel within construction project environment.

Supervisor - Designer and Field Supervisor for mechanical work (heating and air conditioning) on new commercial and institutional projects (schools, offices and governmental buildings). Supervised installation of heating/cooling equipment, piping, pumps, ductwork, controls and other accessories as well as performing a field survey on a renovation project and prepared observation reports, gave recommendations, prepared the design and supervised the construction work.

HVAC Designer – Mechanical Design Institute, Tirana, AL. Designed HVAC systems for schools, offices and other governmental buildings. Load calculation, fresh air calculations, equipment sizing and selection and participated in coordination meetings with government officials and architects. Reviewed shop drawings.

SAURIN PATHAK, RA, PROJECT CONTROLS MGR.

Mr. Pathak has over 15 years of experience working on rail/transit, educational, environmental/remediation, commercial, infrastructure, housing design and construction projects. He specializes in Project Controls, is trained in Earned Value Management and he specializes in Schedule Development and Control as well as Cost Development and Control. Mr. Pathak is knowledgeable in LEED Green Building Rating systems for various building types and he has successfully coordinated many projects for LEED certifications.

EDUCATION

Bachelor of Architecture, National Architecture Accrediting Board and New York State Education Department

School of Construction Management, New York University (Continuing Education Courses)

School of Construction Management, Pace University (Continuing Education Courses)

REGISTRATION

Registered Architect
New York, [redacted]
New Jersey, [redacted]
Texas, [redacted]

LEED Accredited Professional

30-hr OSHA Construction Safety & Health

THE RIGHT EXPERIENCE

New York City Housing Authority Requirements Contract, New York, NY

Serving as Project Controls Manager for this $80 million capital improvement program for the New York City Housing Authority (NYCHA); the work includes:

- Fort Washington Roofing Project, $6 million, requires the removal of existing asbestos-containing roofing materials, asbestos abatement, new roof installation and related work;
- Harlem River Brickwork Project, $7.6 million, entails extensive brickwork, the replacement of steel lintels and incidental roofing;
- Rangel Brickwork and Roofing Project, $8.6 million, calls for replacing roofs on all buildings and the parapets for two buildings, and selective replacement/repair of brickwork and steel lintels.
- Queensbridge Boiler Replacement Project, $20 million, boiler plant replacement project at the fully occupied Queensbridge Houses; the project consists of the removal of 9 existing Boilers/Burners and related control equipment and the replacement of 18 Boilers/Burners and related control equipment, at 6 Boiler Plants.
- Williams Plaza, $6.1 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Independence Towers, $6.1 million project requires replacing roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Bushwick Houses, $9.3 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Stapleton Houses, $7 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.

Miscellaneous Projects in the Downstate Area, New York

He serves as Project Controls Manager providing Program/Construction Management services in the New York Downstate area; project assignments include:

- Barretto Point, $10 million, remediation project 15,000 cubic yards of contaminated soil were excavated and replaced with clean fill over 3 acres at the site, which in the past housed a paint and varnish making facility.
- Red Hook WPCP, $2.5 million project demolishing the existing system and installing a new state-of-the-art Fire Alarm System (Notifier) in nine designated plant areas.
- Sludge Dewatering Facilities Improvements at New York City Waste Water Treatment Plants, $12 million, upgrade the heating and ventilation system for air changes in chemical areas; installation of emergency eyewash stations and showers; installing chemical and containment piping with heat tracing system; raising chemical containment areas; installing ammonia detection alarm systems; modifications to sludge cake pumps; replacing sump pumps.
- Richmond Chlorination Facility, $2.5 million, modifications and upgrades to the following systems: automated hypo-chlorite, analyzer, liquid chemical feeds system, PLC/ MCC Automation Controls.
- Station 24, $24 million, principal items of work include: new recovery wells; well pumps for both the existing recovery well and the new recovery well; enclosures for well pump motors on both locations; 6 Granular Activated Carbon (GAC) treatment systems.

New Jersey School Construction Corporation, Jersey City, NJ

He served as Senior Project Controls Manager for projects including the design-phase management of a new $30 million elementary school, the reconstruction of elementary school and the $25 million historical renovation of an elementary school. He was responsible for the project controls and pre-design phase management of building evaluations, and site feasibility analysis for the school construction program and health and safety improvements. Responsibilities also included construction phase coordination RFI's and submittals; coordination of projects for the LEED certification. Established construction strategy, budget, phasing and logistics as well as coordinating regulatory compliance, community relations, affirmative action and historic preservation; coordinated for regulatory compliance, community relations, affirmative action and historic preservation. Development and implementation of 5-year master plan schedule for land acquisition, renovation, expansion and construction of 60 school buildings in Jersey City, NJ. Listing of school projects includes:

- PS 3/ MS 4 Frank R. Conwell Elementary and Middle School
- Jersey City Heights Middle School 7
- Jersey City Freshman Academy
- Jersey City PS 14 and PS 35
- Early Childhood Center
- Victor Mravlag School #21
-

PATCO Accessibility Improvement Program, South New Jersey and Philadelphia, PA

Served as Project Controls Manager providing construction management and project controls services for the $25 million rehabilitation of 13 railway stations; the scope of work included complete station rehabilitations including exterior improvements, new stairs, ramps, elevators, escalators, parking, signs, platform improvements and track improvements.

- The Port Authority of NY & NJ E-ZPASS plus Parking System Implementation for Newark, LaGuardia & JFK Airports ($30 million)
- The Port Authority of NY & NJ Port Imperial Ferry Terminal at Weehawken ($10 million)

MAGDI F. SIDAROUS, ESTIMATOR

Mr. Sidarous has over 30 years of experience in the field of construction. His background includes resolving complex construction, engineering, and financial issues; assisting clients in contract administration,; reviewing plans and specifications; assisting in the preparation of design changes and modifications and financial analysis of individual construction activities and entire projects.

EDUCATION

Bachelor of Architecture and Urban Planning, Helwan University, Cairo, Egypt

Diploma of Architecture, Leonardo Da Vinci Institute, Cairo, Egypt

THE RIGHT EXPERIENCE

New York City Housing Authority Requirements Contract, New York, NY

Serving as Estimator for this $80 million capital improvement program for the New York City Housing Authority (NYCHA); the work includes:

- Fort Washington Roofing Project, $6 million, requires the removal of existing asbestos-containing roofing materials, asbestos abatement, new roof installation and related work;
- Harlem River Brickwork Project, $7.6 million, entails extensive brickwork, the replacement of steel lintels and incidental roofing;
- Rangel Brickwork and Roofing Project, $8.6 million, calls for replacing roofs on all buildings and the parapets for two buildings, and selective replacement/repair of brickwork and steel lintels.
- Queensbridge Boiler Replacement Project, $20 million, boiler plant replacement project at the fully occupied Queensbridge Houses; the project consists of the removal of 9 existing Boilers/Burners and related control equipment and the replacement of 18 Boilers/ Burners and related control equipment, at 6 Boiler Plants.
- Williams Plaza, $6.1 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Independence Towers, $6.1 million project requires replacing roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Bushwick Houses, $9.3 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.
- Stapleton Houses, $7 million project requires replacing all roofing at main roofs and bulkhead roofs, including new tapered insulation, fascia, gravel stops, and all other necessary items.

Echelon Resorts Project, Las Vegas, NV

Served as Architectural Estimator in charge of generating scope from schematic design for different parts of the project (Towers, Meeting Center, and Theaters), creating presentation sketches and following up with the scope as construction documents develop.

MAGDI F. SIDAROUS, ESTIMATOR

Brooklyn Courthouse Program, New York, NY

Served as Architectural Estimator and change manager in charge of document review to establish changes to contract, request scope changes from the owner (GSA), assign values to the scope changes and negotiate final values with contractors and owner and their consultant. Prepared modification of documents (change orders) and issued monthly reports of all work; acted as project manager for a segment of the subcontractors and ultimately closing out their contracts by conducting negotiations in favor of the general contractor while maintaining a level of satisfaction between all entities.

AOL Time Warner Center Project, New York, NY

He served as Architectural Estimator for Change Management group; lead team of architectural, electrical and mechanical estimators in preparing actual and conceptual estimates, estimating scope changes from contract documents (ASI's & Bulletins, etc.); Working with project managers and sub-contractors to evaluate and reconcile cost of changes and working with the Owner in negotiating final costs; Change Management responsibilities include assisting project managers in creating total documentation in Prolog. Assisted with change order and scope change preparation; additionally assisted Senior Management to maintain the accuracy of the Prolog database by performing weekly reviews in preparation of the Owners meeting.

Universal Builders Supply Inc. Interiors Millwork division, Mount Vernon, NY

Served as Estimator in charge of client contacts, preparation of detailed quantity and material take-offs, soliciting material prices, preparation of bid documents and cost estimates for various multimillion dollar projects including the Children's Hospital at Montifiore Medical Center in the Bronx, New York Hospital, United States Tennis Association (USTA) new tennis facility in Queens, Butler Library (Columbia University), Prada Stores and Tommy Hilfiger Executive Offices.

Universal Builders Supply Inc. (UBS) Construction Division, Mount Vernon, NY

Served as Construction Engineer in charge of client contact, design, calculation and preparation of construction documents, material and labor lists, cost and duration estimates for hoisting and scaffolding also, on site supervision and inspection for multimillion projects including Barneys, Met Life of NY, Jadwin Gym at Princeton University, The Statue of Liberty, GE Building, Redwood Towers (Baltimore, MD), The State Capitol Building (Harrisburg, PA), Battery Park City (NYC), King Khaled Military Academy (Saudi Arabia).

WILLIAM NILES, SENIOR SCHEDULER

Mr. Niles has over 35 years of experience as a scheduler and cost engineer. He provided project control and site management services for a variety of new construction and refurbishing projects in the tri-state area. Responsibilities included coordinating activities of several subcontractors reviewing subcontractor schedules and preparing detailed schedule from drawings, specs and estimates.

EDUCATION

BS – Business Administration

Cost/Schedule Control Systems

Proposal/Project Management

OSHA Training (LTP)

MS Project/Office Tools

Bentley ProjectWise Course - 2004

Government Contracts & Pricing

Primavera (P3, P3e, P6 and Sure Trak)

Expedition

REGISTRATION

American Association of Cost Engineers

THE RIGHT EXPERIENCE

Miscellaneous Projects in the Downstate Area, New York

He serves as Scheduler providing Program/Construction Management services in the New York Downstate area; project assignments include:

- Barretto Point, $10 million, remediation project 15,000 cubic yards of contaminated soil were excavated and replaced with clean fill over 3 acres at the site, which in the past housed a paint and varnish making facility.
- Red Hook WPCP, $2.5 million project demolishing the existing system and installing a new state-of-the-art Fire Alarm System (Notifier) in nine designated plant areas.
- Sludge Dewatering Facilities Improvements at New York City Waste Water Treatment Plants, $12 million, upgrade the heating and ventilation system for air changes in chemical areas; installation of emergency eyewash stations and showers; installing chemical and containment piping with heat tracing system; raising chemical containment areas; installing ammonia detection alarm systems; modifications to sludge cake pumps; replacing sump pumps.
- Richmond Chlorination Facility, $2.5 million, modifications and upgrades to the following systems: automated hypo-chlorite, analyzer, liquid chemical feeds system, PLC/ MCC Automation Controls.
- Station 24, $24 million, principal items of work include: new recovery wells; well pumps for both the existing recovery well and the new recovery well; enclosures for well pump motors on both locations; 6 Granular Activated Carbon (GAC) treatment systems.

Catenary and Bridge Rehabilitation on the New Haven Main Line Fairfield and Bridgeport, CT

Served as Scheduler for a scope of work that includes installing catenary structures, foundations and associated track, signal and communication upgrades, replacing open deck superstructures with ballasted decks, rehabilitating abutments of five Metro-North bridges, and a careful interweaving of interim and permanent traction power and overhead catenary system configurations in order to keep the railroad running throughout the construction.

WILLIAM NILES, SENIOR SCHEDULER

Croton Aqueduct Rehabilitation and Site Restoration, New York, NY

Serving as Scheduler for a scope of the work which includes opening the aqueduct for access and ventilation; buried shaft work, including removal of buried shaft covers, removal of ladders, shaft wall repairs and grouting of leaks and voids, rehabilitation of the surface structure, blow off chamber, stream raceway and related surface improvements; and rehabilitation of the 7-mile-long pressure tunnel lining, including crack repairs, brick replacement, contact grouting, consolidation grouting and leak repairs.

Alley Park Environmental Restoration, Queens, NY

Serving as Scheduler for this $22 million project to restore 24 acres of wetland and upland area in Alley Park; impacted by the construction of new CSO abatement facilities. The work includes site clearing and grubbing, excavation in wetland area to proposed grades and disposal of excavated regulated and hazardous soil to offsite disposal facilities; placement of sand in wetland area for plantation of salty marsh, placement and grading of topsoil in upland area of trees/shrubs and warm season grasses. Installation of grass blocks paver over the CSO Retention Facility.

Oakland Lake Park Improvement Program, Queens, NY

Serving as Scheduler for this $3 million project to restore Oakland Lake Park; the lake has been negatively impacted by storm water runoff which has resulted in soil erosion and the formation of ravines. The project also addresses removal of debris dumped at these site locations, elimination of invasive trees/shrubs/vines. As part of restoration work contract is required to backfill and stabilize areas where considerable erosion has taken place, native trees/shrubs planting, reconstruct sidewalks undermined due to erosion, modify catch basin for effective drainage and build pathway for park users with railing to prevent loss of vegetation.

Alley Creek Pump Station Upgrade, Queens, NY

Served as Scheduler reviewing, evaluating and preparing comments on the baseline schedule. Conducts periodic schedule review meetings and prepare the minutes. Review and comment on the schedule updates and accompanying narrative.

Redevelopment of Harlem Hospital Center, New York, NY

He served as Scheduler coordinating and consolidating subcontractor's schedules. Prepares and maintains special schedules for hospital facilities management including complicated staff and patient relocations.

Reconstruction of Metropolitan Avenue Bascule Span Bridge over English Kills, Brooklyn, NY

Served as Scheduler reviewing, evaluating and preparing comments on the baseline schedule. Walked the site to determine completion percentages; conducted periodic schedule review meetings and prepared minutes. Reviewed and commented on schedule updates and the accompanying narrative. Conducted special studies and prepared an ad-hoc report for the owner and provided analysis and reports for change orders.

HAMID ERFANI, EIT, DOCUMENT CONTROL

Mr. Erfani has over 11 years of experience in Construction Management. He is knowledgeable in proper construction practices, including safety practices and QA/QC procedures.

EDUCATION

BS – Business Administration

Cost/Schedule Control Systems

Proposal/Project Management

OSHA Training (LTP)

MS Project/Office Tools

Bentley ProjectWise Course - 2004

Government Contracts & Pricing

Primavera (P3, P3e, P6 and Sure Trak)

Expedition

REGISTRATION

American Association of Cost Engineers

THE RIGHT EXPERIENCE

Miscellaneous Projects in the Downstate Area, New York

He serves as Office Engineer/Document Control providing Program/ Construction Management services in the New York Downstate area; project assignments include:

- Barretto Point, $10 million, remediation project 15,000 cubic yards of contaminated soil were excavated and replaced with clean fill over 3 acres at the site, which in the past housed a paint and varnish making facility.
- Red Hook WPCP, $2.5 million project demolishing the existing system and installing a new state-of-the-art Fire Alarm System (Notifier) in nine designated plant areas.
- Sludge Dewatering Facilities Improvements at New York City Waste Water Treatment Plants, $12 million, upgrade the heating and ventilation system for air changes in chemical areas; installation of emergency eyewash stations and showers; installing chemical and containment piping with heat tracing system; raising chemical containment areas; installing ammonia detection alarm systems; modifications to sludge cake pumps; replacing sump pumps.
- Richmond Chlorination Facility, $2.5 million, modifications and upgrades to the following systems: automated hypo-chlorite, analyzer, liquid chemical feeds system, PLC/ MCC Automation Controls.
- Station 24, $24 million, principal items of work include: new recovery wells; well pumps for both the existing recovery well and the new recovery well; enclosures for well pump motors on both locations; 6 Granular Activated Carbon (GAC) treatment systems.
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- Alley Creek Pump Station Upgrade, Queens, NY

Served as Office Engineer for the complete upgrading of the existing Old Douglaston Pump Station with renovation/rehabilitation of the existing structure and process equipment, and HVAC, plumbing, electrical and associated controls work, demolition, rehabilitation and reconstruction of two existing outfalls, which will involve temporary roadway construction through adjacent wetlands to provide access, and close monitoring and managing the project, budget and schedule so that major milestones are met and schedule slippages do not occur.

HAMID ERFANI, EIT, DOCUMENT CONTROL

Reconstruction of Hamilton Avenue Movable Bridge, Brooklyn, NY

Responsibilities included the reconstruction of Hamilton Avenue Bascule bridge over the Gowanus Canal, which includes temporary widening of existing west bascule span, fabrication and erection of structural steel, grid deck and span operating machinery of east and west bascule spans, construction new auxiliary generator house and parking area, rehabilitation of control house and gate tender house, pier protection system, reconstruction of north and south bascule piers, perform approach roadway work, sidewalk, water main, sewer, catch basins/connections as well as street lighting, traffic signals, milling and resurfacing of the roadway. Duties include coordinating, reviewing and record keeping, entering daily inspection quantities, monthly estimates, material acceptance entry and quantity estimates, keeping up to date all correspondence files, preparing monthly site progress reports and payments in accordance with MURK standard specification, inspection of various construction activities.

Harriet Tubman Memorial Project, New York, NY

Responsibilities included modifications of subway structure, installation of statue, granite curb, sidewalk, planters, water main, sewer, catch basins/connections, street lighting, traffic signals, landscaping milling and resurfacing of the roadway. Duties include coordinating, reviewing and record keeping entering of daily inspection quantities, monthly estimates, material acceptance entry and quantity estimates, keeping up to date all correspondence files, preparing monthly site progress reports and payments in accordance with MURK Standard Specification, inspection of various construction activities.

Cross Bay Blvd. Bridge over Conduit Avenue, Queens, NY

Duties included coordinating, reviewing and record keeping, entering of daily inspection quantities, monthly estimates, item history, material acceptance entry and quantity estimates. Prepared monthly site progress reports and payments in accordance with MURK Standard Specification; inspected various construction activities including MPT, demolition, erection of temporary pedestrian and utility bridges, construction of abutments and piers and erection of structural steel.

Guy Brewer Blvd. Bridge over the Belt Parkway, Queens, NY

Responsibilities included coordination, reviewing and record keeping, entering of daily inspection quantities, monthly estimates, item history, material acceptance entry and quantity estimates, keeping up to date all correspondence files, preparing monthly site progress reports and payments in accordance with MURK, NYCDOT standard specifications. Inspection of various reconstruction activities including MPT, demolition, erection of temporary pedestrian and utility bridges, construction of abutments and piers, erection of structural steel.

65th Street Bridge over the LIRR, Queens, NY

Served as Resident Engineer for the $20 million schools renovation project; the program consisted of total of eight schools. The scope of work for this construction management assignment included new built-up roofing, brick repair and reconstruction, new reinforced concrete parapet walls, terracotta restoration, and plaster and paint work. The entire renovation program was completed under a fast track and accelerated schedule in order not to interfere with the new school year. He was responsible for overseeing field operations, which included: schedule control, resolution of construction issues, construction phasing, contractors' coordination, and quality assurance.

RAYMOND C. KALLBERG, PE - VICE PRESIDENT

Aviation – Project Manager (Mechanical)

Mr. Kallberg, Vice President of the firm, has over 30 years experience in the design of mechanical systems for institutional facilities, transit stations, transit facilities, commercial, and residential facilities. He will serve as Sr. Mechanical Engineer for this contract and has experience as both a designer and construction manager. He specializes in coordination of disciplines, cost estimates, fieldwork, shop drawing review, client liaison and construction administration for a variety of projects. His mechanical expertise includes design of HVAC, energy management and green design systems, building automation, fire protection and plumbing systems. His responsibilities have included preparing specifications, evaluating vendor bids, checking vendor prints, resolving field problems, supervising junior engineers and detailing layout of equipment such as pumps, compressors, blowers, fans (FD & ID), boilers, cooling towers, condensers, heat exchangers, Flue Gas Desulferization (FGD) equipment, water treatment equipment, piping, valves, etc.

EDUCATION

- BS Mechanical Engineering, New York University

REGISTRATIONS

- Professional Engineer: New York, New Jersey

SELECTED EXPERIENCE

JFK AIRPORT GENERAL AVIATION TERMINAL (GAT), NEW 2-STORY ADDITION – PANYNJ. AG completed work for the renovation and expansion of the General Aviation Terminal at JFK Airport under a Requirements contract with the Port Authority of NY & NJ. This structure houses the V.I.P. terminal and the Operations Control Center for the JFK Airport. Completed in time and within budget, despite the tremendous constraints of the site and complex phasing requirements, Mr. Kallberg was responsible for complete Mechanical engineering design and construction administration services.

LINCOLN TUNNEL- PANYNJ. Replacement of exhaust fans in the ventilation building.

UNITED AIRLINES TERMINAL, LA GUARDIA AIRPORT, JAMAICA, NY-PANYNJ. Redesigned passenger waiting area. Project included upgrade of HVAC and sprinkler systems.

NEW ARCH STREET SHOP & YARD VEHICLE MAINTENANCE FACILITY, LIC, NY, LIRR. The new 90,000 sq. ft. facility, Arch St. Yard and Shop is located on approximately twelve acres in Long Island City, New York. For this Design/Build project Mr. Kallberg was responsible for the design and construction administration services for HVAC systems. The facility included the Maintenance Equipment Shop; Power Substation Building; Engineering Support Building; Extraordinary Interior Cleaning Platform and Storage Building; Trackwork and Third Rail; and extensive site utilities.

NEW MORRIS PARK LOCOMOTIVE REPAIR & OVERHAUL SHOP, JAMAICA, NY-LIRR. LIRR, appreciating the competency of AG awarded our team with the design and construction administration of the new Morris Park Locomotive Repair and Overhaul Shop to replace the aged LIRR Morris Park Facility. The new facility's main function will be component change-out, heavy repairs, life cycle maintenance, and overhauls of locomotives. Mr. Kallberg supervised HVAC systems design and construction administration services including office areas, conference room/lunch room, restrooms and locker facilities.

REHABILITATION OF 12 STATIONS ON THE WEST END LINE, BROOKLYN, NY-NYCT. The West End Line, Subway line in Brooklyn, NY is a branch line from the Broadway (Manhattan)-Fourth Avenue (Brooklyn) subway. Mr. Kallberg is supervising HVAC engineering design services for the upgrade and rehabilitation of these 12 stations, both, underground and above ground stations.

BBT BB-15A CONTROL & MONITORING ENHANCEMENTS/CONTROL ROOM MODERNIZATION, BROOKLYN BATTERY TUNNEL, NY-TBTA. The Brooklyn Battery Tunnel is the longest continuous underwater vehicular tunnel in North America. A.G. Consulting Engineering, PC, as a subconsultant to Jacobs/Edwards and Kelcey, was selected by TBTA to perform design and construction administration services for the updating of the tunnel operating

systems-mechanical and electrical-to increase safety, efficiency, reliability, planning, redundancy and maintenance. Services also include remodeling of the control room and Tunnel Management Center (TMC) while minimizing the impact of construction on life and safety tunnel operations. As Project Manager, Mr. Kallberg supervised staff performing Investigations and Feasibility of Design; Advanced Design with Constructability Review; Final Design, Pre-Construction and Design Support during Construction; and System Programming and Maintenance Requirements. He developed the complete mechanical engineering package which detailed an upgrade to the existing HVAC and ductwork.

BAISLEY PARK BUS DEPOT, JAMAICA, NY-MTA BUS. Under an MTA Bus Company Task Order, A.G. Consulting Engineering, PC is preparing a facility condition survey report and complete mechanical, plumbing and electrical design of the entire facility. Mr. Kallberg provided a complete set of construction documents including plans, specifications, and Engineer's estimate for the design for a complete roofing system, new ventilation system including but not limited to exhaust and supply air, heating elements and controls.

BRONX RIVER GREENWAY HOUSE & STARLITE PARK, BRONX, NY-NYC DPR. The Bronx River Greenway River House is the base of operations for the restoration and operation of the Bronx River Greenway and the adjacent portion of the Bronx River. A LEED Silver Project, Mr. Kallberg provided design of complete HVAC system and geothermal system.

BRONX MENTAL HEALTH REDEVELOPMENT RESIDENTIAL VILLAGE, NY-DASNY. A fully BIM (Revit) project, the project consists of The Transitional Living Residence (TLR), The Studio Apartments (SRO) and the Crisis Center. A LEED Goal of Silver Certification Mr. Kallberg provide Mechanical design for the 3 buildings utilizing vertical FCU (2 pipe heating & cooling) for the perimeter spaces and AHU for the corridor & interior spaces, eliminating as much penthouse mechanical space as possible.

BUSHWICK INLET PARK DISTRICT HQ & COMMUNITY FACILITY, BROOKLYN, NY- NYC DPR. This project is the first phase of a remaking of the Greenpoint-Williamsburg waterfront from a decaying industrial strip to a multifaceted public park. A LEED Silver Project, Mr. Kallberg provided design of complete HVAC system and geothermal system.

THURGOOD MARSHALL US COURTHOUSE, NEW YORK, NY-GSA. The 718,180 gross square foot Thurgood Marshall US Courthouse building consists of 34 stories plus basement. Mr. Kallberg's responsibilities included field inspections/surveys, assessment reports and design. A LEED Silver Project, design included HVAC system replacement and upgrade, building management system upgrade and expansion.

NASSAU COUNTY OFFICE, 1 WEST STREET, MINEOLA, NY, NASSAU COUNTY. Built in the late fifties, Mr. Kallberg's Team performed existing condition inspection of all Mechanical systems, functioning status, compliance with current codes and evaluation of the findings with recommendations for design and construction for this 5 story executive office building. Upon approval of our design recommendations, provided engineering design services for the complete interior renovation of the of the building (approx. 100,000 sq ft), renovation of the basement, including, new HVAC system, sprinklering of the entire building, new fire alarm system, new security system, electrical service upgrade.

KULBINDER SINGH, LEED AP

Rail & Transit Facilities – Project Manager (Electrical)

Mr. Singh has over 12 years experience in the design and construction inspection of electrical and telecommunication systems. He specializes in the design of electrical lighting, security systems including CCTV, card access system, communications, public address system, LAN/WAN system and power distribution. He is also experienced in preparing cost estimates from schematic to 100% construction documents. Through constant vendor contacts, he is able to maintain current material pricing. He acts as a liaison with architects and engineers to obtain all necessary information to provide accurate cost estimates

EDUCATION

- MS, Telecommunications and Electronics, India, 1998
- BS, Power and Telecommunications, India 1995

SELECTED EXPERIENCE

STEWART INTERNATIONAL AIRPORT, NEWBERG, NY-PANY&NJ. Located near Newburgh, N.Y., 55 miles north of the city, Mr. Singh is providing electrical lighting upgrades design at the facility under a Call In Contract

JOHN F. KENNEDY AIRPORT GENERAL AVIATION TERMINAL BUILDING, NY-PANY&NJ. AG completed work for the renovation and expansion of the General Aviation Terminal at JFK Airport under a Requirements contract with the PANY&NJ. This structure houses the V.I.P. terminal and the Operations Control Center for the JFK Airport. There was a 9000 sq. ft. expansion towards the airside for this structure. 8000 sq. ft. of the interior were renovated. The facility remained occupied during construction. Phasing of the construction was critical. This project was completed in time and within budget, despite the tremendous constraints of the site and complex phasing requirements. Mr. Singh provided design for new lighting, power, telephone, and emergency generator. AG also worked on the interior fit out of the space. This project included an upgrade of command center, new office stations, private offices etc., supported by uninterrupted power supplies (UPS) and dedicated diesel emergency generator

PORT AUTHORITY BUS TERMINAL – SOUTH WING COMPREHENSIVE PHYSICAL ASSESSMENT, NY-PANY&NJ. The Port Authority Bus Terminal (PABT) is comprised of two buildings: the South Wing and the North Wing. Mr. Singh's services consists of performing a physical assessment of the existing electrical and electronic infrastructure in the South Wing of the PABT, the Bridge over 41st Street connecting the North and South Wings of the PABT, the 41st Street Bus Underpass, the Bus and Car Ramps, and the Ventilation Building located on the corner of 41st Street and Ninth Avenue (the Area of Work). The objective is evaluating the existing physical conditions, and remaining useful life of the infrastructure and systems, and recommending alterations as appropriate to maintain operations in the South Wing for the next 25 years. Work included providing draft and final reports documenting findings and recommended modifications or replacements, as appropriate, giving reasons therefore, order of magnitude construction cost estimates, and making presentations to Authority staff as required.

PATH JOURNAL SQUARE STATION LIGHTING SYSTEM REHABILITATION, NJ- PANY&NJ. Under a Call In Contract Mr. Singh provided design for the upgrade to the lighting systems at the Garage (Lower Level Parking Deck) and Walkway below the Lower Ramp Area of the Journal Square Transportation Centre.

PATH DUCTBANK REPLACEMENT, NJ-PANY&NJ. The PATH Tunnel Duct Bank System includes approximately 8 miles of tunnel and 16 miles of duct banks. The cables in the duct bank consist of 27 KV cables, 15 KV cables (for emergency ventilation system), DC traction cables, and DC control cables under a Call In Contract we are providing cost estimating services for the duct bank replacement in Tunnels A and B, between Caisson No. 1 and Christopher Street, approximately 15,600 feet of tunnel consisting of 31,200 feet of duct banks.

BBT BB-15A CONTROL & MONITORING ENHANCEMENTS/CONTROL ROOM MODERNIZATION, BROOKLYLN BATTERY TUNNEL, NY-TBTA. The Brooklyn Battery Tunnel is the longest continuous underwater vehicular tunnel in North America. As subconsultant to Jacobs/Edwards and Kelcey, AG was selected by TBTA to perform design and construction administration services for the updating of the tunnel operating systems-mechanical and electrical-to increase safety, efficiency, reliability, planning, redundancy and maintenance. Services also include remodeling of the control room and Tunnel Management Center (TMC) while minimizing the impact of construction on life and safety tunnel operations. Tasks included Investigations and Feasibility of Design; Advanced Design with Constructability Review; Final Design, Pre-Construction and Design Support during Construction; and System Programming and Maintenance Requirements. Due to the critical nature of the tunnel, a complete temporary control room was designed. Mr. Singh provided electrical design including control room power, communication systems and lighting, development of the temporary control room design package including power, UPS and communication wiring.

BAISLEY PARK BUS DEPOT, JAMAICA, NY-MTA BUS. Under an MTA Bus Company Task Order, Mr. Singh prepared a facility condition survey report and a complete set of construction documents including plans, specifications, and Engineer's estimate for the design of complete electrical and fire alarm systems of the entire facility. He is also providing support during pre-construction and construction phases.

BRONX RIVER GREENWAY HOUSE & STARLITE PARK, BRONX, NY-NYC DPR. The Bronx River Greenway River House is the base of operations for the restoration and operation of the Bronx River Greenway and the adjacent portion of the Bronx River. The Bronx River Alliance will occupy the building and includes a boat house, administrative area, and spaces for use by the public and schools. A LEED Silver Project, the building is a living part of the park. The goal for this project is to be a true "Productive" building: generating a surplus of renewable energy, harvesting and using all on site rainwater. Mr. Singh provided design of complete fire alarm system, electrical lighting, PV system, power, telephone, data, and security system.

BUSHWICK INLET PARK DISTRICT HQ & COMMUNITY FACILITY, BROOKLYN, NY- NYC DPR. This project is the first phase of a remaking of the Greenpoint-Williamsburg waterfront from a decaying industrial strip to a multifaceted public park. The design team is integrating a full program of ball fields, cafe, public meeting rooms, classrooms, and Park office and maintenance facilities, into a city-block sized site. Mr. Singh provided design of complete fire alarm system, electrical lighting, PV system, power, telephone, data, and security system.

THURGOOD MARSHALL US COURTHOUSE, NEW YORK, NY. The 718,180 gross square foot Thurgood Marshall US Courthouse building consists of 34 stories plus basement. The tower includes two mechanical floors at the top and contains twenty-three courtrooms, forty-four judges' chambers and court-related office spaces. Mr. Singh's responsibilities include field inspections/surveys, assessment reports and design. A LEED Silver project, design included electrical power distribution/grounding system/lighting systems replacement and upgrade, emergency power system replacement and upgrade, telephone/data systems replacement and upgrade, security screening and security system upgrades

NASSAU COUNTY OFFICE, 1 WEST STREET, MINEOLA, NY, NASSAU COUNTY. Built in the late fifties, A.G. Consulting Engineering, PC is providing existing condition inspection of all MEP systems, functioning status, compliance with current codes and evaluation of the findings with recommendations for design and construction for this 5 story executive office building. Upon approval of design recommendations, Mr. Singh is providing engineering design services for the complete interior renovation of the of the building (approx. 100,000 sq ft), renovation of the basement, new fire alarm system, new security system, electrical service upgrade.

ARDASH MEGUERDICHIAN, CIPE

Rail & Transportation Facilities – Project Manager (Mechanical)

Mr. Meguerdichian has over 29 years of experience in the design and engineering of cold water, hot water, sanitary, medical gases, site utility, sprinkler, dry pipe, and pre-action systems gas lines systems. Mr. Meguerdichian is experienced in planning and design of integrated fire protection systems for various buildings, including healthcare facilities, educational facilities, landmark buildings, research and medical laboratories, corporate facilities, and hotels. His responsibilities include preparation of reports, design, existing condition surveys, budget estimating, coordinating, specification writing, approving shop drawings, troubleshooting and field inspection. He reviewed extensively plumbing design projects from the constructability point of view and improved the final design and specification accordingly. He is a member of the Technical Committee for NYC Building Code 2008, and the American Society of Sanitary Engineers (ASSE).

EDUCATION

- New York University, New York, New York, 1986
- New York Institute of Technology, B.S., New York, 1976
- Queensborough Community College, Queens, New York - AAS, 1972
- NY Certified in Plumbing Engineering

SELECTED EXPERIENCE

BAISLEY PARK BUS DEPOT, JAMAICA, NY, MTA BUS COMPANY. Under an MTA Bus Company Task Order, A.G. Consulting Engineering, PC is preparing a facility condition survey report and complete mechanical, plumbing and electrical design of the entire facility. The report consists of inspection findings and recommendations with the estimated cost of the proposed renovation work. The project design includes a complete set of construction documents including plans, specifications, and Engineer's estimate for the design and sizing of a new gas service. Mr. Meguerdichian is also providing support during pre-construction and construction phases. These include, but are not limited to, responding to written inquiries from prospective bidders, preparing all Addenda to the construction documents, participating in the Pre-Bid Site Tour; review and approve shop drawings, catalog cuts, O&M manuals respond to RFI's, and resolve any field condition that require Designer's input.

BRONX RIVER GREENWAY HOUSE & STARLITE PARK, BRONX, NY, NYC DEPT. OF PARKS & RECREATION AND BRONX RIVER ALLIANCE. The Bronx River Greenway River House is the base of operations for the restoration and operation of the Bronx River Greenway and the adjacent portion of the Bronx River. The Bronx River Alliance will occupy the building and includes a boat house, administrative area, and spaces for use by the public and schools. A LEED Silver Project, the building is a living part of the park. The goal for this project is to be a true "Productive" building: generating a surplus of renewable energy, harvesting and using all on site rainwater. Mr. Meguerdichian provided design of complete fire protection, fire detection, sprinkler system, and standpipe system,.

REHABILITATION OF 12 STATIONS ON THE WEST END LINE (BMT), CM-1330, BROOKLYN, NY, NYCT. The West End Line, Subway line in Brooklyn, NY is a branch line from the Broadway (Manhattan)-Fourth Avenue (Brooklyn) subway, serving the communities of Borough Park, New Utrecht, Bensonhurst, Bath Beach and Coney Island. It is served full time by the D Train, and rush hours by the M Train, which provides direct access to the financial district. Mr. Meguerdichian is providing Plumbing and Fire Protection engineering design services for the upgrade and rehabilitation of 4 stations and component rehabilitation at 8 stations on the West End Line. These include underground and above ground stations.

BUSHWICK INLET PARK DISTRICT HQ & COMMUNITY FACILITY, BROOKLYN, NY, NYC DEPT. OF PARKS & RECREATION. This project is the first phase of a remaking of the Greenpoint-Williamsburg waterfront from a decaying industrial strip to a multifaceted public park. The design team is integrating a full program of ball fields, cafe, public meeting rooms, classrooms, and Park office and maintenance facilities, into a city-block sized site. Mr. Meguerdichian provided design of complete fire protection, fire detection, and sprinkler system.

THURGOOD MARSHALL US COURTHOUSE, NEW YORK, NY. The 718,180 gross square foot Thurgood Marshall US Courthouse building consists of 34 stories plus basement. The tower includes two mechanical floors at the top and contains twenty-three courtrooms, forty-four judges' chambers and court-related office spaces. Mr. Meguerdichian provided assessment reports and design including domestic water/sanitary/storm water systems replacement, fire protection system upgrade and expansion. The entire HVAC system is being designed following LEED Guidelines to achieve Silver Certification.

NASSAU COUNTY OFFICE, 1 WEST STREET, MINEOLA, NY, NASSAU COUNTY. Built in the late fifties, A.G. Consulting Engineering, PC is providing existing condition inspection of all MEP systems, functioning status, compliance with current codes and evaluation of the findings with recommendations for design and construction for this 5 story executive office building. Our findings shows that even though with proper maintenance the life expectancy of the MEP system can be extended, limitations exist due to latest technology, energy conservation, appropriate material, non availability of spare parts of existing equipment and rising labor cost of maintenance of old plant and machinery. Upon approval of our design recommendations, we are providing engineering design services for the complete interior renovation of the building (approx. 100,000 sq ft), renovation of the basement and replacement of all windows. Mr. Meguerdichian is providing design for sprinklering of the entire building.

John E. Burns, PE, LEED® AP
Aviation Project Manager

Education

BS, 1985, Electrical Engineering, Catholic University of America

Registration

Professional Engineer – AZ, NJ, PA, MD, VA, DE, TX, NY, FL, OH, SC

Professional Associations

American Association of Airport Executives
Consulting Engineers Council of PA
American Consulting Engineers Council

For the past 23 years, John has been involved in all aspects of facility planning, design and construction. As a Principal of Burns Engineering, John has led the Burns team in numerous facility and infrastructure improvement projects. John has an explicit and current understanding of facility operations, procedures, special needs and systems. As an engineer, he combines this knowledge with his technical background that results in a very high quality design. John also oversees Burns Engineering's Quality Management System Program which addresses the full breadth of our services including client relationship, proposal development, project execution, project quality, client feedback and client satisfaction. John developed Burns Engineering's quality plan and oversees the QA/QC audit process for the projects.

Port Authority of New York and New Jersey, Call-In Engineering Services, Various Locations. John is the ***Principal-in-Charge*** for Burns Engineering's Call-In agreements for mechanical, electrical and electronics engineering services. He is responsible for Burns' services consisting of preparing engineering studies, conditions surveys, designs and contract documents including drawings, technical specifications and construction cost estimates for a wide variety of electrical installations, for both new construction and rehabilitation projects. Burns has worked on projects at each of the PANYNJ airports and many other PANYNJ facilities under these agreements.

Port Authority of New York and New Jersey, John F. Kennedy International Airport, Runway 13R-31L Reconstruction, Queens, NY. John is the ***Engineer of Record*** for all electrical work for this $200 million reconstruction and widening of JFK's primary runway. The 14,572-foot-long runway was reconstructed with 18" of portland concrete cement on top of the existing asphalt pavement. This required the complete replacement of all electrical infrastructure and lighting systems. John oversaw the electrical design and led the electrical construction phasing development which included extensive night work, 120 day runway closure and over 12 discreet construction phases. The project also included extensive pre-purchasing of lights, cable, conduit, signs and other electrical equipment to assure that adequate supply was on hand during this rapidly constructed project. The electrical construction value of this project was $40,000,000.

Port Authority of New York and New Jersey, Newark Liberty International Airport, Terminal A Redevelopment, Newark, NJ. John was ***Principal-in-Charge*** for Burns' involvement in this terminal redevelopment project which is focusing on the construction of a new 2 million sf terminal building adjacent to the existing Terminal A at Newark Airport. John provided technical leadership in developing conceptual solutions for sustainable design and M-E-P systems. Burns developed concepts and schematic design for the mechanical, electrical, plumbing, fire protection, security, telecommunications and special systems. Burns has developed systems concepts, load analysis, energy profile and conceptual design for the new terminal.

Port Authority of New York and New Jersey, John F. Kennedy International Airport, Runway Safety Area Improvement Program, Queens, NY. John is the ***Engineer of Record*** for the NAVAIDS, lighting and electrical components of the rehabilitation for the runway safety areas at Kennedy Airport. John led the electrical engineering efforts to rehabilitate the RSAs for runways: 4L-22R, 4R-22L, 13L end and 13R end. His responsibilities included supervising a team of design professionals, technical leadership for Instrument Landing System changes, underground electrical distribution relocations, approach lighting system modifications and changes to other electrical systems resulting from grade changed and runway threshold and declared distance changes.

Port Authority of New York and New Jersey, Newark Liberty International Airport, Runway 4L – Replacement of NAVAIDS, Newark, NJ. John is the ***Engineer of Record*** to upgrade the visual and electronic navigational aids on Runway 4L from CAT-I to CAT-III. The design includes a new instrument landing system (glide slope, localizer and marker beacons), ALSF-2 high intensity approach lighting system, RVR, PAPI, electrical vaults and other systems. The work also included an obstruction study to determine if the threshold could be partially or completely un-displaced.

Metropolitan Washington Airports Authority (MWAA), On-Call Contract, Washington Dulles International and Ronald Reagan Washington National Airports. John is the ***Principal-in-Charge*** for Burns' On-Call Task Order Contract with MWAA. Burns is managing multiple tasks at both Ronald Reagan Washington National Airport (DCA) and Washington Dulles International Airport (IAD). The contract value is $900,000 fee annually. Task orders include: DCA Utilities Physical Enhancements; DCA Perimeter Fence / Intrusion Detection; IAD Utilities Physical Enhancements; IAD Access Control Improvements; and IAD HVAC Improvements.

Denver International Airport, South Terminal Redevelopment Program, Denver, CO. John is Burns' ***Principal-In-Charge*** for this $650 million project which includes an extension of the existing Jeppesen Terminal, a new 500 room three star hotel, a new train station and platform configuration for the City of Denver Rail System (RTD) and an extension of the Airports Automated Guideway Transit System (AGTS). Burns is leading the mechanical, electrical and systems/electronics engineering effort for the Parsons-led Program Management Team.

Brian Phillips, PE, LEED® AP
Aviation – Project Manager

Education

BS, 1992, Mechanical Engineering, Penn State University

Registration

Professional Engineer – PA, VA
LEED Accredited Professional

Professional Associations

American Society of Heating, Refrigerating & Air Conditioning Engineers
Association of Energy Engineers
National Fire Protection Association

A Vice President and Principal with Burns, Brian has extensive experience in the design and management of various systems engineering projects, particularly for airport terminals and other transportation facilities. He has developed a broad understanding of airport infrastructure, operations and regulatory issues. He has been involved in all phases of project execution from aviation planning, budgeting, and analyses through design and construction management. He is particularly adept in the management and oversight of task order type contracts which represent a significant portion of Burns' overall workload.

Port Authority of New York and New Jersey, Electronics Engineering Call-In Contract 2005-2007, Newark, NJ. Brian was the ***Principal-In-Charge*** for this contract with the PANYNJ. As such, Brian communicated regularly with the PANYNJ Electronics Group, and worked diligently to ensure customer satisfaction and a high level of QA/QC. Projects successfully completed by Burns through this contract include the following:

- On-Site Electronics Engineering Support
- Holland Tunnel Administrative Building Modifications HT-454
- Bayonne Bridge CCTV Relocation

Port Authority of New York and New Jersey, Newark Liberty International Airport, Terminal A Redevelopment, Newark, NJ. Brian was the ***Project Engineer*** for the planning and conceptual design phase for this $3 billion project, which is considering a new 2.0 million square foot, 45-gate terminal adjacent to existing Terminal A. Brian also established preliminary sizes for central plant equipment which included five 1,500 ton chillers and three 800 HP boilers, developed conceptual central heating and cooling plant configurations, identified mechanical space needs and coordinated air distribution concepts with the project architect, evaluated multiple LEED and sustainable design concepts, and established a basis of design for all mechanical systems.

Metropolitan Washington Airports Authority (MWAA), Security Consulting Task Order Contract, Washington, DC. Brian has played a key role for this security task order contract with MWAA. In particular he has worked with the Authority and the Burns technical team to assess the airports security needs, evaluate available and emerging technology, and recommending viable solutions to protect the airport and its infrastructure. His assessments and recommendations have led to the following projects:

- DCA Waterside and Landside Perimeter Security Enhancements
- DCA Camera Core Systems Upgrade
- DCA Chem/Bio/Radiation Detection System Design
- IAD Concourse C/D HVAC Unit Replacement
- IAD Fuel Farm Security Improvement
- IAD Secure Portal Project
- IAD Airside Inner-Perimeter Security Enhancement
- IAD Cargo Line Security Enhancements

Metropolitan Washington Airports Authority (MWAA), On-Call A/E Services for COMIP, Washington Dulles International and Ronald Reagan Washington National Airports, VA. Brian is the ***Project Manager*** for this Task Order Contract with MWAA. Burns is managing multiple tasks at both Ronald Reagan Washington National Airport (DCA) and Washington Dulles International Airport (IAD). Tasks include a variety of facilities and infrastructure upgrades including perimeter security, utilities, central plant and airfield navigation systems. Tasks include:

- DCA Waterside and Landside Perimeter Security Enhancements
- DCA Camera Core Systems Upgrade
- DCA Chem/Bio/Radiation Detection System Design
- IAD Concourse C/D HVAC Unit Replacement
- IAD Fuel Farm Security Improvement
- IAD Secure Portal Project
- IAD Airside Inner-Perimeter Security Enhancement
- IAD Cargo Line Security Enhancements

Denver International Airport, South Terminal Redevelopment Program, Denver, CO. Brian is Burns' ***Project Manager*** for this $650 million project which includes an extension of the existing Jeppesen Terminal, a new 500-room, three-star hotel, a new train station and platform configuration for the City of Denver Rail System (RTD) and an extension of the Airports Automated Guideway Transit System (AGTS). Burns is providing electronics and special systems engineering as part of the Parsons-led Program Management Team (PMT). Burns' scope includes program criteria and preliminary design for systems including access control and video surveillance, inside and outside plant cable systems, wired and wireless network systems, 450 and 800Mhz radio systems, audio and video paging and wayfinding, digital television distribution and fire alarm systems.

David Ciervo, PE, LEED® AP
Aviation – Project Manager

Education

BS, 1990, Mechanical Engineering, Temple University

Registration

Professional Engineer – PA

Professional Associations

American Society of Heating, Refrigeration, and Air Conditioning Engineers
National Fire Protection Association

Years of Professional Experience: 20

A Senior Mechanical Engineer with Burns Engineering, Inc., Dave has 20 years of experience in mechanical engineering design and analysis including the design of plumbing, fire protection, HVAC, and other mechanical systems, particularly for airport infrastructure and facilities. Dave also provides specification writing, report writing, cost estimating, building surveying, and computer data analysis. He is an active member of both ASHRAE and NFPA and continuously stays abreast of trends in the mechanical engineering industry. Relevant project experience includes:

Philadelphia Airport System, General Engineering Services Contract, Philadelphia, PA for the City of Philadelphia, Division of Aviation. Dave has been involved with a multitude of mechanical engineering projects on this contract for his entire 20-year career at Burns. His work under this contract has included preliminary studies, investigation of multiple engineering concepts, engineering research and analysis, calculations, preparation of contract drawings, specifications, cost estimating and construction administration. He has become thoroughly familiar with the mechanical systems at PHL including airport design standards, central heating and cooling plants, chilled and hot water piping network, pumping systems, indoor and outdoor air handling equipment, plumbing and fire protection systems, and the building automation system. Representative projects include:

- Mechanical Room Rehabilitation Projects
- Ventilation and Fire Suppression for Electrical Substations
- Ventilation and Fire Suppression for Airfield Lighting Vaults
- Terminal A East Addition of Pre-Conditioned Air Units
- Development of Tenant Design Standards Manual
- ARFF Facility Mechanical Improvements
- Tenant Reviews
- Terminal E Computer Room HVAC Upgrades
- Terminal Complex Fire Protection Expansion
- Concourses B, C and D Expansion
- Baggage Claim D Expansion

Metropolitan Washington Airports Authority (MWAA), On-Call A/E Services for COMIP, Washington Dulles International and Ronald Reagan Washington National Airports. Dave has been ***Lead Mechanical Engineer*** on numerous tasks as part of Burns' On-Call A/E Services for COMIP prime consulting contract with MWAA. He has become familiar with the personnel, facilities, operations and systems at both airports (DCA and IAD). As a result of his experience on multiple tasks, Dave has developed a thorough understanding and knowledge of the Authority code requirements and Design Manual. Dave recently led the mechanical engineering effort on the following tasks:

- IAD Concourse C/D Rooftop HVAC Unit Replacement
- IAD Shop 2 Boiler Replacement
- DCA Hangar 11 HTHW Generator
- DCA Terminal A Operations Computer Room Expansion

Philadelphia International Airport, Terminal A West, Philadelphia, PA for the City of Philadelphia Division of Aviation. As ***Mechanical Engineer,*** Dave supported the mechanical design for the new 800,000 sf, 12-gate world class International Terminal. He designed piping systems, air handling units, ductwork and mechanical room layouts. Dave also provided field support during the four-year-long construction phase. He was the lead mechanical designer during the construction phase to supplement the new terminal with additional post-9/11 security measures.

Metropolitan Washington Airports Authority (MWAA), Washington-Dulles International Airport, International Arrivals Building (IAB) Expansion, Dulles, VA. Dave is ***Lead Mechanical Engineer*** for the IAB expansion which is needed to address deficiencies in the size and configuration of the existing facility and to increase passenger processing capacity to accommodate a forecasted future flight schedule. The mechanical work included conditioning the 215,000 s.f. facility with built-up air handlers and extending the airport's existing low temperature chilled water and high temperature hot water systems. The air handlers utilize both constant volume as well as variable air volume distribution systems. A new 70,000 cfm ventilation system will be provided to serve the basement baggage make-up area, baggage vehicle entrance and connecting tunnel. The system will be controlled by a CO/NO_2 detection system. A Plate-and-Frame heat exchanger is being provided to exchange heat to a glycol heating system which will feed pre-heat coils.

Susquehanna Area Regional Airport Authority (SARAA), Harrisburg International Airport, Multimodal Transportation Facility, Harrisburg, PA. Dave was ***Lead Mechanical Engineer*** for this transportation facility which houses several rental car agencies and supplements the expansion of the terminal building by providing 2,500 parking spaces. Dave led the design of the HVAC, Plumbing and Fire Protection. The $52 million facility utilizes 200 tons of cooling and self-contained HVAC equipment for the rental car facility as well as the enclosed pedestrian walk-ways. The complex also utilizes gas fired snow melters, a 40,000 cfm smoke exhaust system and a deck wash-down system. The complex provided for a bridge between the new terminal building and the Amtrak station.

Chuck Reed
Aviation – Project Manager

Education

B.S.A.S., 1997, Electrical Engineering, Thomas Edison State College

Credentials

ATAB Certified Anti Terrorism Specialist (CAS)

Chuck has over 13 years of security and technology system evaluation, design and implementation experience. Chuck has specific experience with: inside and outside plant communications cabling systems, Voice Over IP networks, call center/dispatch operations, cable plant management systems and design, LAN and WAN network planning, digital network equipment layouts, video surveillance and behavior analytic systems, access control and asset management systems, fire and life safety systems, CBR detection systems, sallyport sayouts, supporting electrical power requirements and any necessary supporting technologies and systems. Chuck is also knowledgeable of other airport specific systems, including FIDS, CUTE/CUPPS, etc.

Port Authority of New York and New Jersey, On-Site Electronics Systems Support, Newark, NJ. Chuck is providing on-site support for the Port Authority's electronics engineering group. Chuck assists with the design, evaluation and review of electronics components of multiple PANYNJ projects. Specific systems included in Burns' scope include synchronous optical network (SONET) hardware, access control and video surveillance systems, fiber optic fence intrusion detection systems, audio / video paging systems, and revenue control systems. Representative projects include: Trans Hudson Rail System – Traction Power Substation #7, Trans Hudson Rail System – Traction Power Substation #9, Port Authority Bus Terminal Renovations, and Harrison Passenger Station Revenue Control.

Metropolitan Washington Airports Authority, On-Call A/E Services for COMIP, Washington Dulles International and Ronald Reagan Washington National Airports, Northern Virginia. Chuck has been the ***Special Systems Designer*** for dozens of special systems tasks as part of Burns' on-call A/E services for COMIP contract at both Ronald Reagan Washington National Airport (DCA) and Washington Dulles International Airport (IAD). He has developed a thorough knowledge of the infrastructure and systems in place at both airport facilities. The scope of work covers multiple task orders, including: DCA Camera Core Systems Upgrade, DCA Terminal A Paging System Upgrade, DCA TSA Camera System Expansion, and DCA/IAD Perimeter Enhancements.

Denver International Airport, South Terminal Redevelopment Program, Denver, CO. Chuck is Burns' ***Lead Special Systems Designer*** for this $650 million project. Burns is providing electronics and special systems engineering as part of the Parsons-led Program Management Team (PMT). Chuck is leading the design effort associated with access control and video surveillance, inside and outside plant cable systems, wired and wireless network systems, 450 and 800Mhz radio systems, audio and video paging and wayfinding, digital

television distribution and fire alarm systems. The program includes an extension of the existing Jeppesen Terminal, a new 500 room three star hotel, a new train station for the City of Denver Rail System (RTD) and extension of the Airports Automated Guideway Transit System (AGTS).

Miami-Dade County, MIC-MIA Mover Automated People Mover at Miami International Airport, Miami, FL. Chuck, as ***Lead Special Systems Designer,*** is currently involved in the design of wayside communications and security systems for the 1.5 mile automated people mover being constructed as a design-build project with Parsons Odebrecht Joint Venture. Chuck's scope of design includes wayside fiber communications, emergency blue light stations, guideway and platform video surveillance and audio and visual passenger communications.

El Dorado International Airport, New Terminal and Concourses, Bogota, Columbia. Chuck is the ***Lead Special Systems Designer*** for Burns, who is part of the Program Management Team supporting the expansion of El Dorado International Airport in Columbia. The program will expand the airport by over 30 gates and include tenant and passenger processing spaces. Chuck is providing oversight and design guidance on a variety of systems including control and video surveillance, inside and outside plant cable systems, audio and video paging and wayfinding, digital television distribution and fire alarm systems.

Susquehanna Area Regional Airport Authority, Harrisburg International Airport, New Terminal and Multimodal Transportation Facility, Harrisburg, PA. Chuck, as ***Lead Special Systems Designer***, developed and designed a complete information, security, and life safety infrastructure for the new terminal building and its associated multimodal transportation facility. The design included a variety of systems including: complete fiber and copper telecommunication infrastructure, including all facility plant cabling and utility service connections; complete video surveillance and access control system; fully addressable fire detection and alarm system; public address/terminal announcement system; flight and baggage information display system; operations control station for Authority security personnel; and building management system to control and monitor typical building functions such as lighting controls and HVAC settings. Chuck also designed to provide complete system integration of all packages and a Flight and Baggage Information Display System with integrated Audio Paging.

Phoenix Sky Harbor International Airport, Perimeter Intrusion Detection System, Phoenix, AZ. Chuck has worked on a design to provide the City of Phoenix with a $15,000,000 plan to procure a multi-technology complete electronic perimeter surveillance system for the airport's more than 14 miles of concentric perimeter. The plan will include General Video Surveillance and Content Analytic Systems using both traditional Day/Night Cameras and Thermal Imagers. The system will also include Fiber Optic Fence Detection Systems, Infra-Red Beam Sensors and Microwave Detection Links to provide redundant detection methods which will help reduce false alarm rates. The design provides reporting integration and supporting connections to existing Access Control and Video Recording Systems.

Peter Harrison, B.Sc., MBA, C.Eng. MIET, MIEEE

Rail & Transportation Facilities – Project Manager

Education

Bachelor of Science, 1977
University of Manchester Institute of Science and Technology, Manchester. UK

Master of Business Administration, 1989
University of Loughborough, Loughborough. Leicestershire UK

Professional Associations

Institute of Engineering and Technology (IET), Member, 1978-date

Institute of Electrical and Electronic Engineers (IEEE), Member, 2000-date

Association of MBAs, Member, 1987-date

Employment History

May 2007 – July 2009
Parsons Transportation Group, New York
Senior Technical Consultant

Sept. 1999 – May 2007
Booz Allen Hamilton, Newark
Associate

Aug. 1996 – Aug. 1999
The Land Transport Authority, Singapore
Senior Systems Engineer

Aug. 1994 – Aug. 1996
Hartgain Limited,

Profile

Mr. Harrison is a Chartered Electrical Engineer with 30 years of worldwide experience of engineering and project management in the transit industry with consultants, agencies and contractors. His experience is focused on rail vehicles, automatic train control and integration of rail transit systems. He has experience with all types of rail transit vehicles, including commuter rail and mass transit electric multiple units, diesel multiple units, light rail, locomotives. Recently Mr. Harrison has been specializing in Communication Based Train Control (CBTC) and Automatic Tran Control (ATC) projects. He is also experienced with: rubber tired people mover vehicles, solid state drive and power electronic conversions systems. Mr. Harrison is experienced with all aspects of project implementation including developing initial concepts, producing specifications, engineering and design, manufacturing support, system testing and maintenance.

Projects

Port Authority of New York and New Jersey EWR Monorail Extension
Mr. Harrison was project engineering responsible for vehicles, control, Supervisory Control and Data Acquisition (SCADA), platform screen door and power distribution systems for the Newark Airport Monorail People Mover North East Corridor extension link. He was managing the resolution of technical issues, supporting and overseeing inspection, test, commissioning and acceptance of the systems. He was also managing the compliance of the system and vehicles with the technical specification.

Port Authority of New York and New Jersey - PATH Railcar and Signal Program - *Mr. Harrison supported the procurement of CBTC systems. Mr. Harrison's role included review and modification of technical specifications, and review and evaluation of proposals principally for the car mounted equipment.*

Delcan Corporation, New York, NY. Project Manager, August 2009 – Present
Metropolitan Transit Authority (MTA), New York
Independent Engineering Consultant (IEC) – Mr. Harrison is leading the IEC oversight of all vehicle procurements projects (rail vehicle and bus), for New York City Transit (NYCT), Metro North Railroad (MNR) and Long Island Railroad (LIRR). He is also leading the oversight of CBTC and PTC projects. The IEC monitors the operating agencies (NYCT, MNR, and LIRR) with respect to planning, execution and management of their respective capital programs. Mr. Harrison has also led review tasks including: Review of CBTC procurement

Warwickshire, UK
Director

April 1992 – May 1994
Thorn Automation Limited,
Rugeley, UK
Manager

Nov. 1988 – April 1992
Brush Traction Limited,
Loughborough, UK
Senior Engineer

June 1984 – Oct. 1988
Brush Electrical Machines Limited,
Loughborough, UK
Senior Design Engineer

1983 – 1984
GEC Industrial Controls Ltd.
Rugby, UK

1981 – 1983
Thorn EMI Automation Ltd.,
Rugeley, UK
Development Engineer

1979 – 1981
Chloride Legg Ltd.,
Wolverhampton, UK
Development Engineer

1977 – 1979
GEC Traction Ltd.,
Manchester, UK
Graduate Engineer

specifications, Review of rail vehicle early retirement proposals, Review of Bus procurement strategy.

JFK AirTrain - Mr. Harrison was Lead Vehicle Engineer for the JFK Airport Access project and was responsible for all aspects of the procurement of 32 light rail vehicles. He was responsible for and was managing the design, integration, inspection, testing and commissioning processes for the vehicles. Mr. Harrison also supported the JFK Airport Access project as a subsystem specialist, focusing on Auxiliary Power, Propulsion, Passenger Information Systems, and electrical systems reviewing contractor design submittals including review of contractor submittals, for designs, reliability analysis, FTA and FMECA, First Article inspections and test witnessing.

Parsons Transportation Group, New York, NY. Senior Technical Consultant, May 2007 – July 2009 New York City Transit Authority (NYCT)
Canarsie CBTC Procurement – Mr. Harrison led the consultant support team to NYCT installing CBTC system to the Canarsie line. The project included installing CBTC equipment on R160 cars to augment the existing R143 cars in CBTC operation for the Canarsie line. The team provides technical oversight of the contractor including managing resolution of technical issues for the CBTC system, supporting the safety certification process, monitoring CBTC system performance and equipment reliability and managing close out of issues with the existing CBTC deployment. Mr. Harrison was chairperson of the Passenger Cars Integration and the Track Geometry Car working groups reviewing contractor submittals and resolving technical issues. Mr. Harrison also supported NYCT during the bid process including review, production and evaluation of specifications, scope of work, contractual terms and conditions, and bidder proposals. He also participated in the bid negotiations.

New Jersey Transit (NJ TRANSIT) New Diesel Multiple Unit Procurement - Mr. Harrison was leading the engineering support team for the procurement of diesel multiple unit vehicles for NJ TRANSIT. Mr. Harrison's team was responsible for providing technical support to the client for the procurement of the vehicles including development of the technical specification, design concepts and review of proposals.

New York City Transit Authority (NYCT) Fushing CBTC Procurement – Mr. Harrison was supporting the procurement of Communication Based Train Control (CBTC) equipment for the Flushing and Second Avenue lines of the New York Subway system. Mr. Harrison was supporting the implementation of the train borne control equipment and is responsible for producing procurement specifications for the train board CBTC equipment and associated information including drawings and specifications. He was also responsible for producing concept designs for implementation of the CBTC train borne equipment on existing NYCT EMU vehicles.

Education
B.S., Civil Engineering, University of British Columbia, 1988

M.B.A., Simon Fraser University, British Columbia, 2003

QMI-ISO 9000 Quality Documentation and Quality Auditing

Business Certificate in Quality Management

Ashbrook ISO 9000:2000 Lead Auditor Course

Professional Associations
Professional Engineer (PE), Colorado Certified Project

Management Professional (PMP)

Certified Quality Manager (CQM)

Certified Quality Engineer (CQE)

Certified Quality Auditor (CQA)

Employment History
1998 Delcan Corporation

1995-1998 H.A. Simons Ltd.

1988-1995 Various Engineering Firms

Timothy P. Stokes, MBA, P.E.

Rail & Transportation Facilities – Project Manager

Profile

Timothy Stokes is an experienced Project Manager with a background in, construction management, civil and structural design/engineering, quality management, management system auditing and requirements management. Tim has specialized expertise in the development, maintenance and implementation of project management systems, especially: quality systems for companies seeking ISO 9001 registration. Tim has substantial experience in auditing of project management systems (i.e. quality, environmental, safety, incident management, and other project management systems). Tim has made significant contributions to the development and implementation of Delcan's specialized Compliance Audit Services (CAS) and Requirements Management Services (RMS) - project management services that are unique to industry, particularly Design-Build projects.

Projects

Denver RTD, FasTracks Program 2005-Present. Leading Delcan's consultant team to assist RTD (serving as the Quality Management Consultant (QMC)) and working as an extension of the RTD staff to develop program and contract requirements, verify requirements during program implementation, assist in developing a "quality of life within the region" metrics program and manage final acceptance of the overall program. This invokes the tailoring of a Delcan's requirements management database application to support the processes for overseeing consultant/contractor management and work products. FasTracks Program Cost $4.6 billion

Colorado Department of Transportation (CDOT), Transportation Expansion Project (T-REX), Denver RTD, 2001-2005. Assisted CDOT & RTD in the development, management and implementation of the T-REX (CAS) Audit Program. Directly managing a consultant team of four, the scope of the T-REX Audit Program consists of auditing methods to monitor and report upon the contractor's product, process, and management activities to verify, on a sampling basis, the implementation of the governing T-REX project contractual requirements. Tim led the effort to register the Audit Program to ISO 9001:2000 in 2003. The program comprises the use of a custom designed database, developed under Tim's direction, to collect, report, and track trends relevant to the Audit Program.
Performing audits to verify ISO 9001 compliance of various design, subcontractor, and supplier organizations, including other Design Builder management systems: safety, environmental, traffic management, public information plans. Project Cost: $1.7B.

Colorado Department of Transportation (CDOT), Colorado Springs I-25 Design Build Project (COSMIX),2004-2005 Assisted in the development of the Acceptance Management Program (AMP) for CDOT to be implemented on their $150 million design-build project, which commenced construction February 2005. Acceptance Management is a systematic methodology of assessing Work completed by the contractor prior to acceptance based on formal quality auditing techniques. The approach is used to monitor a design-build contractor's product, process or procedural, and management activities and verify on a sampling basis, the implementation of the governing contractual requirements.

Oregon Department of Transportation, OTIA III State Bridge Delivery Program, 2004. Assisted in the preparation of a report titled "Study Plan Options to Apply Compliance Auditing to the OTIA III State Bridge Delivery Program." The report contains specific recommendations and options about how best to use audit functions to provide quality oversight for the OTIA III program as a whole and for OTIA III Bridge projects in general. This report also discusses how macro performance measures related to environmental, economic, social, sustainability and infrastructure finance could be derived, trended, reported and used to support continuous improvement of the Program.

Minnesota Department of Transportation (MnDOT), Program Management Services, 2002-2003. Providing advice to an on-site team developing a Requirements Management System (RMS) which is a process of collecting, organizing, maintaining, and tracking Owner and stakeholder requirements for the purpose of communicating them to a design-builder and for future confirmation of fulfillment. The process is being developed as part of Program Management for Mn/DOT Design-Build program.

407ETR concession Company Limited, Highway 407 ETR – East and West Extension, Ontario, Canada, 1999-2001. Responsible for detailed development and implementation of a Compliance Audit Program for the East and West extensions to the Highway 407, which was designed and constructed by a concessionaire. Performed management system audits to verify ISO 9001 conformance of various design, subcontractor and supplier organizations. Developed training programs and trained staff on ISO 9001 principles and application. He also performed audits on 407 ETR's environmental, operational and maintenance operations.

Department of National Defence of Canada, WATC Third Party Audit Services Wainwright, AB, Canada, 1998. Responsible for managing the implementation of Compliance Audit Services performed on three buildings for the Department of National Defence (DND). Developed an ISO 9001:1994 conforming quality system manual for the Department of National Defence.

Education
BS, Computer Science, Point Park College, 1985

Employment History
2009–Present, Delcan Corporation, Systems Engineering Manager – Rail/Transit

1997-2009, Parsons Corporation, Systems Manager

1985–1997, Union Switch and Signal, Pittsburgh Pennsylvania, Software Manager/Software Engineer

Professional Affiliations
International Council on Systems Engineering (INCOSE)

Intelligent Transportation and Transit Systems (ITTS) Steering Committee Member

Member of APTA Systems Engineering Subcommittee

Lori Colangelo

Rail & Transportation Facilities – Project Manager

Profile

Ms. Colangelo has over 24 years of systems engineering experience in the design and implementation of complex software-based projects in the rail transit industry. She spent the first 12 years of her career as a software developer and software project manager, implementing rail transit Operations Control Center (OCC) systems. This experience gave her the appreciation of the implementation issues that Contractor's face when interpreting and implementing contract requirements. She is able to take a practical approach to implementing systems engineering best practices on complex rail transit projects. As a member of the International Council on Systems Engineering (INCOSE) she has worked with international systems engineering experts to better define Systems Engineering processes and best practices. Her expertise with the design and implementation of OCC systems includes extensive experience in designing Automatic Train Supervision (ATS) systems for both fixed block operation and Communications Based Train Control (CBTC) systems.

Rail Car and Signal Program, Port Authority Trans Hudson (PATH), NY, NY: Systems Engineer responsible for developing Technical Specification requirements for software-based systems and ATS systems, ensuring that best practices for communications-based train control systems were incorporated into the ATS design package for PATH, and working with designers and PATH to ensure that software requirements and ATS requirements were integrated amongst all sections of the specification.

Automatic Train Supervision System for Subdivision B (ATS-B), MTA New York City Transit (NYCT), New York, New York: Project Manager responsible for the financial aspects of the project including budget and schedule management, cost reporting, subcontractor invoices, change order negotiations, and status reporting and overall design and development of the Technical Specifications for the procurement of the ATS-B System. Lead Engineer responsible for the development of the Technical Specifications for the ATS-B System and integration with other Capital Program projects within NYCT. The scope of the ATS-B project includes a Monitoring and Scheduling System for the existing fixed block operation which can then be expanded to integrate with future Communications Based Train Control systems. The system also includes a Voice Communications system, Projection Systems and interfaces to Decision Support Systems, Public Address/Customer Information Systems, and NYCT Reporting Systems. Signaling, communications and fiber optic systems will be upgraded in support of the Monitoring and Scheduling System.

Flushing and Second Avenue Communications-Based Train Control Project, MTA New York City Transit, New York, New York: Systems Engineer responsible for ensuring consistency of requirements between the Flushing Specifications and the design of the ATS-B System and for defining all software process requirements.

Software Status Review for the Jubilee Line Upgrade Project, London, England: Member of a 3-person Expert Review Team responsible for assessing the status of the software development effort by Thales on the Jubilee Line Resignaling Program. Thales is contracted to replace the existing signaling system on the Jubilee Line with a Communications-Based Train Control (CBTC) system. The scope of work includes CBTC equipment on 37 route-km, 27 stations and 63 trains. The Expert Review Team was contracted by the CEO of Tube lines to provide an independent assessment of the status of the software development effort in order to validate the commissioning schedule. As a member of the Review Team, Ms. Colangelo was responsible for reviewing software development and software testing metrics at the Thales office in Toronto and at the Tubelines office in London, United Kingdom. She met with key project staff and produced a Software Status Report that was commissioned by the CEO of Tube lines. The Expert Review Team will continue to assess the status of the Thales software development effort throughout 2010.

Radio-Based Automatic Train Control-Communications Based Train Control (ATC-CBTC) for the Yonge, University, Spadina (YUS) Subway, Toronto Ontario, Canada, 2007-2009: Systems Engineer and a member of the consultant team which developed the Technical Specifications for the ATC-CBTC system for the YUS Line. As the Systems Engineer, she was responsible for the design and development of the Technical Specifications for the ATS portion of the ATC-CBTC system. As a member of the Proposal Review Team, she was responsible for assisting the Toronto Transit Commission in deciding on whether to procure a new ATS system for the YUS line or revise the existing Central Office Signal System (CSS).

MTA Long Island Rail Road - East Side Access (ESA), Metropolitan Transit Authority, New York, New York: Control Center Lead Engineer responsible for development of the ESA Control System design, including specifications, drawings and cost estimates. Her primary responsibilities included customer interface and interface to other discipline leads. The ESA Control System includes typical Train Control functions, as well as Supervisory Control and Data Acquisition (SCADA) and Building Management functions.

Education
B. Eng (Honours), Electronics, Liverpool University, England, 1984

Employment History
2009–Present, Parker and Associates (Division of Delcan Corporation), Kingston, Ontario; Chief Engineer

2008 -2009, York Region, Rapid Transit Corporation, Markham, Ontario; Chief Engineer

1994–2008, Bombardier Transportation, Total Transit Systems, Kingston, Ontario; Director, Engineering

Professional Affiliations
Professional Engineer, Ontario, (Electrical)

Formerly P.Eng APEGBC Chartered Engineer (UK)

European Engineer (EurIng)

Member of Institution of Engineering and Technology (UK)

Member of APTA Systems Engineering Subcommittee

Papers
Pacific Asia Rail Conference Singapore 2003: Automated Transportation Systems
APTA Rail Conference

Toronto 2007: Integration of Automation into Urban Transit

Jonathan Hulse

Rail & Transportation Facilities – Project Manager

Profile

Mr. Hulse is a Professional Engineer with over 25 years experience in technical and engineering management. He has extensive experience in the Rail Transit Sectors and a broad background in system engineering within the Military, Industrial and Nuclear sectors.

Chief Engineer, Parker and Associates Inc. (Division of Delcan):
Reporting to the President, responsibilities include:

- Ensure technical integrity of the Rail Transportation projects, processes and procedures;
- Recruitment, supervision and technical guidance to engineering staff and Associates;
- Provide as necessary technical input and advice to support varying client and project needs;
- Preparation of special reports and technical studies;
- Participation in business development, including client development, development of proposals, client interviews and negotiations;
- Development of system engineering processes and procedures.
- Clients and examples include:
- Expert witness in automatic train control litigation case (client confidential);
- Review of Thales software readiness for London Tubelines Jubilee line resignalling project;
- Technology assessment and recommendations on transit technology, including capital and lifecycle cost comparisons to City of Ottawa in order to meet Transportation Master Plan;
- Studies on Signalling, Platform Screen Door and Guideway Intrusion Detection options for Amsterdam Metro;
- Studies on vehicle communication networks and door systems (client confidential);
- Preparation of System Engineering Plans for Siemens for Toronto's Union Station Railway Corridor resignalling contract.

Chief Engineer, York Region Rapid Transit Corporation:
Reporting to the Vice President, responsible for planning and directing large infrastructure projects in support of York Region's Official Plan, and Regional Transportation Plan for the implementation of rapid transit.
Coordinated a variety of different phases of the projects including the preliminary engineering and the environmental assessments (EA), implementation of design build contracts with integration into revenue service.

Led a project team of engineering professionals, consultants, and technical and support staff for the design, construction, procurement, and the development

References
Mary-Frances Turner, VP, York Region Rapid Transit [redacted]
Dan Braund, Bombardier Transportation [redacted]

of budgets, work programmes and schedules for the rapid transit network program. Reviewed pricing proposals from main contractors and vendors for compliance with scope definitions and reviewed comparative pricing of multiple vendors for best value for York Region.

Worked with Infrastructure Ontario and Metrolinx to develop funding and delivery strategies with the necessary benefits case analyses, and sat on the Metrolinx technical working groups for the Scarborough Rapid Transit system and the Transit City projects.

Projects included:
The implementation of a $1.7Bn bus rapid transit system with approx 70km of segregated rapidways along the Yonge St and Highway #7 corridors within York Region, including terminal facilities, an operations, maintenance and storage facility and significant vehicle procurement.

Toronto York Spadina Subway Extension Project: working closely with the TTC and City of Toronto on an extension of the subway into York Region from Downsview to the Vaughan Corporate Centre. As a 40% funding partner York Region remained responsible for the surface project management and transit oriented development for the facilities within York Region.

Planning for the Yonge Subway Extension from Finch Station to the Richmond Hill Centre – work entailed the development and submission of the Environmental Project Report, and the associated analyses to support provincial funding.

Director Engineering, Bombardier Transportation, Total Transit Systems
Responsible for all System Engineering activities for the Yong-In Rapid Transit project in South Korea. This was a full turn-key, design build, operate and maintain project providing a fully automated rapid transit system. Responsible for engineering activities in both the design and project offices. Scope of supply included unmanned vehicles using linear induction motor technology, communication based Automatic Train Control (ATC), Communication subsystems, and the provision of the complete operations and maintenance capabilities (manpower and equipment) to operate for 30 years. System engineering activities included design, and requirements management, RAMS, EMC, as well system integration and safety certification of the complete Transit System, including the Civil and E&M partners (providing trackwork, power supply and distribution, and AFC) to ensure a fully integrated automated Transit System that would meet the 30 year performance requirements of the System.

This project was the first to integrate the latest Bombardier *Cityflo* 650 ATC technology with Bombardier's Advanced Rapid Transit (ART) MKII Vehicle for unmanned train operation.

EXPERIENCE SUMMARY

Henry Chin, Senior Project Cost Manager, has more than 25 years of experience in architectural design and construction cost estimating, specializing in conceptual project budgeting and detailed cost estimating at various stages of design and construction. Mr. Chin has a unique combination of estimating knowledge and sensitivity to architectural design and costs. Prior to joining ELLANA, he was the lead estimator with a major construction management firm for many high-profile New York City and national projects. His project experience includes construction cost estimating and master planning of high-rise office buildings, hospitals, museums, research facilities, airports, schools, residential developments, hotels, and alteration and renovation of existing buildings for adaptive reuse.

EDUCATION

BS in Architecture, New York Institute of Technology, 1985

LICENSES/CERTIFICATIONS

Licensed Architect in the State of New York, [redacted]

RELEVANT PROJECT EXPERIENCE

PANYNJ, World Trade Center Tower One, New York, NY – Senior Project Cost Manager responsible for cost estimating and project cost control services for the 3-million square-foot Tower One at the World Trade Center site. Services include assisting the Project Program Manager with independent estimate preparation for trade bid packages; bid reviews; estimate preparation for bulletins, addenda, and change orders; and tracking and updating budget costs.

PANYNJ, Architectural, Engineering, and Interior Design Services for Offices at 4 World Trade Center, New York, NY – Senior Project Cost Manager responsible for cost estimating and scheduling services for the new corporate offices of the Port Authority of NY & NJ, consolidating about 1,700 Port Authority staff from multiple buildings in Manhattan and New Jersey in one central location at 150 Greenwich Street in Manhattan. The offices will cover approximately 15 to 20 contiguous floors, 1 podium floor (approximately 35,000 square feet located on the retail level to include a cafeteria, conference center, and an emergency command post), and 1/3 of the subgrade space in the new World Trade Center - Tower 4 Building. In compliance with current PANYNJ sustainability objectives all office buildings will comply with the World Trade Center Sustainable Guidelines, leading to a LEED gold rating.

PANYNJ, Redevelopment of jetBlue Terminals 5 & 6 at JFK International Airport, Queens, NY - Senior Project Cost Manager responsible for assisting the design team with the cost estimating of various design options for the proposed new terminal and roadways. These studies include design options for the terminal exterior walls, and roofs, drop-off area, and new canopy.

PANYNJ, TWA Building 60 Interior Adaptive Reuse / Exterior Improvements JFK International Airport, Queens, NY – Senior Project Cost Manager responsible for providing initial planning, design development, and construction-document cost estimating services to the design team throughout the interior/exterior renovations of this iconic TWA Terminal (Building 60), designed by Eero Saarinen, at JFK.

PANYNJ, World Trade Center Vehicle Security Center and Tour Bus Parking Facility, New York, NY – Senior Project Cost Manager responsible for providing construction cost estimating services for the 4 story 295,700 sf vehicle and tour bus parking and screening facility.

PANYNJ, USAir Terminal at LaGuardia Airport, Queens, NY - Lead Estimator responsible for the cost estimates for this $200-million, 300,000-square-foot, two-story airline terminal with a total of 12 gates. The project also included managing the construction of the taxiway realignment and access roads.

PANYNJ, New International Arrivals Building/Terminal Four at JFK International Airport, Queens, NY - Lead Estimator responsible for providing cost estimates from the schematic level of design to GMP for the new $400-million International Arrivals Building. The total terminal and concourses area is 1.4 million sf.

PANYNJ, Terminal One at JFK International Airport, Queens, NY – Lead Estimator for this two-level structure with a partial third level, totaling 660,000 sf. The new terminal was constructed on the site of the former Eastern Airlines Terminal, which was demolished as part of this project. Also included in the project are a retail and food gallery; new boarding lounges; and an airline club level on the airside of the security checkpoint. Construction value - $205 million.

National September 11 Memorial & Museum at the World Trade Center, New York, NY – Senior Project Cost Manager responsible for schematic and design development estimates for the WTC memorial and museum complex. Services include various cost studies of proposed design options, structural systems, and slurry wall supports.

NYSOGS, Life Safety Services Term Contract, State of New York (S3014) – Senior Project Cost Manager will be responsible for providing cost estimating services as-needed on this statewide life-safety term contract.

NYC School Construction Authority Cost Estimating Services On-Call Contract, New York, NY – Senior Project Cost Manager responsible for cost estimates at all stages of design for this on-call cost estimating prime contract, including new school construction projects, renovations, mechanical system upgrades, construction of new, 5-story, 97,000-square-foot intermediate school, feasibility study for 4-story, 49,000 sf. high school, and 4-story, 72,000-sf K-5th grade school. Domestic piping, flood elimination, low-voltage electrical system, boiler and climate-control upgrades, and mini-school roof upgrades, boiler and climate-control upgrades, heating plant and climate-control upgrades, boiler conversion and climate control upgrades, upgrades to roof, windows; interior restoration/replacement, exterior masonry restoration/replacement and related interior work, and exterior façade restoration; exterior masonry restoration/replacement

New York City Housing Authority Term Contract, New York, NY - Senior Project Cost Manager responsible for providing cost estimating services for this requirements contract for various buildings throughout the New York City Area. Projects generally include exterior restoration of the existing facades, mechanical and plumbing upgrade, interior kitchens and finishes replacement, and site/landscape/playground development

Public Safety Answering Center II, (PSAC II), Bronx, NY – Senior Project Cost Manager responsible for preparing cost estimates for the new, 525,000-sf Public Safety Answering Center being constructed in The Bronx, NY. This project will provide a new call center and improve the City's emergency communication systems, including responses to 911 calls. PSAC II was designed to withstand the effects of a major disaster, both natural and man-made, and to operate without interruption. The building also complies with all applicable laws and ordinances, including the Green Buildings Law (Local Law 86 of 2005) governing sustainable design. The scope of services include cost estimates preparation at all design milestones, value engineering estimates, and cost studies of various design options.

MTA, Design and Technical Services for Security Capital Program On "Task Order" Basis, New York, NY – Senior Project Cost Manager responsible for the provision of cost estimating services for engineering design and technical services for the MTA security improvement capital program. Services include risk and vulnerability assessments, development of a security program and security design guidelines, engineered solutions for threat mitigation, cost/benefit analyses of alternative mitigations, conceptual design, design development, final design, contract document preparation including drawings and specifications, preparation of project phasing plan and cost estimates, value engineering, and pre- and post-construction contract award services for a variety of security projects.

PATH/Christopher Street-9th Street Station Entrances, Jersey City, NJ – Senior Project Cost Manager responsible for cost estimating services to the design team at the conceptual design stage for the preparation of an analysis report for both stations and conceptual design for a new station entrance at the 9th Street Station through the Fontana Center building. The logistically-challenging proposed new 9th Street Station entrance includes an underground mezzanine tunnel over the existing PATH lower-level platform tunnel. The scope involved extensive utility relocation; maintenance and protection of traffic; Fontana Building substructure and structural work; as well as vertical ingress/egress elements.

EXPERIENCE SUMMARY
Walter A. Fitzer, Chief MEP Estimator, has more than 30 years of experience in mechanical/electrical design, field supervision, and cost budgeting and estimating. He has a wide range of project experience and is responsible for MEP estimate preparation from the conceptual through construction document phases, as well as coordination of MEP scopes and costs with the architectural trades. He is fully involved in value engineering sessions and project cost analyses, estimates, presentations, cost reconciliations, and negotiations.

Mr. Fitzer's project experience encompasses educational facilities for such public institutions/agencies as the New York City School Construction Authority (NYCSCA), State University of NY (SUNY), and City University of NY (CUNY), as well as private schools; transportation projects for MTA NYCT, MTA Metro-North, MTA LIRR, NJ Transit, and Port Authority of NY & NJ (PANYNJ). He has also provided his expertise for healthcare, hospital, and R&D facilities; commercial construction and office buildings including NYC's World Financial Center and World Trade Center; courthouses and correctional facilities; as well as alterations and renovations for a variety of clients.

EDUCATION
AAS, HVAC and Refrigeration, State University of Agricultural and Technical Institute at Farmingdale, NY

LICENSES/CERTIFICATIONS
Certified Specialist in HVAC - American Society of Heating, Refrigeration and Air Conditioning Engineers, Inc.

RELEVANT PROJECT EXPERIENCE
PANYNJ, Architectural, Engineering, and Interior Design Services for Offices at 4 World Trade Center, New York, NY – Chief MEP Estimator responsible for cost estimating and scheduling services for the new corporate offices of the Port Authority of NY & NJ, consolidating about 1,700 Port Authority staff from multiple buildings in Manhattan and New Jersey in one central location at 150 Greenwich Street in Manhattan. The offices will cover approximately 15 to 20 contiguous floors, 1 podium floor (approximately 35,000 square feet located on the retail level to include a cafeteria, conference center, and an emergency command post), and 1/3 of the subgrade space in the new World Trade Center - Tower 4 Building. In compliance with current PANYNJ sustainability objectives all office buildings will comply with the World Trade Center Sustainable Guidelines, leading to a LEED gold rating.

PANYNJ, Path Christopher Street and 9th Street Station Entrances, Jersey City, NJ - Chief MEP Estimator responsible for cost estimating services to the design team at the conceptual design stage for the preparation of an analysis report for both stations and conceptual design for a new station entrance at the 9th Street Station through the Fontana Center building. The logistically-challenging proposed new 9th Street Station entrance includes an underground mezzanine tunnel over the existing PATH lower-level platform tunnel. The scope involved extensive utility relocation; maintenance and protection of traffic; Fontana Building substructure and structural work; as well as vertical ingress/egress elements.

PANYNJ, World Trade Center Final Streets and Surfaces, New York, NY – Chief MEP Estimator responsible for providing design-development cost estimating services for the construction the Final Streetscape for the entire World Trade Center Site.

PANYNJ Architectural Call in Services for 2007-2010, New York, NY – Chief MEP Estimator responsible for providing cost estimating and scheduling services for the fit-out of Authority offices located at 115 Broadway and 116 Nassau Street in Manhattan.

MTA/Design and Technical Services for Security Capital Program On "Task Order" Basis, New York, NY- Chief MEP Estimator responsible for cost estimating services for engineering design and technical services for the MTA security improvement capital program. Services include risk and vulnerability assessments, development of a security program and security design guidelines, engineered solutions for threat mitigation, cost/benefit analyses of alternative mitigations, conceptual design, design development, final design, contract document preparation including drawings and specifications, preparation of project phasing plan and cost estimates, value engineering, and pre- and post-construction contract award services for a variety of security projects.

PANYNJ, World Trade Center Tower One, New York, NY – Chief MEP Estimator responsible for cost estimating and project cost control services for the 3-million square-foot Tower One at the World Trade Center site. Services include assisting the Project Program Manager with independent estimate preparation for trade bid packages; bid reviews; estimate preparation for bulletins, addenda, and change orders; and tracking and updating budget costs.

PANYNJ Architectural Call-In Services, NY/NJ – Chief MEP Estimator responsible for providing cost estimating services on an on-call basis for this "call-in" contract for PANYNJ. Tasks included the renovation of the Goethals Bridge Administration Building for which existing documents and assessment report were reviewed; assisted in determination of initial SF cost for alternatives; reviewed 50% and 100% drawings and prepared construction cost estimates, including list of unit price items with estimated quantities.

PANYNJ, World Trade Center Towers 1 and 2, New York, NY – Chief Mechanical/Electrical Estimator responsible for change-orders for MEP tenant work and lobby finishes.

PANYNJ, 7 World Trade Center, New York, NY - Chief Mechanical/Electrical Estimator responsible for provision of present-day replacement costs of HVAC, plumbing, and fire protection work for core and shell and tenant fit-out for insurance purposes.

PANYNJ, JFK International Airport, Queens, NY - Chief Mechanical/Electrical Estimator responsible for complete MEP requirements at new arrival gates at Terminals 1 and 4, including all conveyor systems.

NYSOGS, Life Safety Services Term Contract, State of New York (S3014) - Chief MEP Estimator responsible for providing cost estimating services as-needed on this statewide life-safety term contract.

NYC Metropolitan Transportation Authority, Amtrak, and NJ Transit Rail Transit Experience, NY and NJ – Chief Mechanical/Electrical Estimator responsible for cost estimates for the following:

- MTA LIRR, Air Conditioning Upgrades
- MTA LIRR, Ventilation Studies, Track Level
- MTA NYCT, 72nd Street Subway Station - Site Utilities and Interior Upgrades
- MTA Metro-North, Grand Central Terminal Building Modifications - Interior and Track Work
- NJ Transit, Montclair Connection, New Light Rail
- Amtrak, James A. Farley Post Office Building/Penn Station Redevelopment, NYC

NYC School Construction Authority Cost Estimating Services On-Call Contract, New York, NY – Chief MEP Estimator responsible for cost estimates at all stages of design for this on-call cost estimating prime contract, including new school construction projects, renovations, mechanical system upgrades, construction of new, 5-story, 97,000-square-foot intermediate school, feasibility study for 4-story, 49,000 sf. high school, and 4-story, 72,000-sf K-5th grade school. Domestic piping, flood elimination, low-voltage electrical system, boiler and climate-control upgrades, and mini-school roof upgrades, boiler and climate-control upgrades, heating plant and climate-control upgrades, boiler conversion and climate control upgrades, upgrades to roof, windows; interior restoration/replacement, exterior masonry restoration/replacement and related interior work, and exterior façade restoration; exterior masonry restoration/replacement

New York City Housing Authority Term Contract, New York, NY - Chief MEP Estimator responsible for providing cost estimating services for this requirements contract for various buildings throughout the New York City Area. Projects generally include exterior restoration of the existing facades, mechanical and plumbing upgrade, interior kitchens and finishes replacement, and site/landscape/playground development

Public Safety Answering Center II, (PSAC II), Bronx, NY – Chief MEP Estimator responsible for preparing cost estimates for the new, 525,000-sf Public Safety Answering Center being constructed in The Bronx, NY. This project will provide a new call center and improve the City's emergency communication systems, including responses to 911 calls. PSAC II was designed to withstand the effects of a major disaster, both natural and man-made, and to operate without interruption. The building also complies with all applicable laws and ordinances, including the Green Buildings Law (Local Law 86 of 2005) governing sustainable design. The scope of services include cost estimates preparation at all design milestones, value engineering estimates, and cost studies of various design options.

Jonathan Goldstick, PE

Marine – Deputy Program Manager

Specialization
Ocean engineering

Registration/ Certifications
PE: NY [redacted] 1985);
[redacted]
(2009)

Year Joined
1995

Years with other Firms
15

Education
BSc, 1980, Ocean Engineering, Massachusetts Institute of Technology

1976-1978, Ocean Engineering studies, US Coast Guard Academy (No Degree)

Professional Affiliations
American Society of Civil Engineers (ASCE), Member

Society of American Military Engineers (SAME), Member

Society of Naval Architects and Marine Engineers (SNAME), Member

Key Qualifications

Jonathan Goldstick has 30 years of domestic and international experience in waterfront engineering and project management. He has been involved in the design, analysis, construction, rehabilitation, and installation of a wide variety of waterfront structures worldwide. His expertise also includes project management and engineering support for urban waterfronts.

Jonathan is a senior vice president at Halcrow. He has served as principal-in-charge of "on-call" contracts with the Port Authority of New York & New Jersey for the design of waterfront structures and the inspection of waterfront structures, as well as with the New York City Economic Development Corporation and the Hudson River Park Trust for marine engineering services.

Relevant Experience

"On-Call" Waterfront Condition Surveys, Port Authority of New York & New Jersey (PANYNJ), NY and NJ

Principal-in-charge of "on-call" engineering services for condition surveys of waterfront facilities. Jonathan oversaw the regular maintenance work and emergency response inspections for waterfront facilities of various types and constructions. Typically, these projects entailed 100 percent visual inspection of all structural elements and ten percent detailed inspection of select elements. Detailed inspections included cleaning of the structural elements, ultrasonic thickness measurement of steel, sounding of concrete, and evaluation of timber elements with regard to the presence of marine borers. Fees: $1M/year, 1995-2010

"On-Call" Marine Structural Engineering Services, Engineering Division of the PANYNJ, New York, NY

Principal-in-charge and project manager for "on-call" professional engineering design services for waterfront structures in New York Harbor. Services provided include assessments and repairs to existing structures and the design of new structures including bulkheads, and low and high level piers. Projects were generally part of an on-going maintenance program, but there have been numerous emergency response projects often resulting from vessel collision. Fees: $750 K/year, 2000-2010

Regional Private Ferry Study, PANYNJ, New York and New Jersey Harbor, NY and NJ

Project director for the Halcrow-led review and market analysis of existing and potential private ferry services in the greater NY and NJ Harbor. The study examined how ferry service is currently funded, what role ferry service plays in the regional transportation network, the public and private sector roles in ferry transportation, and what funding and financing options are available. The potential for new routes was explored. Study findings helped guide strategies to better integrate ferries into the regional transportation network and enhance the financial stability of the privately-operated ferry services. Fee $475 K, 2009-2010

Publications

"Developing the Mina Raysut Container Terminal", Society of Naval Architects and Marine Engine[redacted] Operati[redacted]ent and E[redacted] Symp[redacted]caucus, NJ, May 1997.

"69th Street Pier Composite Pier Design in Brooklyn, NY", American Society of Civil Engineers (ASCE) Ports '98, Long Beach, CA, March 1998.

"Pier 79 West Midtown Ferry Terminal Development, NY, NY", American Society of Civil Engineers (ASCE) Ports '01, Norfolk, VA, May 2001.

"Irvington, NY Brownfield Waterfront Remediation", American Society of Civil Engineers (ASCE) Ports '01, Norfolk, VA, May 2001.

"Fixed Wave Screen Designs", American Society of Civil Engineers (ASCE) Ports '04, Houston, TX, May 2004.

Brooklyn Navy Yard Rehabilitation, Brooklyn Navy Yard Development Corporation, Brooklyn, NY

Project manager for the rehabilitation of Berths 1A, 8, 8A, 8B, 9, 9A, 10, 10A and structures at the small boat basin. The majority of the structures are timber relieving platforms between and at the entrances to the dry docks. The timber had deteriorated from rot and marine borer attack. Various repair scenarios were developed, and detailed designs were prepared for repairs that included the removal of all fill, encasement of piles, and re-filling with lightweight concrete to seal the relieving platform floors. The project began with detailed underwater inspections of the 19 structures for which only limited documentation existed. $21 M, 2009-2012

Hudson River Park Parkwide "On-Call", Hudson River Park Trust, New York, NY

Principal-in-charge of the inspection, engineering, design, and construction administration services for the marine structures throughout the full length of the Hudson River Park, a five-mile park stretching along the Hudson River. Jonathan had final authority for all work performed, including condition surveys to monitor structures that were scheduled for replacement, inspection and rehabilitation design of structures that were to remain in use by the park, inspection and design of demolition plans for structures that were to be removed, and monitoring of pile fields for previously demolished piers. Structures inspected included timber and steel pile supported piers, granite block seawalls, and timber pile fields. Fees: $1.8 M, 2002-2010

Battery Park Pier A, National Parks Service, New York, NY

Project director for ferry transportation issues at Pier A. This included developing layouts for secure docking of passenger ferries using a floating barge option, as well as examining the transition of passengers from the National Parks Service's security screening facility within Pier A onto the ferries to Liberty and Ellis Islands. Halcrow conducted extensive research to determine key stakeholder interactions as well as to obtain ferry sizes and preferred layout options, likely and projected passenger volumes, structural information related to securing the docking barge and the ferry, ferry operations schedules (numbers of ferries, frequency, timing and staggering of ferry arrivals), and other related information to develop a circulation strategy. Fees: $100 K, 2008-2009

"On-Call" Marine Engineering Services, New York City Economic Development Corporation, New York, NY

Principal-in-charge for comprehensive "on-call" marine engineering services for waterfront sites in all five New York City boroughs. Jonathan ensured that all services were performed including above and underwater inspections; condition evaluations; recommendations for maintenance; preparation of designs, drawings, and specifications for repairs; cost estimating; and inspection of construction. Fees: $1 M/year, 1995-2000

Bill Paparis, PE

Marine - Project Manager

Specialization

Structural engineering

Registration/ Certific

PE: NY [redacted]

PADI Sc [redacted]

Certi [redacted] 82)

Year Joined Halcrow

1984

Years with other Firms

8

Education

MS, 1976, Civil Engineering, Columbia University

BS, 1975, Civil Engineering, Columbia University

Professional Affiliations

None

Publications

"Modernizing a Three Decade Old Wharf Structure for the Next Generation of Containerships", Proceedings of Port '2004, Houston, May 2004.

"Joint Effort Rapid Response Minimizes Downtime during Fuel-oil Dock Replacement", Proceedings of Port '2004, Houston, May 2004.

Key Qualifications

Bill Paparis has more than 33 years of experience on many marine related projects involving structural inspection, rehabilitation, upgrades and new construction design, planning, cost estimating, and construction management. His background includes inspection diving, as a certified diver, and on-site construction management for marine and waterfront projects.

Bill has served as manager of the inspection department and is currently manager of Maritime Structures Group.

Relevant Experience

New York Marine Terminal Piers 6, 7, 8 and Bulkhead 9B, Port Authority of New York & New Jersey (PANYNJ), Brooklyn, NY

Project director for inspection and design of repairs to Piers 6, 7, 8 and Bulkhead 9B. The work included repair of concrete extension on timber piles, plating repairs to steel sheet piling, and installation of a new steel sheet pile bulkhead. $2M, 2008-2009

Norfolk Naval Shipyard, Pier 3 and Berth 25, US Navy, Norfolk, VA

Lead structural engineer for design of Pier 3 and Berth 25 for the Atlantic Division of the US Navy. The pier is to accommodate aircraft carriers, submarines, and all other classes of Navy vessels. The work included the evaluation of numerous alternatives, including platform structures and bulkheads. The options of replacement and building outboard of the existing structures were evaluated. $70 M, 2004-2011

Naval Weapons Station Earle Pier Replacement, US Navy, Colts Neck, NJ

Assistant project manager for the replacement of an ammunition loading pier. Work involved steel pipe piles, precast concrete caps, a composite prestressed/cast-in-place concrete deck, fender systems, mooring fittings, dredging, mechanical and electrical works, and buildings. $134 M. 2005-2009

Port Elizabeth Marine Terminal Upgrade, APM Terminals North America, Elizabeth, NJ

Project manager and lead structural engineer responsible for improvement of 6,000 LF of wharves. The work included the strengthening and deepening of the wharves by provision of a sheet pile cut off wall and new crane foundations to accommodate 152,000 LT container vessels, and super-post-Panamax container cranes. $30 M, 2003-2008

Publications

"Expansion of Middle Eastern Port Overcomes Difficult Ground Conditions", Proceedin[redacted] '2004, Houst[redacted]

[redacted]arine and Wate[redacted]?" Struc[redacted]ine, August 2004.

Author of chapter "*Port Related Marine Structures*", Handbook of Port Engineering, John Wiley & Sons, 2004.

"*Weapons Station Trestle Features Unique Elements*", Proceedings of Ports '95, Tampa, March 1995.

"Port Terminal Design in a Region of Moderate Seismicity: Engineering and Economic Considerations".

Global Container Terminal Extension, Weeks Marine, Bayonne/Jersey City, NJ

Project director and project manager for a 900 ft extension to Global Container Terminal. The major challenge of the project is spanning over an existing storm water sewer outfall which runs at an acute angle to the length of the wharf. In order to accomplish this, a 190-ft-long by ca. 30-ft-deep steel truss was designed to span over the outfall pipe and support the waterside crane rail. Resilient high energy absorption rubber fenders and 150 ton capacity bollards were provided along the face of the wharf. The scope of work also included electrical and mechanical utilities and pavement design. $60 M, 2007-2008

Choctaw Point Container Terminal Development, APM Terminals North America, Mobile, AL

Project director/project manager for planning, design, engineering, and construction supervision for a new container terminal. The work includes final planning and layout of the terminal and gate, considering future expansions. Detailed design was performed for an administration building, maintenance building, longshoremen's shelter, and several smaller buildings and gate. In addition, design of the container yard, including grading, paving, storm drainage, fire water, domestic water, sewage, electrical, and communications, was carried out. The work also included full time resident engineering and construction support services. $50 M, 2006-2008

Passenger Ship Terminal Redevelopment, New York City Economic Development Corporation (NYCEDC), New York, NY

Project director for redevelopment design including pile repairs and structural upgrades to existing Piers 88 and 90, and the addition of new pile supported concrete decks with fendering along each side of the existing piers. Master planning included development of construction alternatives, phasing concepts, and project costs. The terminal was designed to berth a variety of cruise ships including the QM2. $80 M, 2006-2007

Cruise Ship Terminal, NYCEDC, Brooklyn, NY

Project director for design of upgrades to Pier 12 to convert the facility from a general cargo pier to a cruise terminal. $10 M, 2005

Howland Hook Container Terminal, PANYNJ, Staten Island, NY

Project manager for detailed design to expand and upgrade the Howland Hook Container Terminal. The major elements of the project included strengthening of the northernmost 945 ft of the existing wharf to permit future dredging, a 300 ft extension of the wharf to the north and a 175 ft extension to the south. The design relied on the installation of new high capacity steel pipe piles to resist sufficient vertical load so as to make it unnecessary for the existing outboard row of piles to resist any load. Steel sheet piling was to be driven and supported by these new pipe piles, to stabilize the dike below the wharf. $38 M, 2002-2005

Alan Waller, PE

Marine - Project Manager

Specialization

Structural engineering, project management

Registration/ Certifications

[redacted]
(1988); [redacted]
(1988[redacted]

Year Joined Halcrow

1997

Years with other Firms

18

Education

BS, 1979, Civil Engineering, Manhattan College

Professional Affiliations

American Society of Civil Engineers (ASCE), Member

Awards

American Council of Engineering Companies, NY, Project Excellence Awards

Diamond, Intrepid Pier 86

Diamond, Pier 79 Midtown Ferry Terminal

Gold, Hudson River Park Piers & Esplanade

Gold, Staten Island Yankees Ballpark Esplanade

Key Qualifications

Alan Waller is an expert professional engineer with more than 31 years domestic and international experience in the areas of project and construction management, engineering design, and field supervision specializing in waterfront and land based projects. His experience includes new and retrofit construction of piers, bulkheads, petrochemical plants, fossil and nuclear power plants. Specific areas of expertise include the analysis and design of marine structures, value engineering, design project supervision, construction planning, and construction management.

Al is the recipient of numerous awards from the American Council of Engineering Companies, New York including the Diamond award for design of the ferry landing and enclosed pedestrian ramps for the Pier 79 West Midtown Ferry on the Hudson River; Diamond award for the Reconstruction of Pier 86 on the Hudson River which required the replacement of the entire pier where the Sea Air and Space Museum's Aircraft Carrier "Intrepid" is berthed. He has also been awarded the Gold award for the Hudson River Park Piers & Esplanade and the Staten Island Yankees Esplanade projects.

Currently, Al is project manager for the Glen Cove Ferry Terminal Design, project director for the Norfolk Shipyard Berth Rehabilitation, as well as project manager for "on-call" services contract providing waterfront engineering services to the New York City Economic Development Corporation.

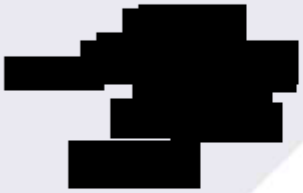
Relevant Experience

Intermodal Ferry Terminal, Hempstead Harbor, City of Glen Cove & State of New York, Long Island, NY

Project manager for the construction of a new terminal, accommodating two ferries and many recreational boats, and is designed to act as a transportation center. Responsibilities included a ferry terminal building, new marine waterfront structures and esplanade, a parking area, associated infrastructure appurtenances, as well as access improvements along local roads. Construction documents were prepared and all construction phase services and waterfront aspects of the terminal will be provided. $16 M, 2012

Liberty State Park Ferry Terminal Fender Rack 2 Reconstruction, NJ Department of the Treasury, NJ

Project manager for the reconstruction of the badly deteriorated timber fender rack No.2 with a new modern pipe pile supported reinforced concrete fender platform with timber panel facing. Project included design bidding, shop drawing review, and construction supervision. $4 M, 2010



Intrepid Pier 86 Reconstruction, Intrepid Sea Air Space Museum, New York, NY

Project director for the home of the Sea Air Space Museum's Aircraft Carrier "Intrepid." Deterioration of the substructure requires replacement of the outer 782 ft of the 1,000-ft-long by 150-ft-wide pier at which the 27 K ton, 872-ft-long Intrepid is berthed. The design meets the latest seismic criteria and includes fenders and mooring hardware for the Intrepid and other transient military vessels. The pier also functions as a park. $35 M, 2009

Naval Weapons Station Earle Pier Reconstruction, US Navy, Colts Neck, NJ

Project manager during final mechanical, electrical, and rail construction of Pier 3 and steam plant replacement on Pier 4. Responsibilities included installation of three new package steam boilers, water treatment system and all new high pressure steam supply system piping and controls, as well as punch out of all pier fire protection, rail tracks and building structures on pier 3. $134 M, 2009

Queens West Waterfront Development Stage 2, Queens West Development Corporation, Queens, NY

Project manager for preparation of the engineering design for replacement of approximately 1,900 lin ft of the East River bulkhead. The previous shoreline consisted of various structures including relieving platforms, timber cribs, and riprap slopes. The new waterfront includes a wetlands area, high level platforms, and new tied back steel sheeting outboard of the timber crib structures. Responsibilities included performing condition surveys, bathymetry, permitting, and detail design. $12 M, 2008

Pier 4 Reconstruction, United States Coast Guard, Cape May, NJ

Project director for this design-build project which included the partial demolition and reconstruction of Pier 4, a severely deteriorated timber pile-supported pier at the United States Coast Guard Training Center. The reconstructed pier is a steel pipe pile-supported pier with precast concrete caps, prestressed precast concrete deck planks, and a reinforced concrete deck. Additional features included precast concrete utility trenches and provisions for mechanical and electrical services for berthing vessels. $4.5 M, 2008

Pier 79 West Midtown Ferry Hudson River, New York City Economic Development Corporation (NYCEDC), New York, NY

Project manager for a floating ferry landing that accommodates seven ferries of various dimensions and configurations (side loading and end loading). The terminal building is supported on a rehabilitated pier. Work included inspection and design of repairs to existing waterfront structures and the design of a 314 ft x 30 ft floating ferry landing and enclosed pedestrian ramps linking the building with the landing. $23 M, 2004

Halcrow

Sean O'Neil, PhD

Coastal Engineer

Specialization

Coastal engineering. numerical hydrodynamic, wave and sediment transport modeling and met-ocean [redacted] uisition

Year Joined Halcrow

2005

Years with other Firms

11

Education

PhD, 2002, Civil Engineering, Ohio State University

MS, 1993, Coastal Engineering, Ohio State University

BS, 1987, Physics, University of Minnesota

Professional Affiliations

American Society of Civil Engineers (ASCE), Member

American Geophysical Union (AGU), Member

American Meteorological Society (AMS), Member

Publications

O'Neil, S., Goshow, C. and Hosseini, S. 2008. "*Waterfront Development in the Gulf Region: A Review and Examination of Flushing and its Relevance to Water Quality",* presented at COPEDIC VII, 24-28 February 2008.

Key Qualifications

Dr. Sean O'Neil has more than 15 years experience managing technical aspects of the Halcrow New York Coastal Group and leading the business development efforts as well. Formerly, he was the technical lead for the data acquisition and numerical modeling group in the Middle East offices, including quality control and quality assurance management. He is knowledgeable in water resources and environmental engineering experience using one-, two- and three-dimensional numerical models in lakes, rivers, estuaries and the coastal ocean.

Sean is familiar with the theory, development and application of a wide variety of numerical modeling tools including commercial packages such as the DHI and DELFT suites of tools, as well as state-of-the-science freeware and shareware codes. Applications include examining the impacts of waste heat and brine discharges, freshwater withdrawal, basin flushing time and contaminated sediment fate and transport in support of coastal and waterfront development projects and environmental impact assessments.

In addition, he is also responsible for design and participation of infield physical data acquisition campaigns and data analysis in support of numerical model calibration and validation.

Relevant Experience

LaGuardia Airport Runway Safety Improvements, Port Authority of New York & New Jersey (PANYNJ), New York, NY

Modeling manager who developed a numerical hydrodynamic and sediment transport model in support of an assessment of environmental aspects of lengthening the runways at LaGuardia Airport. The model covers the NY Harbor and utilized public and private data sources The model investigated varying deck pile diameters and spatial densities. Fees: $250 K, 2010

Marine Container Terminal, Israel Ports Development and Asset Company, Ltd, Haifa, Israel

Project manager responsible for several marine elements related to sediment dredging and reclamation, environmental impact assessment, numerical wave modeling (extreme waves for design, wave agitation), major offshore breakwater design, revetment design, quaywall design, berth availability, shoreline protection design. $13 M, 2009-2011

Qatar-Bahrain Causeway, Qatar-Bahrain Causeway Foundation, KBR, Doha, Qatar

Marine engineering technical leader for the management consortium. Review of the contractor's design and environmental impact assessment related numerical modeling. Wave modeling, hydrodynamic circulation modeling, sediment transport modeling related to dredging impacts. Dredged spoil placement and beneficial uses. Fees: $14 M, 2009-2010

Publications (cont'd)

O'Neil, S., Yang, Z. and Lewis, T. 2008. *"Marine Data Collection and Modeling Study near Abu Dhabi."* Presented [redacted] DIC VII, 24[redacted]08. Blumberg [redacted] Neil and B. N[redacted] *ing the Ph[redacted]ts of a Desalination Facility."* J. Mar. Environ. Eng.,7,1, 2003.

Al-Ruzouq, R., R. Ma, T. Ali, K-C. Cheng, C-Y. Kuo, S. O'Neil, X. Xu, K. Di, R. Li, K. W. Bedford, C. K. Shum, J. R. Ramirez, and A. Zhang. "*Demonstration: Digitalization of Coastal Management and Decision Making. National Conference for Digital Government Research* dg.o 2002, Los Angeles, CA, pp. 391-394, May 20-22, 2002

Wai, O. W.-H., Y. S. Xiong, S. O'Neil and K. W. Bedford, "*Parameter estimation for suspended sediment transport processes under random waves."* The Science of the Total Environment, 226, 49-59, 2001.

S. Zhang, D. J. S. Welsh, K. W. Bedford, P. Sadayappan and S. O'Neil, *"Coupling of Circulation, Wave and Sediment Models,"* Technical Report CEWES MSRC/PET TR, 1998.

Numerical modeling, DP World, Dubai, UAE

Principal modeler who developed and extended a three-dimensional regional flow, temperature and salinity hydrodynamic circulation and transport model in support of the Jebel Ali New Container Terminal mega-port project and the Shell LNG terminal. The modeling examined far-field and near-field impacts from power and desalination plant expansion, dredging and reclamation impacts and development footprint impacts. The model was calibrated to an extensive set of field measurements taken locally near the intake and outfall channels. The model currents at key locations were used to inform the design of the offshore structure toe protection and ultimately used to provide input to the mooring analysis for the LNG berth. Construction value $1.6 B, 2009

Numerical Modeling, KBR and ALDAR, Abu Dhabi, UAE

Principal coastal modeler who extended a two-dimensional hydrodynamic circulation model in the waters off the east for the main island of Abu Dhabi. The domain was enlarged to include additional extensive tidal channels, flats, and mangroves near Yas Island, and other islands along the Shahama-Saadiyat Freeway and along the island to support waterfront developments including South Marina and Formula 1 racetrack marina. The modeling included flushing and water quality studies to support an EIA, and the development of an extensive marina as well as current studies to support the placement of bridge abutments and other structures along the waterfront. Fees: $3.4 M, 2008

Brooklyn Bridge Park Numerical Modeling Study, Brooklyn Bridge Park Development Corporation, New York, NY

Project manager and engineer who managed and constructed a three dimensional numerical modeling study in support of an environmental impact assessment (EIA) for the proposed Brooklyn Bridge Park. The study included modeling the hydrodynamics and sedimentation in the East River and the Brooklyn Piers, and also included a marina flushing analysis. Fees: $80 K, 2005

Pre-FEED LNG Terminal Site Study for Proposed LNG Terminal Siting, Hong Kong, China

Project engineer responsible for a pre-FEED LNG terminal site study. A spectral and near shore wave modeling study was conducted to bring offshore waves into possible LNG terminal site locations in Hong Kong. Fees: $1.4 M, 2005

Douglas Friend, PE

Dive Team Leader and Engineer-Diver

Specialization

Engineer-diver

Registration/ Certifications

PE: MA [redacted]

Santa Barba[redacted] College, Co[redacted] Diving [redacted] (2000)

Professional Association of Diving Instructors, Open Water Diver (1998)

Scuba Schools International, Stress and Rescue Diver (2004)

Eastern Mountain Sports, Specialized Climbing and Rappelling Training (1999)

Year Joined Halcrow

1997

Years with other Firms

1

Education

MS, 2005, Civil Engineering, Columbia University

BS, 1994, Civil Engineering, Manhattan College

Professional Affiliations

American Society of Civil Engineers (ASCE), Member

Publications

None

Key Qualifications

Douglas Friend has more than 13 years of experience in inspection, evaluation, analysis and construction supervision of marine and waterfront facilities. His project experience includes piers, offshore platforms, bulkheads, wharves, bridges, dams, and marine terminals. Doug's specific areas of competence are condition structural evaluation, construction supervision and inspection, rehabilitation design, and analysis of marine structures.

Doug served as resident engineer on major marine construction projects and is currently serving as project manager for various underwater inspection projects and for the US Army Corps of Engineers "on-call" contract.

Relevant Experience

Waterfront Structures Evaluation, New York City Office of Management and Budget (NYCOMB) Asset Management System, New York, NY

Project manager/team leader for the evaluation of waterfront structures throughout the five boroughs of the New York City. Halcrow has performed work under 13 project task orders. The projects have involved the evaluation of more than 300 assets along the shorelines of Manhattan, Brooklyn, Queens, Staten Island and the Bronx. Work involved rapid above water inspection, capture of date in NYCOMB database, and approval of developed cost reports. The work was performed for Gannett Fleming on behalf of the NYCOMB. Fees: $150 K/year, 2006-2010

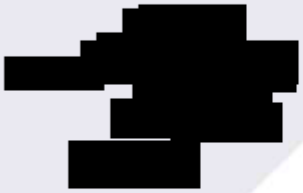
Pier & Bulkhead Inspection at South Brooklyn Marine Terminal, New York City Economic Development Corporation, Brooklyn, NY

Project engineer for the underwater and above water inspection of the 39th Street Pier and bulkhead. The inspection included approximately 3100 lin ft of steel sheet pile bulkhead, 324 lin ft of timber pile supported relieving platform, 215 lin ft of concrete and granite block seawall, and approximately 820,000 SF of concrete floor and apron slabs. A comprehensive report on the above water and underwater inspections was provided. This included observed conditions, structural condition assessments, recommendations for priority and maintenance repair programs, and cost estimates for repairs for the structures. Fees: $65 K, 2006

Piers 35 & 36 Inspection, New York City Economic Development Corporation, Manhattan, NY

Project engineer for the underwater and above water inspection of Piers 35 and 36 on the East River. The inspection included approximately 1,800 steel H-Piles, 1400 lin ft of granite block seawall and timber platforms, and approximately 220,000 SF of concrete deck. A comprehensive report on the above water and underwater inspections was provided which included observed conditions, structural condition assessments, recommendations

for priority and maintenance repair programs, and cost estimates for repairs for both structures. Fees: $100 K, 2005



Norfolk Naval Shipyard Pier 13 Inspection, US Navy, Portsmouth, VA

Project engineer for the underwater and above water inspection of Pier 13, at St Helena Annex. The inspection involved a general condition survey of a 57,300 SF timber pile supported pier. Underwater photographs were taken and a comprehensive report was provided. The report included observed conditions, structural condition assessments, repair recommendations, and cost estimates for repairs for the pier. The work was performed as part of an "on-call" marine engineering services contract. Fees: $130 K, 2005

Inspection of US Coast Guard ANT Saugerties Facility, Saugerties, NY

Project manager for the underwater and above water inspection of the USCG ANT Saugerties facility. The project included inspection of approximately 200 lin ft of rip-rap revetment, 140 lin ft of timber and concrete crib retaining structure, 200 lin ft of timber pile retaining wall, and two steel pipe pile supported concrete wharves. Fees: $40 K, 2005

Waterfront Rehabilitation, Battery Waterfront, New York, NY

Project manager for the evaluation and conceptual design for waterfront improvements at the USCG Battery Building. The project involved the development of conceptual designs and cost estimates for seven alternatives for expansion of operations at the facility. Proposed structures included a new steel sheet pile bulkhead, a steel and timber wave screen, new aluminum and concrete floating docks to service USCG Utility Boats, and berthing facilities for USCG Patrol Boats and Medium Endurance Cutters. Additionally, a review of potential permitting issues and a preliminary wave climate study were performed. Fees: $85 K, 2005

Marine Engineering "On-Call" Services, US Coast Guard-Civil Engineering Unit (USCG CEU), Providence, RI

Project manager/lead engineer-diver for the provision of "on-call" marine engineering services including underwater inspections, condition assessments, and design services for the First US Coast Guard District. The facilities investigated under this contract vary by type and construction and have included timber, steel, and concrete structures. The contract has included the performance of design and conceptual design for waterfront structures and facilities. The work was performed under a contract for the US Coast Guard Civil Engineering Unit, Providence, RI. Fees: $100 K, 2004

Brett Sposito, PE
Engineer-Diver

Specialization
Project management, maritime development design and planning

Registration/ Certifications
PE: NY [redacted]1); OR [redacted]2010)

Association of Diving Contractors Commercial Diver Certification, Entry Level Tender/Diver

National Oceanic and Atmospheric Administration (NOAA) Divemaster (2004), Contaminated Water Diving Seminar

Professional Scuba Inspectors, Visual High Pressure Cylinder Inspector (2004)

Professional Association of Diving Instructors, Advanced Open Water SCUBA Certification (1999)

High Pressure-related HAZMAT Training

CPR/First Aid and DAN Oxygen First Aid Training

Federal Highway Administration (FHWA) National Highway Institute Training:

Bridge Inspection Refresher Training (2009)

Safety Inspection of In-Service Bridges (2003)

Key Qualifications

Brett Sposito has more than 13 years experience as an engineer-diver performing approximately 920 underwater structure inspections over 650 days for Halcrow and the Oregon Department of Transportation (ODOT). He has three years of experience as a fathometer surveyor performing 60 fathometer surveys of bridges over major waterways. In addition, he has one year of experience as a bridge designer performing design and providing construction support, concurrent with underwater bridge inspection experience. His projects have included bridges, piers, wharves, bulkheads, dams, culverts, tidegates, and fender/pier protection systems. Specific areas of expertise include underwater inspection, structural condition evaluation of bridges, non-destructive and destructive underwater testing, underwater repair, underwater still photography, technical report preparation, and fathometer surveying.

Relevant Experience

Waterfront Inspection Services "On-Call" Contract, Port Authority of New York & New Jersey, New York, NY

Project manager overseeing a call-in contract to provide waterfront inspection services. Tasks under this agreement consist of above and underwater cyclical condition surveys of the Authority's waterfront structures in the five boroughs of New York City and New Jersey as summarized in formal condition reports. Recent condition surveys performed in 2009/2010 include Port Newark Berths 3-25 in Elizabeth, NJ; Port Elizabeth in Elizabeth, NJ; the Auto Marine Terminal in Bayonne, NJ; and selected bridge and culvert structures at the Newark Liberty International Airport in Newark, NJ. Fees: $1 M/year, 2009-2011

Port Newark Marine Terminal Inspection, Port Newark, Newark, NJ

Team leader and project engineer-diver for an underwater and above water condition survey of the odd-numbered Berths 3 through 25, including the bulkheads at Berth 19 and east of Berth 25. The purpose of the inspection was to determine the overall condition of the structures and to identify structural and non-structural deficiencies. The project included inspection of timber, concrete, and steel pile supported wharves, and timber and steel sheet pile bulkheads. Fees: ca. $200 K, 2009

Pier 54 Inspection, Hudson River Park Trust, Manhattan, NY

Team leader and project engineer-diver for a partial underwater and a full above water inspection of Pier 54. The purpose of the inspection was to identify structural and non-structural deficiencies and provide recommendations for repair and rehabilitation actions required to maintain the condition of the pier for its current usage. Pier 54 is 770-ft-long by 100-ft-wide and consists of timber piles and bracing, timber pile caps, concrete pedestals, underside of the concrete deck and asphalt deck surface. Fees: $23 K, 2010

Year Joined Halcrow
2007

Years with other Firms
10

Education
BS, Civil Engineering, University of Washington

Professional Affiliations
Chi Epsilon, National Civil Engineering Honor Society (1991)

Port Newark Marine Terminal Inspection, Port Newark, Newark, NJ

Team leader and project engineer-diver for an underwater and above water condition survey of the odd-numbered Berths 3 through 25, including the bulkheads at Berth 19 and east of Berth 25. The purpose of the inspection was to determine the overall condition of the structures and to identify structural and non-structural deficiencies. The project included inspection of timber, concrete, and steel pile supported wharves, and timber and steel sheet pile bulkheads. Fees: ca. $200 K, 2009

74th Street Station Intake Tunnel Inspection, Consolidated Edison, Manhattan, NY

Team leader and project engineer-diver for an underwater condition survey of the intake tunnel. The purpose of the inspection was to provide a condition assessment, to identify and quantify existing defects, to analyze and evaluate the defects, and to recommend repair actions with associated cost estimates. The project included inspection of 100 ft of reinforced concrete tunnel. Fees: $65 K, 2010

Battery Maritime Building to the South Side of Pier 16 Inspection, New York City Economic Development Corporation, Manhattan, NY

Team leader and project engineer-diver for an underwater and above water investigation of the gravity wall bulkhead from the Battery Maritime Building to the south side of Pier 16. The purpose of the routine level investigation was to assess the general overall condition of the structure, estimate the remaining useful life, and determine recommended actions with associated costs. The secondary purpose of this inspection was to identify potential sources of fill loss to address historical problems with settlement in the area. Ground Penetrating Radar (GPR) was also employed upland to identify voided areas due to fill migration. The project included evaluation of over 2,500 lin ft of gravity wall bulkhead, a timber pile supported low level relieving platform, manholes, and concrete and asphalt surface up to 35 ft behind the offshore face. Fees: ca. $100 K, 2009

Pier 60 Inspection, Hudson River Park Trust, Manhattan, NY

Team leader and project engineer-diver for an underwater water inspection of Pier 60. The purpose of the repair inspection was to determine if there were items of non-conformance with repair design documents. This project included the inspection of 85 posted timber piles. Fees: ca. $10 K, 2008

Halcrow

Domenica Stasiak, EIT
Structural Engineer

Specialization
Structures, marine structures

Registration/ Certifications
[redacted]

Year Joined Halcrow
2007

Years with other Firms
6

Education
BS, 2002, Civil Engineering, Villanova University, PA

Professional Affiliations
None

Publications
None

Key Qualifications

Domenica Stasiak has three years experience on marine related projects involving structural design, structural inspection and rehabilitation analysis, resident engineering, and construction inspection/management.

Prior to joining Halcrow, Domenica has six years experience in the structural design of buildings.

Relevant Experience

East River Esplanade, New York City Economic Development Corporation, Manhattan, NY

Resident engineer for the construction phase of the esplanade approximately 1,000 ft in length. The esplanade is constructed of pipe piles installation, rock drilling for sock socket production, installation of precast pile caps and planks, and concrete topping. The esplanade will tie in to the existing concrete walkway and create a bike way lane. The construction includes installation of steel pipe piles, drilled rock sockets, pile caps and planks. The project consists of the redevelopment of the waterfront from the Staten Island Ferry to the Brooklyn Bridge. Fees: $1.5 M, 2009-2010

South Bronx Greenway, Hunts Point Landing Shoreline, Bronx, NY

Project manager for the design and production of contract documents including drawings and specifications, and construction assistance of this shoreline package. The package consisted of a fishing pier, kayak launch and tie up station, along with a retaining wall and wave dissipating rip rap section for a recreational park. 2008-2010

Berth Upgrade, Valero Refining Company, Paulsboro, NJ

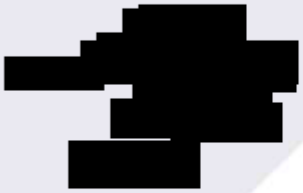
Temporary resident engineer. Phased reconstruction of berthing and petroleum handling facilities at Valero Refining Company. Fast track project to demolish and rebuild two berths for ocean-going vessels in sequence. $35M, 2007-2009

Port Newark Fender Study, Port Newark, Newark, NJ

Structural engineer for analysis of the existing port authority fender system and suggestions for upgrade. 2008

Norfolk Naval Ship Yard Berths 3 and 4 Rehabilitation, US Navy, Portsmouth, VA

Structural engineer who performed analysis and design of bulkhead, aided in the construction phase with suggestions and re-analysis for unexpected on-site situations, and reviewed submittals and RFIs. This project was a design-build contract, requiring a cooperative design effort with the builder to ensure cost efficient design and construction techniques. Berths 3 and 4 rehabilitation represented over 800 lin ft of waterfront facilities and included all civil, structural, mechanical and electrical disciplines. $24 M, 2007-2008



Freeport Container Port Expansion Phase V (Automated Yard), Freeport Container Port Ltd (part of Hutchison Port Holdings Group), Bahamas

Structural engineer for the expansion comprising 500m of additional quay deck, yard equipped with automatic stacking cranes, and electrical services for six additional super-post-Panamax cranes. Tasks included detailed design project delivery of civil works, project scheduling and interface with other disciplines. $250 M, 2007-2008

Container Terminal Expansion/Upgrade, APM Terminals North America, Elizabeth, NJ

Temporary resident engineer for Phase 5 container terminal expansion at Port Elizabeth. The project involved upgrade of 1200 ft of wharf to accommodate rail mounted container cranes. Scope included site demolition, installation of new waterside and landside piling and crane beams and all associated utilities and stowage/tie-down equipment, installation of new cut-off wall, fendering, mooring hardware and paving. Domenica provided temporary on-site engineering supervision during complete wharf container terminal reconstruction project. She was responsible for all aspects of contract administration progress reporting, quality control and client/contractor liaison. $14M, 2007

FIRM EXPERIENCE

DESIGN OF EMERGENCY REPAIRS AND INTERIM DECK REPLACEMENT, GOWANUS EXPRESSWAY, BROOKLYN, NY

HAKS provided design engineering services for rehabilitating the Gowanus Expressway, an elevated structure that carries heavy traffic in each direction in four general use lanes including one high occupancy vehicle (HOV) lane. This contract addressed emergency structural repairs to a 1.5-mile section of the main line Expressway, widening a connector ramp to the Brooklyn-Queens Expressway (BQE), drainage improvements, lighting, signage upgrades and safety improvements. Our responsibilities included the design of new sign structures to accommodate ramp widening, and lighting design for the mainline Gowanus (above and below the viaduct) and BQE Ramp.
Highlights of the designs that we carried out include:

Lighting Design

- New lighting for upper and lower roadways including high-pressure sodium luminaries with pole mounts, new electrical distribution system and design details for new feeders, underdeck conduit supports, junction boxes and connections to foundations.
- Temporary lighting system for proposed work zones during construction including mounting details and lighting levels.
- Evaluation and modification design of lighting controllers including voltage drop calculations.
- Luminaire design for proper lux values at roadways and underdeck areas in accordance with photometric requirements of NYCDOT Division of Street Lighting using Visual Professional software.

Sign Structure Design

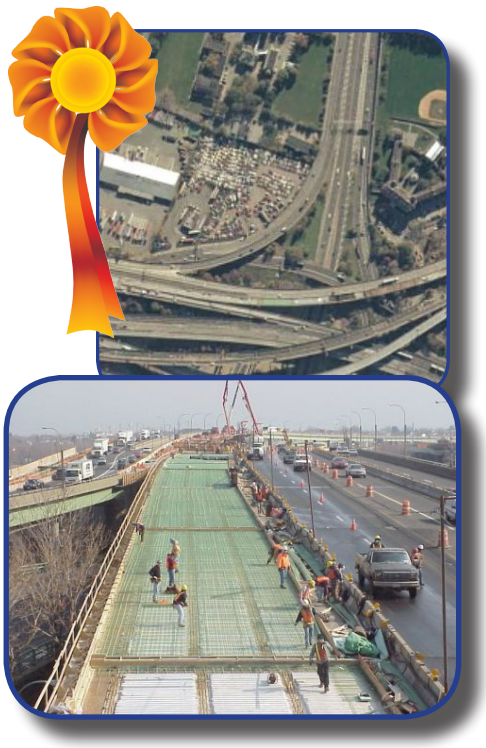
- Span, cantilever and combination-type sign structures including new at-grade foundations.
- New double-girder structural support system for bridge-mounted sign structures.
- In-depth field inspection of existing sign structures including hands-on investigation of all structural members and structural load ratings.
- Preparation of detailed plans for the demolition and removal of the existing sign structures.
- Development of sign panel designs and sign data sheets in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).

Designs included development of all contract drawings, special specifications and construction cost estimates associated with HAKS' design responsibilities. Significant coordination with NYSDOT, NYCDOT and consultant team members was required.

FIRM NAME: New York State DOT
START & END DATE: 2006 - 2009
TOTAL COST: $152 Million
CLIENT CONTACT:
Michael Eugene
PHON [redacted]
EMAIL [redacted]

FIRM EXPERIENCE

CONSTRUCTION COORDINATION AND MANAGEMENT SERVICES, CROSS BRONX EXPWY/BRUCKNER EXPWY INTERCHANGE REHABILITATION, NY



HAKS provided these services for the interchange rehabilitation under a contract with the New York State Department of Transportation. The $204 million project involved extensive bridge and viaduct rehabilitation work and highway improvements. It was completed in May 2002, one year ahead of schedule, due in great part to the partnering atmosphere created among the construction team members, and the incentive/disincentive provisions in the contract. The project received numerous awards as a result, including the CMAA 2003 Project of the Year (Over $60 Million) Award; NYACE 2003 Platinum Award for Engineering Excellence; New York Construction News 2001 Award of Merit: Bridge Project; ARTBA Pride Awards Honorable Mention; NYSDOT Deputy Chief Engineer's Citation; and The ASCE Construction Achievement Project of the Year Award.

The interchange is a major link between the Cross Bronx Expressway, the Bruckner Expressway, the Bronx-Whitestone Bridge, the Throgs Neck Bridge, and the New England Thruway. It runs from Havermayer Avenue to Huntington Avenue on the Bruckner Expressway and from Castle Hill Avenue to Lafayette Avenue on the Cross Bronx Expressway. Serving as a gateway to the northern part of Queens, Bronx County and the State of Connecticut, it is considered one of the most complex interchanges in New York State and as such, required construction to be undertaken in four stages.

The scope of work included reconstruction of major portions of the interchange viaduct including 14 ramps and bridge structures. In effect, several projects were combined into one, thereby substantially reducing the time and impact of the work on motorists and the surrounding communities. The project also called for roadway improvements including paving, resurfacing and installation of an Intelligent Transportation System (ITS) along the Cross Bronx, Throgs Neck, Bruckner and Hutchinson River Expressways. The ITS provides a comprehensive system for improving vehicular flow in the corridor through traffic monitoring and information gathering.

The ITS scope of work included:

- Installation of new communication conduit and pull boxes
- Installation of seven CCTV cameras, three Highway Advisory Radio transmitters, one permanent variable message sign and temporary advisory signs along highways approaching the interchange

One of the project's biggest challenges was the construction of a temporary crossover needed to maintain two lanes of traffic from the westbound Cross Bronx Expressway to the southbound Bruckner Expressway. This temporary steel structure, approximately 50 feet above ground and nearly 1,000 feet long, bridged the roadways for about six months. Paul Cavota, P.E. was the Construction Manager on this project.

FIRM NAME: New York State DOT
START & END DATE: 1999 - 2002
TOTAL COST: $204 million
CLIENT CONTACT:
John Elias, P.E.
PHONE [redacted]
EMAIL [redacted]

FIRM EXPERIENCE

RECONSTRUCTION OF BQE BETWEEN BROADWAY AND 25TH AVENUE, QUEENS, NY

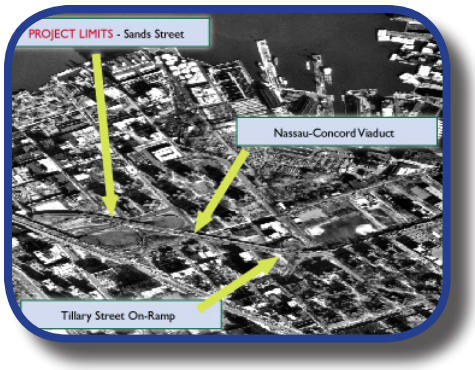
On March 14, 2000, the New York State Department of Transportation awarded contract D258272 to Slattery Skanska, Inc. to reconstruct the Brooklyn-Queens Expressway between Broadway and 25th Avenue in Queens. The original contract amount, $215,800,000, indicated that this was the largest contract ever awarded by NYSDOT. It was scheduled for completion in the spring of 2004, but major items of work later added to the contract brought the contract total to about $254,000,000 and the scheduled contract completion to the fall of 2004.

The project called for total replacement of the existing roadway pavement, drainage system and highway lighting system. Both the horizontal and vertical alignments were changed to increase sight distance. Wider shoulders were added at most locations to accommodate vehicle breakdowns. Bridgework included replacement of four CSX Freight Rail Bridges that run adjacent to or over the BQE, 12 highway bridges and one city street bridge that spans the BQE.

FIRM NAME: New York State DOT
START & END DATE: 2000 - 20004
TOTAL COST: $254 Million
CLIENT CONTACT:
Craig Ruyle, P.E.
PHONE: [redacted]
EMAI [redacted]

FIRM EXPERIENCE

CONSTRUCTION INSPECTION SERVICES, REHABILITATION OF BQE-PARK AVENUE AND NASSAU-CONCORD VIADUCTS, BROOKLYN, NY



HAKS is inspecting the reconstruction of this $146 million project for the New York State Department of Transportation on the Brooklyn-Queens Expressway (BQE) from Flushing Avenue to Sands Street, which includes rehabilitating the Park Avenue and Nassau-Concord Viaducts and six connecting ramps.
The viaducts are integral parts of the BQE, which is a major travel corridor of New York City. But age, weather, heavier trucking and higher traffic volumes have all played their part in steadily deteriorating the structures. Rehabilitation will thus halt the decline, rebuild the structures and improve them to current roadway and bridge safety standards. Completion of the project, set for December, 2009, will amount to full reconstruction of this section of the BQE, and assure continued service of the roadway and viaducts for the community, motorists, commercial traffic and the City in general for years to come.

Viaduct deck replacement is being done in stages, five stages for Park Avenue and six for Nassau-Concord. This allows the number of BQE travel lanes to be maintained throughout construction. However, nighttime lane closures are required on the mainline and local streets along with ramp closures, which included full closure of the Tillary Street off-ramp for about a year. Pedestrian access is maintained at all times. Because of NYSDOT's commitment to minimize impacts on the community, various measures are taken to deal with the closures, protect safety and reduce environmental effects.

Construction work being performed includes:

- Replace existing deck with new and improved concrete bridge deck;
- Replace structural steel members and bearings;
- Install new joints;
- Install a new Intelligent Transportation System (ITS) to inform motorist of real time traffic conditions;
- Install new lighting systems including under deck lighting;
- Install new drainage systems;
- Install new sign structures and panels;
- Paint structural steel inside of sealed containments for environmental protection; Landscaping.

The project is the first in NYSDOT Region 11 to wirelessly download plans, specifications and manuals, monitor information and manage costs and documents including inspector reports, etc. Communication between field and office is in real time, with all information accessed from portable tablet computers.

FIRM NAME: New York State DOT
START & END DATE: 2005-2009
TOTAL COST: $146 Million
CLIENT CONTACT:
Sokwon Im, P.E.
PHONE: [redacted]
EMAIL: [redacted]

FIRM EXPERIENCE

CONSTRUCTION INSPECTION SERVICES
EMERGENCY REPAIR AND INTERIM DECK REPLACEMENT
GOWANUS EXPRESSWAY, BROOKLYN, NY

The project has been recognized with industry awards that include 2010 Project of the Year, American Society of Civil Engineers, Met Section; 2010 ACEC Gold Award for Engineering Excellence; and 2009 Concrete Industry Board Award of Merit in the Roger H. Corbetta Awards Program.

HAKS was the lead joint venture partner providing construction inspection services for the $152 million emergency repair and interim deck replacement project on the Gowanus Expressway in Brooklyn, NY. Work extended from the Verrazano-Narrows Bridge to the Brooklyn Battery Tunnel, and on the Prospect Expressway from Church Avenue to the Gowanus/Prospect Expressway Interchange.

Major reconstruction items were deck replacement, superstructure repairs and emergency repairs to the Gowanus Viaduct; widening/replacement of the BQE Connector; and pavement rehabilitation on the Prospect Expressway/Lower Gowanus. Initial work focused on priority deck and steel repairs to ready the structure for the staged reconstruction to follow, and to assure the structural integrity of the viaduct as work progressed.

The work also involved seismic improvements, fatigue upgrades and bearing replacements. Construction also took place on the approaches and ramps, new lighting was installed, and the steel structures were painted, with lead abatement procedures put in place during steel cleaning. Construction operations on the BQE Connector included excavation, pile foundations, new footings and columns, and a new superstructure to support the widened ramps.

HAKS and its joint venture partner evaluated traffic management strategies such as construction phasing, lane closure restrictions, night and weekend work. Critical Path Method scheduling was employed, which was essential to assuring on-time project delivery. In addition, we were involved extensively with local communities and their representatives, and coordinated regularly with many New York City agencies.

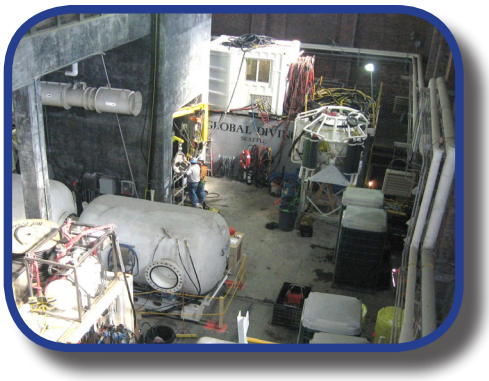
The Joint Venture Team addressed a number of critical issues to assure construction quality, minimal community impact, timely completion and project cost control. These issues included scheduling, emergency repairs, maintenance and protection of traffic, safety, modifications and repair of viaduct structures, and community relations.

This project was the second in NYSDOT Region 11 to employ a wireless system to download plans and specifications, manage costs and documents and monitor information. Communication between the field and office was in real time. All information, including inspector reports, forms, specifications, manuals, etc., was accessed from portable tablet computers.

FIRM NAME: New York State DOT
START & END DATE: 2006 - 2009
TOTAL COST: $152 Million
CLIENT CONTACT:
Albert Wong., P.E.
PHONE [redacted]
EMAI [redacted]

FIRM EXPERIENCE

CONSTRUCTION MANAGEMENT SERVICES, RONDOUT WEST BRANCH TUNNELS AND SHAFTS, WAPPINGER, NY



HAKS is providing inspection services as a subconsultant to the joint venture managing this $239 million tunnel and shaft rehabilitation project for the New York City Department of Environmental Protection.

The project is advancing under NYCDEP Contract DEL-185 and involves preliminary work required to repair leaks at two distinct locations in the Rondout-West Branch (RWB) Tunnel; repairs will be made at some time in the future. RWB Tunnel is a major part of the Delaware Water System, one of three systems that supply water to New York City. The others are the Croton and Catskill Water Systems, and together the three supply water to more than 8 million people in the City and to communities in Orange, Putnam, Ulster and Westchester Counties. The Delaware Water System, with its four separate reservoirs, supplies some 50% of the City's annual water demand. Its water flows through the 45-mile-long RWB Tunnel, a concrete lined, 13.5-foot-diameter, pressurized conduit in rock 400 to 1,500 feet underground that connects the Rondout and West Branch Reservoirs.

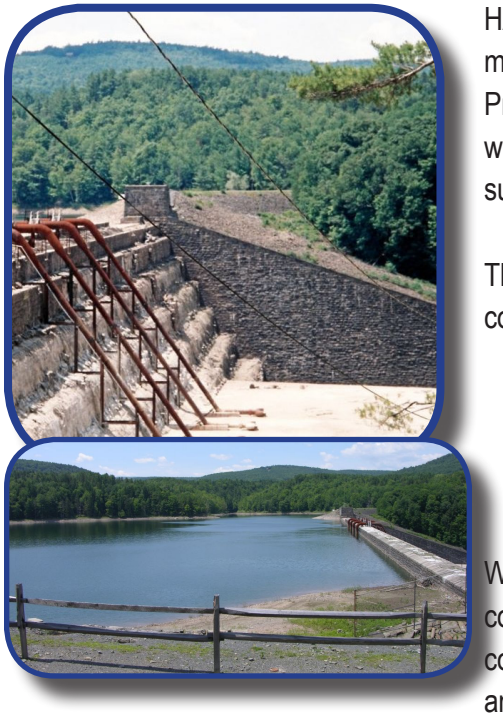
RWB Tunnel was constructed between 1937 and 1944 with a series of vertical shafts along the route. One of these, Shaft No. 6, is a dewatering shaft and contains the original pumping equipment. The shaft was last dewatered in 1957 for maintenance work and flooded again when the work ended 2 years later. The current contract provides for installing an updated pump station in the shaft to dewater the Delaware Aqueduct so that the tunnel repairs may be made, and for improved access to other shafts that are still maintained for ventilation and access, also to facilitate the future repair work.

Initial and follow up diving operations were completed in Shaft 6 to access the bottom of the shaft, inspect the existing mechanical and structural components and make measurements for new equipment and structural components to be installed. Divers utilized a diving bell and a saturation system to work under about 700 feet of water, the equivalent of 20 atmospheres. Divers worked in the shaft and lived in a special habitat at the surface that maintained these pressures. They carried helmet cameras that transmitted video images to the surface where inspectors monitored their work, captured and recorded the transmitted data and communicated with the divers.

FIRM NAME: New York State DEP
START & END DATE:
2010 - Ongoing
TOTAL COST: $239 Million
CLIENT CONTACT:
Pat Sheehan, P.E.
PHON [redacted]
EMAI [redacted]

FIRM EXPERIENCE

CONSTRUCTION MANAGEMENT SERVICES FOR GILBOA DAM RECONSTRUCTION, SCHOHARIE COUNTY, NY



HAKS is managing partner of the joint venture team providing construction management services for reconstructing Gilboa Dam in Schoharie County, NY. Project goals are to rehabilitate and permanently stabilize the facility, which fall within NYCDEP's commitment to maintain and improve the New York City water supply.

The $600 million project is being done under three component contracts that cover:

- Site preparation,
- General reconstruction,
- Intake improvements, to be done simultaneously with general reconstruction.

Work started in June 2009 and will be completed 8 years later. Among the major contract items are construction of an access road, utilities, outlet works, spillway control, side channel and stilling basin, dikes, dam embankment repairs, rock anchors, abutment stabilization and more.

On completion the project will provide:

- A new RCC outlet structure and tunnel to enhance the operation of the dam and allow for better flood control downstream.
- Stabilization of the west bank that reduces the potential for landslides.
- Rehabilitation of the spillway, side channel and stilling basin to mitigate future downstream erosion by dissipating the energy of water overflows.

For the duration of the project, our community liaison will regularly disseminate information on the project schedule, the work being performed and its impact on the community.

FIRM NAME: New York State DEP
START & END DATE:
2009 - Ongoing
TOTAL COST: $600 Million
CLIENT CONTACT:
Manny Madu, DPS
PHONE: [redacted]
EMAIL [redacted]

FIRM EXPERIENCE

EXPERT PROFESSIONAL SERVICES – PERFORMANCE OF CONSTRUCTION MANAGEMENT SERVICES FOR PROJECTS ON A "CALL-IN" BASIS DURING 2007, 2008, 2009

HAKS is providing Office Engineering, Construction Inspection and Fire Protection Engineering services to the Port Authority of New York and New Jersey on a "Call-In" basis, at the New Jersey and New York marine terminals, airports, tunnels and Operations Unit.

Some of the duties at the New Jersey Marine Terminals and the Hoboken South Waterfront Development involve Tenant Alteration Application (TAA) projects. Duties include monitoring all construction activities, daily contract paper work, auditing architects/engineers of record, special inspections, conducting preconstruction and monthly progress meetings, reviewing closeout packages, conducting and coordinating all life and safety testing and inspections before a Permit to Occupy or Use is issued. The major TAA project at present is the $100 million "W Hotel" on the Hoboken waterfront.

OE services are also provided for the construction management/general contracting services capital security program at Bayonne Bridge, George Washington Bridge, Newark, JFK and LaGuardia Airports, PATH, Journal Square, Teterboro, Holland Tunnel, and Lincoln Tunnel.

Individual construction contracts cover a wide range of site/facility construction as well as marine construction. We are providing Construction Inspectors to monitor pile installation, pile repairs, wrapping, jacking, relieving platforms rehabilitation, underwater and above-water pier repairs, bulkhead repairs and new construction, fender systems, buildings, digital video monitoring systems, paving, concrete, asphalt and other site work.

At the Port Authority Technical Center, HAKS' Fire Protection Engineers focus on maintaining a fire safe environment at Authority facilities for employees, tenants and patrons and on an effective HPR- (highly protected risk) based property loss prevention program. They conduct and witness annual and acceptance tests of fixed fire protection systems and equipment; review and comment on plans for fire code compliance, and participate in special technical investigations. Post-9/11 their assignment grew to include risk assessment for survivability of certain Authority structures in the event of another terrorist attack or other disaster.

For the Engineering Department/Quality Assurance Division/Construction Standards Unit, our fire protection engineering services include inspection and plan review at various facilities for Authority contract and Tenant Alteration projects. We are also involved in a new program of fire inspections at all Authority properties ("Post-Construction Inspections) under which initial fire protection inspections were conducted at Stewart International Airport in Newburgh, NY. Other Engineering Department assignments involve reviewing drawings for TAA and major Authority projects, which currently include the Freedom Tower, Towers 2, 3 and 4 and the Memorial at the World Trade Center site.

FIRM NAME: PANYNJ
START & END DATE:
2007 - 2009
COST: $5 Million (FEE ONLY)
CLIENT CONTACT:
William Kehoe, P.E.
PHONE: (212) 435 - 7000
EMAIL: wkehoe@panynj.gov

MANAGEMENT APPROACH

PROPOSED APPROACH

Ask any group of top decision makers to describe program management and you will hear many different answers—Program Management is:

- "hiring consultants as an extension of staff"
- "providing high level organization and management for a comprehensive long term effort"
- "filling technical goals when we cannot hire the talent"
- "bringing in personnel who can help us figure out and do the different types of work that needs to be done over several years"
- "having a team that can expand or contract with the expertise to respond to the program's changing needs.

This range of responses does not illustrate confusion about program management, but rather highlights how it works for individual clients with specific capital programs that must be completed. However, for many of these same clients for their next program management assignment the effort may be completely different. HAKS take a contemporary and responsive view of program management, developing program-specific teams to meet the unique needs of each client and project type. HAKS program management teams have significant variations in—size, areas of expertise, specific types of work, levels of authority and responsibility and the physical location of the team members.

Despite these client sensitive distinctions several common characteristics differentiate program management from other consulting services such as construction management or owner's representative. Program management teams develop decision making and communications structures that infuse accountability into the program's structure. Responsibilities and lines of authority are clear, facilitating higher quality and greater efficiency. Since most programs are multi-year engagements HAKS can develop strong and stable relationships and high levels of trust amongst all team members. Additionally, the program develops a level of integration with the client and consultant staffs to create synergy, efficiency and responsiveness.

TASK A. PROJECT INITIATION SERVICES

1. Develop and implement program/project management plans (to include project scope, schedule and budget) for projects consistent with the Agency's project management methodology to be defined as projects are identified.

The HAKS team will prepare a comprehensive Program/Project Management Plan (PMP) for the project. We recommend that the PMP be prepared in accordance with the FTA's "Project and Construction Management Guidelines. The PMP will contain comprehensive information to help control, direct, coordinate, and evaluate cost, time, and quality in the administration and contractual agreements relating to each aspect of the program. The plan will include a definition of the program, the individual projects, project objectives, work statements, organization, duties, staffing, and written procedures. The PMP will establish the rules and procedures for program and project administration, identify organizational and reporting relationships between responsible parties, and provide guidelines for orderly interaction. Finally, the PMP will define control mechanisms, decision-making processes, and systems for measuring.

MANAGEMENT APPROACH

Organization of the PMP as a roadmap to project information, organization, processes and procedures helps insure the longevity of the information. We have found that a short description of program elements with reference to the source documents is an efficient way to assure the latest revision of program elements is implemented. This also serves to facilitate maintenance of the documents and limits the need for updates.

The PMP will be placed under version control in the project's configuration management system. The plan will include a general overview of the project's purpose and need, clear milestones and deliverables, and proven project controls that will track performance against established baselines. The PMP outline below was recently used on a PMP for a similar program:

- Purpose
- Project Background and Description
- Organization and Staffing
- Safety and Security
- Project Management Controls
- Risk Management and Insurance
- Procurement
- Design Program
- Right of Way and Real Estate Acquisition
- Community Relations
- Construction Program
- Interagency Coordination and Third Party Agreements
- Claims Mitigation, Changes, and Conflict Resolution
- System Testing and Start up
- Quality Assurance and Quality Control
- Construction Safety and Health

The project PMP outline will be created to conform to FTA requirements and to fit the requirements of this unique project. The HAKS team recognizes the importance of timely and definitive decision making in keeping on-call projects on pace. We will include an element in the Organization and Staffing section of the PMP that describes decision rights and identifies the types of decisions that will need to be made. The PMP will assign the authority and responsibility for those decisions to the appropriate organizational element. This process will assure that decisions are made at the lowest appropriate level, and that they are enduring.

Procedures will be developed to define and control project management activities. Procedures will be developed in accordance with existing Authority Project Management guidelines. In recognition of the importance of maintaining project momentum, procedures will be designed for speed while maintaining control. Only process-essential tasks will be on the primary (critical) path. Control, audit, and failure tasks will be performed on a parallel path and will not lengthen the primary processing time. All procedures will be designed and analyzed to assure that they enhance rather than impede performance.

2. Provide business analysis services, as required to identify owner's project requirements and define/document project scope.

During the course of the program we will identify and discuss the fundamental principles and innovative techniques that are available to efficiently manage capital projects and programs. These techniques include but are not limited to: capital program management procedures, business case analysis components and methods, and cost-effective capital project execution methodologies. This methodology will also identify techniques for the planning and implementing capital projects and programs. Program development and management, as well as individual project implementation should be studied in accordance with the following management components:

Building a Program—identifies best practice fundamentals for ascertaining projects and assembling a prioritized program to meet the Authority's requirements, including the appropriate components of a business case for capital investments.

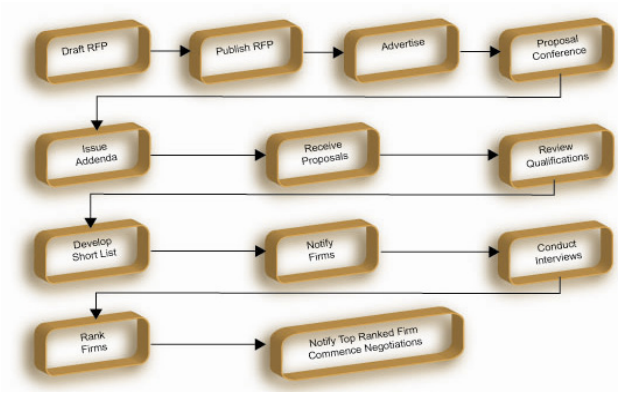
Implementing Projects—recommend best practice fundamentals for delivering individual and coordinated projects. Recommend innovative techniques for planning and implementing projects. Recommend and evaluate alternative delivery methods and consider the merits of each.

Managing a Program—identifies the best practice fundamentals for management and implementation of a program.

3. Coordinate project team alignment and team-building activities.

HAKS will strive to develop a partnering atmosphere with all stakeholders involved in the project. Communication is the key to this effort. Through this partnership we will work to develop project teams that are only focused on the project at hand and working cooperatively with each other. HAKS emphasizes and promotes the principles of partnering throughout the construction phase by implementing a formal process of feedback, evaluation, and improvement. We will organize, coordinate, and participate in partnering workshops with key representatives from the Authority, contractors, utility companies, and other key stakeholders, if required. Initial activities are critical so that the entire project team is brought together and establishes a cooperative approach to attaining project objectives.

4. Assist in the preparation of Requests for Proposals (RFP's) for the performance of expert professional architectural and engineering services. (It is important to note that any firm preparing such documents will be precluded from participating as a proposer in response to said RFP.)



One of the HAKS team's efforts will be to assist the Authority with the development of the necessary procurement documentation, i.e. Request for Qualifications (RFQ); Request for Proposals (RFP), addenda and the subsequent identification and selection for the "best qualified" architectural and/or engineering firms that will be required for the project. We will assist the Authority with identifying and preparing scopes of services, legal requirements; the scope of services will delineate the type, amount, and detail of work to be accomplished as well as interface and coordination requirements, length of services, and scheduling.

Develop the RFQ/RFP

- Define Scope of Services
- Define Contractual Terms
- Define RFQ/RFP Requirements
- Define Selection Criteria
  - Technical abilities and competencies
  - Prior experience with similar programs type, size, complexity
  - Size of firm and resources of team
  - M/WBE participation
  - References

Advertise, Communicate and Issue the RFQ/RFP

- Advertise – Scope, services and RFQ/RFP requirements
  - References
  - Newspaper – website – local industry associations
  - Vendor registration
- Define Procurement Milestones
- Establish method for submittal and responding to questions
- Issue required addenda
- Receive and Distribute Issue the RFQ/RFPs to the Selection Committee
- Confirm issuance of short list and interview dates

Evaluation and Award

- Conduct selection committee review
  - Evaluate on qualifications, not proposed fee
  - Carefully evaluate qualifications and references
  - Rank and develop the short list
- Publish short list and schedule interviews
  - Require project team members to be present
  - Get a feel for their style and best fit
  - Tabulate ranking and publish final recommendation
- Obtain authority to negotiate

Negotiations and Contract

- Start negotiations with No.1 ranked
  - If negotiations are not successful within a reasonable time, formally conclude and move on to the next ranked
- Refine scope of services with selected firm
  - Reconcile fees, scope, budget and schedule
- Keep the contract as direct and simple as possible
  - Consider using industry acceptable templates
  - Identify key PM staff and contacts
  - Protect the Authority's interests
- Execute the contract

5. Coordinate project related risk analysis and management activities.

The purpose of risk management is to identify threats to project success and to mitigate or eliminate negative impacts to the project. Analysis of the risks also identifies opportunities that should be pursued to provide additional benefit to the project or the organization as a whole. The scope of risks to be considered includes technical, management, solicitation and contracting, performance, budget, resources, political, natural disasters, security, etc. Not all risks can be eliminated, but mitigation and contingency plans can be developed to lessen their impact if they occur. Risk management is an integral part of program management on any project. Risk management processes are utilized from project initiation through development, maintenance and operations, and end only when the project/system is shutdown or retired.

MANAGEMENT APPROACH

Risk is the combination of likelihood and magnitude of undesirable outcomes; the corollary to risk is opportunity, which is the combination of likelihood and magnitude of desirable outcomes. The HAKS team will develop a systematic process to manage such risks and opportunities, hereafter collectively termed risks and discussed in risk terms (although opportunities are also implied). Our approach to developing a systematic risk management process for the project and its component projects is to identify, characterize, evaluate, and manage risks in each stage of design, construction, and operation. Our approach to managing risk essentially involves addressing the following five basic questions.

What Could Go Wrong?

Things that could go wrong may be defined in terms of various scenarios. Major causes of things going wrong include for example significant deviations from assumed baseline conditions, equipment failure/malfunction, operator error that causes an accident, and the occurrence of extreme events ("hazards") not considered in the design/planning stages. It is important to identify a relatively comprehensive and non-overlapping set of such potential problems. Typically we do this in a structured way through facilitated interviews / workshops, after first establishing the relevant project performance measures and the process for completing the project (planning, construction and subsequent operation). Typical performance measures include worker and public safety, environmental impact, property damage to existing facilities, and impact to program cost and schedule.

How Badly Can it Go Wrong?

The magnitude of the consequences (vis-à-vis the performance measures) if the problem occurs defines that problem's severity. These consequences may be uncertain, ranging from minor to catastrophic. We assess these "conditional" consequences (including significant uncertainties) for each potential problem in a structured way through facilitated interviews / workshops, based on data and expert opinion, correcting for any assessment biases. It will be necessary to recognize and appropriately consider possible dependencies among outcomes, either among different types of outcomes for one problem or among different problems.

What Are the Chances of it Going Wrong?

The likelihood of each potential problem, as defined by its severity, will also be assessed in a structured way through facilitated interviews/workshops, based on data and expert opinion, correcting for any assessment biases. Obviously, the likelihood of more severe events is typically less than for less severe events. Again, it will be necessary to recognize and appropriately consider possible dependencies among the occurrences of different problems.

How Significant Are the Risks?

The significance of the various potential problems can be evaluated in terms of their "expected value" outcome or the product of the likelihood of the problem occurrence and the expected value of consequences if it does occur. For example, potential problems that are unlikely to occur and only have minor consequences if they do occur are clearly insignificant, whereas potential problems that are likely to occur and have major consequences if they do occur are significant. When

different types of outcomes are considered, then "tradeoffs" among those various outcomes must be established in order to combine them into a single measure. Such tradeoffs are policy rather than technical issues and must be established by management, for example by facilitated interviews / workshops. The potential problems can be categorized and ranked in terms of their expected values. For planning and budgeting purposes, probability distributions can also be developed to display the uncertainty in various project performance measures (e.g., program schedule and costs) due to all potential problems.

What Should We Do About the Risks?

Risks can be reduced, generally at some cost, in various ways, which can be categorized as some combination of the following:

Prevention: Reduce the probability of a potential problem occurring. Examples: additional geotechnical investigations regarding subsurface conditions (to reduce the chance of surprises), increased margin of design safety (to reduce the chance of failure), use of more reliable equipment (to reduce the chance of breakdowns), and expanded personnel training (to reduce operator errors).

Mitigation: Reduce the severity of consequences of a problem if it does occur. Examples: improved emergency response planning (to reduce health impacts), additional protection to existing facilities (to reduce vulnerability to subsidence), and buying additional insurance (to transfer the risk to another party).

The cost effectiveness of each feasible risk reduction option (including no action) can be assessed and used to objectively determine which option should be adopted. The cost of implementing each measure, and its impacts on risk (reducing the likelihood and/or consequences of particular potential problems) if it is implemented, will be assessed in a structured way through facilitated interviews / workshops, based on data and expert opinion, correcting for any assessment biases. It will be necessary to recognize and consider how combinations of risk reduction measures will perform, e.g., typically two measures that address the same risk will not have the same benefit as the sum of the benefits of either acting alone. For planning and budgetary purposes, the residual risks (for a particular risk reduction program) can be assessed in the same way as before. In order to facilitate the risk management process, a Risk Register will be developed and maintained throughout the project. The Risk Register will:

- Document the various risks (i.e., the potential problem) and keep the risk characteristics (i.e., likelihood and consequences of occurrence) up-to-date, based on current information (including the results of risk reduction activities)
- Present a current evaluation of the significance of each potential problem and the associated ranking of each potential problem
- Present plans for managing each risk (which may be simply acceptance for relatively insignificant risks) and the current status of those plans
- Present a current prioritization of all remaining risk management activities (based on the significance of the risks they address and how well they address them).

Risk Identification

HAKS will hold structured, facilitated workshops periodically throughout the project (typically at key design and construction milestones) in which risks will be identified and quantified. Optionally, probability distributions for ultimate project cost and schedule, as well as other performance measures, can be developed. The results of these workshops will be documented in a Risk Register, and will generate prioritized risk lists.

Risk Management Plan

A risk management plan will be developed, consistent with the approach described in this proposal, defining roles and responsibilities and a detailed procedure for identifying and managing project risks.

Risk Mitigation

Risk mitigation strategies will be developed to address each of the most significant risks identified. HAKS will document these strategies in the Risk Register and regularly monitor and report on progress implementing these strategies.

6. Prepare presentations, documents and conduct presentation.

HAKS will prepare presentations and documents and conduct presentations to assist the Authority with Project Initiation services for this assignment.

TASK B. PROJECT IMPLEMENTATION SERVICES

1. Manage the implementation of the project management plans and the work performed by all of the program and/or project members.

One of the crucial lessons HAKS has learned in starting up major programs is that the first months are the most critical time-frame for maximizing program success. During this period, all of the management procedures and systems must be put in place to establish a design and construction process that runs smoothly. It is also during this time that the master program schedule will be finalized, and estimates and budgets are validated. HAKS will manage the implementation of its project management plan so that it is used as an effective tool to help guide the program. HAKS will coordinate and monitor the work performed by all its team members and that the work is performed in accordance with the drawings, specifications and contract documents.

2. Conduct meetings (including project kick-off and progress meetings) with the project team, record all minutes, distribute for review and revise as necessary.

In order to enhance communications among the project team members we will, during the course of the project, schedule regular meetings to review progress and to report on the estimated cost status of the project. We will prepare agendas and minutes of these meetings. We will highlight areas where information is lacking and advise on the completeness of the information received to date. Meetings will be held weekly. Project progress meetings will continue throughout the duration of the project, so that all parties will be informed of job progress costs issues, information missing and decisions required.

3. Manage preparation of study reports, construction cost estimates and preliminary and final contract documents.

HAKS will manage and prepare various reports, estimates and preliminary and final contract documents for this contract. We will review the preliminary planning cost estimates and the basis for any assumptions that were utilized in the preparation of those estimates. We will then proceed with developing an independent estimate, comparing it to previous estimates, reconciling any variations. This effort will then be reviewed with the Authority, with the outcome being a validated cost estimate that will be the basis for the formal program and project budgets.

4. Establish, through meetings with facility personnel, staging restrictions/requirements based upon operational and maintenance constraints.

Construction planning must take place on several levels: the program level by the program manager and the project level by designers and contractors. Development of a construction-phasing/staging plan is the primary element in the overall construction planning effort. This plan will be developed interactively with the master schedule and will be based on the concept of vertical and horizontal area zoning. Through this method, we have been successful in identifying, early in the planning stages, potential conflicts between program elements. From day one we will have a prototype construction plan that will enable us to proceed with gathering information for preparation for the implementation of your program. The construction phasing/staging and logistics plan must be frequently updated during the course of the program. We will hold frequent coordination information exchange meetings with team participants in which all parties will provide updated information, express concerns, and suggest viable alternatives to resolve sequencing and scheduling issues before they become major problems affecting program completion.

5. Review studies, preliminary designs and contract documents for conformance to approved scope and budget.

HAKS will gather all of the previously prepared documentation associated with the program, review the planning basis for the execution of the program, and assess whether any adjustments may be warranted. A resource library will be created in which these and other critical documents will be stored. The outcome of this review will be presented to the Authority's staff for input and concurrence relative to any possible changes that will benefit the program's goals.

6. Prepare project documentation, correspondence and maintain project file.

The establishment of a proficient record keeping system for any project is essential to the proper management of the project. Current information must be easily retrieved and documented to support all project activities, decisions and actions must be developed. This will be accomplished through the Information Management System and the utilization of a computerized Document Tracking and Retrieval System which will provide document control.

This information will be automatically stored in electronic file repositories located in either the minicomputer or the remote servers, with daily automated tape back-up which will prevent the information from being unintentionally lost.

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The project records will be maintained through a document imaging system which will enable the project team members to access, retrieve, and display and output documents from a variety of sources including archives, current files or special work in process databases. Every document stored in the system can be listed and selected for retrieval within the security parameters established for the users. The retrieval system will provide for optical reading, distributed printing or facsimile importation with seamless integration with the other LAN based applications and utilities on the project. Project records will include, but will not be limited to:

- Correspondence
- Contracts
- Contract Documents
- Estimates
- Budgets
- Change Orders
- Subcontracting Plan
- Surveys
- Special Studies
- Directives
- General Ledger Accounts
- Anticipated Cost Reports
- Procedures Manual
- Safety Manual
- Phasing Plans
- Logistics Plans
- Constructability Reviews
- Maintainability Reviews
- Operability Reviews
- Value Engineering Reports
- Shop Drawings & Samples
- Market Analyses
- Contract Document Control Logs
- Shop Drawing Control Log
- Change Order Control Log
- Procurement Status Reports
- Daily Reports
- EEO Reports
- Compliance Inspection Reports
- Test Reports
- Safety Reports
- Non Conformance Reports
- Progress Reports
- Progress Payment Requests
- Payrolls
- Claim Case Files
- Punch Lists
- Meeting Minutes

7. Coordinate bidding and award of construction contracts including:

- recommending procurement options
- coordinating preparation of Addenda, as required
- evaluating bids
- preparing award authorization documents and briefing materials for executive staff

ELECTRONIC PUNCHLIST

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The HAKS team will receive and analyze the bids. We will analyze the scope of work, exclusion and qualifications that may be listed and conduct meetings with each contractor to assure scope compliance and knowledge of the job and obtain the contractor's commitment to complete the project on time. During the evaluation process, we will provide the Authority with current pricing information, trade contractor proposals, unit and alternate price lists, and the status of contractor negotiations. Pre-award comparison sheets will analyze the following:

- Completeness of scope
- Adherence to the overall schedule of the project
- Elimination of ambiguities in defining the bid package, and clarification of confusing areas
- Base and unit pricing
- Acceptability of any proposed alternates and how these should be structured
- Compliance with financial requirements of both the project and the proposed construction
- Negotiation with bidders to verify that all involved parties have a complete and thorough understanding of their performance, quality and financial responsibilities

8. Coordinate and monitor shop drawing review process and respond to contractor's Request for Information (RFI's).

HAKS will establish and implement procedures and coordinate and review shop drawing submittals, Requests for Information, samples, product data, change orders, payment requests, material delivery dates and other procedures; and maintain logs, files and other necessary documentation. We will log in all submittals with the date received, the number of copies received, distribution list, the return date from reviewers, and the status (such as approved, approved with comments, resubmit, or rejected). The appropriate design consultant will have the responsibility for approval.

We will expedite any question raised by the contractor in connection with the contract drawings, maintaining continuous communication, and acting as liaison with the contractor, architects/engineers, and the Authority. Our work will coordinate, expedite, and distribute the preparation of composite and/or coordination drawings by others and resolve disputes, inconsistencies or conflict among various trades performing the work. As per the construction documents provided, we will coordinate and direct information to the architects/engineers when unexpected field conditions are encountered. We will assist the architects/engineers with technical clarification as needed and issuing construction change directives, change orders, etc. We will review and approve CPM schedules, staging plans, erection plans, and related project matters.

An aggressive submittal program for this project will be an important part of the success of each project. HAKS recognizes the significance that the submittal process can have on the overall project. Its importance to the contractor, design team, owner and construction manager has been clearly demonstrated on other projects. The submittal process invariably is identified by more than one party as a top issue of concern.

Most project management software allows the creation of a submittal log with relative ease. We intend to take advantage of an electronic process to create the most efficient submittal process possible. In it, submittals and submittal packages can be added as needed. HAKS will be thoroughly familiar with the Authority's contract documents as they relate to submittals. They will be reviewed against the plans and specifications and any corrections will be recorded and reported appropriately. A submittal schedule will be incorporated into the Master Schedule so that all design professionals can predict when submittal reviews will be required and therefore any periods of high volume can be mitigated in advance. The submittal log will be established during the start-up phase of the project. All submittals and shop drawings will be reviewed by HAKS prior to being transmitted to the design team and will bear a written statement by HAKS that the submittals and shop drawings are consistent with the Contract Documents. Any submittals or shop drawings submitted without this approval will be returned. Additionally, HAKS proposes that a weekly meeting occur to work through all critical submittals so that they are resolved by the meeting's end.

HAKS will include with each submittal and shop drawing, a letter indicating all deviations from the design team's drawings and specifications. It will be HAKS's obligation and responsibility to check all of its submittals and shop drawings and to be fully responsible for them and for coordination with connecting work. By reviewing or transmitting submittals and/or shop drawings, HAKS represents that it has determined and verified material and product availability, field measurements, field construction criteria, catalog numbers and similar data, or will do so, and that it has checked and coordinated each submittal and/or shop drawing with the requirements of the work and of the Construction Documents. If any specified material item or part is not available, HAKS will so indicate to the design team. The design team will review and approve submittals and shop drawings and return them to HAKS within a previously agreed to timeframe. If the review and approval are delayed beyond the agreed to timeframe, the design team will notify HAKS and the Authority in writing stating the reason for the delay.

If the design team returns a submittal or shop drawing to HAKS with the notation "rejected", "revise and retransmit", or "approved as noted", HAKS so as not to delay the work, will promptly transmit a submittal or shop drawing conforming to the requirements of the Construction Documents and indicating in writing on the submittal or shop drawing and on the transmittal what portions have been altered to meet with the approval of the design team. Any other differences between the resubmittal and the prior submittal will also be indicated on the shop drawing and on the resubmittal as a special note.

Fabrication of work will not commence until HAKS has received written approval. HAKS will furnish prints of approved submittals and shop drawings to all the contractors whose work is in any way related to the work. It should be emphasized that it is everyone's responsibility to review each and every submittal for conformance to the contract design documents. The contractor must provide a quality submittal or it should be immediately returned indicating that any further delay may result in a delay of schedule. The Construction Manager should provide a thorough review of each submittal color coding their comments on the submittal so the design team knows that this process is a team effort. The design team should also color code their comments and return the submittal within the agreed upon maximum time which should never exceed a ten working day period. This team effort will provide the contractor with a coordinated effort that will expedite the final completion of the submittal, and in turn, maintain the schedule.

9. Coordinate preparation of Post Award Contract Changes (PACC's).

Contract changes that occur during construction are inevitable. These changes may be caused by a variety of factors such as design changes, additional work elements, or field changes due to unforeseen site conditions, encountering

previously unidentified utility conflicts and/or hazardous materials. Our approach to managing the schedule and the changes and avoiding impacts to the project budget involves close cooperation with the Authority and application of the following elements:

Early notification and communication. Continuous communication between the Authority and HAKS enables pending changes and unforeseen conditions to be known immediately by all parties allowing for the resolution and mitigation process to begin expeditiously.

Cooperative planning. Contract changes must be addressed in the spirit of partnering. The Authority and HAKS will work cohesively to determine the best method of implementing contract changes to minimize project costs.

Reviewing for potential design changes that minimize project impacts. Often, changes associated with encountering unforeseen site conditions can be mitigated or eliminated through design modifications. HAKS will examine potential change situations for this opportunity.

Schedule accommodation. Each change will be assessed for schedule impact and provisions will be made to accommodate the change within the original project schedule, if at all possible.

Fair and open negotiations. A successful partnering relationship will enable the Authority to negotiate contract changes fairly and openly. We are committed to providing the Authority with all documentation required to evaluate change pricing.

Additionally, if the Authority uses a change control database to manage the paperwork and the approval process of contract changes, we would expect to adopt this same system. If not, we will propose a system that utilizes a database application for data management, process control and reporting. We would also strongly recommend the use of a Change Control Board (CCB) in the event that the number and magnitude of contract changes becomes significant. A by-product of the change control process is documentation of any changes to scope, time or cost. We will implement a process designed to communicate these changes to all affected parties and to trigger the modification of current configuration data (drawings, specifications, data systems) in a controlled manner such that the most current information is available to all parties at all times.

10. Attend construction progress meetings and coordinate facility force account work, as required.

HAKS will conduct and document weekly project meetings with the contractors, subcontractors and the Authority. These meetings will typically cover such items as submittals, progress of work, scheduling milestones, critical issues, nonconforming work, safety, material and equipment testing, and start-up. We will consecutively number the weekly minutes, thereby providing a tracking device for outstanding items. Responsibilities and deadlines will be established for completing these items. Monitoring and follow-up will occur at subsequent meetings, ensuring a rapid response to each item. HAKS will prepare and distribute detailed meeting minutes to all meeting attendees.

Force Account

In order to efficiently and effectively plan and coordinate force account work elements the schedule must accurately depict those work elements that will be supported (flagging or other protection) and/or performed directly by the Authority force account labor. HAKS experience working for many local railroads and transit agencies in this region provides a working knowledge of force account operations and a keen understanding of work elements that would normally and customarily be performed by railroad force account labor. To ascertain an accurate understanding of current labor agreements and standard practices. We will closely coordinate with the Authority's craft labor disciplines to review current labor agreements and standard practices as well as to gain an in-depth understanding of all contractual elements such as overtime, headquarter requirements, per diem requirements, hours of service requirements, etc. As force account construction scopes are defined, we will work closely with the Authority to proactively develop typical craft labor crew compositions, establish standard crew sizes, costs and production rates and formulate a Crew Cost Library necessary for resource planning. We will use the Crew Cost Library to assure the consistent application of standard and typical crew consists for each force account labor element by discipline for integration into the schedule. Railroad resource projections by trade/craft discipline will be identified by the Authority confirming whether it can readily support the projected force account workload in conjunction with other capital construction commitments, and if not, for developing alternate force account negotiations and/or agreements.

HAKS will proactively work with the Authority's management personnel to monitor that unions provide formal labor clearances for all work scopes to be performed by railroad force account personnel. During the development of contract documents, language will be introduced into the contract that identifies the responsibility for coordinating force account activities with the contractor, and require the inclusion of force account activities within the contractor's CPM schedule. To assure efficient force account integration, HAKS will proactively assist the various contractors with coordination of all force account operations. Weekly coordination meetings will be held with the contractor(s), the Authority project representatives for reviewing work scopes, constraints on activities and the overall schedule to avert impacts to critical activities. A clear understanding of force account activities will give contractors a comfort level during bidding, which will ultimately reduce costs.

Constraints to the construction process must be clearly identified within contract documents. Windows for allowable work periods will be limited and of minimal duration.

TASK C. PROJECT MONITORING AND REPORTING SERVICES

1. Monitor and report on the actual consultant/contractor/staff performance, comparing the approved management plan versus the recommended corrective action, when required.

HAKS will monitor and report on consultant, contractor and staff performance and will make recommendations for corrective action when it observes a deficiency.

2. Update and review monthly actual and forecasted project costs and schedule(s) on an earned value basis in a manner consistent with the Authority's project management methodology.

This task will define the linkage between project costs and schedule and the financial plan. We will track these linkages to highlight specific problems in time to take corrective action. Success in satisfying this plan will depend on a project that remains within budget, on schedule, and meets the specific requirements for individual financial components. It is also important to track likely receipts and forecasts for any dedicated taxes and funds that may be used to support the project.

Any shortfall in any individual item may place the overall program at risk. We will define the linkages among each element at the beginning—a "logic diagram" that shows the connections between the project itself and individual sources of funds. Once the linkages are defined, we will track them and identify any potential shortcomings in time to make adjustments—we will also identify additional potential sources of funding.

A key part of this effort will be to provide regular and systematic reports on the specific risks to the financial plan. These reports will vary in time and level of detail based on the degree to which any problems have been identified. They will begin with quarterly reports that cover all dimensions of the financial plan equally and then shift emphasis as needed.

The HAKS team recognizes the importance of its responsibility to provide up to date and accurate information condensed into timely financial reports. Our experience has shown us that using the schedule in conjunction with the project budget and the change management tracking system we can provide the most accurate forecasting for the project. By assigning budgeted cost values to the individual schedule activities, we forecast the anticipated installed value of the project across the duration of the construction effort. This "cash flow" projection will be utilized not only to plan anticipated expenditures, but by evaluation of the overall project requirements, certain components of the work may be deferrable until later in the project, without impact to the overall completion schedule. With this information available, we can then provide accurate and timely information on reports that can be utilized for:

- Budget controls
- Cash flow management
- Payment verification
- Construction schedule and sequence control
- Control of trade contractor submissions
- Anticipated Cost Control

Anticipated Cost reports will be prepared on a trade by trade basis that documents the Original Budget information, budget adjustments and the amount of the adjusted budget, Committed Contract Costs, Change Orders, Adjusted Contracted Amount, the value of Work Completed, forecast of the cost to complete the work, the percentage of completed work and the variance of the anticipated cost to complete the work from the adjusted budget amount.

The Anticipated Cost Report is presented in complete detail which lists each contract and each change order. A summary sheet accompanies the Anticipated Cost Report to provide for Executive Overview of the Financial Status of the Project. The Anticipated Cost report is kept current on a continuous basis as entries are made daily.

The HAKS team understands that cost tracking and forecasting are critical to the success of any project.

3. Monitor progress of construction, including review of actual and forecasted construction in place (CIP) and schedule versus authorized contract budget and schedule.

Our management staff will continuously monitor each contractor's performance to ensure all contractors perform per the dictates of the technical and commercial provisions of their contracts. Deviations from contract requirements will be immediately identified and rapidly resolved and protracted breaches of contract requirements will not be tolerated. HAKS will review construction progress, based on progress and a previously agreed to schedule of values. We will also maintain accounting records in accordance with the Authority procedures and prepare monthly reports detailing budgets, committed costs, and anticipated costs to complete, and program cash flow reports.

4. Prepare monthly status reports addressing accomplishments, issues, and schedule and budget status, including corrective actions, if required.

The HAKS team will produce reports at various levels of detail to provide an organized and timely basis for directing the project. A monthly executive summary, focusing on schedule, cost status, proposed changes, and problem areas for each project will be provided. This report will address as a minimum:

- Overall project status
- Areas of concern and corrective measures
- Analysis of any actual or potential schedule slippage
- Change Orders
- A list of potential claims and mitigation strategies
- A report of actual versus planned construction expenditures.

5. Evaluate design consultant invoices for earned value and recommend payment.

The HAKS team will review and approve design consultant's schedule of values for each of the activities included in their schedule of events. The HAKS team will develop and maintain a master schedule of values and will develop and implement procedures for the review and processing of applications by design consultant(s) for progress and final payments. The HAKS team will review then and make recommendations to the Authority pertaining to design consultant payments.

6. Evaluate impact of changes on approved scope, schedule and budget and obtain approval for the change.

HAKS will explicitly execute the Authority's procedure for change orders including defining responsibilities and authorities for contract price and/or time modifications. In support of these procedures we will implement timely, efficient and effective means of recording, tracking, and reporting change orders. Actively identifying, managing and mitigating change is the essence of a successful program/project manager. We take advantage of its depth and breadth of our construction experience to anticipate and identify potential changes so that the program/project management staff can aid in averting potential cost or time impacts. Each potential or proposed change is thoroughly investigated and evaluated to determine any potential undisclosed issues that could affect a timely, cost and time efficient, resolution, and to determine if alternate resolutions are available. We will perform these duties in a way that is auditable, verifiable, and transparent to the Authority. From the moment a proposed change is identified HAKS will be fact finders, prepare the preliminary estimate, and perform a preliminary schedule impact analysis. During these steps we will also evaluate the merit and contractual validity, perform labor productivity, material, and equipment comparisons, assess constructability, and evaluates life-cycle-costs so that related potential cost or time impacts can be assessed in the context of the project. HAKS will prepare recommendations for each Proposed Contract Modification and, in cooperation with the Authority, aid in negotiations with the contractor(s). We will appropriately group approved PC's into packages for final approval by the Authority. HAKS approach to change management mirrors the Authority's procedures with the added advantage of including the proactive approach to anticipating potential changes, identifying roadblocks to resolution, and early identification of alternate solutions to minimize project cost or schedule impacts. This enhanced approach will empower the Authority to make sound, informed, cost effective, and timely business decisions at each step of the process.

7. Schedule and organize briefings for executive staff on status of projects, as required.

In order to enhance communications among the project team members we will, during the course of the project, organize and schedule regular briefings for the executive staff to review the status and progress of the projects. We will prepare agendas and minutes of these meetings and we will highlight areas where information is lacking and advise on the

completeness of the information received to date. Briefings will continue throughout the duration of the project so that all parties will be informed of job progress, schedule, costs and decisions required.

TASK D. PROGRAM LEVEL MANAGEMENT SERVICES

1. Assist Authority staff in the scheduling and implementation of selected programs and/or group of projects including coordinating and managing the activities of subordinate Project Managers.

HAKS understands that the Authority continues to strive for an aggressive and ambitious schedule for completion of the projects within this program. We are fully prepared to integrate the various projects into one functional master schedule. We will work efficiently with the Authority to evaluate and develop a project/program control system that utilizes best practices, lessons learned and proven technology to best fit the needs of this program. We believe that schedule component of the overall system is the backbone for the program and the tool that allows the team to drive it to successful completion.

We will review what has already been developed by the Authority and quickly enhance it appropriately for overall system integration. Our approach will be in full coordination with the Authority to ensure consensus with all parties involved for the tools, methodology, reporting requirements and other factors. We are well-versed in the most current schedule software and will suggest the full integration of Primavera's Enterprise Suite for schedule, cost and document control. We will utilize the schedule for:

- Improving Efficiency—by coordinating activity on the project site to verify that the proper work sequence is observed, while maximizing the activities being accomplished in all available areas.
- Logistics Planning—by assigning both manpower and material values to all scheduled activities, we will forecast manpower loading levels, material storage and staging area requirements throughout the duration of the project, and establish an appropriate plan to manage the workforce on the project site.
- Financial Planning—by assigning budgeted cost values to the individual schedule activities, we forecast the anticipated installed value of the project across the duration of the construction effort. This "cash flow" projection will be utilized not only to plan anticipated expenditures, but by evaluation of the overall project requirements, certain components of the work may be deferrable until later in the project, without impact on the overall completion schedule. The cash flow will form the basis of other analyses.
- Progress Monitoring & Contingency Plan—by continuous monitoring of the actual progress of the project against the planned schedule, variances is identified early when corrective action can be implemented. Where especially aggressive approaches are planned in the project schedule, back-up or contingency plans and schedules will be prepared for implementation, if required. The schedule will be developed as an all inclusive document which addresses the activities of all the members and participants involved in the program. It is not solely a construction schedule but rather an integrated network of responsibilities and actions required to fully achieve the program requirements through all phases. The design team(s) will establish the activities, durations and interrelated logic required for design preparation, evaluation of alternatives, obtaining approvals and development of the final drawings. These network components will be evaluated and compared to the time parameters established when setting the objectives program-wide.

2. Establish annual and/or program level resources requirements.

HAKS will establish annual and/or program resource requirements for the duration of the program based upon the Authority's capital plan.

3. Ensure that selected projects and/or programs are staffed and started as planned.

The HAKS team will maintain a competent full-time staff at each project site for the purpose of coordinating and providing general direction for the work and progress of the contractors. We will observe that the materials and equipment being incorporated into the work are handled, stored and installed properly and adequately and are in compliance with the contract documents for each project. The HAKS team will report to the Authority regarding the status of such activity. We will endeavor to guard against defects and deficiencies and will advise the Authority of any deviations, defects or deficiencies the HAKS observes in the work. HAKS observation duties will include reasonable diligence to discover work that is not in compliance with the contract documents. We will review contractor's recommendations for corrective action on observed nonconforming work. The HAKS team will make recommendations to the Authority in instances where we observe work that, in our opinion, is defective or not in conformance with the contract documents. The HAKS team will observe the contractor's work to verify that all authorized changes are properly incorporated in the project and we will report to the Authority regarding the status of such activity and provide a written record of the same. The HAKS team will keep a daily log containing a record of weather, the contractors working on the site, number of workers, work accomplished, problems encountered, and other relevant data or such additional data as the Authority may require.

4. Update program level schedules.

The HAKS team will develop and implement the Master Schedule and will regularly update and maintain the Master Schedule incorporating the activities of contractors on each project, including activity sequences and durations, allocation of labor and materials, processing of shop drawings, product data and samples, and delivery of products requiring long lead time procurement. The Master Schedule will include the Authority's occupancy requirements showing portions of a project having occupancy priority. The HAKS team will update, reissue and distribute the Master Schedule as required to show current conditions and revisions required by the actual experience. We will prepare and distribute the updates to the Master Schedule on a monthly basis to maintain the Master Schedule. After an evaluation of the actual progress as observed by the HAKS team, scheduled activities will be assigned percentage-complete values. The report will reflect actual progress as compared to scheduled progress and note any variances. We will identify problems encountered in accomplishing the work and recommend appropriate action to the Authority to resolve these problems with a minimum effect on the timely completion of the program.

5. Evaluate and recommend appropriate M/WBE sub-contractor goals.

The Authority requires an M/WBE participation program to encourage, promote, and advance the growth of minority and woman-owned businesses, ensuring a vital and thriving business community for the future. Its program is dynamic and comprehensive. HAKS will attempt to maximize participation through all phases of the project. We have an established, successful practice of partnering with our clients, the local community, and allied professionals to implement creative M/WBE programs and establish technology transfer initiatives. HAKS will bring an innovative, proactive approach and experience leveraging community skills and resources to maximize the participation of M/WBEs through all phases of the program.

TASK E. PROGRAM MANAGEMENT SERVICES

1. Provide ancillary program management support services.

The HAKS team understands that our program management role on the Authority project will be to solely represent the needs and interests of the Authority by acting as your representative through all stages of the project. Our expertise and creativity will allow us to monitor the program's adherence to schedule, cost and quality. The skills of our team will enable

us to anticipate the many technical, logistical and administrative issues the project will pose and to develop and assess alternative solutions to address those issues creatively and effectively. The HAKS team brings not only the technical expertise necessary to provide Program Management Services but also a thorough knowledge and familiarity providing ancillary program management support services.

2. Coordinate biddability and/or constructability reviews with the Authority's in-house or externally retained technical staff.

The HAKS team will perform constructability reviews, operational analyses, value engineering reviews, and design reviews geared to minimize costs and ultimately develop construction documents that avert adverse impacts to the Authority. Constraints to the construction process must be clearly identified within contract documents. Additionally, designs must be developed in a manner that permits construction operations to proceed within those constraints.

The HAKS team will mobilize immediately upon receipt of NTP and focus on a thorough review of the project documents prepared to-date for constructability, maintainability and claims avoidance. The Construction Industry Institute (CII) defines constructability as "the optimum use of construction knowledge and experience in planning, design, and procurement and field operations to achieve the overall project objectives." The basis of this concept is that experienced construction personnel need to be involved with the project from the earliest stages to check that the construction focus and their experience can properly influence the owners, planners, and designer, as well as material suppliers. Constructability input is intended to supplement and enhance the design effort to check the final design is the most complete, cost-effective and constructible product possible.

The HAKS team's goal is to produce high-quality, cost-effective design documents that can be reasonably constructed in the field without unnecessary cost or project delays, and without sacrificing quality. We will develop a partnering atmosphere with the design team, the Authority and all other players involved in the project. Communication is the key to this effort. Through this partnership we will work with the design team to develop clearly defined constructible documents. Reviews will be performed by a team of individuals with extensive field experience, as well as a clear understanding of the project's goals, the constraints of the project site, and the concerns of the surrounding communities and the various regulatory agencies involved in the project.

The HAKS team will advise the Authority on a variety of issues, such as construction feasibility and practicality, selection and availability of materials, availability of required labor, time requirements for procurement and construction activities, construction procedures, selection of systems and components, site use and claims avoidance. These reviews will include an assessment of drawings, specifications and engineering calculations that enable us to provide advice on construction methods, materials and equipment requirements and availability, subcontractor availability, cost schedule, claims avoidance and safety. Constructability reviews will assess how each project can be built economically within given site constraints and market conditions in addition to ensuring efficient contract sequencing and the preparation of biddable construction packages. This will be particularly important when complicated staging and phasing of construction is required. Since most construction claims emerge from incomplete, ambiguous or unworkable contract documents, early constructability reviews and technical coordination help to clarify ambiguities, and help protect the Authority's interests.

3. Maintain records for and preparation of Record Drawings.

We will use our computerized document control system to manage the design, procurement, and construction activities of the project. All drawings, documents, correspondence, reports, and invoices produced or received will be identified according to an established index. Each document received will be date-stamped and logged. The document control system will store and protect the following documents:

- RFI logs
- Change order logs
- Document (general contract correspondence) log
- Directive or bulletin log
- Inspector's daily diary
- Inspection reports
- Meeting minutes
- Noncompliance notice log
- Progress payment (verification)
- Punchlist

The Office Engineer will be responsible for maintaining the project correspondence files in accordance with the Uniform Filling System and other approved document control procedures. This procedure provides for the assignment of documents to locations in the document management system, retention periods, and the retention period for each document. Project files are subject to audit for compliance with procedures by Quality Assurance surveillance.

4. Provide support services for the following:

- Updating of the Agency's project management manual of standards and procedures including development of new modules and/or procedures, as requested.
- Document control including, tracking and expediting shop drawing process through the use of Oracle's Primavera Contract Manager software currently used by the Authority.
- Coordinate project control functions through the use of Oracle's Primavera project portfolio management software currently used by the Authority and as assisted by the PMO's Project Control staff.
- Prepare technical presentations and assist in responding to inquiries from outside entities and the public, as requested.

HAKS will provide all necessary support services to the Authority as required. We will:

- Update the Authority project management manual of standards and procedures and will develop new modules and/or procedures as requested.
- Use the Authority's current software, Oracle's Primavera Contract Manager, for document control and tracking and expediting the shop drawing process.
- Use the Authority's current software Oracle's Primavera project portfolio management software to coordinate the project control functions on this assignment
- Prepare technical presentations and assist in responding to inquiries from outside entities and the public, as requested.

5. Provide Project Management training/workshop sessions, as requested.

HAKS will provide project management training workshop sessions as requested. For the New York City Department of Environmental Protection (NYCDEP) HAKS has established a series of in-house training sessions for our construction management and resident engineering professionals, to gain increased familiarity with NYCDEP operations, procedures, protocols and culture in order to be sensitive to and knowledgeable about the Agency's goals and establishing a partnership with NYCDEP's staff. The sessions are coordinated by Farhan Syed, P.E. under the auspices of Jeffrey

MANAGEMENT APPROACH

Terzakis, Senior Vice President of Construction Management. Seminar topics include improving contract management techniques, regulatory changes and new agency standard operating procedures, water conservation approaches, critical path method (CPM) scheduling, new change order protocols and health and safety procedures. HAKS obtains credit for Professional Development Hours in conducting these sessions for attending licensed professional engineers.

Training will be a critical component of the provision of our services. We will develop and staff a training program to fully inform and educate our employees regarding the specifics of working with the Authority. Our training often starts with young engineers and continues through management with seminars covering specific technical topics as well as general issues. Utilizing our internal knowledge management systems we will employ training specific to the issues required for a quick ramp up based on programs we have pioneered with success in the past.

Based on our cumulative project experience and industry history, we will outline an engaging, informative and interactive template as the framework and foundation of any successful construction professionals' technical education and expertise. A pragmatic approach to research and application of case study learning will be the basis of communication on learned strategies and skills for all program participants. A sample course is outlined below:

Session 1: Concepts of Project Management

- Defining Project Management Framework and Terminology
- Pre-Construction/Post Construction Applications
- Differentiation Between Operations and Projects
- Design Elements for Setting Up and Conducting Projects
- Project Planning and Site Logistics
- Working in Occupied Environments

Session 2: The Project Officer in an Organization

- Role, Responsibilities & Agency Hierarchy
- Working effectively on Cross Functional Teams
- Negotiation Skills for Project Officers
- Understanding Agency Documents, Regulations and Practices

Session 3: The Project Team

- Establishing Team Goals
- Reporting Structure of the Team
- Identifying Relevant Skills, Qualifications and Experience Needed
- Key Performance Criteria

Session 4: The Project Management Life Cycle

- Project Initiation & Scoping
- Schematic Layout & Design Development
- Construction Readiness- Bid/Award & Constructability
- Project Monitoring & Field Operations Management
- Orchestrating Substantial Completion Contract Closeout
- Post Completion Reporting, Financial Turnover & Maintenance

MANAGEMENT APPROACH

Session 5: Project Controls and Reporting

- Techniques for Optimal Control
- Providing Status Reports, Project Baselines and Identifying Variances
- Monitoring Budget, Quality and Cost

Session 6: Change Orders

- Identifying the Requirements for Change Orders
- Understanding the Process for Submitting Change Orders
- Determining the Feasibility of Change Order Request
- Change Order Review and Approval Process

Session 7: Field Training

- OSHA
- Management of Subcontractors & Vendors
- Utilizing Project Documentation for Success
- Safety
- Scaffold

Session 8: Computer Support and Options

- Establishing a repository for project information and documentation
- Field Tabulation and markup notes for field conditions and approvals on handheld/mobile devices

HOURLY RATES

The HAKS Team has aggressively priced our hourly rate to be competive. All of the rates (except for Halcrow, Inc.) in this section are subject to a 4% annual increase for each progressive year starting from 2011 and ending at 2014.

HAKS' HOURLY RATES		
Name	Title	Hourly Rates (2011 - 2014)
JEFFREY TERZAKIS	PRINCIPAL-IN-CHARGE	$91.30 - $102.70
KHALED HUSEIN	OVERARCHING PROGRAM MANAGER	$77.00 - $86.61
FARHAN SYED	DEPUTY PROGRAM MANAGER	$77.00 - $86.61
HENRY HESSING	AVIATION - DEPUTY PROGRAM MANAGER	$83.50 - $93.93
KAMAL KISHORE	BRIDGE & TUNNELS - DEP. PROGRAM MANAGER	$84.13 - $94.63
LAWRENCE KING	QA/QC OFFICER	$84.13 - $94.63
RAYMOND RIBEIRO	TECHNICAL ADVISOR	$108.17 - $121.68
ANTHONY PAPPAGALLO	PROGRAM MANAGER	$67.00 - $75.37
NILESH SHAH	AVIATION - PROJECT MANAGER	$56.00 - $63.00
JEFFREY WRIGHT	BRIDGES & TUNNEL - PROJECT MANAGER	$75.00 - $84.36
FRANK VERDARAME	BRIDGES & TUNNEL - PROJECT MANAGER	$63.00 - $70.86
ASHRAFF ABDALLA	RAIL & TRANSPORTATION - PROJECT MANAGER	$60.00 - $67.49
HARRY LEWIS	TRANSPORTATION FACILITIES - PROJECT MANAGER	$68.00 - $76.50
MOUSTAFA REZK	TRANSPORTATION FACILITIES - PROJECT MANAGER	$57.00 - $64.11
HARRY FOSTERIS	RAIL & TRANSPORTATION - PROJECT MANAGER - ELECTRICAL	$56.75 - $63.84
ROBERT MILO	RAIL & TRANSPORTATION - PROJECT MANAGER - MECHANICAL	$46.50 - $52.31

HOURLY RATES

HAKS' HOURLY RATES		
Name	Title	Hourly Rates (2011 - 2014)
MAGDI SIDAROUS	ESTIMATOR	$52.89 - $60.00
WILLIAM NILES	SENIOR SCHEDULER	$59.50 - 67.00
HAMID ERFANI	DOCUMENT CONTROL	$45.68 - $51.38

SUBCONSULTANTS

AG CONSULTING'S HOURLY RATES		
Name	Title	Hourly Rates (2011 - 2014)
KULBINDER SINGH	RAIL & TRANSPORTATION FACILITIES - PROJECT MANAGER - ELECTRICAL	$46.00 - $51.74
RAYMOND C. KALLBERG	AVIATION - PROJECT MANAGER - MECHANICAL	$60.00 - $68.00
ARDASH MEGUERDICHIAN	RAIL & TRANSPORTATION FACILITIES - PROJECT MANAGER - MECHANICAL	$62.00 - $70.00

BURNS GROUP'S HOURLY RATES		
Name	Title	Hourly Rates (2011 - 2014)
JOHN BURNS	AVIATION - PROJECT MANAGER	$240.00 - $270.00
BRIAN PHILLIPS	AVIATION - PROJECT MANAGER	$192.50 - $216.00
DAVID CIERVO	AVIATION - PROJECT MANAGER	$121.00 - $136.11
CHUCK REED	AVIATION - PROJECT MANAGER	$107.30 - $120.36

ELLANA'S HOURLY RATES		
Name	Title	Hourly Rates (2011 - 2014)
HENRY CHIN	SENIOR PROJECT COST MANAGER	$72.11 - $81.11
WALTER FITZER	CHIEF MEP ESTIMATOR	$69.71 - $78.41

HOURLY RATES

DELCAN CORPORATION'S HOURLY RATES		
Name	Title	Hourly Rates
KENT HAGGAS	RAIL & TRANSPORTATION FACILITIES - DEPUTY PROGRAM MANAGER	$96.20 - $108.21
PETER HARRISON	RAIL & TRANSPORTATION FACILITIES - PROJECT MANAGER	$83.68 - $94.13
TIMOTHY STOKES	RAIL & TRANSPORTATION FACILITIES - PROJECT MANAGER	$68.80 - $77.40
LORI COLANGELO	RAIL & TRANSPORTATION FACILITIES - PROJECT MANAGER	$79.60 - $89.54
JONATHAN HULSE	RAIL & TRANSPORTATION FACILITIES - PROJECT MANAGER	$74.67 - $84.00

HALCROW'S HOURLY RATES		
Name	Title	Hourly Rates
JONATHAN GOLDSTICK	MARINE - DEPUTY PROGRAM MANAGER	$105.00 - $155.00
BILL PAPARIS	MARINE - PROJECT MANAGER	$105.00 - $155.00
ALAN WALLER	MARINE - PROJECT MANAGER	$82.00 - $107.00
SEAN O'NEIL	COASTAL ENGINEER	$82.00 - $107.00
DOUGLAS FRIEND	MARINE ENGINEERING - DIVE TEAM LEADER	$45.00 - $73.00
BRETT SPOSITO	MARINE ENGINEERING - DIVER	$45.00 - $73.00
DOMENICA STASIAK	MARINE - STRUCTURAL ENGINEER	$29.00 - $43.00

MULTIPLIER

HAKS 2.1
AG CONSULTING 2.1
BURNS GROUP 2.1
DELCAN 2.1
ELLANA, INC. 2.1
HALCROW, INC. 2.1

BREAKDOWN OF MULTIPLIER

% Direct Labor

		Field
A.	**Direct Labor**	**100%**
B.	**Department Overhead**	
	Fringe Costs	46%
	Officer's Salary	3.90%
	Indirect Salary	37.4%
	Insurance	3.31%
	Workman's Comp. Ins	0.49%
	Travel & Entertainment	1.39%
	Rent	3.97%
	Office Supplies	1.06%
	Depreciation	0.91%
	Telephone & Utilities	1.19%
	Temporary Staffing	0.05%
	Professional Fees	0.99%
	Bid & Proposal Costs	0.01%
	Consultants	1.35%
	Dues & Publications	0.24%
	Auto Expense	0.83%
	Equipment Rental	0.43%
	Furn, Fixt & Equipment Under 2500	0.08%
	Taxes	0.36%
	Relocation	0.03%
	Recruitment	0.49%
	Printing & Xerox	0.19%
	Repairs & Maintenance	0.22%
	Community Service	0.03%
	Seminars & Education	1.12%
	Security	0.00%
	Postage	0.16%
	Overhead Recovery	-0.15%
C.	**Total Departmental Overhead**	**106%**
D.	**Profit**	**2%**
	Total	**2.1**

M/WBE PARTICIPATION

ACHIEVING M/WBE GOAL ON NEW YORK STATE CONTRACTS

HAKS started in business in 1991 as a two-person partnership that carried DBE/MBE certification. This proved to be of great advantage to the firm in teaming with other consultants and in developing additional business. We found the State's MBE/WBE/DBE certification program to be most beneficial to HAKS during our early years, which resulted in increasingly higher annual billings that allowed us to advance beyond the DBE designation. Under the program we grew to where, today, we are a professional corporation with more than 400 employees, and we carry out 90% of our contracts as a prime consultant.

Based on our background and experience, therefore, we are in total accord with, and sensitive to, Minority, Women and Disadvantaged Business Enterprise goals on every contract that we participate in. The program provided HAKS the opportunity to successfully fulfill many types of assignments and to establish the kind of performance record that eventually enabled us to compete as a prime consultant. We believe in the MWBE program, and we encourage and assist other minority, women and disadvantaged business firms to grow and benefit from it as we have.

In all of the New York State contracts that have been awarded to HAKS as prime consultant or as a joint venture partner, we assign the highest priority to meeting or exceeding the MWBE goals of the contract. We focus on achieving this through approaches that include:

- Selecting sub-consultants to team with based on the expertise, qualifications and experience that they would provide to meet the contract requirements;
- Developing a Consultant Utilization Plan before the work begins that establishes or provides, for each minority or women sub-consultant firm
  - manning table,
  - specific individuals and resumes,
  - titles that these individuals will fill,
  - total hours to be worked;
- Obtaining approval of the plan from New York State;
- Making assignments, once the work begins, of MWBE personnel based on the Consultant Utilization Plan (i.e., implementing what we said we would do in the plan);
- Assigning sub-consultant personnel with titles approved in the Consultant Utilization Plan to tasks based on the qualifications and experience required for the task, for example
  - Resident Engineer, Assistant Resident Engineer
  - Office Engineer
  - Various Levels of Construction Inspectors
  - Constructability Reviewer
  - Scheduler
  - Other Specialty Titles
- Working continually toward goal achievement through hands-on involvement of the Project Manager and Project Executive in
  - monitoring total MWBE sub-consultant contract amounts, payments for the month, previous payments and total payments to date;
  - comparing total payments to date against sub-consultants' total share;
  - assessing progress being made toward MWBE goals;
  - making adjustments as needed in sub-consultant assignments throughout the life of the project to assure that MWBE goals will be met by or before the end of the contract.

HAKS LIST OF AFFILIATES

Entity: HAKS Engineers, P.C. (CT)
Address: 306 Industrial Park Road
Suite 201
Middletown, CT 06457 **EIN/TIN:** [redacted]

Entity: HAKS Engineers, Architects and Land Surveyors, P.C. (NJ)
Address: 570 Broad Street
Suite 401
Newark, NJ 07102 **EIN/TIN:** [redacted]

Entity: HAKS Stone & Webster (JV)
Address: 40 Wall Street
11th Floor
New York, NY 10005 **EIN/TIN:** [redacted]

HAKS

Entity: HAKS/DMJM + Harris (JV)
Address: 605 Third Avenue
New York, NY 10158 **EIN/TIN:** [redacted]

Entity: HAKS/Earth Tech (JV)
Address: 40 Wall Street
11th Floor
New York, NY 10005 **EIN/TIN:** [redacted]

HASA

Entity: HASA Construction, LLC
Address: 40 Wall Street
11th Floor
New York, NY 10005 **EIN/TIN:** [redacted]

Entity: HASA Realty, LLC
Address: 22 Central Drive
Farmingdale, NY 11735 **EIN/TIN:** 0[redacted]

Entity: SIMCO Engineering, P.C.
Address: 80 Maiden Lane
Suite 501
New York, NY 10038 **EIN/TIN:** [redacted]

Entity: Washington Group/HAKS (JV)
Address: One Penn Plaza
32nd Floor
New York, NY 10119-2901 **EIN/TIN:** [redacted]

CONFLICT OF INTEREST

October 21, 2010

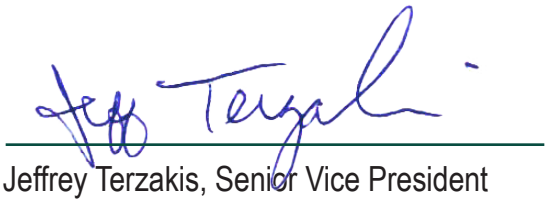
HAKS has no conflict of interest in performing services for the Port Authority of New York and New Jersey.

Jeffrey Terzakis, Senior Vice President

EXCEPTIONS

October 21, 2010

HAKS has no exceptions with the standard agreement and its terms and conditions.



Jeffrey Terzakis, Senior Vice President

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

By

Office of Business & Job Opportunity

HAKS Engineers, Architects and Land Surveyors, P.C.

Certificate PA-27372

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: March 15, 2010

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: March 5, 2015

Form: 6/10/93

THE PORT AUTHORITY OF NY & NJ

March 5, 2010

RECEIVED
MAR 18 2010
HAKS Engineers, Architect and Land Surveyors, P.C.

Mr. Husam Ahmad
President
HAKS Engineers, Architects and Land Surveyors, P.C.
40 Wall Street, 11th Floor
New York, NY 10005

RE: **MBE CERTIFICATION**
TYPE: **Architectural & Engineering**

Dear Mr. Ahmad:

This is to acknowledge receipt of the Uniform Certification Application which your firm submitted **HAKS Engineers, Architects and Land Surveyors, P.C.** has been included on our roster of eligible **Minority Business Enterprise (MBEs)** for contracts with the Port Authority of New York and New Jersey.

Please be advised that the Port Authority's Office of Business & Job Opportunity periodically reviews all certifications and reserves the right to decertify any previously certified firm that no longer meets the Port Authority's guidelines for **MBE** designation.

Additionally, any **MBE** whose business incurs changes in any substantial manner must notify the Office of Business & Job Opportunity within thirty days of that change. These changes include, but are not limited to, a change of officers, directors, location, corporate name, or financial condition. Failure to advise of these changes may result in our removing the firm from our roster of eligible **MBEs.**

If you have any questions regarding your certification, please feel free to contact Marvin Morency at (212) 435-7807.

Sincerely,

Lash Green
Director
Office of Business & Job Opportunity

LG/MM

Enclosures: Certificate
Registration Notice

233 Park Avenue South
New York, NY 10003
T: 212 435 7000

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

By

Office of Business & Job Opportunity

Ellana, Inc.

Certificate PA-24746

This certificate acknowledges that the above named firm is certified as a **Women-owned Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: April 7, 2010

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: April 7, 2015

Form: 6/10/93

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Kenneth J. Ringler, Jr.
Executive Director

Certified

by

Small Business Programs

A.G. Consulting Engineering, P.C.

Certificate PA-17754

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
General Manager
Certified: November 4, 2005

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: November 3, 2010

Form: 6/10/93

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

HAKS ENGINEERS ARCHITECTS AND LAND SURVEYORS PC
40 WALL STREET
11TH FLOOR
NEW YORK, NY 10005-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0005960

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

Construction Management Association of America

Certificate of Appreciation

The Construction Management Association of America
Presents this certificate to

Khaled T. Husein, CCM

For Conducting 2-Hours CCM Workshop Seminar for HAKS In-house Staff

The Mission of CMAA is to promote and enhance leadership, professionalism, and excellence in managing the development and construction of projects and programs.

July 16, 2009

PACE UNIVERSITY

CERTIFICATE OF COMPLETION

CONSTRUCTION MANAGEMENT

22.5 HOURS OF CONTINUING EDUCATION

To all persons be known that

Khaled Hussein

Has satisfactorily met all of the requirements and completed a course of study in Real Estate continuing education a subject approved by the Secretary of State in accordance with the provisions of Chapter 868 of the Laws of 1977 and the attendance was satisfactory and in conformity with the law and that such above referenced course was completed on October 9, 2010.

Earle J. Walker, Executive Director
Regional Alliance for Small Contractors

Lash Green, Director, Office of Business & Job Opportunity
Port Authority of NY & NJ

Cathy Pagano, Director, Continuing & Professional Education
Pace University

Facilitated and Coordinated by

THE Regional Alliance FOR Small Contractors
Building Tomorrow's Partnerships Today!

Sponsored By

THE PORT AUTHORITY OF NY & NJ

Pace University Official School Seal
Continuing Ed. Code # C-1420

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 10/15/2010

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies)must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER

Willis of New York, Inc.
26 Century Blvd.
P. O. Box 305191
Nashville, TN 37230-5191

CONTACT NAME:
PHONE (A/C, NO, EXT): 877-945-7378 | FAX (A/C, NO): 888-467-2378
E-MAIL ADDRESS: certificates@willis.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: National Fire Insurance Company of Hartfo	20478-001
INSURER B: Valley Forge Insurance Company	20508-001
INSURER C: Transportation Insurance Company	20494-002
INSURER D:	
INSURER E:	
INSURER F:	

INSURED

HAKS Engineers, Architects, and Land Surveyors, P.C.
40 Wall Street
11th Floor
New York, NY 10005

COVERAGES **CERTIFICATE NUMBER: 14899526** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD'L INSRD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	Y	N	2091435469	12/11/2009	12/11/2010	EACH OCCURRENCE	$ 1,000,000
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurence)	$ 1,000,000
	CLAIMS-MADE X OCCUR						MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$ 2,000,000
	POLICY X PRO-JECT X LOC							$
B	AUTOMOBILE LIABILITY	N	N	2091436010	12/11/2009	12/11/2010	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY(Per person)	$
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY(Per accident)	$
	X HIRED AUTOS / X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
C	UMBRELLA LIAB X OCCUR	N	N	2091436055	12/11/2009	12/11/2010	EACH OCCURRENCE	$ 10,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$ 10,000,000
	DED RETENTION $							$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N	N/A	N	2091435973	12/11/2009	12/11/2010	X WC STATU-TORY LIMITS / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?						E.L. EACH ACCIDENT	$ 1,000,000
	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach Acord 101, Additonal Remarks Schedule, if more space is required)

Re: Request for Proposals for Performance of Expert Professional Project Management Services on a "Call-in" Basis for 2011, 2012 & 2013 & 2014 (RFP #22388).

The insurance carrier shall not, without obtaining the express advance permission from the General of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, Officers, agents or employees, the governmental nature of the Port Authority, or the provisions of any statutes respecting suits against the Port Authority.

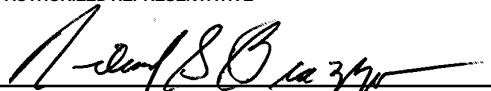
CERTIFICATE HOLDER

Port Authority of New York & New Jersey
Attn: RFP Custodian
One Madison Avenue, 7th Floor
New York, NY 10010

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



Coll:3157065 Tpl:1015777 Cert:14899526

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AGENCY CUSTOMER ID: 631055

LOC#:

ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
Willis of New York, Inc.	HAKS Engineers, Architects, and Land Surveyors, P. 40 Wall Street 11th Floor New York, NY 10005
POLICY NUMBER See First Page	
CARRIER: See First Page / NAIC CODE	EFFECTIVE DATE: See First Page

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

It is agreed that the Port Authority of New York and New Jersey are included as Additional Insureds as respects to General Liability, but solely in regards to work being performed by or on behalf of the Named Insured in connection with the job described herein.

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ACORD CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 10/15/2010

PRODUCER
WHITEHORN FINANCIAL GROUP, INC
44 Main Street, Suite 3
Millburn, NJ 07041
(973) 564-9330

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
HAKS Engineers, Architects and Land Surveyors, PC; HAKS Engineers, PC
40 Wall Street, 11th Floor
New York, NY 10005

INSURERS AFFORDING COVERAGE	NAIC#
INSURER A: CNA	20443
INSURER B:	
INSURER C:	
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
		GENERAL LIABILITY				EACH OCCURRENCE	$
		COMMERCIAL GENERAL LIABILITY				DAMAGE TO RENTED PREMISES (Ea occurence)	$
		CLAIMS MADE ☐ OCCUR ☐				MED EXP (Any one person)	$
						PERSONAL & ADV INJURY	$
		GEN'L AGGREGATE LIMIT APPLIES PER:				GENERAL AGGREGATE	$
		POLICY ☐ PRO-JECT ☐ LOC ☐				PRODUCTS - COMP/OP AGG	$
		AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT (Ea accident)	$
		ANY AUTO				BODILY INJURY (Per person)	$
		ALL OWNED AUTOS				BODILY INJURY (Per accident)	$
		SCHEDULED AUTOS				PROPERTY DAMAGE (Per accident)	$
		HIRED AUTOS					
		NON-OWNED AUTOS					
		GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	$
		ANY AUTO				OTHER THAN AUTO ONLY: EA ACC	$
						AGG	$
		EXCESS/UMBRELLA LIABILITY				EACH OCCURRENCE	$
		OCCUR ☐ CLAIMS MADE ☐				AGGREGATE	$
							$
		DEDUCTIBLE					$
		RETENTION $					$
		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				WC STATU-TORY LIMITS ☐ OTH-ER ☐	
		ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?				E.L. EACH ACCIDENT	$
		If yes, describe under SPECIAL PROVISIONS below				E.L. DISEASE - EA EMPLOYEE	$
						E.L. DISEASE - POLICY LIMIT	$
		OTHER Professional Liability	AEH 28-823-70-85	03/30/10	03/30/11	$5,000,000 Per Claim and Aggregate	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

Request for Proposals for Performance of Expert Professional Project Management Services on a "Call-in" Basis for 2011, 2012, 2013 & 2014 (RFP #22388)

CERTIFICATE HOLDER

Port Authority of New York & New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attn: RFP Custodian

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE
Maureen Andrews

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October 13, 2010

SUBJECT: REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388 – ADDENDUM #1)

Dear Sir or Madam:

The Port Authority of New York & New Jersey hereby amends the subject Request for Proposal (RFP) letter, dated September 30, 2010, as follows:

The following questions were received from an RFP recipient(s). The Authority provided the corresponding answers:

1. Please clarify what is required for III.C.3 "table that provides a summary of project experience for key personnel on this project with respect to number of projects and project costs."

It is anticipated that the table shall provide a summary of the information presented in the resumes including project costs.

2. In light of the fact that this is an on-call proposal to provide Project Management Services, is it necessary to have a license to practice Architecture or Engineering services in the State of New York and New Jersey?

Yes.

The due date for receipt of proposals remains 2:00 p.m. on October 21, 2010.

If you have any questions, please contact Ms. Tracy Tiernan at ttiernan@panynj.gov.

Sincerely yours,

Tim Volonakis
Manager
Professional, Technical & Advisory Services Division
Procurement Department

Acknowledged by Jeffrey Terzakis, Senior Vice President

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n Management, P.C.
ompany

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nagement

Call-in Basis
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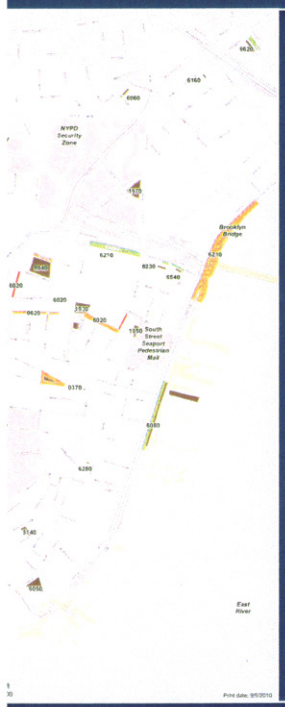

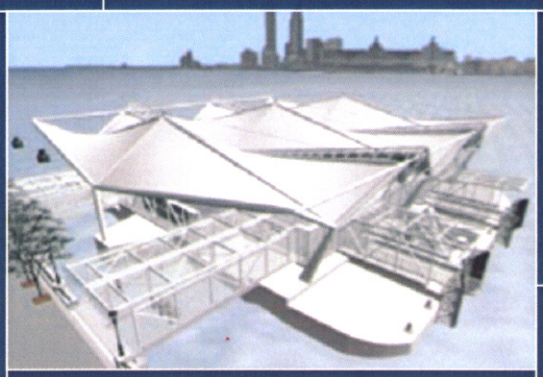

L | RFP # 22388 | OCTOBER 21, 2010

THE PORT AUTHORITY
OF NEW YORK & NEW JERSEY

LiRo Program and Construction Management, P.C.
A LiRo Group Company
Three Aerial Way, Syosset, NY 11791 Telephone 516.938.5476 Facsimile 516.938.5491

October 21, 2010

Port Authority of NY & NJ
One Madison Avenue, 7th Floor
New York, NY 10010
Attention: RFP Custodian

Re: RFP Number 22388

Dear Sir or Madam:

It is our pleasure to submit one original and six copies, and one CD of our proposal for the Performance of Expert Professional project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2103 and 2014 to the Port Authority of New York and New Jersey (Authority). The LiRo team's qualifications and experience are uniquely matched to the Authority's requirements. We offer primary strengths in Professional Project/Program Management and On Site Inspection, Construction Staffing, Scheduling, Cost Estimating, Design/Constructability Review, and Value Engineering augmented by a full service architectural, engineering and environmental staff.

We are currently performing work for the Authority on a number of Call-In contracts for 2006-2010 and have demonstrated ***LiRo's ability to be immediately responsive and provide the depth of resources to address all staffing needs placed upon us by the Authority***. Ranked #3 by New York Construction magazine among the region's Top Government Service Buildings Contractors and nationally among the Top 30 Construction Managers by Engineering News-Record, LiRo has one of the largest management resource pool in the New York and Northern New Jersey region.

LiRo specializes in serving as an extension of staff geared to delivering successful projects in the Metro Area for both infrastructure and building programs.

Our commitment to meeting the needs of public clients is unequivocal and backed by our **Project Executive, Luis Tormenta, P.E.** As a former Commissioner for the New York City Department of Design and Construction, Mr. Tormenta has successfully managed a diverse range of complex, critical construction involving buildings, institutional facilities and infrastructure within the Metropolitan area. In that role, he was also a client utilizing on-call contracts and has the unique experience with these types of services both as client and provider.

LiRo's proposed **Program Manager, Michael Burton, P.E.,** is a recognized industry leader who has managed some of the nation's largest public and private capital program portfolios. One of his significant public sector accomplishments was his management of the World Trade Center 9/11 Recovery, the largest peacetime mobilization of the design and construction industries in U.S. history, for which he received the Engineering News-Record's Award of Excellence, the industry's highest award.

Supplementing our significant resources are construction professionals from the following firms: **McLaren Engineering, PMA Consultants, LLC, (MBE), Works-In-Progress Associates, LLC (WBE), and DY Consultants (MBE).**

We believe that the LiRo team members have demonstrated our capabilities to deliver quality professional services for the Authority in a cost-effective manner. If selected, LiRo will continue to prove our value to the Authority including our experience as:

- A major New York/New Jersey based firm presently managing capital construction projects associated with over $10B of investment in transportation, infrastructure and public buildings.
- A firm successfully serving PANYNJ for over 15 years.
- A firm with extensive experience in all five of the Authority lines business outlined in the RFP – Aviation, Tunnel, Bridges and Terminals, Port Commerce, PATH and World Trade Center.
- A firm with well versed in cutting edge technology applying BIM and Risk Analysis to all of our major projects.
- A firm intent on continuing its commitment to the Authority to provide high-quality, cost-effective services.

We acknowledge the receipt of Addendum 1, dated October 13, 2010. We look forward to continuing our work for the Authority in the years ahead under this contract. I can be reached at 516.214.8186 should you wish to discuss our proposal in more detail or require additional information.

Very truly yours,

Harvey S Sands

Harvey S. Sands
Executive Vice President and Vice Chairman

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G. M/WBE Participation

H. Firm's Affiliates

I. Conflict of Interest

J. Terms and Conditions

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

LiRo Program and Construction Management, P.C.

(Company)

Harvey G Sands

(Signature)

Executive Vice President/Vice Chariman

(Title)

10/11/10

(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):
   LiRo Program and Construction Management, P.C.

2. Business Address (to receive mail for this RFP):
   3 Aerial Way, Syosset, NY 11791

3. Business Telephone Number: (516) 214-8186

4. Business Fax Number: (516) 938-5492

5. Firm website: www.liro.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 03 / 01 / 94

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):
   See attached Affiliate Firms

9. Officer or Principal of Firm and Title:
   Mr. Harvey S. Sands, Executive Vice President & Vice Chairman

10. Name, telephone number, and email address of contact for questions:
    Mr. Harvey S. Sands, 516.214.8186 , sandsh@liro.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

List of Firm's Affiliates

LiRo Engineers, Inc.
EIN [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Architects + Planners, P.C.
EIN: [redacted]
Type of Business: For profit
111 Broadway – Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Program and Construction Management, P.C.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Consulting Engineer, P.C.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Contractors, Inc.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Architects & Engineers West, P.C.
(New Jersey)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Architects & Engineers, P.C.
(Connecticut)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Architects + Engineers, P.C
(Pennsylvania)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Program and Construction Management, Inc. (California)
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

Qualification and Experience of Staff

C

1. Key Personnel Assigned

The LiRo team is uniquely qualified to provide project management services to support the Authority. We offer The Authority unmatched project management experience for multi-billion dollar capital programs. Brief highlights of the Executive Management experience are provided below followed by a key personnel experience matrix.

1. Entities – Similar Services
2. Specific Relevant Experience

Luis Tormenta, P.E., Project Executive – Mr. Tormenta has over 25 years experience in successfully managing a diverse range of complex, critical, public construction programs and projects involving buildings, institutional facilities and infrastructure in the New York Metropolitan area. A former Commissioner of NYC's Department of Design and Construction under Mayor Guliani for four years prior to joining LiRo in 2000, Mr. Tormenta was responsible for New York City's buildings and infrastructure capital improvement program, with an annual budget in excess of $3B. Since joining LiRo, he has served as CEO, Chief Operating Officer and Group Leader of LiRo's Program and Construction Management projects. A particularly noteworthy assignment awarded to LiRo and led by Luis Tormenta, P.E. in June 2008 involved an assessment of the schedule, budget and challenges for the overall World Trade Center Construction Program (Program). The report identified the key challenges confronting the project and then presented a risk assessment of the Program schedule and budget. The report was provided to the Executive Director of the Port Authority in six weeks and was the basis of a report provided to Governor Patterson in the Fall of 2008.

For this project, Mr. Tormenta will be responsible for the overall coordination and management of LiRo's work at the executive level and for ensuring appropriate delivery of construction management personnel.

Michael Burton, P.E., Project/Contract Manager – Mr. Burton is a recognized industry leader who has managed some of the nation's largest public and private capital program portfolios. He has served as Senior Vice President and National Operations Manager responsible for $100B of design and construction work in aviation, bridge, highway, transit and infrastructure programs. As Executive Deputy Commissioner at the NYC Department of Design and Construction (DDC), he was responsible for the capital programs for the majority of New York City's agencies. At DDC, Mr. Burton was responsible for a capital construction portfolio of $4.1B, consisting of over 900 buildings, roadway, water and sewer mains projects managed by 1,300 employees spanning the Giuliani and Bloomberg administrations. One of his significant public sector accomplishments was

his management of the World Trade Center 9/11 Recovery, the largest peacetime mobilization of the design and construction industries in U.S. history, for which he received the Engineering News-Record's Award of Excellence, the industry's highest award.

His New York City project portfolio totals approximately $10B in the following sectors:

- Infrastructure $6.2B
  - Dept. of Environmental Protection (Sewers) $995M
  - Transportation/Highways $1.5B
  - Education $954M
  - Underground Storage Tanks $174M
  - Transit $6.5B

2. Organizational Chart

Program/Project Managers/Project Control Staff

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

Project Executive
Luis Tormenta, PE

Program/Project Contract Manager
Michael Burton, PE

Senior Program/ Project Managers

M. Turton, PE*	R. Kruezer*	J. Cohen, AIA	M. Mascaro
J. Ahrens, PE*	R. Wesolowski, PE*	A. Dolce, AIA	G. Psillos
G . Althoff*	R. Wilson, PE*	B. Fogel	B. Radafshar
V. Valdemira*	C. Zanoni*	J. Fox	R. Tilleli
M. Rafat, PE*	B. Aidikoff, PE	F. Franco, AIA	V. Wagh, PE*
R. Busch, PE*	M. Bailey, PE	D. Hall	D. Yap, P.E.
D. Bornkamp, PE*	G. Balog, AIA	K. Holmstrom, PE	J. Green, PE
B. Markowitz, PE*	M. Bendetti, PE	J. Hurley, PE	B. Moody, PE
D. Owen, PE*	E. Bifulco, PE	A. Johansen	
L. Deprima, PE*	L. Blond, PE	M. Levi, AIA	

Schedulers

R. Barsky*	A. Chattaway
A. Carrion*	J. Apostolou
G. Graceffa*	P. Patel
G. Gifford	S. Janjua
P. Kalmus	D. McBaine
	Z. Walters

Cost Engineers/Estimators

E. Frysztacki, PE*	W. Curran
A. Paladino, PE*	P. Daulatini
M. Yong*	W. Egbert
	S. Pagani

Program/Project Managers

R. Abdo	T. Colabella	M. Iannuzzi, PE	S. Smolenski, P.E.
A. Achouri, PE	E. Comilloni	E. Sartoris	L. Mastropieri
M. Albergo, PE	L. Comunelli, PE	N. Silver, RA	S. Hun Cho
A. Ansari, PE	J. Eckoff, PE	P. Singh	P. Hakimian
S. Asquith	J. Enang	M. Swanson	M. Daniels, PE
M. Belling, PE	J. Eskridge	L. Venechanos	C. Mase, PE
M. Byrnes	J. Gaspari	W. Wall	
A. Caggiano	T. Gibbons, RLA		

LiRo DY Consultants
PMA Consultants McClaren A1 Works-In-Progress

Key Personnel Experience Matrix

EXECUTIVE MANAGEMENT	***PROJECT EXPERIENCE/PROJECT COSTS***
Luis Tormenta, P.E.	PANYNJ CM Call-In Contract, 2006-2010 ($900M) NYCDDC Lower Manhattan Infrastructure Recovery ($20M) NYCDDC Buildings/Infrastructure ($500M)
Michael Burton, P.E.	NYCDDC World Trade Center 9/11 Recovery ($550M) New York City Bridge/Highways ($1.1B) Logan International Airport ($1B)
SR. PROJECT/ PROGRAM MANAGERS	**PROJECT EXPERIENCE/PROJECT COSTS**
Peter Turton, P.E.	#7 Line Extension ($2B) Jamaica Station Intermodal Terminal Complex ($316M) Tubelines Project, London ($100M)
James Ahrens, P.E.	PANYNJ JetBlue Airlines Term 5 & Parking Garage at JFK Airport ($900M) Renovation of MTA/NYCT Bus Depots ($7M) Improvements to Yankee Stadium and Shea Stadium ($6M)
Gordon Althoff	LMDC Lower Manhattan Construction Command Center ($15M) Fiterman Hall, Borough of Manhattan Community College ($54M) Queens Family Court ($104M)
Vincent Valdemira	Metro-North Hudson Line Stations Rehabilitation ($70M) Yankee Stadium Redevelopment/Rail Transportation Coordination ($144M) Reactivation of Staten Island Railroad ($40M)
Mike Rafat, P.E.	#7 Line Extension ($2.3B) Lower Manhattan Construction Command Center ($9M) Yankee Stadium Redevelopment ($90M)
Raymond Busch, P.E.	MTA East Side Access, LIRR Connection to Grand Central Terminal ($6.3B) MTA East Side Access, CM Services for Arch Street Yard ($77M) Nassau County Government Operations Center ($36M)
Donald Bornkamp, P.E.	MTA NY City Transit ($2B) Rikers Island – Facilities Upgrades and Renovations ($86M) NYCDOS Queens Garage and Salt Shed ($33M)
Bernard Markowitz, P.E.	NYCDOT W158th Street Maintenance and Repair Facility ($28M) NYCDOS Requirements Contract ($8.5M) NYCDOS Incinerators Abatement and Demolition ($10M)
Douglas Owen, P.E.	CM and Inspection Services Throgs Neck Bridge ($50M) CM and Inspection Services Whitestone Bridge ($41M) MTA-Bridge and Tunnel On-Call Construction Inspection Services ($1.5M)
Leonard Deprima, P.E.	NYCDDC Lower Manhattan/WTC Program Management ($9M) Erie County Department of Public Works Program Management ($50M) ECIDA GM Access Road ($2M)

Robert Kreuzer	JetBlue Warehouse Demolition/Terminal 5 Remediation ($900M) New York City Transit Asbestos Consultant Services ($20M)
Martin Wesolowski, P.E.	JetBlue Phase I/II Assessments and Geotechnical Studies ($25M) DSNY Incinerator/Garage Demolition Projects ($6.2M) TBTA Environmental Management and Analysis ($450K fee)
Ronald Wilson, P.E.	NYCHA Requirements Contract ($60M) NJ School Construction Corporation Program Management ($500M) Rockaway Sewage Treatment Plant ($20M)
Christopher Zanoni	JetBlue Warehouse Demolition/Remediation ($25M) PANYNJ Asbestos and Lead Paint Consulting Services ($200K fee) PANYNJ CM Call-In Contract, 2006-2010 ($900M)
PROGRAM/PROJECT MANAGERS	**PROJECT EXPERIENCE/PROJECT COSTS**
A. Achouri, P.E.	Port Newark Comprehensive Traffic Study ($1M) Intelligent Transportation System in Lower Manhattan ($6M) Rehabilitation of Bridge Joints on the Brooklyn-Queens Expressway Triple Cantilever Structure($2M)
Michael Albergo, P.E.	Lower Manhattan Construction Command Center Coordination ($9M) East 180th Street Station Rehabilitation ($20M)
A. Ansari, P.E.	Port Newark/Elizabeth Marine Terminal ($1M) Continental Airlines Terminal C Redevelopment ($1M) George Washington Bridge Bus Station ($1M)
L. Communelli, P.E.	Traffic Engineering Services for JFK, EWR, and LGA airports ($78M) Reconstruction of Gun Hill Road Bridge ($8M) Replacement of Steinway St. Bridge over Grand Central Pkwy ($18M)
James Eckoff, P.E.	Traffic Engineering Services for JFK, EWR, and LGA Airports ($78M) Long Island Rail Road – Rehabilitation of Suffolk County Bridges ($2M) Staten Island Ferry, Pier 1 Maintenance Facility ($1.4M)
PROJECT CONTROLS	**PROJECT EXPERIENCE/PROJECT COSTS**
Robert Barsky	New York City Transit Authority On-Call Technical Inspections ($5M) NYCHA CM/Build Requirements Contracts ($250M)
Anthony Carrion	MTA – Long Island Rail Road East Side Access ($6.3B) NYSDOT Bridge Reconstruction on Staten Island Expressway ($5M)
Edward Frysztacki, P.E., CCE	NYCDOT W158th Street Maintenance and Repair Facility ($28M) NYCHA CM/Build Requirements Contracts ($250M)
Giovanni Graceffa	Continental Airlines Interim Regional Jet Operations ($1M) MTA – NY City Transit East 180th Street Maintenance Facility ($46M)
Alfio Paladino, P.E.	NYCSCA Emergency Response ($263M) Brookhaven National Laboratory ($195M)
Mireya Yong	Amboy Neighborhood Center ($44M) Rikers Island GRVC Addition ($90M)

Subcontractors

McLaren Engineering Group

McLaren distinguishes itself as one of the nation's leading experts in managing the design and development of port and all types of waterfront structures. As a recognized leader in the waterfront facilities development industry, McLaren has provided management, design, engineering, and inspection services for many of these type projects nationwide. Waterfront / shoreline development projects are particularly geared for McLaren as they can cover many of the work elements and aspects of such a project given they are a multidiscipline consulting firm. Their depth of experience and expertise encompass all aspects of port and marine design and construction.

McLaren's professional staff includes specialists in coastal engineering, who are expert in wave analysis, wave attenuation, sediment transport, environmental loading, and structural coastal interaction. McLaren provides port and waterfront facility master planning, development/design, and design build RFP document preparation services. Port terminals and marine layout planning, dry bulk handing/conveying, container terminal feasibility studies/design, TEU loading/unloading analyses, RO-RO and LO-LO planning/design, liquid bulk transshipment planning and design, cruise ship terminal design, all are within the realm of expertise offered by McLaren's Marine Division. Through their extensive experience in this rather specialized field, they can offer expertise in cost estimating, life cycle analysis, and construction supervision. Their underwater inspection capabilities provide assurance that construction is carried out in conformance with plans

PMA Consultants LLC (MBE)

PMA, a 100% minority-owned firm, was first awarded an on-call consulting contract with the Port Authority Engineering Department in 1998. Since then, they have performed many different functions under that contract, including:

- Implementation of Project management Systems for Engineering and the Chief Operating Officer
- Development of custom software applications
- Reporting for project management, Capital Budget management and data integrity verifications
- Schedule reviews for the Goethals Bridge Program
- Estimating for the $2.2B World Trade Center Transportation Hub
- Value Engineering for the $2.2B World Trade Center Transportation Hub

PMA was so successful in its implementation of these new customized systems that they continued as the administrators of these systems with PMA staff working for the Port Authority central project controls. They also continue to bring in new systems and upgrade and enhance the existing systems.

Due to its successful system implementation for Engineering, PMA was hired by the Chief Operating Officer of the Agency to replace their Capital Program Management System (Captrak) with a Primavera P3e/MyPrimavera system that is fully integrated with Engineering's project controls system.

As part of this assignment, PMA brought many other innovations to the Port Authority, including:

- Complex, custom-designed, graphical performance reports seamlessly accessed from the Primavera toolbar.
- Automation of cost and schedule data into a monthly progress report previously done by project managers in Microsoft Word.
- Creation of a new cost-update cycle that made actual cost data available in Primavera within two weeks of month end closing, six weeks earlier.
- Creation of a new schedule-update cycle that provided project managers with a variance report after they provided update info to the scheduler. This control measure dramatically improved the accuracy of the schedule data.
- Recommendations on ways to identify and reconcile data inconsistencies between various Port Authority legacy databases.

The Port Authority asked PMA to review complex construction bid packages to help expedite their multi-billion dollar three-year capital program. PMA served on several committees, including a Design Quality Committee charged with improving and documenting design quality procedures in accordance with ISO 9000 standards and best practices. PMA used the lessons learned from their bid document review efforts to recommend several innovative solutions that are currently under consideration. PMA drafted special conditions contract language related to schedule and submittal management, incorporating best practices customized to the Port Authority's business processes.

Works-In-Progress Associates, LLC (WBE)

WPA works closely with clients in a comprehensive team and strives to build consensus among all stakeholders to create a solid structure for effective decision making and project execution. Services include strategic planning, community outreach, agency liaison, project team assembly, contract negotiation and administration, procurement, design evaluation, design and technical review, construction supervision, project phasing, inspections, project close-out and quality assurance/quality control. WPA is a certified Woman Owned Business with New York State Department of Economic Development, The Port Authority of New York & New Jersey, Dormitory Authority State of New York, New York City School Construction Authority, and NYC Department of Small Business Services.

DY Consultants (M/DBE)

DY Consultants are specialists in aviation planning and engineering. Relevant experience with the Port Authority includes as a subconsultant for on-call assignments at LGA and JFK airports. DY Consultants, a certified M/DBE firm, provides a broad spectrum of airport design, engineering services, and planning ranging from grant procurement, master planning, airport layout plan development, and environmental review to the final design, construction management, inspection, program management and final closeout. DY utilizes its expertise by providing consulting support to airports in operations and management issues. The majority of their work involves projects funded with Federal AIP grants and State transportation grants. Their background in administering and implementing Capital Improvement Programs has aided Airport Sponsors in procuring much needed funds for maintenance, improvements and expansion.

3. Resumes

Executive Management

Luis Tormenta, P.E.

PROJECT EXECUTIVE

EDUCATION	B.S., Civil Engineering, Manhattan College, 1982
REGISTRATION / CERTIFICATIONS	Board Member - ACE Mentor Program Professional Engineer, NY Chi Epsilon (Civil Engineer Honor Society) Professional Engineer, NY
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	20

A highly accomplished leader in the region's design and construction industry, Mr. Tormenta has over 30 years experience and has lead many of New York City's complex construction projects and the administration of several public capital programs. The founding Commissioner of the New York City Department of Design and Construction (DDC), Mr. Tormenta was appointed by Mayor Rudolph W. Giuliani to create and manage the "super construction agency." As Commissioner of DDC, he was responsible for New York City's building and infrastructure capital improvement program valued at $4B.

As LiRo's current CEO, Mr. Tormenta is responsible for the overall strategic direction and management of The LiRo Group, with a focus on maintaining high quality service standards while increasing market share and expanding services regionally. Mr. Tormenta prides himself as a skilled hands-on manager and, on selective projects, is directly involved in the management and oversight of LiRo's work. He has led many successful CM project teams responsible for large-scale, high-profile and emergency public projects. His knowledge of the New York Metropolitan design and construction market has been invaluable to many of LiRo's clients.

With more than 23 years of experience managing a diverse range of public facility and infrastructure projects, Mr. Tormenta shares his knowledge teaching graduate level construction management for the Executive 21 Graduate Program at Brooklyn Polytechnic Institute as an adjunct professor. Representative projects include:

PANYNJ CM Call-In Contract 2006-2010, Project Executive: Oversight responsibilities for various projects under this call-in contract. Significant projects under this contract included Terminal 5 at JFK Airport, an elevated connector to the AirTrain, and a new 1500 space, 6-level parking garage. The project also involves the construction of an elevated Arrivals Roadway, new Hydrant Fuel System, Baggage Handling System, 15"-17" concrete apron pavement, and connection to the historic Saarinen Terminal. (PANYNJ, $900M, 2007-2009)

Lower Manhattan Infrastructure Recovery Coordinator, Project Executive: After the events of 9/11 in New York City, LiRo was assigned to the coordination of the extensive amount of electric, telecommunications, steam, gas and subway work that was being performed 24/7 in the vicinity of the WTC. LiRo's responsibility had been expanded since July 2002 to include the coordination of all infrastructure work in Manhattan below Canal Street. LiRo coordinated construction activities in the region with all utilities, public agencies and private owners. (NYCDDC)

New York City Housing Authority, Project Executive: This project was a $265M construction program to rehabilitate and construct new facilities in the New York City region. All construction contracts were bid and negotiated by LiRo. (2004-present)

New York City Department of Design and Construction, Project Executive: $500 million dollars of construction work where construction contracts were directly held by LiRo:

- GRVC Jail Addition ($110M)
- NYC Fire Training Academy ($55M)
- EMS Station Program ($75M)

- Yankee and Shea Stadium Reconstruction ($15M)
- Transportation Facilities ($15M)

(2000-Present)

Dormitory Authority State of New York, Project Executive: $150M in construction projects including:

- City College of Architecture ($55M)
- Office of Chief Medical Examiner ($15M)
- Bernard Fineson Hospital ($50M)
- NYS Civil Court ($22M)
- Bronx Psychiatric Center ($50M)

(2000 - Present)

Broadway Street Improvement Project, Project Executive: This project was a $10M reconstruction and beautification of Broadway from Park Place to Water Street. (Alliance for Downtown New York, 2003-2005)

Commissioner, NYC Department of Design and Construction (DDC): Mr. Tormenta was appointed by Mayor Rudolph W. Giuliani to create and manage the "super construction agency" with an annual operating budget of over $86M and a capital budget in excess of $3B, representing over 1,200 projects and 1,400 employees. He was charged with the delivery of New York City's buildings and infrastructure capital programs, including facilities for city government and public functions, roadways, sewers, water mains and schools. He was also responsible for developing the organizational structure and operating methodology for the agency. Some key achievements included:

- Integrated the design and construction operations of three independent agencies into a cohesive operating organization – DGS, DEP, and DOT.
- Reduced project delivery time frames and increased annual productivity.
- Automated the majority of the business practices and established a computerized project management and geographical information system.
- Created a comprehensive training program for agency staff.
- Instituted agency performance measurement standards.
- Established and nurtured a client service philosophy.
- Implemented new project delivery system focused on schedule, quality and budget.

Assistant Commissioner, NYC Department of General Services: Mr. Tormenta was responsible for managing the Bureau of Construction and Program Management with a capital portfolio of over 700 projects valued in excess of $2.7B, an annual operating budget over $25M, and a staff of 300+. Some key achievements included recasting the Division into a program management client service organization and reducing project backlog through "bundling," Design/Build and CM/Build project delivery methods.

Employment History:

The LiRo Group (2000 to Present)
Chief Executive Officer/ Vice Chairman
New York City Department of Design and Construction (1995-1999)
Commissioner
New York City Department of General Services (1992-1995)
Assistant Commissioner

Michael Burton, P.E.

PROGRAM/PROJECT CONTRACT MANAGER

Mr. Burton is a recognized industry leader who has managed some of the nation's largest public and private capital program portfolios. He has served as Senior Vice President and National Operations Manager responsible for $100B of design and construction work in aviation, bridge, highway, transit and infrastructure programs. As Executive Deputy Commissioner at the NYC Department of Design and Construction (DDC), he was responsible for the capital programs for the majority of New York City's agencies. At DDC, Mr. Burton was responsible for a capital construction portfolio of $4.1B, consisting of over 900 buildings, roadway, water and sewer mains projects managed by 1,300 employees spanning the Giuliani and Bloomberg administrations. One of his significant public sector accomplishments was his management of the World Trade Center 9/11 Recovery, the largest peacetime mobilization of the design and construction industries in U.S. history, for which he received the Engineering News-Record's Award of Excellence, the industry's highest award.

EDUCATION	Ph.D., honoris causa, Manhattan College, M.B.A., Fordham University BE, Manhattan College
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	1
YEARS WITH OTHER FIRMS	19

His New York City project portfolio totals approximately $10B in the following sectors:

- Infrastructure $6.2B
- Dept. of Environmental Protection (Sewers) $995M
- Transportation/Highways $1.5B
- Education $954M
- Underground Storage Tanks $174M
- Transit $6.5B

Representative project experience includes:

Senior Vice President and National Operations Manager, The LiRo Group: Responsible for high-profile projects on East Coast and West Coast including serving as *Senior Management Consultant* to Los Angeles Unified School District's $12B K-12 Capital Program, and *Project Executive* for CUNY Baruch College's $170M Field Building renovation and Southern Connecticut University's new $50M Laboratory Building.

Senior Vice President and CM/PM National Operations Manager: Responsible for the operations of a national 1,400-person construction division with a portfolio valued at more than $100B of design and construction projects. Additionally, Mr. Burton managed the firm's New York engineering and architectural operations. Significant projects include: UCLA Westwood Replacement Hospital ($1B), Harvard University Laboratory ($1B), Harvard University Cultural Program ($350M), McGill University Health Center ($1.8B), Atlanta-Hartsfield Airport ($6.7B), GSA Brooklyn Courthouse ($750M), and Los Angeles Unified School District ($1.5B).

Executive Deputy Commissioner, New York City Department of Design and Construction: Responsible for the day-to-day operations of agency that designs and builds the majority of New York City's public buildings, roads, water and sewer projects with annual budget exceeding $1.1B in 2002. Managed a staff of 1,300 design and construction professionals who executed a portfolio of design and construction projects valued at over $4.1B. Planned and implemented initiatives to execute Mayor Giuliani's mandate to create a more efficient capital construction program. Acted as project executive and on-site project manager for several high-profile emergency projects, including management of the World Trade Center Recovery, starting on 9/11 ($550M). Other significant projects include: Mayor/City Council Schools Program ($644M), Rikers Island Facilities ($420M) and Safe Streets Program ($177M). Infrastructure accomplishments resulted in 2,708 lane miles milled, 537 lane miles of roadway, 638 miles of water mains, 440 miles of reconstructed sewers, and 8,500 new sewer connections ($1.6B).

Projects (Selected)

Notable New York City Projects:

· Columbia University Capital Program, $1.4B
· Mayor/Council Schools Program, $750M
· Rikers Island New Buildings & Fire/Life Safety Upgrades, $320M

Aviation Projects:

· Hartsfield-Jackson Atlanta Int'l Airport, $6.7B
· Fort Lauderdale Airport, $1.5B
· Logan International Airport, $1B
· O'Hare International Airport, $495M
· Baton Rouge Airport, $205M

Bridges/Roadway Projects:

· Biloxi Bay Bridge, $338M
· Bay St. Louis Bridge, $267M
· Robert Moses Causeway, $38M

Rail/Port Projects:

· TransBay Transit Center, $4.1B
· NJ Transit East End Concourse, $110M
· Port Imperial Ferry Terminal, $35M
· NYC Transit 74th Street/Roosevelt Avenue Station, $115M

World Trade Center: World Trade Center 9/11 Recovery, $550M

Awards

Engineering News-Record - Award of Excellence
New York Building Congress - George A. Fox Award for Public Service
American Council of Engineering Companies (ACEC) - President's Award
American Society of Civil Engineers - Construction Management Award

Boards/Memberships

Member of Mayor Bloomberg's Construction Cost Panel
Board of Directors, NY Building Congress 2003 - 2008
Chairman, Public Buildings Committee, NY Building Congress, 2003 - 2007
Chairman, Infrastructure Committee, NY Building Congress, 2007 - 2008

Media Recognition

CNN, Public Broadcasting Service (PBS), The New York Times, Engineering News-Record, New York Construction Magazine, Atlantic Monthly, Great Projects Film Company, *American Ground: Unbuilding the World Trade Center* by William Langewiesche

Employment History:

The LiRo Group (2009 to Present)
Senior Vice President and National Operations Manager
URS (2002 – 2008)
Senior Vice President and CM/PM National Operations Manager
NYC Department of Design and Construction (1996 – 2002)
Executive Deputy Commissioner
O'Brien Kreitzberg (1989 -1996)
Project Executive/Project Manager

Senior Program/ Project Managers

Peter Turton

SENIOR PROGRAM/ PROJECT MANAGER

Peter Turton is a registered professional engineer and a chartered engineer in the UK with more than 40 years of experience. He is skilled in all aspects of project management implementation with a particular focus on transportation projects both in the United States and abroad, including 14 years in New York City. His experience has been entirely on large-scale complex projects in the $100M to $500M range, either stand-alone or sections of multi-billion dollar programs. He is very familiar and experienced in the delivery of multi-billion dollar projects, including the complexities of working in an operating environment. Through these complex projects he has extensive experience interacting with federal, state and local agencies. Relevant project experience includes:

EDUCATION	M.S., Civil Engineering Soil Mechanics and Foundation Engineering, University of Birmingham, UK B.S., Civil Engineering with honors, University of Birmingham, UK
REGISTRATION / CERTIFICATIONS	30hr STS Curriculum Standard Work Process Procedures Confined Space Training, NY Chartered Engineer, UK Civil Engineering Society, CA Effective Contract Management MTA NYCT Track Safety, NY OSHA 10 Hour Training Course
YEARS WITH THIS FIRM	3
YEARS WITH OTHER FIRMS	39

Port Authority of NY & NJ, World Trade Center Value Engineering Study - Participated in the Washington Group-led value planning services for design, construction and utilization of the permanent PATH Terminal at the World Trade Center. Facilitated melding the common interests of stakeholders and resolving differences to arrive at a series of project improvement alternatives. Washington Group identified and assessed three fundamental concepts of value engineering, namely function, cost and worth. Helped develop alternative ways to achieve the equal function of various elements within the permanent PATH Terminal. Also helped develop a weighted matrix analysis to determine which alternative is the best blend of performance, cost and schedule. Participated in the development of alternatives through sketches, cost estimates, schedule narratives, the substantiation of test data and the development life cycle costs.

No. 7 Subway Line Extension, Program and Construction Management, Project Director -The redevelopment of the West Side Yards is a New York City priority envisioned to result in new high-density neighborhoods, landmark public facilities and more additional floor space within the Manhattan Central Business District (CBD) than all of the plans for Lower Manhattan. Key to the West Side redevelopment is the initiative for accessibility to transit by extending the Number 7 Subway Line from its present terminus at Times Square. New York City's Number 7 Subway Line, known as the Flushing Line, is the system's busiest, linking Queens to Times Square. The planned new 7,000-foot-long tunnel will stretch west and south from Times Square to the Jacob J. Javits Convention Center on West 34th Street and 11th Avenue. (MTA-NYCT, $2.1B)

Work Previous to Joining LiRo includes:

Metropolitan Transportation Authority, Capital Security Program, Project Manager - Task Order-25, a confidential security project under a contract to provide design of security solutions and related technical and construction services for MTA facilities throughout New York City. MTA facilities

include rail transit, commuter rail, bridges, buses, stations/terminals, maintenance facilities, and office buildings.

Tubelines Project, London, Project Manager - Tube (subway) extension to Heathrow Terminal 5. Managed a 65-person team responsible for design and construction. Established the project team, set up the procedures for managing the project and managed development of the $100M GMP. Interfaced closely with British Airports Authority, who were responsible for construction of Heathrow Terminal 5 and London Underground and who inherited the assets of the completed project. Derived the complex staging to permit the rail extension to Terminal 5 while maintaining rail operations to Terminals 3 and 4.

Jamaica Station Intermodal Terminal Complex, Queens, New York - Construction Manager. Mr. Turton integrated the CM effort with the Port Authority Management and Engineering Department and played an instrumental role in developing the $316M Jamaica Station Intermodal terminal complex, which integrates JFK's automated light rail system with the Long Island Rail Road (LIRR) and the New York City Transit (NYCT) subway. During the pre-construction stage, he was responsible for construction strategy, construction staging and scheduling, estimating, constructability reviews and for the formation of special contract conditions to accommodate the ongoing operations. He worked closely with MTA, LIRR and NYCT managements to capture the operational issues for inclusion in the contract documents. He evaluated contractor proposals and played a key role in the award of the contract. Subsequently managed the construction of this complex project, supervising a construction management team of 35, working the project 24/7 for 44 weeks a year over a three-year period. The project was successfully delivered while maintaining railroad and transit operations. Received the Port Authority James G. Helimuth Citation Award.

John F. Kennedy International Airport Redevelopment Program, New York - Construction Manager. Mr. Turton integrated the CM effort with the Port Authority Management and Engineering Department. He served for several years, involved at all stages of the multi-billion dollar redevelopment of JFK and was responsible for construction strategy, construction staging, planning and scheduling of contracts, contract formation and all aspects of constructability at the pre-award stage for the major contracts. He established the interface programs for the new terminal's construction with the landside redevelopment including the light rail. He played an instrumental role as a key member of the team, developing the criteria and subsequently evaluating the contractors' proposals for the $1B light rail.

King Fahd International Airport, Dammam, Saudi Arabia, Construction Manager - Managed the construction, from start to finish, of the $500M passenger terminal and concourse buildings. The complex was comprised of three million square feet of architecturally intensive high specification building work with a multitude of interfaces and its own chiller plant. Major components such as structural steel, marble, bronze, window wall, loading bridges and docking system were procured offshore. He led the procurement operation for these items and made periodic visits to the fabricators to ensure adherence to the contract requirements. Mr. Turton supervised a construction management team of 50, managed the change control process, negotiated changes and provided oversight for the A/E efforts, reviewing the shop drawings and submittals.

Employment History:

The LiRo Group (2007 to Present)
Vice President
Washington Group International (2005-2007)
Senior Project Director
Bechtel (1972-2005)
Project Manager
Gibbs & Hill (1971-1972)
Engineering Supervisor
De Leuw Cather (1967-1971)
Geotechnical Engineer

James Ahrens, P.E.

SENIOR PROGRAM/ PROJECT MANAGER

Mr. Ahrens has been providing engineering design and construction management services since 1973. He is currently Vice President of the firm and involved in providing Resident Engineering and Construction Management Services. His diverse responsibilities include oversight of all Quality Assurance/Quality Control as well as Project Safety aspects for the firm's projects. Mr. Ahrens has been Project Manager and Resident Engineer for a wide variety of civil/structural projects related to highways, roadways, and bridges; sewer and water main replacement; pump stations; airport terminals; parking garage; pipelines and petroleum storage tanks; parking facilities; power generation plants; golf courses; high rise building and other various types of facilities.

Mr. Ahrens has also been responsible for coordinating OSHA seminars related to construction industry standards, and lead abatement for LiRo personnel. He is also certified as a NYC Site Safety Manager and is well versed in the safety requirements of the NYC Building Code, specifically Article 19 related to the protection of the public and property. His commitment to quality construction management and site safety is just one of the reasons that LiRo has maintained a solid reputation over the years with our clients. Representative project experience includes:

EDUCATION	Graduate Studies, Polytechnic Institute of New York, 1976 B.C.E., Structural Engineering, Villanova University, 1973
REGISTRATION/ CERTIFICATIONS	Professional Engineer, NY Past President NYSSPE, Nassau Chapter 2001-2003 NYC Site Safety Manager Certification OSHA Safety and Health Training - 30-hour 29 CFR/OSHA Safety OSHA 10 Hour Safety Course
YEARS WITH THIS FIRM	20
YEARS WITH OTHER FIRMS	17

Construction of JetBlue Airlines Terminal 5 & Parking Garage at JFK Airport, Resident Engineer - Project involves resident engineering and quality assurance oversight for a 625,000 sf passenger terminal building with 26 gates, an elevated connector to the AirTrain, and a new 1500 space, 6-level parking garage. The project also involves the construction of an elevated Arrivals Roadway, new Hydrant Fuel System, Baggage Handling System, 15"-17" concrete apron pavement, and connection to the historic Saarinen Terminal. (PANYNJ, $900M, 2006-2009)

Renovation of MTA/NYCT Bus Depots, Queens and Bronx, Project Manager – These projects involve the renovation of roofing and ventilation systems at 2 NYCT Bus Depots. In addition, the Queens Bus Depot also requires the raising/jacking of over 16,000 sf of roof to provide additional clearance for bus maintenance operations. The major challenge associated with these projects is to perform the renovations in facilities the operate 24 hours a day/ 7 days a week. Construction costs are approximately $4m and $7m. (MTA/NYCT, 2010-present)

Improvements to Yankee Stadium and Shea Stadium, Site Safety Manager- Project involves multiple contracts related to structural improvements to concrete walls throughout both stadium, escalator repairs and rehabilitation, HVAC upgrades, cooling tower support modifications, parking garage structural repairs and fire sprinkler upgrades, stairway replacement in Parking Garages 3 & 8 at Yankee Stadium, and painting of steel superstructure. (NYCDDC, 2006)

Modernization of the Oceanside/Bayside Apartments, Far Rockaway, Site Safety Manager, 11/2005 to Present - This project involved the upgrade and improvements to over 30 high-rise apartment buildings. Work included façade rehabilitation, parapet wall reconstruction, electrical distribution improvements, construction of new Day Care Center, and renovation of Senior Citizens Center. (NYCHA, $50M, 2006-2007)

Improvements to the MacArthur Resource Recovery Facility, Project Manager, 4/2003 to 1/2006 - Construction management and engineering support services related to the $15 million Plant Upgrade Project at the MacArthur Resource Recovery Facility to comply with the new USEPA Emissions Guidelines. Work included installation of new scrubbers, construction of Lime Prep Building, Compressor Building, Electrical Distribution Building, and all associated equipment and appurtenances within these structures. Work also included replacement of the Forced Draft Fans, Induced Draft Fans, and Reverse Air Fans. New phase includes roadway design for access to plant back end. (Islip Resource Recovery Agency, 2003-2006)

Rehabilitation of the Central Heating Plant, Grasslands Reservation, Valhalla, NY, Quality Assurance Engineer - This project involved the upgrade of boilers which heat the offices, courthouses and prison, as well as the construction of a new steel framed building addition to house them. This multi-prime contract also involved asbestos removal in connection with steam pipes and installation of those pipes, all within the prison. (Westchester DPW)

Reconstruction of Taconic State Parkway Phase IV, Westchester, NY, Project Director - This project involved the construction of two concrete arch bridges over the Parkway and Route 9A. Approximately 1.2 miles of road was widened and realigned. Drainage and safety improvements were also performed. (NYSDOT, $12M, EIC: J. Lambertini, 1994-1996)

Reconstruction of Van Wyck Expressway and Four Bridges of the Long Island Expressway, Queens, NY, Project Manager - Full and partial depth repairs were made with calcium concrete. The roadway was overlaid with a HD asphalt wearing course. Work included the rehabilitation of four steel bridges over the Long Island Expressway. All bearings were replaced; repairs were made to the piers, abutments, girders, and stringers. A new deck was then overlaid. All work was done at night. This was Region 11 first A & B contract. (NYSDOT, $15M, EIC: Robert Carbone, 1994-1995)

Reconstruction of Jericho Turnpike (Route 25), Syosset, NY, Project Manager - This project involved the widening and realignment of three miles of Route 25, from Route 106/107 to Route 135. The existing pavement required full and partial depth repairs. Eight large concrete retaining walls were constructed. The highlight of the project was the replacement of an active Long Island Rail Road Bridge. A new 180-foot long, 800-ton bridge was constructed alongside the existing bridge. In one weekend, the existing bridge was demolished and the new bridge was rolled in place. Extensive CPM scheduling was required. (NYSDOT, $35M, EIC: Byron Alford, P.E., 1993-1995)

Employment History:

The LiRo Group (1990 to Present)
Vice President
Lockwood, Kessler & Bartlett, Inc. (1985-1990)
Project Manager
Impell Corporation (1977-1985)
Supervising Engineer
Ebasco Services Inc. (1973-1977)
Associate Engineer

Gordon Althoff

SENIOR PROGRAM/PROJECT MANAGER

Mr. Althoff is a construction executive with solid track record of completing challenging and complex projects. He is proficient in pre-construction, negotiations, budgeting, cost control, proposals, contracts, risk-management and on-time delivery and constantly strives to satisfy clients' needs and deliver added value. Mr. Althoff is well-versed in all project delivery systems including construction management, real estate development and facilities management. He is an expert in program implementation and the collaboration of entire process of conceptualization-preconstruction-construction-occupancy. Representative project experience includes:

EDUCATION	M.B.A., Finance and Operations, New York University, 1975 B.S., Construction Management, University of Washington, 1971
REGISTRATION / CERTIFICATIONS	United States Army - Captain, Corps of Engineers Licensed Real Estate Broker OSHA 10 Hour Occupational Safety & Health Training, NY
YEARS WITH THIS FIRM	4
YEARS WITH OTHER FIRMS	34

Lower Manhattan Construction Command Center, Senior Project Manager: Mr. Althoff oversees the construction projects below Canal Street, primarily focusing on the reconstruction of the World Trade Center. He is responsible for:

- Managing coordination with stakeholders, utilities and various government agencies.
- Attending weekly coordination meetings with the PANYNJ and the contractors.
- Tracking the progress of construction at the WTC and maintaining database of the development and construction various planned project in catchment area.
- Reviewing the progress of the construction documents at various stages.
- Analyzing the progress of scheduled work and preparing reports for the LMCCC.
- Checking the construction logic and site logistics feasibility.
- Organizing value planning workshops, with renowned experts, for the World Trade Center.
- Preparing risk-based financial cost modeling for the World Trade Center on behalf of the PANYNJ.

(Lower Manhattan Development, $9M)

Fiterman Hall, Borough of Manhattan Community College, New York, NY, Project Executive, Major core and shell upgrade and tenant fit-out program of conversion of a former commercial 15-story office building into an educational facility. This $54M project included the renovation of 350,000 sf, including installation of new elevators, M/E/P systems, cleaning and restoration of the masonry facade, complete replacement of all windows and build-out of spaces for a variety of educational uses. The facility was occupied for educational activities during the entire construction process.

Stewart International Airport, Newburgh, NY, Project Executive - A 92,000 sf terminal expansion. Six construction phases were utilized to ensure no disruption of airport operations. The airplane runways were too close to the existing buildings with insufficient space to perform the new construction. Working with the FAA, we were able to temporarily restripe the runways, locate all the aircrafts further away and use temporary enclosed walkways to provide secure access for the passengers.

Queens Family Courthouse and Agency Building, Jamaica, NY, Project Executive - High profile court complex consisting of three buildings totaling $104M, 300,000 sf with 16 new courtrooms, separate structure for legal support services and a high-rise parking garage. Near the end of project completion, the entire shipment of special UV filtered insulated glass for the curtainwall was discovered to be defective. To ensure project completion on time, a command decision was made to temporally install all the defective glass so that finish trades could be completed and to install the correct glass at a later date; in the end, the project was delivered for occupancy on schedule.

New York City Department of Homeless Services, Brooklyn and Bronx, NY, Project Executive, $44M design/build program for the New York City Department of Homeless Services consisted of the restoration of three armories and the Seneca House, owned by New York City, to house the homeless in the Bronx and Brooklyn. All of the armories are official historic landmarks, which required special filings and restoration methodology. The goal of the program was to stabilize and repair the exterior of these enormous structures where the roof, brick, stone and terracotta had deteriorated over the last 100 years. *Designated 2005 Lucy G. Moses Preservation Award by New York Landmarks.*

Bronx Criminal Court Complex, Bronx, NY: On this project, Mr. Althoff was responsible for coordinating the preconstruction activities for a new 750,000 sf complex and managing the environmental cleanup, condemnations and demolition for a two city-block assemblage near Yankee Stadium. The demolition of existing structures was performed in a phased manner so that, as parcels became available, portions of the excavation/foundations proceeded before the entire site had been acquired, resulting in a construction jump-start of eight months.

New York City School Construction Authority, Capital Improvement Program II, Bronx, NY: Renovation of 14 public schools in the Bronx. Work was done concurrently at 13 locations with a staff of 22 professionals. Construction included exterior restoration, mechanical/electrical upgrades, boiler conversions and window replacements. Due to overcrowding at most of these schools, during the preconstruction phase the implementation was carefully planned with the principals and custodians to ensure minimum relocations and disruption to the ongoing educational activities. ($31M)

Kingsboro Psychiatric Center, Brooklyn, NY: This 168,000 sf project involved the complete exterior and interior renovation of an existing structure to provide a completely new interior layout, including patient rooms, isolation rooms, recreation rooms, dining rooms offices, treatment rooms, exam rooms and exterior activity areas. Included were state of the art life-safety systems, security systems and patient tamper-proof devices. The building also has two new four-story additions at the center of the building and a new one-story entrance addition. Also included was a new center power plant located nearby. ($35M)

Employment History:

The LiRo Group (2006 to Present)
Senior Project Manager
Gleman Construction Corp., (2004 – 2005)
Operations Manager
Apple Builders and Renovators, Inc., (2003 – 2004)
Vice President
Bovis Lend Lease, (2000 – 2003)
Project Executive
Skanska USA Builders, Inc., (1994 – 2000)
Executive Vice President

Vincent N. Valdemira, Sr.

SENIOR PROGRAM/ PROJECT MANAGER

EDUCATION	Bachelor of Professional Studies, Transportation Finance, SUNY Empire State College, 1986 Certificate, Management of Federal Transit Projects, Rutgers State University
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	32

Mr. Valdemira has diversified experience in managing more than $500M in capital improvement projects. He has been responsible for a broad range of projects from the planning phase through construction closeout. He has developed scope and budget for the past four Long Island Rail Road (LIRR) capital improvement programs, supporting strategies and business plans. Mr. Valdemira was responsible for more than $100M in shops and yards improvements, which included five diesel yards, two electric yards and a repair facility. These improvements were carefully coordinated with the LIRR, Transportation, and Maintenance of Equipment & Engineering Divisions. Representative projects include:

Metro-North Hudson Line Stations Rehabilitation and Restoration of Historic Yonkers Station, Project Manager - This project is a $70M design/build effort that includes complete station facility replacements. Included were station buildings, passenger platforms, canopies, stairways, overpasses, parking facilities and retaining walls. In addition, all stations needed to be brought into ADA compliance. LiRo provided construction management services at several Metro North stations including Greystone, Glenwood, Ludlow, Riverdale, Spuyten Duyvil, Marble Hill, University Heights and Morris Heights. The scope of work and service included:

- Platforms were demolished and replaced.
- Overpasses were constructed, incorporating ADA compliant elevators, ramps and stairways.
- New canopies, enclosures and windbreak were constructed.
- Retaining walls were repaired and rehabilitated.
- In addition to the work being performed at the aforementioned stations, LiRo managed the restoration of the historic Yonkers Station. Work at this station included:
- Demolition of 30-year-old high-level platforms and supporting members due to sever water damage of station facilities and replacement
- Height differential between the train and the platform caused by settling of platforms
- Significant ADA improvements
- Waterproofing
- Complete rehabilitation to abutments and viaduct retaining walls of four bridges due to corrosion damage
- Development and installation of a pigeon proofing system
- Rehabilitation and restoration of station building
- Extensive improvements of existing retaining wall
- Installation of new Right-of-Way fence

(MTA-Metro North, 2001-2005, $70M)

Yankee Stadium Redevelopment, Project Manager / Rail Transportation Coordinator - Mr. Valdemira is responsible for coordinating the activities of the construction contractors with Metro North Railroad's (MNR) operations personnel. In addition, he will coordinate the activities of this

contract with those project activities scheduled for the construction of the new Metro North Passenger Station at Yankee Stadium. Where construction may impede train operations, it is the primary focus of Mr. Valdemira to communicate with MNR ensuring that any impacts are minimal and properly coordinated as part of scheduled track outages or for the usage of flag personnel provided by MNR. (NYCEDC, $144M)

Reactivation of the Staten Island Railroad, NYC EDC, Project Manager - The project entailed the re-construction of Arlington Rail Yard and Cut-East, replacement of track along the seven-mile North Line and Travis Branch and construction of a new WYE connector between the North Line and the Travis Branch. The Travis Branch was extended 6,500 feet to the south. The branch provides a connection to the new Department of Sanitation transfer facility at Fresh Kills. A major component of this project was the replacement of two existing timber trestles with new bridges. In addition, a new twin arch culvert was installed near the project's southern terminus. Three existing bridges required extensive underpinning due to the installation of new retaining walls. These structures, as well as the structural underpinning, were the project's most challenging components and required the most expertise. (NYCEDC, $40M, 2005)

New York City Transit - Asbestos, Lead and Environmental Services for CM-1027, CM-1079 and CM-1183, Quality Manager - LiRo has established a standard approach for providing asbestos survey services to ensure that projects are completed on time and within the budget allocated for each site. The asbestos survey phase is initiated with a review of facility building records and a site walk-through by our certified (by USEPA and state agencies) inspectors to accurately identify the scope of the subsequent survey. The certified inspectors then map the location of all suspected asbestos containing material (ACM) at the site; classify the materials into homogeneous groups as appropriate and collect representative samples at a frequency compliant with all regulatory requirements for analysis at an accredited laboratory. Laboratory results are received within 24 hours of field sampling and summarized by LiRo in a survey report which details the location and results of all sample points, the location of all ACM present at the subject property, an estimate of the quantity of each ACM identified and a preliminary cost estimate for asbestos abatement at the subject property. (NYCT, $17.5M, 2004)

QM-80 Exhaust Fan Replacement at the Queens Midtown Tunnel, Project Manager - LiRo provided construction management services for the replacement of 23 tunnel ventilation exhaust fans in both the Queens Ventilation Building and the Manhattan Ventilation Building. This 54-month assignment included the relocation of programmable motor protectors, supervision and inspection of lead/asbestos abatement and extensive structural improvements. The project required meticulous coordination of construction while allowing for 24-hour continuous operation. The security of the facility was of the utmost concern. LiRo coordinated the entry of contractor and CM personnel into the facilities with the Bridge and Tunnel officers. (MTA-TBTA, $20M, 2003-2008)

Employment History:
The LiRo Group (2001 to Present)
Vice President
MTA - LIRR (1977–2001)
Director, Capital Program Management

Mike L. Rafat, P.E.

SENIOR PROGRAM/ PROJECT MANAGER

Mr. Rafat has over 25 years of experience with a strong background in business development, construction management, engineering, estimating, cost control and scheduling. He has had hands-on experience in virtually every project stage from development to final completion. Representative projects include:

EDUCATION	B.S. Civil Engineering, Civil/Structural Engineering, Alexandria University, Egypt, 1983
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, NJ Professional Engineer, PA OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	4
YEARS WITH OTHER FIRMS	22

No. 7 Subway Line Extension, Program and Construction Management, Project Director -The redevelopment of the West Side Yards is a New York City priority envisioned to result in new high-density neighborhoods, landmark public facilities and more additional floor space within the Manhattan Central Business District (CBD) than all of the plans for Lower Manhattan. Key to the West Side redevelopment is the initiative for accessibility to transit by extending the Number 7 Subway Line from its present terminus at Times Square. New York City's Number 7 Subway Line, known as the Flushing Line, is the system's busiest, linking Queens to Times Square. The planned new 7,000-foot-long tunnel will stretch west and south from Times Square to the Jacob J. Javits Convention Center on West 34th Street and 11th Avenue. (MTA-NYCT, $2B)

Lower Manhattan Construction Command Center, New York, NY, Program Coordinator - This contract provides program coordination services supporting the operations of the LMCCC in the coordination and oversight of Lower Manhattan construction projects. Primary day-to-day coordinator of the Lower Manhattan construction projects, coordinating and organizing logistics, scheduling and other actions relating to the various construction projects, in addition to taking all appropriate steps to ensure all construction proceeds in a coordinated manner, maintaining the overall agreed-to schedule and implementing measures to minimize disruption to the Lower Manhattan residential and business community. (LMCCC, $9M)

Neptune Aquatic Center, Neptune, NJ, Project Executive - Mr. Rafat is the project executive on this new Olympic-size seven lane enclosed pool. ($11M, NJSDA, on-going)

Yankee Stadium Redevelopment, Bronx, NY, Project Executive - LiRo is responsible for providing construction management services for the design and construction work that is required of the City of New York as part of the Yankee Stadium Agreement. Specifically, Mr. Rafat is responsible for managing the reconstruction of the Bronx Terminal Park, demolition of the existing Yankee Stadium ball fields and infrastructure upgrades on the new stadium. ($90M, NYCEDC, on-going)

Previous Experience includes:

New Jersey Schools Construction Corporation, Trenton, NJ - Regional Director. Mr. Rafat was in charge of the Hudson regional office, managing over $2B of school design and construction. The work included master planning, business development, land acquisition, feasibility studies and the hiring of architects, engineers and contractors. He supervised the design and construction activities while managing over 20 staff members and 100 consultant staff members. Project experience included:

- Led a large team of professionals to perform immediate repairs (health and safety related work) worth $450M, covering 300 schools. The work was done over two summers and every single school opened on time.
- Completed the design and started the construction of 30 new schools worth $500M.
- Started the design of 70 new schools that involved community input, land acquisition, Department of Education approval and coordination with several stakeholders.
- Worked with several school superintendents, school boards and local and state politicians on addressing community concerns, updating them on the progress and answering any questions from the legislators.
- Set up internal policies for the Hudson region on design, construction, change orders and claims. The policies ensured consistent approach and improved productivity.
- Worked with diversity groups and consultants on the best ways to encourage contractors to hire local workers, minorities and women. The efforts caused a sharp increase in the hiring of these groups.
- Led the effort in procuring, manufacturing and installing 300 temporary early childhood classroom units under fast-track schedule.
- Outstanding safety record on all of the projects - no fatalities and no serious injuries.

GCM Metal Industries, Brooklyn, NY - Vice President. Mr. Rafat's responsibilities for this structural steel fabricator and installer included business development, project planning, interacting with clients and A/E, supervising engineering and shop drawing preparations and preparing and negotiating change orders.

Nab Construction Corporation, College Point, NY - Project Manager. As project manager at one of the largest construction companies in New York City, Mr. Rafat's project assignments dealt with complex and critical projects, including:

> **Union Square Subway Renovations, NYC, Project Manager.** Major renovation of one of the largest Transit Authority subway stations in New York City. The work included structural steel, excavation, sheeting rock demolition, the construction of a temporary bridge along 14th Street to minimize traffic delays and to allow major construction activities to continue, concrete work, structural repairs, new underground passageway, new crew quarters, new elevators, floor tiles, underground duct supplies and HVAC, art work, asbestos abatement, chemical grouting, park rehabilitation, power and light fixtures, communication system, water and sewage work, track wall panels and several other activities. Prepared and negotiated over 130 change orders and held an excellent safety record. (NYCT, $46M)
>
> **Brighton Line Subway Renovations, NYC, Project Manager.** This project involved a four-subway rehabilitation project in Brooklyn, NY. ($20M)

Employment History:
The LiRo Group (2006 to Present)
Senior Vice President
NJSDC (2001 – 2006)
Regional Director
GCM Metal Industries (1999-2001)
Vice President
Nab Construction (1990-1999)
Project Manager

Raymond Busch III, P.E.

SENIOR PROGRAM/ PROJECT MANAGER

EDUCATION	B.S., Mechanical Engineering, New York Institute of Technology, 1987 A.A.S., Engineering, Suffolk Community College, 1984
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hour Occupational Safety & Health Training OSHA 10 Hour Safety Training Course OSHA Competent Person for Excavation LIRR Roadway Worker Protection
YEARS WITH THIS FIRM	23
YEARS WITH OTHER FIRMS	3

Since 1984, Mr. Busch has worked in the construction field. He has extensive experience as a Resident Engineer on large-scale municipal construction projects. These include rail yards and sewage treatment plants. Mr. Busch has overseen all phases of construction including the civil, structural, mechanical, electrical and architectural disciplines. He has been responsible for supervision of field personnel, implementation of specifications in accordance with contract documents, review and submittal of payment requisitions and change orders, permit review and documentation, project scheduling, as well as documentation and quality control. Some of his projects have been accomplished under NYSDEC consent orders. He has extensive experience on Wick's Law multi-prime contracts. Representative projects include:

MTA East Side Access - LIRR Connection to Grand Central Terminal, Resident Engineer. The East Side Access project will connect the Long Island Rail Road's (LIRR) Main and Port Washington lines in Queens to a new LIRR terminal beneath Grand Central Terminal in Manhattan. East Side Access has awarded two major contracts in December 2007 and February 2008: Manhattan Structures I contract and the Harold Structures I contract which are scheduled for completion in 2015. (MTA-LIRR-ESA, $6.3B)

MTA East Side Access - Construction Management Services for Arch Street Yard and Shop, Resident Engineer, 2002-2004. The Arch St. Yard and Shop is located on approximately twelve acres in Long Island City, New York. This Design/Build project included the design and construction of the following major elements:

- Maintenance Equipment Shop (64,000 SF Shop w/15,000 SF office space)
- 27 KVA Power Substation Building; Engineering Support Building
- 1200' long covered Extraordinary Interior Cleaning Platform and Storage Building;
- Track work and Third Rail
- Extensive site utilities

The shop and yard was initially used as a testing and acceptance facility for the LIRR's new M-7 train cars and will service as an inspection, maintenance and cleaning facility upon commencement of ESA revenue service in 2010. The Design Build contract was awarded for $77M with contract duration of 810 CCD's for completion. A unique aspect of this project lies within the Design/Build delivery system. In order to facilitate project completion within the required time frame, the building was built, in effect, from the outside in. An example can be found in the underground conduit sizing. During the initial design phase as well as during the installation of the steel H-piles, pile caps, grade beams and structural steel, the exact types of internal machinery, i.e. power requirements, was not known. Conduits could not be sized. Upon acceptance of the machinery, final sizing was determined. This caused the conduit and

floor slabs to be installed after the building shell was constructed, contrary to standard construction methodology. (MTA, $77M)

Nassau County Government Operations Center, Project Manager- LiRo in a Joint Venture with Bovis Lend Lease is providing comprehensive construction management services for the Theodore Roosevelt Government Operations Building. The Theodore Roosevelt Executive and Legislature Building at 1550 Franklin Ave in Garden City, NY will be completely renovated. The original building was constructed in 1916 and was the first public building to be constructed using reinforced concrete. The building is listed on the State Register of Historic Places and is currently approximately 135,000 gsf. Later additions to the building will be demolished so the final footprint will house approximately 85,000 gsf of space. In addition, a 28,000 gsf annex will be connected to the Old Courthouse building to house the new mechanical plant and Legislature chamber. The $36 million project is the result of an extensive evaluation of the County's requirements and the building's condition. (NCDPW, $36M)

Bay Park WPCP, Main Building Renovation, Resident Engineer- Improvements involved the phased expansion and renovation of the existing main building into a new administration building which would contain shop and crew facilities. Renovation of the existing facility was sequenced to follow construction of the main building extension and relocation of services into the new space. Included in the work was the replacement of face brick on the main building, construction of a new Unit Substation No. 5, an 80 ft tower/weather station, asbestos removal, dewatering, and the installation of auger grout injected piles. The interfacing and phasing of the new construction work with both the existing plant and other on-going construction projects was paramount towards the project's success. (NCDPW, $15M)

Bay Park Sewage Treatment Plant, Sludge Dewatering Facility, Resident Engineer- This project was accomplished ahead of schedule under DEC Consent Order. Completion of this facility involved the installation of wood foundation piles and concrete pile caps; the construction of a reinforced concrete and concrete encased structural steel building; the installation of precast concrete roof panels and built-up roofing system; the installation of HVAC units and odor control equipment, the installation of 12 sludge dewatering presses, pumps, conveyors and various mechanical equipment; and the installation of roads, parking lots and various site improvements. (NCDPW, $30M)

Resident Engineer for the LIRR Ronkonkoma Yard Train Wash Facility - This facility consists of a 200 ft by 50 ft single building structure containing a Wash Bay and two-story Wash System Support Bays. The footing, foundation, lower level support bay and train wash slab are constructed of reinforced cast in place concrete. Coordination was required with the LIRR Force Account Departments and the Local Utility Company's prior to and during the construction of the Train Wash Facility. Coordination with Key Span Energy was required to relocate gas lines while the design and relocation of 13.8 KVA underground feeders was required with the Long Island Power Authority. Coordination with the F/A Signal and Communication departments was required to reroute existing signal and communication systems that were within the footprint of the new car wash structure. (LIRR, $4.7M)

Employment History:
The LiRo Group (1987 to Present)
Associate Vice President

Donald Bornkamp, Jr., P.E.

SENIOR PROGRAM / PROJECT MANAGER

EDUCATION	B.E., Civil/Environmental, Manhattan College, 1985
REGISTRATION / CERTIFICATIONS	Professional Engineer, VA Professional Engineer, NY Certified Code Enforcement Official, NY OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	12

Mr. Bornkamp has been providing engineering and operations management services since 1985 in the areas of construction management and project management. His experience includes NYCT bus depot construction, vehicle repair shop construction, general facilities construction, track construction, bridge & elevated subway inspection, underground storage tank replacement, retaining wall and bulkhead construction, utility installation, facility demolition, environmental remediation, productivity improvements, safety improvements, and organizational development.

Representative project experience includes:

Construction of the Queens 14 Garage & Salt Shed, Project Manager - Responsible for design review, preconstruction planning and construction management for the $33 million, 72,000 sf service and storage building, accessory support structure (salt storage shed) and all utility services (sanitary & storm sewer, domestic water and fire mains, gas service and electric). Project required the coordination of four (4) prime contractors under Wick's Law requirements for the ground up construction of the storage & repair garage, locker facilities and office facilities.

Environmental Remediation and Demolition of the South West Brooklyn, Greenpoint and Hamilton Avenue Incinerators, Project Manager - Responsible for preconstruction planning and construction oversight for the environmental abatement and demolition of three decommissioned incinerator facilities. Tasks included environmental monitoring, waste tracking, permitting, utility coordination, compliance with Federal, State and local regulation and health & safety regulations governing hazardous and contaminated waste.

Renovation of James A. Thomas Center, Rikers Island, Project Manager - Responsible for design review, preconstruction planning and construction oversight for the $30 million structural renovation of the of an historic correctional facility (constructed 1933). Scope of work required the upgrade of the facility to present fire/life safety codes and existing court mandates for inmate occupancy. Tasks included demolition and replacement of several rooms requiring pile foundations, structural steel framing, replacement of HVAC systems, domestic hot and cold water systems, and installation and energizing for a new 5 kv feeder loop with three (3) new substations and emergency generators. Work required the removal of ACM following NYCDEP regulations and abatement and monitoring of lead contaminated areas.

Construction of Locker Facility at Rikers Island, Project Manager - Responsible for design review preconstruction planning and construction oversight for the $6M, 16,200 sf locker facility to resolve a union grievance between the Department of Correction and the Officers Union. Work required the installation of pile foundations, structural steel framing, installation of new gas, water and electrical services, installation of a 130' connecting corridor, men's and women's locker and shower facilities.

Randall's Island Fire Training Academy, Assistant Project Manager - LiRo provided complete construction management and inspection services for the New York City Fire Department's Fire Academy. This $35M project involved the construction of three new buildings, renovation of a fourth and construction of an outdoor training area at the Department's Fire Training Academy on Randall's Island. Building 11 involved the new construction of a four-story building containing classrooms, gymnasium, locker rooms, and cafeteria. This building featured a facade with brick, insulated metal panels and a curtain wall system and houses a boiler room. It also featured state-of-the-art audio-visual systems. Building 12 involved the new construction of a six-story training building. This building featured insulated metal panels and brick facade on the outside, and an indoor atrium configured to represent several different types of City buildings: brownstone, storefront, and commercial building. Building 5 consisted of a new multi-level training facility. This building featured an advanced computerized fire training system providing firefighters with realistic theatrical flames, intense heat, and obscured visibility. The building featured a brick facade, fire resistant interior spaces, and exterior features to enable access training such as cutting station and mock-up skylights. Building 2 involved the reconstruction of the existing multi-level live fire training burn facility. This facility was renovated to a smoke generator training facility.

System-Wide Kitchen Renovations at Rikers Island, Resident Engineer - Under the Cook-Serve Program, all kitchens, pantries, and serveries at correctional facilities throughout the City were reconstructed to allow food to be prepared and served on-site in accordance with court mandates. To accommodate the new equipment required for the program, the electrical and mechanical infrastructure of the kitchens (62,000 sf), pantries (7,500 sf), and related areas were expanded, and additional utility services were provided. The work was phased so that while some facilities undergo construction, they were provided food from nearby facilities. (NYCDDC, $50M)

MTA-New York City Transit, Department of Buses, Assistant Chief Facilities Officer - Managed a staff of 14 engineers and architects to support 20 facilities with a value of more than $2 billion. Responsible for project scope development and coordination for all capital and operating contracts impacting facilities. Responsibilities included:

- Planned, designed and implemented $3 million in fast track projects (6 month period) to accommodate the increased bus storage needs at Dept. of Buses facilities.
- Designed and implemented temporary connection and transfer station for subway to bus transfers for the Williamsburg Bridge shutdown. Project coordinated between NYCTA and NYCDOT.
- Developed TA Labor (Force Accounts) for all capital projects at Dept. of Buses facilities.
- Developed and implemented policies and procedures related to environmental compliance and NYS building code compliance.
- Improved efficiency of maintenance procedures for in-house maintenance staff.
- Prepared bus depot design guidelines for the construction of new facilities and renovation of existing facilities.
- Implemented new regulatory requirements for the USEPA AND NYSDEC as they apply to Department of Buses facilities.

Employment History:

The LiRo Group (1998 to Present)
Associate
MTA – New York City Transit (1984-1998)
Assistant Chief Facilities Officer

Bernard Markowitz, P.E.

SENIOR PROGRAM / PROJECT MANAGER

Mr. Markowitz has been providing construction management services since 1970. He has provided project management services for major capital improvement projects for various public agencies. Representative projects include:

EDUCATION	M.S.C.E., Civil Engineering (Environmental), City College of New York, 1976 B.C.E., Civil Engineering, City College of New York, 1970
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, NJ
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	29

New York City Department of Sanitation Requirements Contract, Project Manager - Three DSNY projects included the following:

- New Manhattan 5 Garage - Pile foundation, steel frame, metal exterior building of 15,000 sf building to house a partial sanitation district, including mechanical building maintenance and operating personnel. ($6M)
- New warehouse on Kingsland Avenue - Pile foundation, steel frame, metal exterior of 12,000 sf building to house a new warehouse facility for DSNY. ($2M)
- Roof replacement at Gansvoort Incinerator - Removal of existing asbestos roof and replacement with a new membrane roofing system. ($0.5M)

Supervised engineering and inspection staff at all projects. Responsible for monitoring contractor's performance, pavements and work schedules. Coordination work between four prime contractors (Wicks Law). Reviewed contractor's safety program, shop drawings/submittals, correspondence. (DSNY, $8.5M)

E73rd, Gansvoort and Greenpoint Incinerators Abatement and Demolition - Project Manager for four separate DSNY incinerators Abatement and Demolition projects as follows:

- Southwest Brooklyn - Interior abatement and demolition of entire structure including abatement equipment and furnaces. ($5.4M)
- E73rd Street - Interior abatement and Demolition of all equipment inside structure. ($2.18M)
- Greenpoint - Abatement and Demolition of expansion chambers, gas conditioning towers, precipitators, and exhaust stacks. ($2.0M)
- Gansvoort - Abatement and Demolition of expansion chamber and exhaust stacks. ($0.69M)

Supervised environmental and engineering staff at all projects. Responsible for monitoring contractors, performance for environmental and demolition work. Monitored compliance with regulatory requirements for all abatement work. Monitored contractor's safety procedures for abatement and demolition phases. Prepared/ Reviewed contractors payment and submittals. Provided direction and interpretation of contract documents. Reviewed and approval contractors schedule. (DSNY)

W. 158th Street Maintenance and Repair Facility - Responsible for construction Management of four prime contractors under Wicks Law totaling $23.8M. Supervised multidiscipline staff for construction project. Reviewed and interpreted contract drawings and specifications. Reviewed/ prepared contractors payments, shop drawings, submittals, request for information and responded to

correspondence. Provided monthly project schedule. Coordinated work between all prime contractors and subcontractors to avoid delays and claims against owners. Prepared necessary change orders. Provided documentation/reports to owners. (NYCDOT)

Police Firing Range, VCP Corrections Requirements Contract - For this CM/Build project, Mr. Markowitz was responsible for project management and construction contracts. (NYCDDC, $1.1M, 1999 - 2002)

Employment History:

The LiRo Group (1999 to Present)
Associate
MTA-New York City Transit, Department of Buses (1998-1999)
Chief Officer Environmental and Industrial Safety
MTA-New York City Transit, Department of Buses (1990-1998)
Chief Facilities Officer

Douglas Owen, P.E.

SENIOR PROGRAM / PROJECT MANAGER

EDUCATION	B.S., Mechanical/Civil Engineering, Temple University, 1982
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hour Occupational Safety & Health Training CPM Scheduling Class Formal MPT Training - NYSDOT
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	12

Mr. Owen has acquired considerable field construction experience as an Assistant Project Manager, Resident Engineer, Assistant Resident Engineer, Office Engineer and an Inspector on a wide variety of highway and bridge construction projects since the early 1980's. He has been responsible for construction inspection and documentation, office management and record keeping, field staff management and consultant contract budget monitoring. Mr. Owen's duties have also included project change order evaluation, value engineering reviews, construction CPM schedule monitoring and final contract computations along with the management of progress meetings. In addition, he has been responsible for preparation of orders-on-contracts and cost estimates for proposed changes. Representative projects include:

Construction Inspection Services on an As-Needed Basis, New York, NY, Resident Engineer. This project involved on-call construction inspection services and included associated services at various MTA B&T facilities throughout New York City. Mr. Owen's assignments were located at the Henry Hudson Bridge which spans the Harlem River. Specific projects included: *Upper Level Deck Bearing Replacement.* This project included structural steel repairs and bearing replacements for the Upper Level. Mr. Owen inspected the existing conditions, and made recommendations for additional element replacement or modification of repairs in conjunction with the designer based on conditions found. He also reviewed contractor shop drawings for content and prepared as-built drawings. ($400K)

Dyckman Street Bridge Steel Access Platforms at the Henry Hudson Bridge. This project included the fabrication and installation of steel access platforms and ladders for the Dyckman St Br north and south vaults. He worked with the designer to resolve design issues when field conditions did not coincide with the original design. He worked with the contractor to resolve fabrication issues and he reviewed the contractor shop drawings for content and prepared as-built drawings. ($500K)

Concrete Repairs at Skewbacks. This work involved concrete repairs to the bridge's skewback anchorages at water's edge. Mr. Owen performed verification inspection from bi-annual inspection reports to establish limits of the repairs. He assured compliance with the water protection system and coordinated work from small tug boats and barges, assuring compliance with MTA B&T and USCG security regulations. ($750K)

(MTA-TBTA, 2005)

Construction Management and Inspection Services for Structural Retrofits at the Bronx-Whitestone Bridge, Mr. Owen served as Resident Engineer for the construction of retrofits to the towers, main cables, suspender ropes, and anchorages of this major suspension bridge. The scope of this project included: Strengthening the exterior and interior of the bridge towers; Relocating and installing new electrical elements; Installing protective armor for the main cables; Installing protective

armor for the suspender ropes; Installing new structures and security barriers within and around the anchorages; extensive maintenance and protection of traffic was required to minimize delays to the travelling public. (MTA Bridges & Tunnels, $41M)

Construction Management and Inspection Services for Structural Retrofits at the Throgs Neck Bridge, New York, NY, Mr. Owen served as Resident Engineer for the construction of retrofits to the towers, main cables, suspender ropes, and anchorages of this major suspension bridge. The scope of this project included: Strengthening the exterior and interior of the bridge towers; Relocating and installing new electrical elements; Installing protective armor for the main cables; Installing protective armor for the suspender ropes; Installing new structures and security barriers within and around the anchorages; extensive maintenance and protection of traffic was required to minimize delays to the travelling public. (MTA Bridges & Tunnels, $50M)

Replacement of Steinway Street Bridge over the Grand Central Parkway, Resident Engineer. This project for NYCDOT - Division of Roadway Bridges involved construction inspection for the reconstruction of two rigid frame arch structures over the Grand Central Parkway in Astoria, NY. The project included the demolition of the existing concrete rigid frame arch structures; erection of new steel frame posts and arches, structural steel painting; pouring of encasement abutments and new poured-in-place concrete deck slabs and sidewalks; galvanized steel bridge railing & fencing; permanent soldier pile and lagging sheeting with grouted tie-back anchors; the installation and removal of two temporary ACROW truss bridges; and extensive MPT detour scenarios. To replicate as closely as possible the original rigid frame arch, the new structures consist of three section steel frames which sit upon the original foundations and at a skew of 29° to the roadway alignment. The foundations were modified to accept the new anchor bolts. Because of the very limited site, Mr. Owen worked with the contractor and NYCDOT to devise erection schemes which utilized nighttime operations requiring full one-way shutdowns of the GCP to maximize nightly production and minimize community disruption. The demolition of the existing structures was performed utilizing traffic crossovers east and west of Steinway Street on the Grand Central Parkway. During each stage of the contract the GCP traffic was diverted over two weekends to the opposite side and a structure was removed by dropping the bridge onto the parkway. Prior to weekend demolition operations, extensive coordination with NYCDOT Office of Construction Management Coordination (OCMC) was required. (NYCDOT, $18.4M)

Interchange 17, NYS Thruway, and I-84/Route 300 Interchange Reconstruction, Contract No. 1, Resident Engineer - This $8.2 M New York State Thruway Authority project was Phase 1 of the four phase interchange reconstruction. It included the reconstruction of existing eastbound on and off ramps in the I-84 & Route 300 Interchange and lengthening and widening of the northbound I-87 off-ramp to Exit 17 (Newburgh) to allow for an additional lane of traffic. The second major aspect to this project was the excavation, screening and testing, then stockpiling and/or disposing of 73,000 cm of potentially contaminated soils from an abandoned dumpsite within the future interchange footprint. The abandoned dump cleanup required the close monitoring of contractor operations of excavation and testing of potentially contaminated soils and the documentation of disposal manifests and assuring NYS DEC and US EPA regulation compliance. Mr. Owen prepared the landfill remediation closure report for NYSTA to be submitted to NYS DEC. Mr. Owen took numerous actions to expedite the intersection reconstruction that resulted in significant saving to the NYSTA in both time and money. (NYSTA, $8.2 M, 2003-2004).

Employment History:
The LiRo Group (1994 to Present)
Associate Vice President

RBA- (1991-1992)
Office Engineer
Boswell Engineers (1988-1991)
Office Engineer

Leonard J. DePrima, P.E.

SENIOR PROGRAM/ PROJECT MANAGER

EDUCATION	M.B.A., Business Management, Canisius College, 1981 B.S.C.E., Civil Engineering, SUNY at Buffalo, 1969
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	32

Mr. DePrima has over 36 years of professional experience in engineering, planning, design, construction, and program management. As Vice President for Infrastructure Programs, he leads the LiRo team in support of our public and private clients' efforts to maintain and improve their assets and physical plants. Mr. DePrima was previously employed by the NYS Thruway Authority, where his professional growth in a 20 year career demonstrates his ability to develop, lead, and manage multi-million dollar operating and capital programs. He has gained extensive experience in the innovative financing of projects, contract and project management, and dispute resolution. He has also had considerable private municipal experience in the design of subdivisions and commercial developments, including drainage studies, design reports, and the design of water and sanitary systems. Representative project experience includes:

NYCDDC Lower Manhattan/WTC Program Management Services, NY: Project Engineer responsible for coordination of all assigned projects. Mr. Deprima worked closely with the Director of Program Management & Planning, as well as with the designated NYCDDC and NYCDOT representatives. In the effort to rebuild lower Manhattan after 9/11 recovery, duties include selecting and leading work teams based on needs of specific projects, project planning and design coordination, schedule review, progress meetings, development and implementation of MPT schemes for vehicles, bicycles, and pedestrians, quality oversight, and community outreach services. Special emphasis is placed on supporting NYC agencies relative to their interface with NYSDOT, FHWA, and other State Authorities.

Erie County DPW Program Management Services, NY: Program Manager for $50 million accelerated 2003/2004 capital program to plan, design, and construct multiple culvert, highway, and bridge restoration projects throughout the County. As Program Manager, directed LiRo staff and more than 17 diverse professional consultant firms in delivering 30 plus projects on an accelerated schedule, including over 60 individual culverts, 10 bridges, and 50 miles of highway. The goal of this program was to allow the individual consultant teams to function effectively, focusing on their specific projects, while the overall program proceeded in a fast-moving, well-coordinated effort. Interagency coordination, community outreach, and construction management were key components of the program.

Erie County Highways Consultant, NY: Project Manager for general highway engineering contracts with Erie County. Services include highway design and construction management services. Current projects include Maple St. reconstruction in East Aurora and the North French Road reconstruction in Amherst.

ECIDA GM Access Road (2001-2002): Project Manager for design and construction management services for a $2 million access road planned to facilitate construction of the new General Motors $500 million in-line 4/5 engine plant expansion, in the Town of Tonawanda, NY. In addition to general highway engineering, work included; site demolition, soil/water remediation and disposal, and construction management services to insure that the project was constructed as per plans and specifications, on schedule, and within budget.

Tonawanda Incinerator Demolition/ Remediation, NY (2001): Project Manager for the site investigation and engineering services for the demolition of a municipal incinerator structure in the Town of Tonawanda, NY. LiRo provided identification of hazardous materials to be abated prior to demolition and detailed design plans for remediation and demolition of the structure. LiRo also provided construction management and quality assurance services, enabling the Town to plan the future re-development of the cleared site.

Town of Amherst Renovation and Expansion of the Amherst Town Hall (2000): Project Manager for the completion of a feasibility study to expand the Amherst Town Hall at its current location. The LiRo team developed several alternate proposals, including detailed estimates that addressed the architectural and structural modifications necessary to expand the useable space needed for government operations at the existing Amherst Town Hall

Como Lake Park Dam Retaining Wall Rehabilitation, NY: Project Manager responsible for bank stabilization adjacent to the historic Como Park Lake Dam in Lancaster, NY. The project included the design of a reinforced concrete retaining wall with related drainage and civil engineering details. In addition, a historic masonry wall was restored. Subsequent to design, LiRo also provided construction management services.

NYSDOT Term CI, Buffalo, NY: Project Manager responsible for overall management and execution of term contract that provided construction inspection activities at several sites in western NY including:

- Route 240 truss bridge over Cazenovia Creek
- I-190 Virginia Street Ramp
- I-190 Niagara Street Ramp
- Route 430/Route 17 stringer bridge in Mina
- Armenian Road/Route 17 stringer bridge in Sherman
- Day Road truss bridge over Erie Canal

Project includes field inspection of construction activities including the preparation and painting of structural steel, as well as enforcement of the Health and Safety procedures and Maintenance and Protection of Traffic.

Employment History:

The LiRo Group (1999 to Present)
Vice President
New York State Thruway Authority (1978-1999)
Deputy Executive Director (1996-1999)
Chief Engineer (1995-1996)
Division Director (1983-1994)
Asst Superintendent of Maintenance (1981-1983)
Assistant Division Engineer (1978-1981)

Robert Kreuzer

SENIOR PROGRAM/PROJECT MANAGER

Mr. Kreuzer has over 20 years of environmental and hazardous waste consulting experience involving subsurface investigation and remediation of commercial and industrial properties for public and private sector clients. In addition, he has extensive experience in the areas of asbestos and hazardous materials investigation, design and abatement to support large scale demolition, renovation and rehabilitation projects.

He has been involved with numerous projects involving Federal agency remedial efforts (USEPA, USACE, AFCEE) and New York State/Superfund site characterization and remediation in accordance with CERCLA requirements. His project experience encompasses a wide range of settings including spill sites, industrial facilities, military facilities and landfills. His recent project experience includes several brownfield investigations and remedial designs under the NYSDEC and USEPA programs.

During his career, he has demonstrated an exceptional ability to manage and coordinate a wide range of environmental projects including numerous programs under on-call or task order based contracts. Representative projects include:

EDUCATION	B.S., Geological Science, State University College of New York at Buffalo, 1988 Post-Baccalaureate Studies, Hydrogeology
REGISTRATION / CERTIFICATIONS	OSHA, HAZWOPER 40 hour training OSHA, Construction Safety and Health Training NYSDOL Asbestos Supervisor NYSDOL Asbestos Project Monitor OSHA Confined Space Entry Training OSHA 8 Hour Supervisory Training NJDEP UST Certification-Closure, NJ NJDEP UST Certification-Subsurface Evaluation, NJ OSHA 40 Hour Site Worker Protection Training NJDEP UST Cert-Tank Testing, Closure, Subsurface Evaluation, NJ
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	9

NYCT Asbestos Consultant Services Contract, NY: Project Manager responsible for four consecutive indefinite quantity Asbestos Consultant Services Contracts. Services included asbestos investigations and reports, development of abatement work plans, cost estimating, project coordination and interfacing with site representatives, and project management with oversight of the abatement contractors. Other responsibilities included project cost tracking and invoicing. Project sites included operating substations, subway stations, office buildings, mechanical rooms, rail yards, bus depots, tunnels, bridges, and various other structures throughout many of NYC Transit's three thousand facilities located throughout the five boroughs of New York City.

DNSY 4, 4, 7a, 6, 8, and 8a Incinerator/ Garage Demolition Projects, NY: Project Manager for environmental aspects of this $6.2 million program involving detailed site investigations at two former municipal waste incinerators for asbestos and other hazardous materials and a structural evaluation in preparation of demolition design documents and specifications. Responsible for coordinating the field effort and for preparing drawings and specifications for: environmental issues; USTs/ASTs (bulk storage); soil and water contamination; RCRA wastes; residual ash/refractory brick; PCBs; lead paint; and drum waste.

DSNY Gansevoort and Greenpoint Incinerator Equipment Decommissioning Investigation and Design, NY: Project Manager for environmental aspects of this $2.8 million project involving the

decommissioning of incinerator and pollution control equipment at two former municipal waste incinerators. Conducted surveys and investigations to address the decontamination/dismantlement /demolition of 200 foot stacks, duct work, air scrubbers, precipitator units, and expansion chambers. Prepared specifications and drawings for the dismantlement/ demolition of structures, removal of asbestos containing materials (ACM), RCRA wastes-ash/residue brick, and deteriorated lead based paint. Provided inspection services and support to the Construction Manager during the cleanup/ dismantlement phase.

NYCDDC Requirements Contract for Environmental Services: Project Manager for work-order based contract to perform Phase I/Phase II Environmental Site Assessments (ESAs) and corridor studies in support of NYCDDC property acquisition and corridor rehabilitation projects. More than 60 task orders have been issued and completed. Mr. Kreuzer is the project manager responsible for the coordination of field activities and implementation of Phase I ESAs in accordance with ASTM standards. Responsible for the development and implementation of Phase II/Corridor Investigation work plans for all the project sites. He is responsible for the review and management of all aspects of the program including records reviews, data acquisition, work plan development, oversight of subsurface investigation work, data review and report preparation. Mr. Kreuzer has also performed all administrative functions for project tracking and invoicing.

NJSCC Site Feasibility Studies-South Region, NJ: Project Manager for environmental services performed for various school renovation and replacement projects for NJSCC. Assignments have included providing site investigations at a swing space school. Services include asbestos survey, lead inspection, mold and indoor air quality. Also, for three school buildings that will be demolished for new facilities, provided Phase I/II and remedial investigation services, asbestos and lead based paint investigations, abatement and demolition design, underground storage tank removal, and cost estimates.

JetBlue Airways Warehouse Demolition/ Terminal 5 Remediation, NY: Project Manager for the site investigation and design for the demolition of four large warehouse and maintenance facilities at JFK International Airport. Responsible for coordinating the field effort and preparing site investigation reports for the remediation of hazardous materials and asbestos. Prepared drawings and specifications for the removal of asbestos, USTs, drummed wastes, PCBs, and CFCs. For Terminal 5 project, responsible for developing a remediation Health and Safety Plan, Soil Management Plan and Spill Prevention and Control Plan for the project. In addition, LiRo prepared asbestos abatement design documents for the fueling line and existing buildings in the project area.

New York Power Authority, NY: Program Manager for environmental services at various facilities in connection with building systems upgrades to promote energy efficiency; maintain project budgets staffing assignments for upstate and downstate sites; projects sites included White Plains Courthouse, Valhalla Penitentiary, and 18 other associated sites for Westchester County Department of Public Works.

Employment History:
The LiRo Group (1997 to Present)
Vice President
URS Corporation (1989 to 1997)
Project Manager
Recra Environmental, Inc. (1987-1988)
Laboratory Analyst

Martin J. Wesolowski, P.E.

SENIOR PROGRAM/ PROJECT MANAGER

Mr. Wesolowski is a Professional Engineer licensed in the State of New York with over 13 years experience in the civil/environmental field. Mr. Wesolowski has been assigned to various highway and bridge reconstruction, building construction, and utility design and construction projects. Additionally, Mr. Wesolowski has been involved in hazardous and non-hazardous waste remediation projects involving design, inspection and cost estimating. Responsibilities have included oversight and coordination of engineering staff, liaison with agencies, and providing a wide range of design services, various construction support services including coordinating permit requirements with state and local agencies, review of shop drawings and providing technical assistance to inspectors.

EDUCATION	B.S., Civil Engineering, SUNY at Buffalo, 1991
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Hazardous Waste Operations & Emergency Response NJDEP UST Certification-Closure, NJ NJDEP UST Certification-Installation, Entire System, NJ NJDEP UST Certification-Testing, NJ NYSDEC UST Certification, NJ NYSDOL Asbestos Project Designer, NY OSHA 40 Hour Hazardous Waste Site Worker Protection Training OSHA Confined Space Safety Training OSHA, Construction Safety and Health Training OSHA, HAZWOPER 40 hour training SSPC C-3 Training
YEARS WITH THIS FIRM	13
YEARS WITH OTHER FIRMS	7

Representative projects include:

Jet Blue Phase I/II Assessments and Geotechnical Studies, NY: Project Engineer for a large scale geotechnical and environmental investigation in support of JetBlue Airways Corporation's New Technical Support Operations Campus at John F. Kennedy International Airport. The project involved assessing geotechnical and environmental requirements for the construction of a 63,000 square foot hangar and a 16,000 square foot technical operations building. The project boring program involved the advancement of 75 borings ranging in depth from 15 to 80 feet. Geotechnical analyses included grain size, moisture content, Atterberg limits, moisture-density relationship, and bearing capacity ratios of laboratory compression tests. Based on the results of the investigation, provided recommendations for foundation construction in accordance with New York City Building Code. Responsible for QA of specifications for addressing the disposal of contaminated soils and treatment of groundwater during construction dewatering activities.

SUCF UST Replacement for SUNY at Buffalo, North (1999-2002): Project Manager for the replacement of 20 emergency generator tank systems at SUNYAB North campus. Responsible for the development of project initiation documents and the development of construction documents. Coordinated between SUCF and SUNYAB personnel. Provided construction management services during construction.

NYSDOT Construction Inspection Services, Region 5: Assistant Project Manager responsible for coordinating construction inspection staff for the term contract to NYSDOT in Region 5 for various bridge and highway projects.

TBTA Environmental Management and Analysis, NY: Project Manager for an indefinite delivery general environmental services contract for TBTA. Project work, to date, has included permitting evaluations for compliance with NYSDEC/USEPA Small Municipal Separate Storm Sewer Systems (MS4) storm water discharge requirements, NYSDEC Part 201 Air permitting requirements, and NYS Waste Reduction Program requirements.

NYCT Asbestos Consultant Services Contracts, NY: Project Designer for two indefinite quantity asbestos consulting contracts. Services included the development of asbestos abatement designs for operating substations, subway stations, office buildings and various other NYCT facilities throughout the five boroughs of New York. Additional services included submittal review and cost estimating.

New York Bus Service, NY: Project manager responsible for the design of a 1,000 cfm multi phase extraction system for the removal and treatment of free product, soil vapor and groundwater contamination. The system utilizes a medium vacuum liquid ring pump manifolded to seventy four recovery wells to recover the free product, groundwater and soil vapor. The free product and groundwater is then treated through a series of separation tanks and an oil/water separator to remove the free product. The groundwater is then treated through an air stripper and discharged to the river. Other services included preparation of the stipulation agreement, and construction support. Additional services included the design of a new fleet fueling facility consisting of three - ten thousand gallon above ground storage tanks. The tanks were double wall steel UL- 2085 protected tanks manifolded to 12 fuel dispensers. Other services included the preparation of NYFD variance for above ground motor fuel tank installation and construction support services.

NYCHA Fuel Oil Tank Replacement, NY: Project Engineer responsible for the supervision of the preparation of design plans and specifications for the replacement of fuel oil tanks at Astoria Houses, White Houses and Breukelen Houses. Design included the installation of double wall fiberglass coated steel USTs and replacement of boiler piping systems in accordance with the NYCHA standard metric specification and guidelines. Project involved inspections for potential ACM along tank system piping.

DSNY Incinerator/Garage Demolition Projects, NY: Project Engineer for this $6.2 million program involving detailed site investigations at two former municipal waste incinerators for a structural evaluation in preparation of demolition design documents and specifications. Responsible for preparation of demolition drawings and specifications. He also performed review of geotechnical report in support of the new building design work for various sites. Geotechnical services included the advancement of borings to assess geotechnical conditions as well as soil and groundwater contamination.

NYCDDC Remediation Program, NY: Senior Engineer for the NYCDDC remediation program. Responsible for the design of groundwater/soil treatment and product recovery systems at 50 facilities in all 5 boroughs of New York City. Other activities included supervision of contractors during construction and on-site supervision during startup and testing.

Employment History:
The LiRo Group (1997 to Present)
Associate
URS Consultants, Inc, Buffalo, NY (1991-1997)
Project Engineer

Ronald Wilson, P.E.

SENIOR PROGRAM / PROJECT MANAGER

EDUCATION	M.B.A., Executive Management, St. John's University, 1988 B.S., Civil Engineering, Polytechnic Institute of New York, 1971
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, NJ Professional Engineer, CT
YEARS WITH THIS FIRM	14
YEARS WITH OTHER FIRMS	26

Mr. Wilson has 34 years of construction administration and design management experience for a wide range of diversified, multi-million dollar projects. These include a major water tunnel project; water pollution control plants throughout the New York City and Long Island docking facilities for the U.S. Navy; and buildings such as schools, prisons, airport terminals, and railroad stations. As a Construction Manager with LiRo, Mr. Wilson has managed all aspects of projects, from initial development through staff management, day-to-day administration, and close out. His responsibilities include value engineering, constructibility review, estimating, bid packaging, claims control, and supervision of construction inspection. Relevant project experience includes:

CM/Build Requirements Contract for NYC Housing Authority, Senior Project Manager. LiRo performed work on a task order basis for this project involving interior and exterior renovation of 31 high-rise buildings for the Ocean Bay Complex in Rockaway, NY. These properties all required that LiRo perform preconstruction and construction phase services LiRo was responsible for prequalifying potential construction contractors, bidding the work and ultimately entering into contract with the construction contractors. Work for this project included: exterior renovations, full repointing, replacement of windows, window lintels, window sills, parapets, roof, lobby extensions and renovations, construction of stair towers as a second means of egress, landscaping, additions to daycare center and senior center, full electrical distribution upgrade, brick replacement and interior renovation. Of particular importance was that these projects required careful coordination with community residents so interruptions of utilities, housing access, etc. was kept to an absolute minimum. In addition, a community liaison was necessary to keep local residents well informed as to the progress and new developments on the project. (NYCHA, $265M)

New Jersey School Construction Corporation Program Management for Professional Staffing, Associate Project Manager - Assisted NJSCC in program management of a NJ State Supreme Court mandated statewide school design and construction initiative. Assigned for the Jersey City School District under Hudson County with a construction budget allocated at $500 Million. Major responsibilities included overseeing the design consultants and the program Management Firm (PMF) ensuring that the program goals were met both in design and construction phases. (NJSCC, $25M)

Brooklyn House of Detention for Men, Project Manager - These NYCDDC projects were performed in a high security correctional facility. Coordination was critical since there could be no interruption of operations or security. The work involved all elements of construction including piles, structural steel, masonry, HVAC, electrical and security systems, as well as interior finishes for administrative offices. Projects included under this contract:

- New Additions and Renovations ($20M)

- Second Means of Egress ($5M)
- Fire, Life and Safety Improvements ($12M)

P.S. 98 Reconstruction, Manhattan, NY, Project Manager - This project involved phased construction with continuous operations of the school which contains over 1000 students. Coordinating the administration, staff, students, UFT, parents and contractors was crucial to the success the project. Construction included asbestos removal throughout the building, modernization of the HVAC, plumbing and electrical systems, kitchen, elevators, roofs, and the restoration of the entire masonry facade. (New York City School Construction Authority, 1994-1998, $13M)

P.S. 176 and I.S. 52, Manhattan, NY - As Project Manager, Mr. Wilson provided administrative and technical management for the complete renovation of a 1200-student intermediate school and the construction of a new 600-student public school. The renovation required the complete overhaul of the HVAC, electrical, and plumbing systems; complete interior remodeling and refinishing; and extensive asbestos insulation and lead paint abatement and disposal. Concurrent with the renovation was the construction of the new facility at a different location. (SCA, $40M)

Newark International Airport - Mr. Wilson was Project Manager for the renovation of the International Departure and Arrivals Terminals (A, B, and C), and the construction of a monorail system at one of the largest airports in the metro area. All construction was accomplished while maintaining the operations of both ground and air side facilities.

Babylon School District, Babylon, NY - Interior renovations and upgrades of mechanical, electrical and HVAC systems for a grade school, elementary and junior high school. (BUFSD, $5M)

Home Port, Staten Island, NY - Construction of docking facilities for the U.S. Navy's Home Port fleet including enlisted men's quarters, maintenance facilities, personnel housing and recreational facilities. (U.S. Navy)

Construction Management for Town of Oyster Bay Golf Course and Clubhouse - This project involved the complete overhaul of the building's HVAC, electrical, and plumbing systems as well as complete interior redesign. (TOBDPW)

White Plains Railroad Station - This project involved the construction of a new railroad station and elevated platform for the Metro-North Commuter Railroad. (MetroNorth)

North River, Manhattan Sewer Treatment Plant - Inspection of concrete foundations included installing concrete caissons and grade beam network for the plant superstructure out over the Hudson River. Also performed concrete testing during placement. (NYCDEP, $15M)

Hunts Point Sewer Treatment Plant, Bronx, NY - Construction inspection of primary settling tanks involving concrete, piping valves and related equipment. (NYCDEP, $12M)

Employment History:
The LiRo Group (1996 to Present)
Associate

Christopher Zanoni

SENIOR PROGRAM/ PROJECT MANAGER

Mr. Zanoni has over 18 years experience in the environmental field, with extensive asbestos and lead based paint project experience. Mr. Zanoni is responsible for the management, planning and staging of all aspects of asbestos and lead based paint projects from the initial building survey through design and preparation of bidding documents. Mr. Zanoni is also experienced in all areas of abatement related services including: submittal review, project abatement monitoring and project close-out requirements. Representative projects include:

EDUCATION	Ph.D. (pending), Civil Engineering, Polytechnic University M.S., Environmental Engineering, Polytechnic University, 1994 M.E., Civil Engineering, Cooper Union School of Engineering, 1993 B.E., Civil Engineering, Cooper Union School of Engineering, 1992
REGISTRATION / CERTIFICATIONS	NJ Asbestos Safety Technician, NJ CTDOPH Asbestos Project Designer, CT NYSDOL Asbestos Inspector, NY NYSDOL Asbestos Project Designer OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	7

PA of NY&NJ Asbestos and Lead Paint Consulting Services, Project Manager- Responsible for asbestos air and project monitoring services at various PA facilities. Project includes surveying, bulk sampling, reporting, tracking of materials/quantities, compliance monitoring, daily record-keeping of all contractor activities, and report preparation. Prepared Phase I Environmental Site Assessments for use by Port Authority of New York and New Jersey in negotiating lease agreements with air carriers and other tenants. A total of six Phase I assessments were performed in accordance with ASTM guidelines over a one month period of time and included special consideration of existing asbestos-containing materials and lead-based paint. Project sites included plane hangars, warehouses, administrative buildings, and Port Authority maintenance shops.

MTA New York City Transit Comprehensive Environmental Services Contract, New York, NY, Project Manager- Responsible for several continuous indefinite quantity environmental On-Call services contracts. Services included development of lead based paint and asbestos abatement work plans, cost estimating, project coordination and interfacing with site representatives, and project management of inspections and oversight of abatement activities. Supervised over 50,000 hours of field operations including abrasive blasting, needle gun scaling, chemical striping wet scraping at various NYCT facilities ranging from elevated structures on the Flushing IRT line and pedestrian bridges at Corona Park, to active bus depots and station platforms; he has prepared work plans for field operations and managed the hazardous waste storage maintenance program for NYCT. Additional responsibilities included preparation and enforcement of site specific Health and Safety Plans. Project sites included operating substations, subway stations, office buildings, mechanical rooms, rail yards, bus depots, tunnels, bridges, and various other structures throughout many of NYCT's three thousand facilities located throughout the five boroughs of New York City.

MTA Bridges and Tunnels (Tri-borough Bridge and Tunnel Authority)- Worked in coordination with TBTA Safety and Health manager Steve Kozak; functioned as Project Manager for all asbestos and lead based paint project consultation and daily contractor oversight enforcing all applicable EPA, NYSDOL, Local Laws for the renovation and modernizing/restoration of vents shafts, security devices upgrades in the Manhattan, Queens, Staten Island ventilation facilities as well as Brooklyn Battery

Tunnel and Verrazano Bridge. The general scope consists of interpretation and implementation of MTA/TBTA regulations and site specific procedures, surveys, designs, oversight of construction phases. This contract is similar to activities and functions noted for the MTA/NYCT system contract.

Recreation and Historic Preservation - Bear Mountain Inn Lead and Asbestos Remediation Services, Senior Project Manager- During emergency lead based paint assessment, remediation planning and oversight at the historic Palisades, New York recreation facility. Performed scoping, coordination, and quality control during field assessment activities aimed at the Identification and mapping of lead based paints and areas with visible dust accumulations presumed to be contaminated with lead paint; reviewed proposed abatement contractor work plans and matched those locations where large areas of LBP coatings were likely to be disturbed verses areas of "incidental" disturbance; accurately identified to the restoration contractors the surfaces that may be coated with lead paint. Remediation phase work included (a) Inspection of lead paint removal operations to ensure that the work was performed in accordance with specifications issued by NYS Parks as well as applicable regulations; (b) collection of surface wipe samples/air samples for testing subsequent to the completion of decontamination activities to establish that re-occupancy levels have been met; (c) inspection of lead waste storage areas to confirm proper labeling, waste stream separation, waste testing (TCLP) and waste manifesting procedures; (d) inspection and evaluation of suspect asbestos-containing materials and subsequent collection and analysis of representative bulk samples from materials that may be impacted by the renovation; (d) project monitoring during asbestos removal activities and reporting of observation of regulatory non-compliance to NYS Parks; (e) preparation of asbestos and lead based paint project close out reports and/or monthly reports during phased abatements.

Highline Reconstruction Rehabilitation, Task Manager- Provided direct assistance to the Resident Engineer for implementation and enforcement of SSPC, NYSDOT, EPA, OSHA, NYS, and relevant Local laws and guidelines for the abatement of ACM and the removal, treatment, disposal and handling of lead based paint during abrasive blasting of lead based paint from over 2 miles of elevated structural steel. Conducted QC inspections of blasting containments and waste storage areas. Provided management support and technical guidance during excavation of contaminated soil and demolition of ancillary structures below the Highline. Defined the scope and procedures for abatement of asbestos containing track bed expansion joint tar, rail connector rust inhibitor, and miscellaneous ACM encountered during the project.

New York City Department of Environmental Protection – Legacy Program Remediation of Contaminated Paint, NY, NY: Performed Project Management during program aimed at removing coatings contaminated with lead, PCB, and mercury. A total of 16 sites consisting of effluent chambers, intake chambers, shaft-ways, maintenance facilities, were targeted throughout the Hudson Valley watershed area. Management tasks included field reconnaissance to confirm inspection data and site conditions, interviews with local DEP personnel to obtain information on individual facility operations and potential constraints to the pending remediation effort, specification drafting, and construction management during the abatement phase.

Employment History:

The LiRo Group (1999 to Present)
Associate Vice President
Professional Services Industries, Inc (1997-1999)
Project Manager
Warren & Panzer Engineers, Inc. (1992-1995)
Design Engineer

Brant Aidikoff, P.E.

SENIOR PROGRAM/ PROJECT MANAGER

EDUCATION	M.Eng., Nuclear Engineering, Cornell University, 1976 B.S., Engineering, Cornell University, 1975
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, NJ ASTM Course - E1739-RBCA PETCON Course - UST Installation Confined Space Entry Certification Lieutenant, US. Navy - Aircraft Carrier, 1976-1979
YEARS WITH THIS FIRM	15
YEARS WITH OTHER FIRMS	16

Mr. Aidikoff has been providing project management for environmental and power plant projects since 1975. Recently, Mr. Aidikoff has been providing infrastructure coordination support for the WTC recovery. He has provided support to nuclear, oil, gas, industrial and utility clients and assisted them with complying with the Code of Federal Regulations, including Titles 10 (Energy), 33 (Navigation), 46 (Shipping) and 49 (Transportation). He has provided six years of intensive litigation support for environmental hearings before administrative law courts. Responsibilities included discovery, depositions, writing prefilled testimony, expert testimony and review of decisions of appeal. Mr. Aidikoff was president for ten years of an eight-person firm that worked for utilities and governmental agencies in New York and other states. Projects included preparation of plans and documents to assist clients respond to the requirements of the CERCLA (Comprehensive Environmental and Liability Act), EPRCA (Emergency Planning and Community Right to Know Act) and RCRA (Resource Conservation and Recovery Act.). He worked with FEMA on the development of an environmental hazard exercise which involved over 1200 participants and with utilities in the development of environmental hazard response plans and large scale drills. Representative projects include:

Lower Manhattan Construction Command Center, New York, NY Program Coordinator: In October 2005, Mr. Aidikoff continued his role in Lower Manhattan as the Program Coordinator, leading the LiRo team, at the LMCCC. In addition to the weekly project status meetings that Mr. Aidikoff had been coordinating since 9/11, Mr. Aidikoff's responsibilities again expanded to include logistical coordination for both infrastructure and structures in Lower Manhattan. The LiRo team has developed state of the art program management tools that interface project schedules with geographical information systems so that construction impacts on roads and thoroughfares can be assessed. This was the first part of a massive logistical assessment that has analyzed steel, concrete, equipment and labor demand vs. supply in entire NYC metropolitan region. Meetings were held with City agencies and every major NYC construction organization. Task forces were formed to deal with the logistical issues that had been identified as a part of the assessment process. (LMCCC, $9M, 2005 - Present)

WTC Program Assessment, New York, NY, Project Coordinator: In June 2008, the Port Authority requested that LiRo facilitate an assessment of the schedule, budget and challenges for the World Trade Center construction program. Mr. Aidikoff led a team of both LiRo employees and sub consultants that worked with Port Authority and other stakeholders. The report identified the key challenges confronting the project and then risked the program schedule and budget. The report was provided to the executive

director of the Port Authority and was the basis of a report provided to Governor Patterson in July 2008. (PANYNJ, $240K, June 2008)

Lower Manhattan Infrastructure Recovery Coordinator: After the events of 9/11 in New York, Mr. Aidikoff was tasked with the coordination of the intensive amount of electric, telecommunications, steam, gas and subway work that was happening around the clock in the vicinity of the World Trade Center. The responsibility was expanded after July 2002 to include all infrastructure work in Manhattan below Canal Street - involving two dozen projects going on simultaneously. Mr. Aidikoff held weekly meetings with the utilities companies, agencies and construction companies who have projects in the downtown area and later held an executive status meeting for City commissioners to provide an update of ongoing projects. (NYCDDC, $9M, 2002 - 2005)

WTC Infrastructure Recovery Coordinator: In this position, Mr. Aidikoff coordinated the infrastructure recovery of utilities throughout the WTC vicinity, including the reconstruction of West Street (Rector and Chambers) and Liberty (West and Liberty). After 9/11, Mr. Aidikoff also worked with NYC OEM in providing the Bank of New York with information concerning the utility reconstruction in the vicinity. Mr. Aidikoff has focused on the Vesey Street alignment and the construction phasing for the WTC 7 vicinity, where a new Con Edison substation is being built. Mr. Aidikoff held weekly meetings with the utilities companies, agencies, and construction companies who have projects in the downtown area. In addition, he provided a weekly status report of infrastructure activities for City and FEMA personnel. This report also provided a funding tracking chart that details the funding source for the City's sewer and water main projects in the downtown area. (NYCDDC/Bovis, 2001-2002)

Remediation at 60 Sites for the NYCDDC, Soil and Groundwater Remediation: Projects included the design and construction of remediation systems, which includes the installation of ground water and soil vapor extraction wells that are piped through a series of excavation trenches to multi-phase, soil vapor or pump and treat systems. The multi-phase systems included liquid ring pumps, phase separators, oil water separators, carbon filters, air strippers, transfer pumps, blowers and a host of sensors connected to a remote communication device for system monitoring. Bioremediation installations included geoprobe borings and the injection of a bioslurry with oxygen releasing compounds or a bio mix with active hydrocarbon digesting bacteria. (NYCDDC $23M, 1998-2001)

Employment History:
The LiRo Group (1995 to Present)
Vice President
Aidikoff Associates, Inc., 1984 -1995
President
Stone and Webster Engineering Corporation, 1979 -1984
Project Engineer

Michael Bailey, P.E.

SENIOR PROGRAM / PROJECT MANAGER

Mr. Bailey has over 20 years of experience managing infrastructure and building projects. He holds a BS in Civil Engineering from Lehigh University and presently manages LiRo's Resident Engineering Inspection group. He is responsible for all of the firm's roadway, bridge, rail and utility projects. In addition, he has managed large building and MEP projects for selected clients. Mr. Bailey has managed projects valued up to $2.5B in construction. He has also developed one of the region's most successful "on-call" construction management groups.

In addition to the management of the REI division, he is responsible for proposal preparation and resource allocation within his division. A testament to his management capabilities can be seen in the number of repeat contracts he has generated in the past fifteen years. Prior to joining LiRo, Mr. Bailey served as a design engineer, resident engineer and construction superintendent where he was responsible for bridge designs, storm/sanitary sewer and water distribution system designs, highway/ roadway designs, as well as several large development site plans. Representative projects include:

EDUCATION	B.S.C.E., Civil Engineering, Lehigh University, 1984
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA Safety Trained Confined Space Entry Certification Troubleshooting Exterior Masonry Walls Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Brick Masonry-Inspections and Quality Control Certification, NY
YEARS WITH THIS FIRM	20
YEARS WITH OTHER FIRMS	6

Projects in which Mr. Bailey serves or has served as Project Executive or Project Manager include:

- Triborough Bridge Deck Replacement on the Wards and Randall's Island Viaduct (TB-64B) Project Manager. (MTA-TBTA, $272M)
- Whitestone Expressway Bridge Replacement, Long Island City, NY, Project Executive (NYSDOT, $180M)
- High Line Reconstruction, New York, NY, Project Executive (NYCEDC, $125M)
- Specialty CM Services - Route 25A over Hempstead Harbor (Roslyn Viaduct), Hauppauge, NY, Project Executive (NYSDOT, $120M)
- As-Needed Construction Management Services, 2006-2009, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Project Manager. (MTA-TBTA, $25M)
- As-Needed Construction Management Services, 2004 - 2007, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Project Manager. (MTA-TBTA, $30M)
- As-Needed Construction Management Services 2001-2004, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Project Manager. (MTA-TBTA, $25M)
- As-Needed Construction Management Services, 1998 - 2001, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Project Manager. (MTA-TBTA, $20M)

- As-Needed Construction Management Services 1995 - 1998, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Project Manager. (MTA-TBTA, $10M)
- Tappan Zee Bridge - Removal and Replacement of East and West Deck, Construction Inspection and Scheduling, and Rehabilitation of Substructure, Project Manager. (NYSTA, $81M)
- NYCDOT Contract No. HBCY093, Marine Structural Repairs, Resident Engineer. (NYCDOT, $10M)
- MTA-TBTA Projects AW-32, AW-34, AW-36 and AW-80A/B, Various Locations, NY. 2003 - 2006. Project Manager. (MTA-TBTA, $60M)
- NYCDOT Contract No. HBE1023, Emergency Installation of Center Median New Guide Rails on the Mill Basin Bridge, Brooklyn, Resident Engineer. (NYCDOT, $3M)
- Triborough Bridge Redecking and Cabling (TB-64A), Project Manager. (MTA -TBTA, $150M)
- Queens Midtown Tunnel - Construction Administration and Inspection Services for the Rehabilitation of the Roadway Drainage System (QM-10), Project Manager. (MTA -TBTA, $6M)
- Brooklyn Battery Tunnel - Construction Administration and Inspection Services for the Rehabilitation of the Roadway Drainage System and Related Work (BB-24), Project Manager. (MTA-TBTA, $4M)
- On-Call Construction Management Services, 1998 - 2001, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Project Manager. (TBTA, $20M)
- On-Call Construction Management Services 1995 - 1998, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Project Manager. (TBTA, $10M)
- Construction Management for Indefinite Quantity-Security Program CM-1308/1309/1310, Project Director. (MTA-NYCT)
- NYSDOT, Region 11 Construction Inspection Term Agreement, Project Manager. (D015297, PIN S117.21). (NYSDOT, $170M, 2003-2005)
- NYCDOT, Engineering Services Agreement for Resident Engineering Inspection and Design Services, Project Manager. Projects under this agreement included Replacement of Steinway Street Bridge over the Grand Central Parkway, Project Manager. (NYCDOT, $18.4M)

Employment History:
The LiRo Group (1990 to Present)
Senior Vice President

Gilbert E. Balog, AIA

SENIOR PROGRAM / PROJECT MANAGER

In his 40 years of professional experience, Mr. Balog has administered a variety of renovation and rehabilitation projects with a cumulative value of more than $1 billion. He is also an expert in providing feasibility studies, project management and organization, adhering to building codes, and developing design/build and fast-track construction programs for governmental facilities. Most of the projects he has worked have been designed to maintain facility operations during construction.

Mr. Balog has been the recipient of the New York Society of Architects' Citation for Excellence in Design, Planning and Construction. He also has received numerous fellowships and scholarships.

EDUCATION	M.S., Urban Planning, Columbia University, 1968 Bachelor of Architecture, Cornell University, 1966
REGISTRATION / CERTIFICATIONS	Registered Architect, NJ Registered Architect, NY Registered Architect, CT Registered Architect, PA International Code Council American Institute of Architects NCARB Certified
YEARS WITH THIS FIRM	39
YEARS WITH OTHER FIRMS	3

Mr. Balog is a member of the National Fire Protection Association, The International Code Council and The American Institute of Architects. Representative projects include:

World Trade Center, Feasibility Study, Life Safety, and Building Code Analysis for the Expansion of the Concourse Level of the World Trade Center - Completed a building code analysis of the entire Concourse Level of the World Trade Center (approximately 470,000 sf of public passageways and retail facilities). Mr. Balog directed a review of the existing complex and advised the Port Authority of code deficiencies regarding future expansion relative to New York City Building code. Alternative solutions were proposed with estimates of construction cost to mitigate the deficiencies. (Port Authority of NY& NJ)

Mr. Balog also directed the creation and development of a computer generated, life safety analysis model for the evacuation of the existing 20-year old complex. The program was used to provide visual displays of various scenarios regarding the availability or lack thereof of different exits and passageways during emergency situation. (Port Authority of NY/NJ)

Americans with Disabilities Act (ADA) Surveys, World Trade Center - Performed ADA Title III Public Accommodations Facility Surveys of the entire World Trade Center Complex. Under Mr. Balog's direction, LiRo completed an ADA survey report, conceptual designs, transition plan, construction cost estimates, and proposed mitigation measures for the public areas of 1, 2, 4, and 5 World Trade Center (concourse level, plaza level, PATH mezzanine, elevators, parking levels, public toilets and loading dock), sky lobbies of 1 and 2 World Trade Center, the multi-level *Windows on the World* restaurant and banquet facilities on the entire 106th and 107th floors of 1 World Trade Center, and exterior public plaza and fountain (over one million square feet). (Port Authority of NY/NJ)

Call-In Contracts, Feasibility Studies, Code Analysis - Mr. Balog programmed, scoped, planned, and budgeted over 50 individual projects including replacement of doors and roofs, lobby, interior and

new-building designs, feasibility studies, and code and ADA analysis. These projects were developed for various departments of the Port Authority of NY & NJ, including their Engineering, Maintenance, Aviation, and World Trade Departments. (Port Authority of NY & NJ)

Call-In Contract for Architecture - Mr. Balog developed, programmed, planned and budgeted over 30 projects for the client's downstate facilities including a myriad of building system repairs, rehabilitation, upgrading and additions to their aging buildings. (New York State Facilities Development Corporation)

CUNY School of Architecture - Swing Space Relocation, New York, NY - Principal Architect - Responsibilities included programming, design, construction documents and construction administration for the relocation of approximately 60,000 sf of City College's administrative facilities (over 14 departments) previously housed in the "Y" Building to other buildings on the City College campus in order to allow the "Y" Building to be converted into the new home for the School of Architecture. (DASNY, $7M)

Rehabilitation of the 8th Avenue Station and Retaining Walls, Sea Beach Line, Brooklyn, NY - Mr. Balog is the Principal Architect in charge of the design of the 8th Avenue Station renovation. The scope of work for the rehabilitation of this station, which is located in an open cut embankment, includes the rehabilitation of the full-time control house, station platforms, and the Transit Authority's Automatic Fare Control building. The design will bring the entire station to a "state of good repair", provide requisite customer and employee amenities, and enhance customer and employee safety. (NYCT, $1M)

Rehabilitation of the 77th Street and 86th Street Stations, Lexington Avenue Line, Project Manager - Mr. Balog coordinated, managed and planned the complex renovation and rehabilitation of these two subway stations. The scope of work involved numerous upgrades of existing building systems and structures in multiple locations throughout both stations. (NYCT, $30M)

Pennsylvania Station Historic Restoration, Newark, NJ - Provided design services and supervision of multi-contract construction for this project. Scope included historic restoration, renovation, and rehabilitation of the commuter and AMTRAK passenger train and bus terminal including the renovation of all street entrances, the modernization of platform areas, the addition of platform elevators for elderly and disabled access, upgrade of mechanical systems, installation of new security and CCTV systems, track signalization, roof rehabilitation, and reconfiguration of traffic and parking facilities. The project was designed for the phasing and staging of construction to maintain the uninterrupted operation of the terminal during rehabilitation.

Delta Airlines Building Code Study Terminal A & B, JFK international Airport - When Delta Airlines took over Pan Am's International and Domestic Terminal at JFK, it inherited facilities that had been renovated many times and did not meet current building code. Under Mr. Balog's direction, LiRo performed a forensic building-code analysis using the original construction documents to establish initial code compliance and provide Delta with cost-effective mitigation measures for the modification of the existing facilities to meet current code.

Employment History:
The LiRo Group (1971 to Present)
Senior Vice President/Principal Architect
Emery Roth & Son (1968-1971)
Detailer

Michael Bendetti, P.E.

SENIOR PROGRAM / PROJECT MANAGER

Mr. Bendetti has over 19 years of construction management and design experience for major public works projects in the New York area. His experience includes courts, correctional facilities, maintenance facilities, buildings, pump stations, roadway reconstruction, and site improvement projects. Mr. Bendetti has managed projects from conceptual design through construction completion. Since 2003, he has worked extensively on projects for the Suffolk County Department of Public Works (SCDPW). Representative projects include:

EDUCATION	B.E., Civil Engineering, The Cooper Union School of Engineering, 1988
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Primavera Expedition (Project Controls) OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	21
YEARS WITH OTHER FIRMS	1

Pre-Construction and Construction Support Services to SCDPW, Project Manager. During the pre-construction phase, Mr. Bendetti worked closely with the design teams, SCDPW, and LiRo's staff of engineers and architects to ensure quality, cost and schedule control. Pre-construction services include:

- Providing detailed constructability reviews of the contract documents. Develop reports which identify errors, omissions, conflicts, and missing work in the contract drawings and specifications. Identify aspects of the work which can be redesigned to reduce costs without affecting quality.
- Development of conceptual construction budgets and detailed cost estimates during design development.
- Extensive value engineering and development of project scope revisions to ensure budget compliance.
- Development of design schedules and preliminary construction schedules; analyze schedule impact for proposed design and construction changes.
- Development of phasing plans and site logistic plans.
- Assist in the development of Project Labor Agreements (PLA).
- Provided analyses of bids and award recommendations.

Specific Projects Mr. Bendetti has provided pre-construction services for SCDPW include:

- **Civil Court Complex in Riverhead, NY.** Multi- phase project Includes construction of a 96,000 sf addition, and renovations to four existing court buildings ($35M)
- **Yaphank Jail in Yaphank, NY.** Multi- phased program includes construction packages which will provide for over 200,000 sf of additional jail inmate housing and support spaces ($151M).
- **County Center Complex in Riverhead, NY.** Includes renovations to 200,000 sf of office space ($29M)
- Mr. Bendetti also provides construction support services for SCDPW, including project oversight with regard to schedule, cost (change orders and overall budget), quality, and construction progress meetings. In addition to the above projects, Mr. Bendetti provided construction support services for the following SCDPW projects:

- **Fire Training Center, Class "A" Burn Building, in Yaphank, NY.** Construction of a reinforced concrete building for the Suffolk County Fire Training Academy for use in fire simulations ($4M)
- **DWI Facility in Yaphank, NY.** Construction of a new 16,000 sf secure facility for the Suffolk County Sheriff's Office ($6M)

Since 2006, Mr. Bendetti has also been Project Manager providing construction management services to the NYC DDC Transportation Unit. Projects include:

New Sunrise Yard NYC DOT Maintenance Facility in Ozone Park, NY- This $20M project includes demolition of two one-story brick structures; abatement/ remediation of asbestos and contaminated soils associated with these structures and a subsurface fuel storage tank; construction of a new two- story steel framed building to house material storage, shops, drive- through vehicle maintenance, locker room, and administrative offices; and associated site improvements, including new fence, paved parking, green spaces and art wall. The project is designed to achieve a LEED Gold Certification.

Inmate Housing Addition at GRVC on Rikers Island (2002 to 2003) - This multi- phased project included construction of two new housing units (50,000 sf each), a 65,000 sf administrative building, a new addition for the locker room, and site security upgrades. During the preconstruction phase reviewed various housing options and analyzed costs associated with population and security level. Developed project packaging and phasing to meet budgetary and logistical requirements, and to minimize impact to ongoing facility operations. Performed extensive constructability and value engineering, and coordinated with NYC DDC and the owners (NYC Dept of Correction) to ensure budget compliance ($120M).

New Security Control Room and Perimeter Fence Upgrade, Rikers Island (2001-2005) - Construction of new central control room and upgrade of security features throughout the perimeter fencing surrounding Rikers Island. Extensive coordination required to prevent lapses in security while work progresses. ($6M)

New Locker Room Building at EMTC, Rikers Island (2001-2003) - This multi-phased project included construction of a new facility entry sallyport and parking lot ($2M) and a new 12,000 sf locker room building. During the preconstruction phase, developed phasing plans to integrate portions of the Fence Upgrade Project (see above), which were required prior to constructing the new locker building. Reviewed various building configurations and construction types to provide the required functions at the lowest cost. ($5M).

C141SERV-1- System wide Kitchen Renovation Program for Department of Corrections (1996-2001) - This multi- phased, multi packaged project was fast tracked and subject to court mandated start and completion dates. Project included a short term phase wherein $10M of temporary improvements was made at fifteen correctional facilities throughout the City of New York within a four month period. Also included complete renovations and new kitchen facilities at six jails (BKHDM, NIC, BXHDN, BCF, CIFM & QHDM). Extensive phasing and temporary construction was required to maintain facility operations during construction in occupied facilities ($60M).

Employment History:
The LiRo Group (1989 to Present)
Associate

Eugene Bifulco, P.E.

SENIOR PROGRAM / PROJECT MANAGER

EDUCATION	B.S., Mechanical Engineering, New York Institute of Technology, 1987
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hour Occupational Safety & Health Training NYC DOB 4-Hour Supported Scaffold User Certificate, NY NYC Site Safety Manager License
YEARS WITH THIS FIRM	21
YEARS WITH OTHER FIRMS	7

Mr. Bifulco has over 20 years of experience in the construction industry. Most recently, Mr. Bifulco has been extensively involved with LiRo's contracts with New York City Department of Design and Construction and Dormitory of the State of New York work. Mr. Bifulco is involved with administration, contracts, auditing project schedules and documentation, client liaison and technical troubleshooting. Having worked his way through the ranks, Mr. Bifulco possesses hands-on experience in all areas of construction management. Specific areas of expertise include cost estimating, CPM scheduling and electrical construction. Mr. Bifulco's experience is deeply rooted in public works and he is thoroughly familiar with Wicks Law construction contracts. Representative projects include:

Bernard Fineson Replacement Facility, Project Executive - Under this contract, LiRo provided CM services for DASNY for the pre-construction and construction phases of this project for the Office of Mental Retardation and Developmental Disabilities. The scope of work included the demolition of existing structures on a 12-acre site and the erection of eight new one- and two-story residential buildings and an 80,000 square foot program/administration building. Work also included the development of the 12-acre site and all utilities. (DASNY, $80M, 2009)

DASNY School of Architecture, Project Manager - Demolition and reconstruction of a 136,000 sf building to become the new School of Architecture building. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including façade, interior and mechanical, electrical and plumbing systems. The estimated project construction cost was $52M. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus, which required the renovation of various locations at a cost of approximately $8M and was accomplished in one year.

Stony Brook University Medical Center - This project consists of various stages of construction with an anticipated overall cost of approximately $170M. The overall scope of work is anticipated to take 7 years, due to the intricate phasing that will be required to keep the facility in operation throughout the entire construction duration. The job consists of five separate projects: Patio Enclosure, Emergency Generator, The Heart Center Project, ACP Project, and a Major Modernization Project.

Westchester County Penitentiary - The Penitentiary Housing Replacement Facility project at Norwood E. Jackson Correctional Center, located in Valhalla, New York, was developed by the Westchester County Department of Public Works. The scope of the project included renovation of existing spaces and the demolition of existing building to allow for the construction of the new facility. The new facility includes a punitive segregation housing area and a general population area. The new facility is structured concrete with a masonry facade and has state-of-the-art security. New housing units replaced the three-story buildings. ($42M)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME) Construction Management Services - LiRo managed the construction of the new Office of the Chief Medical Examiner (OCME) facility in Brooklyn. This is a state-of-the-art facility offering the staff and the public a safe and private environment. Shared between Kings County Medical Center and the OCME, the new facility contains space designated for NYPD investigators. It was designed to be sensitive to the surrounding community and hospital campus. LiRo's role was to provide comprehensive construction management services from design development through the completion of construction. This included the coordination of all construction operations and related vehicular traffic so that it did not interfere with local traffic or hospital campus operations. The 40,000 sf facility was constructed in 28 months. (DASNY, $18M)

System-Wide Kitchen Renovation Program for NYC Department of Corrections, Project Manager - This contract entailed the phased renovation of kitchens, pantries and related food service areas throughout the NYC jails system. LiRo's role was to perform all construction management duties including bidding and entering into contract with various construction contractors. This program required an initial phase of construction in which 14 facilities were to be upgraded with systems that would last through the construction period. The balance of the program involved the total renovation of kitchens and food related services areas at six correctional facilities throughout Brooklyn, Queens and the Bronx. (NYCDDC, $50M)

Various Capital Project Requirements Contract - This CM/build project consists of separate contracts ranging in value from $1M to $14M each. Project types include court mandated correctional facility renovation work as well as renovations to a vintage theater/school in upper Manhattan. (NYCDDC, $35M)

Renovations and Expansions at the Brooklyn House of Detention for Men, Project Manager - This project involved 44,000 sf of new additions and renovations to a high security correctional facility. The new additions were constructed around 60% of the perimeter of the existing building which required a phased sequence of construction including restoration of entry and exit doors. Interruption of facility operations was prohibited and maintenance of security was critical. The additions required a two-story structure to be built along a busy city thoroughfare and very little staging space. (NYCDDC, $20M, 1995 - 2001)

Fire, Life and Safety Improvements at Brooklyn House of Detention for Men - Provided construction management services under a CM/Build requirement contract for fire, life and safety improvements. The Brooklyn House of Detention for Men is a maximum security jail located in downtown Brooklyn, a busy urban area providing the site with limited space (approximately 144,000 sf). This facility houses 815 inmates. (NYCDDC, 2003, $12M)

Employment History:
The LiRo Group (1989 to Present)
Vice President

Lawrence Blond, P.E.

SENIOR PROGRAM /PROJECT MANAGER

EDUCATION	B.S.C.E., Civil Engineering, Rutgers University
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY 10-Hour Occupational Safety and Health Training Course, NY
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	14

Mr. Blond has been providing construction management and engineering services since 1979. His past experience has included program and project management, structural design and analysis, building inspection and evaluation, cost estimating, quality control and quality assurance for both public and private sector projects. He has both performed and managed the general administration of construction projects, including design and constructability reviews, field inspection, scheduling, cost control and value engineering.

Since joining LiRo he has been directly responsible for over a half a billion dollars of construction projects, many of which have involved high profile municipal projects with mandated completion dates. Mr. Blond is currently overseeing the Program and Construction Management Division of the LiRo Group, which has been steadily growing over the past five years. Senior Management oversight is a key to LiRo's success and Mr. Blond leads the way with his direct involvement with his staff, ongoing projects and our clients. Representative projects include:

NYCDDC Fire Unit, Project Executive - This CM/Build program has included projects ranging from $2M to $12M of renovation and new construction of firehouse facilities. LiRo has completed $50M of work over the past three years and a total construction amount of $85M. (NYCDDC)

NYCDDC Stadia Projects, Project Executive - LiRo is working at both Yankee and Shea Stadiums performing CM/Build services. Approximately 30 fire, life, safety projects have been performed over the past two years including structural repairs, escalator repairs, and MEP upgrades. (NYCDDC, $50M)

Nassau County Government Operations Center, Project Executive- LiRo in a Joint Venture with Bovis Lend Lease is providing comprehensive construction management services for the Theodore Roosevelt Government Operations Building. The Theodore Roosevelt Executive and Legislature Building at 1550 Franklin Ave in Garden City, NY will be completely renovated. The original building was constructed in 1916 and was the first public building to be constructed using reinforced concrete. The building is listed on the State Register of Historic Places and is currently approximately 135,000 sf. Later additions to the building will be demolished so the final footprint will house approximately 85,000 sf of space. In addition, a 28,000 sf annex will be connected to the Old Courthouse building to house the new mechanical plant and Legislature chamber. The $36 million project is the result of an extensive evaluation of the County's requirements and the building's condition. (NCDPW)

New York City Department of Sanitation Requirements Contract, Project Executive- This contract involved providing construction management services to the DSNY on an on-call basis. These services were provided to support the numerous projects that DSNY has in progress throughout the five boroughs of New York City. Nine projects have been performed over the past three years ranging from scheduling services to complete construction management assignments. (DSNY, $8.5M)

Battery Park City Authority, On-Call Owner's Representative Construction Management Services, Project Executive - LiRo provided construction management services on an On-Call/ Emergency Basis. The contract primarily involved any work that was required construction management services throughout all of Battery Park City. The design phase responsibilities included constructability reviews, cost estimating, CPM scheduling, code compliance review, site layout and construction phasing recommendations. The construction phase responsibilities included all essential CM services for the specific task or project at hand. Emergency response was essential to the tasks that may arise.

Battery Park City, Site 14/14B Park Reconstruction, Construction Management, Project Executive - LiRo provided construction management services for the construction of Site 14/14B, adjacent to the Museum of Jewish Heritage. The project primarily involved landscaping the property around the Museum of Jewish Heritage and its new addition. It involved new lighting systems, new irrigation systems, installation of paving material around the entire site, and landscaping, implementing BPC green guidelines. The property encompassed approximately 80,000 sf. LiRo maintained careful coordination of this project with the adjacent concurrent construction of the Museum addition.

Battery Park City, Site 23/24 Baseball Fields - Construction Management, Project Executive - LiRo provided construction management services for the renovation/construction of new ball fields at Battery Park City's Site 23/24. As CM, our emphasis was on the coordination of all contractors, developers, BPCA/BPCPC, quality control, budget control, construction direction and supervision, scheduling and the creation of verifiable as-built for all work. LiRo also integrated the expertise of landscape architects and turf specialists in each phase of the project, implemented BPC green guidelines.

Battery Park City, Community Center Construction Management Services, Project Executive - LiRo is providing Owner's Representative/ Construction Management services for a 60,000 sf community center/ball field maintenance facility in the base of two residential towers at Site 23/24 in Battery Park City. LiRo will oversee the creation of the community center/ball field maintenance facility from design development through completion of all construction and post-construction. This facility will house 2 swimming pools, an auditorium, a gym, classrooms, and exercise center/outdoor plaza, as well as a maintenance facility for the Battery Park City Parks Conservancy for the care of the two adjacent little league ball fields. Site 23/24 will be developed according to the mission of the Authority of furthering sustainability in urban development. The community center/ball field maintenance facility will be built in accordance with the Authority's Environmental Residential Guidelines and with the latest LEED for Commercial Interiors (CI) rating system, now version 2.0. It is anticipated that the facility will attain a Platinum rating, the highest possible level bestowed by the USGBC. ($30M)

FDNY Fire Training Academy at Randall's Island, Phase II, Project Executive - This NYCDDC CM/Build project included the construction of four new state-of-the-art training facilities for the FDNY and renovation of three additional fire academy buildings. The new construction included classroom training facilities, a burn building, an indoor mock-up of a New York City street, and a subway simulation building. In addition, a new state-of-the-art security system was installed for the facility. ($55M)

Employment History:

The LiRo Group (1994 to Present)
Senior Vice President & General Manager

Jerrold S. Cohen, AIA

SENIOR PROGRAM / PROJECT MANAGER

Mr. Cohen has over 25 years of experience in construction management and design services for public sector and institutional clients. He understands that the stewardship of these projects constitutes a public trust requiring the highest level of professional and technical responsiveness. Mr. Cohen's experience includes K-12 schools and higher education facilities, courts, housing, health care, laboratory and research facilities. He has demonstrated expertise in the leadership of high priority, complex construction programs with multiple stakeholders. Mr. Cohen is a proven client service oriented team builder, skilled in delineating objectives, effective decision-making, in pro-active coordination, budget management and project delivery. Representative projects include:

EDUCATION	M Arch, State University of New York at Buffalo, 1981 B.A., Environmental Studies, State University of New York at Stony Brook, 1973 Environmental Design, Parsons School of Art & Design
REGISTRATION / CERTIFICATIONS	Registered Architect, NY Const. Claims Arbitration & Mediation, American Arbitration Negotiation Strategies for Public Construction OSHA - 10 Hours Certificate Partnering Facilitation, American Arbitration Assoc. DART Project Delivery Systems, Design Build, AIA Scaffold Safety Engineering, Construction Safety, OSHA
YEARS WITH THIS FIRM	7
YEARS WITH OTHER FIRMS	20

CM/Build Requirements Contract for NYC Housing Authority, Project Executive - LiRo is currently performing work on a task order basis including renovating and/or constructing several community centers throughout New York City. Work includes new construction of a community center, various renovations and upgrades, and infrastructure renovations including electrical, HVAC, and plumbing. These properties all require that LiRo perform preconstruction and construction phase services. LiRo is responsible for prequalifying potential construction contractors, bidding the work and ultimately entering into contract with the construction contractors. These projects require careful coordination with community residents so interruptions of utilities, housing access, etc. are kept to an absolute minimum. (NYCHA, $250M)

New York City School Construction Authority, Construction Management Emergency Response Management and Coordination Program, New York City, Project Executive - Under multiple contracts LiRo's extensive scope of work varied widely, and included the highly expedited renovation and construction and major restructuring projects for five new high school ranging from approximately $15 to $30 million. These projects, including extensive reconstruction of school facilities, were completed within less than 90 days during the summer period when regular school sessions have ended, as compared to the typical 1 year or longer durations for comparable work. Work was accomplished using round-the clock shifts, 7 days per-week with minimal disruption to students and faculty engaged in school activities and to the surrounding neighborhoods. LiRo also immediately mobilized construction professionals, trade labor union personnel, contractors and/or material suppliers to arrest dangerous conditions or contain hazardous materials at public schools within the five boroughs of New York City. In this capacity, work was performed on a 24 hour-per day, 7 day-per-week basis. Categories of work included the design administration; development of construction estimates, schedules, solicitation of bids in accordance with Authority requirements and the law; providing general conditions including but not limited to testing and controlled inspections; remediation of hazardous materials; construction and demolition of the work in accordance with the SCA's Project labor

Agreement (PLA) and contract documents issue by the Authority. Among the services that LiRo provided included: detailed construction cost estimates detailed CPM schedules cost and schedule controls and reporting bid and award of contracts management of all construction and hazardous remediation work and related activities general conditions work, including testing and controlled inspections To date LiRo has completed in excess of approximately $110 million under two successive contracts with the NYCSCA. (NYCSCA, $238M, 2004- on-going)

New York City School Construction Authority, Professional Staffing Services, Project Executive - LiRo, in JV, was selected under successive contracts to provide supplementary staffing to the New York City School Construction Authority. Assigned personnel responsibilities included the construction management administration and coordination of design and construction for rehabilitation, modernization and new school projects and campuses throughout New York City. Current assignments include providing Project Officers for both new school and school rehabilitation construction in the Bronx, Queens, Brooklyn and Manhattan. (NYSCSA, $29M, On-going)

Decontamination and Deconstruction of Fiterman Hall, Borough of Manhattan Community College, Project Executive - LiRo is currently serving as the Construction Manager Sub consultant to Pei Cobb Freed & Partners for the decontamination and demolition phases in anticipation of the rebuilding of Fiterman Hall, Borough of Manhattan Community College (BMCC). Services are provided on an ongoing work session review basis fully coordinated with Pei Cobb Freed personnel and with DASNY and CUNY project managers. This teamwork approach is structured to facilitate coordination amongst the multiple primary stakeholders, to minimize disputes, eliminate potential cost and schedule overruns, and to mitigate change orders, that may otherwise arise during construction. The project involves extensive New York City inter-agency coordination, particularly with LMCCC, LMDC, USEPA, NYCDEP, NYCDOT and the MTA. It also requires continual briefings and dissemination of process and update information to the local Community Board and the public. LiRo managed design investigations, providing site supervision and managing field contractor operations prior to and during the decontamination and deconstruction work. This includes interior and exterior environmental cleaning and removal of all building contents and components. All work is being conducted under special monitoring requirements applicable to the USEPA WTC Recovery Zone, and will occur within the jurisdiction of the USEPA WTC Recovery Program. Additionally being provided are preconstruction services, scheduling, contractor prequalification and bid packaging. (DASNY, $240M)

Westchester County Courthouse Renovations and Addition, Project Executive - This steel framed, twenty story building, was constructed in the early 1970's. It currently houses the offices of the district attorney, courtrooms and other miscellaneous county official offices. The project was made up of three major construction phases: 1) exterior renovation of the existing façade; 2) construction of an annex on the west face of the existing building; and 3) rehabilitation of the existing building interior. Extensive coordination and phasing was required in order to minimize the impact on the existing and continuing courthouse operations. (DASNY, $100M, 2005)

Employment History:

The LiRo Group (2003 - Present)
Vice President, Project Executive
NYCDDC (1997-2003)
Assistant Commissioner
Bonnie Roche Construction Services (1994-1997)
Construction Manager
Jerrold S. Cohen, A.I.A (1992-1997)
Consultant
Architecture for Health, Science & Commerce P.C. (1988-1992)
Associate and Project Manager
Hellmuth, Obata & Kassabaum, P.C. (1987-1988)
Director of Health Care Facilities
The Rosenfield Partnership (1982-1987)
Senior Associate and Project Manager

Anton R. Dolce, AIA

SENIOR PROGRAM/PROJECT MANAGER

Mr. Dolce is an architect with 35 years of experience in design, construction management, facilities operations, and maintenance. His primary strength is in healthcare facilities: he has served as Director of Engineering, Director of Operations, Safety Officer, and Vice President of Facilities for three metro New York hospitals. His most recent assignment has been as Project Manager for Dormitory Authority of the State of New York projects. Representative projects include:

EDUCATION	B. Arch., Architecture, Arizona State University/College of Architecture B.S., Construction Management, Pratt Institute
REGISTRATION / CERTIFICATIONS	American Institute of Architects, NY Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Certified Code Enforcement Officer, NY OSHA - 10 Hours Certificate Troubleshooting Exterior Masonry Walls Certification, NY
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	29

Westchester County Medical Center, Project Manager - LiRo is providing construction management services for projects which include ICUs, an Emergency Room, a labor and delivery center, patient rooms, offices, and laboratories, as well as extensive infrastructure upgrades such as parking, IT centers, switchgear, and building envelope repair.

DASNY School of Architecture - Demolition and reconstruction of a 136,000 sf building to become the new School of Architecture. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including facade, interior and mechanical, electrical and plumbing systems. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus. This required the renovation of various locations at a cost of approximately $8M and was accomplished in one year. (DASNY)

Central Park Police Precinct -Project Manager. Mr. Dolce was the manager for the construction of a new police precinct in Central Park adjacent to the existing landmark precinct at the 82nd Transverse. This was a fast track project worth $5M and built in 6 months. (NYCDDC, $5M)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME) Construction Management Services, - LiRo managed the construction of the new Office of the Chief Medical Examiner (OCME) facility in Brooklyn. This is a state-of-the-art facility offering the staff and the public a safe and private environment. Shared between Kings County Medical Center and the OCME, the new facility contains space designated for NYPD investigators. It was designed to be sensitive to the surrounding community and hospital campus. LiRo's role was to provide comprehensive construction management services from design development through the completion of construction. This included the coordination of all construction operations and related vehicular traffic so that it does not interfere with local traffic or hospital campus operations. The 40,000 sf facility worth $17M was constructed in 28 months. (DASNY, $18M)

Kings County Hospital Center - Dialysis Unit, Project Manager- LiRo managed the construction of a new $6 million dialysis unit. The unit was built on an existing floor in the "C" building. A total renovation, including mechanical and electrical, was required, and the construction was adjacent to

occupied areas. LiRo worked closely with the KCHC construction management group, facilities and nursing staffs to ensure no disruption to their operations.

Kings County Hospital Center – Women's Option Unit, Project Manager - LiRo managed the construction of this new state-of-the-art clinical space. The project included the renovation of 9,000 sf of existing space on the fourth floor of the "E" building. The $1.7 million project opened during the summer of 2004.

James A. Thomas Center (JATC) Renovations at Rikers Island - Comprehensive construction management services were provided to the renovation of the James A. Thomas Center on Rikers Island (approximately 240,000 sf). The original construction of this high security facility dates back to 1933 and has a housing capacity of 1600 inmates. The program for renovation consisted of retrofitting existing spaces within the facility cell blocks, day rooms, showers, pantries, housing areas, mechanical rooms, electrical rooms, and common spaces. Part of the renovation program upgraded the electrical systems and domestic hot water distribution system. (NYCDDC, $25M, 1998 - 2001)

System Wide Kitchen Renovation Program for NYC Dept of Corrections - Mr. Dolce served as Project Manager for this $50M kitchen renovation program. This program involved the rehabilitation of six kitchens serving 6,000 inmates.

New York Methodist Hospital - For this 600-bed major teaching hospital, Mr. Dolce directed and managed a staff of 83 professionals, including biomedical engineering, with an annual construction budget of $25-30 million. He developed six off-site community health centers and was responsible for the operations and maintenance of 1.5 million sf of acute care and off-site facilities.

Vytra Healthcare - Mr. Dolce directed and managed a staff of 35 managed care professionals for this HMO. He was responsible for the design and construction of a 40,000 sf facility.

Long Beach Memorial Medical Center - Mr. Dolce was responsible for engineering, biomedical engineering, and operation of this 202-bed hospital and 200-bed nursing home facility. In addition, he was responsible for the construction of 200-bed nursing home and major additions to the hospital.

Employment History:
The LiRo Group (1999 to Present)
Senior Associate
New York Methodist Hospital (1997-1999)
Director of Engineering
Vitra Health Care (1995-1997)
Division Manager
Winthrop Hospital (1979-1995)
Vice president of Facilities
Long Beach Memorial Health Care Center (1974-1979)
Director of Facilities and Engineering

Bernard Jeffrey Fogel

SENIOR PROGRAM/PROJECT MANAGER

An expert in educational facility projects, Mr. Fogel is highly experienced in project management for both design and construction. For five years he served as Chief of Construction for the City University of New York, the nation's leading urban public university, serving more than 400,000 students at 20 colleges in New York City. In this capacity, he led implementation of a 5-year capital program including all science and laboratory programs valued at more than $1B.Mr. Fogel's experience includes a broad range of major, multi-disciplinary projects and programs, from the design and construction of new buildings by signature architects to emergency repair and reconstruction projects, where planning and scheduling of construction without interfering with ongoing operations was paramount. He is adept in project control, administration, coordination, and client relations. Representative projects include:

EDUCATION	B.S., Civil Engineering, Pennsylvania State University, 1983 A.A.S., Architectural Engineering, Pennsylvania State University, 1981
REGISTRATION / CERTIFICATIONS	Engineer-in-Training, PA Basic Code Enforcement Training Certification
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	18

City University of New York, Chief of Construction - Mr. Fogel supervised and provided overall coordination of all construction activities at the City University of New York, the nation's leading urban public university, serving more than 400,000 students at 20 colleges in New York City. In this capacity, he led the implementation of a five-year capital program valued at more than $1B. Projects included new construction of multi-million dollar facilities, total renovations, gut rehabilitations, upgrades of campuses and infrastructures, and emergency repair projects. Averages of 150 projects were ongoing at any one time, with individual projects as large as $500M.

- ***Queens College, Renovation of Science Lab*** - This renovation project involved an upgrade to existing science labs, and included new exhaust hoods, fans, and new fixtures for dispensing gas and compressed air service. The project was phased, limiting the number of classrooms being renovated to allow classes to continue. ($2M)
- ***Baruch College Academic Complex*** - This new 17-story urban classroom building features a 10-story atrium, a pool and gymnasium in three below-grade stories, a 500-seat auditorium, recital hall, student center, and theater. Designed by Kohn Pedersen Fox, the building has a unique curved profile and a staggered truss system. The design and construction were completed under a fast-track schedule. ($450M)
- ***Queens College, Building B*** - This project entailed a total gut rehabilitation of a four-story building down to its structural members, and completely renovating all classroom and support space within. ($70M)
- ***City College*** - Historic facades were reconstructed at Compton Goethals Hall, Shepherd Hall, and Harris Hall. The facades were carefully designed and constructed with historic components, including Manhattan schist and City seals.
- ***Lehman College*** - The lower floors of this elevated mid-rise building were enclosed to provide space for a new computer lab.

- ***Baruch College*** - A 4-story expansion was added to the existing library, including all building systems. The brick façade of the expansion was matched to the original structure.
- ***Brooklyn College*** - A major reconstruction and expansion of the chilled water system provided for new campus-wide water service at this urban campus.

Bernard Fineson Developmental Center Hillside Campus Replacement Facility, Project Manager - Mr. Fogel led design and construction management services for the Bernard Fineson Developmental Center. The Project includes construction of eight buildings serving 120 developmentally disabled and medically frail consumers in addition to a Program/Administration Building. The new construction for the resident building consists of six one story residences for medically frail consumers and two two-story residences for multiple disability consumers. The building program spaces comprise a total of 66,600 gross square feet. During this project a 3-story baseball stadium, laundry building, and bakery were demolished. Work included asbestos abatement and removal of hazardous materials. There is close coordination around existing operational utility tunnels. (DASNY, $80M)

Renovation of Fiterman Hall - The Borough of Manhattan Community College undertook the renovation of a mid-rise office in building in Lower Manhattan prior to September 11, 2001. The project included developing swing space on the upper floors of the building while renovation was completed on the lower floors. Elements included asbestos abatement, floor reinforcement, and new infrastructure, all maintaining a partially occupied building. (DASNY, $70M)

Westchester County Courthouse Phase 3 Tower, Project Manager - LiRo was retained by Westchester County to provide both design and construction management services for this $23 million interior renovation project. The program consisted of a combination of partial and complete renovations to 18 floors of the 20 story courthouse tower, including mechanical, electrical, telecommunications, fire alarm and security upgrades, ADA compliance throughout, new courtroom layouts and finishes, and all adjunct facilities to service New York State's civil courts and the County's Department of Probation. In order to meet the County's construction schedule, all work was designed around an intricate staging program that Mr. Fogel helped devise to maintain the County's requirements that the building remain fully operational throughout construction. Construction documents were completed in nine months from the date of design award and the project was completed, on time and under budget. (Westchester County DPW, $23M, 2007)

Westchester County Norwood E. Jackson Correctional Facility, Senior Project Manager - The project included a demolition and asbestos abatement phase, along with a swing space phase. The project's third phase was comprised of two new penitentiary buildings and renovation work. Project was completed on time and under budget. Project received "Project of the year for 2005" from the Westchester/Putnam Chapter of the New York State Society of Professional Engineers. (Westchester County DPW, $45M, 2005)

Employment History:

The LiRo Group (2001 to Present)
Senior Project Manager
City University of New York (1996-2001)
Chief of Construction
York Hunter (1994-1996)
Senior Project Manager
Facilities Development Corporation (1988-1994)
Regional Construction Manager
STV (1983-1988)
Project Manager

Joseph W. Fox

SENIORPROGRAM/ PROJECT MANAGER

Mr. Fox has over twenty years of experience in construction management, including administrative operations, project scheduling, and direction of construction activities. Projects have included rail yard construction, school reconstruction, industrial and office buildings, correctional institutions, power plants and infrastructure projects. His rehabilitation/ reconstruction experience includes code compliance requirements including ADA and Life Safety modifications.

EDUCATION	B.S., Civil Engineering, University of Maryland
YEARS WITH THIS FIRM	25
YEARS WITH OTHER FIRMS	14

Mr. Fox's typical responsibilities include project management, client liaison, CPM scheduling, directing the activities of field staff, coordination of subcontractors, processing shop drawings, negotiating change orders and overseeing cost control. Representative projects include:

Continental Airlines, Terminal Renovations at LaGuardia Airport, 1999-2000. Owner's representative for the renovation of ticketing and baggage handling. The work also involved extensive asbestos abatement. Critical to the project was the maintenance of continuous operations. This project represented the final phase of the overall modernization of the main terminal and was contracted in two parts: asbestos abatement and general construction. (PANY/NJ, $12M)

Sunrise Yard, NYC Department of Transportation Maintenance Facility, Ozone Park, NY, Construction Manager - Under this contract, LiRo is providing full construction management services. This project includes the demolition of two one-story brick structures; abatement/ remediation of asbestos and contaminated soils associated with these structures and a subsurface fuel storage tank; construction of a new two- story steel framed building to house material storage, shops, drive- through vehicle maintenance, locker room, and administrative offices; and associated site improvements, including new fence, paved parking, green spaces and an art wall. The project is designed to achieve a LEED Gold Certification. Unique to the project is the construction of a multimillion dollar art wall. The Art wall is 192' long and varies in elevation from 8' to 12'. The face of the art wall consists of close to 400 2'x2' panels with metal supports. Some of the material used in the design was from the demolition of the building itself and others were indigenous to the area to represent the earth strata. The art wall portion of the project required extensive coordination with the Public Design Commission (formerly known as the NYC Arts Commission). (NYCDDC, $20M, 2009)

Bond Street EMS Station, Brooklyn, NY, Inspector - As part of the On Call CM/Build Services for the NYCDDC Fire Unit, the Bond St. EMS Station project involved the complete gut and rehab of an existing building located at the corner of Bond Street and Carroll Street in Brooklyn, New York. The rebuilt structure now has an approximately 4,000 sq ft garage and an additional 3,900 sq ft space which houses a command center, locker and restroom area, lounge and fitness room. There is room for seven ambulances inside the building, and contains offices, a kitchen, conference rooms, personal decontamination area, and a truck decontamination area. (NYCDDC, $5.5M, 2006)

NYCSCA Emergency Response Management and Coordination Program. High School of Urban Assembly, Flatbush. LiRo managed and coordinated responses to the emergency needs of the NYCSCA. In this capacity, we stood ready to respond to emergencies on a 24 hour-per day, 7 day-per-

week basis. Predicated upon verbal authorization (a telephone call), we were prepared to immediately mobilize construction professionals, Trade Labor Union personnel, contractors and/or material suppliers to arrest dangerous conditions or contain hazardous materials at public schools within the five boroughs of New York City.

Columbia University - Schermerhorn Extension Window Replacement, Project Manager, 5/2002 - 9/2002. This project involved scheduling, procurement, and coordination activities for the renovation of the Schermerhorn Amex. (Columbia University, $3.5M, 5/02-9/02)

Bronx House of Detention for Men - Utility Upgrades, Project Manager - Upgrade to the electric system and install 3 new boilers. Project included asbestos abatement extensive mechanical and electrical renovations, overall project control to include scheduling, coordination of all work with the facility maintaining security and site access, etc. (NYCDDC, $20M, 10/02 - 2005)

Construction Manager, Shops and Yards Construction, 180th Street Bronx Subway Car Maintenance Facility- The 180th Street facility is a 600' by 150' subway car maintenance building located at NYCTA's 180th Street station. Mr. Fox was handpicked by NYCT to expedite the construction of this project. The project was several years behind schedule when Mr. Fox began the assignment. Mr. Fox turned this troubled project around and gained beneficial occupancy within 18 months. This full-service facility houses six tracks and includes a full range of cleaning, maintenance, and repair equipment, including overhead cranes, lubrication systems, pitted and posted tracks, an elevated stinger electrification system, and a freight elevator. The facility also contains administrative offices and locker rooms for NYCTA personnel, and is equipped with a communications system and card-access security system. Mr. Fox's role was to help expedite the reconstruction of this facility. Extensive track and track signal work was required both inside and outside of the building. Tying the new track into the existing track signal and switch work was an essential component of construction. (NYCT $45M)

PS 98 School Modernization Project, Construction Manager - Responsible for all field work for renovation and restoration to this public school built in 1928. The Project included asbestos abatement of all floor tile and thermal insulation, kitchen, HVAC, electrical upgrading, and restoration of the facade to NYC Historical Preservation Standards. (NYCSCA, $14M)

Employment History:
The LiRo Group (1985 to Present)
Construction Manager

Frank Franco, AIA

SENIOR PROGRAM/PROJECT MANAGER

Mr. Franco is a registered architect with over 20 years of experience in the construction industry. His experience includes extensive construction management for both public and private agencies and institutions including NYCDDC, DASNY, NYCHHC, BPCA and PA. Mr. Franco also spent six years in the health care field as a Director of Facilities and Construction for NY Methodist Hospital, Brooklyn, NY.
Representative project experience includes:

EDUCATION	B.S., Architecture, New York Institute of Technology at Old Westbury, NY, 1983
REGISTRATION / CERTIFICATIONS	American Institute of Architects, NY NCARB Certified, NY OSHA - 10 Hours Certificate
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	19

CM/Build Requirements Contract for NYC Housing Authority, Program Manager - LiRo is currently performing work on a task order basis including renovating and/or constructing several community centers throughout New York City. Work includes new construction of a community center, various renovations and upgrades, and infrastructure renovations including electrical, HVAC, and plumbing. These properties all require that LiRo perform preconstruction and construction phase services LiRo is responsible for prequalifying potential construction contractors, bidding the work and ultimately entering into contract with the construction contractors. These projects require careful coordination with community residents so interruptions of utilities, housing access, etc. are kept to an absolute minimum.
Representative projects include:

- Betances Houses Community Center, $10 M
- Queensbridge Houses Community Center, $5 M
- 1162 Washington Avenue Community Center, $500K
- Bayview Houses Community Center, $12 M
- Marlboro Houses Community Center, $3 M
- Baruch Houses Community Center, $1M
- Edenwald Houses Community Center, $1M
- Linden Houses Community Center, $10M
- Ocean Bay Facade Restoration, $52M
- Albany Houses Electrical Upgrades, $4M
- B41st Boiler Replacement, $3M
- Throgg's Neck Houses Facade Restoration, $12M
- Exteriors Unit Roofing Replacement Program, 15 Projects, $75M

(NYCHA, $250M)

NYCHHC, CM Services Requirements Contract, Project Executive - Under this contract, LiRo is performing CM Services on an On Call Basis. Current task performed to date include:

- Kings County Hospital "T" Building, LIU School of Nursing ($4M)
- Kings County Hospital "D" Building, NICU Renovation ($2M)

- Kings County Hospital 9th Floor Urology and Surgical Suite. A 10,000 SF renovation to the 9th floor of the "E" Building ($4M)
- Harlem Hospital Ron Brown Ambulatory Care Building ($40M)
- Queens Hospital Center N Building, 3rd and 4th floor renovations and expansion ($4M)

(NYCHHC, $58M)

Westchester Medical Center, Valhalla, NY, Project Manager - LiRo was contracted to provide construction management services for numerous projects at Westchester Medical Center. Services include:

Pre-Construction Services

- Review construction documents for constructability
- Prepare preliminary estimates
- Review and select contractors for the bid process
- Prepare/package bid documents and solicit bids

Construction Services

- Execute contracts with all contractors
- File for all necessary Permits
- Maintain all logs (shop drawing, RFI, change orders, etc.)
- Provide daily construction supervision and inspection
- Provide a construction schedule

(Westchester Medical Center, $150M)

Battery Park City, Community Center Construction Management Services, Project Manager - LiRo is providing Owner's Representative/ Construction Management services for a 60,000 sf community center/ball field maintenance facility in the base of two residential towers at Site 23/24 in Battery Park City. LiRo will oversee the creation of the community center/ball field maintenance facility from design development through completion of all construction and post-construction. This facility will house two indoor swimming pools, an auditorium/theater, a gym and basketball court, classrooms, and exercise center/outdoor plaza, as well as a maintenance facility for the Battery Park City Parks Conservancy for the care of the two adjacent little league ball fields. Site 23/24 will be developed according to the mission of the Authority of furthering sustainability in urban development. The community center/ball field maintenance facility will be built in accordance with the Authority's Environmental Residential Guidelines and with the latest LEED for Commercial Interiors (CI) rating system, now version 2.0. It is anticipated that the facility will attain a Platinum rating, the highest possible level bestowed by the USGBC. (BPCA, $30M)

Employment History:

The LiRo Group (1999 to Present)
Vice President
New York Methodist Hospital (1993-1999)
Director of Facilities Management and Construction (1997-1999)
Assistant Director of Engineering (1996- 1997)
Project Manager (1993 - 1996)
Avis Rent a Car, (1992 - 1993)
Project Manager
Blum and FitzSimmons Architects (1990-1992
Architect/Project Manager
Anthony J. Musso Architect (1980-1990)
Senior Associate Architect

David Hall, N-IV

SENIOR PROGRAM/ PROJECT MANAGER

Mr. Hall has 30 years of experience in construction administration, management and inspection. His projects include hospitals, schools, municipal buildings, wastewater treatment facilities, roads, drainage, utilities, site work and property development. Mr. Hall has managed multi-million dollar, multi-prime municipal projects under consent orders, many of which required continuous operations during construction.

EDUCATION	Architectural Technology and Civil Engineering, New York Institute of Technology, 1978 Business Administration and Accounting, Wheeling College, 1973
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training NICET IV - Highway Construction
YEARS WITH THIS FIRM	21
YEARS WITH OTHER FIRMS	10

Representative projects include:

Stony Brook University Medical Center - Construction Management Services, Stony Brook, NY, Project Superintendent - This project consisted of various stages of construction with an overall cost of approximately $180 million. The overall scope of work took 7 years, due to the intricate phasing, that was required to keep the facility in operation throughout the entire construction duration. The job consists of 5 separate projects as follows:

- Patio Enclosure - This project had a contract value of $1.5 million and consisted of the enclosure of an outdoor sitting area and conversion into cafeteria setting and maintenance area, the project was completed 1 month early and on budget.
- Emergency Generator - This portion of the work consisted of the installation of a 2000kW generator to serve the future Heart Center Project as the backup power for all of their critical circuits. Included as part of the project were the construction of a combustion air penthouse and the alteration of the existing space including the construction of a new switch gear and control room, and the installation of all conduit and wiring from the physical plant to the new Heart center transfer switch. Cost of the work was $1.9 million.
- The Heart Center was the renovation of approximately 70,000 sf. The work entailed the construction of a new Orthopedic Department, a new Heart Center including the installation of 5 new single and bi-plane cath labs, and the creation of 14,000 sf of usable swing space, which is required for the future projects. The value for this portion of the work is $20.5 million. This work was completed as scheduled and on budget.
- ACP project consisted of a new 60,000 sf Cancer Treatment and Imaging facility as well as the extension of both the main loop road entrance to be tied into the main hospital entry road and the existing steam and electrical facilities to the new building. The estimated value of this work is $24 million.
- Major Modernization Project with a construction cost of $128 million. This project included the construction of 10 new OR suites and associated recovery, support and visitor spaces, a new OBGYN wing with its own operating suites, recovery, NICU and ancillary spaces, a totally new, as well as renovated Emergency Department, a new parking structure, a new Helipad, and the addition of a new lobby and renovation of the existing lobby from public into program space. The total square footage of this work is 225,000 sf of new spaces, 3 stories and a penthouse, and 180,000 sf existing space. This phase also included a great deal of infrastructure and site work including the development of an entirely new entry loop road. This project took 4+ years

because of the detailed phasing and commissioning that had to take place throughout its duration, in order to keep the hospital fully functional. (SUNY, $187M, 2009)

Fire Training Academy at Randall's Island, NY - The Fire Department of the City of New York has operated a Fire Training Academy on Randall's Island for over 25 years. This 27-acre waterfront facility sits between the DEP Wards Island Water Pollution Control Plant and NYC Park Department property. The current facility has nine buildings including both classrooms and hands-on training with simulated fires and smoke structures. (NYCDDC, $35M, 2003)

Housing, Classroom, and Dog Training Facility for Guide Dog Foundation, Project Manager - Mr. Hall has served as project manager for this new construction and renovation of spaces used for special training of guide dogs for the blind. Classroom and housing for training the blind in life skills. (Guide Dog Foundation, $7M, 2002)

United States Postal Service, On-Call Construction Management Services, Hoboken, N.J., Assistant Project Manager/Resident Engineer - Mr. Hall has been involved in all aspects of construction management and has managed several projects for this on-call construction management contract for services throughout New York City and Long Island. The assignments varied, ranging from the renovation of existing post offices to the construction of 2 completely new post offices. Multiple task orders were completed simultaneously under this contract. (USPS, $35M, 2000)

Neo-natal Intensive Care Unit, Harlem Hospital - Project Manager for complete gutting and construction of an intensive care unit for premature infants. The project included all architectural, mechanical, electrical, plumbing, and fire protection systems. An intense coordination effort was required, as the work was performed in around active patient areas. LiRo coordinated with NYSDOH, the NYC Building Department, Fire Department, and HICFA. (NYCHHC, $700K)

Nassau Community College Center & Classroom Building, Phase I - CPM Scheduling and Construction Management, General Superintendent- Construction Management for a 70,000sf College Center, a 95,000 sf Classroom building and demolition of a 50,000 sf Hangar, as well as asbestos abatement. The work included the installation of approximately 5000 lf of 18" Rickwill Piping from an existing Co-Gen plant to the new facility. Provided QA/QC inspection, cost control, and time control through a cost-loaded CPM schedule, change order estimating and negotiations, preparation of as-built drawings and testing of equipment. Issued monthly reports to describe time and cost status. (NCDPW, $35.5M, 1995)

Various Improvement Projects, Cedar Creek Water Pollution Control Plant , Superintendent of Construction - Building additions, expansions, modifications and rehabilitation, in order to upgrade the plant from 60 mgd to 75 mgd; a Consent Decree Program, which included the following: Generator Building Final Tanks Pelletization Building Influent Building Air Pollution Controls (NCDPW, $125M)

Employment History:
The LiRo Group (1989 to Present)
Associate

Kenneth J. Holmstrom, P.E.

SENIOR PROGRAM/ PROJECT MANAGER

Mr. Holmstrom has gained experience in various facets of engineering projects since 1976 including planning and design of highway improvements; bridge rehabilitation and construction design; site development design; design of infrastructure improvements; utility coordination; and building construction and renovation projects. Representative projects include:

EDUCATION	B.S.C.E., Civil Engineering, City College of New York, 1976
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	34
YEARS WITH OTHER FIRMS	0

Traffic Engineering Services - Port Newark/Elizabeth Marine Terminal, Stage 1 and II, Quality Assurance/ Quality Control - LiRo provided professional engineering services to conduct a comprehensive traffic study for the proposed redevelopment of the Port Newark/ Elizabeth Marine Terminal. The Port redevelopment included relocation and expansion of the existing terminal facilities as well as changes in the roadway network, site access locations, and inter-modal facility operations. (PANYNJ, $450K, 2004)

Port Authority On-Call Structural Engineering Services, Quality Assurance/ Quality Control - Project included various structural assignments including retaining walls, building inspection, parking garage designs, and building renovations. All projects located at JFK Airport. (PANYNJ, $200M, 2001-2004)

Brookhaven National Laboratories - National Synchrotron Light Source II, Project Manager. This project involved the conceptual design of a new facility which would provide the structures and systems necessary to enable installation and operation of the accelerator and experimental beam lines. Facilities consist of Ring Building, a central lab office building, up to four lab office buildings, a linac and RF building, and four service buildings containing mechanical and electrical equipment. LiRo provided conceptual plans for site development and utilities and performed construction cost estimating and scheduling services. (BNL, $200M)

Brooklyn College, Brooklyn, NY, Quality Assurance - Performed architectural and structural inspections, surveys, and evaluations; prepared reports; and generated construction contract documents for the exterior rehabilitation of 12 academic buildings at Brooklyn College. The architectural features, facades, roofs, parapets, and structural systems of many of these buildings had deteriorated due to water leakage, weathering, and deferred maintenance. Design included rehabilitation or replacement of roofing on three buildings and the replacement of windows on four buildings. (DASNY, $5.8M, 2001)

East Ramp Automotive Shop and North Hub Garage, Randall's Island, NY, Site Design Engineer- Design of a new 47,000 sf vehicle maintenance facility and parking facilities to accommodate 88 buses, trucks, vans, and cars. All necessary site improvements, mechanical and electrical work, fire protection and communication systems, and fuel and fluid dispensing systems were included in the project scope. The facility, including applicable mechanical and electrical systems and associated site work, was designed to comply with all applicable ADA requirements. (TBTA)

New York City Transit Authority Surface Facilities, NY, Project Manager- Design of a new, two-story, pre-fabricated building to be constructed at the Queens Village Bus Depot; rehabilitation of the bus dispatcher's tower at the St. George Ferry Terminal; security improvements at the Fanchon Parking Lot, East New York Depot; modifications to the HVAC system for Room No. 27 at the East New York Depot; upgrades to toilet facilities for the Brooklyn Division Office at One Jamaica Avenue; and design of paving, grading, and drainage for the new bus parking lot at the Castleton Bus Depot in Staten Island. (NYCT)

Queens-North Borough Vehicle Maintenance Facility, Queens, NY, Site Design Engineer- Design for site improvements and building service connections including reconstruction of pavement, curbs and sidewalks along the surrounding streets and sanitary sewer, storm drainage, water supply and gas service connections. (NYCDOS)

99th Street Area - Design of Street Reconstruction and New Water and Sewer Lines, Queens, NY, Project Manager - Design of street reconstruction and new water and sewer lines. Prepared the final design for the reconstruction of 4.2 miles of streets in Queens, New York. Project elements included performing survey involving updating of base mapping planimetrics and obtaining additional spot elevations; preparation of micro engineered best fit grading design which minimizes adverse impact on abutting properties and trees; and conducting a Tree Condition Inventory to determine which tree mitigation measures would be required to preserve existing street trees. Detailed Maintenance and Protection of Traffic Plans and Notes providing for the sequencing of construction to minimize disruption of vehicular and pedestrian movements during construction were developed. Further, the project also included reconstruction of water mains and street drainage facilities, construction of street lighting, and installation of pavement markings and signs. (NYCDDC, $11.9, 1998)

Route 112 Reconstruction, Suffolk County, NY, Quality Assurance - Planning and design for improvements to a 3-mile section of a principal arterial involving the preparation of a Design Report/Environmental Assessment which details existing conditions such as traffic volumes, intersection capacity, safety features, drainage systems, environmental issues, etc. defines project objectives and presents recommendations for proposed improvements. Required extensive coordination of sub consultant work including survey and mapping, environmental studies, hazardous material assessment and a community outreach program as well as coordination with three interrelated projects. (NYSDOT, $30M, 1999-on-going)

New York State Thruway MP 76.4 - MP 86.8, Ulster County, NY, Project Manager - Preliminary design for rehabilitation of a 10-mile section of the mainline Thruway involving super elevation improvements, left shoulder widening, roadway resurfacing, guide rail improvements, rock remediation and drainage improvements as well as rehabilitation of three bridges and reconstruction of one structure including deck rehabilitation, reconstruction of approaches, bearing replacement and substructure repairs. (NYSTA, $12M)

Employment History:
The LiRo Group (1976 to Present)
Vice President

Joseph Hurley, P.E.

SENIOR PROGRAM/ PROJECT MANAGER

Mr. Hurley has acquired extensive experience in public works, environmental, building, and infrastructure projects since 1970. He provides a unique approach to capital construction from both the municipal and private perspectives. During his former tenure as Commissioner of Public Works for Suffolk County, for the City of Long Beach, and for the City of Glen Cove, Mr. Hurley was responsible for complete administration of departmental activities as well as all projects from inception to completion. As a Public Health Engineer with the Nassau County Department of Health, Mr. Hurley was closely involved with the operations of all wastewater treatment plants in Nassau County as well as the County's extensive sewering program. This diversified experience has proven to be of considerable benefit in managing numerous assignments for LiRo.

Inherent in much of Mr. Hurley's public sector and management experience has been the chairing and coordinating of Citizen Advisory Committees, task force groups, and programs developed for public participation and involvement. His approach to the dynamics of public/community input on municipal projects and programs has provided a positive "spin" on many otherwise unpopular projects.

EDUCATION	B.S.M.E., Mechanical Engineering, Manhattan College, 1970 Course Work, Polytechnic Institute of New York, 1974 Operators Course Grade I-A, Polytechnic Institute of New York, 1979
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Environmental Inspection Phase 1, by the EEA Grade I - WWTP Operators Course OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	18
YEARS WITH OTHER FIRMS	22

For example, as the Public Works Commissioner for Glen Cove and Long Beach, he was actively involved in Municipal Solid Waste Management Plans including refuse collection, scheduling, equipment allocation and purchase, staffing, recycling, and disposal alternatives. Planning and organization for current and future needs were the key components of these plans as well as the appropriate interface with the regulatory agencies, principally the NYS Department of Environmental Conservation.

Mr. Hurley's extensive understanding of governmental agency operations and procedures and local community concerns has proven most beneficial in tailoring project management programs to satisfy the concerns and needs of both large and small municipal agencies. Representative projects include:

Downstate On-Call CM, Brooklyn & Queens, NY, Assistant Project Director - Task Order contract included upgrading/renovation or Coney Island WPCP, Oakwood Beach WPCP, Tunnel Shaft Close-outs, thus far. (NYCDEP, $15M)

Improvements to the Riverhead County Center, Project Executive. Provided project management services for improvements to the County Center Building in Riverhead, NY. Mr. Hurley was responsible for the schedule, controls and the project labor agreement. This included preparing a feasibility study,

development of the agreement, negotiating terms of the agreement and implementing the agreement during construction.

Suffolk County Civil Court Renovations and Addition, Project Manager. LiRo provided project management services for the preconstruction and construction for Civil Court renovation and a 93,000 sq. ft. 3-story addition in Riverhead. The Project site was a congested and heavily trafficked location in downtown Riverhead. Renovations to the existing facility which housed the Courthouse, Courthouse Annex, District Attorney Building and Commissioner of Jurors were also contemplated to facilitate code compliance, handicapped accessibility, fire protection and egress as well as improved functionality to the complex. Upgrading of existing mechanical systems was done as well as mitigation of ACM. ($35M)

Spring Creek Water Pollution Control Plant Upgrade, Assistant Project Manager (under a Joint Venture agreement) - LiRo provided project management, resident engineering inspection, and start-up services for the Spring Creek auxiliary water pollution control plant upgrade. (NYC DEP, 2/02 to 2006, $85M)

Rikers Island GRVC Addition, Project Executive- Services included management, coordination, and monitoring of the design process and subcontract all construction in accordance with a CM/Build form of contract. The project also included upgrade of the existing kitchen and laundry facility, locker room facility, and commissary at the George R. Vierno Center. (NYCDDC, $150M)

Replacement DWI Alternative Facility, Project Manager. Services provided by LiRo during the preconstruction phase included constructibility review, value engineering studies, construction cost estimates, preliminary construction schedule and development of a Project Labor Agreement. During construction LiRo provided construction management services for project controls including shop drawing log, RFI log, proposal/change order logs, meeting minutes, schedule review and compliance and Project Labor Agreement compliance. ($5.5M)

Construction of the New Sixth Police Precinct, Suffolk County, NY, Project Manager. Provided construction management services for the new construction of the Sixth Police Precinct in Suffolk County. On this project, Mr. Hurley had the responsibility of schedule, controls and the project labor agreement. ($10M)

Jail Replacement Facility at Yaphank Correctional Facility, Project Executive - LiRo is contracted by Suffolk County Department of Public Works for Construction Management Services during pre-construction and construction phases of the new Yaphank Jail Facility. Initially, the project involved the construction of an addition of 360 cells and the renovation of the existing dormitory. It will provide housing for the expansion and renovation of the infrastructure and support facilities necessary for the proper processing, care and feeding of the inmate population. Included in the project will be state of the art staff, administrative, health care and support facilities that provide the county with efficient and cost effective management and staffing. ($150M)

Employment History:
The LiRo Group (1992 to Present)
Associate
Suffolk County Department of Public Works (1988-1993)
Commissioner

Arthur Johansen

SENIOR PROGRAM / PROJECT MANAGER

Mr. Johansen is a 25 year veteran of the construction industry. During this time, he grew from a carpenter's apprentice to the Executive Vice President of a major carpentry contractor. He has successfully managed many large, high-end projects and was responsible for coordinating the activities of multiple trades and hundreds of craftsmen. Representative projects include:

EDUCATION	Degree, Construction Management, New York University Courses, Architectural Drafting, Mechanics Institute,
REGISTRATION / CERTIFICATIONS	OSHA - 10 Hours Certificate, NY
YEARS WITH THIS FIRM	5
YEARS WITH OTHER FIRMS	20

New York City School Construction Authority - Emergency Response Management and Coordination Program, New York City - Superintendent - Under this contract LiRo managed and coordinated responses to emergencies, on the basis of a telephone call at any time during a twenty-four hour period and on any day Monday through Sunday. LiRo immediately mobilized trades, people or firms and materials for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public school in the five boroughs of New York City. Some of the work was performed in occupied schools. Accordingly, LiRo used best efforts to insure that all such work was performed in a safe and secure manner with minimum disruption to students and school personnel. (NYCSCA, $238M)

Park Slope Armories, Project Manager - LiRo is providing construction management services for this old military armory that is being converted into an indoor sports facility. The building is an historic landmark, over 110 years old. LiRo is overseeing two contracts: one for life safety for NYCDHS, and one for the sports facility for NYCDDC. (NYCDDC, NYCDHS, $15M)

College of Staten Island, Project Manager - Nastasi White - Supervised, furnished and installed drywall and acoustic ceiling for a new building containing a theater (focal point), multiple classrooms, and lavatory. This was a high profile theater project for the College. Project included light gauge framing in the theatre area. (CCNY, $5M)

Foley Square Courthouse, Project Manager - Vergara Nastasi - Supervised, furnished and installed drywall partitions and ceiling. The 600,000 sq ft space contains courtrooms, judges' chambers, common corridors, public assembly area, entrance area, and food service areas. (NYSOGS, $8.5M)

White Plains Court House, White Plains, NY, Project Executive, Nastasi White, Inc.

- Supervised, furnished and installed interior bid package consisting of drywall, drywall finishing, acoustic ceilings, architectural woodwork and wood and resilient flooring.
- Coordinated deliveries of woodwork to site as required.
- Provided executive support for field supervision during installation.
- Prepared, submitted and negotiated change orders with construction manager.
- Attended project meetings to help with coordination with various trades.
- Closed out project with CM and architectural wood work supplier.

Queens Civil Court House Queens, NY - Project Executive, Natasi White, Inc.

- Supervised, furnished and installed interior bid package consisting of drywall, drywall finishing, acoustic ceilings, architectural woodwork and wood and resilient flooring.
- Solicited bidders, review scope, bids, references and award project to woodworkers
- Maintained relations with various trade unions throughout project.
- Reviewed and approved sub contractors' requisitions.
- Supervised installation of woodwork.
- Closeout contracts with sub contractors and construction manager.

55 Wall Street, Manhattan, NY, Project Executive, Natasi White, Inc.

- Supervised, furnished and installed interior bid package consisting of drywall, drywall finishing, acoustic ceilings, architectural woodwork and wood and resilient flooring.
- Assisted construction manager with value engineering of project prior to project award date.
- Reviewed trade schedule to accommodate delays in owner furnished mill work.
- Attended meetings with owners and construction manager during project redesign.
- Processed change orders and project closeouts upon completion.

Employment History:

The LiRo Group (2005 to Present)
Resident Engineer
Nastasi White, Inc (1988-2004)
Executive Vice President (1993-2004)
General Superintendent (1990-1993)
Project Manager (1988-1990)

Murray L. Levi, A.I.A.

SENIOR PROGRAM/ PROJECT MANAGER

Mr. Levi's experience lies in the administration of projects for institutional clients including education, health care and government agency sponsored projects. He is acknowledged for his expertise with technically complex projects; and integration of digital technologies into academic settings, laboratory and hospital design. Mr. Levi, a long-term proponent of Sustainable design, is LEED Accredited Professional who sits on the Board of Directors of the USGBC New York Chapter. He frequently lectures on the art of high-performance building design including presentations of his work at the inaugural USGBC-Haworth "Green Pioneers" lecture series, BKLYN Designs,

EDUCATION	B.Arch, The Cooper Union, School of Architecture, 1979
REGISTRATION / CERTIFICATIONS	Registered Architect, NY Registered Architect, NJ Registered Architect, CT LEED Accredited Professional, US Green Building Council American Institute of Architects USEPA Accredited Inspector and Management Planner
YEARS WITH THIS FIRM	4
YEARS WITH OTHER FIRMS	27

IFMA and other professional, building trade, and management organizations. Representative projects include:

Empire State Development Corporation Monroe Community College Urban Campus Program Midtown Site Test Fit, Rochester, New York: Principal-in-Charge. LiRo has been retained by the Empire State Development Corporation (ESD) to investigate the potential for Monroe Community College (MCC) to build its new campus at the Midtown redevelopment site in downtown Rochester. Currently in progress, multiple scenarios are being investigated on the site to assess the most favorable campus configuration on the multiple parcels available to MCC. The study will result in three options with plans developed from the recommended option.

Settlement Health and Medical Services Executive Offices: Principal-in-Charge of approximately 5,700 sf of office space built out in an existing building to house Settlement Health and Medical Services' Executive Offices, in addition to the Billing and Finance Departments. The program includes seven individual offices and open workspace for nineteen employees. Support areas include: a state-of-the-art thirty-five person conference room with video conferencing capabilities; a staff lounge and pantry; server room and IT office; lateral file and boxed paper storage for the considerable needs of the Billing and Finance departments.

Verdopolis Green Energy Demonstration Plant: LiRo is the Executive Architect and Design Team Coordinator for the Verdopolis Green Energy Demonstration Plant. Verdopolis is one of the first in a new generation of green energy plants. Verdopolis is an electric generation plant that will produce 9 megawatts of carbon-neutral energy by converting 240,000 tons of food waste per year into bio-gas and saleable compost. The specific conversion process is unique in the United States; a hybrid process which combines features from two different food-waste digestion processes licensed from Holland and Denmark. The 120,000 square foot, $40 million project involves the adaptive re-use of an unused hangar at JFK airport supplemented by additions to provide specialized functions. LiRo is providing programming, code analysis, building analysis and architectural design for the project. LiRo is also working to coordinate the activities of a team of specialists providing process and controls design,

environmental engineering, in addition to traffic analysis, geo-technical, structural, and building MEP engineering.

Georgetown YMCA Georgetown, Connecticut - Principal-In-Charge. Designed a new 55,000 sq ft health, recreation, and wellness center for the first sustainably planned community in America. The YMCA will be part of a multimodal transportation complex to include a 600-car parking garage, Metro-North train station, and police precinct for the new town. (Georgetown Land Development Company)

Charles B. Wang Community Health Center - Administrative Offices. Principal in charge and designer of 7,000sf fit-out of back of house administrative offices for the CBWCHC. The project will deliver forty (40) workstations and offices for the Finance, and Information Technology, Health Education, and Billing. It will also provide a much needed conference room that seats thirty-five (35) and a training room. The project achieves a high level of indoor environmental quality through fundamental planning and careful material choices. The project will be completed in October 2009 at a cost of $875,000. (Charles B. Wang Community Health Center)

First LEED CI Silver Certified Private Doctor's Office in America - Drs. Walter and Robin Unger have selected LiRo to design 1,300 sf of new office space for their dermatology medical practice relocating to 720 Park Avenue. The doctors intend for the project to be the first private medical practice to achieve LEED Silver Certification. LiRo was selected for the excellence of its design work, expertise in medical planning and pioneering work in sustainable design. LiRo will provide design and construction administration services and also act as he LEED advocate for the project.

LEED Existing Buildings Process Management for Random House - Project Manager. As part of the process management for the Random House Bertelsmann headquarters building, LiRo facilitated the submission of the documentation for LEED for Existing Buildings to the US Green Building Council. LiRo was involved in creating the development density credit template, which involved the creation of data to be used with existing data sources. These GIS products demonstrated the development density of the Random House Berteismann headquarters, as well as the densities for the surrounding developments (Atkinson Koven Feinberg Engineers, LLP, $80K, 2008)

Battery Park City Community Center - LEED Advisor. LiRo is providing Owner's Representative/ Construction Management services for a 60,000 sf community center/ball field maintenance facility in the base of two residential towers at Site 23/24 in Battery Park City. Site 23/24 is being developed according to the mission of the Authority of furthering sustainability in urban development. It will be built in accordance with the Authority's Environmental Residential Guidelines and with the latest LEED for Commercial Interiors (CI) rating system, now version 2.0. It is anticipated that the facility will attain a Platinum rating, the highest possible level bestowed by the USGBC. Mr. Levi is responsible for ensuring contractors meet the requirements set forth in the guidelines and LEED rating system.

Employment History:
The LiRo Group (2006 to Present)
Vice President
Green4NYC, Architects - (2004-2006)
Founder and Principal
Helpern Architects, PC - (2000-2004)
Principal Architect
Einhorn Yaffee Prescott - (1998-2000)
Senior Associate
Taylor Clark Architects, Inc. - (1992-1998)
Project Director

Michael Mascaro

SENIOR PROGRAM/ PROJECT MANAGER

EDUCATION	B.S., Architecture, New York Institute of Technology
REGISTRATION / CERTIFICATIONS	ACI Flatwork Finisher and Technician OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	11

Mr. Mascaro has been in the construction industry since 1988. During this period Mr. Mascaro has served in a number of capacities:

As project manager and resident engineer for public works and private developments As cost estimator and scheduler for large building projects As inspector for a testing laboratory, supervising steel, concrete, masonry, and soils testing Having worked his way up from the bottom of the industry, Mr. Mascaro has an in-depth knowledge of construction elements and management processes. In particular, Mr. Mascaro has been involved with the NYCDDC and the CM/Build form of contract. Mr. Mascaro is familiar with the various elements of the CM/Build contract or prequalification, VENDEX, bidding requirements, change order processes, LBE requirements, etc. In addition, Mr. Mascaro can effectively deal with subcontractors in terms of performance and documentation. Mr. Mascaro is currently program manager of LiRo's Fire Unit Requirements contract with the NYCDDC which total contract value is $150M. For the past four years, he has managed over ten projects from design through construction. Representative projects include:

Program Management Services for Rehabilitation and New Firehouse/Emergency Medical Service Stations, Program Manager - Mr. Mascaro provided services for the design and construction of the rehabilitation and construction of new Firehouses and EMS stations. Program included 15 sites across NYC for which LiRo provided pre-construction & construction services. Included review of design documents, cost estimating, preparation of bid documents, management of construction and closeout. This was a complex, multisite, multimillion dollar program subject to Wicks Law and which required coordination of multiple prime contractors across the sites. (NYCDDC, $150M)

Randall's Island Phase I&II, Project Manager - Mr. Mascaro served as Project Manager during the Pre-construction, Construction and closeout phases of these projects. Project included the construction of a new Subway Simulator Building and building expansions for an Existing Apparatus Maintenance garage and the vital existing Mask Service Building. All work in existing buildings was completed under full occupancy and while maintaining complete FDNY operations. Mr. Mascaro also managed the completion and closeout of Buildings 11, 12, 5 and 2. (NYCDDC, $60M)

EMS #20 at Jacobi Medical Center, Bronx New York- Mr. Mascaro acted as Project manager for this project which included the structural replacement of the Apparatus floor and construction of new offices, lounge and locker facilities. This work was completed under "Emergency Status" and during full occupancy and operation by the FDNY. In addition to FDNY requirements Mr. Mascaro coordinated all work with the Jacobi Hospital Campus. This included Site Safety, Noise/Dust control, and

development of an agreed upon Staging and phasing plan. These plans were required in order to not impact the hospital campus.

Engine Company #277 Ladder #112, Brooklyn NY- As project manager Mr. Mascaro managed the pre-construction, demolition and is managing the construction phase of this project. Due to the adjacent NYC intermediate school, the project required demolition to be completed during school closing and coordination with the facility during all phases of construction. The award winning façade and structure required close coordination with the subcontractors and Consultants while completing the building envelope.

Engine Company #6 & #81 - Mr. Mascaro managed these projects from design to completion. These projects included the complete reconstruction of a 4 story firehouse in lower Manhattan and rehabilitation of a 4 story firehouse in the Bronx. Work included Select structural replacement, new electrical and mechanical systems/upgrades and the installation of all FDNY required systems (Neederman, FDNY Communications, Housewatch, etc.). Work in the Bronx was completed in a fully occupied firehouse requiring coordination and phasing to be completed with the FDNY.

Engine Company #201- Mr. Mascaro is acting as Project Manager for the project. The project requires the preparation of swing space, demolition of existing and erection of new 12,000 sf firehouse. Due to community requirements a swing space was prepared which include all FDNY operational requirements prior to the demolition of this firehouse. This site is located on a main Brooklyn thoroughfare and is adjacent to a MTA subway tunnel. The demolition, foundation and structural work will all be monitored so as to not impact the MTA and the adjoining buildings. The project will include all required FDNY systems.

Rikers Island CIFM Locker Room Building at Rikers Island, Resident Engineer - Mr. Mascaro was involved with all aspects of this 20,000 sf project from design through construction. He developed and presented construction phasing and staging schemes to the Department of Corrections for their approval. This CM/Build project required that Mr. Mascaro follow all contract guidelines as well as the New York City Procurement Policy Board rules. (NYCDDC, $5M)

System-wide Kitchen Renovation Program for Department of Corrections - Mr. Mascaro maintained project controls and project schedules. He was involved with bid packaging, bidding, and change orders. (NYCDDC, $50M)

Employment History:
The LiRo Group (1992-1996) (2003 to Present)
Project Controls/Associate Vice President
The Stegla Group (2002-2003)
Project Manager
C&L Contracting Corp. (2000-2002)
Project Manager
Tishman (1999-2000)
Project Manager
Raytheon (1998-1999)
Project Controls
JA Jones (1996-1998)
Project Controls/Asst. PM
Stallone Testing Laboratories (1990-1992)
Controlled Inspector

George J. Psillos

SENIORPROGRAM/ PROJECT MANAGER

EDUCATION	B.S., Architectural Technology, New York Institute of Technology, 1976
REGISTRATION / CERTIFICATIONS	Primavera Expedition (Project Controls) Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Troubleshooting Exterior Masonry Walls Certification, NY OSHA - 10 Hours Certificate, NY
YEARS WITH THIS FIRM	19
YEARS WITH OTHER FIRMS	14

Mr. Psillos has been providing construction management services for over 30 years. He has provided project management, CPM scheduling, specifications review and cost control services. He has worked on projects for the: New York City Department of Environmental Protection (DEP), Nassau County DPW, Suffolk County DPW, New York City Transit Authority, New York City Department of Sanitation and Merrill Lynch. These projects have ranged in value from $2 million to $600 million. Most recently, Mr. Psillos has served as Project Manager for a multi-site on-call contract with the United States Postal Service. On this project, Mr. Psillos managed nine LiRo field personnel on multiple projects totaling over $90M in renovations. Representative projects include:

U.S. Postal Service On-Call Construction Management Services, Project Manager. LiRo provided construction management services to the U.S. Postal Service under an indefinite quantity contract. The contract demanded both construction management and engineering/architectural expertise, with complete CADD capabilities. The work, which was performed for the New York Facilities Service Office, encompassed Post Office construction projects in the New York area. LiRo's specific responsibilities included:

- Design Consultation, Coordination, Estimating, Coordination Drawings
- Project Management, Coordination, Scheduling and Progress Surveillance
- Construction Planning and Cost Estimating
- Surveillance of Quality Control and Inspection of Construction
- Contract Document Interpretation
- Administration of Project Documents and Records
- Claims Analysis and Defense

(U.S. Postal Service, $59M, 2000-2008)

U.S. Postal Service, On-Call Construction Management Services, Project Manager- Mr. Psillos was project manager for this on-call construction management contract, which entails both construction management and A/E services for the U.S. Postal Service at various locations throughout New York City and Long Island. The assignments were varied, ranging from HVAC improvements to the construction of a completely new post office. Multiple task orders were being completed simultaneously. (U.S. Postal Service, $30M, 1997-2000).

Suffolk County Community College, Multi-Purpose Health Technology Building, Brentwood, NY, - This project involved the new construction for a new Classroom Building, Athletics Complex,

and Athletic Sport Fields. Involved CPM scheduling and project coordination for this new 250,000 sf health, sports and education center on the western campus. The multi-purpose building contains 22 general purpose classrooms, a 150 seat high-tech lecture hall, computer labs and state-of-the-art laboratories for the health sciences, a 60,000 sf field house and a modern fitness center, faculty and administrative offices and the Suffolk County Police Academy. The project was in conformance with the Wick's Law Requirements for multi-prime contracts. (DASNY, $55M, 1997-2000)

Cohalan Courthouse Complex, Assistant Project Manager and CPM Scheduler - Project involved CPM scheduling and project coordination for courthouse and office complex including holding cell and jail facilities for prisoners. ($90M)

Assistant Project Manager and CPM Scheduling for LIRR Herricks Road and Mineola Grade Crossing Elimination Project ($340M) - ***Phase I***: Raising 1 mile of mainline track and the lowering of Herricks Road, including a portion of Third Main Line track, installation of high-speed crossovers, signal system equipment, communication, signal and power lines, and signal bridges. ***Phase II:*** Elimination of the remaining five MTA LIRR grade crossings in the Mineola area: Main Street, Willis Avenue, and Roslyn Road on the mainline; and Willis Avenue and Second Street on the Oyster Bay Line. Mr. Psillos was responsible for all CPM scheduling for the LIRR Force Account work. Six weekend track outages were required for track cut-over's, each requiring CPM schedules on 1-hour intervals. Extensive coordination and interface with the railroad was required.

Nassau Community College Expansion, Assistant Project Manager - Mr. Psillos provided administrative and technical management of $35.5 million of contract for the demolition of a 55,000 sf block and brick frame aircraft hangar buildings. For the construction of two new buildings: an 115,000 sf three-story classroom building and 90,000 sf three-story college center. The new construction complies with all applicable codes including new ADA requirements. Coordinated operations of five prime contractors. Mr. Psillos was involved in all aspects of construction management including field inspection, estimating, change order estimating and negotiation, project meeting administration, document control, constructability review, and value engineering.

Additional Projects include:

- JFK 2000 Redevelopment Program, Project Control Engineer ($3.2 Billion)
- Cogeneration Facility at JFK International Airport, Project Control Engineer ($200M)
- Skilled Nursing Facility, Suffolk County, NY, CPM Scheduler($30M)
- Merrill Lynch World Financial Center , CPM Scheduling Engineer($600M)
- DOC Kitchen Rehabilitation, NYC DDC, CPM Scheduler($80M)
- Red Hood Sewer Treatment Facility, NYC DEP, Assistant Project Manager ($80M)
- Bay Park Sewer Treatment, Nassau Country DEP, CPM Scheduler ($120M)
- 63rd & 21st Street Subway Stations, NYC Transit Authority, CPM Scheduler ($60M)

Employment History:
The LiRo Group (1991-present)
Associate Vice President

Bijan Radafshar

SENIOR PROGRAM/ PROJECT MANAGER

EDUCATION	B.S., Civil Engineering, New Jersey Institute of Technology, 1980
REGISTRATION / CERTIFICATIONS	OSHA - Construction Safety & Health Certification, NY OSHA 30 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	18
YEARS WITH OTHER FIRMS	12

Mr. Radafshar has over 30 years experience in progressive construction management, having worked as a field engineer, scheduling engineer, estimator and project manager. Among the clients that he has worked with are: Dormitory Authority of the State of New York, NYS Facilities Development Corp., NYS Office of Mental Health, NYC Department of Design and Construction, NYC Department of Sanitation, NYC School Construction Authority, Merrill Lynch and Nassau County D.P.W.

Mr. Radafshar's experience includes all aspects of construction management for both public and private agencies. Mr. Radafshar's experience includes contractor coordination, scheduling, estimating, contract development, change order negotiation, securing permits, obtaining certificates of occupancy, etc. Mr. Radafshar has been successful in motivating contractors in order to bring projects to timely completion in accordance with the construction documents and owner requirements. The project types where Mr. Radafshar has been responsible for contractor activity include court-mandated renovations at high security occupied correctional facilities throughout New York City, construction of the new Cohalan Court Complex and Merrill Lynch World Headquarters at Battery Park City. Mr. Radafshar is experienced with coordinating the activities of contractors on a Wick's Law project where the Project Manager must sometimes act as a referee and resolve conflicts and disputes. Mr. Radafshar has extensive knowledge of construction cost estimating as well as an ability to accurately estimate time and manpower requirements. This has allowed Mr. Radafshar to anticipate project costs, negotiate change orders and direct or convince contractors to increase their manpower levels in order to maintain schedule. Representative projects include:

New York City School Construction Authority - Emergency Response Management and Coordination Program, New York City - Sr. General Superintendent - Under this contract LiRo managed and coordinated responses to emergencies, on the basis of a telephone call at any time during a twenty-four hour period and on any day Monday through Sunday. LiRo immediately mobilized trades, firms and materials for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public school in the five boroughs of New York City. LiRo's scope of work was extensive, varied widely and included the expedited renovation and restructuring of 7 schools with the approximate value for each project was between $6M to $28M. Our categories of work, services, trades or equipment to be provided on an emergency basis include the design, administration, management and coordination of the work; development of construction estimates, solicitation of bids in accordance with Authority requirements and the law; providing general conditions including but not limited to

testing and controlled inspections; remediation of hazardous materials; construction and demolition of the work in accordance with contract documents issues by the Authority. (NYCSCA, $238M)

George R. Vierno Center, 448 Bed Jail Facility - As Project Manager coordinated removal of contaminated soil and installation of piling & foundation and methane system for a $140M high security jail on Rikers Island. Due to shortfall of funding this project was redesigned to dormitory and total beds were increased to 823 beds. (NYCDDC, $20M, 2004)

System Wide Kitchen Renovation Program for N.Y.C. Department of Corrections - This project involved the complete gut/rehabilitation of 5 existing kitchens and construction of a new kitchen with all related services at six correctional facilities in New York City which served more than 6,000 inmates and 1,000 staff members' three meals per day. The facilities were occupied throughout the process therefore phasing and maintenance of security were major issues. Access and egress at each facility required advance planning and appropriate notice. In addition, the project was under a court-mandated schedule. Long lead kitchen equipment and security equipment were ordered early and tracked aggressively. (NYCDDC, $60M, 2004)

Electrical Service Upgrade at Queens House of Detention, New York City, Project Manager - The project consisted of installation of a new electrical service building, coordination with Con Edison in order to bring new feeders and terminate at the property line manhole. In addition, installed a new emergency generator for a 100% backup contingency. The work was performed while the facility was occupied. LiRo was responsible to coordinate and minimize interruptions to both the jail and the adjacent courthouse. (NYCDDC, $5M, 2002)

Powerhouse Masonry Facade Repair & Roof Replacement, Rikers Island New York City, Project Manager - the project consisted of repairing of the collapsed powerhouse wall, re-pointing of the remaining facade and replacing 12,000 sf of roofing. (NYCDDC, $1M, 2002)

Elevator Upgrade & Fire Life Safety Signoff by Fire Department, Bronx House of Detention New York City, Project Manager - the project consisted of full gut/rehabilitation of 4 existing elevators and installation of a new Fire Alarm Panel and associated devices and incorporating all existing panels to report to one panel for NYCFD final inspection & sign-off. (NYCDDC, $1M, 2001)

Columbus Avenue Rehabilitation from Lincoln Center to 110th Street, New York City, Scheduling Coordinator - As scheduling coordinator for the rehabilitation of this high profile and high traffic volume, prepared and maintained CPM schedule in order to maintain traffic and minimize interruption to the daily activities. (NYCDOT, $85M, 1996)

Employment History:

The LiRo Group (1992 to Present)
Associate Vice President
O'brien Kreitzberg & Associates (1987-1992)
Project Manager
Olympia & York (1983-1987)
Project Manager
DJA & Associates (1982-1983)
Resident Engineer

Ralph Tilleli

SENIOR PROGRAM/ PROJECT MANAGER

EDUCATION	B.S., Civil Engineering, University of Delaware, 1959
REGISTRATION / CERTIFICATIONS	Civil Engineering Society, NY Licensed Site Safety Manager, NY Licensed Site Safety Manager Notary Public, NY
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	42

Mr. Tilleli has been working in the construction industry for more than forty years. He has extensive experience in demolition work as well as the erection of high-rise buildings in New York City. He has had vast exposure to the unique construction conditions which exist in New York City including: unusual subsurface conditions, highly congested construction jobsites, and maintaining harmonious working relationships with the numerous trade labor unions. One of Mr. Tilleli's greatest attributes is his ability to communicate effectively with all parties involved in a construction project. He does this by developing strong personal relationships while maintaining leadership and firm project control.

A key component of Mr. Tilleli's demolition experience is his familiarity with scaffolding. He has directly supervised the erection, maintenance, relocation and dismantling of scaffolding ranging up to heights of seven building stories.

As a Licensed Safety Engineer, Mr. Tilleli is well-versed on required safety precautions, particularly when performing demolition work. Representative projects include:

DASNY School of Architecture, Project Manager - Demolition and reconstruction of a 136,000 sf building to become the new School of Architecture building. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including façade, interior and mechanical, electrical and plumbing systems. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus. This required the renovation of various locations at a cost of approximately $8M and was accomplished in one year. (DASNY, $48M)

CUNY/DASNY - City College of New York, Shepard Hall, Great Hall, Senior Project Manager - This complex restoration project included the removal of existing floor fill and replacement with reinforced concrete; installation of new limestone flooring and steps leading to stage area (approx. 40,000 sf); the removal of existing ceiling panels approximately 60 ft. high and replacement with new fabric panels; and asbestos abatement. Phasing/coordination were a key factor, as was the maintenance of school operations throughout construction. ($1.75M, 1997)

CUNY/DASNY - The College of Staten Island, NY - Responsible for the management of the construction of a new, $360 million campus which consisted of renovation of existing buildings and the construction of six new buildings on an area of 204 acres and 1,235,937 GSF. The campus was the largest single phase project in the history of the City University of New York (CUNY) and the Dormitory Authority State of New York (DASNY).

CUNY/DASNY - New York City Technical College, Brooklyn, NY - Construction manager responsible for management of the construction and renovation of seven buildings within an eight-block area--a $45.5 million project budget. Project included a new 10-story atrium sandwiched between three existing buildings. Approximately 11,000 students in attendance were never interrupted as work progressed in a timely manner.

CUNY/DASNY - The College of Insurance, New York, NY - Construction manager responsible for the construction of a 12-story reinforced concrete building which included four upper floors as student dormitory rooms and a seven-story atrium, all enclosed by exterior precast walls at perimeter of building. The unique feature of this construction was the stepped balconies from the second to seventh floors. This was a $25 million project.

Telephone Building, New York, NY - Construction superintendent for the construction of a 22-story building with 16' floor heights. For this construction, the concrete batch plant was located in the building itself. Walls were reinforced concrete designed to withstand atomic attack. The building was designed to be self-sufficient, including a water well beneath the building.

Bronx Lebanon Hospital, Bronx, NY - Rehabilitative work included foundations and reinforced concrete superstructure. Construction managed the installation which was adjacent to a fully functioning operating room. The construction site was tight, requiring sidewalk bridges and overhead construction trailers.

Brookdale Hospital, Brooklyn, NY - Assistant superintendent for the structural steel construction of a new six-story building between two existing buildings. Included the replacement of an existing egg-shaped sewer sandwiched between existing buildings.

East Harlem Hospital, New York, NY - Construction superintendent for a new 28-story hospital. This project required deep excavation and blasting of hard rock adjacent to existing, fully functioning hospitals.

Jewish Home for the Aged, Brighton Beach, Brooklyn, NY - Responsible for management and coordination of all subcontractors for construction of a 12-story, reinforced concrete structure with brick exterior used as senior citizen housing.

Bishop Boardman Senior Citizen Housing, Brooklyn, NY - Supervised construction of five-story/50,000 sf masonry wall bearing building and coordinated subcontractors through all phases of construction. (NYS Division of Housing and Community Renewal)

Employment History:

The LiRo Group (2001 to Present)
Senior Associate
TDX (1979-2000)
Partner/Project Manager
Walsh Construction (1976-1979)
Assistant Project Manager
Gotham Construction (1971-1976)
Superintendent
Euclid Contracting Co. (1946-1971)
Superintendent

Euclin Contracting Co. (1946-1971)
Superintendent

Vikas Wagh, P.E.

SENIOR PROGRAM/ PROJECT MANAGER

Mr. Wagh has over 30 years experience in analysis and design of highways, bridges, buildings and transit facilities. He has performed numerous value engineering studies and constructability reviews for engineering projects of all types. Mr. Wagh has won awards for innovations in engineering and has presented and published many papers. He was the President of Wagh Engineers, PC for 10 years. Relevant project experience includes:

EDUCATION	B.E., Civil Engineering, University of Poona, India, 1976 M.S., Civil Engineering, University of Cincinnati, 1981 Graduate Courses in Business Administration, University of Pittsburgh, 1984
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, NJ Professional Engineer, PA Professional Engineer, MD Professional Engineer, OH Professional Engineer, DE American Society of Civil Engineers (ASCE)
YEARS WITH THIS FIRM	5
YEARS WITH OTHER FIRMS	29

Roosevelt Island Tramway Modernization, New York – Mr. Wagh is the Program Director for the Roosevelt Island Operating Corporation (RIOC). This 18-million-dollar Design-Build Contract was awarded to Pomagalski (Poma) of Grenoble, France. Currently, the project is under construction and is scheduled to complete by August 31, 2010. The Roosevelt Island Tramway (Tram) was commissioned in 1976. The original Tram system equipment was supplied by Von Roll Ltd. Located in Berne, Switzerland through their American partner VSL Corporation. The Tram installation is a bi-cable system of the double reversible type with two carriers traveling back and forth between terminals on two stationary paths. Each path consists of two track ropes whereby the carriages supporting the cabins travel along the path in a controlled motion by moving haul rope. Each carriage is connected to a concrete counterweight by a counter rope. The counterweight is located at the Manhattan terminal and the haul rope drive machinery is located at the Roosevelt Island terminal. (RIOC, 2008 – present, $18M)

East River Bridges in New York, NYCDOT: Director of East River Bridges, Design Division. Managed the ten year rehabilitation program for the four East River Bridges, namely Brooklyn Bridge, Manhattan Bridge, Williamsburg Bridge and Queensboro Bridge. The rehabilitation program involved design of a series of construction contracts for each one of the four bridges. The total cost of rehabilitation was approximately 1.4 billion dollars. East River Bridges presented various conditions that are unique to long span truss and suspension bridges. The development of these contracts required in-depth inspection of the several areas and components of these bridges. The projects involved deck replacements while maintaining traffic, seismic risk assessment of suspension bridges and truss bridges, suspension cable anchorage eyebars rehabilitation, cable strands replacement, cable rehabilitation including opening the cables with wedges, oiling, rewrapping with steel wires, neoprene wraps, etc., replacement of suspenders and cable bands, replacement of grid decks with closed rib steel orthotropic deck, various types of fatigue cracking details and their retrofits, pin and hanger connections, stiffening truss tie-downs, primary truss members consisting of eye bars, etc.

Tappan Zee Bridge/I-287 Corridor Environmental Impact Study, Project Manager - Project Manager for LiRo's efforts in developing the base maps including establishing the ROW lines and developing a database of highway and bridge inventory for the 33 miles of Thruway corridor (including the Tappan Zee Bridge) database for major utilities in the same corridor. Mr. Wagh also participated in the development of the new bridge crossing alternatives. (New York State Thruway Authority)

Tappan Zee Bridge/I287 Corridor Environmental Impact Study, New York State Thruway Authority, New York: Project Manager for Wagh Engineers, P.C. effort on this project. WEPC was assisted in the In-Depth Inspection of the bridge by providing one Team Leader and two Assistant Team Leaders. He performed Load Rating Analysis and Seismic Analysis and conceptual retrofit designs of all deck truss spans of this 3.1 mile long bridge. Studied the combined bridge and tunnel alternates for the replacement of the existing bridge. Cut and cover and bored tunnels were being suggested in the approach areas. (7/02 to 5/05)

Tappan Zee Bridge, Westchester County, NY, NYSTA: Project Manager for the rehabilitation of this 3.1 mile long bridge over the Hudson River between Tarrytown and Nyack consisting of 1.5 mile trestle spans, 19-250 foot deck truss spans and a 2,400 foot three-span cantilever through truss. The project involved inspection, rating analysis, seismic risk assessment and deck replacement. The design involved modifications to the bridge to accommodate new wider deck and retrofit work for live loads and wind loads. The seismic risk assessment work involved site specific seismicity investigation and response spectra and time history analyses using three-dimensional computer models. This project also included a comprehensive study to determine the most appropriate means for replacing the existing deck considering constructability, durability and traffic control. (4/94 to 12/95)

Walt Whitman Bridge Corridor Reconstruction, Contract No. 3, DRPA: Project Manager for the rehabilitation of the 10,000 + foot long bridge. The project included inspection, rating, preliminary and final design services for the rehabilitation of the main suspension spans and widening and redecking of approaches. The project also included construction staging, replacement and widening of the deck slab on the approaches, suspended spans deck repairs, overlay replacement, suspender collar retrofit, barrier replacement, fatigue investigation, and other structural modifications. The work also included seismic retrofit measures such as bearing replacement of the approach beam, girder and truss spans. The redecking was designed to be constructed in seven (7) construction stages to allow six (6) traffic lanes to be maintained during peak hours. The project included complete replacement and upgrade of the electrical system that supports roadway lighting, navigational and aviation lights and lane use signals. The Suspender Collar retrofit work consisted of modifying the existing suspender collar assemblies from panel point 65 to 65' on the north and south sides of the center suspended span (46 total collars). The work included removal of the existing collars, replacement of the zinc lining with a polyurethane liner, realigning of the collar and re-installation. (10/94 to 12/95)

Employment History:

The LiRo Group (2005 to Present)
Vice President
Wagh Engineers, P.C (1996 – 2005)
President
Frederic R. Harris, Inc. (1994 – 1995)
Project Manager
New York City Department of Transportation (1991 – 1994)
Director of East River Bridges, Design Division

Resume

Dennis Yap's broad range of skills has been utilized at airports of various sizes and service levels. His role is often considered that of a program manager for airports and sometimes as an assistant to airport management. The services Dennis provides are best defined as airport administration, programming, planning, design and construction.

Education

Bachelor of Science, Civil Engineering, Polytechnic Institute of New York, 1983

Years in Practice: 27

Registrations

Professional Engineer- NY, NJ, CT, PA, MA

Memberships

American Association of Airport Executives

Airports Consultants Council

New York Airport Managers Association

American Society of Civil Engineers

Airport Minorities Advisory Council

Southern New Jersey Development Council

DY Consultants

Dennis Yap, PE, Principal-in-Charge, QA/QC

Experience

Dennis has focused his nearly 27-year career entirely towards the planning and development of airport-related facilities throughout the US. He has successfully completed more than 400 aviation projects and has serviced more than 100 individual airports. He is president and hands-on owner of DY Consultants.

Planning:

As a project planner, Dennis monitors the production of planning projects for the company. The firm participates in planning studies such as: Airport Layout Plan Studies, Airport Master Plan Studies, Feasibility Studies, Obstruction Studies, Heliport Studies and Pavement Management Studies. His airport planning experience includes airfield inventory, aeronautical forecasting, demand/capacity analysis, alternatives development, recommendation of plans, development of Airport Layout Plans, environmental reviews, terminal planning, scheduling and cost estimating.

Administration:

Well versed in the FAA program and airports, Dennis has a strong understanding of the operational and administrative requirements associated with sponsors who utilize FAA funds for Capital Improvement Projects. Dennis provides clients with an overall understanding of the assurances associated with grants and the procedures involved in implementing grants.

Programming:

Dennis coordinates and aids in the development of capital improvement plans for airport facilities. He works very closely with clients to develop short and long-term programs. This effort is completed with the objectives of meeting the immediate needs, minimizing environmental impacts, minimizing financial exposure and providing a program that is consistent with the airport's future plans. This service typically involves the preparing of a capital improvement plan for a three-to-five year period, coordinating with funding agencies, procuring funds for individual projects, and following the administrative procedures of the funding agencies.

Design:

Dennis is very involved with the technical issues of all design projects assigned to the firm. He is ultimately responsible for the accuracy, quality, and production of all design reports, plans, specifications and other project documents. These projects range in cost $50,000 to $20 million. Dennis has vast experience with existing and new runways, taxiways, taxilanes and parking aprons. Many of these improvements involved the rehabilitation or reconstruction of existing pavements or the construction of new pavement sections. These projects involved rigid and flexible pavement sections for civilian and military facilities. Dennis is sensitive to minimizing disturbance to the airfield during construction and makes special efforts toward coordinating an acceptable Operational and Safety Plan for projects. In addition to the paving projects, Dennis has an extensive background in the development of airside visual and navigational aids.

Construction:

Construction duties provided by Dennis currently include liaison between client and contractor, supervising inspection team and sub-consultants, preparing all administrative documents, interpreting plans and specs, attending project meetings and preparing final close out documentation. In addition, he has participated during construction as both a Resident Engineer and a Project Engineer. Dennis provides expertise in quality assurance and quality control during construction. He reviews Job Mix Formulas, other related Materials Submittals, plant and in place test results, and quality control programs. He ensures compliance to project plans and specifications, determines penalties if applicable and confirms quantities placed.

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James V. Green, P.E.
Senior Engineer/P.E. Diver
Project Role: Senior Project Manager

Education:
M.S. Candidate, Structural Engineering, Manhattan College
B.S., Civil Engineering, Manhattan College, 1992
A.S., Engineering Science, Rockland Community College, 1988

Registration:
Professional Engineer: New York, New Jersey, Connecticut, Pennsylvania, Maryland, Delaware, Virginia, California

Certifications:
National Bridge Inspection Standards (NBIS), 2005 – Course #FHWA-NHI-130055
American Red Cross – Adult CPR and Standard First Aid
Association of Diving Contractors, Commercial Diver Certification, [redacted]
Open Water Diver Certification, 1994
OSHA Confined Space Entry and Fall Protection, 2006

Work History:
1996-Present – McLaren Engineering Group
1995-1996 – The RBA Group
1993-1995 – NYC Department for the Aging
1991-1993 – New York State Thruway Authority
1985-1991 – 2x2 Development, Stony Point

Experience:
Mr. Green is a structural engineer and diver with over 19 years of experience. His background encompasses resident engineering, field investigation, and construction inspection services, as well as review of shop drawings, subaqueous investigation, and extensive structural design. He has worked on underwater inspection and assessment programs and construction inspection programs for the PANYNJ, NYCDOT, NYSDOT, ConnDOT, NHDOT, NJDOT, and the NYSTA. His background includes experience in all facets of structural and civil engineering design on the waterfront, including ferry terminals, shipping facilities, piers and wharves, and foundation engineering. He is involved in the preparation of permit applications, EIS documentations, and consistency review documents, and coordination with and between agencies on permitting issues to include the Army Corps of Engineers, the Department of Environmental Conservation, the Department of State, National Marine Fisheries Service, the Fish and Wildlife Service, and other local agencies.

- **Design of an Oceanfront Pier, Ferry Terminal and Waterfront Destination; City of Long Branch, New Jersey;** Lead Marine Engineer/ P.E. Diver for the full marine and structural engineering services needed for design and construction of a new oceanfront pier in Long Branch, New Jersey. The pier will include a multi-functional retail and entertainment facilities, a ferry terminal providing commuter access to New York City, renewable energy resources, and a learning center. The pier is a critical aspect of the City's redevelopment plan, enhancing its identity as a premier United States destination.
- **New Jersey Marine Terminal Priority Marine Rehabilitation; for PANYNJ;** Team Leader/P.E. Diver for the performance of expert professional engineering services for PANYNJ Contract 415-09-065. Mr. Green provided the necessary waterfront structural engineering services associated with the inspection, evaluation, design and preparation of contract drawings, construction cost estimates and construction phase services for the priority repair work orders.
- **Port Elizabeth Berths 88-98 & Turntable; Newark/Elizabeth; for PANYNJ;** P.E. Diver for a condition survey of Berths 88, 90, 92, 94, 96, 98, and Turntable located at Elizabeth – Port Authority Marine Terminal. Involved with underwater inspection of timber and steel piles, pile caps and extensions and assessment of the concrete

edge beam, wharf topside, and steel sheet pile bulkhead. Mr. Green assisted in the preparation of a report indicating inspection findings, presenting pertinent photographs, and making priority repair recommendations.

- **Waterfront Structural Engineering Services for the New Jersey Marine Terminal; Elizabeth, NJ; for PANYNJ;** Structural Engineer/Inspection Team Leader responsible for providing waterfront structural engineering services for the inspection, evaluation, and rehabilitation design for the New Jersey Marine Terminal structures. Mr. Green prepared contract drawings and construction cost estimates for priority repairs for the structures, which included berths, a turntable, mooring dolphins, and timber walkways.
- **Underwater Condition Inspection of Bulkheads at Piers 2, 3, 4 & 5 at the New York Marine Terminal; Brooklyn, NY; for PANYNJ;** P.E. Diver for this high and low-level inspection of the relieving platforms and bulkheads. The project involved visual inspection of all above water elements including the deck underside, edge beams, reinforced concrete pile extensions, and stay lathing/bracing, as well as detailed underwater inspection services for the bulkheads between Piers 2 and 3 and Piers 4 and 5.
- **Underwater Inspection at JFK Airport; Queens, NY; for PANYNJ;** Team Leader/P.E. Diver for the underwater inspection of a 3,000-foot-long timber pile system pier at Runway 4R. Included report preparation, underwater photos, and repair recommendations.
- **Underwater Inspection of Piers 6, 7, 8, 9, 9A & 12 at the New York Marine Terminal; Brooklyn NY; for the PANYNJ;** Team Leader/P.E. Diver for underwater inspection of more than 10,000 timber piles and bulkhead, including a 10 percent in-depth inspection to determine marine borer infestation. A comprehensive report was prepared including condition assessment, repair recommendations, and cost estimates.
- **Engineering & Inspection Services for Marine Structures; Manhattan, NY; Battery Park City Authority;** Inspection Team Leader/Structural Engineer for the repair of the esplanade including piles, precast concrete seawall skirt, and the riprap slope protection that surrounds the perimeter of the Battery Park City Authority parcel in lower Manhattan. Mr. Green was responsible for the assessment of and design of repairs for approximately 3,500 precast concrete piles that support the relieving platforms at the esplanade. He also helped perform a testing program to investigate "hot spots" (areas of significant deterioration), statistical analysis of inspection data, and development of repair alternatives with cost estimates.
- **SUNY Maritime Rehabilitation and Expansion; Kings Point, NY; for SUCF;** Senior Engineer responsible for design and construction services in a project involving the 200-foot extension of the college pier, an addition to the approach pier, and an expansion of the working pier. Mr. Green is also involved with the management of NYSDEC and Army Corp permitting processes. The project includes rehabilitation of floating docks, pile repair and bulkhead remediation.
- **Williamsburg, The Edge Waterfront Development; Brooklyn, NY; for Douglaston Development;** Senior Engineer for the physical inspection, preliminary pier design and management of permitting issues for this waterfront development project along the East River. Project responsibilities included inspection of piers and bulkheads, evaluation of soil conditions, site/civil inspection, feasibility studies for water related activities, and design drawings.
- **Rehabilitation of the Astoria Site Waterfront Dock and Bulkhead; Queens, NY; Con Edison;** Structural Engineer/Inspection Team Leader responsible for performing professional engineering, design and construction support services associated with the rehabilitation of the Astoria Site Waterfront Dock and Bulkhead. Mr. Green was responsible for developing repair and replacement designs for these structures. Structures included: sheet piles, rip-rap revetment, existing steel pile hardware, fender systems and pump station intakes.

Brian C. Moody, P.E.
Senior Engineer/P.E. Diver
Project Role: Senior Project Manager

Education:
1999, Manhattan College, MSCE, Structural and Geotechnical Engineering
1997, Manhattan College, BSCE, Structural Engineering

Registrations & Certifications:
Professional Engineer - New York
National Bridge Inspection Standards (NBIS), 2005 -- Course #FHWA-NHI-130055
Association of Diving Contractors, Commercial Diver Certification #[redacted]

Work History:
2004-Present - McLaren Engineering Group
1997-2004 – Thornton Tomasetti / LZA
9/95 – 12/95 – Eschbacher & Associates
6/95 – 9/95 – NYS Thruway Authority

Experience:
Mr. Moody has over 13 years experience with underwater condition assessment, inspection, and structural design projects. He has worked on all types of structures, including bridges, marine structures, canal structures, roadways, buildings, and foundations. His responsibilities have included inspection, design and analysis, report preparation, and construction inspection. He has worked on projects for the NJDOT, NJT, NYCDOT, NYSDOT, NYSTA, New York Canal Corporation, Port Authority of NY and NJ, EDC, NHDOT and for various NJ Counties. As a Team Leader and P.E. Diver, Mr. Moody has performed the above and below water inspection of many bridges, piers, bulkheads, dams, and culverts. Representative projects for include:

- **Condition Survey Inspection of Berths 51-63, at Port Elizabeth Marine Terminal; PANYNJ;** Team Leader/PE Diver responsible for the cyclical condition survey of the New Jersey Marine Terminal, Port Elizabeth Berths 51, 53, 55, 57, 59, 61, and 63. The condition survey included an underwater inspection of the treated timber piles, steel H-piles, steel pipe piles, timber bulkheads, and an above water inspection of the concrete pile extensions, deck soffit, and top of deck. A Conditions survey report was also provided.
- **Condition Survey Inspection of Brooklyn Pier 12 and Bulkhead – New York Marine Terminal; PANYNJ;** Team Leader/PE Diver responsible for the field survey of Pier 12. Services included visual inspection and a ten percent hands-on inspection of all timber, and steel piles; all pile cap beams and pile extensions; all exposed and accessible surfaces along the entire length of the timber and steel sheet pile bulkhead, including ultrasonic thickness measurements of steel sheet pile bulkhead and soundings were taken along the bulkhead; a twenty percent hands-on inspection of the deteriorated portions of the deck soffit; and a visual inspection of the concrete edge beam and wharf topside. A Conditions survey report was also provided.
- **New York Marine Terminal Inspection of Piers 2, 3, 4, 5, & 11; Brooklyn, NY; for PANYNJ;** Team Leader/Marine Engineer for underwater inspection and assessment of bulkheads (timber piles, steel H-piles, pile cap beams, pile extensions, steel sheet piles) between Piers 2 and 3, Piers 4 and 5 and along Pier 11. A topside inspection of the concrete seawall and wharf was performed to determine its general condition.
- **Staten Island Homeport Bulkhead/Seawall Rehabilitation; Staten Island, NY; for NYCEDC;** Engineer for the design and construction support services for long-term rehabilitation of a collapsed portion of steel sheet pile bulkhead located at Staten Island Homeport. Services provided include engineering analysis and design for a replacement tied back bulkhead. A full set of construction drawings and technical specifications were prepared, as well as construction cost estimates and assistance with bidding.
- **Underwater Condition Inspection of Bulkheads at Piers 4, 5, & 11 at the NY Marine Terminal; Brooklyn, NY; for PANYNJ;** Team Leader/Marine Engineer for the Underwater Inspection and Assessment of the bulkhead between Piers 4 & 5 and along Pier 11.

Brian C. Moody, P.E.
Senior Engineer/P.E. Diver
Project Role: Senior Project Manager

- **Greenpoint Openspace Improvements; Brooklyn, NY;** Team Leader/Marine Engineer for open space improvements that include a pier, waterfront esplanade, and a waterfront park with the objective of giving the community much needed recreational space, connecting residents to the waterfront and accommodating future ferry service. Services performed included underwater inspection of timber low-level relieving platform and concrete seawall, schematic design, and consultation for the proposed park.
- **Condition Survey of the Hoboken Ferry Terminal - PANYNJ;** Team Leader/PE Diver responsible for the condition survey which consisted of an above water and underwater inspection of all structural elements comprising the Hoboken Ferry Terminal including pile caps, beams, bulkheads, piles, deck surface, and underside. Specifically, the structures include the following: the Pullman Immigrant Building and Cordoned-off Pier, the Rail Pier, two barges (Floating Terminals), and associated ramps, passageways, and gangways. The purpose of the inspection was to determine the overall condition of the structures and to identify structural and non-structural deficiencies. A report of findings and repair recommendations was also provided.
- **Civil Engineering Waterfront Structures Inspection Program – Former Kent Avenue Generating Station; Consolidated Edison Company;** Team Leader/PE Diver responsible for the inspection of a 600 ft. bulkhead for the overall condition and structural integrity; the concrete intake and discharge tunnels; and the Ash Pit Wall along the Wallabout Channel. Soundings were also taken of the river bottom along Wallabout Channel. A final report of findings was prepared.
- **Waterfront Revitalization 4th & 5th Street Piers, Kent Avenue; Brooklyn, NY; RD Management Corp;** Team Leader/Marine Engineer during the design phase of this redevelopment project along Williamsburg's waterfront in Brooklyn. The 4th & 5th Street Piers are being revitalized in two phases: demolition phase and construction phase. McLaren is performing detail design, construction inspection and construction administration services during these phases. McLaren performed an investigation of the waterfront structures including existing pile fields and bulkheads, and a hydographic survey of the project site area. McLaren provided a boring plan, waterfront site investigation and permitting services, and conceptual designs in addition to supervising the taking of geotechnical boring samplings.
- **Green Street Pier Inspection; Brooklyn, NY; for Park Tower Group;** Assistant Project Manager for the inspection of the existing Greet Street Pier. Responsible for marine engineering services, including a condition survey of the existing pier and adjacent bulkhead, a condition report of the pier and bulkhead, an alternatives study of at least three repair options for the pier, designs for the pier and for the new bulkhead, design of a water taxi landing and marina, and construction support services.
- **Assessment of the Water Club Marginal Wharf and Pier 11 Fender System; Manhattan, NY; for New York City Economic Development Corporation;** Team Leader/Marine Engineer for the Underwater Inspection and Assessment of the Water Club Marginal Wharf and the Pier 11 Fender System in Manhattan, NY for the New York City Economic Development Corporation.
- **Gowanus Substation Waterfront Structures Inspection; Con Edison;** Team Leader/PE Diver responsible for the routine inspection of the Gowanus waterfront. The 600 linear foot bulkhead is comprised of a wood bulkhead constructed of wood piles tied back into the supported large stone riprap and a small steel sheet pile bulkhead. A report of findings and repair recommendations was provided.
- **Engineering Services in Support of the Rehabilitation of the Bulkhead at Con Edison 74th St. Station; Consolidated Edison Company;** Team Leader/PE Diver responsible for the engineering and construction inspection services in support of the rehabilitation of the bulkhead at the Con Edison 74th Street Station. Field reports noting the construction progress, quality, adherence to detail, as well as any deficiencies requiring correction were provided.

Program/Project Managers

Rasem Abdo

PROGRAM/PROJECT MANAGER

Mr. Abdo is an accomplished professional with 24 years of construction management experience. He has successfully managed/supervised contractors and their field personnel and directed the new construction, renovation, and landmark exterior restoration of numerous educational facilities, as well as renovation and tenant fit out of residential, office and electrical facilities. Many of these projects encompass the simultaneous management of multiple sites. Representative projects include:

EDUCATION	B.S., Civil Engineering, Kuwait University, 1984 M.S., Civil Engineering, Kuwait University, 1986
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training, NY
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	18

New York City Health and Hospitals Corporation, Façade rehabilitation, clay tile & flat roof replacement, selected lead panel & lead roof fascia repairs and associated asbestos abatement work for Buildings A, B & C at Kings County Hospital Center., Project Manager –
Kings County Hospital Center is one of the largest hospital complexes in NYC. This complex consists of more than twenty functional buildings that occupy an area of more than eight city blocks. This hospital complex was founded in 1831. The A, B & C buildings were erected in 1931. The A & B buildings are 11 stories and 120 feet in height. The B building is 13 stories and 140 ft in height. The three buildings are crowned with a clay tile and lead panel's cupola. Our project was to replace the original clay tile, flat roofing and designer lead panels, renovate and wash down the original face. Mr. Abdo's duties included, managing the site mobilization, coordination with the design architect and NYCHHC facilities management and the general contractor for this project regarding all aspects of the construction activities; especially phasing the renovation work in a manner the insures the uninterrupted activities of the hospital services until completion and final acceptance of the renovation work. This includes also reviewing and negotiating of contractor change orders proposals and preparing and/or reviewing contractor monthly requisitions. He also is responsible for management of shop drawing logs and submittals throughout the approval process, development of short-term schedules to support overall project milestones and assisting in updating site logistics plans for use in contractor coordination. (NYCHHC, $21M, 2008-Present).

CM/Build Requirements Contract for NYC Housing Authority (NYCHA), Betances Houses Community Center, Queens bridge Houses Community Center, Project Manager -Under this contract, LiRo performed work on a task order basis. We were in the design or construction phases of renovating and/or constructing community centers and several other renovation projects throughout New York City. These properties all required that LiRo perform pre-construction and construction phase services. Mr. Abdo's duties included, managing the site mobilization, coordination with the in-house NYCHA construction department, the design architect and NYCHA facilities management and all subcontractors (General construction, electrical, mechanical and plumbing) regarding all aspects of the construction activities until completion and final acceptance, reviewing and negotiating of subcontractor change orders proposals and preparing and/or reviewing subcontractor monthly requisitions. He also was responsible for management of shop drawing logs and submittals throughout

the approval process, development of short-term schedules to support overall project milestones and assisted in updating site logistics plans for use in contractor coordination. (NYCHA, $15M, 2005-2008)

Emergency Response Management and Coordination Program, New York City, Assistant Project Manager- Under this contract LiRo managed and coordinated responses to emergencies, on the basis of a telephone call at any time during a twenty-four hour period and on any day Monday through Sunday. LiRo immediately mobilized trades, firms and materials for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public school in the five boroughs of New York City. LiRo's scope of work was extensive, varied widely and includes the expedited renovation and construction a new $18M, 55,000 sf high school within 90 days. Our categories of work, services, trades or equipment to be provided on an emergency basis include the design, administration, management and coordination of the work; development of construction estimates, solicitation of bids in accordance with Authority requirements and the law; providing general conditions including but not limited to testing and controlled inspections; remediation of hazardous materials; construction and demolition of the work in accordance with contract documents issues by the Authority. (NYCSCA, $108.7M, 2004-2005)

Previous Experience

Hudson River Park Trust (HRPT), Bovis Lend Lease LMB, Project Manager- In 1998, The Hudson River Park Act was enacted by the State Legislature and signed it into law by Governor Pataki. The bill established The Hudson River Park Trust (HRPT) to design, build, maintain, and operate the park. The goal of the organization is to create a new, self-supporting park that will provide an opportunity for water-related and recreational activities along the historic Hudson River Waterfront, and embrace the history, ecology, and culture of the river and its surrounding areas. Valued at $385M. Mr. Abdo managed the construction a 60,000 Square Feet Athletic Field inside Pier 40 under Wicks law and three new open door tennis courts at West Houston Street. The Athletic Field was constructed with synthetic turf. The building surrounding went through architectural, electrical, mechanical, and plumbing modifications to comply with current state and city occupancy codes with four contractors on board. His duties included outreach to with subcontractors and suppliers for bid solicitation, evaluation of sub contractor bids, writing subcontracts and purchase orders, reviewing and negotiating of subcontractor proposals through change events and change orders and preparing and/or reviewing subcontractor monthly requisitions. He also was responsible for management of shop drawing logs and submittals throughout the approval process, development of short-term schedules to support overall project milestones and assisted in updating site logistics plans for use in contractor coordination. (HRPT, $13M, 2003-2004)

Employment History:
The LiRo Group (2005 to Present)
Project Manager
Bovis Lend Lease LMB (1997-2004)
Project Manager
M.A. Angeliades Inc. (1992-1996)
Project Manager
Othman Engineering Firm (1987- 1990)
Project Manager
Rania Construction Corp. (1984-1986)
Site Superintendent

Aomar Achouri, P.E., P.T.O.E.

PROGRAM/PROJECT MANAGER

Mr. Achouri has an extensive background and education in traffic and civil engineering, both locally and globally. For LiRo, his responsibilities include capacity analysis, signal timing analysis and optimization, geometric analysis, Maintenance and Protection of Traffic and GIS data manipulation for clients such as NYSDOT, PANY/NJ, LMCCC and Nassau County DPW. Representative projects include:

EDUCATION	M.S., Civil and Transportation Engineering, The City College of New York, 2002 Advanced Studies Diploma, Civil Engineering, Ecole Normale Supericure de Paris France, 1994 B.C.E., Civil Engineering, Ecole Nationale Polytechnique d'Alger, Algeria, 1993
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, NJ Professional Traffic Operations Engineer
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	6

Comprehensive Traffic Study for Port Newark, Elizabeth, NJ, Traffic Engineer - Work included:

- Data collection and reduction
- Trip generation and travel demand forecasting
- Warrants analysis and signal design
- Develop Synchro model
- Capacity and level of service analysis
- Cost benefit analysis

(PANYNJ, 2003)

Intelligent Transportation System (ITS) in Lower Manhattan, NY, Project Manager-
The project consists of installing an integrated ITS System for Lower Manhattan, including subsystems for Wireless Traffic Monitoring Cameras, Traffic Sensors, Portable Variable message Signs, Transponder Readers, Highway Advisory Radio and a High-Speed Telecommunication Link. Mr. Achouri's responsibilities as Project Manager included the following; preconstruction meetings, document tracking and control, budget tracking, change order evaluations, contractor invoice review and recommendation, post installation equipment inspection, testing verification, substantial completion, and project closeout. (LMDC, $6M, 2007)

Reconstruction and Widening of Merrick Road, Rt. 27A, Freeport, NY, Chief Inspector - This project involved the widening, repaving, and resignalization of a 5 lane roadway in an urban area. The project included the realignment of a major intersection, Mill Road. New drainage, curb and sidewalk were installed. The entire intersection was paved with asphalt. The project also included extensive utility upgrades for gas, electric, and telephone service. MPT was critical due to the high traffic volumes running through the project corridor. The major portion of the work was performed at night and required nightly lane closures. All traffic control and MPT was done in accordance with NYSDOT standards and requirements. (Nassau County DPW, $3M, 2006)

Lower Manhattan Redevelopment Project, Traffic Engineer - Mr. Achouri's responsibilities included the following:

- Capacity and level of service analysis
- Signal timings plan design and optimization
- Maintenance and protection of traffic

- Accident and pedestrian flow analysis
- Geometric roadway design
- Simulation of traffic patterns and travel demand forecasting

(LMDC, 2005)

Neighborhood Traffic Studies, Transportation Engineer. LiRo conducted numerous neighborhood traffic safety studies (NTSS). The studies were targeted at specific neighborhoods and focused on what improvements were warranted to reduce the amount of accidents and address complaints from residents. To accomplish this LiRo collected all available accident and traffic data, sign and pavement ordinances, and supplemented the data with field volume and speed data. The results were arrayed to identify safety analysis/investigation issues. Each study request the assessment of the roadway networks operation from the Town/Village perspective.

Data analysis revealed discrepancies with existing signs, traffic signals, and pavement markings as well as any need for new signs, signals, and markings. In some locations, speed limit changes were also recommended. Maps showing existing and proposed conditions were developed. The results were delivered to the Town in report format and in a Map Info GIS database. (Town of Brookhaven, $120k, 2005)

Speed Sign and Impact Attenuators Study at JFK International Airport, Traffic Engineer - Work included the following:

- Located speed signs and impact attenuators on base map and noted their conditions and type
- Created a database
- Made recommendations to change damaged impact attenuators and improve signage visibility and effectiveness

(LMDC, 2004)

Canal Street Pedestrian and Vehicular Traffic Study, Traffic Engineer - Responsibilities included:

- Traffic volume and geometric data gathering
- Field observation and inventories
- Analysis of traffic operating conditions
- Evaluation of pedestrian crossing times at signalized intersections
- Develop new traffic signal timings to address deficient pedestrian crossing times
- Develop Synchro model

(LMDC, 2004)

Employment History:

The LiRo Group (2001 to Present)
Transportation Engineer
New York City Department of Transportation (1999 – 2000)
Transportation Engineer/Planner
Centre Scientifique et Technique du Batiment Paris, France. (1994 – 1995)
Junior Civil Engineer

Michael Albergo, PE, PMP

PROGRAM/PROJECT MANAGER

Mr. Albergo has over 20 years of experience in the planning, development, and engineering analysis of public works projects, with emphasis on transportation components. His experience includes project development from concept through construction, and analysis of the supporting logistics. He has worked with both public and private organizations to address their concerns during planning, design, and construction. Strong analytical, writing, and communications skills have enabled him to play a pivotal role in many of these projects. Representative projects include:

EDUCATION	B.S., Humanities and Engineering: Nuclear Engineering/Literature, Massachusetts Institute of Technology, 1983
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hr. Construction Safety and Health, NY CMAA Project Management Institute
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	15

Lower Manhattan Construction Command Center, New York, NY. Project Manager, 9/11 Memorial Opening. Currently assigned to LiRo's program management contract for LMCCC, Mr. Albergo is providing planning, analysis, and coordination in connection with the permanent opening of the 9/11 Memorial scheduled for 9/11/11. In this capacity, he is examining issues and evaluating options for:

- Access and emergency egress
- Pedestrian queuing areas, queue lengths, sidewalk capacities, and operational impacts
- Tour bus drop-off locations
- Construction trucking impacts
- Potential security impacts
- Street and sidewalk reconstruction
- Signage, way-finding, and beautification

Lower Manhattan Construction Command Center, New York, NY. Logistics Coordinator. Assigned to LiRo's program management contract for LMCCC, Mr. Albergo authored all reports produced by the agency and is responsible for developing and analyzing the logistics data underlying $12 billion in construction in Lower Manhattan. This effort entails collecting or estimating data on concrete, steel, excavation, labor, and major equipment. Data was collected on more than 60 major projects, including the WTC site (Freedom Tower, Towers 2 through 4, PATH Hub, WTC Memorial and Museum, Vehicle Security Center, Performing Arts Center, and supporting slurry walls and connectors), Fulton Street Transit Center; South Ferry Terminal, and approximately 20 high rise buildings averaging 40 stories in height. In addition, because major regional projects were known to be drawing on many of the same resources, summary logistics and schedule data were collected for East Side Access, 2nd Avenue Subway, the Trans-Hudson Express Tunnel, City Water Tunnel No. 3, the Hudson Yards, the Atlantic Yards, and other major regional projects.

Mr. Albergo worked with the scheduling team to load this logistics data onto the master schedule developed for all of Lower Manhattan. He developed a series of reports and presentations with histograms detailing the peak demands in each area, balanced against the known or estimated supplies of

each resource. By developing typical labor and trucking profiles, he was able to accurately predict shortages in particular areas (e.g. metal lathers) and forecast construction traffic at various locations. By building a database of permitting, utility, site logistics, embargo, and other issues encountered at each construction site, he developed a series of project metrics which quantify the benefits of LMCCC's ongoing coordination – an essential step for LMCCC's continued funding.

The logistics data identified and supported the seven major issues to be addressed by LMCCC: concrete, trucking, staging, labor, security, worker transportation, and major equipment. Mr. Albergo worked closely with the local concrete industry, MTA Bridges & Tunnels, and other agencies to address concerns, develop procedures, and implement solutions. He has authored a series of reports and presentations evaluating these logistics, their associated issues, costs, and their potential solutions. These included *Emergency Preparedness / Emergency Response to Concrete Truck Incidents at the Brooklyn Battery Tunnel*), the *Logistics Summary and Solutions Reports, Recommendations to Government Agencies, Test of MTA Tow Equipment on Concrete Trucks, Analysis of Pier 57 as a Potential Truck Staging Area,* and the *Project Metrics Report.* Directly as a result of Mr. Albergo's efforts, the MTA changed its regulations regarding concrete trucks, and NYCDOT opened the inbound Williamsburg Bridge to truck traffic.

East 180th Street Station Rehabilitation, Bronx, NY. Deputy Project Manager. A landmark station, this $20 million rehabilitation project included structural, architectural, landscape architectural, mechanical, electrical components. Mr. Albergo assembled the project team for the overall effort, and served as Deputy Project Manager for the structural design, developing the scope and budget for the structural work.

Marcy Pedestrian Bridge Forensic Investigation, Marcy, NY. Deputy Project Manager. Mr. Albergo served as Deputy Project Manager for the investigation of the collapse of a pedestrian bridge under construction near Marcy, NY, as part of the Utica - Rome Expressway. One worker was killed, one critically injured, and eight others injured in the collapse. The scope of work included examination of the debris field, metallurgical tests, interviews with witnesses, and examination of NYSDOT practices. The causes contributing to the collapse were documented in a final report.

22 West Progress Group, Washington County, PA. Project Engineer. As a member of the Executive Committee, Mr. Albergo worked with school boards, municipalities, water authorities, and developers to examine the issues in developing a 20-mile stretch of Route 22 in western Pennsylvania. Development required the introduction of water service to the area, and Mr. Albergo was a key player in the formation of new municipal authority for this purpose. In particular, Mr. Albergo was responsible for the development of layered maps which would serve as the building blocks for a GIS system used to facilitate development. Five base maps were included in the study: Existing rail routes Existing highways and streets A map of the watersheds (for the introduction of water and sewer service)A demographic map A map of existing industries

Employment History:

The LiRo Group (1995-2002) and (2006 to Present)
Project Manager
Weidlinger Associates (2002 to 2006)
Vice President
Michael Baker Corporation (1992 to 1995)
Manager, Project Development
Blauvelt Engineers (1989 to 1992)
Project Engineer
John J. Kassner & Company (1984 to 1989)
Project Engineer

Abid M. Ansari, P.E., P.T.O.E.

PROGRAM/PROJECT MANAGER

EDUCATION	M.S., Civil Engineer, New Jersey Institute of Technology, 1989 B.S., Civil Engineer, NED University of Engineering and Technology, 1984
REGISTRATION / CERTIFICATIONS	Professional Engineer, CT Professional Engineer (pending), NY Professional Traffic Operations Engineer, NY
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	15

Mr. Ansari has been providing civil and traffic engineering services since 1984. Mr. Ansari has managed and conducted numerous traffic studies and has prepared reports for various public and private clients. He has also provided technical reviews of design documents and environmental impact statements for various diversified projects.

Mr. Ansari has extensive experience in the planning, design, and maintenance of existing and proposed civil and transportation facilities, preparation of environmental impact statements, MPT plans and traffic/transportation operation and safety studies. He has also developed improvement measures for traffic impacts and calculated their effectiveness through computer modeling.

Mr. Ansari's specific experience with traffic and transportation studies includes:

- Managing and conducting traffic analyses, safety and accident studies, parking demand studies and traffic circulation studies
- Preparation of detour and MPT plans and evaluation of associated impacts
- Overseeing activities such as geometric design, capacity analysis, field surveying, traffic modeling, traffic projections and forecasting and signal analysis and design
- Analysis and design of parking facilities
- Pedestrian and mass transit analysis

Representative project experience includes:

Port Newark/Elizabeth Marine Terminal - Mr. Ansari conducted a comprehensive traffic study for the proposed redevelopment of 900+ acre site of the Port Newark/Elizabeth Marine Terminal. The project included relocation and expansion of the existing terminals as well as changes in the roadway network, site access locations and inter-modal facility operations. This study included extensive field surveys to gather traffic database including manual and machine counts. The data were used to analyze the existing traffic conditions. Synchro models were developed for the existing and future scenarios. Using the existing and future capacity analysis results, operating conditions were evaluated and deficiencies were identified. Feasible improvement measures were developed and proposed to improve traffic operations and to minimize congestion and delays for the interim, short term and long term. Mr. Ansari prepared a comprehensive report to summarize the analysis data, methodology, findings, conclusions and recommendations of the study.

World Trade Center Area Pedestrian Study - Mr. Ansari conducted a comprehensive pedestrian circulation and operation study in the World Trade Center site vicinity. For this project, Mr. Ansari prepared and completed a detailed data collections program. Using this data, analysis models were developed along Church Street, Vesey Street, Liberty Street and West Street (9A) to determine the current operating conditions at key sidewalks, crosswalks and street corners. Analysis models were utilized to assess pedestrian conditions and potential impacts and to develop mitigation related to construction of various facilities in the area.

Lower Manhattan Traffic Model - Mr. Ansari was responsible for developing a comprehensive traffic operation model for lower Manhattan covering the entire island south of Canal Street. The model, based on Synchro and SimTraffic software, was developed for the Lower Manhattan Borough Commissioner's office in relation to the aggressive post 9/11 utility works and comprehensive roadway reconstruction program in the area. In addition to gathering and utilization of available information, extensive traffic data were collected. This effort established a unified set of traffic data for various ongoing projects. The model presents an operational assessment of existing conditions as well as provides a platform to project and evaluate future scenarios. The model was also used for developing and assessing MPT plans. Mr. Ansari has developed alternate detour schemes for roadway construction and closures and demonstrated associated impacts and viability by utilizing the traffic model, and presented the findings to NYC and NYS DOT.

Canal Street Corridor Study - Mr. Ansari conducted a comprehensive vehicular and pedestrian traffic study along Canal Street in Manhattan. The study was conducted for the Lower Manhattan Borough Commissioner's Office in response to the Canal Area Transportation Study (CATS Phase I) recommendations. The intent of the study was to evaluate the existing operations as well as various improvements recommended by CATS. In addition to the arterial and progression analyses, pedestrian operations and crossing times were evaluated. Traffic signal timing plans were reviewed and modified throughout the corridor to address potential safety and operational issues. In addition, evaluation of existing traffic control devices, installation of new traffic signals, adequacy of existing crosswalks and feasibility of mid-block crosswalks at various locations along Canal Street were studied and assessed. Mr. Ansari also prepared a comprehensive written report presenting findings and conclusions.

George Washington Bridge Bus Station - Mr. Ansari was responsible for traffic design and MPT plans for HVAC system renovations at the bus station. The project involved vehicular and pedestrian circulation and operation analyses as well as preparation of contract documents for permanent traffic conditions and MPT plans at the terminal and busy adjacent streets including Broadway, W. 178th Street and W. 179th Street. It also included partial and full closure of Trans-Manhattan Expressway (I-95) lower level eastbound, which passes under the work area at the bus station.

JFK Terminal 8 & 9 Expansion Project - This project involved pedestrian and vehicular traffic circulation analysis and design and development of MPT plans for the terminal access and frontage roadways, construction phasing and coordination with utilities for a major American Airlines terminal expansion at JFK Airport.

Continental Airlines Terminal C Redevelopment - This project at Newark Airport involved pedestrian and vehicular circulation studies at the terminal frontage and parking facilities and development of MPT plans for the terminal expansion and proposed parking garage.

Employment History:
The LiRo Group (1999 to Present)
Director of Transportation
SIMCO Engineering, P.C (1999)
Vice President – Engineering
Eschbacher Associates (1995-1999)
Associate/Supervising Transportation Engineer
Ethan C. Eldon Associates (1989 –1995)
Senior Transportation Engineer

Steven Asquith

PROGRAM/PROJECT MANAGER

Mr. Asquith has over 30 years experience in underground and aboveground petroleum and chemical storage tank design, installation, closure, testing and remediation. He has been involved with numerous projects in the public and private sectors as Senior Project Manager providing turnkey environmental engineering, consulting and contracting services. He has been responsible for planning, implementation and coordination of site clean ups for hazardous and non-hazardous contamination soils and ground water. He has also managed Capital Improvement and Construction Rehabilitation projects for the City of New York. Representative project experience includes:

EDUCATION	B.S., Meteorology and Physical Oceanography, SUNY at Maritime College, 1970 M.S., Geological Oceanography, The City College of New York, 1976
REGISTRATION / CERTIFICATIONS	Ameron Fiberglass Pipe Installation, NY Basic Code Enforcement Training Certification Brick Masonry-Inspection and Quality Control Cert., NY Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Certified Asbestos Monitor, NYSDOL, NY Concrete Construction Seminar Confined Space Entry Certification NYC Fire Dept. License - Tank Installation, Testing & Repair NYSDEC Tank Installation Certification, NY OSHA 10 Hour Occupational Safety & Health Training OSHA Certified 40 Hour Hazardous Waste Worker Training, NY P1-Unlimited Plumping Troubleshooting Exterior Masonry Walls Certification, NY Welding Inspection Issues Seminar, NY
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	20

Yankee Stadium City Work Redevelopment, Bronx, NY, Project Coordinator - LiRo is responsible for providing Construction Management/Build services for the design and construction work that is required of the City of New York as part of the Yankee Stadium Agreement. LiRo has performed the following projects and infrastructure upgrades within the entire scope of work: Demolition of five buildings at the Bronx Terminal Market; Excavation and disposal of contaminated soils at the Bronx Terminal Market Waterfront Park site; Installation of synthetic turf little league baseball fields and additional recreation facilities at two sites in the adjacent Bronx neighborhood; Restoration of retaining walls along 161st Street which included concrete imbedded baseball logos in time for the April 2009 baseball season; Widening of the sidewalk bridge for McCombs Dam approach for NYC DOT; Installation of a 20" water main around the new Yankee Stadium for NYC DEP; Installation of a 36" combined sewer from 157th Street to the Major Deegan service road and a 24" sewer along Ruppert Place for NYC DEP. LiRo is presently in the process of redeveloping the Bronx Terminal Waterfront Park by restoring the waterfront bulkhead along the entire site in preparation of the construction of 16 new tennis courts, an outdoor classroom, water features and an esplanade within a passive park setting. Also under restoration, is a historic building that is owned and will be occupied by the Parks & Recreation Department of NYC.

Mr. Asquith is responsible for Contract compliance, quality and procedural manuals for site safety, proposal preparation and contractor procurement, all document control from preconstruction through construction closeout, agency meetings, project reports and coordinating/sequencing the work to meet the contract milestones using P3 for scheduling and Prolog for a database. (NYCEDC, $144M, 2006-Present)

Various Capital Construction Projects at Yankee Stadium and Shea Stadium, NY, Project Manager - LiRo provided construction management/build services at both former Yankee and Shea Stadiums. The projects involved all disciplines with particular emphasis on life safety issues and mechanical systems. The majority of the work required completion during the off season with strict deadlines to avert opening day activities. Work during the baseball season had to be performed around the teams' schedules and Stadium operations. The Project involved multiple contracts related to structural improvements for concrete walls and facades, escalator repair and rehabilitation, HVAC upgrades, plumbing system upgrades, cooling tower support modifications, parking garage structural repairs and fire sprinkler upgrades, stairway replacement in Parking Garages 3 & 8 at Yankee Stadium, and painting of the steel superstructure. As Project Manager, Mr. Asquith was responsible for all phases of work at both Stadiums. (NYCDDC, $50M, 2004-2006)

Remediation of Petroleum Contaminated Soil and Groundwater Project, NY, NY, Project Manager - Implementation of a remediation program to comply with a NYS DEC consent order at over seventy NYC owned/operated sites, LiRo provided the Construction Management/ Design/Build services with the following types of remediation systems: Total Fluid Recovery, Dual Phase Recovery, Soil Vapor Extraction, Bio-Venting or Bio-Remediation. For each site, LiRo established the nature and extent of contamination, determined the need for site remediation, performed an evaluation of remedial alternative and recommended site remedies for NYS DEC approval. As Project Manager, Mr. Asquith was responsible for management of construction subcontracts, including the construction of remediation systems, oversight of system operations and a maintenance program. Monthly reports were provided to NYS DEC indicating system status and progress until final approval was given for termination of remedial action by NYS DEC. (NYCDDC, $37M, 2001-2004)

Bulk Petroleum Storage Tank Projects for various NYC Agencies including DDC and DOS, Assistant Project Manager - Mr. Asquith has design/replacement/ upgrade/closure of AST's and UST's at over two hundred and fifty city sites including site investigation, design, pre-qualification of contractors, management of bid awards, and coordination of construction with contractors. Tank sizes have varied from 250 to 25000 gallon tanks. In addition to diesel and gasoline products, projects have included fuel conversions from oil to gas, alcohol tanks, lubricating oils and waste oils. Permit agencies included NYC Building Dept, Fire Dept. of NY, Dept. of Environmental Protection, and NYCDOT. (NYCDDC / NYCDOS, $42M, 1998-2001)

Route 9A, Segment 1 Reconstruction Project, Field Inspector - Mr. Asquith was responsible for the direct field inspection and supervision of the drilling operations for soil borings and rock coring to determine soil characteristics and bedrock criteria for pier foundations at the Intrepid Museum and the Morris Street Pedestrian Bridges. Mr. Asquith's responsibilities included supervising the daily drill rig operations for soil sampling and rock coring following NYS Standard Specifications and procedures, including proper spilt-spoon sampling, determining RQD values for coring, documentation for all boring logs and bore hole restoration. (NYSDOT, Region 11, $18M, 2001)

Employment History:

The LiRo Group (1998 to Present)
Project Manager
New York City Department of Design and Construction (1996-1998)
Senior Project Manager

Michael Belling, P.E.

PROGRAM/PROJECT MANAGER

Mr. Belling is a licensed Professional Engineer with experience in civil engineering, program/project management and construction inspection. He has experience interacting with City, State and Federal agencies regarding all aspects of construction. He is also experienced in utility work, relocation and highway design, including highway drainage design, traffic control (signing and striping), accident analysis, horizontal and vertical alignments and capacity analysis. Mr. Belling also has extended experience in environmental engineering, including bulk fuel storage system design and site remediation. His project experience includes:

EDUCATION	B.S., Civil Engineering, Manhattan College, 2000 M.S., Civil Engineering, Manhattan College, 2004
REGISTRATION / CERTIFICATIONS	Confined Space Entry Certification OSHA 10 Hour Occupational Safety & Health Training Professional Engineer, NY
YEARS WITH THIS FIRM	10

Construction Management and Inspection Services for Project VN-80A, Utility Relocation for the Upper Level Replacement of the Verrazano-Narrows Bridge (TBTA), Resident Engineer: LiRo served as the construction management consultant for the Triborough Bridge and Tunnel Authority for the VN-80A project. The project involved relocating the bridge's vital electric, communications and fire standpipe utilities, as well as new redundant circuits for upper level lighting, lower level lighting and 24-hour power. A new SCADA operating system is also being installed and integrated with the existing Quindar system. Some specific items of work include:

- Installation of conduit, steel channel hangers and pull boxes for 5kV, fiber optic and medium voltage cable
- Installation of fire standpipe branch lines and hose connections
- Installation of lighting and 24 hour circuits
- Installation and splicing of fiber optic cable, 5kV cable and medium voltage cable
- Removal of bridge telephone system and existing fire standpipe branch lines
- Installation of SCADA operating system, including interfacing with existing Quindar system
- Installation of SCADA cabinets and implementation and training of new control system
- Monitoring of cut over of existing systems (cameras, lighting, etc.) to newly installed cables
- Monitoring of end-to-end OTDR tests and other tests as specified

Maintenance and protection of traffic and coordinated lane closures were required for this installation on both the upper and lower level roadways. Coordination with facility personnel was of great importance, due to the fact that systems were required to be temporarily taken off-line during cut over. Security access management was also a vital part of this project, as there was extensive work required within the bridge towers and anchorages. Responsibilities also included the management of the contract with regard to submittals, project progress and safety meetings, as well as contractor payments and as-built drawing documentation. (November 2008 - Present)

Program Management for Lower Manhattan Development Corporation (LMDC) and Lower Manhattan Construction Command Center (LMCCC), Construction Coordinator: LiRo is serving as a Program Management consultant for the LMDC & LMCCC, whose responsibilities involve nearly all construction projects, both public and private, south of Canal Street, including all World Trade Center site development. The goal of this work is to provide a service which coordinates over 70 major projects with the community and all federal, state, and city agencies. Mr. Belling is also a member of the

LMCCC's Construction Permit Enforcement Taskforce (CPET). This group meets on a daily basis and is comprised of representatives from LMCCC, NYPD, NYCDOT, NYCDEP, NYCDOS, NYCDOB and the Alliance of Downtown New York. CPET's purpose is to provide a daily interface where all city agencies that issue and enforce construction permits can coordinate their efforts to ensure all federal, state and city regulations are followed. Public noise complaints, after hours construction work, illegal street closings, bus idling and unsafe working conditions are only a few of the issues reported to the appropriate agency at this meeting. (January 2007 - November 2008)

Replacement, Upgrade, Closure or Removal of Underground Heating Oil and Emergency Generator Fuel Storage Tanks for the New York City Fire Department, Design Engineer: This project involved the replacement, upgrade, closure or removal of heating oil and emergency generator fuel underground storage tanks at four FDNY Communication Center Facilities and two firehouses. Design responsibilities included developing design documents for bidding. Specific responsibilities included acquisition of site specific information, development of site plans and details, coordination of contract drawings, compilation and writing of contract specifications including determination of specific project scope for each site and manufacturer equipment investigation and determination. Post-bid award responsibilities include sub-contractor's submittal approval for operation plans and other required items requiring approvals. (NYCDDC, 1/00 - 1/07)

Replacement, Closure or Removal of Underground Lube Oil Storage Tanks with Installation of New Product Delivery Systems for the FDNY and NYC Department of Sanitation, New York, NY, Design Engineer - These projects involved the replacement of existing storage tanks for such fluids as motor oil, hoist oil, anti-freeze and transmission fluid. New air driven pumps and product delivery hose reels and nozzles were installed for these fluids. Sites included sanitation garages in New York City, which required 24-hour operation during construction. Design responsibilities included developing design documents for bidding. Specific responsibilities included acquisition of site-specific information, development of site plans and details, coordination of contract drawings, compilation and writing of contract specifications including determination of specific project scope for each site and manufacturer equipment investigation and determination. Post-bid award responsibilities include sub-contractor's submittal approval for operation plans and other required items requiring approvals. (NYCDDC, $82M, 2007)

Tappan Zee Bridge/I-287 Corridor Study, Senior Project Engineer: This project involved tasks supporting the Tappan Zee Bridge replacement and the I-287/I-87 corridor improvements reaching from Rye, in Westchester County, to Suffern, in Rockland County. This project also included Route 119 as well Metro North's Hudson, Harlem and New Haven rail road lines in Westchester County. Tasks involved complete highway right of way (ROW) delineation and base mapping for the entire corridor, highway and utility infrastructure photo inventory and contacting and coordinating with various utility facility owners to confirm locations of all utilities within the corridor.

Employment History:
The LiRo Group (2000 to Present)
Civil Engineer

Michael D. Byrnes, CIH, CSP

PROGRAM/PROJECT MANAGER

Mr. Byrnes has 25 years' experience in the construction management field with an extensive emphasis on environmental remediation issues. He has extensive experience in asbestos; lead, indoor air quality, and laboratory analysis. As a Certified Safety Professional, Mr. Byrnes specializes in protecting workers, the public, property, and the environment by identifying, evaluating, and controlling hazards. As a Certified Industrial Hygienist, Mr. Byrnes is responsible for the management, planning and staging all aspects of asbestos abatement projects from the initial building survey, through design and preparation of bidding documents and technical specifications, evaluation of bid submittals and contractor selection, monitoring of the abatement project and oversight of the abatement contractor's activities, and post-project close-out. Representative projects include:

EDUCATION	B.S., Chemical Engineering, 1984
REGISTRATION / CERTIFICATIONS	OSHA 500 OSHA 510- Occupational Safety & Health Standards, NY OSHA 30 Hour Occupational Safety & Health Training, NY OSHA 10 Hour Occupational Safety & Health Training Certified Safety Professional Hazardous Waste Operations & Emergency Response OSHA - 10 Hours Certificate American Board of Industrial Hygiene Certified Industrial Hygienist NYSDOL Asbestos Inspector, NY OSHA Confined Space Entry Training NYSDOL Asbestos Project Monitor, NY NYSDOL Asbestos Project Designer NYSDOL Asbestos Air Sampling Technician, NY NYSDOL Asbestos Certificate, NY MTA Track Safety Training SSPC C-3 Certified NIOSH 582 Certification NYCDEP Certified Asbestos Investigator, NY NYSDOL Management Planner OSHA 40 Hour HAZWOPER
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	17

New York City School Construction Authority, NY – Field Inspector during disinfection of newly installed water piping in association with plumbing alterations, new additions, and new construction for various projects in association a New York City School Construction Authority (NYCSCA) hazardous materials management contract. Duties included: pre-disinfection site visits to determine if necessary interior of exterior piping is installed, and shut off valves are located at transition points between newly installed and existing piping in order to prevent chlorination of existing lines; review of Disinfection Water Quality Testing Plans (DWQTP) to determine compliance with NYCSCA and other applicable standards, codes and recommendations; field oversight of disinfection operations to ensure that approved DWQTP and other applicable codes, standards and recommendations are adhered to, including determination of proper chlorine concentration for disinfection is obtained, proper holding time of disinfectant in piping, and ample flushing following holding time to determine diminution of chlorination levels to less than 1 part per million, as required by applicable codes and NYCSCA standards; and witness sampling for total coliform/E-Coli bacteria, and heterotrophic plate counts (HPC) is performed, not less than 24-hours following ample flushing. Representative disinfection projects included: New Utrecht High School – new addition; PS 234K – new construction, disinfection of newly installed interior piping from service main interior double control valve to fixtures and drinking fountains; PS 265K – new construction, disinfection of two new service mains from exterior box valve to interior of building; PS 13Q (1) – disinfection of newly installed service mains from exterior box valve to interior double control valves; PS 13Q (2) – disinfection of newly installed hot and cold water

pipes from service mains interior double control valves to newly installed fixtures. Performed pre-disinfection walk-through, to determine if proposed DWQTP and disinfection can proceed, at the following schools: August Martin High School, Queens, new interior piping and fixtures; Mott Haven Complex, Bronx, new construction of charter school, three high schools, auditorium and gymnasium facilities, including exterior service main connections from street, interior hot and cold water piping and fixtures; Manhattan Academy, Manhattan, new interior hot and cold water piping, and fixtures on 7th floor of leased space for new school at 26 Broadway; Manhattan School of Math, Science and Engineering at the City University of New York, new hot and water piping and fixtures for new science labs, bathrooms and drinking fountains; and walk through and review of DWQTP for East NY Family Academy, new hot and cold water piping associated with kitchen modernization.

Remediation and Disposal of Contaminated Paint – Various Sites – New York City Department of Environmental Protection - LiRo is currently serving as the Construction Manager consultant to the New York City Department of Environmental Protection (NYCDEP) for the remediation and disposal of contaminated paint at various NYCDEP facilities located throughout Westchester County, and the Catskill and Delaware Watersheds. The project involves the removal and disposal of paint contaminated with lead, mercury, and PCBs, from various building and equipment surfaces, and the re-painting of those surfaces required by NYCDEP. LiRo will facilitate coordination of Contractor with NYCDEP personnel, and local authorities at the various facilities. Pre-construction services consist of reviewing NYCDEP Contract requirements, and assisting NYCDEP is finalizing Contract Technical Specifications. Services also consist of developing Health and Safety Plans (HASP) to address hazards that will be encountered during the paint remediation operations.

Resident engineering services will include reviewing Contractor submittal packages, Contract schedules, coordinating site activities so as to make the least impact on NYCDEP operations and site specific requirements, managing progress meetings, reviewing Contractor payment requisitions, and coordinating with Contractor and NYCDEP for disposal of hazardous materials, during the course of the site work. Services will also include overseeing field supervision, Contractor compliance with Contract Specifications, NYCDEP specific health and safety requirements, applicable regulations, codes and standards.

MTA/NYCT Asbestos and Environmental Consulting Services, NY - Project Manager for several consulting contracts with MTA New York City Transit totaling over $4,500,000. The Contract involved the coordination of site facility surveys and asbestos abatement design specifications and preparation of New York State Department of Labor site specific variances (SSV). The Contract also involved the management of project monitoring services for the asbestos abatement phase of the work, including evaluation of abatement contractor's work practices to ensure compliance with applicable federal, state and local regulations and standards, and the Contract documents. Prepared final reports, which included evaluation of post-abatement submittals and payment applications.

Employment History:

The LiRo Group (1998-1999 (2001 to Present)
Certified Safety Professional
Certified Industrial Hygienist
TRC Environmental Corporation, (1997-1998)
(1999 to 2001)
Senior Project Manager
Law Environmental, Inc. (1996-1997)
Project Manager
Warren & Panzer Engineers, PC. (1991-1996)
Project Manager
Applied Technology Services, Inc. (1987-1991)
Field Engineer
Enviro-Probe, Inc. (1985-1987)
Field Engineer

Anthony Caggiano

PROGRAM/PROJECT MANAGER

Since joining LiRo, Mr. Caggiano has been involved in requirements contracts involving multisite, wicks law projects. Over the years, he has become an expert in managing and coordinating theses projects from design through construction. He possesses both the technical and communication skills required to create workable designs, coordinate and schedule with individual facilities, and package the overall project and inspect and document the construction. Over the past ten years, he has performed work at over 350 facilities including over 100 fire department facilities. Work has included tank removals and upgrades, gas conversions and emergency generator installations. This experience has given him intimate knowledge of the FDNY operations.

EDUCATION	B.S., Industrial Engineering, City College of New York, 1966
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training Troubleshooting Exterior Masonry Walls Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Brick Masonry-Inspections and Quality Control Certification, NY Confined Space Entry Certification CPM Scheduling Certification, NY Construction Management Certification Prep Course Risk Management Course, NY IFCI - Certified in UST Installation/Retrofitting PETCON Course - UST Closures IFCI - Certified in UST Decommissioning ASTM Course - E1739-RBCA Course for Integrated Environmental Solutions, NY PETCON Course - UST Installation
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	30

Representative projects include:

Project Manager/Assistant Project Manager for Four NYC Department of Design and Construction Petroleum Storage Tank Projects. These four projects with a total value of $70 million involved the construction management of replacement /upgrade/decommissioning of ASTs and USTs at over 300 city sites. Responsibilities included site investigation, design review, development of subcontractor RFPs subcontractor prequalification, bonding, insurance and VENDEX certification.

Duties also involved maintaining of schedules, utilizing Primavera, monthly status reports, shop drawing review, ISRP and SSIP review, requisition review, cost control, cost estimating, progress payment requests, punch lists, maintenance and warranty controls, change order processing and approvals. The project required close coordination with NYC Department of Design and Construction client agencies, subcontractor personnel, and field inspection on multisite, multicontractor construction.

Project Manager for Design and Construction Management for Installation of FDNY Emergency Generators, Citywide. Responsibilities included site investigation, design review, development of subcontractor RFB's, subcontractor pre-qualification, required insurances, bonds and vendex certification. Duties also included schedule maintenance, shop drawing review, requisition review, cost control, cost estimating, change order processing and approval, progress payment requests, substantial completion requests, punch lists, and maintenance and warranty controls. The project required close coordination with NYC, DDC, FDNY, subcontractor personnel, and field inspection on multi-site contractor construction.

Assistant Project Manager for Tank Upgrade and Fluid Distribution System Installation at NYC Department of Sanitation Central Repair Shop. Duties included participation in determining motor vehicle fluid system requirements, design and installation. The project included the location and subsequent removal and/or replacement and remediation of sixteen (16) USTs consistent with the relevant State, Federal and City requirements governing these tanks.

Assistant Project Manager for Tank Upgrade and Fluid Distribution System Installation at NYC Housing Authority. Duties included supervision of pre-design investigation, removal, replacement, and remediation of USTs on a multi-site project.

Employment History:
The LiRo Group (1994- Present)
Associate Vice President
Frequency Controls Products (1984-1994)
Director of Sales & Marketing
ADI Electronics (1975-1983)
Vice President & General Manager
Arrow Electronics (1978-1982)
Director
Servo Development Corp. & FEE Industries (1977-1981)
Vice President of Manufacturing
GAP Instrument Corp (1969-1976)
Director of Manufacturing
Otis Elevator Electronics (1964-1969)
Manufacturing Manager
Belock Instrument Corp. /Otis Elevator Electronics (1962-1964)
Manager of Estimating & Industrial Engineering
Belock Instrument Corp. (1958-1961)
Manager of Estimating

Todd Colabella, N-IV

PROGRAM/PROJECT MANAGER

Since 1980, Mr. Colabella has worked in the construction inspection and administration field on a wide variety of highway, bridge, and heavy construction projects. He has served as Inspector, Chief Inspector, and Resident Engineer. Representative projects include:

REGISTRATION / CERTIFICATIONS	Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY LIRR Safety Training NICET Level IV NICET IV - Highway Construction OSHA 10 Hour Occupational Safety & Health Training OSHA 30 Hour Construction Safety and Health OSHA Safety Certificate Traffic Control Training - NYSDOT, Region 11 Transportation Eng. Technology/Highway Construction/Level IV Troubleshooting Exterior Masonry Walls Certification, NY
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	18

Replacement of Steinway Street Bridge over the Grand Central Parkway, Chief Inspector - This project for NYCDOT - Division of Roadway Bridges involved construction inspection for the reconstruction of two rigid frame arch structures over the Grand Central Parkway in Astoria, NY. The project included the demolition of the existing rigid frame arch structures; erection of new steel frame posts and arches, pouring of encasement abutments and new poured-in-place concrete deck slabs and sidewalks; bridge railing & fencing; permanent soldier pile and lagging sheeting with grouted tie-back anchors; the installation and removal of two temporary ACROW truss bridges; and extensive MPT detour scenarios. Project elements also included; drainage systems; underground and bridge supported utilities (water main, gas, telephone and NYC DEP & FDNY communications); traffic signals; and intersection and safety improvements. (NYCDOT, $18.4M)

Resurfacing of the Wantagh State Parkway from the Southern State Parkway to the Northern State Parkway, Chief Inspector - This project involved the complete resurfacing of 9.8 km of the Wantagh State Parkway in Nassau County, NY. This project required that Mr. Colabella coordinate nightly closures of the Parkway with the NYSDOT, NYS Troopers and the local community. All existing asphalt pavement was milled. Full and partial depth pavement repairs were made. Over 300 drainage structures were modified. The existing concrete curb was milled and replaced with new modified curb. Extensive electrical work was also performed including 5000 lf of conduit, numerous pull boxes, and electrical appurtenances rewired to support the INFORM system. (NYSDOT, $16.2M)

Long Island Expressway (I-495) HOV Lane, Exits 57-61, Long Island, NY, Chief Inspector - This project involved the construction of new High Occupancy Vehicle (HOV) lanes on the Long Island Expressway and the reconstruction of the LIE mainline pavement from Exits 57-61. A total of eight bridges were reconstructed and/or replaced. Construction encompassed three phases to allow for an unimpeded traffic flow. Project specifics included:

- Drainage: Over 28,000 lf of RCP and PE pipe in sizes ranging from 15 in. to 42 in. diameter.
- Asphalt: Over 240,000 tons. All asphalt was placed in accordance with Superpave specifications.
- Sound Barrier: Precast concrete panels and posts were mounted on cast-in-place piers. 640,000 sf total.
- Concrete Curb: 12,000 lf.

- Concrete Median Barrier: 30,000 sf, all precast.

Other work elements included drainage structures, street lighting, INFORM upgrades, and the installation of Variable Message Signs (VMS). MPT on this project was of paramount importance due to the extremely high traffic volumes on the LIE. This project incorporated two A+B bid contracts. The project ran as many as three shifts. (NYSDOT, $95M)

Throgs Neck Bridge, New York, NY, Resident Engineer - Mr. Colabella was responsible for the inspection and coordination of installation and testing of a VMS system at the approaches to the Throgs Neck Bridge. This project included MPT with complete nighttime closure of the bridge. Project elements included: installation of new sign gantries across the northbound and southbound roadways; inspection of installation and erection of all structural attachments, electric, power, communications, and central computer control system; removal of the existing signs and support structures; erection of temporary work platforms on underside of the bridge at four locations; lead paint removal for the cantilevered attachment of new steel to the existing floor beams outside fascia girder; and painting utilizing a three-coat system. The assignment included a total of two structures and four signs. Two of the VMS are full color, and two are tricolor. Mr. Colabella attended progress meetings and generated contractor's estimates and change orders. (TBTA, $3M)

Rehabilitation of 20 Bridges Throughout New York, NY, and Rehabilitation of 19 Bridges on Various New York State Highways, Office Engineer/Chief Inspector - Mr. Colabella was in charge of construction inspection for these projects. He assured compliance with plans and specifications; supervised five Inspectors; coordinated activities of sub consultants; and enforced maintenance and protection of traffic. The projects' elements consisted of concrete columns, cap beams, bridge seats, stems, back walls, pedestals, portions of structural slabs, curbs, winter concrete, and vertical and overhead patch work; structural lifting operations for the replacement and/or resetting of fixed and expansion bearings, stringers, stiffeners, diaphragms, finger joints, and armored joint systems with compression seals; cleaning and painting of structural steel; epoxy coating for the protection of concrete repairs; and micro-silica concrete overlay. He supervised the concrete testing and checked shop drawings for acceptance of proper materials. (NYSDOT, $20M)

MacArthur Airport Taxiway "F" Construction, East Taxiway Overlay, and Terminal Apron Expansion for American Airlines, Resident Engineer/Inspector for C&S Engineers - Client: Federal Aviation Administration, Project Cost: $9M. This project consisted of the excavation, replacement and new construction of taxiways "E", "F" and Eastern Apron Expansion at Terminal building. It also involved the removal, regrading and resurfacing of intersection at Taxiway "E" and runway 15R-33L, approx. 80,000 tons of P-401 mix design. Project included: Saw & Seal Transverse joints in newly constructed asphalt pavement; Monitoring all field testing and sampling supplied by testing agency; Assured flow, stability and air voids within proper ranges for P-401 asphalt mix design. As Inspector, Mr. Colabella performed layout of asphalt core sampling and testing by method of random sampling and utilizing standard deviation for payment purposes.

Employment History:

The LiRo Group (1998 to Present)
Chief Inspector
Ensign Engineers (1997-1998)
Resident Engineer
Eschbacher Associates (1995-1997)
Chief Inspector
Gibbons, Esposito & Boyce (1980-1990) (1992-1995)
Chief Inspector
Calocerinos & Spina Engineers (1990-1992)
Resident Engineer

Eugene J. Comilloni
PROGRAM/PROJECT MANAGER

Mr. Comilloni has been providing civil design, building construction supervision, construction cost estimating and architectural field representative services since 1967.
Relevant project experience includes:

EDUCATION	Civil Technology, Westchester Community College
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	32

United States Postal Service, On-Call Construction Management Services - Mr. Comilloni managed several projects for this on-call construction management contract which entailed construction management services throughout New York City and Long Island. The assignments varied, ranging from HVAC improvements to construction of elevator replacement to the restoration of an existing post office. Multiple task orders were completed simultaneously.

Bridgeport Schools Repair and Replacement Project - LiRo is providing construction management services for 20 schools in Bridgeport CT. The project includes various repair work from pavers, window replacement, masonry repair, HVAC upgrade and toilet room upgrades. (Bridgeport School District, $10M)

Street Reconstruction, Massapequa Park, NY. Senior Technician. LiRo provided design services for improvements to approximately 1.3 miles of residential streets in the Village of Massapequa Park. The project involved roadway reconstruction, road realignment, and drainage improvements. LiRo's work on this project included: Collecting and reviewing existing utility information. Performing a pavement and drainage condition survey; survey of the streets; development and implementation a boring program to determine pavement thickness and sub-grade description; performance a condition evaluation of existing drainage facilities to determine repair, cleaning or replacement; provision of a cost estimate for the construction; and coordinate and attend meetings with Utility Companies. Maintenance of traffic plans was developed to maintain access during construction.

Route 112 Reconstruction - Long Island Expressway to Route 25, Suffolk County, NY. Senior Technician. Preparation of the Design Report/Environmental Assessment for the construction of improvements to a 3.5-mile section of Route 112, a principal arterial in Suffolk County. (NYSDOT, 1999-present).

Town of Brookhaven, On-Call Engineering Services, Senior Technician. Provided engineering services in connection with the Town's Capital Program. Measured work done by contractors; prepared pavement requisitions; supported the Town of Brookhaven traffic staff in conducting neighborhood traffic studies; analyzed roadways and geologic features as applied to traffic; developed a consortium for transportation professionals to prepare a Traffic Calming Procedure manual for the Town. (Town of Brookhaven, $500,000)

Bruckner Expressway/Cross Bronx Expressway Interchange, Senior Technician. The rehabilitation of this interchange's bridges was designed by another consultant. LiRo was asked by the State to assist with the review of shop drawings and investigation of deterioration to structural members as requested by EIC. The scope of work included review, approval and maintaining a log for approx.

600 shop drawings which included Erection Drawings, Steel Details, Sheeting, Temporary Towers and various repairs. (NYSDOT, $250K, 2000 - 2001)

Westchester County Courthouse Phase 3 Tower, Resident Engineer - The LiRo Group was retained by Westchester County to provide both design and construction management services for this $23 million interior renovation project. The program consisted of a combination of partial and complete renovations to 18 floors of the 20 story courthouse tower, including mechanical, electrical, telecommunications, fire alarm and security upgrades, ADA compliance throughout, new courtroom layouts and finishes, and all adjunct facilities to service New York State's civil courts and the County's Department of Probation. In order to meet the County's construction schedule, all work was designed around an intricate staging program that LiRo devised to maintain the County's requirements that the building remain fully operational throughout construction. Construction documents were completed in nine months from the date of design award and the project is currently under construction, on time and under budget. Construction completion is anticipated for the summer of 2007. (Also includes architecture).

County Route 80 Reconstruction, Senior Technician - Roadway widening and resurfacing, drainage installation and bulkhead reconstruction in conformance with NYSDOT requirements. Provided for the inspection of all fieldwork, survey control and drainage layout and preparation of daily reports. Installation of drainage facilities for flood control, reconstruction of asphalt and concrete roadways, replacement of concrete curb and sidewalks, Towns of Hempstead and North Hempstead. Responsible for inspection on all field operations and record keeping, according to Town requirements. (NYSDOT, Region 10)

Concourse Village, Bronx, NY, Resident Engineer - Supervision of the construction of major structural reconstruction, electrical rehabilitation, utility relocations, drainage improvements and parking improvements. These efforts included review of proposed construction efforts and the development of construction cost estimates for project change orders.

Employment History:
The LiRo Group (1997-Present)
Superintendent
Evans & Posthauer Engineers (1989-1997)
Assistant Engineer
Riverbay Corporation (1988-1989)
Assistant Director of Construction
Russel Gibson von Dohlen (1981-1988)
Field Representative
Perkins & Will (1964-1981)
Architectural Field Representative/Construction Administrator

Louis Comunelli, P.E.

PROGRAM/ PROJECT MANAGER

Mr. Comunelli has had over 40 years of experience in the administration of major roadway and bridge reconstruction contracts. As the Director of the East River Bridge Construction Unit, he was responsible for managing reconstruction work on the Williamsburg, Manhattan and Queensboro Bridges. Prior to that assignment, Mr. Comunelli was a Project Manager on projects for the Connecticut Department of Transportation, the New Jersey Department of Transportation, the Westchester County Department of Public Works, the New York City Department of Environmental Protection and the New York City Department of Parks and Recreation. In prior Civil Service, he was the Engineer-in-Charge of two Manhattan Bridge rehabilitation contracts for NYSDOT and the NYCDOT Borough Engineer of construction for Manhattan and Staten Island. Representative projects include:

EDUCATION	B.E., Civil Engineering, City College of New York, 1965
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, NJ Professional Engineer, PA Amtrak Track Safety Course Installation-Entire UST System Closure, NJ Metro-North Track and Safety Course Subsurface Evaluation, Tank Testing & Corrosion Specialist, NJ American Engineering Alliance Board of Directors, NY
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	31

Traffic Engineering Services at NY & NJ Airports, Project Manager- LiRo provided traffic engineering services on an as-needed basis. Assignments included projects at JFK Airport, JFK Air Train, Newark Airport, and LaGuardia Airport. (PANYNJ, $78M, 2008)

Reconstruction of Gun Hill Road Bridge, Bronx, NY, Project Manager. LiRo is providing Resident Engineering Services for this project which entails the removal and replacement of the eight-lane wide Gun Hill Road Bridge over Metro-North Rail Road. The project was performed in three separate demolition and construction phases. The new bridge is a single-span steel structure with a concrete deck. Extensive utilities span across the bridge and were replaced including a 36" water main, electric power and communications lines. This project also required major coordination with Metro-North Operations personnel and force account support departments. LiRo staff coordinated all of the third party construction activities with the MNRR operations representative within the required advanced notice. The staff is actively involved in requesting flag protection and track outages for the project, in addition to coordinating with the MNRR Force Account Departments who are providing Maintenance of Way support for track and Power Department support services. LiRo ensures that all demolition and erection procedures are being followed according to the approved drawings. The manufacturer and the model numbers of the cranes are checked as well as the Approval and Operations Certificate issued by the NYC Department of Buildings. Counterweights are checked, the pick location is checked and the rigging is checked. The fabrication of shields used in the demolition procedures is thoroughly checked. Lumber grade and dimensions, and fastener material and dimensions are checked, as well as the overall fabrication of the shields.

MPT and Traffic Signals
Due to field conditions, several aspects of the MPT had to be revised and traffic signals had to be relocated. LiRo staff responded to NYCDOT OCMC's request to install additional signs on the Bronx River Parkway, and to their request to close an exit ramp with concrete barriers. They coordinated the relocation of traffic signals, and the installation of temporary ones that were not called for in the contract documents. LiRo interacted closely with the NYCDOT Bureau of Traffic to affect these traffic signal relocations.

Community Relations
LiRo interacts with the community by informing them of the construction work through a Newsletter. In addition, LiRo updates the NYCDOT's web page for this project. LiRo personnel have met with local community leaders to explain the aspects of the project.
(NYCDOT, $14M)

Replacement of Steinway Street Bridge over the Grand Central Parkway, Project Manager. This project for NYCDOT - Division of Roadway Bridges involved construction inspection for the reconstruction of two rigid frame arch structures over the Grand Central Parkway in Astoria, NY. The project included the demolition of the existing rigid frame arch structures; erection of new steel frame posts and arches, pouring of encasement abutments and new poured-in-place concrete deck slabs and sidewalks; bridge railing & fencing; permanent soldier pile and lagging sheeting with grouted tie-back anchors; the installation and removal of two temporary ACROW truss bridges; and extensive MPT detour scenarios. Project elements also included; drainage systems; underground and bridge supported utilities (water main, gas, telephone and NYC DEP & FDNY communications); traffic signals; and intersection and safety improvements. (NYCDOT, $18.4M)

Rehabilitation of Bridge Joints on the Brooklyn-Queens Expressway Triple Cantilever Structure, Project Manager. LiRo provided Resident Engineering Inspection Services for contract HBKC1144, which was designed to correct leakage, structural defects, and traffic noise problems occurring at approximately 100 expansion joints. The joints were located on a reinforced concrete structure comprised of three cantilevered levels located in downtown Brooklyn.
(NYCDOT, $2M)

NYCDOT Contract Nos. HBCY093 and HBCY096, Marine Structural Repairs, Project Manager - These contracts called for when and where repairs for waterway bridges throughout New York City. Due to the time-critical nature of the work, there was little advance notice of the general defects discovered by condition inspection teams. LiRo prepared specific designs for work on a fast-track basis, as well as applications for DEC/Corps of Engineer and Coast Guard Permits. We performed Construction Inspection and site engineering services as an integral part of a combined team that was closely integrated with NYCDOT. (NYCDOT, $10M)

Employment History:
The LiRo Group (1999 to Present)
Senior Project Manager
Bettigole, Andrews & Clark (1996-1999)
Project Manager
NYCDOT Brooklyn (1967-1984) (1991-1996)
Resident Engineer
Director of East River Bridge Construction
NYSDOT (1984-1988)
Engineer- in-Charge

James Eckhoff, P.E.
PROGRAM/PROJECT MANAGER

Since 1989, Mr. Eckhoff has worked in the construction management field as Resident Engineer, Office Engineer and Chief Inspector on major bridge and highway reconstruction projects for the NYCDOT, NYSDOT in Regions 8 and 10, Long Island Rail Road, Port Authority of NY and NJ and the NY State Thruway Authority. Representative projects include:

EDUCATION	B.S.C.E., Civil Engineering, Manhattan College, Riverdale, NY, 1989
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	9

Traffic Engineering Services at NY & NJ Airports, Senior Associate- LiRo provided traffic engineering services on an as-needed basis. Assignments included projects at JFK Airport, JFK Air Train, Newark Airport, and LaGuardia Airport. (PANYNJ, $78M, 2008)

High Line Reconstruction, New York, NY, Resident Engineer - LiRo is providing construction management and inspection services for the transformation of an abandoned elevated rail line into an urban park. This project involves the conversion of a 1.5 mile abandoned elevated freight line into a linear public park that will serve as an open space with outstanding views. The project spans 20 city blocks from Gansevoort Street adjacent to the Gansevoort Market Historic District, north through the meatpacking district, and up to 30th Street where it wraps around the Hudson Rail Yards. The project will also provide 12 points to access the elevated structure and will generate pedestrian traffic in the area. Rentable event space will also be created. Upon its completion, the High Line will take an unused structure and transform it into a one of a kind linear park that will be a great benefit to the community and city. (NYCEDC, $125M)

Long Island Rail Road - Suffolk County Bridges, 5 Rehabilitation Projects, Resident Engineer - This project consisted of the rehabilitation of 5 bridges in Suffolk County. LiRo was responsible for the construction management of the project. The core of the project centered around two bridges that required an increase in loading capacity due to the weight of the fleet of railcars purchased by the Long Island Rail Road (LIRR). Construction at both locations required for the removal of the tracks and extensive coordination between the LIRR and the contractor. Project specifics include:

- Bridge deck waterproofing.
- Structural steel painting with epoxy paint and mastic system to minimize the need for extensive surface preparation and lead abatement required by conventional coating systems.
- Concrete repairs using shotcrete.
- Replacement of the existing steel bearing pads with elastomeric and multi-rotational pot bearings. In order to minimize the impact of replacing the pads on train schedule, the existing girders were jacked and supported on temporary shoring towers. The towers were designed to withstand E50 loading using AREA standards. Since these bridges spanned over high volume roadways, extensive maintenance and protection of traffic was required.
- Concrete cracks were repaired with a low pressure epoxy injection system.
- Installation of gabion retaining walls and rip rap for slope stability.

(MTA-Long Island Railroad, Jamaica, NY)

Long Island Rail Road - Nassau County Bridges, 12 Rehabilitation Projects, Resident Engineer - This project consisted of the rehabilitation of 12 bridges in Nassau County. LiRo was responsible for the construction management of the project. The bridges were located on the Long Island Rail Road's (LIRR) busiest lines, the Mainline and the Montauk Branch. The project was completed 4 months ahead of schedule and below the budgeted time allowed for fouling the tracks. Project specifics include:

- Bridge deck waterproofing.
- Structural steel painting with epoxy paint and mastic system to minimize the need for extensive surface preparation and lead abatement required by conventional coating systems.
- Concrete repairs using shotcrete.
- Replacement of the existing steel bearing pads with elastomeric and multi-rotational pot bearings. In order to minimize the impact of replacing the pads on train schedule, the existing girders were jacked and supported on temporary shoring towers. The towers were designed to withstand E50 loading using AREA standards. Since these bridges spanned over high volume roadways, extensive maintenance and protection of traffic was required.

(MTA-Long Island Railroad, Jamaica, NY)

Staten Island Ferry Emergency Reconstruction of Pier 1, Ferry Maintenance Facility, St. George, Staten Island, New York, Resident Engineer -The emergency reconstruction of Pier 1 was due to the ferryboat Andrew Barberi collision at the Ferry Maintenance Facility, Richmond, New York. The project consisted of restoring the pier back to its original condition prior to the collision. The impact of the collision collapsed approximately 1500 SF of the Southeast corner of the pier. In addition, during the underwater damage inspection of the pier divers also discovered excessive damage to other piles along the pier caused by marine borers, which were required to be posted. Work consisted of the following:

- Removal of the existing reinforced concrete deck slab.
- Removal of the supporting timber cap beams.
- Removal of the timber pier piles and bracing.
- Removal of the fender system including fender piles
- Removal of debris in the waterway to ensure safe navigation
- Installation of new greenheart timber piles.
- Posting of existing piles under the intact section of the pier damaged by marine borers
- Installation of greenheart timber bracing
- Installation of greenheart timber pile clamps, cap beams and splice/sister beams
- Installation of reinforced concrete deck
- Installation of steel bollard and cleats.

(NYCDOT, $1.4M, 2004)

Employment History:

The LiRo Group (1998 to Present)
Senior Associate
Savin Engineers (1998)
Chief Inspector
Gibbons, Esposito and Boyce, PC (1992-1997)
Chief Inspector/ Assistant Resident Engineer
George R. Lehan and Associates (1989 – 1992)
Structural Engineer

Joseph Enang
PROGRAM/PROJECT MANAGER

Mr. Enang has over 19 years experience in performing and managing lead based paint remediation and surveying, as well as asbestos abatement projects. In his career, he has been responsible for all tasks associated with lead based paint and asbestos hazard consulting projects. Representative projects include:

EDUCATION	B.A., Business Management, College of Mount Saint Vincent, 1991
REGISTRATION / CERTIFICATIONS	USEPA Lead Risk Assessor SSPC C-5 Certified, NY NYSDOL Asbestos Designer NYSDOL Asbestos Air Sampling Technician, NY NYSDOL Asbestos Project Monitor, NY NYSDOL Asbestos Inspector EPA Lead Risk Assessor
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	9

New York City Transit (NYCT) Comprehensive Environmental Consultant Services Contract, NY. Senior Inspector for lead based paint assessment and remediation oversight services; enforced contractor work plans and monitored field operations including abrasive blasting, needle gun scaling, chemical striping wet scraping at various NYCT facilities ranging from elevated structures and pedestrian bridges, to active bus depots and station platforms; he has conducted control inspections of designated hazardous waste storage areas for EPA compliance and provided weekly reports to NYCT.

MTA Bridges and Tunnels (Tri-borough Bridge and Tunnel Authority). Monitor conducting daily contractor oversight, enforcing all applicable EPA, SSPC and MTA specifications during field operations involving 3P containments for the manual wet scraping or needle gun scaling of coatings; projects include vents shafts & security devices upgrades for the Queens Midtown Tunnel and Brooklyn Battery Tunnel, in addition to anchorages at the Verrazano Narrows Bridge. Worked in close coordination with construction management and resident engineering staff while enforcing MTA/TBTA regulations and site specific procedures during the construction phase of work.

NYS Department of Parks, Recreation and Historic Preservation, Bear Mountain Inn. EPA licensed Inspector and Risk Assessor during investigation and scoping of lead based paint remediation following incidental disturbance of contaminated coatings during construction activities. Subsequently prepared design procedures and specifications for lead dust decontamination and overall lead paint abatement; provided on-site enforcement of all relevant EPA, NYSDOL, Local laws, RCRA and application of SSPC practices, as well as OSHA regulations.

NYC Economic Development Corporation - Highline Reconstruction Rehabilitation. Project Manager for the implementation and enforcement of SSPC, NYSDOT, EPA, OSHA, NYS, and relevant Local laws and guidelines for the removal, treatment, disposal and handling of lead based paint on industrial applications pertaining to abrasive blasting of lead based paint from over 2 miles of structural steel. Coordinated continuous inspections of blasting containments and waste storage areas; assisted in the preparation of monthly reports summarizing field data and EPA Method 22 daily visual inspection results; enforced procedures for the abatement of asbestos containing track bed expansion joints, and miscellaneous ACM encountered during the project.

NYSDOT-Roslyn Viaduct Rehabilitation. SSPC supervisor and lead field inspector implementing the enforcement of NYSDOT project specifications and SSPC guidelines for the removal, temporary storage and disposal lead based paint during needle gun scaling on structural steel beneath a major roadway spanning Hempstead Harbor. Coordinated with the Engineer-In-Charge continuously to

provide schedule and progress information and communicate compliance and/or corrective actions taken in the field to ensure timely completion of the work.

Comprehensive Environmental Consultant Services Contract, NY, Senior Inspector- Responsible for lead based paint assessment and remediation oversight services; enforced contractor work plans and monitored field operations including abrasive blasting, needle gun scaling, chemical striping wet scraping at various NYCT facilities ranging from elevated structures on the Flushing IRT line and pedestrian bridges at Corona Park, to active bus depots and station platforms; he has conducted control inspections of designated hazardous waste storage areas for confirming EPA compliance and provided weekly reports to NYCT. (NYCT, $26.5M, 2008)

On Call Lead and Asbestos Monitoring Contract, Project Monitor- Responsible for conducting daily contractor oversight, enforcing all applicable EPA, SSPC and MTA specifications during field operations involving 3P containments for the manual wet scraping or needle gun scaling of coatings; project sites include vents shafts & security devices upgrades for the Queens Midtown Tunnel and Brooklyn Battery Tunnel, anchorages at Verrazano Narrows Bridge. Worked in close coordination with construction management and resident engineering staff while providing on-site implementation of MTA/TBTA regulations and site specific procedures during the construction phase of work. (MTA, $250,000, 2008)

Highline Reconstruction Rehabilitation- Implementation and enforcement of SSPC, NYSDOT, EPA, OSHA, NYS, and relevant Local laws and guidelines for the removal, treatment, disposal and handling of lead based paint on industrial applications pertaining to abrasive blasting of lead based paint from over 2 miles of structural steel. Conducted continuous inspections of blasting containments and waste storage areas; assisted in the preparation of monthly reports summarizing field data and EPA Method 22 daily visual inspection results; enforced procedures for the abatement of asbestos containing track bed expansion joint, rail connector rust inhibitor, and miscellaneous ACM encountered during the project. (NYCEDC, $500,000, 2008)

Battery Parking Garage, NY, Field Supervisor- Mr. Enang was Responsible for all phases of daily operations including obtaining permits, prioritizing and supervising. Duties also included documentation of abatement activities; field lead testing, bulk asbestos and lead paint chip sample collection, air sampling/monitoring and project reporting to construction management team for Burns & Roe. ($75,000, 1997)

New York City School Construction Authority, NY, EPA Inspector and Asbestos Project Monitor- Responsible for the Asbestos/Lead Consultant Services Contract. Services included asbestos, lead based paint, and mold spore investigations and reports, development of abatement work plans, cost estimating, project coordination and interfacing with site representatives, general project management, and final report compilation submission. Project sites where throughout the 5 NYC boroughs. ($2M, 2008)

Employment History:
The LiRo Group (1999 to Present)
Project Manager
Warren Panzer (1990-1998)
Environmental Scientist

John Eskridge, N-IV

PROGRAM/PROJECT MANAGER

Since 1974, Mr. Eskridge has been involved in the construction inspection and administration of civil engineering projects. Projects include highway and bridge construction, installation of storm and sanitary sewers, concrete and asphalt pavement operations on city streets and site improvements, including landscaping and irrigation. He has extensive experience in utility installation and coordination. His project experience includes:

EDUCATION	Construction Technology, SUNY at Farmingdale
REGISTRATION / CERTIFICATIONS	ACI Concrete Field Testing Technician - Grade I NICET IV - Highway Construction Welding Inspection Issues Seminar SSPC C-1 Certified, NY Portland Cement 40 Hour Concrete Pavement Construction Permit-Required Confined Space Entry Course - 29CFR/OSHA OSHA 10 Hour Occupational Safety & Health Training Formal MPT Training - NYSDOT Confined Space Entry Certification Advanced Practice of Concrete Construction & Specifications
YEARS WITH THIS FIRM	22
YEARS WITH OTHER FIRMS	13

LIRR Rehabilitation of Amott Drainage Culvert, Resident Engineer - The project consists of adding a 72 inch diameter culvert to augment the existing culvert. Rehabilitation of the existing culvert includes repair/replacement of the spillway, inlet structure, drainage pipes and outfall piping. The work included coordination with railroad departments such as Electric Traction Power, Maintenance of Way and Rail Operations. The major items of work include the following:

- Construction of a catch basin at the LIRR Substation to receive: a) flow from the existing 15 inch diameter steel pipes, b) flow from the LIRR substation swale.
- Modify/extend the LIRR substation swale to carry swale flow to the new catch basin.
- Construct a stair sluice at the LIRR substation.
- Demolish portions of the existing stair sluice at the LIRR substation and fill/stabilize the eroded area of the adjacent embankment.
- Provide and install a precast concrete trough at the bottom of embankment from the proposed stair sluice at the LIRR substation over a distance of approximately 350 ft. on the south side of the ROW.
- Provide and install a 42 inch diameter reinforced concrete pipe over a distance of approximately 750 ft. on the south side of the ROW.
- Provide and install a 72 inch reinforced concrete carrier pipe inside of the 96 inch steel jacked under both tracks at Amott Culvert and grout in place.
- Construct new head and wing walls at Culvert at Amott Culvert.

Parkway, PIN XM97.51 D015486- This project involved the repair and painting of 37 bridges on or spanning the Grand Central Parkway in Queens, NY. The bridges required a wide variety of repairs including those to steel, joints, concrete decks, drainage system and scuppers, masonry veneers, as well as paving and complete bridge painting utilizing full Class Containment. The bridges ranged in size from a three span pedestrian overpass to a 28 span viaduct ten lane wide and included the Clearview Expressway/Grand Central Parkway interchange. Work was performed on a 24/7 basis. Multiple change orders were processed. (NYSDOT, $29M)

Reconstruction and Widening of Merrick Road, Rt. 27A, Freeport, NY, Resident Engineer - This project involved the widening, repaving, and resignalization of a 5 lane roadway in an urban area. The project included the realignment of a major intersection, Mill Road. New drainage, curb and sidewalk were installed. The entire intersection was paved with asphalt. The project also included extensive utility upgrades for gas, electric, and telephone service. MPT was critical due to the high traffic volumes running through the project corridor. The major portion of the work was performed at night and required nightly lane closures. All traffic control and MPT was done in accordance with NYSDOT standards and requirements. (Nassau County DPW, $3M, 2006)

When and Where Marine Structural Repairs, Directed within the Five Boroughs (Tasks 1 & 3), Chief Inspector - This contract called for when and where repairs for waterway bridges throughout New York City. Due to the time-critical nature of the work, there was little advance notice of the general defects discovered by condition inspection teams. LiRo prepared specific designs for work on a fast-track basis, as well as applications for DEC/Corps of Engineer and Coast Guard Permits. We performed Construction Inspection and site engineering services as an integral part of a combined team that was closely integrated with NYCDOT. (NYCDOT, $10M)

Reconstruction of Glen Cove Road at Northern Boulevard (RT 25A), Greenvale NY - This project involved the widening and realignment of a major intersection. New turning lanes were constructed. The project included the installation of a new drainage system, concrete curb installation, Superpave asphalt paving, stripping, traffic system resignalization, and extensive utility upgrades. Due to the heavy traffic volumes MPT was critical and the majority of the work was done a night. The project was for the Nassau County DPW but was all done according to NYSDOT specification due to the extensive work on Northern Blvd. The project also required extensive coordination between the NCDPW and the NYSDOT. (NCDPW, $3M, 2005)

Resurfacing of the Wantagh State Parkway from the Southern State Parkway to the Northern State Parkway (D015384), Levittown, NY, Chief Inspector - This project involved the complete resurfacing of 9.8 km of the Wantagh State Parkway in Nassau County, NY. All existing asphalt pavement was milled. Full and partial depth pavement repairs were made. Over 300 drainage structures were modified. The existing concrete curb was milled and replaced with new modified curb. Extensive electrical work was also performed including 5000 lf of conduit, numerous pull boxes, and electrical appurtenances rewired to support the INFORM system. A unique aspect of the project was that full nighttime closures of the Parkway were required each night. The closures were coordinated with the NYSDOT, INFORM, the contractor, as well as local municipalities. NYS Troopers provided closure protection. Extensive signage was required for detours within a 5-mile radius of the project. (NYSDOT, $16.2M)

Long Island Expressway Reconstruction, Queens County, NY, Chief Inspector - This project for NYSDOT involved the ***replacement of 18 bridges, the rehabilitation of 7 others***, and the reconstruction of 7 miles of highway. The project also included the construction of 5 noise walls and the construction of 12 retaining walls. A major component of the project was a complete ITS system including facilities such as VMS boards, closed circuit cameras, ranging radar detectors, highway advisory radio, central office facilities and many others. Project specifics included 31,000 sm of "European" concrete pavement, superstructure deck replacement with "Inverset" structural spans, "Superpave" asphalt overlays, modification or replacement of over 700 drainage structures, and replacement of 35 overhead sign structures. (NYSDOT, $200M)

Employment History:
The LiRo Group (1988 to Present)
Chief Inspector

James Gaspari

PROGRAM/PROJECT MANAGER

EDUCATION	B.S., Mechanical Engineering, Hofstra University, 1993 J.D., Touro School of Law, 2000
REGISTRATION / CERTIFICATIONS	CPM Scheduling Certification, NY New York State Appellate Court 2nd Division OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	0

Mr. Gaspari brings experience on more than $700M in construction projects, including more than $200M in educational facilities. He has extensive experience building higher educational projects in occupied campus environments. He recently completed the CUNY School of Architecture, a 136,000 square foot academic building with labs built on an occupied campus with 17,000 students and faculty. Mr. Gaspari has also built several other higher education projects, including a 95,000 square foot facility and a 70,000 square foot facility for Nassau Community College. These projects were built on an active campus with 21,000 students. Mr. Gaspari knows the intricacies of working around students in a safe, effective manner that minimizes disruption to the campus while finishing the project within budget. Mr. Gaspari is also a CPM scheduler and is OSHA certified. Representative projects include:

School of Architecture, Project Manager - LiRo provided construction management services for the demolition and reconstruction of a 136,000 sf building into the new School of Architecture, Urban Design and Landscape Architecture (SAUDLA) building. After complete gutting, the existing building structure was extensively renovated highlighted by a multi-level atrium and roof top amphitheater. Designed by Raphael Vinoly, the building was transformed into a modern education facility with classrooms, exhibition rooms, design/workshop studios, computer labs and common areas. Construction was within a very active college campus requiring protection for the student and faculty population. Extensive site work was also required integrating the building with the existing rock outcropping and vegetation. (DASNY, $52M, 2008)

Park Terrace Garden Window Replacement, Project Manager- LiRo Program and Construction Management was retained to provide full client Construction Management services for the replacement of over 3000 windows for Park Terrace Gardens, a residential coop in upper Manhattan. Preconstruction services included design and shop drawing review, asbestos and lead investigations, and monitoring of window mock-up installation. LiRo provided ongoing schedule and budget information and coordinated the final installation plan that allowed tenants safe, continued occupancy throughout the process. The project budget was approximately $2,500,000, with an additional $750,000 for asbestos removal. (EMG Corporation, $3.25M, 2006)

Brooklyn House of Detention for Men - Base Building Renovation, Project Manager - The project was the addition to and renovation of the existing maximum security BKDC facility. The project included site and landscaping work, asbestos abatement, the removal and relocation of existing temporary modular buildings, the demolition of existing partitions, stairs, floor slabs and exterior walls, the construction of 16,669 square feet of new building area and remodeling of 22,765 square feet of existing building area. This work took place on the cellar, first and second floor levels. In addition, the project included renovation of shower rooms on floors three through ten (3 - 10), waterproofing and

repair of an existing tunnel, and reconstruction of existing windows at the tenth floor. Work was performed in six separate phases, each of which included demolition of existing facilities, asbestos abatement, construction of new facilities, relocation of existing furniture, equipment, associated power/signal feeds and hook-ups, etc. to provide a fully operational new area. Construction and maintenance of temporary security partitions was included in the work of each phase. (NYCDDC, $16M)

Brooklyn House of Detention for Men - Fire, Life, Safety Improvements, Project Manager - Work included the installation of a new emergency generator to supplement the existing generator. General construction work included the modification of interior partitions to bring them in compliance with current code criteria. In addition to the partition renovations, existing doors were replaced with fire-rated door assemblies. A new smoke purge system was installed to meet new code requirements. As part of the smoke purge system new motorized damper assemblies were installed in the existing ducts and interlocked into a new smoke purge control system. The contract work also included the upgrading of the existing sprinkler system and associated control devices. Hazardous material removals including asbestos abatement and lead abatement were required and continued to be a concern during the staging of the construction work due to the age of the facility. (NYCDDC, $2M, 2003)

Program Management Services for New Emergency Medical Service Stations, Resident Engineer - LiRo provided services for the design and construction of new EMS stations to speed ambulance response times. The project included 30 sites across NYC for which LiRo provided pre-construction services which included review of design documents and cost estimating of drawings. This was a complex, multi-site, multi-million dollar project subject to Wicks Law. Coordination of multiple prime contractors across the sites and providing QA/QC inspections at out of state fabrication plants was necessary throughout construction (NYC DDC, $29M, 2000).

System Wide Kitchen Renovation Program, Inspection - This program required that kitchen facilities, feeding lines, and supporting services at 15 correctional facilities throughout Rikers Island, Queens, Brooklyn, Manhattan, and the Bronx be upgraded in accordance with a court-mandated schedule while maintaining DOC operations, feeding schedules, and food quality during construction. Mr. Gaspari performed inspections of kitchen equipment to ensure compliance with the project specifications. (NYCDOC, $50M, 1995)

Nassau Community College, Office Engineer / Inspection - This project called for the construction of a new college center on the site of an existing aircraft hangar building. It required: Demolition of a 55,000 sf block and brick frame aircraft hangar building, a 6,000 sf wood frame building and a 2,000 sf brick and concrete steam building; The construction of two new buildings: a 95,000 sf 3-story Classroom Building and a 70,000 sf, 3-story College Center. The project included cast-in-place concrete caisson footings, structural steel framing, and extensive masonry work. Mr. Gaspari's duties included shop drawing review, change order control, estimating, payment requisitions, and construction inspection. His inspection work focused on the footings, concrete block and brick work, electrical conduit, and gas connections. (NCDPW, $36M, 1995)

Employment History:
The LiRo Group (1994 to Present)
Senior Associate

Thomas Gibbons, Jr., RLA

PROGRAM/PROJECT MANAGER

Mr. Gibbons has over 10 years of landscape architectural experience in the construction industry. He has been responsible for multi-disciplinary projects with emphasis on conceptual design and planning. Mr. Gibbons has experience in preparation of contract documents, specifications and estimates, client interaction, proposals, visual and environmental impact studies, surveying, GPS surveying, construction inspection and garden design. Representative projects include:

EDUCATION	B.L.A., Landscape Architecture, SUNY College of Environmental Science and Forestry, 1995 A.A.S., Ornamental Horticulture, SUNY Farmingdale, 1990
REGISTRATION / CERTIFICATIONS	Landscape Architect, NY Landscape Architect, CT Council of Landscape Architectural Reg. Boards, NY 10-Hour Occupational Safety and Health Training Course
YEARS WITH THIS FIRM	8
YEARS WITH OTHER FIRMS	7

Westchester County Airport, Westchester, NY, Landscape Architect. The scope of this project was to enhance and expand the airport's existing perimeter security road. This required surveying existing conditions, identifying existing trees and routing the road for minimal impact on the vegetation. (Westchester County Airport, 2004)

New York City Department of Parks and Recreation - Project involved restoration of several sites including Juniper Valley Park, Baisley Pond Park, Alice Austen Park, Mount Prospect Park, Owl's Head Park, William E. Kelly Park, and Irving Square Park. Work included restoration of existing ball fields, pathways, lawns, planting beds, and drainage structures. Work also involved installation of new basketball courts, ball fields, play and exercise areas, paving patterns, water features, and new planting designs. (NYCDPR)

Gaynor Park, Glen Head, NY, Landscape Architect- The scope of this project is to provide a pre-fabricated restroom building and a pre-fabricated 1,000sf storage building for this existing park. The project also calls for the design of a pedestrian and vehicular path, site grading and drainage, sanitary systems, electric service, water service and landscaping. In addition to the new work, modifications are required for the irrigation system, existing playground, baseball batting cage and other incidentals. (Town of Oyster Bay, 2007- Present)

Sabellico Field, Farmingdale, NY, Landscape Architect- The scope is to provide a pre-fabricated restroom building for an existing park containing a little league baseball field. In addition to the new building, modifications and design are required for pedestrian paths irrigation system, water service, electrical service, sanitary connections, site grounding & drainage and landscaping. (Town of Oyster Bay, 2007-Present)

Borella Farm Fields, Plainview, NY. Landscape Architect. Borella Fields is an existing 10.2-acre park facility that consists mostly of open grass areas for baseball, softball and soccer use. There were minimal amenities to the site consisting basically of some chain-link fencing for backstops and a gravel area designated for parking. The proposed project called for planning and design of one full-sized baseball field with a 350' center field, one little league field with a 200' outfield and one softball field with a 185' out field. The ball fields each contain two dugouts with batter's box, one scorer's booth, two sets of

bleachers, a scoreboard and perimeter fencing. In addition to the ball fields, there was a proposed soccer/multi-use field, measuring 180' x 360', with bleachers and decorative bleacher walls. The project also called for a restroom facility building, parking for 85 vehicles (which include four ADA spaces), decorative entrance walls with signage, irrigation, 8,000+ sf of decorative retaining wall and a playground area with equipment for children ages two to five, and five to 12, as well as a gazebo. (Town of Oyster Bay, $4M, 2005)

Field of Dreams Athletic Park, Massapequa, NY., Landscape Architect. LiRo was responsible for the planning, design and construction inspections for this project from conception to completion. The Field of Dreams project, located in Massapequa, NY, is a multi-use sports facility for the Town of Oyster Bay. The park consists of two full-size multi-purpose fields, measuring 180' x 360' and a half field measuring 180' x 180'. These fields host numerous soccer, football and lacrosse sporting events. Each field contains its own set of bleachers, a wire-less electronic score board, field-lighting and irrigation. The fields were constructed with a modified soil structure to allow for increased vertical drainage of rain water. In addition, the surface of the soil received a treatment of plastic mesh fibers to increase the holding capacity of the turf. This mesh was installed down the middle of each of the fields, as well as the entire extents of the goal areas. The mesh will allow for greater longevity of the field turf under heavy use and harsh playing conditions. Restroom & utility building facilities were also constructed. Other site amenities included basketball court, two separate playgrounds for children ages two through five and five through 12, on-site parking for 128 cars; extensive landscaping; entrance walls and gates; site lighting, drinking fountains, decorative and utilitarian fences, relocation of electrical services from above ground to underground, sewer connections, curbing and sidewalk. (Town of Oyster Bay)

Hecksher Park, Huntington, NY, Landscape Architect. The scope of this project was to redesign four entrances to the park in order to make them aesthetically inviting to park users. In addition, a gazebo area with landscaping was added next to an existing playground that overlooks the park's lake. The project also required the addition of a decorative retaining wall to solve an existing erosion problem (Town of Huntington, 2005)

Votypka Property, Woodbury, NY, Landscape Architect. The scope of this project was to create a master plan consisting of 27 multiple housing units on a 5.4 acre site. Design criteria included maximizing the allowable area for construction while adhering to property line offsets drainage retention, site access, circulation and provide and environmental buffer from an existing on-site wetland. (Votypka, 2005)

Various Levittown Parks, Levittown, NY, Landscape Architect. This project entailed the redesign of the expansion of six community parks. The work consisted of replacing out-dated playground equipment with ADA compliant equipment. Additional design elements included new pathways, benches, vinyl clad chain link fencing, shade trees, drainage and signage. (Town of Hempstead, 2005)

Employment History:
The LiRo Group (2002 to Present)
Landscape Architect
GPI (Greenman Pederson, Inc.) (1996- 2002)
Landscape Architect
Storch Associates (1995-1996)
Assistant

Matthew Iannuzzi, P.E.

PROGRAM/PROJECT MANAGER

Mr. Iannuzzi has over 15 years of experience providing construction management and engineering services for New York public agencies. Most of his experience is on-site management of multi-prime building renovation projects on occupied sites. Virtually all of his prior projects were situated on complex sites where coordination with neighboring governmental agencies and the overall community were keys to the success of the projects. Representative projects include:

EDUCATION	B.S., Civil and Environmental Engineering, Carnegie-Mellon University, Pittsburgh, Pennsylvania, 1996
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hour Safety Training Certification Primavera Expedition (Project Controls)
YEARS WITH THIS FIRM	18
YEARS WITH OTHER FIRMS	0

FDNY / Leary Firefighters Foundation Addition / Renovation of Building 1, Project Manager - Design / Build Contract. Masonry high rise simulation facility housing a full burn unit, central smoke system and a flashover system for both residential duplex and full commercial floor simulation at the FDNY Training Academy on Randall's Island, NY. (FDNY Foundation / Leary Firefighters Foundation, $4.4M)

FDNY Rehabilitation of Engine Company 259, Assistant Project Manager - CM/Build Contract. Complete gut / rehabilitation of fire house located in Long island City, New York. The building interior was totally gutted and an extension to the rear of the building was added. A new state-of-the-art firehouse was then constructed. (NYC DDC, $9.6M)

FDNY Rehabilitation of R&T Building, Assistant Project Manager - CM/Build Contract in occupied facility that houses FDNY's vehicle maintenance division and the building maintenance division. The existing electrical service is being upgraded. Two (2) new emergency generators are being installed. Three (3) existing boilers are being removed and replaced and central air conditioning will be installed in the 2nd floor office area. Multi phased construction to allow the FDNY to continually occupy / operate (24/7) out of the building, while work is in progress. Long Island City, NY (NYC DDC, $8.1M)

FDNY Engine 84 and 286, Kitchen / Bathroom Renovations, Resident Engineer - CM/Build Contract in occupied fire houses. Kitchens and bathrooms in the two (2) fire houses were renovated in multi phased construction to allow the FDNY to continually occupy / operate out of the fire houses while work was in progress. (NYC DDC, $1.5M)

FDNY Training Academy, Randall's Island Phase I & II, Resident Engineer - The security project included a complete security upgrade of the main entrance to the training facility. This project integrated the construction of Architectural security walls, fencing, a security control guard booth, security devices and high speed crash barriers. Infrastructure was added to the site to allow for monitoring of the new security system through FDNY's fiber optic / data network. Access / egress to the facility had to be maintained through the construction site and all new security equipment had to be tied into existing security and communication systems.

In addition to the above, Mr. Iannuzzi oversaw the punch list / closeout / sign off phase of the following work; Construction of a new Subway Simulator Building, building expansions for an Existing Apparatus Maintenance garage and the existing Mask Service Building. And the sign off phase of Buildings 11, 12, 5 & 2 (NYC DDC, $60M)

Kingsland Avenue Warehouse, Resident Engineer - Construction of a 12,000 SF building (removal of contaminated fill, metal walls and roof panels on pile foundation). There were two (2) demolition projects (adjacent buildings and incinerator stacks) in progress on the site and the site was also completely surrounded by the Newtown Creek Sewage Treatment Plant that was in the midst of a major (one (1) billion dollar upgrade / expansion). Coordination with multiple contractors, consultants and agencies was essential. The local Community Board closely monitored the project over concerns that the construction on the site would disturb prior underground contamination (petroleum). (NYC DOS, $2M)

Queens House of Detention for Men, Kitchen Renovation, Resident Engineer - Renovation of existing kitchen and storehouse (approximately 8,000 SF of space). CM/Build contract. Occupied facility where NYC Corrections daily operations could not be disrupted. Access / egress for Daily truck deliveries from Rikers Island (delivering meals for inmates three (3) times a day while the kitchen was out of service) had to be maintained. Coordination with the neighboring Queens Court Complex, NYC Department of Transportation (Parking facility and street work) and NYC Department of Probation was of great importance. (NYC DDC, $5M)

Queens House of Detention for Men - Electrical Service Coordination Project - Resident Engineer - New building addition (brick/block/steel) to house switchgear, emergency generator, etc. required for new 4000 amp service. CM/Build contract. Occupied facility where NYC Corrections daily operations could not be disrupted. A major part of the project was maintaining daily bus access to the facility (inmates being transported to court) and fire egress. Project ran concurrently with the Kitchen Renovation project listed above. (NYC DDC, $4M)

North Infirmary Command Kitchen Renovation, Resident Engineer - CM/Build contract. Occupied facility where NYC Corrections daily operations could not be disrupted. Conversion of existing space (some of which housed sick inmates / hospital environment) to pantries and interim kitchen, demolition of existing kitchen building (modular building) and construction of new kitchen building (12,000 SF - brick, block and steel). An existing steam tunnel and the electric service to other buildings ran through the foundation of the new kitchen building requiring extreme caution / coordination during pile / foundation work. (NYC DDC, $9M)

Queens House of Detention for Men, Kitchen Renovation, Resident Engineer - This project was part of the System-Wide Kitchen Renovation Program for Department of Corrections, a $50M contract, which entailed the phased renovation of kitchens, pantries, and related food service areas throughout the NYC jails system. LiRo's role was to perform all construction management duties including bidding and entering into contract with various construction contractors. This program required an initial phase of construction whereby 14 facilities were to be upgraded with systems that would last through the construction period. The balance of the program involved the total renovation of kitchens and food related services areas at six correctional facilities throughout Brooklyn, Queens, and the Bronx. ($5.5M)

Employment History:
The LiRo Group (1992 to Present)
Associate

Edward A. Sartoris

PROGRAM/PROJECT MANAGER

Mr. Sartoris is a construction manager with an extensive background in rehabilitation projects and restoration. He has successfully worked on numerous projects for NYCDDC, DASNY, NYCT, NYSOGS, NYSCA and several other city and state agencies. He is adept in working in occupied facilities.
Representative projects include:

EDUCATION	B.S., Structural Design and Construction Engineering Technology, New York Institute of Technology, 1991
REGISTRATION / CERTIFICATIONS	ACI Certification for Slump Testing Air Compressor/Spray Equipment Asbestos Handler Asbestos Supervisor Bridge Painting Inspection Certificate from S.G. Certified by Lehighton Associates Facility Fire Marshall Lead Awareness Certified Lead Awareness Instructor NYCTA ED&TPD Certificates OSHA 30 Hour Occupational Safety & Health Training OSHA 316 Course OSHA 40 Penney & Associates Propane Fuels/High Pressure Gases Site Safety Lic. #7 Store and Use Compressed Gas F19/21 Torch Use/Fire Guard Track Safety Instructor Yard Hydrant/Sprinkler
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	15

NYCSCA Mentor Program, New York, NY, Project Manager - LiRo, in Joint Venture, is serving as the School Construction Authority's Mentor Program Construction Manager, ensuring that construction projects awarded through the Mentor Program are completed safely, qualitatively, timely and within budget in accordance with the SCA's requirements. Services under this assignment include a wide range of projects and all facets of construction, firm management, and emergent contractor development. LiRo's work involves managing key components of the Mentor Program, including construction management, construction and firm capacity building services. Specific services include construction supervision, field inspection, scheduling, change order management, closeout, and also assistance with loan acquisition and payment processing. Mr. Sartoris is associate project manager of this project. LiRo is currently managing over 50 concurrent projects totaling over $15M. Due to the nature of the Mentor Program and the emergent contractors, projects are limited to $750,000K each.

Westchester County Courthouse Phase 3 Tower, Project Manager - The LiRo Group was retained by Westchester County to provide both design and construction management services for this $23 million interior renovation project. The program consisted of a combination of partial and complete renovations to 18 floors of the 20 story courthouse tower, including mechanical, electrical, telecommunications, fire alarm and security upgrades, ADA compliance throughout, new courtroom layouts and finishes, and all adjunct facilities to service New York State's civil courts and the County's Department of Probation. In order to meet the County's construction schedule, all work was designed around an intricate staging program that LiRo devised to maintain the County's requirements that the building remain fully operational throughout construction. Construction documents were completed in nine months from the date of design award and the project underwent construction on time and under budget. Construction was completed during the summer of 2007. (Westchester County DPW, $23M)

Construction Management Services in Connection with Emergency Management and Coordination, Assistant Project Manager - Under multiple contracts LiRo's extensive scope of work varied widely, and includes the highly expedited renovation and construction and major restructuring projects for five new high school ranging from approximately $15 to $30 million. These projects, including extensive gut renovation of school facilities, were completed within less than 90 days, as

compared to the typical 1 year or longer durations for comparable work. Work is accomplished using round-the clock shifts, 7 days per-week with minimal disruption to students and faculty engaged in school activities and to the surrounding neighborhoods. To date LiRo has completed in excess of $125 million under two successive contracts with the NYCSCA. Our categories of work, services, trades or equipment to be provided on an emergency basis included: Design, administration, management and coordination of the work Development of construction estimates, solicitation of bids in accordance with authority requirements and the law Provide general conditions including but not limited to testing and controlled inspections Remediation of hazardous materials Construction and demolition of the work in accordance with contract documents issues by the NYCSCA. (NYCSCA, $178M)

Home Crest Health Clinic and Crown Heights Health Clinic, and Washington Heights Health Clinic, Project Manager - Installation of Elevators ($1.2M each) at Crown Heights and Home Crest. Façade repair of multi-storied health clinic. Repointing, spandrel beams repaired and waterproofing of parapet walls throughout.

Bellevue Hospital, Chief Medical Examiner's Office, Project Manager - Renovation ($6M)
Bellevue Annex (Second Avenue Clinic), Project Manager - Demolition, Asbestos Abatement, Re-insulation of Ductwork in Basement, First and Second Floors, Modernization of All Sprinkler Lines; New Loading Bay Ramp (500 Yds Concrete) ($1.9M)

Reconstruction of $32M capital project at Yankee Stadium station, and $27M project at 7 stations on the Broadway line in Brooklyn, Project Superintendent - Supervised, planned, and coordinated all tasks. Developed safety plans and theft deterrent practices which resulted in major cost saving allowance in theft ridden area. Coordinated with NYCT to allow smooth transition and round the clock work force to accomplish completion by opening day. Acted as a safety superintendent on Broadway line and coordinated all night work - as well as all logistics associated with NYCT for work trains, flagging, and schedules. Responsible for all scheduling, implementation, and record keeping for employee training and classes directly related to industry standards.

Coney Island Hospital, Assistant Project Manager (Design Phase) - Modernization, Electrical Upgrade, New Curtain Walls ($15M)

Employment History:
The LiRo Group (2004 to Present)
Project Manager
New York City Transit Authority (1985-2004)
General Superintendent

Nancy Silver, R.A., LEED AP

PROGRAM/PROJECT MANAGER

Ms. Silver has experience as a Project Architect and as a Project Manager on a wide variety of renovation projects for local municipalities and government agencies. She has been responsible for performing initial field inspections and writing project scope reports, preparing bid documents, ensuring ADA compliance, cost estimating, and providing construction support. Relevant project experience includes:

EDUCATION	M.S., Construction Management, Polytechnic University of New York, 1985 A.B., Architecture/Civil Engineering, Princeton University, 1982
REGISTRATION / CERTIFICATIONS	Registered Architect, NY LEED Accredited Professional LEED for New Construction, Green Building Certification
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	17

Port Authority of New York and New Jersey, GWB Bus Station Lower Bus Level Renovations, Project Manager. Developed architectural design documents and coordinate design team for the replacement of 150' long storefront entrance wall and metal panel ceiling system at the bus parking area. (PANYNJ, $1.2 M)

Port Authority of New York and New Jersey, LaGuardia Airport Structural Slab Repairs, Project Architect. Prepare a feasibility study, in coordination with the structural engineering prime, to determine potential methods of repairing areas of deteriorated structural slabs. Extensive field survey work was performed. (PANYNJ)

Port Authority of New York and New Jersey, LaGuardia Airport Pump house No. 6, Project Manager. Developed architectural design documents for the replacement of exterior cladding for this small building, housing storm water runoff pumping apparatus. (PANYNJ, $200K)

NYC School Construction Authority, Project Manager. Architectural and engineering upgrade projects in over 135 schools over a ten-year period. Responsibilities include field surveys and development of project scope reports and estimates; coordination of design team; preparation of architectural design documents; building department filing; and provision of post contract services. Projects include:

- Science lab renovations, including complete replacement of new casework, room finishes, mechanical and electrical utilities, and computer networking.
- Program accessibility, including renovations to toilets, entrances, and public assembly spaces. Design of new elevator additions.
- Gymnasium floor replacement Coping stone and roofing replacements
- Window replacements
- Exterior masonry restoration.
- Swimming Pool Upgrades Library upgrades
- MEP upgrades including boiler replacements
- Feasibility Studies for new school buildings, including site evaluation and zoning analysis, development of conceptual designs, and generation of construction cost estimates.

(NYCSCA)

DASNY/ CUNY SAUDLA Swing Space Relocation, New York, NY - Project Manager. Developed program requirements for the relocation of a total of 14 departments, originally housed in 50,000 sf in the "Y" Building, to new locations on the City College Campus. Developed architectural design documents, coordinated design disciplines, and provided construction phase services for 5 of those departments. (DASNY, $1.8M).

Town of Oyster Bay Town Hall South Relocation, Project Architect. Performed field surveys, wrote existing conditions assessment reports, and prepared cost estimates for the upgrade of both the existing town hall building and of the Packard Middle School, which the Town is considering purchasing for use as a new town hall.

Ellsworth Allen Park, Farmingdale, NY, Project Architect. Developed architectural design documents and provided construction phase services, in coordination with the engineering prime, for the construction of a new 5,000 sf building, including a community room, full service kitchen, administrative office spaces, and public toilets. (Town of Oyster Bay, $710K)

Marjorie Post Park Skatehouse, Massapequa, NY, Project Manager. Coordinated design team and prepared architectural design documents for the renovation of a 5,000 sf building, including complete interior demolition and reconstruction of toilets, skate rental and repair shop, full service kitchen and concession area, and public lounge area. (Town of Oyster Bay, $750 K)

Design of Animal Shelter in Town of Southampton, Project Manager. Coordinated design team, developed conceptual design, prepared architectural design documents, and provided construction phase field support for a new 12,000 sf animal care facility, including animal holding areas, animal recreation spaces, veterinary clinic, staff spaces, and a community meeting room. The design incorporates noise control, specialized HVAC and plumbing design, and ADA compliance. (Town of Southampton, $1.9M, 2001)

Jackson Avenue Master Plan, Project Manager. Developed a conceptual master plan for the future development of an 80-acre central public works/ public safety site. Tasks included survey of existing building conditions, review of program information for departmental expansions, development of phased plans for future expansion, and coordination of design team to perform utility survey of site and analysis of fuel storage conditions. (Town of Southampton, $55K, 2004)

Playground at Heckscher Park, Project Manager. Developed architectural design documents and coordinated design team for the complete renovation of an existing playground. (Town of Huntington, $400K)

Village of Thomaston, Village Hall Renovation/ Addition, Project Manager. Coordinated design team and prepared architectural design documents for the renovation of existing courtroom and office spaces, and the addition of new office space, and the installation of an elevator to meet ADA requirements. (Village of Thomaston, $900 K)

Employment History:

The LiRo Group (1999 to Present)
Associate

Lockwood Greene Engineers (1989 – 1999)
Project Manager/ Architect

Grumman Corporation, Bethpage (1982 –1989)
Architect, Facilities Department

Prem Singh, N-IV

PROGRAM/PROJECT MANAGER

Mr. Singh has over 30 years of experience in the field of construction inspection field both in the United States and in the West Indies. His experience is primarily in the areas of highway and sewer reconstruction projects, but also includes some structural bridge and building work. Representative projects include:

EDUCATION	H.Y.D., Civil Engineering, University of Guyana, 1975 Road Construction Course-TAMS Engineers of USA, 1980
REGISTRATION / CERTIFICATIONS	Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY CPM Scheduling Certification, NY NICET IV - Highway Construction, NY NYCDDC Concrete Field Testing & Training Certification, NY OSHA 10 Hour Occupational Safety & Health Training SSPC C-1 Certified, NY Troubleshooting Exterior Masonry Walls Certification, NY
YEARS WITH THIS FIRM	23
YEARS WITH OTHER FIRMS	13

Engineered Resurfacing South of Canal Street, Manhattan, Chief Inspector - This three-year project involved the resurfacing and reconstruction of 44 streets in lower Manhattan. Work on individual streets ranged from full depth reconstruction to milling and resurfacing. Work was performed on some of the busiest streets in Manhattan including Broadway, Greenwich Street, John Street and Beaver Street. Work was performed both day and night. This project also included an intensive community liaison effort to help keep residents and businesses apprised of the work status. The construction cost to the NYCDDC for this project was relatively modest at approximately $4 million. The utility relocation costs, however, exceeded $40 million, greatly increasing the scope and complexity of the project. (NYCDDC, $44M)

World Trade Center - Lower Manhattan Roadway Milling and Paving Project, Assistant Resident Engineer - This was one of LiRo's most unique and difficult projects. LiRo had been working at Ground Zero since September 17, 2001. On April 16, 2002, we were given an assignment by the New York City Department of Design and Construction to provide construction inspection services for the milling and repaving of 61 lane miles of streets in the Trade Center area. This project was performed under the auspices of FEMA and the FHWA. The project commenced on Monday, April 22, 2002 and was completed by June 7, 2002. Work was performed at night. The work consisted of milling 1-1/2" of asphalt roadway, adjustment of street hardware, miscellaneous roadway repairs, and placement of a 1-1/2" asphalt concrete roadway surface. The operation was staggering. Approximately 150 men, multiple milling, paving and chipping crews, and over 50 trucks were utilized each night. Asphalt production averaged nearly 1,200 tons per night on tight lower Manhattan streets. LiRo had up to 16 inspectors on this project. Extensive coordination with local community boards was essential. (NYCDDC, 2002, $14M)

Reconstruction of Jamaica Avenue, Chief Inspector - This high profile project was located in a combined residential/commercial area. The work included 10,000 lf of water main; 1,500 lf of sanitary sewer; 1,100 lf of storm sewer up to 24" in diameter; 1,400 lf of storm sewer 30" - 36" in diameter. Roadway widening involved 10,000 lf of curb; 130,000 sf of sidewalk; 15 reinforced concrete bus pads; 3" asphalt on a 6-inch concrete base; an urban park; catch basins and connections. There was extensive

scheduling and community outreach, especially with regard to operations at Jamaica Hospital. Maintenance and protection of traffic was a major consideration for the contractor and for the inspection staff. (NYCDDC, $9M, 2000)

Greenwich Street Reconstruction - Liberty to Rector Streets, Manhattan, NY, Chief Inspector - The scope of the project included installing new sewer lines, new catch basins, subway vents, water services, manholes as well as sidewalks, curbs and roadways on the east and west side of this six block stretch. This work was critical due to the age of the infrastructure as well as the damage it withstood during the collapse of the World Trade Center. The subway vent work conducted was vital due to the re-opening of the Rector Street subway station.

This project used 3,400 square yards of asphalt, 900 cubic yards of concrete base, 1,600 lf of new steel curbs, 800 lf of new and rehabilitated sewers, 900 lf of new water mains as well as new traffic signals and decorative street lighting. (NYSDDC, $2.1M)

Rehabilitation at TBTA Facilities, Resident Engineer - These projects included pothole repair, milling and paving, pavement marking and striping, and concrete work (slab and grade) at toll plazas and approaches. (TBTA, $14M, 2000)

Paving at Various Facilities (GFM - 398), Resident Engineer - This multi-year project involved asphalt and concrete paving at all TBTA facilities. All work was performed by a single contractor and a requirements type contract. Specific work activities included asphalt milling and paving full and partial depth calcium chloride concrete repairs, application of waterproofing membranes emergency pothole repair, and pavement marking. Work was done primarily on nights and weekends. This project required extensive MPT and coordination with various facility engineers and managers. (TBTA, $10M, Project Manager: I. Shapiro, 2002)

Rust Street Reconstruction, Chief Inspector- This project involved resident engineering inspection for the reconstruction of Rust Street in Queens from Flushing Avenue to Maspeth Avenue, and on Grand Avenue from 57th Street to 58 Place. The half-mile stretch of urban roadway was widened and repaved with a 3-inch asphaltic concrete wearing course on an 8-inch concrete base and 6inch sub base course. New steel faced concrete curbs and concrete sidewalk, new traffic signals, and street lighting were also provided.

- Rust Street is adjacent to LIRR tracks, which run atop an embankment for the entire project length. The construction of a retaining wall for the embankment was a key component of the project.
- Coordination with the numerous City agencies (DOT, DEP, Transit Authority, Police, Fire, and Sanitation), utilities (Con Ed, NY Telephone, Empire City Subway), the Community Board, and local business was required.
- All of the above work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day service.

Employment History:
The LiRo Group (1987 to Present)
Resident Engineer

Mark J. Swanson
PROGRAM/PROJECT MANAGER

Mr. Swanson has over 25 years experience in the construction industry. He has extensive project experience with public works agencies, both from CM firm and client perspectives. Mr. Swanson is a former Senior Project Officer for the New York City School Construction Authority. He has also performed Project Management services for Construction Management and Owners Representative firms for numerous high profile, complex projects. Representative projects include:

EDUCATION	Certificate, Masonry Restoration and Preservation, Mechanics Institute of Technology, NY, 1982 Advertising Art & Design, Farmingdale University, 1977
REGISTRATION / CERTIFICATIONS	Management Skills Training Course Eight Hour OSHA Certification Course 30 Hour OSHA Certification Course OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	4
YEARS WITH OTHER FIRMS	24

Bernard Fineson Developmental Center, Hillside Complex, Office of Mental Retardation and Developmental Disabilities, Queens, NY, Project Manager - Under this contract, LiRo is provided CM services for DASNY for the pre-construction and construction phases of this project for the Office of Mental Retardation and Developmental Disabilities. The scope of work included the demolition of existing structures on a twelve acre site and the erection of eight new one and two story residential buildings and an 80,000 square foot program/administration building. Work also included the development of the twelve acre site and all utilities. (DASNY, $80M, 2009)

CM/Build Requirements Contract for NYC Housing Authority, Albany Houses Electrical Upgrade, NY, Assistant Project Manager - Under this contract, LiRo performed work on a task order basis. We provided services for upgrades of building systems and facade/roofing restoration projects throughout New York City. These properties all required that LiRo perform pre-construction and construction phase services. The work at Albany houses included new outlets and fixtures in over 1,200 apartments and new electric distribution panel's at all nine buildings. (NYCHA, $3.5M)

Kings County Hospital Center - A/B/C Buildings Renovation, NY, Project Manager - LiRo is providing construction management services for the pre-construction and construction phases of the exterior envelope renovation of Building A, B, & C at the Kings County Hospital Center. The renovation work includes parapet wall replacement, complete flat roof replacement, masonry pointing at all facades, masonry cleaning at all facades, rehabilitation of existing ornamental stone and wrought iron fencing and the removal and replacement of all existing terracotta roof tiles. (NYCHHC, $25M, 2009)

Kings County Hospital Center, 9th Floor, Surgery and Urology Suites, N.Y., Project Manager - As part of our requirements contract with the New York City Health & Hospitals Corporation, LiRo provided construction management services for the construction of the new 9,000 sf surgery and urology suites in the E Building. The new construction consisted of full demolition of the existing space, new mechanical, electrical and plumbing tie-ins to existing services, construction of new surgery rooms, diagnostic rooms, elevator lobby and new mechanical room on the roof. This project required continuous coordination with a rehabilitation project that was occurring below the 9th floor, as well as HVAC coordination with new chiller work in an adjacent hospital building.
(NYCHHC, $3.5M, 2007)

Park Terrace Gardens Window Replacement, Project Manager - LiRo was retained to provide full client construction management services for the replacement of over 3,000 windows for Park Terrace Gardens, a residential coop in upper Manhattan. Pre-construction services included design and shop drawing review, asbestos and lead investigations and monitoring of window mock-up installation. LiRo provided ongoing schedule and budget information and coordinated the final installation plan that allowed tenants safe, continued occupancy throughout the process. (EMG Corporation, $3.25M, 2006)

Employment History:

The LiRo Group (2006 to Present)
Project Manager
Zubatkin Owner Representation, LLC (2005-2006)
Project Manager
New York City School Construction Authority (1997-2005)
Senior Project Officer
TDX Construction Corp./ TDX Becom Joint Venture (1989-1997)
Project Manager

Leonard Venechanos

PROGRAM/ PROJECT MANAGER

EDUCATION	B.S., School of Architecture, City College of New York, 1977
REGISTRATION / CERTIFICATIONS	Fire and Safety Response Suicide Prevention Infectious Disease Control Hazardous Materials Handling Chemical Agent Utilization
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	21

Mr. Venechanos has over 30 years of construction management and design experience. His specific experience includes large public projects which are subject to Wicks Law and require construction phasing, coordination and security. These projects have included both renovations and new construction.

Mr. Venechanos managed major public capital improvement projects for New York City Department of Correction since for 20 years. In that time Mr. Venechanos was responsible for projects ranging in size from $14 million to $336 million. Mr. Venechanos has been responsible for coordinating both design and construction phases of various projects. It was his responsibility to ensure that the owner was provided with a design which reflects the pre-described scope and that the completed construction was in accordance with those design documents. Representative projects include:

Westchester Medical Center, Valhalla, NY, Assistant Project Manager - This renovation and addition project addressed the following specific areas of work:

- New Emergency Department Addition- including patient/visitors waiting administrator's area, triage and connecting corridor.
- Renovation of Emergency Department- including new adult and pediatric exam rooms, nurse's station, fast track and pharmacy.
- Renovation of the Labor and Delivery Suite- the replacement of all finishes and systems for patient rooms, pharmacy, nurse's station, on- call residents and operating rooms.
- Renovation of the Oncology Suite- provides 44 new patient beds, including isolation rooms, pharmacy, nurse's station, on-call suites and staff and patient lounges.
- Renovation of Pediatric Hospital- providing 8 additional pediatric beds
- Renovation of On-Call Residence's- providing new finishes and systems for resident's facilities serving multiple medical disciplines.
- Renovation of the Medical Intensive Care Unit- including 22 new patient beds, finishes, systems. Functional areas include pharmacy, on-call residences, nurse's station, administrative functions and visitor's waiting areas.
- Renovation of the Neonatal Intensive Care Unit- including all finishes and support functions for 5 new neonatal beds.

(Westchester Medical Center, $125M)

Jail Replacement Facility at Yaphank Correctional Facility, Yaphank, NY, Design Review - LiRo was contracted by Suffolk County Department of Public Works for Construction Management Services during pre-construction and construction phases of the new Yaphank Jail Facility. The project involves the construction of an addition to the existing facility and the renovation of the existing structure. It will provide housing for 1265 inmates as well as the infrastructure and support facilities

necessary for the proper processing, care and feeding of the inmate population. Included in the project will be state of the art staff, administrative, health care and support facilities that provide the county with efficient and cost effective management and staffing. (Suffolk County Department of Public Works, $150M)

Bridgeport Schools Repair and Replacement Project, Bridgeport, CT - LiRo is providing construction management services for 20 schools in Bridgeport CT. The project includes various repair work from pavers, window replacement, masonry repair, HVAC upgrade and toilet room upgrades. (Bridgeport School District, $10M, 2008)

Westchester County Courthouse Phase 3 Tower, Westchester, NY, Assistant Project Manager - The LiRo Group was retained by Westchester County to provide both design and construction management services for this $23 million interior renovation project. The program consisted of a combination of partial and complete renovations to 18 floors of the 20-story courthouse tower, including mechanical, electrical, telecommunications, fire alarm and security upgrades, ADA compliance throughout, new courtroom layouts and finishes, and all adjunct facilities to service New York State's civil courts and the County's Department of Probation. In order to meet the County's construction schedule, all work was designed around an intricate staging program that LiRo devised to maintain the County's requirements that the building remain fully operational throughout construction. Construction documents were completed in nine months from the date of design award and the project is currently under construction, on time and under budget. The contract also included architecture. (Westchester County Department of Public Works, $23M, 2007)

Westchester County Norwood E. Jackson Correctional Facility, Westchester, NY, Assistant Project Manager - The project includes a demolition and asbestos abatement phase, along with a swing space phase. The project is currently in its third phase which is comprised of two new penitentiary buildings and renovation work. (Westchester County Department of Public Works, $45M, 2005)

Westchester County Courthouse Renovation and Addition, Westchester, NY, Liaison Engineer - This project consisted of the renovation and addition to the Westchester County Courthouse. This steel framed, 20-story building was constructed in the early 1970's. It currently houses the offices of the district attorney, courtrooms and other miscellaneous county official offices. (Westchester County Department of Public Works, $100M, 2005)

Hecksher Theater Renovation - Renovation of a community-based theater originally built in 1921. The renovations included a new ventilation and air conditioning system in the theater and adjacent art gallery. In addition, the theater received new seating, carpeting, stage rigging, curtains, painting, and other finishes. A fire alarm upgrade was part of the renovations. All renovations were performed while other areas of the build remained open. The theater renovations required special care in order to maintain the integrity of the original building elements such as ornate plaster ceilings and wall murals. (NYCDDC, $3M, 2001)

Employment History:

The LiRo Group (1999 to Present)
Senior Project Manager
NYC Department of Correction (1980-2000)
Project Manager (1980-1990)
Director of Design and Construction (1990-2000)

William Wall

PROGRAM/ PROJECT MANAGER

Mr. Wall has over 35 years of experience in Supervision and Management of Construction Projects. His expertise includes working from a lead carpenter foreman and estimator to superintendent on multimillion dollar projects. This varied experience complements LiRo's Construction Management approach in that Mr. Wall's knowledge of cost control, cost tracking, estimating, scheduling, QA/QC inspection, on-site management, and supervision of multiple contractors and trades is exactly what our Resident Engineers must possess. Mr. Wall was Project Superintendent on multiple high rise, residential, and commercial projects including renovations and expansion of existing facilities for a major Long Island contractor. His responsibilities included supervision of all contractor and trades, negotiations of subcontracts and change orders, requisitions, problem solving, and project close-outs including fire-life-safety/inspections, TCO's and CO's. Representative projects include:

EDUCATION	Business Management, Nassau Community College B.S. (Pending), Civil Engineering, Manhattan College Construction Management, SUNY at Farmingdale
REGISTRATION / CERTIFICATIONS	10-Hour Occupational Safety and Health Training Course Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Troubleshooting Exterior Masonry Walls Certification, NY
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	14
YEARS SELF EMPLOYED	9

HHC Emergency Power Generators, New York City, Assistant Project Manager - The scope of work for this contract consisted of demolition and reconstruction of outdated Emergency Power Systems at six hospital trauma centers and various other smaller hospital facilities located in the New York City area. The contract required LiRo to prepare cost estimates for the various types of work in the projects. Typical elements of work for these projects included: Emergency Generators, paralleling switchgear, remote radiators for generator cooling systems, power distribution panels, underground fuel oil storage systems and conduit & wire distribution to all associated equipment. (DASNY, $121M)

Improvements to the County Center Building - Phase II, Riverhead County Center - Riverhead, NY. LiRo is providing project management services for improvements to the County Center Building in Riverhead, NY. This project provides for major renovations of the 140,600 sf building including:

- 10,000 sf Records Storage Addition
- MEP Demolition, Replacement and Upgrading
- Escalator Demolition/Elevator Installation
- Asbestos Survey/Investigation/Mitigation as necessary
- Building Façade Removal and Replacement
- Security Enhancements (including Card Reader System)

On this project LiRo was responsible for developing a Project Labor Agreement. This included preparing a feasibility study, development of the agreement, negotiating terms of the agreement and implementing the agreement during construction. In addition, LiRo performed constructability reviews,

provided cost estimates and developed phasing plans during the development of the contract documents.

During construction LiRo was responsible for providing and updating the coordinated schedule based on input from the prime contractors. In addition, LiRo maintained project controls including the shop drawing log, RFI log, proposal/change order logs and meeting minutes. Our project management responsibility of schedule, controls and the project labor agreement provided the County staff with all the tools they needed to successfully complete the project. (Suffolk County Department of Public Works, $34M, 2007)

NYC Department of Sanitation, Manhattan 5 Garage & Repair Facility, Project Superintendent - Provided construction management services for the construction of a new garage and repair shop located adjacent to Gansevoort Incinerator. The new structure is a two-story building with approximately 15,000 sf of usable space. The project had four prime contractors and a total cost of approximately $6M. The first floor consists of six maintenance bays for vehicle repair (4) and for building maintenance (2). Also included are offices and storage space for operative personnel. The second floor includes locker rooms, lunch rooms and toilet facilities for four different types of personnel being housed at this site. The building contains heat mechanical equipment for four air changes per hour. Also included are a fluid dispensing system, security monitoring systems, underground drainage/oil separators, underground storage tanks (UST) and public address systems. (NYC DOS, $6M, 2005)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME) Construction Management Services, Project Superintendent - LiRo managed the construction of the new Office of the Chief Medical Examiner (OCME) facility in Brooklyn. This is a state-of-the-art facility offering the staff and the public a safe and private environment. Shared between Kings County Medical Center and the OCME, the new facility contains space designated for NYPD investigators. It was designed to be sensitive to the surrounding community and hospital campus. LiRo's role was to provide comprehensive construction management services from design development through the completion of construction. This included the coordination of all construction operations and related vehicular traffic so that it did not interfere with local traffic or hospital campus operations. The 40,000 sf facility worth $17M was constructed in 28 months. (DASNY, $18M, 2004)

New York Methodist Hospital, Dyker Heights Dialysis Center, Project Superintendent-
LiRo was the Construction Manager involved in the gut / renovation of 21,000 square feet including new electrical service, boiler, HVAC, elevator, exam rooms, administrative space and 21 chair dialysis suite. This project was a fast track, revenue producing facility, with a cost of $3,000,000.

Employment History:
The LiRo Group (1998 to Present)
Assistant Project Manager
4- Wall Construction (1990-1998)
Owner
Riccardi Construction (1985-1990)
Lead Carpenter/ Foreman
Gemma Construction (1983-1985)
Supervisor
John J. Kassner & Associates Consulting (1981-1983)
Field Inspector

Resume

Steve Smolenski, PE, Project Manager

EDUCATION

MBA, Executive Management, from St. Johns University

Master of Science, Transportation Planning, from Polytechnic Institute of Brooklyn

Bachelor of Engineering, Civil Engineering, from Manhattan College

PROFESSIONAL ENGINEER:

NY

Over 40 Years Experience

Experience

Trenton-Mercer Airport, Taxiway A, C & J Rehabilitation, Construction Management

Responsible for the oversight of the construction of this multi-million dollar project. Manages resident engineers as well as daily coordination with construction contractor. Steve oversaw all aspects of the administration and engineering process associated with the construction of this project. This included monitoring costs, complying to plans and specs, and conflict resolution. He was responsible for both field and office engineers.

Lincoln Park Airport, General Aviation Apron, Construction Management

Responsible for the oversight of the construction an apron and taxiway system being constructed to support T-hangars.

Port Authority of New York & New Jersey

Program Director, JFK Redevelopment-- 5/01-1/05

Was responsible for the delivery and integration of a coordinated planning, design and construction effort for all elements of the $10 billion Redevelopment Program at Kennedy International Airport, including oversight of the $1.4 billion International Arrivals Terminal and the $1.1 billion American Airlines Terminal, facility coordination of the $1.9 billion AirTrain system. Lead technical negotiations on the lease and development of the $875 million JetBlue project. Developed and negotiated alternatives with various landmark groups on the adaptive reuse of the TWA Saarinen Building. Coordinated planning and construction of passenger and baggage screening installations by the Transportation Security Administration. Developed roadways and parking structure projects. Administered ongoing project management contracts and A/E agreements. Made presentations/speeches on the program to governmental agencies, Chamber of Commerce and others.

Assistant Program Director, JFK Redevelopment-- 8/98-5/01

Assisted in the development of the lease for the $1.1 billion American Airlines Terminal, coordinating and facilitating the project commencement. Resolved issues during the construction of the International Arrivals Terminal, facilitated its commissioning. Led coordination efforts during the initial stages of the AirTrain construction. Responsible for reviewing and approving construction payment applications and consultant invoices.

Manager, Airport Facilities Division, LaGuardia Airport 2/85-8/98

Was responsible for the maintenance of the physical plant, project management of the Capital Program, supervision of construction and tenant activities. Served as Project Executive on the LaGuardia Overrun Project including testimony and presentations to community boards, Queens Borough President's Office, New York City Planning Commission and New York City Council. Directed projects on the rehabilitation and strengthening of the runway and taxiway decks and the Central Terminal Modernization and Expansion. Developed Requests for Proposals for CM/PM services and served on selection committee. Interacted with local labor unions on maintenance and construction issues. Responsible for all snow removal operations and providing direction during aircraft, flood and fire emergencies.

Acting General Manager, LaGuardia Airport 6/96-10/96

Was responsible for the day-to-day activities of the airport during the General Manager's leave of absence, including all landside and airside operations, security and crash/fire rescue (CFR). Developed and presented the facility budget including all service agreements. Met with community leaders on airport related issues.

DY Consultants

© DY Consultants

Resume

Lisa has 20 years of aviation planning experience and recently joined DY after having been with a large consulting firm for over 16 years. She has managed and actively participated in the development of airport master plans, joint-use civilian and military base master plans, environmental assessments, environmental impact statements, FAR Part 150 noise compatibility plans, terminal feasibility studies, economic benefit plans and other airport facility planning studies and has led many public information programs associated with them.

Education

Master of Science, Aeronautics, Arizona State University

Bachelor of Arts, Education, Arizona State University

Noise Compatibility Planning at FAA Academy Management Skills for Planners, AICP Training Service

Over 20 years experience

Registrations

Professional Associations:

American Association of Airport Executives

Florida Airports Council

DY Consultants

Lisa Mastropieri, Assistant Program Manager

Experience

Lisa has more than 20 years of aviation planning experience including working on several on-call contracts. She brings a wealth of relevant experience having managed and actively participated in the development of airport master plans, environmental assessments, environmental impact statements, FAR Part 150 noise compatibility plans, terminal feasibility studies, economic benefit plans, other airport facility planning studies. She has led several public information programs associated with publicly funded projects.

Venice Municipal Airport, Master Planning, Venice Florida

Project Start: January 30, 2009 Completion: January 30, 2010

Project manager responsible for completing the Venice Municipal Airport Master Plan. The project is controversial within the community and requires an innovative approach to developing alternatives that are compatible with the community. A unique aspect of the project included a six month aircraft counting program to accurately identify the critical aircraft operating at the airport as well as provide an accurate count. The counting system utilized six wireless cameras positioned on the airfield that captured a photo of the aircraft and provided data to a server including the time of the operation, aircraft type and owner information. In addition two cameras were specifically installed to capture touch and go activity. At the conclusion of the six month period the City decided to purchase the equipment and keep it permanently installed to continue the counting program on a daily basis.

Flagler County Airport, General Engineering Consulting Services, Flagler County, FL

Project Start: October, 2006 Completion: October 31, 2009

- Project Director as well as Manager of all planning and environmental tasks undertaken. Recent work includes an Airport Access Road Feasibility Study to assess the viability of accessing the airport from the east. The team reviewed various conceptual layouts to determine a more preferable option having the least impact to wetlands and water quality impacts. Order of magnitude costs were also prepared.
- Airport Minimum Standards and Rules and Regulations were developed to replace the airport's existing documents that are over 10 years old. Two documents were developed – one containing the Minimum Standards the other for the Rules and Regulations.

Philadelphia International and Philadelphia Northeast Airports, On-call Airport Planning Services, Philadelphia, Pennsylvania

Project start and completion: 1995-2006

- 2000 Airport Master Plan and Airport Layout Plan Update (PNE).
- Runway Safety Area Evaluation (PNE): Manager of effort in conjunction with ALP Update for Northeast Philadelphia Airport. Included assessment of declared distance standards, and relocation of local roadway to provide traditional safety area length and EMAS. Coordinated with PHL Division of Aviation FAA and Penn DOT Bureau of Aviation throughout process.
- Concourse D and E expansion (PHL): Project manager for various task assignments for each terminal, including terminal space programming, aircraft parking layouts and gate requirements, security requirements, baggage make-up areas, and all other aspects of short-term needs.
- Terminal area landside master plan and environmental assessment (PHL): As project coordinator, Lisa's responsibilities included project management, in-house coordination, QA review, technical task analysis and study, and oversight of meeting materials and documentation.
- Various on-call services (PNE): Coordinate on-call services, including land use planning, noise analysis, properties lease surveying, layout of corporate hangars, coordination with FAA on form 7460s, assistance with capital improvement programming, and runway safety area analysis, among other tasks.

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WPA / Sung Hun Cho

PROFESSIONAL EXPERIENCE

WORKS-IN-PROGRESS ASSOCIATES, New York, NY 2008-Present

Field Inspector on the Bronx-Whitestone Bridge

- Provides inspection services of the bridge and the tower structures.
- Monitors the contractor's activities ensuring performances are executed according to the contract plans, specs, shop drawings, etc.
- Monitors bolted installation of steel plates, diaphragms, angles, beams etc.
- Inspects Suspender Rope Shielding (Types 1 & 2), Main Cable Shielding, Splayed Main Cable Strand Shielding, Shielding Panels at Underside of Desk, etc.

SJH ENGINEERING P.C, New Jersey 2006-2008

Assistant Inspector on the Cumberland and Middlesex County bridges

- Performed routine inspection preparing field reports, drawings, and equipment requirements on daily basis prior to each bridge inspection.
- Coordinated with team leader on site and inspect bridges with most efficient and safe performance.

Assistant Engineer

John F. Kennedy International Airport

- Performed a baseline condition survey and cyclical condition survey at 7 various buildings at JFK in Queens County, New York as a sub consultant to Gannet Fleming Engineers and Architects, P.C. The purpose of this inspection was to determine the overall condition of the buildings and to identify the structural and non-structural deficiencies.

Journal Square

- Performed a condition surveying, structural, and architectural drawings of the new escalators assigned by NYDOT.

100 Centre Street and 27 Madison Avenue

- Performed a condition surveying and architectural drawings of the courthouse, ADA accessibility, and new redesigned floors and rooms for DCAS.

Temple of Bharat Sevashram Sangha of North America

- New proposed building of four-stories, 5000 sq. ft.
- Designed structural drawings with lead engineer's assistant and managed architectural, electrical, mechanical, and plumbing drawings with each engineer.
- Managed all specifications and installations with other lead engineers.

Sprint Recycling Plant

- Performed an inspection for the structural elements of the building and developed as-built plans and details as necessary for the purpose of making the required modifications.
- Repaired design drawings for the modifications that were proposed.

Design Engineer

Public School 114, Brooklyn, NY

- Prepared structural stability, design, and preparation of structural stability drawings.

Public School Q89, Queens, NY

- Prepared structural design services and review of field notes, architectural layout drawings, preparation of structural details, and the drawings for the installation of a folding partition for Public School Q89, Queens, NY.

Geotechnical Engineer

- Prepared soil classifications based on Unified Soil Classification System (ASTM D2488-06) and proctor or modified proctor tests (ASTM T99 or T180) based on boring samples.
- Concrete inspector, for Starbucks, Hess gas station, Bank of America, McDonalds, and etc. performing sampling freshly mixed concrete (ASTM C172-07), Slump Test (ASTM C143), and prepared curing concrete test specimens (ASTM C31).
- Performed DCP testing for experimental investigation of the effects of moisture and density on the elastic moduli and strength of four sub-grade soils at similar retail clients above.

WPA / Sung Hun Cho

EDUCATION

Rutgers University - Pending
BS Civil Engineering

CERTIFICATIONS

AutoCAD 2006 Certification
Troxler Radiation Certification
Primavera Project Management Training (Port Authority of NY & NJ)
Rutgers Traffic Control Certification
New Jersey Society of Asphalt Technologists
ACI – Concrete Field Technician I
NICET II Highway Construction

PROFESSIONAL EXPERIENCE

MANUEL ELKEN CONSULTING, The Bronx, NY — Sept. 2009 – Present
Resident Engineer

- Resident Engineer for the reconstruction of Vincent Ciccarone Comfort Station located south of East 188th Street between Arthur Avenue and Hughes Avenue in the Borough of Bronx. Oversaw General, Electrical, Plumbing and HVAC Contractors.
- Ensure construction activities are done according to specifications, contract drawings, shop drawings and approved submittals.
- Perform Daily and Weekly Reports of The Contractors Bid Items and authorizing payments to the contractors as required by NYC-DPR.
- Interpret contract drawings, specifications and shop drawings, in order to inspect the construction properly.

MANUEL ELKEN CONSULTING, The Bronx, NY — April 2009 – Sept. 2009
Bridge Inspector

- Bridge Inspector for Reconstruction of Manhattan College Parkway, West 239th Street, West 252nd Street and West 232nd Street over Henry Hudson Parkway in the Borough of Bronx.
- Performed Inspector's Daily Report required by NYC-DOT:
  - Assured contractor activities done according to construction plans.
  - Recorded interim quantities of materials and services performed.
  - Maintained written & photographic documentation of all activities.
- Ensured job safety of construction workers from bridge traffic.

PHILLIP HAKIMIAN CONSTRUCTION SERVICES, Great Neck, NY — Jan 2008 – March 2009
Founder & Owner

- Supervised & held responsibility for construction of 3 mansions.
- Implemented construction according to plans & specifications.
- Coordinated subcontractors' schedules & tasks to manage deadlines.

7/2002 – 12/2007 **Philco Builders Corp., Great Neck, NY**
Construction Manager

- Successfully completed 9 projects, totaling 24 houses.
- Responsible for day to day management of 8-20 employees per day.
- Coordinated subcontractors' schedules & tasks to meet deadlines.
- Conducted budget & expenditure control, material purchasing, hiring, & firing.

PHILLIP HAKIMIAN JEWELRY COMPANY, Great Neck, NY — 1980 – 2002
Founder & Jewelry Salesman

ENVIRODYNE ENGINEERS, Chicago, IL — 1977-1980
Bridge Inspector

- Inspected super & sub-structures of over 100 bridges.
- Monitored & prepared reports on health of bearings & structural components.
- Demonstrated expertise in dealing with:
  - Bridge expansion & contraction caused by differential temperatures.
  - Concrete, beams, foundations, & structures.
- Successfully prevented potential bridge collapses.

EDUCATION

University of Illinois, Chicago, IL, 1977
Bachelor of Science in Structural Engineering

Matthew J. Daniels, P.E.
Senior Engineer/P.E. Diver
Project Role: Project Manager

Education:
B.S., Civil Engineering, Manhattan College, 2000

Active Registration:
Professional Engineer: New York ([redacted], Delaware (Reciprocity Pending)

Certifications:
National Bridge Inspection Standards (NBIS) -- Course #FHWA-NHI-130055
Bridge Inspection Workshop (2005), NYSDOT
Annual Bridge Inspector's Training (2005), NYSDOT
NICET Level I
NAUI Certified Open Water Diver
ADCI Entry-Level Tender/Diver

Work History:
2008-Present - McLaren Engineering Group
2000-2008 – Boswell Engineering

Experience:
Mr. Daniels has over nine years of experience as a Team Leader on above and underwater condition surveys, Project Manager, Resident Engineer, fathometric surveyor, and design engineer. He has participated in structural integrity inspection and evaluation projects for various bridges, culverts, and marine structures, including assignments for the Port Authority of New York & New Jersey, NYSDOT, NYCDOT, DELDOT, and various private clients. In addition, he has performed over 300 fathometric surveys associated with bridge scour assessments and is proficient in preparing reports and drawings utilizing Autodesk Land Desktop 2006. Mr. Daniels also has experience in preparing fathometer survey contour drawings based on hydrographic positioning techniques. His expertise includes design of marine structures, including rehabilitation designs and cost estimates. Representative projects include:

- **Waterfront Structural Engineering Services for the New Jersey Marine Terminal; Elizabeth, NJ; for PANYNJ;** Senior Engineer/Inspection Team Leader for the above and underwater inspection of New Jersey Marine Terminal structures, which includes berths, a turntable, mooring dolphins, and timber walkways. Mr. Daniels led an inspection team in performing detailed inspections to determine needed repairs and is supporting the design process and construction cost estimating.
- **Port Newark Marine Terminal, Berths 2 through 36; for PANYNJ;** Resident Engineer/Team Leader for the diving inspection and construction quality assurance of the substructural rehabilitation repairs throughout the 16,500 LF of active shipping terminals located in Port Elizabeth, NJ.
- **Port Elizabeth Marine Terminal, Berths 50 through 62 and 76 through 86; for PANYNJ;** Functioned as Team Leader for the diving inspection and construction quality assurance of the sub-structural rehabilitation repairs throughout the 8,500 LF of active shipping terminals located in Port Elizabeth, NJ.
- **Ferry Shore Facilities – Miscellaneous Engineering Services (On-Call); for New York City Department of Transportation;** Senior Engineer/Diver for structural reconstruction of ferry facilities and other miscellaneous work when and where directed by the NYCDOT. Mr. Daniels is managing the replacement of elevated slabs at Slips 4, 5 and 6, an effort that involves slab design – from demolition through construction documents – construction cost estimates, and bid phase support. In a separate task, he was involved with the inspection and damage assessment at St. George Ferry Terminal Slip 5.

Matthew J. Daniels, P.E.
Senior Engineer/P.E. Diver
Project Role: Project Manager

- **Engineering and Inspection Services for Marine Structures; Manhattan, NY; for Battery Park City Authority;** Senior Engineer/Diver for the performance of construction administration and inspection services associated with marine structure repairs at the Battery Park City Authority parcel in lower Manhattan. Mr. Daniels performed above and underwater inspection of pile repairs under the Battery Park City Esplanade (Phase 1) and will perform additional inspections for similar repairs, scheduled to begin in Spring 2010 (Phase 2). The project involves the assessment of and repair recommendations for approximately 3,500 precast concrete piles that support the relieving platforms at esplanade, as well as timber piles that support a platform at the north end.
- **Repair of Floating "Trim Tank" System at Peter Jay Sharp Boathouse; New York, NY;** Project Manager/Diver for inspection and design services needed for repairs at Peter Jay Sharp Boathouse. Mr. Daniels was involved with review of existing construction documents as well as a dive inspection of the Boathouse and its external flotation "trim" tanks. He directed preparation of a letter report of inspection findings, recommendations for repairs, and repair design. Construction documents were prepared and bid phase support was provided. Construction administration and inspection are ongoing.
- **Survey and Inspection of Coney Island Outfall; Brooklyn, NY; for Malcolm Pirnie/Baker Engineering;** Senior Engineer/Diver for the condition inspection of the Coney Island Outfall. Mr. Daniels was involved with underwater inspection/reconnaissance of the damaged section of the Outfall. Project also included topographic and hydrographic survey, including location of surrounding structures; and side-scan sonar for entire length of Outfall pipe.
- **Inspection of Ellis Island Seawall; for HDR Engineering;** Senior Engineer/Diver for the underwater and topside inspection of the Ellis Island Seawall and preparation of Class C, Class B and Class A Construction Cost Estimates. Mr. Daniels performed a "hands-on" inspection on 5,333 LF of existing seawall and has prepared a condition survey report. His effort also included preparation of construction cost estimates for schematic and preferred alternatives as well as the final design.
- **Construction Inspection of FDR Drive Sinkhole Repair; for New York City Department of Transportation;** Senior Engineer who provided topside support for the underwater construction inspection of emergency repairs to the platform structure below the FDR Drive near 15th Street in Manhattan.
- **Investigation of Piers C & D; Weehawken, NJ; for Hartz Mountain;** Senior Engineer/Diver for construction administration and inspection services for repairs at Piers C and D.
- **Pier 61 Damage Assessment; New York, NY;** Senior Engineer/Diver for investigating pile failures at the two locations of Pier 61, Chelsea Piers. Mr. Daniels was involved with the field inspection, dive inspection, document research, structural analysis/modeling, meetings, and a report of observations and assessment for each failure location.
- **Village of Dobbs Ferry Waterfront Park; Dobbs Ferry, NY;** Senior Engineer for the evaluation of existing riprap condition along the Village's Hudson River shoreline. Project also includes design of shoreline stabilization improvements, which may include new riprap, and/or sheet piling; preparation of cost analysis for construction; meetings with Village Officials; and environmental permitting. Construction documents will be prepared and construction administration will be provided.
- **Military Ocean Terminal Bayonne;** Project Engineer for the underwater structural inspection of all submerged structural components of Berths N1, N4 and N5 including in-depth condition surveys of the timber and steel bulkheads and mudline profiles beneath the wharf.

Christopher M. Mase, P.E.
Marine Engineer
Project Role: Project Manager

Education:
B.S., Civil Engineering, University of Delaware, 2005

Registration:
Engineer In Training, 2004, Delaware

Work History:
2006-Present – McLaren Engineering Group

Experience:

Mr. Mase is an engineer with extensive construction management and construction inspection experience, coupled with expertise in design of marine structures and components, such as piers, piles, pile caps, and bulkheads. He has provided these services in projects for several private clients, as well as for public agencies like the PANYNJ, NYCDOC, and NYSDOT. His construction management experience includes bid phase support, coordination with contractors, shop drawing review, responding to RFIs, and site visits. Mr. Mase is also well versed in permit preparation for the NYCDEC, Army Corp, and Department of State. Representative projects include:

- **Battery Park City Ferry Terminal; Battery Park City, NY; for PANYNJ;** Project Engineer responsible for providing construction administration services for the 32,000sf floating ferry terminal valued at $70 million in construction cost. Responded to all RFIs, provided shop drawing review, and made minor design recommendations during construction phase. Also was involved with design of below-deck supports. The terminal consists of a mono-hull main terminal with five ferry slips with variable height landing systems.
- **Beach Channel High School Seawall Remediation and Upgrades; Far Rockaway, NY;** Project Engineer for the design of a new revetment at the Beach Channel High School Seawall. Optimized shoreline protection by altering the position of the seawall and using the existing seawall to provide support. Produced design drawings for the new revetment and then prepared joint permit application for the NYCDEC, Army Corp, and Department of State. The Seawall's deterioration had caused subsidence and sinkholes in an access path above it.
- **Piermont Seawall Repair Design; Piermont, NY;** Engineer preparing contract documents and providing bid phase support in the repair of upland sinkholes. Issued bid set and provided review support.
- **Newport Bulkhead Study and Rehabilitation; Jersey City, NJ;** Project Engineer for the modification and upgrade of the Newport Bulkhead. Designs were to prepare the bulkhead for extension of the Hudson River Walkway, which runs along the bulkhead. Performed calculations and structural analysis of the existing bulkhead in order to identify and design the necessary support, such as concrete cut-off walls. Also was involved with the design of low-level decking repairs to eliminate sinkholes at the Newport Tennis Pier.
- **Waterfront Revitalization – 4th and 5th Street Piers at Kent Avenue; Brooklyn, NY; for RD Management Corp;** Project Engineer for the revitalization of the 4th and 5th Street Piers at Williamsburg, Brooklyn. Involved with both design and construction management of the project. During construction, was responsible for site visits, preparing progress reports, and acting as a point-of-contact for the contractor and client. On the design side, assisted in the design of the pre-cast piers, pre-cast piles and a cantilevered sheetpile bulkhead wall. The project has included detailed underwater inspection,

hydrographic survey, geotechnical services, design services, construction inspection services, and construction administration services.

- **Williamsburg, The Edge Waterfront Development; for Douglaston Development;** Project Engineer for the design of pile caps, a concrete cut-off wall, and an irrigation room at this widespread waterfront development project along the East River. Overcame significant challenges in the pile cap design caused by variable elevations at the site, due to various stairs, pathways and structures, and differing construction materials. McLaren performed an in-depth physical inspection of piers and bulkheads, evaluated soil conditions, produced feasibility studies for waterborne activities, and provided design drawings.
- **Vernon C. Baim Center Dry Docking Inspection and Repair Design; New York, NY; for NYCDOC;** Project Engineer involved with the inspection and design of repairs for the Vernon C. Baim Center barge and upland facilities. Coordinated above and underwater inspection of the barge, which involved a non-destructive testing program, with field team. Based on inspection findings, then provided design recommendations for the sheetpile bulkhead repair and replacement of the barge fendering system. Recommended use of plastic lumber for the new fendering system.
- **Columbia (Little Pea) Island Pier Boat Landing Dock; New Rochelle, NY;** Engineer for the preparation of permit applications and construction documents, and construction management services for a boat landing dock at the existing pier on the west side of Columbia Island. Construction documents included ferry landing plans and technical specifications for piles, gangways, operating equipment, fendering, and navigational lighting. Construction administration included shop drawing review and site visits.
- **Raritan Yacht Club Condition Assessment; Perth Amboy, NJ;** Junior Engineer for a condition survey of the above water and underwater elements which comprise the various structures of the Raritan Yacht Club. Prepared necessary permits for the repairs. McLaren inspected the structures for possible deterioration, damage, and marine borer activity and prepared construction documents of the repairs.
- **Design of NYCDOC Passenger Ferry Ramp Landing; Astoria, Queens;** Project Engineer for the design of an emergency ferry landing positioned off Con Edison's A-11 dock. The landing was proposed to accommodate transport to and from Riker's Island, and its design needed to incorporate an ability to disconnect from the Con Edison bulkhead. Design thus included a cantilevered platform and a guide beam connection system, which was set to circumvent the dock's timber fendering system and attach to the bulkhead. The guide beam's rollers were to provide ample support for the docked vessel and facilitate easy disconnect of the landing.
- **Design of Crew Access Structures at Hoboken Ferry Terminal; Hoboken, NJ; for NY Waterway;** Engineer responsible for the design of a 30X90 barge and eight 12X50 Kentucky floats at Hoboken Ferry Terminal. Designed the appropriate gangways and platform off existing bulkhead. Also was involved with pile design, which involved careful consideration and analysis of the soil quality at the site. The structures were intended to provide storage for NY Waterway's vessels and were essentially platforms off the existing bulkhead at the Terminal.
- **U.S. Gypsum Pier Extension; Stony Point, NY;** Engineer for structural and marine engineering support, pier rehabilitation, and construction inspection. Produced a feasibility study and designed mooring dolphins, similar to an offshore oilrig, to accommodate a 20,000-ton cargo vessel. Also prepared construction documents for the project, which included structural analysis, environmental evaluation and geotechnical investigation.

Schedulers

Robert Barsky
SCHEDULER

Mr. Barsky has been providing construction and project management services since 1979. He is a Vice President with the firm and is presently serving as our Director of Project Controls. Under Mr. Barsky's guidance and leadership, LiRo's CPM scheduling and estimating staffs have grown to be one of the largest and most accomplished in the New York metropolitan area.

Most recently, Mr. Barsky has been LiRo's Contract/Project Manager for the New York City Transit Authority's Indefinite Quantity Scheduling & Technical Support contracts. His duties have involved close interaction with the Program/Project Schedule Control personnel as well as in-house construction managers in NYCT's Capital Program Management Department. Under Mr. Barsky's direction, 19 CPM schedulers and 15 construction inspectors have been provided to NYCTA to meet their specific needs and demands. The foregoing has involved the matching and placing of project personnel within NYCTA program areas, such as: Shops, Yards & Busses; Stations; New Routes; Electrical; and Environmental/HAZMAT.

EDUCATION	B.S.C.E., Civil Engineering, Lafayette College, 1979
REGISTRATION / CERTIFICATIONS	Primavera Expedition (Project Controls) Primavera Project Planner (CPM Scheduling) Engineer-in-Training, PA Engineer-in-Training, NY
YEARS WITH THIS FIRM	20
YEARS WITH OTHER FIRMS	10

In his capacity as a CPM scheduler, Mr. Barsky has developed master program schedules, developed detailed baseline CPM schedules, updated detailed CPM schedules, prepared periodic narrative reports which detail project status, documented reasons for gain or loss of time and proposed means/methods for recovery of any lost time. He has also provided resource and cost loading of CPM schedule activities and has generated and analyzed resource and cash flow projection curves and histograms. Representative projects include:

Program Management Services for Brooklyn Navy Yard Development Corporation, Brooklyn, NY: LiRo is currently serving as the Program Manager for the construction of the Perry Avenue Building, NYPD Tow Pound Facility and NYC DCAS Building at the Brooklyn Navy Yard. For this assignment, Mr. Barsky is serving as LiRo's Executive-in-Charge. LiRo's involvement began during the pre-construction (design) phase and continued through the completion of construction.

- Review of design documents and presentation of recommendations
- Value engineering
- Estimating
- Constructability reviews

LiRo's pre-construction efforts helped to reduce the overall building costs and provide a more efficient design. Additionally, LiRo advised the owner (BNYDC) of the various types of construction management contracts that were available. We helped guide their selection into using a CM/Build contract and participated in the procurement/selection of a construction manager.

- Ensure CM compliance with contract documents
- Review CM's cost requisitions
- Review CPM schedules
- Review project budget and compare with actual expenditures
- Provide recommendations regarding change orders/requests for time extensions

(Brooklyn Navy Yard Development Corporation)

New York City Housing Authority CM/Build Requirements Contracts (Two Contracts: 2004-2007 & 2005-2008), New York, NY, Project Controls Manager: Under these contracts, LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of renovating and/or constructing numerous community centers, performing upgrades of building systems and facade/roofing restoration at several housing projects throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services. (NYCHA, $250M)

School of Architecture, Urban Design and Landscape Architecture (SAUDLA): LiRo provided construction management services for demolition and extensive reconstruction of a 136,000 sf building into the new SAUDLA building. The building frame of structural concrete still remains and the balance of the building were demolished and rebuilt, including façade, interior and mechanical, electrical and plumbing systems. (2009, $60M)

New York City Department of Sanitation Requirements Contract, New York, NY, Administrative Project Manager: This contract involved providing construction management services to the NYCDOS on an on-call basis. These services were provided to support the numerous projects that NYCDOS has in progress throughout the five boroughs of New York City. Nine projects have been performed over the past three years ranging from scheduling services to complete construction management assignments. (NYCDOS, $8.5M)

New York City Transit Authority, On-Call Technical Inspection Contract (CM-1145), New York, NY, Project Manager: LiRo was contracted to render support services to NYCTA in connection with technical inspection, monitoring and oversight responsibilities under the supervision of the construction managers of the NYCTA. Locations of work are within the five boroughs of New York City. Program areas include new routes, stations, structures and environmental. Duties performed by LiRo personnel include inspection of field construction work; preparation of progress estimates and payments, processing additional work orders (AWOs), interaction with NYCTA flagmen, review of shop drawings, as-built drawings and manuals, constructability reviews, phasing plan reviews, cost estimating, CPM scheduling, safety inspection, review of contractors quality control program and value engineering. (NYCTA, $5M, 2005)

Employment History:
The LiRo Group (1990 to Present)
Vice President
O'Brien – Kreitzberg & Associates (1983 to 1990)
Senior Project Manager
Fogel & Associates (1982 to 1983)
Project Manager - Construction Claims Analyst
Arnold M. Diamond (1979 to 1982)
Project Engineer

Anthony R. Carrion
SCHEDULER

EDUCATION	B.S., Civil Engineering, University of Puerto Rico
REGISTRATION / CERTIFICATIONS	Construction Management Certification Prep Course
YEARS WITH THIS FIRM	<1
YEARS WITH OTHER FIRMS	20

Mr. Carrion has more than 20 years of experience in construction management and project controls. During this time he has performed CPM scheduling, evaluated schedules prepared by others, analyzed delay claims, performed work force optimization studies and developed cost estimates. Mr. Carrion has worked upon a diverse array of projects for both municipal and private clients such as: MTA-Long Island Railroad, AMTRAK, Dormitory Authority State of New York, NYC School Construction Authority, NYC Housing Authority, Puerto Rico Power Authority, United Nations, New York State Department of Transportation, and American Airlines. Types of projects worked upon include: tunnels, railroad, airports, power facilities, schools, hospitals, laboratories, stores, conference centers and housing projects. Specific CPM scheduling duties and responsibilities have included: Development of work breakdown structure & logic diagrams, Computerization and de-bugging baseline, CPM schedule Periodic (typically monthly) updating of CPM schedule Preparation of monthly schedule progress reports and narratives Analyzing delays and impacts Review/critique schedules prepared by others Cost loading of CPM schedules Cost tracking and forecasting Earned value analyses Resource loading of CPM schedules Optimization of resources. Relevant project experience includes:

New York State Department of Transportation (NYSDOT) LiRo – 2010 - Present Senior Scheduler 2.78 Kilometers of Asphalt and Concrete Highway Reconstruction with Precast and Prestressed Concrete Bridge Construction on I-278 (Staten Island Expressway) Richmond County Reviewed CPM Progress Schedule prepared by the contractor using the Primavera Scheduling software provided by the NYSDOT on network servers and accessed though the Internet. Reviewed Progress Schedule at Bid and Progress Schedule at Award. Conduct Schedule Monthly Review Meetings

MTA – Long Island Rail Road LIRR - East Side Access ESA Dragados USA – 2010 Senior Project Controls Engineer East Side Access ESA Project will bring the Long Island Rail Road trains into a new station under Grand Central Terminal. Provided CPM Scheduling services for Contract CM019 – Manhattan Structures I Provided CPM Scheduling services for Contract CM009 – Manhattan's Tunnels Excavation Monitored actual progress, compare to baseline and report progress against schedule Created "what if" project schedules for analysis of project alternatives Analyzed schedule impacts and delays Prepared schedule monthly status reports Prepared & maintained Six (6) Week Look Ahead Schedules Conducted weekly schedule development and status review meetings

North Lawn Conference Building, United Nations Headquarters, NY, NY Skanska USA Building – 2008-2010 Senior Project Controls Engineer Advisor to the UN CMP Management Staff. Developed the Project Work Breakdown Structure (WBS) and WBS dictionary Developed and updated the project schedule Created "what if" project schedules for analysis of project alternatives Analyzed schedule impacts and delays Prepared monthly schedule status reports Conducted weekly schedule development and status review meetings Developed a General Conditions Cost Tracking System

Developed manpower requirement analysis Prepared logistic analyses which extracted project schedule information and presented in the context of the project logistic plan

Puerto Rico Power Authority, Gasoducto del Sur, Ponce Puerto Rico Skanska USA Building – 2006-2008 Project Controls Engineer The Gasoducto del Sur Project involved installing a 43 mile long, 42" Natural Gas Pipeline. The project cost was in excess of $170 million. Provided CPM scheduling and cost control Prepared cost/ schedule analysis for alternative construction methods Prepared monthly cash flow analyses Provided construction cost and schedule forecasting Conducted risk management studies for tunneling operations

Best Buy Stores, San Juan, Puerto Rico Skanska USA Building – 2006 – 2008 Project Controls Engineer Prepared level IV project plans and CPM schedules Generated monthly applications for payment as well as periodic budget and cost reports Inspected jobsite to view work progress Updated the CPM Schedule on a weekly and monthly basis Prepared plan, schedule, risk, man power load and cost performance reports using earned value analysis. Created Work Breakdown Structure, Organization Breakdown Structure and Cost Breakdown Structure. Monitored actual progress, compare to baseline and report progress against schedule Prepared and issued management progress reports such as Earned value and Cost reports. Provided schedule recommendations to ensure completion of projects on time

Lyos & Zosyn Laboratories, Wyeth Pharmaceutical, Carolina, Puerto Rico Skanska USA Building 2006 – 2008 Project Controls Engineer Developed CPM schedule for project Updated the schedule on a daily and weekly basis Performed schedule trending and forecasting analyses Provided analysis of schedule delays and impacts Prepared various spreadsheets such as material delivery, plan and schedule analysis, etc. to assist project management team Prepared several periodic reports including: construction progress, earned value, cost status Recommended schedule recovery actions to project management team Reviewed sub-contractors' plans and schedules Tracked labor productivity

National Railroad Passenger Corporation – Amtrak / Long Island Rail Road LIRR DMJM+Harris (AECOM) 2000-2006 Office Engineer / Project Controls Engineer Rehabilitation of East River Railroad Tunnels and Facilities at 1st Avenue Ventilation Shaft, New York, NY, Amtrak / MTA-Long Island Rail Road Developed and updated the Project master Schedule on Primavera P5.Developed a custom database to review and create report analysis. Responsible to generate reports for the tracking of the project schedule, project trends, budget and change orders. Forecasted overall costs including change orders and the impact on the project schedule. Supported the CM Staff with providing the assessment of risks and uncertainties within the project schedule.

Other projects for which Mr. Carrion has performed similar scheduling duties (1989-2005) include: New AML-14 Process Laboratory, Amgen Laboratories, Juncos, Puerto Rico Office of the Chief Medical Examiner Laboratories at Queens Hospital Center, Queens, NY, Dormitory Authority of the State of New York American Airlines Terminal 9, John F. Kennedy Intl. Airport, Queens, NY Boiler Conversion Program, NYC School Construction Authority, Facilities Division Queens Hospital Center, Queens, NY, Dormitory Authority State of New York Department of Asset Management & Private Market Operations, New York City Housing Authority, New York, NY

Giovanni L. Graceffa

SCHEDULER

Mr. Graceffa has over 20 years of construction experience on a wide variety of types of construction projects. These projects include: rail, transportation, airports, schools, universities, laboratories, hospitals, prisons, housing projects, libraries, museums and water pollution control plants. His extensive experience includes cost estimating, project management and design engineering. He has worked on projects for numerous municipal agencies such as: MTA-NYC Transit, MTA-Capital Construction, Dormitory Authority State of NY, NYC Department of Design & Construction, NYC Department of Homeless Services, State University Construction Fund, NYC Department of Sanitation and Nassau County Department of Public Works.

Mr. Graceffa work responsibilities have included the following:

- Preparing detailed cost estimates at all stages of design
- Negotiating and coordinating change order work

EDUCATION	B.S., Physics, New York Institute of Technology, Old Westbury, 1989
REGISTRATION / CERTIFICATIONS	Primavera Expedition (Project Controls) Society of Physics Students of N.Y.I.T.
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	12

- Reviewing design documents for constructability
- Analyzing bids and making contract award recommendations
- Value Engineering
- Analyzing and resolving contractors' claims for damages and delays
- Reviewing/processing contractors' payment requisitions
- Performing field Inspections
- Conducting project meetings and generating meeting minutes
- Developing design documents

Representative projects include:

Continental Airlines, Interim Regional Jet Operations Gate A-1 - As the Owner's Representative for Continental Airlines, LiRo was responsible for the creation of a hold room and office space at Gate A-1 for Continental Express at LaGuardia Airport. This project consisted of an accelerated schedule requiring close coordination between all trades and the owner. The project entailed the demolition of existing office and storage spaces and the installation of fan coil units, lighting, millwork, carpeting, seating and communication data links, and telephone lines.

MTA New York City Transit – East 180th Street Maintenance Facility, Bronx, NY - Demolition and reconstruction of a six track 120,000 sf maintenance facility building for the New Technology Subway Cars including replacement of tracks. The building is a steel frame building with metal panel and masonry exterior walls. The building interior consists of six pitted and posted rail tracks and a three floor office & administration area. Building systems originated from a separate utility building adjacent to the facility and included: (3) New 200 HP Boilers for the Heating and Domestic Hot Water Systems, New Compressors for the Compressed Air System, New Emergency Generator, New Fire Pumps, Elevator machine Room and New Electrical Switchgear. Heating & Ventilation was provided to the Shop Area via Rooftop Heat Recovery type Air Handling Units. (MTA-NYCT, $46M)

MTA New York City Transit, Capital Program Management Department, Senior Estimator - Prepared cost estimates for major multi-million dollar capital projects. Performed general construction feasibility estimates. Estimated change orders for various parts of the infrastructure. Negotiated impact

cost claims and change orders in fair and equitable settlements for the Authority's benefit. Among the specific projects for which cost estimates were prepared were the following:

- Rehabilitation of Tunnel Lighting - Lenox & White Plains Lines, $11.1M
- Rehabilitation of Tunnel Lighting - Broadway/7th Ave. Lines, $20.1M
- Tunnel Lighting Modernization – Broadway Line, $31.5M
- Rehabilitation of Pumping Facilities - Broadway/Nassau Lines, $8.5M
- Rehabilitation of Pumping Facilities – Crosstown Line, $4.1M
- Rehabilitation of Pumping Facilities – Lexington Line, $2.5M
- Rehabilitation of Pumping Facilities – Flushing Line, $4.4M
- Rehabilitation of Pumping Facilities – Concourse & 8th Avenue, $12.1M
- Rehabilitation of Fan Plant & Pump Room – Crosstown Line, $8.6M
- New Ventilation Plant - Crosstown Line, $20.7M
- Furnish & Install 17 Escalators at Various Locations, $39.5M
- Replacement of Gap Fillers – South Ferry Station, $4.5M
- Lenox Avenue Line Rehabilitation, $13.3M
- Lenox Avenue Line Rehabilitation & DOT Work, $63.5M
- 63rd Street Connection, $9.7M

James A. Thomas Center (JATC) Renovations at Rikers Island - Comprehensive construction management services were provided to the renovation of the 240,000 s.f. James A. Thomas Center on Rikers Island. The original construction of this high security facility dates back to 1933 and has a housing capacity of 1,600 inmates. The program for renovation consisted of retrofitting existing spaces within the facility cell blocks, day rooms, showers, pantries, housing areas, mechanical rooms, electrical rooms, and common spaces. Part of the renovation program upgraded the electrical systems and domestic hot water distribution system. (NYCDDC, $25M)

Manhattan Civil Court, Construction Management Services, Cost Estimator - This project called for an extensive reconstruction of the building's infrastructure and exterior. Key elements included electrical upgrade that included fire alarm and security systems, mechanical/HVAC that included HVAC controls and building management systems, plumbing, fire protection, DAD compliance for building, entrances and bathrooms, and facade and parapet wall improvements. All work was completed within 12 months while building and court operations continued without interruption. LiRo's construction management services for this facility included design reviews for constructibility; cost estimating; scheduling; development of phasing and staging plans; trade coordination; construction inspection. \Mr. Graceffa performed design reviews for constructability and detailed cost estimates during the design phase of the project. During the construction phase, he estimated and negotiated change orders with the contractors. (DASNY, $16M)

FDNY Fire Training Academy at Randall's Island, Phase II, Estimator - This project involved the renovation of two existing buildings and construction of a new building at the FDNY facility at Randall's Island. Mr. Graceffa performed detailed cost estimates during the design phase of the project. (NYCDDC, $7.5M)

Employment History:

The LiRo Group (2010 to Present)
Senior Scheduler
VJ Associates (2008-2010)
Senior Estimator
The LiRo Group (1998-2008)
Project Manager
NY Transit Capital Program Management (1988-1998)
Mechanical Engineer level II

George Gifford
SCHEDULER

Mr. Gifford has more than 17 years of experience in the CPM scheduling, cost estimating, planning and maintaining of progress schedules for major civil public works projects including renovation / rehabilitation projects, such as municipal office buildings, courthouses, hospitals, schools and construction of new facilities.

In addition, Mr. Gifford has experience in large environmental remediation and decommissioning projects including removal and replacement of aboveground /underground storage tanks and product distribution systems, contaminated ground water remediation systems and large contaminated soil removal / disposal projects for both public and private concerns. Representative projects include:

EDUCATION	B.S., Business Management, State University of New York at Plattsburgh
YEARS WITH THIS FIRM	7
YEARS WITH OTHER FIRMS	12

NYCDOT, Rehabilitation of 11th Avenue Viaduct, Scheduler - LiRo is providing Resident Engineering and Construction Management services to the NYC Department of Transportation in connection with the rehabilitation of the 11th Avenue viaduct. The viaduct is located between 29th Street and 34th Street on the west side of Manhattan. The viaduct spans the active West Side Rail Yard which is operated by MTA - Long Island Rail Road. The construction work scope includes replacement of: bridge decking, concrete pier heads, spalled concrete, sidewalks, fencing and street lighting. To prevent any interruption to the rail service, it was necessary to construct a protective shield beneath the viaduct prior to the commencement of any other construction work. Scheduling duties included: review of contractor's baseline CPM schedule, review of contractor's monthly CPM schedule updates, preparation of written reports, responses to schedule-related issues and analysis of impact/delay claims. (NYCDOT, $25M)

Battery Park City, Community Center Construction Management Services, Scheduler - LiRo is providing Owner's Representative/ Construction Management services for a 60,000 sf community center/ball field maintenance facility in the base of two residential towers at Site 23/24 in Battery Park City. LiRo will oversee the creation of the community center/ball field maintenance facility from design development through completion of all construction and post-construction.

This facility will house 2 swimming pools, an auditorium, a gym, classrooms, and exercise center/outdoor plaza, as well as a maintenance facility for the Battery Park City Parks Conservancy for the care of the two adjacent little league ball fields. Site 23/24 will be developed according to the mission of the Authority of furthering sustainability in urban development. The community center/ball field maintenance facility will be built in accordance with the Authority's Environmental Residential Guidelines and with the latest LEED for Commercial Interiors (CI) rating system, now version 2.0. It is anticipated that the facility will attain a Platinum rating, the highest possible level bestowed by the USGBC. (BPCA, $30M, 2010)

Westchester County Courthouse Phase 3 Tower - The LiRo Group was retained by Westchester County to provide both design and construction management services for this $23 million interior renovation project. The program consisted of a combination of partial and complete renovations to 18 floors of the 20 story courthouse tower, including mechanical, electrical, telecommunications, fire alarm and security upgrades, ADA compliance throughout, new courtroom layouts and finishes, and all adjunct facilities to service New York State's civil courts and the County's Department of Probation. In order to meet the County's construction schedule, all work was designed around an intricate staging program that LiRo devised to maintain the County's requirements that the building remain fully operational throughout construction. Construction documents were completed in nine months from the date of design award and the project is currently under construction, on time and under budget. (Westchester County DPW, $23M, 2007)

Mercy High School, Bronx, NY - Gut renovation of Mercy College that was transformed into Bronx High School of Visual Arts (NYCSCA, $15M, 2004)

Yaphank Residential Juvenile Detention Center, Yaphank, NY, Architectural and Engineering Design Services - LiRo was retained to design and build this new 32 bed juvenile detention center complete with housing, intake, medical, educational, food service, administrative, visiting, indoor gymnasium and outdoor baseball and soccer fields and courtyard recreation areas. The project design was completed in the spring of 2003. (SCDPW, $10M, 2003).

Taft High School - As part of the Emergency Response Management Coordination Program, this project at William Taft High School in the Bronx consisted of restructuring of approximately 28,000 sf of space, included new Science Labs, new Clinic and upgrading of existing classrooms. Liro developed detailed construction cost estimates & CPM schedules, solicited bids and awarded contracts in accordance with Authority requirements, and managed and coordinated all construction work. Also, LiRo provided general conditions including testing and controlled inspections, remediated hazardous materials, and maintained cost controls for all time & materials contract work. (NYCSCA, $11M)

Bridgeport Schools Repair and Replacement Project, Scheduler - LiRo is providing construction management services for 20 schools in Bridgeport CT. The project includes various repair work from pavers, window replacement, masonry repair, HVAC upgrade and toilet room upgrades. (Bridgeport School District, $10M, 2008)

Employment History:

The LiRo Group (2005 to Present)
Scheduler
Fenley & Nicol Environmental, Inc (1997-1999)
Estimator
Environmental Products & Services, Inc. (1994-1997)
Project Manager/Estimator
CDM Federal Programs Corporation (1992-1994)
Global Positioning System Technician
Unicorn International Consultants (1991-1992)
Project Manager/Damage Assessor
Marcor of DC, Inc (1989-1991)
Project Manager/Estimator

Philip Kalmus
SCHEDULER

Mr. Kalmus has been involved in the construction industry for more than 37 years. He is a professional experienced in both construction management and project controls. He specializes in the application of CPM scheduling and project control techniques. Among his areas of expertise are the following:

- CPM/PERT development
- Time/schedule control techniques
- CPM scheduling/phasing
- Claims analyses

EDUCATION	B.S., Architecture, New York Institute of Technology, 1975 A.A.S., Design Drafting, New York City Community College, 1969
YEARS WITH THIS FIRM	7
YEARS WITH OTHER FIRMS	31

- Delay/impact studies
- Earned value assessment
- Monthly reporting/narratives
- Proposal schedules

Representative projects include:

Newark Draw and Approach Structures Rehabilitation, Morris and Essex Lines, Bridges MP7.41, 7.42, 7.48, 7.53, 7.59 and 7.65, Scheduler - The work of this contract generally is to rehabilitate the substructure and superstructure of the Newark Drawbridge and the approach structures to the East and West. The work includes repairing the structural steel in the superstructure and the masonry and concrete in the substructure, repairs to the fender system and the electrical and mechanical repairs to the swing span. The scheduling responsibilities include: Review/commenting on the contractor's baseline schedule until approved Develop/issue monthly schedule Update review/analysis reports and narratives Attend/participate in monthly schedule update review meetings Review/comment and report on the contractor's cost loading of the schedule
(NJT, 2009)

NYSTA Tappan Zee Bridge Project, Milepost 14.67 +/-: The scheduling responsibilities include:

- Reviewing/ Commenting on the contractor's monthly schedule updates
- Developing/ issue monthly schedule review/ analysis reports
- Assist in conducting monthly schedule review meetings
- Attend job progress meetings

(NYSTA, 2009)

WP-269 Pumping Station, Construction of sewers, pumping station, force mains, & associated facilities, Meadowmere & Warnerville, Queens, NY, Scheduler- LiRo is providing full project management (Resident Engineer) on site services. The scheduling responsibilities include:

- Assist contractor in developing baseline schedule by review/comments
- Conduct monthly schedule update review meetings
- Review monthly site progress
- Develop/issue monthly schedule review/analysis reports and narratives
- Attend job progress and I & T meetings

(NYCDEP, 2009)

Sunrise Yard, New DOT Maintenance Facility, South Ozone Park, NY, Scheduler - LiRo is providing full project management on-site services. The scheduling responsibilities include:

Assisting contractor in the development of the baseline schedule by review/comments Conduct and issue periodic schedule updates, as required Produce recovery schedules, as required Produce summary schedules for project minutes Review site progress and discuss with project staff, (NYCDDC, 2009)

Park Slope Armory Revitalization Project, Brooklyn, NY, Scheduler- Under this contract LiRo is performing project management for the renovation of the existing drill floor area which involves full GC/Electrical/Mechanical & Plumbing services and the upgrade of the Life Safety Services. Duties include:

- Developing Scheduling of remaining work items
- Periodic progress updates
- Issuing schedule reports, as required

(NYCDDC, $15M, 2008)

Improvements to County Center Building, Yaphank, NY, Scheduler- Under this contract LiRo performed CM services for constructing a new 4-story 85,000sf Civil Court building, followed by renovating the existing three original court buildings. The renovation included new mechanical, electrical, and plumbing services, along with new interior GC finishes. The third part of the project involved the exterior restoration and weather proofing of the original structures. The scheduling tasks performed were:

- Developing baseline schedules
- Conducting monthly status updates and end date projection
- Walk job to determine progress with the contractors
- Developing and issuing monthly schedule reports and narratives

(SCDPW, $34M, 2007)

Hope VI Ocean Bay Apartments, Far Rockaway, NY, Bayside, Masonry, GC Work, Electrical Distribution, NYCHA - Oceanside, GC and Masonry Work, NYCHA, Day Care/Senior Centers, Scheduler - Under this contract, LiRo performed work on a task order basis. We were charged with renovating and/or constructing several community centers throughout New York City. In addition, we performed new construction of a community center and various renovations and upgrades at Ocean Bay apartments in Rockaway. These properties all required that LiRo perform preconstruction and construction phase services LiRo was responsible for prequalifying potential construction contractors, bidding the work and ultimately entering into contract with the construction contractors. Of particular importance was that these projects required careful coordination with community residents so interruptions of utilities, housing access, etc. was kept to an absolute minimum. In addition, a community liaison was necessary to keep local residents well informed as to the progress and new developments on the project.

Employment History:

The LiRo Group (2003 to Present)
Senior Scheduler
NYC School Construction Authority (1999-2003)
Scheduling Engineer
J.A Jones-GMO LLC (1997-1999)
Scheduling Engineer
Lehrer/McGovern/Bovis (1995-1997)
Scheduling Engineer
Stone & Webster (1990-1995)
Planning Engineer
New York City Transit Authority (1988-1990)
Cost/Schedule Supervisor
Ebasco Services (1971-1976)
Scheduling Engineer

Andrew J. Chattaway

Sr. Scheduler

11 YEARS EXPERIENCE
3 YEARS WITH PMA

Education

BIPP PQE (BA equivalent)
Professional Qualifying Exam in Photography Film & Television
British Institute of Professional Photographers
HND (Higher National Diploma 2-year course)
Photography Concentration
Film & Television
OND (Ordinary National Diploma 2-year course)
Design/Photography Concentration
Plymouth College of Art and Design
Plymouth, UK

City & Guilds Certificate in Communication studies
Graduated with four Distinctions
Plymouth Chamber of Commerce & Industry
Plymouth, UK

Mr. Andrew Chattaway has extensive experience in a diversity of project-based industries. He is highly proficient in Primavera P3, P3e, P5 and P6, Pertmaster risk software, MS Project and MS Office software for development of schedules and budgets, managing costs, progress reporting, data analysis and presentation techniques. He has worked as an integral member of project teams on large civil, nuclear, construction and wastewater management projects. He has also successfully produced large-scale video productions, both on time and to budget. He has a unique range of skills that integrate with and compliment diverse project management requirements.

SCHEDULING

Lower Manhattan Construction Command Center (LMCCC) - New York, NY

Mr. Andrew Chattaway is currently serving as a lead schedule consultant for Lower Manhattan Construction Command Center (LMCCC). He prepares, updates, and analyzes project schedules and is responsible for coordinating and integrating schedules into a single master schedule using P5. He is proficient using the full Primavera suite of products and has developed EPS, WBS, and project coding structure to report data from over 400 construction projects identified. He has developed layouts and outputs for regular monthly progress review, and he has analyzed contract SOW documents and plans for schedule development and project phasing. He has been integral in providing Risk Analysis support for various Value Planning exercises utilizing Pertmaster for analysis of project schedules. The resulting schedule scenarios were integrated into Gehry Technologies' Digital Project; a 3-D BIM modeling tool, to create a 4-D simulation of the WTC site program and surrounding projects. This enabled comparisons between various schedules, project interdependencies, stake-holder issues and logistical requirements.

PRIOR EXPERIENCE

Previously with JCMS, Inc., Mr. Chattaway served as a project controls/scheduling engineer. His project experience included initial planning for the deconstruction of 130 Liberty Street at the WTC Site and an environmental impact study for Lower Manhattan/JFK/Jamaica rail link.

With JoLee TV, Inc., Mr. Chattaway served as a production manager and associate producer. He managed day-to-day business operations, including scheduling,

preparing budgets and bids, cost actualizing, purchasing, billing, and supervising administrative personnel/production staff and marketing meetings.

With MWH Project Management/North West Water AMP3 Projects, Mr. Chattaway served as Planning Engineer for Project Controls.

Mr. Chattaway also served as Deputy Planning Manager on the major Civil Nuclear Construction Project for AMEC Group Ltd. /British Nuclear Fuels Ltd. (BNFL) Project B41 Waste Retrieval Plant.

He also worked for Allott & Lomax Consulting Engineers, as Advisor to the UK Ministry of Defense, Project D154, served as Planning Engineer (Planning & Risk Support).

Jamie Apostolou

Scheduler

10 YEARS EXPERIENCE
1 YEAR WITH PMA

Education

BS,
University of Massachusetts

Case Study on European Union's Infrastructure & Development,
Universiteit Van Amsterdam

Mr. Jamie Apostolou has extensive experience in project management, project controls, dispute resolution, project oversight as well as on-site construction. His past project experience includes utilities, airports, education, medical and residential facilities, sports arenas, railways, and convention centers. His software capabilities include Microsoft Office, Mac OS, OmniPro, Primavera, SAP, Corel Draw, AutoCAD, Practice Master, Lenstar, Word Perfect, Photoshop, and construction equipment operation.

PROJECT CONTROLS

Mr. Apostolou serves as Senior Consultant and member of the PMA team assisting PSE&G to establish a world-class project controls office (PCO) within the delivery projects and construction organization. The project controls group manages a $1 billion portfolio of new projects as well as system wide upgrades. Mr. Apostolou's primary emphasis is on the management of design, procurement, schedule, contracts, assets and costs for each project.

PRIOR EXPERIENCE

Prior to joining PMA, Mr. Apostolou served as a consultant performing analysis and oversight on capital projects for public, private and government clients. He also assisted counsel on litigation matters including deposition, mediation, and trial. Mr. Apostolou's forensic and dispute resolution experience on various project includes RFI & change order analysis, manpower analysis, damage and design assessment, project control analysis, design error and omission assessment, defense development, measured mile and schedule analysis as well as assistance with the preparation for litigation matters including arbitration, mediation, deposition and trial.

In addition to dispute resolution and forensic cases, Mr. Apostolou also performed project oversight, risk assessment and management as well as advisory services. His experience includes schedule review, process analysis, budget monitoring, risk analysis, project status analysis, and development for software designed to monitor project status and risk exposure.

Mr. Apostolou served as Oversight Advisor with the Federal Transit Authority on a $50 million ski lodge, a $9 billion hotel and casino development and a $611 million LNG facility.

As a legal assistant for the Real Estate and

Construction practice within a private law firm in Chicago, he was responsible for processing sensitive and confidential cases, deadline execution, calendar management and daily communication among staff with top tier American banks. He also assisted with implementation and training of a new document control and tracking software.

Mr. Apostolou also served with a private general contractor for a large public facility's maintenance division, where he participated in the construction of a 120-unit residential subdivision development and supervised a 136-acre facility. Mr. Apostolou was responsible for the supervision of additional staff as well as performing a variety of construction activaties, including paving, masonry, roofing, drywall, concrete, light steel erection, finishes and equipment operation.

Purvasha V. Patel

Jr. Scheduler

4 YEARS EXPERIENCE
2 YEARS WITH PMA

Ms. Purvasha Patel has extensive experience in the engineering and construction industry with an emphasis on project, cost, and scheduling management.

Education

BS, Civil Engineering

Rutgers University

COST ESTIMATING

Ms. Patel has performed cost analysis and cost management services on many large projects.

- **Northline Utilities, On-Call Contracts Review & Claims Assistance**

SCHEDULING

Ms. Patel has extensive experience in the development, updating, and analysis of project schedules using P3 and P6.

- **MTACC On Call Schedule Assistance** - New York, NY - $24B
- **Norwich University Student Housing Project**
- **Mount Pleasant Water Main**
- **NYCDEP Dependability Program**

PRIOR EXPERIENCE

Previously, Ms. Patel served as Project Engineer/Scheduler on a $145 million highway project. She was responsible for the submission of schedule updates to the owner and distribution of four-week and one-week look-aheads to team and upper management. She also helped implement a company-wide P3 schedule system. She oversaw a $2.8 million precast operation. Her responsibilities included oversight of revenue, cost, schedule impact and product procurement.

Previously, Ms. Patel served as Field Engineer. She was responsible for monthly billing to the client. She also teamed with the project superintendent to oversee installation of all post and panels retaining walls and MSE retaining walls. She tracked weekly labor costs and production on precast/cast in place concrete work. She also managed vendors and subcontractors.

Previously, Ms. Patel served as Assistant Field Engineer. She utilized P3 to create schedules under the guidance of the head scheduler. She collaborated with the project management on buy-out process and the project engineers to establish a submittals process.

Sadia Janjua, LEED AP

Jr. Scheduler

8 YEARS EXPERIENCE

Education

BS, Industrial Engineering and Operations Management

Minor Civil and Environmental Engineering

University of California, Berkeley

Professional

Leadership in Energy and Environmental Design (LEED AP®)

Members

U.C. Berkeley Engineering Alumni Society (board member)

National Association of Women in Construction

Project Management Institute

Ms. Janjua is a scheduler and project controls specialist with particular experience in preparing schedules and cost analyses for education, government, and healthcare facilities as well as pipeline construction projects. She is skilled with developing and updating baseline project schedules, performing trend and critical path analyses, and preparing cost estimates and audits. Ms. Janjua has experience in engineering design, construction management, financial and resource planning, and dispute resolution for several agencies, including the San Francisco Public Utilities Commission (SFPUC). Ms. Janjua is proficient with the following software: Primavera Project Planner, Primavera Contract Manager, SureTrak, SAP, i2, MS Projects.

SCHEDULING

Ms. Janjua has extensive schedule development, review, updating and analysis experience that includes utilizing CPM scheduling to produce master schedules for all project phases and project delivery methods. Her scheduling experience has been assisting general contractors as well as owners. She has represented the following projects:

- **Willis Ave Bridge Replacement - Queens, NY, $612**
- **New Jersey Transit Portal Bridge project - New Jersey, $7.3B**
- **MTA Capital Construction LIRR East Side Access - New York, $16.8B**
- **Cross Harbor Freight**
- **Lockheed Martin Multipurpose Building**
- **Lockheed Martin High Bay Addition- New York, $9.5M**
- **DASNY Bronx Family Courthouse Renovation - Bronx, NY**
- **NYCHA Housing Projects Renovations - Various Area, NY**
- **Mateo College of San Mateo Science Building 36 - San Mateo, CA, $19.5M**
- **University of California Berkeley C.V. Starr East Asian Library - CA, $42M**

PROJECT CONTROLS

Ms. Janjua also has extensive experience with project controls and cost for project development support for various projects. Her work has included establishing and providing full-time project controls for projects, reviewing and validating contractor, change order, project planning and status reviews; schedule reviews, monitoring actual progress, change order management, and final project reporting. She has represented the

following projects:

- DDOT 11th Street Bridge Rehabilitation - Washington, DC, $10.5M
- STV Project Controls Department Procedures
- NYCHA Housing Projects Renovations - Various Area, NY
- New Jersey School Development Authority Capacity Study - NY $450M
- Hillsborough Unified School District 2007 CIP, $449M
- BG Group Trinidad Cross Island Pipeline, $3B
- Sonatrach/Japan Ohanet Oil and Gas/Woodside Energy Southern Algeria Pipeline, $1B
- San Francisco Public Utilities Commission - San Francisco, CA

Dane C. McBaine, LEED AP

Scheduler

7 YEARS EXPERIENCE
7 YEARS WITH PMA

Representative Projects

Detroit Water & Sewerage Department (DWSD) Water Meter Replacement & Automatic Meter Reading Equipment Installation – Detroit, MI *($150M)*

DWSD 800 MHz Radio System Detroit, MI *($120M)*

DWSD CS-1304 As-Needed Capital Improvement Program Detroit, MI *($2B)*

DWSD CS-1433 As-Needed Capital Improvement Program Detroit, MI *($2B)*

Visteon Village Corporate Headquarters *($270M)*

Guardian Electric v. State of Michigan (Anchor Bay Schools)

State of Michigan Center for Forensic Psychiatry *($95M)*

Education

BS, Civil Engineering
Michigan State University

MIOSHA 10-Hour Training
Construction Association of Michigan

LEED Professional Accreditation Seminar
United States Green

Mr. Dane McBaine started his career as an intern with PMA in 1994. PMA hired Mr. McBaine as a full-time employee after he graduated from Michigan State University in 2003. Mr. McBaine has seven full-time equivalent years experience in project controls administration, project management, field inspection, and claims avoidance and resolution.

PROJECT CONTROLS

Mr. McBaine has been working on The Port Authority of NY & NJ (PANYNJ), Capital Improvement Program to implement the cost loaded schedules using Primavera P6.2 and Web client applications for the Project Management Office and capital planning group, which have a combined capital program and operating budget in excess of $1 billion per year on 100 projects. Mr. McBaine has performed schedule reviews and associated analyses for the DWSD on a regional 800 MHz radio system, Springwells Water Treatment Plant Chemical Feed Improvements, and on water meter replacement and automatic meter reading equipment installation projects, and for Visteon on their corporate headquarters project for compliance with respective contracts.

Mr. McBaine has provided cost estimating services and monthly billing reviews for the regional radio system project and on the water meter replacement and automatic meter reading equipment installation project. He also provided project controls for architect costs on the Visteon Village Corporate Headquarters project.

PROJECT MANAGEMENT

Mr. McBaine provided project management and administration services, including RFI responses, submittal reviews, correspondence, changes, and QA/QC of contractor work for a regional 800 MHz radio system and for water meter replacement and automatic meter reading equipment installation projects.

PROCUREMENT ASSISTANCE

Mr. McBaine provided procurement assistance for the water meter replacement and automatic meter reading equipment installation project. Responsibilities included assisting the client with proposal evaluation, contract award, and negotiation of contract scope and price.

DISPUTE RESOLUTION

On claims for Water Works Park II, Lake Huron Water Treatment Plant, *Guardian Electric vs. State of Michigan* (Anchor Bay Schools), *Center for Forensic*

Psychiatry vs. URS Corporation, and *Rockwell International vs. MDOT*, Mr. McBaine provided support to senior consultants through analyses of cost and damages, schedule analyses, delay and disruption analyses, and by preparing issue books.

REPRESENTATIVE PROJECTS

- **Detroit Water and Sewerage Department (DWSD) Water Meter Replacement & Automatic Meter Reading Equipment Installation** – Detroit, MI *($150M)*
- **DWSD Regional 800 MHz Radio System** – Detroit, MI *($120M)*
- **DWSD Springwells Water Treatment Plant Chlorination Feed Improvements** – Detroit, MI *($14M)*
- **Visteon Village Corporate Headquarters** – Van Buren Twp., MI *($270M)*
- ***Guardian Electric vs. State of Michigan* (Anchor Bay Schools)** *(Conf'l)*
- ***State of Michigan Center for Forensic Psychiatry vs. URS Corporation*** – Ann Arbor, Mi *(Conf'l)*
- **DWSD Water Works Park II** – Detroit, MI *($288M)*

ZACHARY O. WALTERS, PSP

Scheduler

5 YEARS EXPERIENCE
1 YEARSWITH PMA

Education

BS Electrical Engineering,

University of Maryland

Professional

AACEi Planning & Scheduling Professional (PSP)

Mr. Zachary Walters has extensive experience in commercial and residential construction. He is proficient in Primavera/Oracle Project Management (P3, P5, and P6), SureTrak, Microsoft Project Planner, entire Microsoft Office Suite, Trouble Shooting and Updating Windows Software Programs, HTML. He has completed various coursework including Comprehensive Calculus, Physics, and Engineering Curriculum, Numerical & Statistical Methods, Urban Planning, Product Liability.

SCHEDULING

Mr. Walters has performed expertise scheduling service for the following types of projects including Schools, Waste Water Treatment & Water Pollution Control, Road & Bridge, Scientific Research Laboratories, Vertical Structures, Embassies and Mixed Use Residential. He is currently serving as a scheduler to perform schedule management tasks for NYCDEP project. This project involves the expansion and upgrade of the existing 350 MGD Newtown Creek Wastewater Treatment Plant in Brooklyn, NY. The upgrades involved will enable the owner to begin a major $1 billion expansion and upgrade at the conclusion of this assignment.

PRIOR EXPERIENCE

Prior to joining PMA, Mr. Walters worked with FTI Consulting *in* Rockville, MD. He developed and worked with CPM schedules of up to 30,000 activities and worked closely with clients on-site or in home offices when needed. He loaded schedules with costs and resources for billing and usage reporting and generated comprehensive schedule update packages with reports for schedule narratives, remaining Work, critical Path, total float and provide monthly and weekly look-a-heads, TIAs and fragnets.

Cost Engineers/Estimators

Edward Frysztacki, C.C.E., P.E.

COST ENGINEER/ESTIMATOR

Mr. Frysztacki has a rare combination of talents: he is an experienced structural engineer, an expert CPM scheduler, and an excellent cost estimator. He has been performing these duties since 1977. His experience includes highways and bridges, grading and drainage, sewage treatment plants, pumping stations, and building design, including the structural, civil, mechanical, and electrical trades. Relevant project experience includes:

EDUCATION	B.S.C.E., Geotechnical Engineering, University of Toronto, 1977
REGISTRATION/ CERTIFICATIONS	Professional Engineer, NY Certified Cost Engineer, NY Professional Engineer, NJ Primavera Expedition (Project Controls) Troubleshooting Exterior Masonry Walls Certification, NY Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY
YEARS WITH THIS FIRM	19
YEARS WITH OTHER FIRMS	14

Program Mgmt. Services for: Perry, Tow pound & DECAS Bldgs at the Brooklyn Navy Yard - LiRo is currently serving as the Program Manager for the construction of the Perry Avenue Building and the NYPD Tow Pound Building at the Brooklyn Navy Yard. LiRo's involvement began during the Pre-construction (Design) Phase and will continue through the completion of construction. Our responsibilities during preconstruction included:

- Review design documents, provide recommendations
- Value engineering
- Estimating
- Constructability reviews
- LiRo's Pre-Construction efforts helped to reduce the overall building costs and provide a more efficient design. Additionally, LiRo advised the owner (BNYDC) of the various types of construction management contracts that were available. We helped guide their selection into using a CM/Build contract and participated in the procurement/selection of a Construction Manager. During the Construction Phase of the project, LiRo is performing the following services:
- Ensure CM compliance with contract documents
- Review CM's cost requisitions
- Review CPM schedules
- Review project budget and compare with actual expenditures
- Provide recommendations regarding change orders/requests for time extensions

(Brooklyn Navy Yard Development Corporation)

New York City Housing Authority CM/Build Requirements Contracts (Two Contracts: 2004-2007 & 2005-2008), Design Review / Constructability Review / Value Engineering - Under these contracts, LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of renovating and/or constructing numerous community centers, performing upgrades of building systems and facade/roofing restoration at several housing projects throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services. (NYCHA, $250M)

DASNY School of Architecture, Urban Design and Landscape Architecture (SAUDLA) - Demolition and reconstruction of a 136,000 sf building to become the new School of Architecture, Urban Design and Landscape Architecture (SAUDLA) building. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including façade,

interior and mechanical, electrical and plumbing systems. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus. This required the renovation of various locations at a cost of approximately $8M and was accomplished in one year.

FDNY Fire Training Academy at Randall's Island, Phase II, Estimator - This New York City DDC project involved the renovation of two (2) existing buildings and construction of a new building at the FDNY facility at Randall's Island. ($7.5M)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME) Construction Management Services, - LiRo managed the construction of the new Office of the Chief Medical Examiner (OCME) facility in Brooklyn. This is a state-of-the-art facility offering the staff and the public a safe and private environment. Shared between Kings County Medical Center and the OCME, the new facility contains space designated for NYPD investigators. It was designed to be sensitive to the surrounding community and hospital campus. LiRo's role was to provide comprehensive construction management services from design development through the completion of construction. This included the coordination of all construction operations and related vehicular traffic so that it does not interfere with local traffic or hospital campus operations. The 40,000 sf facility worth $17M was constructed in 28 months. (DASNY, $18M)

Bay Park Water Pollution Control Plant in Nassau County, NY, CPM Scheduling - Included pump stations and other sewage treatment structures. Projects included construction of various concrete process control structures (e.g. refurbishing of 5 mainline sewage pumps which serve the plant) and supplementary plant operations buildings. CPM scheduling detailed procurement and installation of state of the art computerized instrumentation systems. (NCDPW, $80M)

West 158th Street Maintenance and Repair Facility, Preconstruction Review/Estimator - This project involved the construction of a NYCDOT Maintenance and repair facility beneath the Riverside Drive in Upper Manhattan. In the design phase, Mr. Frysztacki was part of the estimate and document review team. (NYCDOT, $12M)

Cedar Creek Water Pollution Control Plant in Nassau County, NY, CPM Scheduling - Projects included construction of various concrete process control structures and supplementary plant operations buildings. CPM scheduling detailed procurement and installation of state of the art computerized instrumentation systems. (NCDPW, $20M)

Department of Homeless Services On Call Services, Design Review/Estimator - Provided construction management services to the Department of Homeless Services under a requirements contract. The contract demanded both construction management and engineering/architectural expertise. He managed over a dozen projects at numerous homeless shelters. Responsibilities included design review, coordination, estimating, and assessment; award coordination, analysis, and recommendations; project management and coordination; project scheduling and progress surveillance; construction planning; cost estimating verification; surveillance of quality control and inspection of construction; contract document interpretation; administration of project documents and records; claims analysis and defense. Projects included roof and window replacement, mechanical and boiler replacement, facade repair and general renovation. (NYCDHS, 1999 - 2000, $13M)

Employment History:
The LiRo Group (1991-present)
Associate, Sr. CPM Scheduler/ Chief Estimator

Alfio Paladino, P.E.

COST ENGINEER/ ESTIMATOR

Mr. Paladino has 24 years experience in the construction industry. His extensive experience includes cost estimating, project management and engineering. He has worked on a broad range of Capital Program Projects for New York City Transit where he has held the positions of Senior Estimator, Project Engineer and Mechanical Engineer. Mr. Paladino's broad range of experience in construction and engineering has enabled him to become an accomplished Cost Estimator. He has extensive experience in developing cost estimates for rail construction projects in the areas of Power, Mechanical Systems, Rail Facilities, Environmental Abatements and Fiber Optics. His experience as a Project Engineer, managing construction projects, provides the background required for developing and interpreting construction work scopes. Representative project experience includes:

EDUCATION	B.S.M.E., Mechanical Engineering, Manhattan College, 1984
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	20

New York City School Construction Authority - Emergency Response Management and Coordination Program, New York City - Estimator - Under this contract LiRo managed and coordinated responses to emergencies, on the basis of a telephone call at any time during a twenty-four hour period and on any day Monday through Sunday. LiRo immediately mobilized trades, people or firms and materials for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public school in the five boroughs of New York City. Some of the work was performed in occupied schools. Accordingly, LiRo used best efforts to insure that all such work was performed in a safe and secure manner with minimum disruption to students and school personnel. (NYCSCA, $70M)

Bronx Civil Supreme Courthouse, Estimator- Under this contract, LiRo provided construction management services for the Interior Renovation & Stair Remediation Work. As one of the services, the electrical work cost estimate was performed for maintenance of budget. The electrical work consisted of new interior lighting, power distribution panels, fire alarm system upgrades and telecommunication system. In developing the estimate, calculating quantities and the obtaining of material price quotes were performed. As part of the estimating process, value engineering suggestions were developed and implemented to achieve budget goals. In addition, constructability review was also performed to identify deficiencies and conflicts in the contract documents for correction prior to bid to avoid potential change order work during construction. The total estimated construction cost was calculated to be over $21M.

Battery Park City Community Center, Estimator- As part of the construction management responsibilities for this project, LiRo was required to determine the adequacy of budget for the construction costs reflective of the project design documents. Electrical work cost estimate was performed for new systems which include power distribution, lighting, fire alarm, communications and security. Constructability review of the construction documents was also performed. The total estimated electrical work cost was calculated to be over $5.4M.

Brookhaven National Laboratory National Synchrotron Light Source II, Estimator- The scope of work for this contract consisted of the construction of a new research facility to be used for the development of new efficient energy sources. This facility includes a new one-story Ring Building,

Injection Building and RF Building along with various other buildings that will house MEP systems. The contract required LiRo to prepare cost estimates for the MEP systems. Electrical work estimate was performed. Elements of this work included: site work power distribution system, site lighting, new switchgears and power distribution panels, interior lighting and power, emergency generators and fire alarm system. The total estimated construction cost was calculated to be over $195M.

Norwalk Community College, Estimator- The scope of work for this contract consisted of the construction of a new building wing to replace an existing outdated one. The renovation of another existing wing was also part of the scope of work. Electrical cost estimate was developed for construction costs related to new systems that included power distribution, lighting fixtures, communication, fire alarm, audiovisual and security work. The performance of quantity take-offs, obtaining material price quotes and utilization of estimating software along with current wage rates and industry standards were implemented. Constructability review of documents was also performed to ensure project scope. The total estimated construction cost was calculated to be over $28M.

New Family Intake Center, Estimator- The construction of a new 80,000 SF multi-story office building for the Department of Homeless Services was to be managed by LiRo. The development of a construction cost estimate for all construction work was required as part of LiRo's construction management services to ensure the adequacy of the allocated budget. Electrical and plumbing work estimates were developed as part of this task which included: new power distribution system; lighting; security; fire alarm; domestic water distribution; drainage including sanitary and sewer lines. Estimates were developed by performing quantity take-offs and utilizing documented wage and productivity rates and material price quotes. Constructability review of the construction documents was also performed. The total estimated construction cost was calculated to be over $47M.

DASNY/HHC Emergency Power Systems Upgrade, Estimator- The scope of work for this contract consisted of demolition and reconstruction of outdated Emergency Power Systems at six hospital trauma centers and various other smaller hospital facilities located in the New York City area. The contract required LiRo to prepare cost estimates for the various types of work in the projects. Typical elements of work for these projects included: Emergency Generators, paralleling switchgear, remote radiators for generator cooling systems, power distribution panels, underground fuel oil storage systems and conduit & wire distribution to all associated equipment. The total estimated construction cost was calculated to be over $121M.

Engine Company #277 / Ladder Company 112 - CM Build Services, Estimator - As part of a Requirements Contract, LiRo managed the new construction, renovation, and/or demolition of fire houses or related facilities throughout New York City. The contract required that LiRo participate during the design phase by preparing cost estimates, schedules, reviewing phasing and staging system and constructability issues. Typical elements of construction for these projects included: structural steel, masonry facade, historical masonry and details in some cases, mechanical systems for heat and ventilation, electrical service, vehicle exhaust extraction system, vehicle fuel storage and distribution.

Employment History:

The LiRo Group (2004-Present)
Senior Estimator
New York City Transit (1987 - 1994)
Senior Cost Estimator, Project Engineer, Mechanical Engineer
Spielman Associates Consulting Engineers (1985-1987)
Project Engineer

Mireya Yong
COST ENGINEER/ ESTIMATOR

Ms. Yong has over sixteen years experience within the construction industry. Prior to joining LiRo, she served as a Senior Estimator for MTA-New York City Transit. Additionally, she has worked in the capacity of Structural Design Engineer, Resident Engineer and Field Inspector for MTA-New York City Transit. As a Senior Estimator, Ms. Yong has worked in establishing budgets for Capital Projects. She has prepared detailed construction cost estimates from the preliminary through final stages of design. Ms. Yong has helped resolve change orders by: preparing cost estimates, reviewing contractors' const estimates, negotiating cost with contractors finalizing the change orders, and preparing feasibility studies and constructability reviews of design documents. Representative projects include

EDUCATION	B.S., Civil Engineering, Polytechnic University
REGISTRATION / CERTIFICATIONS	Intern Engineer, NY Primavera Expedition (Project Controls)
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	16

No. 7 Subway Line Extension, Program and Construction Management. New York City's Number 7 Subway Line, known as the Flushing Line, is the system's busiest, linking Queens to Times Square. The new 7,000-foot-long tunnel stretches west and south from Times Square to the Jacob J. Javits Convention Center on West 34th Street and 11th Avenue. LiRo is providing program and construction management for the Number 7 Subway Line Extension, which includes:

- 9,400 feet of tunnel by excavation, primarily with 2 Herrenknect Hard Rock Double Shield 22.5' diameter tunnel boring machines
- Installation of 5 shafts, averaging 110 feet deep and 39 feet in diameter. The shafts are installed both by excavation in soft ground and drill and blast in rock. The finished shafts are lined with steel fiber reinforced shotcrete.
- A 950' by 65' x 66' station cavern at West 34th Street, constructed by drill and blast methods of underground construction.
- Construction of steel and concrete structures for stations and other facilities, construction and installation of tracks, drainage, third rail power and other electrical systems, signals, communications, HVAC and tunnel ventilation systems.
- Multiple fan plants, HVAC facilities, traction power substations, facility power substations, circuit breaker houses, fare collection and communications and signal rooms.

The terminal at 34th Street will be fully fitted out for operation and commissioned with the Number 7 Subway Line Extension project, including major building work to make a complete station. (MTACC, $2.1B)

DASNY, Bernard and Anne Spitzer School of Architecture Project- LiRo completed the demolition and reconstruction of a 136,000 sf building to become the new Bernard and Anne Spitzer building. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including façade, interior and mechanical, electrical and plumbing systems. Prior

to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus. This required the renovation of various locations at a cost of approximately $8M and was accomplished in one year. (DASNY, $60M)

DASNY, Bronx Psych Center- LiRo is managing the construction of the new Adult Behavioral Center in the Bronx. The project is being built for the New York State Office of Mental Health (OMH) through the New York State Dormitory Authority. The four-story building features standing seam metal roofing, a combination of brick, stucco & metal panels at the facades, large curtain wall at the main entrance elevation and skylights at the one story section of the building. All HVAC equipment will be located on the main roof of the building. The Adult Center is being designed by STV and will be a LEED Silver certified building and is being designed using BIM/Revit software. ($85M)

Preconstruction CM Services for Storrs Hall Addition & Modifications at the University of Connecticut- LiRo provided Preconstruction Construction Management services for the construction of a new 15,000 sf classroom building addition as well as modifications to existing Storrs Hall. Preconstruction services included: Cost Estimating, CPM Scheduling, Site Logistics, Phasing Plans and Constructability Reviews. (UConn, $11.75M)

Additional Project Experience

- Bronx Civil Supreme Courthouse (DASNY, $14.5M)
- 448 Bed Addition to GRVC (NYCDDC, $90M)
- Staff Locker Facility at CIFM (NYCDDC, $5M)
- Perimeter Alarm Upgrade and Reconstruction for Fence Security at Riker's Island (NYCDDC, $2M)
- Minimum/Medium Security Facility at Yaphank (NYCDDC, $10M)
- Electrical Upgrade for Police Firing Range (NYCDDC, $6M)
- Regent Family Residence (NYCDHS)
- Window Replacement at Charles Gay Annex Bldg (NYCDHS)
- Roof Replacement at Hospitality House (NYCDHS)
- Miracle Makers SRO, Building Upgrade (NYCDHS)
- Brooklyn Women's Shelter, Building Upgrade (NYCDHS)

Employment History:

The LiRo Group (1999-2004, 2008-Present)
Project Controls
Estimator
MTA New York City Transit (1997-1999)
Estimating and Cost Control Division
Estimator
Structural Engineering and Design Division (1993-1997)
Design Engineer
Station Construction, Capital Program Management (1987-1993)
Resident Engineer

William Curran
COST ENGINEER/ESTIMATOR

Mr. Curran has approximately 16 years of construction experience on a wide variety of types of construction projects. These projects range from structural, airport, and heavy construction projects to environmental work at water pollution control facilities. Mr. Curran has served as an estimator, construction inspector, project engineer, and office engineer on numerous projects throughout the New York Metropolitan area.

EDUCATION	B.S., Mechanical Engineering, New York Institute of Technology
REGISTRATION/ CERTIFICATIONS	Primavera Expedition (Project Controls)
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	6

His responsibilities have included: Performing constructability reviews of contract documents

- Preparing detailed cost estimates
- Negotiating and coordinating change order work
- Inspecting field work for quality control compliance
- Preparing daily inspection reports, meeting minutes, and project correspondence
- Reviewing contract plans and specifications
- Reviewing and processing contractor/subcontractor payments
- Reviewing shop drawings
- Reviewing project CPM schedules
- Resolving contractors' claims for delay and associated damages

Representative projects include:

New York City Housing Authority CM/Build Requirements Contracts (Two Contracts: 2004-2007 & 2005-2008), Estimator / Design Review / Constructability Review / Value Engineering - Under these contracts, LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of renovating and/or constructing numerous community centers, performing upgrades of building systems and facade/roofing restoration at several housing projects throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services. (NYCHA, $250M)

Department of Homeless Services, Estimator and Plan Reviewer - Mr. Curran has performed detailed budget estimates, change order estimates and constructability reviews for various DHS projects.

- Jackson Family Residence
- Jerome Avenue
- Help USA - Supportive Employment Center

CUNY School of Architecture, NY, NY, Estimator and Plan Reviewer - This New York State Dormitory Authority project involved the total renovation of the existing City College "Y" building into the future School of Architecture. Mr. Curran performed detailed budget estimates and constructability reviews for each of the schematic design, design development and construction document phases. (DASNY, $40M, 2008)

FDNY Fire Training Academy at Randall's Island, Phase II, Estimator - This New York City DDC project involved the renovation of two (2) existing buildings and construction of a new building at

the FDNY facility at Randall's Island. Mr. Curran performed detailed budget estimates during the pre-bid phase of the project. (NYCDDC, $10.5M, 2005)

James A. Thomas Center (JATC) Renovations at Rikers Island, Estimator - Comprehensive construction management services were provided to the renovation of the James A. Thomas Center on Rikers Island (approximately 240,000 sf). The original construction of this high security facility dates back to 1933 and has a housing capacity of 1600 inmates. The program for renovation consisted of retrofitting existing spaces within the facility cell blocks, day rooms, showers, pantries, housing areas, mechanical rooms, electrical rooms, and common spaces. Part of the renovation program upgraded the electrical systems and domestic hot water distribution system. (NYCDDC, $25M, 2004)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME) Construction Management Services, Estimator - LiRo managed the construction of the new Office of the Chief Medical Examiner (OCME) facility in Brooklyn, completed in 28 months. This state-of-the-art 40,000-s.f. facility offers the staff and the public a safe and private environment that is shared between Kings County Medical Center, the OCME, and NYPD investigators. It was designed to be sensitive to the surrounding community and hospital campus. LiRo provided comprehensive construction management services from design development through the completion of construction including the coordination of all construction operations and related vehicular traffic to avoid interference with local traffic or hospital campus operations. (DASNY, $18M, 2004)

Steam Tunnel Renovations at Rikers Island, Long Island City, NY, Project Engineer/ Inspector - This project involved the renovation of existing steam tunnels from the central power plant to the various facilities at Rikers Island. Work included removal and replacement of existing steam piping expansion joints, valves, supports, condensate pumping stations and the modification of existing and addition of new steam and condensate piping. Also included in this work were the repair of existing concrete tunnel walls and the addition of new concrete vent houses. (NYCDDC, $19M, 2004)

Manhattan Civil Court, Construction Management Services, Estimator - This project called for an extensive reconstruction of the building's infrastructure and exterior to be completed within 12 months, while building and court operations continued without interruption. Key elements included electrical, mechanical/HVAC, plumbing, fire protection, fire alarm and life safety, HVAC controls and building management systems, DAD compliance for building, entrances and bathrooms, facade and parapet walls, structural and waterproofing, security systems. LiRo's construction management services for this facility included design reviews for constructability; cost estimating; scheduling; development of phasing and staging plans; trade coordination; construction inspection. (DASNY, $16M, 2003)

Bridgeport Schools Repair and Replacement Project, Estimator - LiRo is providing construction management services for 20 schools in Bridgeport CT. The project includes various repair work from pavers, window replacement, masonry repair, HVAC upgrade and toilet room upgrades. (Bridgeport School District, $10M, 2008)

Employment History:
The LiRo Group (1998-present)
Estimator/Constructability Reviewer
Durr Mechanical Construction (1997-1998)
Project Manager/Asst. Project Manager
H. Sand & Co./Slattery/Skanska (1993-1997)
Project Engineer

Prakash Daulatani

COST ENGINEER/ ESTIMATOR

Mr. Daulatani has over 13 years of experience as a cost estimator and performing constructability reviews on various projects including building and road construction. Representative projects include:

EDUCATION	B.S., Civil Engineering, RKNEC College of Engineering, India, 1993 M.S., Civil Engineering, BITS Pillani, India, 1995
YEARS WITH THIS FIRM	5
YEARS WITH OTHER FIRMS	10

New York City Housing Authority CM/Build Requirements Contracts (Two Contracts: 2004-2007 & 2005-2008), New York, Cost Estimator/Plan Reviewer - Under these contracts, LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of renovating and/or constructing numerous community centers, performing upgrades of building systems and facade/roofing restoration at several housing projects throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services. Mr. Daulatini is involved in the following projects; Tompkin Houses Electrical Upgrade, Woodson Houses, Electrical Upgrade, Electrical upgrade Albany Houses, Wyckoff Garden Roof Replacement, Fort Washington Roof Replacement. (NYCHA, $250M)

Reactivation of the Staten Island Rail Road, Cost Estimator - LiRo was responsible for the Construction Management of the contractor activities for the Reactivation of the Staten Island Railroad. The construction contract, on a fast-track schedule of 18 months, was awarded at $40M.
The Construction Management scope of services included the following activities:

- Owners on-site representative
- Construction Supervision and Inspection
- Coordinated USCG and NYS DEC permits
- Monitoring the contractors' activities
- Contract Document Review to identify long lead procurement items and special conditions
- Expediting and tracking of shop drawing submittals
- Providing project controls support to monitor a baseline schedule and construction progress
- Develop coordinated and maintain work plans for each work element
- Estimating changes in scope
- Scheduling and review of contractor schedule updates

(NYCEDC, $40M, 2005)

Family Intake Center, Cost Estimator/Plan Reviewer - This project consists of the construction of office building for Department of Homeless through the New York City Department of Homeless Services. The Seven story building features a detailed Terra Cotta Rain Screen system and has been designed to achieve a silver LEED rating. The building has approximately 84000 SF of floor area with a total cost of $47 million dollars. (NYCDDC, $47M)

Mamaroneck Public Library, Cost Estimator/Plan Reviewer - This project consists of the construction of a major renovation and addition to the Mamaroneck Public Library approximately doubling the size of the existing facility. The library site is located on a corner bound on the north and west by narrow streets, on the south by the Emelin Theater and on the east by the rear yards of stores along Mamaroneck Avenue. The multilevel facility includes an extensive renovation of the existing facility (including MEP systems) and a new addition. When completed, the new facility will total 44,294

sf. The facade of the facility is a skillful blend of the old stone work with new energy efficient materials defining the new addition and entry. (Mamaroneck Public Library, $12M)

Betances Houses IV & VI Community Center Renovation, Cost Estimator/Plan Reviewer - The project consists of the renovation of two existing buildings; a one story boxing gym with a full cellar, which is to be included in the renovation and a Community Center which is located on the first floor of an adjacent residential tower. The existing Boxing Gym is a one-story steel frame building with a full cellar and is to be completely gutted including its exterior brick and block walls. The existing Community Center located in the residential tower adjacent to the Boxing Gym is to be completely gutted, including interior, non-bearing CMU partitions. This area is to be completely renovated. Vehicular and pedestrian ramps that exist within the boxing gym building and separate the two program spaces are to be removed and replaced with new program space. The two buildings are to be connected internally and a two-stop elevator is to be added to service the cellar boxing area. (NYCHA, $250M)

Bronx Civil Supreme Court House, Bronx, NY, Cost Estimator/Plan Reviewer - This project is being performed in three separate contracts; the design phase, the construction phase, and the general conditions work phase. The phasing will take into consideration areas of availability, work hours, temporary protection, swing space, coordination with DCAS MEP and elevator projects, safety and security. The plans will include temporary signage, posting notices and newsletters. (DASNY, $16M)

Engine Company 201, Brooklyn, NY, Cost Estimator/Plan Reviewer - Preparation of swing space, demolition of existing and erection of new 12,000 sf firehouse. Due to community requirements a swing space was prepared which include all FDNY operational requirements prior to the demolition of this firehouse.
This site is located on a main Brooklyn thoroughfare and is adjacent to a MTA subway tunnel. The demolition, foundation and structural work will all be monitored so as to not impact the MTA and the adjoining buildings. The project will include all required FDNY systems. (NYCDDC, $10M)

Bernard Fineson Replacement Facility, Queens, NY, Cost Estimator/Plan Reviewer - The Project includes construction of eight (8) buildings serving 120 developmentally disabled and medically frail consumers in addition to a Program/Administration Building. The new construction for the resident building consists of six (6) one story residences for medically frail consumers and two (2) two-story residences for multiple disability consumers. The building program spaces comprise a total of 66,600 gross square feet. Program/Administration Building is located on a 12.46 acre open sited adjacent to the grounds of the New York State Creedmore Psychiatric Hospital, Queens, NY. The Program/Administration Building will contain 70, 274 gross square feet on two (2) floors plus a basement. The total program area for the Project is 122,454 gross square feet. (DASNY, $80M)

Employment History:

The LiRo Group (2005 to Present)
Estimator
VJ Associates, Inc (2000-2005)
Cost Estimator
N R E Associates, Inc (2000)
Cost Estimator
Public Works Department (India) (1996-2000)
Site Engineer/Cost Estimator
M N Dastur & Company Limited (India) (1995)
Training Engineer
Junghare Designers & Consultants (India) (1993-1994)
Site Engineer

Wayne Egbert

COST ENGINEER/ ESTIMATOR

EDUCATION	B.S., Civil Engineering, Polytechnic Institute of New York, 1981 A.A.S., Civil Engineering, Nassau Community College, 1978
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	17

Since 1981 Mr. Egbert has worked in the field of Civil Engineering. He has extensive construction project management experience having worked as a Project Manager and an Assistant Project Manager for a general contractor. He has also worked as a Structural Engineer in the concrete industry and has performed cost analysis and feasibility studies for proposed and completed projects. He has experience overseeing all areas of construction projects including estimating, contract award and project management. He has experience preparing feasibility studies as well as scope preparation while working for a utility company. Mr. Egbert currently uses and is thoroughly familiar with Primavera Expedition. Representative projects include:

DASNY/HHC Emergency Power Systems Upgrade, Cost Estimator - The scope of work for this contract consisted of demolition and reconstruction of outdated Emergency Power Systems at six hospital trauma centers and various other smaller hospital facilities located in the New York City area. The contract required LiRo to prepare cost estimates for the various types of work in the projects. Typical elements of work for these projects included: Emergency Generators, paralleling switchgear, remote radiators for generator cooling systems, power distribution panels, underground fuel oil storage systems and conduit & wire distribution to all associated equipment. The total estimated construction cost was calculated to be over $121M.

Queens Midtown Tunnel, Construction Administration and Inspection Services for the Rehabilitation of the Roadway Drainage System (QM-10), Estimator - This project involved the rehabilitation of the tunnel's roadway drainage system. The work was performed at six locations (Queens Ventilation Building, Manhattan Ventilation Building, Queens Plaza, Manhattan Plaza Entrance, Manhattan Plaza Exit, Mid-River Pumping Station). The project called for the replacement of the main drainage pumps as well as the stripper pumps at all pump stations. Specific work items included: Replacement of all switchgear, MCC's, circuit breakers and wiring for the pumps Lead and asbestos abatement Concrete and structural steel repair Installation of new lighting and unit heater Replacement of liquid level controller Replacement of piping and piping support Replacement of piping insulation Concrete repair of the drainage sumps (MTA-TBTA, $6M, 2003)

DASNY School of Architecture, Estimator - Demolition and reconstruction of a 136,000 sf building to become the new School of Architecture building. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including façade, interior and mechanical, electrical and plumbing systems. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus. This required the renovation of various locations at a cost of approximately $8M and was accomplished in one year.

NYC Department of Environmental Construction, Lead Estimator – Mr. Egbert was responsible for implementation of a cost estimating program in the Bureau of Design and Construction (BEDC). This program was designed in order to develop consistent formats for Cost Estimates from Consultant Engineers. This consisted in the development of Work Breakdown Structures, Basis of Estimate Reports and estimates in a consistent format (IE: Timberline, Heavy Bid, etc.) Presently reviewing projects in the NYC DEP's fiscal budget thru 2015. These projects consist of tunneling projects, Dams, Pipelines, Water Treatment Plants and Waste Water Treatment Plants. (6/08-2010)

New York City Housing Authority CM/Build Requirements Contracts (Two Contracts: 2004-2007 & 2005-2008), Estimator / Design Review / Constructability Review / Value Engineering - Under these contracts, LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of renovating and/or constructing numerous community centers, performing upgrades of building systems and facade/roofing restoration at several housing projects throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services. (NYCHA, $250M)

Mechanical/HVAC Reviewer for the Long Island Rail Road, Constructability Review and Value Engineering - This 4-year project involved constructability review, value engineering, and code compliance review for numerous LIRR projects. The projects were all reviewed by "peer" groups comprised almost exclusively of licensed professional engineers and registered architects. The LIRR was provided with detailed written reports for the reviews as well as monthly summary reports outlining the work performed and the budget status. He reviewed the designs of others in accordance with MTA Long Island Rail Road Station Design Guidelines and the Guidelines for Preparation of Technical Requirements, the NY State Uniform Fire Prevention and Building Code, applicable requirements of the Americans with Disabilities Act (ADA), and other applicable state and federal requirements. In addition, he provided assessments and recommendations regarding constructability, value engineering, compliance with applicable codes and requirements, phasing and interface of the work with other Railroad activities, and necessary flagging and support, as well as conflicts or omissions in the documents. (Project Manager: M. Wolfe-Mulch, LIRR, 2003)

Bernard Fineson Replacement Facility, Cost Estimator - Demolition/New construction of eight residential buildings in addition to an 80,000 sf Program/ Administration Building. Program/Administration Building is located on a 12.46 acre open sited adjacent to the grounds of the New York State Creedmore Psychiatric Hospital, Queens, NY. The Program/Administration Building will contain 70, 274 gross square feet on two (2) floors plus a basement. The total program area for the Project is 122,454 gross square feet. (DASNY, $80M)

Employment History:

The LiRo Group (1998-2008) (2010-Present)
Senior Cost Estimator
MWH Constructors (2008- 2010)
Lead Estimator
Durr Mechanical Construction Inc. (1993 -1998)
Project Manager, Assistant Project Manager, Project Coordinator
Hazen & Sawyer, Environmental Engineers and Scientists (1991-1993)
Engineer
Abrahams and Karp Services, Inc. (1984-1991)
Structural Engineer
Jamaica Water Supply Company (1982 - 1984)
Management Engineer
Scorcia & Diana Associates, Inc. (1981- 1982)
Project Manager

Steven M. Pagani

Sr. Cost Estimator

25 YEARS EXPERIENCE
7 YEARS WITH PMA

Education

Construction Management Program

Worcester Polytechnical Institute

Civil Program Studies

Cape Cod Community College

Construction Supervisory License, MA #[redacted]

Real Estate Salesperson, MA

Mr. Steven Pagani has extensive experience in all corporate administrative functions. His industry experience includes construction, government, and infrastructure projects.

COST ESTIMATING

Mr. Pagani has developed many construction cost estimates on a variety of projects. He has performed material takeoffs requiring the review of contract documents, specifications, cut sheets, and impact statements. He also supervised the development of a proprietary cost-based estimating system for primary use in the New York City area, with expansion possibilities on a national level.

MTA / LIRR East Side Access Project - New York, NY

Mr. Pagani is currently the senior estimator for the East Side Access Project. The East Side Access Project is a $ 7 Billion public works project being undertaken by the Metropolitan Transportation Authority (MTA) in New York City, designed to bring the Long Island Railroad (LIRR) into a new East Side station to be built below and incorporated into Grand Central Station in Manhattan.

Port Authority Trans Hudson (PATH) World Trade Center (WTC) Transportation Hub - New York, NY

This $2 billion project was designed by world-renowned architect Santiago Calatrava to serve as a source of inspiration for the heroes, survivors, and families of September 11th, as well as for those who live and work in and visit Lower Manhattan.

SCHEDULING

Mr. Pagani has extensive schedule development, review, and analysis experience that includes utilizing CPM scheduling to produce master schedules for all project phases and project delivery methods.

Croton Water Treatment Plant - New York, NY

This $2 billion project is a 290 MGD facility to treat New York City's Croton water supply.

DestiNY USA Management Company LLC - Syracuse, NY

The DestiNY USA project involved the design and construction of an $25 billion amusement/retail/hotel complex. This includes 12 hotel towers and 6 million-SF of retail space.

CLAIMS ANALYSIS

Mr. Pagani has prepared claim estimates and has assisted in the negotiations of more than $325 million in contract claim settlements.

Massachusetts Turnpike Authority (MTA) Central Artery Tunnel (CA/T) - Boston, MA

This $14.6 billion project is the largest infrastructure project in the country. It involves extending I-90 under the Boston Harbor to Logan International Airport and replacing the existing I-93 highway viaduct with a newly constructed tunnel.

PRIOR EXPERIENCE

Prior to joining PMA, Mr. Pagani worked with Bearse Corporation in East Sandwich, Massachusetts, as a Senior Project Manager where he managed all ongoing projects for this midsized contracting firm. His project highlights include the MBTA Police Station, Boston, MA; Am-Trak car wash maintenance facility, Boston, MA; a wastewater treatment facility, Otis Air Force Base, Sandwich, MA; and the Brighton District Court House, Brighton, MA.

Specific Relevant Experience

D

1. Entities for which Similar Services have been provided

LiRo's multidisciplinary capability and locally-based resource pool enables the firm to provide a full range of professional services to our clients. The firm is unique in that we offer primary strengths in professional Program/Project/Construction Management (scheduling, cost control, constructability review, value engineering, bid packaging, claims control, construction program management and on-site inspection) while also offering the full range of engineering support services (civil, environmental, structural, mechanical, electrical, and architectural.)

1. Entities – Similar Services
2. Specific Relevant Experience

LiRo is presently managing the construction of over $10B of public sector capital construction projects locally. LiRo's management staff has extensive experience coordinating, progressing and delivering major construction projects in difficult environments and sensitive operational facilities. A particularly noteworthy assignment awarded to LiRo and led by Luis Tormenta, P.E. in June 2008 involved an assessment of the schedule, budget and challenges for the overall World Trade Center Construction Program (Program). The report identified the key challenges confronting the project and then presented a risk assessment of the Program schedule and budget. The report was provided to the Executive Director of the Port Authority and was the basis of a report provided to Governor Patterson in the Fall of July 2008. Additionally, we have recently completed project management and resident engineering inspection services on a call-in basis to the Port Authority on two assignments: the $800M JFK Terminal 5/6 Redevelopment, and the new $65M parking garage associated with this terminal.

We are adept at working within the constraints of complex, occupied facilities, and we know how to coordinate interior and exterior renovation projects with building owners and tenants. Our careful attention to CPM scheduling and construction staging and phasing allows for smooth transitions, continuous facility operations, timely progression of construction work, and public safety.

In addition to currently providing project/construction management services on major Metropolitan area capital projects, LiRo has unmatched experience on Call-In Project/Construction Management contracts that demand immediate responsiveness supported by extensive resources and often as an extension of staff. (Please see the following table for relevant on call project experience.)

Due to our large and varied number of staff assigned to these types of projects, LiRo has a constant pool of resources available.

Project	Agency	Contract Type	Comment
On-Call CM Services 2006-2010	PANYNJ	PM/CM	Initial contract
On-Call Indefinite Quantity Security Program	MTACCC	PM/CM	Numerous projects throughout the system
On-Call CM Services	DSNY	PM/CM	Ten projects over 3 years
Construction Management for CM-1308	MTA NYCT	PM/CM	Third consecutive contract
On-Call CM Services	MTA NYCT	PM/CM	Second consecutive contract for LIRR
On-Call CM Services	USPS	PM/CM	Third consecutive contract
As-Needed CM Services	MTA TBTA	PM/CM	Fourth consecutive contract
On-Call CM Services	MTA LIRR	PM/CM	Third consecutive contract
On- Call CM and Inspection for Various Capital Improvement Projects	NYCHHC	PM/CM	Second 3-year contract
On-Call Owner's Representative CM Services	BPCA	PM/CM	Third consecutive contract
Emergency Response Management and Coordination Program	NYCSCA	PM/CM Extension of Staff	Immediate response required.
On-Call CM/Build Services	NYCDHS	CM/Build	Second consecutive contract
CM/Build Requirements Contract	NYCHA	CM/Build	Third on-call contract
On-Call Indefinite Quantity Scheduling	MTA NYCT	Scheduling Extension of Staff	Third consecutive contract
On-Call Indefinite Quantity Technical Inspection Service	MTA NYCT	Inspection	Extension of staff
On-Call CM Services	NYS DPRHP	PM/CM	Initial contract

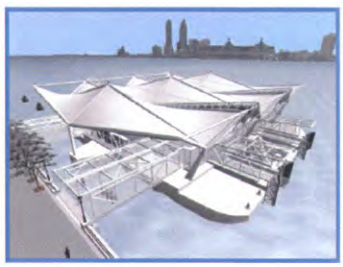
2. Specific Relevant Experience

Specific experience of the LiRo Team is presented on a 'project-type' basis within the sections that follow. These sections are categorized in the following manner: Aviation, Tunnels, Bridges and Terminals, Port Commerce, PATH, World Trade Center, and Additional Experience. A matrix providing added experience is presented at the end of this section.

Aviation

Call-In Construction Management Contract 2006-2010 ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *William Kehoe, P.E.* *241 Erie Street,* *Jersey City, NJ 07310* *201-216-2070* ***Start:*** *2006* ***End:*** *2010* ***Cost:*** *$900M*	The LiRo team provided Project Management and Resident Engineering Inspection services on a call-in basis. Assignments included: John F. Kennedy International Airport Terminal 5/6 Redevelopment Project John F. Kennedy International Airport Parking Garage at JetBlue	
Delta Airlines Terminals 2 & 3 ***Owner:*** *Delta Airlines* ***Contact:*** *Corgan Associates* *350 Fifth Avenue* *New York, NY 10118* [redacted] ***Start:*** *2003* ***End:*** *2005* ***Cost:*** *$50M*	The LiRo team provided a comprehensive study & implementation of an Infrastructure Investment Plan at JFK Airport for Delta Airlines Terminals 2 & 3. Delta increased flights, and invested more than $300M in improving its JFK terminals over 6 years. The facility investments planned for Terminals 2 and 3 focused on the scope of work required to maintain operational reliability, improve service levels & address building code deficiencies. The scope included passenger experience enhancements, infrastructure improvements to building systems, envelope & apron pavement rehabilitation.	
Air Train Station ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *Tom Amoia* *Jamaica Air Train Terminal* *148-15 Archer Avenue* *Jamaica, NY 11435* [redacted] ***Start:*** *2003* ***End:*** *2007* ***Cost:*** *$5.4M*	The LiRo team provided field inspection & administrative services on the Jamaica Air Train Station. This link now provides a true inter-modal hub with connections to & from the MTA/LIRR, the MTA/NYCT, and Air Train JFK. The LiRo team has provided civil engineers, mechanical engineers & contract administrators. The LiRo team has provided a significant role in two major areas: Vertical Circulation Building /Jamaica Central Control & Platform/ Portal.	

Port Commerce

Waterfront Structural Engineering Services New Jersey Marine Terminal-Elizabeth, NJ ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *Yu Shing Wong* *3 Gateway Center* *Newark, NJ 07102* [redacted] ***Start:*** *2009* ***End:*** *2010* ***Cost:*** *N/A*	The LiRo team provided the waterfront structural engineering services necessary to inspect, evaluate, design and prepare contract drawings and construction cost estimates for priority repairs for the following: • NJMT Port Newark Berths 3 to 25 (Odd) • NJMT Port Newark Berths 2 to 36 (Even) • Elizabeth PAMT Berths 50 to 86 (Even) • Elizabeth PAMT Berths 88 to 98 (Even) & Turntable • NJMT AMT Berths 1 &2, Conc. Mooring Dolphins & Timber Walkways	
Battery Park City Ferry Terminal ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** Nilgun Ozdemir, P.E. *3 Gateway Center* *Newark, NJ 07102* [redacted] ***Start:*** *1998* ***End:*** *2008* **Cost:** *$70M*	The LiRo team to provide structural and marine engineering services for the design of a permanent floating ferry terminal, which will provide the facility a minimum 25-year life. The facility is the largest of its kind in the US, encompassing more than ¾ acres of floating structure. The floating terminal structure consists of a mono-hull main terminal; two anchorage towers anchored to bedrock, 75 feet below the water; & pedestrian walkways connecting to the Battery Park City Esplanade.	
Inspection of NJ Marine Terminal–Port Elizabeth ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *Mr. C. John Lin, P.E.* *3 Gateway Center* *Newark, NJ 07102* [redacted] ***Start:*** *2007* ***End:*** *2007* **Cost:** N/A	The LiRo team provided marine engineering services in connection with the performance of a condition survey of Berths 88, 90, 92, 94, 96, 98 and Turntable located at the NJ Marine Terminal in Elizabeth, NJ. The condition survey enabled the verification of the status of all load restrictions and priority repair recommendations as compared with the previous condition survey inspection.	

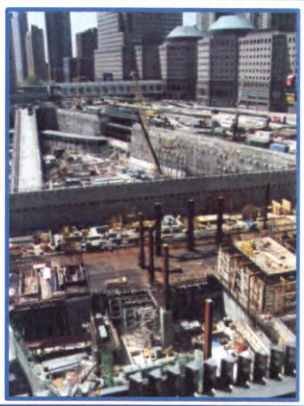
Tunnels, Bridges, and Terminals

MTA's East Side Access Project ***Owner:*** *MTA Capital Construction* ***Contact:*** *Alan Paskoff* *2 Broadway* *New York, NY 10004* [redacted] ***Start:*** *2007* ***End:*** *2015* ***Cost:*** *$6.3B*	The project connects the LIRR's Main Line and Port Washington Branch in Queens to a new LIRR terminal beneath Grand Central Terminal (GCT) in Manhattan and includes 7 miles of tunneling in Manhattan and Queens. Work includes the construction of 5 ventilation buildings, new transportation terminal 135' below GCT, new passenger station at Sunnyside train storage facilities, 50,000' of track, a reconfigured Harold Interlocking and systems components including signals, communications, power and security.	
As-Needed Construction Management & Inspection Services ***Owner:*** *MTA TBTA* ***Contact:*** *Igor Shapiro, P.E.* *2 Broadway* *New York, NY 10004* [redacted] ***Start:*** *2005* ***End:*** *2009* ***Cost:*** *$25M*	On Call construction inspection services including highway and bridge construction, electrical and mechanical construction, building construction and renovation, asbestos & lead abatement, underground storage tank replacement, as well as estimating, scheduling, and shop drawing review. Work was performed day and night at all TBTA facilities	
Triborough Bridge Deck Replacement on the Wards and Randall's Island Viaduct (TB-64B) ***Owner:*** *MTA TBTA* ***Contact:*** *Tom Bach, P.E.* *2 Broadway* *New York, NY 10004* [redacted] ***Start:*** *2005* ***End:*** *2010* ***Cost:*** *$282M*	This project involved the reconstruction of the Wards/Randall's Island Viaduct, new coatings, bearing replacement on the Queen's Approach and Bronx Truss, construction of new ramps, access road construction on Randall's Island and widening of the Queens to Manhattan Ramp.	

PATH

PATH Reconstruction-World Trade Center Site to Exchange Place ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *David Caruth* *Senior Project Manager* *2 Gateway Center* *Newark, NJ 07102* *212-435-7121* ***Start:*** *2002* ***End:*** *2003* ***Cost:*** *$323M*	The LiRo team provided project management services in support of the reconstruction of the PATH from the World Trade Center site to Exchange Place in Jersey City. Key project features: • New rock tunnel and rail turnouts at exchange place • Removal and replacement of signal & communication systems, third rail power cables, tunnel lighting, track and third rail • Temporary & permanent ventilation system	
Post 9/11 Temporary PATH Station Pedestrian Analysis ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *Renalto Commacio, P.E.* *EADD Traffic Engineering* *2 Gateway Center* *Newark, NJ 07102* *973-565-7837* ***Start:*** *2001* ***End:*** *2004* ***Cost:*** *$200M*	A simulation model was built to compile passenger routing, based on various entrances and exit flows observed for the peak periods. These were probabilistically applied to tens of thousands of passengers via millions of computer calculations. Population densities were reported continuously. The model was used to evaluate the effect of flow surges increased loads & reconfigured entrances and exits. The assignment focused on the completion of a (NEPA) 130 Analysis & a dynamic simulation of pedestrian activity associated with the Port Authority Temporary PATH Station.	
No. 7 Subway Line Extension, Program and Construction Management ***Owner:*** *MTA -NYCT* ***Contact:*** *Phil McGrade, P.E.* *Program Manager* *2 Broadway* *New York, NY 10004* [redacted] ***Start:*** *2008* ***End:*** *2013* ***Cost:*** *$6.3B*	The LiRo team is providing program & construction management for the No. 7 Subway Line Extension, which includes: • 7,000 feet of tunnel by excavation, • A cavern station terminal • Shaft excavations for tunnel access/ vertical circulation, construction of steel/ concrete structures for stations/other facilities, construction & installation of tracks, drainage, third rail power/other electrical systems, signals, communications, tunnel ventilation systems	

World Trade Center

Lower Manhattan Infrastructure - Program Management ***Owner:*** *NYCDDC* ***Contact:*** *Thomas Foley* *30-30 Thomson Ave.* *LIC, NY 11101* [redacted] ***Start:*** *2001* ***End:*** *2003* ***Cost:*** *$9M (fee)*	The LiRo team provided program management services in support of: • Coordination of all Infrastructure below Canal Street • Road Projects included, West St. Liberty, Vesey, Barclay • WTC 7 Area Coordination and Scheduling • Coordination of City Five Year Road Construction Program • Utility Coordination ConEd, ECS, City DEP • Agency Coordination, NYC DDC, NYC DOT, Port Authority, State DOT	
LMCCC Program Coordination Services ***Owner:*** *LMCCC* ***Contact:*** *Robert Harvey, PE* *One Liberty Plaza* *New York, NY 10006* [redacted] ***Start:*** *2005* ***End:*** *Ongoing* ***Cost:*** *$9M (fee)*	The LiRo team is the primary day-to-day coordinator of the lower Manhattan construction projects, responsible for coordinating and organizing logistics, scheduling, and other actions relating to the various construction projects, in addition to taking all appropriate steps to insure minimize disruption to the lower Manhattan residential and business community	
Rebuilding of Fiterman Hall - Borough of Manhattan Community College ***Owner:*** *DASNY* ***Contact:*** *Richard Dalessio* *One Penn Plaza* *New York, NY 10119* [redacted] ***Start:*** *2007* ***End:*** *2012* ***Cost:*** *$160M*	The LiRo team is presently serving as CM subconsultant for the rebuilding of Fiterman Hall for the Borough of Manhattan Community College. For this project, LiRo is providing construction management services including scheduling, cost estimating and constructability review and inspection services.	

Additional Experience

Emergency Response Management and Coordination Program 2006-2009 ***Owner:*** *NYCSCA* ***Contact:*** *Gordon Tung* *Chief Project Officer* *30-30 Thomson Ave.* *LIC, NY* [redacted] ***Start:*** *2004* ***End:*** *Ongoing* ***Cost:*** *$230M*	The LiRo team is serving as CM to manage and coordinate responses to emergencies. CM personnel, as an extension of staff, are on-call 24 hours/day, 7 days/week, including holidays responding to emergencies, immediately mobilize our CM personnel, the required trades/labor, hire Contractors/Subcontractor/Subconsultant, & procure required materials & equipment for the purpose of correcting, stabilizing and/or eliminating dangerous conditions at public schools in NYC.	
CM/Build Requirements Contract Citywide ***Owner:*** *NYC Housing Authority* ***Contact:*** *Constantino Sagonas,* *Assistant. Deputy General Manager* *90 Church Street* *New York, NY 10007* [redacted] ***Start:*** *2005* ***End:*** *Ongoing* ***Cost:*** *$265M*	The LiRo team is performing work on a task order basis which has included the design or construction phases of roofing façade repair projects, boiler room upgrades and electrical system upgrades throughout NYC. Projects include a wide variety of PM/CM services.	
On-Call Owner's Representative Construction Management Services ***Owner:*** *BPCA* ***Contact:*** *Kevin Finergan,* *1 World Financial Ctr* *New York, NY 10281* [redacted] ***Start:*** *2005* ***End:*** *Ongoing* ***Cost:*** *$2M*	The LiRo team provided CM services on an On-Call/Emergency basis. The contract involved work throughout all of Battery Park City. Projects included: • Rector Street Bridge repair • North End sidewalk widening and fence relocation • New ballfield maintenance shed • Installation of new street and directional signage	

PROJECT NAME, LOCATION	Capital Budget	Program/Project Management	Strategic Planning and Development	CIP Prioritization and Validation	Design Management	Organizational Development	Benchmarking and Baseline Assessments	Staff Training/Skills Technology Transfer	Regulatory Compliance/Consent Order Management	Document Controls and Progress Reporting	Cost and Schedule Tracking and Controls	Communications/Public Outreach	Subcontractor Coordination and Management	QA/QC Auditing Services	Procurement Support Services	Risk Analysis/Risk Management	Specification and Construction Contract Standardization	Interagency– Intergovernmental Liaison	Construction Contract Preparation, Negotiation, and Execution	Operations Management	Construction Management	Constructibility, Operability, VE Reviews	Claims Avoidance and Resolution
LiRo Program and Construction Management																							
Port Authority On-Call 2006-2010 Terminal 5/6 Redevelopment	*$900M*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MTA - East Side Access	$6.3B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NYCEDC High Line Reconstruction Project	$125M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
No. 7 Subway Line Extension, Program and Construction Management	$2.1B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LMCCC Program Management Services	$9M (fee)	✓	✓			✓			✓	✓	✓	✓				✓	✓	✓					
MTA TBTA Triborough Bridge Rehabilitation	$160M	✓		✓		✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓
Long Island Railroad Capital Improvement, Jamaica, NY	$2B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MTA-Bridges and Tunnels As-Needed Construction Management Services 2004-2007	$30M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NYSDOT Region 11 (New York City) and Region 5 As-Needed Construction Management Services 2005-2007	$170M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MTA-NYCT On-Call Scheduling Support Services 2004-2007	*$10M*	✓						✓	✓	✓		✓				✓						✓	
Post 9/11 Infrastructure Reconstruction, Lower Manhattan, NY	$700M	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
World Trade Center PATH Station Service Restoration Roadway Analysis	*$250K*	✓	✓		✓	✓			✓	✓				✓				✓				✓	
Post 9/11 Temporary PATH Station Pedestrian Analysis	$200M	✓			✓				✓			✓	✓	✓				✓					
City-Wide Facilities Upgrade (EMS, Fire Academy, Correctional Facilities), NYCDDC	$143M	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

RELEVANT EXPERIENCE

PROJECT NAME, LOCATION	Capital Budget	Program/Project Management	Strategic Planning and Development	CIP Prioritization and Validation	Design Management	Organizational Development	Benchmarking and Baseline Assessments	Staff Training/Skills Technology Transfer	Regulatory Compliance/Consent Order Management	Document Controls and Progress Reporting	Cost and Schedule Tracking and Controls	Communications/Public Outreach	Subcontractor Coordination and Management	QA/QC Auditing Services	Procurement Support Services	Risk Analysis/Risk Management	Specification and Construction Contract Standardization	Interagency– Intergovernmental Liaison	Construction Contract Preparation, Negotiation, and Execution	Operations Management	Construction Management	Constructibility, Operability, VE Reviews	Claims Avoidance and Resolution
NYC Housing Authority Renovation/Upgrading Program, NY	$265M	✓	✓	✓		✓			✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
NYC Department of Design and Construction (DDC) On-Call Construction Management Services for Shea and Yankee Stadia 2004-2006	$50M	✓	✓			✓	✓	✓	✓	✓	✓		✓		✓			✓	✓		✓	✓	✓
NYC School Construction Authority Emergency Response Management and Coordination Program	$265M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NYSDOT LIE – Grand Central Parkway to Van Dam Street, Queens, NY	$165M		✓		✓				✓	✓	✓	✓	✓	✓		✓	✓	✓			✓	✓	✓
USPS On-Call Construction Management Services 2000-2008	$60M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CUNY School of Architecture	$60M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NYCDDC New Bronx Family Intake Center	$50M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
McClaren Engineering																							
Long Branch Ferry Terminal Design & Entertainment Pier	$89M	✓	✓		✓	✓			✓			✓			✓			✓			✓		
Battery Park City Ferry Terminal	$70M	✓	✓		✓							✓			✓				✓				
Battery Park City Authority Inspection and Design Services for Marine Structures	$25M	✓	✓		✓	✓							✓	✓								✓	
DY Consultants																							
Delta Airlines, Terminals 2&3 JFK	$50M		✓		✓			✓	✓											✓			
Jet Blue Hangar, JFK	$50M	✓							✓		✓			✓	✓			✓					
Runway Safety Area Improvement Analysis									✓		✓			✓	✓			✓				✓	

Management Approach

E

Project/Program Management falls into two categories:

1. The owner has similar projects at separate sites, which may be designed and constructed by different architects/engineers and contractors. The owner however wants to impose programmatic standards on the process. These standards may include **consistency of design, operation, equipment, materials, document control, QA, accounting, warrantees, and schedule.** The overall goal is to ensure that even though each of these facilities was created separately they nevertheless reflect the Port Authority's standards and image.
2. The owner has multiple projects that are co-located. These mega-projects, made of separate smaller projects are because of their proximity or because of their functional interfaces, must be coordinated to ensure that all component elements are designed and constructed in the most efficient and effective manner. On mega-projects, because of their size and complexity several firms may be involved in the design and construction and there must be **project wide consistency in the design and construction process.**

The LiRo team has extensive experience managing both types of projects and programs. The approach is to create and establish a system based upon best practice architectural, engineering, and construction experience, and ensure that these systems are rigorously implemented.

The purpose of a program manager is to ***control costs, manage the schedule, and ensure that the new facility meets all of the client's goals and expectations.*** In essence, the program manager brings expertise that allows for strong administration and sound decision-making. Ultimately, this approach saves time and money.

How does the program manager do this? By guiding and coordinating the design and construction process from start to finish.

1. Project Management Plans

A1 Identifying your needs and goals for the facility and translating these into project management plans and design objectives.

The LiRo team will work with Port Authority personnel to develop the programmatic needs and project management plans for the project. This is an essential task because there is inherent competition for operations, administration, utility and retail space. It is also important to have a clear understanding of what the design goals are for the project in the context of other Port Authority projects which may be in the vicinity.

Large projects are not created in a vacuum and there are inevitably agendas imposed on public agencies to meet outside needs. All of these goals must be put into a concise design bid package that clearly identifies function goals, design guidelines, design schedule, and construction budgets. The design bid documents will also clearly identify the Architects/Engineers responsibilities during preconstruction and construction. It must be absolutely clear that the design documents are not the end of the process and that the ***designers are expected to play an important part in the review and approval of shop drawings, responding to Requests For Information, and resolving design flaws*** on an expeditious basis.

Success in the permitting and approval process starts at the design stage. The designer must be aware

that their design must meet all necessary codes and regulations, and they will need to have representatives on site at critical junctures to ensure that they can sign off on all building department forms. The need for a full understanding of the subsurface conditions of a site is vital to the success of a project. In its preparation of the design documents, ***the Design Team must include the services of a geo-technical firm who will perform full assessment of the site for geology, utilities, and hazardous materials.*** The findings of this survey must be incorporated into the design and bid documents for which the Design Team is accepting professional responsibility.

A.2,3,4 Identifying the key design expertise needed, developing selection criteria, and guiding you in selecting an architect.

The LiRo team will assist in the prequalification of design firms to ensure that all proposers have the technical expertise to provide the needed services. We will also assist in the preparation of Requests for Qualifications (RFQs) and Requests for Proposals (RFPs). All bid documents will be tightly linked to the selection criteria to ensure that proposers clearly understand the type and format of the information being requested. In addition, the fee proposed must clearly identify costs associated with the various tasks of the scope of services being provided. The fee will be broken down into phases by percentage so that ***the majority of the designer's fee is not paid out up front leaving little financial incentive to provide construction and closeout phase services.***

A.5 Coordinate project related risk analysis and management activities.

LiRo is well experienced in leading risk management activities, including risk planning, identification, qualitative and quantitative analyses, risk responses, and monitoring and controlling risk. We adhere to the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBoK 4th edition) and PMI's Practice Standard for Risk Management. We have provided risk identification and analysis for the World Trade Center construction as part of our work with for the Lower Manhattan Construction Command Center. This effort required LiRo to convene a two-week workshop of experts from around the world to work with the Port Authority and other stakeholders in identifying risks, ranging their impacts to the project schedule, evaluating and prioritizing their impacts, and performing quantitative (Monte Carlo) analyses to develop a probabilistic risk-adjusted schedule and budget. This approach mirrors PMI's Practice Standard for Risk Management, and it is the approach we take for all risk-related activities.

It is important to note that although the risk management activities described above take place during the planning phase of the project, the monitoring and controlling of project risks must continue throughout the life of the project. It is an iterative process that requires the integration of risk monitoring and controlling with project monitoring and controlling, continued awareness of risks and their trigger conditions, and the management and implementation of risk responses. LiRo offers PMI-certified project managers who will bring formal training in risk management and a culture of risk awareness to the Port Authority's projects.

2. Project Management Plans Implementation

B.1 Design Phase Coordination and Support

LiRo will take the lead in providing Design Phase coordination and support regarding the implementation of the management plans and the work performed by all project team members. Design

firms may have difficulty accessing information needed for their projects and then identifying a venue to resolve the conflicts identified. In this function, LiRo will conduct kick-off and progress meetings, and act as both liaison and mediator between the owner/designers, facility operations personnel and the various utilities and regulatory agencies.

B.2 Utility Design Conflicts:

The LiRo Program Management Team will ensure that all of the Utilities, Owners, and Agencies involved in the construction location are identified.

- Identifying construction conflicts and ensuring that the parties determine and agree upon who is financially responsible for resolving the conflict is necessary since this will have a significant impact on the solution options selected.
- Methodically working through each conflict to develop a workable design, with the understanding that all necessary information may not be available until test-pitting and/or actual excavation has been conducted.

B.3 Cost Estimating

Cost Estimating is an on-going process during the Design Phase. LiRo estimators will attend project meetings on a regular basis and will be available at all times to answer cost-related questions which emanate from the design process, both informally and by performing detailed cost studies of alternate proposals.

At various points during the design phase, LiRo will prepare construction cost estimates in the format prescribed by the Port Authority. LiRo anticipates preparing cost estimates at the following design phase milestones.

- Schematic, if feasible
- 60% Construction Documents
- 100% Construction Documents

A key element in this process will be the reconciliation of these estimates with those of the A/E's. Each of these estimates will be developed in a way which is consistent with the level of detail provided by the design documents.

B.4 Value Engineering

At LiRo, the Program Management Team fully understands that the performance of Value Engineering on any project must take into account the continuous usage that the facilities will encounter and temper that with required pay back terms over the project life. Often times the least costly equal value-value engineering approach does not apply to the life cycle of municipal facilities. However, the VE basics of an interdisciplinary group meeting for several days of intensive brainstorming and review of all aspects of the project will lead to a final design effort with the operations and maintenance requirements as well as the designer's objectives intact. The following summarizes our ***key qualifications for value engineering:***

- LiRo's staff includes veteran construction managers, design engineers, and architects who have completed 40-hour training programs in value engineering and applied VE principles on numerous projects.
- We have performed VE reviews both as construction managers and as members of design review teams.

- Our value engineering projects range from infrastructure and heavy construction to courts, healthcare, and recreational facilities.
- LiRo's diversity of expertise – civil, structural, architectural, mechanical, electrical, transportation, and sanitary engineering – enable us to adeptly provide value engineering across a broad range of engineering disciplines

B.5 Document Control

The Program Management Team will develop and provide an Integrated Electronic Document Controls System utilizing *Expedition*. The document filing structure will adhere to the Program's Work Breakdown Structure ("WBS") as much as possible. ***The Document Control System will constitute of a hard copy filing system mirrored by an electronic storage system with redundant daily backups.*** The document control system will include but not be limited to the following modules:

- Internal Correspondence
- Inter-Agency Correspondence
- Agreements/Memoranda of Understanding, etc.
- Contracts, Changes
- Shop Drawings and Requests for Information (RFIs)
- Construction Coordination Minutes of Meetings
- Daily Construction addressing interface points between projects and the Program milestones
- Transmittals
- Facility Force Account Work
- Drawings of Record

The Electronic Document Control System provides the capability of tracking and monitoring different document types by the program WBS or by common issues. It also includes a workflow engine that will allow the automatic routing of documents for responses or approval, following business rules defined in the Program procedures.

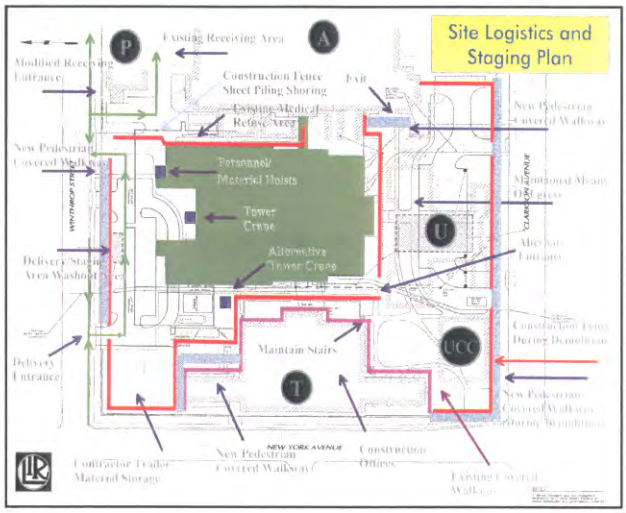
The Document Control System can be set up as a secured Web Site where Stakeholders can post or upload certain project documents. The server allows electronic transmittal and tracking of documents, version controls, and review status of documents and drawings.

B.6 Construction Procurement

LiRo will coordinate bidding and award of construction contracts, assess and recommend procurement options, prepare addenda, bid evaluations and recommendations for award. LiRo has extensive experience in contractor prequalification, bid and award and with developing reliable bid documents. These documents ensure that ***the Port Authority's interests will be protected.*** Bid documents must contain the essential elements of scope, plans, insurance, work rules, relevant M/WBE requirements and any other necessary requirements that can potentially affect the contractor's pricing of the project. Potential problems that may affect construction progress should be clearly identified so that ***claims may be avoided.*** In addition to a project involving multiple contractors, the relationship of the contractor to the overall schedule must be clearly specified, and it must be clear that time is of the essence and the Port Authority owns the schedule float.

Selecting the right contractor(s) is based on their experience, inspection of recently completed projects, current workload, and financial status. ***LiRo maintains a database of qualified local contractors to aid in developing a short list.***

B.7 Preconstruction Coordination



LiRo will support the Port Authority in evaluating the projects' plans and potential impacts. The LiRo PM Team members have developed a comprehensive methodology for evaluating realistic project durations. Meetings will be held with the Port Authority/Construction Managers/ Contractors to evaluate, review and comment on:

- Plans to mitigate project impacts on the community and ongoing operations
- Project Phasing and Logistics Planning
- Utility Coordination
- Heavy equipment placement planning – access, crane sweeps, street impacts
- Stakeholder and Community Communication and Outreach
- Interface and coordination with other projects
- Evaluation of whether the proposed schedule is realistic given project scope and risks
- Construction Management Plans (safety, security, QA/QC, documentation, testing)
- Status of Permits from DOB, EPA, NYSDOT, DEP and others, as may be applicable.

It has been LiRo's experience that the construction stakeholders are most cooperative when ***planning is done sufficiently far in advance so their plans can be adjusted without significant impacts on their project's cost or time.*** Once their plans are formalized, bid, and in construction, the flexibility is very limited. LiRo's Logistics Plan shall support the gathering of information for the various project construction activities, identify potential conflicts and work with the parties to develop a Master Plan with schedule commitments from the various parties involved.

3. Monitoring And Reporting

C.1 Project Controls and Scheduling

LiRo will lead the development and implementation of a Project Controls System that will enable proactive coordination of the work. ***The keystone of this effort shall be a Master Schedule*** of all work. In addition to identifying Critical Path and start and end dates, the schedule will also highlight critical:

- Interim project milestones – essential to identification of projects trending off schedule and in need of remedial attention.
- Logistical interface milestones – where one project must complete an effort so another project can proceed.
- Facility Force Account Work
- Closeout Periods – including Maintenance and Operations Training and Manuals
- Drawings of Record Submissions

Once developed, the schedule must be a useable and meaningful tool. Schedules on highly visible projects can be influenced by factors unrelated to construction realities. LiRo's experience is that

scheduling documents are most effective as coordination tools when distribution is limited to internal use.

The Master Schedule, in addition to focusing on the Critical Path for the projects, will also be manpower and material loaded to ensure that the cumulative needs of all the projects, at any point in time, do not exceed the resources available. In addition to the Master Schedule, Executive Reports will be issued monthly, which will provide the status of the overall program, detail trends, and identify critical issues. Funding issues will also be tracked to determine where these issues become critical to progressing the program.

C.2 Logistical Planning

Mega-projects by definition have a large impact both on the community and the construction logistics of the region. LiRo will take the lead in developing the Program Logistics Plan. The Logistics Plan will be dynamic – ***there will not be one solution, but rather a series of sub plans*** that reflect the changing landscape of construction impacts as the numerous projects throughout the area progress through their stages. The Logistics Plan must enable all parties to accomplish their construction in a safe and efficient manner, while also ensuring the continued operation and quality of life around the project area. The Logistics Plan must also coordinate with the Utilities Plan to ensure that it has been integrated into the overall construction program. Logistical planning will include:

- **Master Utilities Plan and Agreements**
- **Workforce Mobility Strategy**
- **Construction Coord. & Mitigation Plan**
- **Master Staging/ Logistics/ MPT Plan**
- **Program Safety Plan Reviews**

The Master Schedule will be prepared in Critical Path Method (CPM) format and will be maintained in hierarchical form so that summary and detailed reports may be easily produced. The Master Schedule will include all phases of Program Development including planning studies, environmental assessments, permitting, funding approvals, engineering, design reviews, bidding, construction, and commissioning. The Master Schedule will also include inter-project constraints and restraints consistent with the Program Phasing Plan. The Master Schedule is cost-loaded so that cash flow expenditure projections may be continually provided.

The Master Schedule is updated monthly based on the input received from all Stakeholders. We will prepare a Master Schedule report each month that focuses on:

- Changes in forecast schedule for any Program elements.
- Issues, concerns, or decisions required that are affecting Program schedule.
- Any unresolved project issues that could delay or interfere with the delivery of other elements.
- Recommended workarounds or options to recover delays.

LiRo will chair a monthly Master Schedule review meeting among key Program participants to review the report and focus on resolution of issues that are affecting Program progress.

The maintenance of a cost-loaded Master Schedule is also critical for supporting the Port Authority's overall Program Management budget plans.

C.3 Progress Review Meetings

Throughout the project, we will conduct progress review meetings and ***provide leadership to highlight unresolved issues and their respective impact on budget and schedule***. The meeting minutes and issues database will be available online to all approved parties through the web-based

project management system to facilitate faster resolution and allow management to focus on items by exception. Our Project Manager will conduct executive briefings at least monthly. At these briefings, the agenda will include the overall status of the Master Schedule, the budget status of all projects, and key concerns that require resolution.

C.4 Comprehensive Reporting

Progress reports will be required for all tasks and assignments to address schedule and cost performance. The reports will contain an executive summary of Program progress, identify areas of concern and action, programmatic level cost and schedule data focusing on variances to plan, and mitigation approaches. In addition, ***each project will have an individual summary of that project's cost and schedule performance.*** Appendices to the report will identify quality and safety issues. Detailed and summary cost management reports will be issued monthly, providing details of budgets, invoices, payments, costs incurred, and contract or work authorizations. Most importantly, the reports will include cost-to-complete forecasts for each work item so variances can be projected and recovery actions taken.

C.5 Safety Program

All employees, worksites, projects and subcontractors working under the direction of LiRo are held responsible for the items described in the project Health and Safety Program. A copy of this program is made available to all employees on each job site. All applicable local, state and federal regulations are upheld and maintained in accordance with such regulations and this Health and Safety Program. The Health and Safety Program identifies hazards involved in such operations and outlines the appropriate methods to perform the specified work in the safest manner available. Checklists are provided to summarize the criteria necessary to meet the requirements of the program. If additional information is necessary to meet the requirements of a specific task or job site, the health and safety officer for the project refers to the regulatory standards provided by OSHA. The items addressed in this program are upheld ***in accordance with all applicable OSHA regulations and industry standards.***

C.6 Claims Avoidance Program

LiRo's experience has dictated that the ***major claims avoidance begins during the design and preconstruction phase of the project*** with the development of quality construction documents. However, during the construction phase, construction procedures, particularly involving multiple contracts, require constant vigilance to avoid, mitigate, and reduce claims. During this phase, we therefore implement cost, schedule and contract controls to perform the following functions:

- Establish and implement the policies and procedures for quality control, including inspection, testing, and submittal reviews
- Administer the project in a fair and reasonable manner
- Establish effective procedures for processing and monitoring changes, submittals, requests for information and disputes
- Thoroughly document, with daily field reports, schedule reports, cost reports, photographs, and correspondence, the actions or inactions of each prime contractor.
- Keep the CPM schedule pro-active and the focal point of meetings, correspondence, and job progress.
- Notify, on a regular basis, each prime contractor as to the progress or lack thereof, as well as outstanding items. In essence, force the contractors to expedite the job.

Our experience with major construction programs has enhanced our capabilities in the field of claims prevention, mitigation and analysis. In the event that claims do arise, the project team has assembled a group of ***experts in the analysis and mitigation of construction claims.*** In the event of contractor claims, LiRo is prepared to provide services from claims analysis litigation support to expert testimony.

4. Program Level Management Services

D.1 Program Level Controls and Scheduling

LiRo will assist the Port Authority in the scheduling and implementation of selected programs and/or groups of programs by the development and implementation of a Master Program Controls System and Master Program Schedule that will enable ***proactive coordination of the various programs and/or projects.*** Key effort will be the identification and monitoring critical Port Authority objectives and program components, including:

- Annual and/or Program Resource Requirements
- Key project and program start and end dates and critical paths
- Interim project and program milestones – essential to identification of projects and programs trending off schedule and in need of remedial attention.
- Logistical interface project and program milestones – where initiatives compete for resources or must complete efforts so another can proceed.
- Tracking of key project and program M/WBE sub-contractor goals attainment

Executive Program Level Reports will be issued monthly, which status the overall program, detail trends, and identify critical issues. Funding issues will also be tracked to determine where these issues become critical to progressing the Port Authority's program objectives.

5. Program Management Support

E.1 Ancillary Program Management Support Services

LiRo will assist the Port Authority in the provision of ancillary program management support services as may be required. LiRo has extensive experience in providing program management services for our clients on programs and projects that are prominently situated in the public's eye.

E.2 Bidability and/or Constructability

We believe that it is highly advantageous to implement a disciplined project constructability program in the early stages when the opportunity for positive impact is often greater than in later stages. Prior to bid, LiRo will review the plans and specifications, seeking out the inconsistencies and ambiguities that impact cost, schedule and quality.

Design and construction work in and around operating Port Authority facilities poses a special set of challenges, and requires a dependable set of construction bid documents that must reflect actual construction details and work processes, contractor capabilities, existing conditions and necessary requirements to maintain uninterrupted operations. We will ensure that the contract documents are sufficiently complete in advance of bidding, to result in budget conformant bids, to allow the construction to begin immediately thereafter, and to enable the work to proceed unimpeded by procurement, design, detailing or budget issues.

Document coordination and review prior to bidding is critical to thoroughly review the documents for clarity, completeness, and to eliminate potential conflict issues. Our focus will be to eliminate change orders, errors and omissions, and delays.

LiRo will recommend changes to clarify trade responsibilities and eliminate conflicts, to simplify details and to improve the overall clarity of the design documents. We will confirm that the special requirements clearly delineate procedures and criteria for occupancy, systems turnover, testing, punchlists, as-built/record drawings, commissioning and acceptance. Our multidisciplinary, bidability and constructability approach has proven to provide our clients with truly reliable, cost and schedule effective bid documents.

E.3 As-Built Drawings/Record Drawings

During construction, LiRo will work closely with the Port Authority and facility personnel to plan a smooth transition from construction to acceptance/occupancy. This plan, which includes maintenance of records and preparation for punch lists, final inspections, as-built/record drawings and maintenance training and turnover procedures, is also included in the detailed construction schedule. As required, ***closeout procedures will be enforced for areas of beneficial occupancy to avoid post-occupancy conflicts*** with the prime contractors.

LiRo will work with the A/E Design Consultant, the Port Authority, and facilities personnel to prepare a ***running punch list*** to be addressed as construction is completed, supervise and ensure the closeout of these items. In addition, we will ensure that the contractor prepares a set of marked up plans for preparation of as-built drawings for submission to the facility and/or the Port Authority. Major items include:

- O&M Manual finalization, and training for maintenance personnel
- Final submittal of updated shop drawings and cuts
- Final as-built drawings
- Final inspections and punch lists

To ensure that all O&M manuals for the equipment are furnished, ***we require their submittal prior to payment in excess of fifty percent of the total contract cost.*** These manuals will be used to ensure that initial testing of equipment is done in accordance with the manufacturer's specifications. Spare parts inventory, warranties and guarantees, as necessary, will be provided. We will work with user agencies to coordinate and schedule training and video-taping, as may be required, of personnel on specialized equipment. Prior to the end of the guarantee period, we will prepare a report of discrepancies and deficiencies applicable to the guarantee and will work with the contractors or suppliers to have these items corrected.

E.4 Support Services

The LiRo team has a proven record of providing superior services in program and project management support for our public sector clients on highly critical, highly visible major projects and programs. Our team's qualifications and experience summarized in this document profile our capabilities to provide a wide range of dependable program support services, as may be required, to prepare technical presentations and assist in responding to inquires from outside entities and the public. LiRo's continuing work as Program Manager for the Lower Manhattan Construction Command Center represents, among others, directly relevant, proven, comprehensive, program management ***support capabilities focused on senior management's organizational objectives*** and on the preparation of information for distribution to, access by, and in response to requests by stakeholders and the public.

E.5 Project Procedures Manual, Document Controls and Primavera

LiRo will tailor our Project Procedures Manuals specifically for the Port Authority. The Project Procedures Manual establishes the procedures, and the protocols, which must be followed through the life of the project. It establishes the type and schedule of meetings at various stages. It clearly outlines the lines of responsibility and authority of the program and/or project team members. It incorporates the design, bidding, construction schedule, and pertinent sections of policy, procedure and operations manuals (including plans for security, life safety, utility management, hazardous materials, equipment management, security and emergency preparedness.

We couple the use of the Manual with the *Primavera Project Expedition* software to ensure that all program and project level documents, i.e. change orders, request for clarifications, invoices, shop drawing submittal process, etc. are monitored in real time and that all of the team members understand what is expected and when it is due. This is especially useful in managing the implementation of program management initiatives and construction progress, as ***it keeps senior management continually apprised and informed, keeps the contractors on constant notice, and also assists in potential future claim mitigation.***

LiRo will maintain a Document Controls System for the Port Authority utilizing *Expedition*. The document filing structure will adhere to the Program's Work Breakdown Structure ("WBS") as much as possible. The document control system includes a workflow engine and modules that allow the automatic routing of documents for responses or approval, and to track and expedite the following critical processes and documents, including, but not limited to::

- Contracts, Changes
- Shop Drawings and Requests for Information (RFIs)
- Facility Force Account Work
- Drawings of Record

The Document Control System can be ***set up as a secured Web Site*** where Stakeholders can post or upload certain project documents. The server allows electronic transmittal and tracking of documents, version controls, and review status of documents and drawings.

E.6 Project Management Training and Workshops

LiRo has extensive experience providing project management training and workshops, as may be required, for our staff and for our clients. Our programs are based on the best industry practices, our project procedures manuals and tailored to the specific requirements of our client's organization protocols, policies and procedures. ***Training ranges from introductory project management practices through highly detailed primavera-based project controls, scheduling, document controls and cost engineering systems.***

Additionally, our subconsultant team member, PMA, is a Primavera Authorized Representative (PAR), who provides training and implementation for the entire suite of Primavera products and services, including PrimeContract®, Primavera Project Planner® (P3), SureTrak® Project Manager, and Primavera® (formerly Enterprise, TeamPlay, and Primavision) and Primavera Expedition®.

Hourly Rates/Multiplier Breakdown

F

1. Multiplier Breakdown

Provided herein, is the multiplier for the LiRo Team, including all of its components as requested in the Submission Requirements of the RFP. Please note that the entire LiRo Team will be utilizing the same multiplier. LiRo Program and Construction Management's Team multiplier is **1.97.**

Multiplier Components:

Direct Project Payroll	1.00
Overhead & Payroll Burden	
- Vacation & Sick Pay	0.07
- Holiday Pay	0.06
- Payroll Taxes	0.10
- Employee Fringe Benefits	0.09
- Workers' Compensation	0.01
- Indirect & Adm. Salaries	0.30
- Legal, Acct'g & Consultants	0.04
- Rent & Utilities	0.03
- Cleaning & Maintenance	0.01
- Office Supplies & Service	0.01
- Telephone	0.01
- Auto & Travel	0.03
- Professional Development	0.01
- Professional Liability Insurance	0.01
- Other Insurance	0.02
- Equip. Rental & Field Supplies	0.01
- Business Taxes	0.01
- Depreciation & Amortization	0.02
Total Overhead	0.85
Overhead + Direct Project Labor	1.85
Profit	0.12
TOTAL MULTIPLIER:	**1.97**

1. Mulitplier Breakdown
2. Cost Analysis

2. Cost Analysis

Our Team's Cost Analysis / Billing Rate Schedule for this 'Call-In' Assignment is included in the following pages. This Rate Schedule shows the billing rates of all the available proposed team members, including job titles for architectural, engineering and other technical personnel who may be assigned to the anticipated tasks. Following the billing rate schedule is our company policy for compensation for premium pay.

PERSONNEL RATE SCHEDULE

						**Status: E - Employee; SC - Subconsultant		
Firm Name	**LiRo Program and Construction Management, PC**					***Multiplier will = 1 for partners and principals		
PANYNJ Title	**Employee Name**	**Project Title**	**Status****	**Actual Hourly Rate**	**Multiplier*****	**Billing Rate**	**Premium Rate (Actual)**	
							OT	**Night**
LiRo								
Project Executive	Tormenta, M. Luis	Project Executive	E	$125.00	1.00	$125.00	N/A	N/A
Project/Contract Manager	Burton, Michael	Program/Project Contract Manager	E	$84.14	1.00	$84.14	N/A	N/A
Sr./ Program Project Managers	Ahrens, James	Senior Program/ Project Manager	E	$84.26	1.97	$166.00	$84.26	$92.69
	Althoff, Gordon	Senior Program/ Project Manager	E	$74.19	1.97	$146.16	$74.19	$81.61
	Aidikoff, Brant	Senior Program/ Project Manager	E	$94.10	1.97	$185.38	$94.10	$103.51
	Bailey, Michael	Senior Program/ Project Manager	E	$108.23	1.97	$213.21	$108.23	$119.05
	Balog, Gilbert	Senior Program/ Project Manager	E	$74.09	1.97	$145.96	$74.09	$81.50
	Bendetti, Michael	Senior Program/ Project Manager	E	$77.88	1.97	$153.42	$77.88	$85.67
	Bifulco, Eugene	Senior Program/ Project Manager	E	$91.29	1.97	$179.84	$91.29	$100.42
	Blond, Lawrence	Senior Program/ Project Manager	E	$108.23	1.97	$213.21	$108.23	$119.05
	Bornkamp, Donald	Senior Program/ Project Manager	E	$68.63	1.97	$135.20	$68.63	$75.49
	Busch, Raymond	Senior Program/ Project Manager	E	$93.27	1.97	$183.74	$93.27	$102.60
	Cohen, Jerrold	Senior Program/ Project Manager	E	$88.91	1.97	$175.15	$88.91	$97.80
	Deprima, Leonard	Senior Program/ Project Manager	E	$82.27	1.97	$162.07	$82.27	$90.50
	Dolce, Anton	Senior Program/ Project Manager	E	$74.52	1.97	$146.81	$74.52	$81.97
	Fogel, Bernard	Senior Program/ Project Manager	E	$75.01	1.97	$147.78	$75.01	$82.52
	Fox, Joseph	Senior Program/ Project Manager	E	$67.16	1.97	$132.30	$67.16	$73.87
	Franco, Frank	Senior Program/ Project Manager	E	$86.27	1.97	$169.95	$86.27	$94.90
	Green, Jim (MCL)	Senior/ Program Project Manager	SC	$43.41	1.97	$85.52	$43.41	$47.75
	Hall, David	Senior Program/ Project Manager	E	$72.34	1.97	$142.50	$72.34	$79.57
	Holmstrom, Kenneth	Senior Program/ Project Manager	E	$72.76	1.97	$143.34	$72.76	$80.04
	Hurley, Joseph	Senior Program/ Project Manager	E	$87.87	1.97	$173.10	$87.87	$96.66
	Johansen, Arthur	Senior Program/ Project Manager	E	$73.35	1.97	$144.49	$73.35	$80.68
	Kruezer, Robert	Senior Program/ Project Manager	E	$75.76	1.97	$149.25	$75.76	$83.34
	Levi, Murray	Senior Program/ Project Manager	E	$75.38	1.97	$148.50	$75.38	$82.92
	Markowitz, Bernard	Senior Program/ Project Manager	E	$75.43	1.97	$148.59	$75.43	$82.97
	Mascaro, Michael	Senior Program/ Project Manager	E	$79.03	1.97	$155.69	$79.03	$86.93
	Moody, Brian (PMA)	Senior/ Program Project Manager	SC	$42.57	1.97	$83.86	$42.57	$46.83
	Owen, Douglas	Senior Program/ Project Manager	E	$67.68	1.97	$133.33	$67.68	$74.45
	Psillos, George	Senior Program/ Project Manager	E	$77.06	1.97	$151.81	$77.06	$84.77
	Radafshar, Bijan	Senior Program/ Project Manager	E	$79.75	1.97	$157.11	$79.75	$87.73
	Rafat, Mike	Senior Program/ Project Manager	E	$111.59	1.97	$219.83	$111.59	$122.75
	Tilleli, Ralph	Senior Program/ Project Manager	E	$76.40	1.97	$150.50	$76.40	$84.03
	Turton, Peter	Senior Program/ Project Manager	E	$128.67	1.97	$253.48	$128.67	$141.54
	Valdemira, Vincent	Senior Program/ Project Manager	E	$90.62	1.97	$178.52	$90.62	$99.68
	Wagh, Vikas	Senior Program/ Project Manager	E	$91.48	1.97	$180.22	$91.48	$100.63
	Wesolowski, Martin	Senior Program/ Project Manager	E	$69.11	1.97	$136.15	$69.11	$76.02
	Wilson, Ronald	Senior Program/ Project Manager	E	$80.47	1.97	$158.53	$80.47	$88.52
	Yap, Dennis (DY)	Senior/ Program Project Manager	SC	$69.71	1.97	$137.33	$69.71	$76.68

PERSONNEL RATE SCHEDULE

						**Status: E - Employee; SC - Subconsultant		
Firm Name	**LiRo Program and Construction Management, PC**					***Multiplier will = 1 for partners and principals		
PANYNJ Title	**Employee Name**	**Project Title**	**Status****	**Actual Hourly Rate**	**Multiplier*****	**Billing Rate**	**Premium Rate (Actual)**	
							OT	**Night**
	Zanoni, Christopher	Senior Program/ Project Manager	E	$73.48	1.97	$144.76	$73.48	$80.83
Program/ Project Managers	Abdo, Rasem	Program/Project Manager	E	$65.65	1.97	$129.33	$65.65	$72.22
	Achouri, Aomar	Program/Project Manager	E	$50.21	1.97	$98.92	$50.21	$55.23
	Albergo, Michael	Program/Project Manager	E	$74.40	1.97	$146.57	$74.40	$81.84
	Ansari, Abid	Program/Project Manager	E	$66.51	1.97	$131.02	$66.51	$73.16
	Asquith, Steven	Program/Project Manager	E	$62.22	1.97	$122.58	$62.22	$68.44
	Belling, Michael	Program/Project Manager	E	$59.52	1.97	$117.26	$59.52	$65.48
	Byrnes, Michael	Program/Project Manager	E	$45.44	1.97	$89.52	$45.44	$49.99
	Caggiano, Anthony	Program/Project Manager	E	$67.76	1.97	$133.49	$67.76	$74.54
	Colabella, Todd	Program/Project Manager	E	$51.65	1.97	$101.76	$51.65	$56.82
	Comilloni, Eugene	Program/Project Manager	E	$45.55	1.97	$89.73	$45.55	$50.10
	Comunelli, Louis	Program/Project Manager	E	$62.95	1.97	$124.02	$62.95	$69.25
	Daniels Matt (PMA)	Program/Project Manager	SC	$40.00	1.97	$78.80	$40.00	$44.00
	Eckhoff, James	Program/Project Manager	E	$69.94	1.97	$137.78	$69.94	$76.93
	Enang, Joseph	Program/Project Manager	E	$47.27	1.97	$93.12	$47.27	$51.99
	Eskridge, John	Program/Project Manager	E	$52.13	1.97	$102.69	$52.13	$57.34
	Gaspari, James	Program/Project Manager	E	$70.39	1.97	$138.67	$70.39	$77.43
	Gibbons, Thomas	Program/Project Manager	E	$46.46	1.97	$91.53	$46.46	$51.11
	Hakimian, Phillip (WP)	Program/Project Manager	SC	$32.00	1.97	$63.04	$32.00	$35.20
	Iannuzzi, Matthew	Program/Project Manager	E	$58.65	1.97	$115.54	$58.65	$64.51
	Mastropieri, Lisa (DY)	Program/Project Manager	SC	$62.50	1.97	$123.13	$62.50	$68.75
	Mase, Christopher (PMA)	Program/Project Manager	SC	$34.00	1.97	$66.98	$34.00	$37.40
	Sartoris, Edward	Program/Project Manager	E	$65.98	1.97	$129.98	$65.98	$72.58
	Silver, Nancy	Program/Project Manager	E	$51.92	1.97	$102.28	$51.92	$57.11
	Singh, Prem	Program/Project Manager	E	$48.94	1.97	$96.40	$48.94	$53.83
	Smolenski, Steven (DY)	Program/Project Manager	SC	$62.00	1.97	$122.14	$62.00	$68.20
	Sung Hun Cho (WP)	Program/Project Manager	SC	$32.00	1.97	$63.04	$32.00	$35.20
	Swanson, Mark	Program/Project Manager	E	$71.38	1.97	$140.62	$71.38	$78.52
	Venechanos, Leonard	Program/Project Manager	E	$63.15	1.97	$124.40	$63.15	$69.46
	Wall, William	Program/Project Manager	E	$59.63	1.97	$117.46	$59.63	$65.59
Schedulers	Apostolou, Jamie (PMA)	Scheduler	SC	$94.00	1.97	$185.18	$94.00	$103.40
	Barsky, Robert	Scheduler	E	$76.91	1.97	$151.51	$76.91	$84.60
	Chattaway, Andrew (PMA)	Scheduler	SC	$145.00	1.97	$285.65	$145.00	$159.50
	Carrion, Anthony	Scheduler	E	$52.00	1.97	$102.44	$52.00	$57.20
	Gifford, George	Scheduler	E	$47.01	1.97	$92.61	$47.01	$51.71
	Graceffa, Giovanni	Scheduler	E	$56.50	1.97	$111.31	$56.50	$62.15
	Kalmus, Philip	Scheduler	E	$52.53	1.97	$103.48	$52.53	$57.78
	McBaine, Dane (PMA)	Scheduler	SC	$113.00	1.97	$222.61	$113.00	$124.30
	Patel, Purvasha (PMA)	Scheduler	SC	$94.00	1.97	$185.18	$94.00	$103.40
	Junjua, Sadia (PMA)	Scheduler	SC	$120.00	1.97	$236.40	$120.00	$132.00
	Walters, Zach (PMA)	Scheduler	SC	$92.00	1.97	$181.24	$92.00	$101.20

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				Hourly Rate			**OT**	**Night**
Cost Engineers/Estimators	Curran, William	Cost Engineer/Estimator	E	$54.59	1.97	$107.54	$54.59	$60.05
	Daulatani, Prakash	Cost Engineer/Estimator	E	$54.73	1.97	$107.83	$54.73	$60.21
	Egbert, Wayne	Cost Engineer/Estimator	E	$57.00	1.97	$112.29	$57.00	$62.70
	Frysztacki, Edward	Cost Engineer/Estimator	E	$71.82	1.97	$141.49	$71.82	$79.00
	Pagani, Steve (PMA)	Cost Engineer/Estimator	SC	$141.00	1.97	$277.77	$141.00	$155.10
	Paladino, Alfio	Cost Engineer/Estimator	E	$58.74	1.97	$115.72	$58.74	$64.61
	Yong, Mireya	Cost Engineer/Estimator	E	$51.25	1.97	$100.96	$51.25	$56.38

LiRo Policy – Compensation for Premium Pay

employees on the Friday of payroll and will be mailed on the Wednesday following the end of the pay period to the home address of field employees so that they arrive by the pay day.

Forms to authorize direct deposits are available from the Accounting or Human Resources Department.

2.2.3 Calculation of Pay Rate

All salaries quoted, whether for an exempt or non-exempt employee, will be converted to a basic hourly rate in calculating pay. Salaries quoted per week will be divided by 40; salaries quoted per year will be divided by 2,080.

2.2.4 Payroll Deductions

The law requires deductions for federal, state, and local income taxes, Social Security (FICA) and New York State short term disability. Income tax deductions will be made based on properly completed tax withholding forms while statutory deductions will be made automatically in accordance with applicable laws. Other deductions for various insurance and retirement programs will be made upon an employee's written authorization and in accordance with Company policies.

2.2.5 Compensation for Overtime

Overtime is paid based on established LiRo policies and is not paid based on the reimbursement policies of a particular client or project or on a job-by-job basis. In general, to receive compensation for overtime, an employee must have the overtime authorized by their supervisor prior to working it, except for field personnel whose overtime may be necessitated by the schedule requirements of the contractor and/or client.

All employees are classified as either exempt (not entitled to overtime pay) or non-exempt (entitled to time-and-a-half pay for overtime) in accordance with New York State Department of Labor (NYS DOL) regulations. An employee's classification depends on a variety of factors, including job function and predominant type of work to be performed, necessity for a degree, and level of supervisory or managerial responsibilities.

In addition to the exempt/non-exempt designation, LiRo further classifies employees in category "A", "B" or "C". Classification A includes all employees who are considered as non-exempt under NYS DOL rules. For employees exempt from time-and-a-half pay, LiRo has opted to pay certain groups of employees at their straight time rate for overtime hours. These employees are in classification B. All other exempt employees are in classification C and receive no additional compensation for their overtime hours.

employees on the Friday of payroll and will be mailed on the Wednesday following the end of the pay period to the home address of field employees so that they arrive by the pay day.

Forms to authorize direct deposits are available from the Accounting or Human Resources Department.

2.2.3 Calculation of Pay Rate

All salaries quoted, whether for an exempt or non-exempt employee, will be converted to a basic hourly rate in calculating pay. Salaries quoted per week will be divided by 40; salaries quoted per year will be divided by 2,080.

2.2.4 Payroll Deductions

The law requires deductions for federal, state, and local income taxes, Social Security (FICA) and New York State short term disability. Income tax deductions will be made based on properly completed tax withholding forms while statutory deductions will be made automatically in accordance with applicable laws. Other deductions for various insurance and retirement programs will be made upon an employee's written authorization and in accordance with Company policies.

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All employees are classified as either exempt (not entitled to overtime pay) or non-exempt (entitled to time-and-a-half pay for overtime) in accordance with New York State Department of Labor (NYS DOL) regulations. An employee's classification depends on a variety of factors, including job function and predominant type of work to be performed, necessity for a degree, and level of supervisory or managerial responsibilities.

In addition to the exempt/non-exempt designation, LiRo further classifies employees in category "A", "B" or "C". Classification A includes all employees who are considered as non-exempt under NYS DOL rules. For employees exempt from time-and-a-half pay, LiRo has opted to pay certain groups of employees at their straight time rate for overtime hours. These employees are in classification B. All other exempt employees are in classification C and receive no additional compensation for their overtime hours.

An employee's classification as exempt/nonexempt and A/B/C is determined at the time of hire and is noted on the Payroll Status Change form completed by the employee's supervisor. The classification will be changed only if an employee's job functions change and a new Payroll Status Change form is submitted to the Accounting Department.

Non-Exempt Employees

All non-exempt employees are in Classification A (including but not limited to CADD operators, accounts receivable accountants, clerical employees, inspectors, assistant office engineers, jr. engineers and architects, asbestos monitors and industrial hygienists) and will be paid overtime at the rate of 1½ times their regular rate of pay for all hours worked beyond 8 hours in a workday, including Saturday and Sunday.

Overtime rates will also be paid for any regular hours worked above 40 in a week (the work week runs from Saturday thru Friday). For this purpose, regular hours include hours worked (excluding holiday, vacation, sick and personal time) each day up to a maximum of eight in a day. As an example: If an employee works 10 hours on Monday, Tuesday, Wednesday, Thursday and Friday, he/she will be paid for 40 regular hours and 10 overtime hours (two hours over eight on five days) . Had the employee worked eight hours on each of those days and 10 hours on Saturday, he/she would also be paid for 40 regular hours and 10 overtime hours (two hours over eight on Saturday plus eight hours over 40 regular for the week). If the employee puts in 50 hours by working 11 hours Monday through Thursday and six hours on Friday, the employee will be paid for 12 hours at the overtime rate and 38 regular hours.

Part-time and temporary employees (those who do not routinely work 5 days per week, 8 hours per day) shall only be paid for overtime at 1½ times their regular hourly rate for hours worked in excess of 40 during the workweek. Otherwise, the employee's regular hourly rate will be used. Vacation, holiday, sick or personal time are not considered as time worked for purposes of determining overtime. However, all time worked on a holiday by a full-time employee will be reimbursed at a time-and-a-half rate, in addition to being paid for the holiday.

Exempt Employees

Exempt employees are those who are not required to be paid overtime, in accordance with applicable wage and hour laws. However, exempt employees in Classification B (including but not limited to accountants, administrative managers and assistants, architects, chief inspectors, engineers, marketing specialists, office engineers, resident engineers, sr. engineers, geologists/scientists, project managers and schedulers/estimators) will be paid additional compensation at their straight time rate for all hours worked beyond 8 hours in a workday. All other exempt employees are included in Classification C (including but not limited to Associates and Officers/Principals) and will be paid a fixed salary, regardless of the number of hours worked.

2.2.6 Night Shift Differential

A night shift differential of 10% may be paid to employees in Classifications A and B who work between the hours 8:00 p.m. and 6:00 a.m. and whose normal work hours are between 6:00 a.m. and 8:00 p.m. A night shift differential will not be paid on any hours that are paid at a premium overtime rate. Night shift hours must be segregated on a separate line on an employee's time sheet.

Night shift differential will not be paid to employees who are expected to work evening hours when they are hired. The night shift compensation will be included in the employee's regular pay rate. All time for these employees should be entered on their time sheet as regular hours.

2.2.7 Pay for Working on a Holiday

Non-exempt regular employees (classification A) receive holiday pay plus time-and-a-half for all hours worked on a LiRo holiday. Thus, for each hour worked on a holiday, the non-exempt employee receives a total of 2½ times their regular hourly rate. Exempt regular employees in classification B receive holiday pay, plus straight time for all hours worked on holiday. Thus, for each hour worked on a holiday, exempt employees in classification B receive a total of two times their regular hourly rate. No extra compensation will be paid for working on a client holiday that is not a LiRo holiday (see section III - 1.2 for a list of LiRo holidays).

Non-exempt part-time employees in classification A will receive holiday pay for those hours that they would have routinely worked on the day the holiday falls. Should these employees work on the holiday, they will be paid at time-and-a-half for those hours worked which, when added to the hours they would have routinely worked on that day if not a holiday, exceed eight hours. For example, if a part-time employee who routinely works six hours a day, five days a week, works four hours on a holiday, that employee will be paid for eight hours at their straight time pay rate and two hours at time-and-a-half.

Temporary employees are not entitled to holiday pay and will be paid for time worked on a holiday as if it were any regular workday.

New employees will not be paid for any holiday falling after their date of employment during their first week of work unless they have worked at least two days during that week. Similarly, terminated employees will not be paid for any holiday falling before their date of termination during their last week of work unless they have worked at least two days during that week.

2.2.8 Meal Allowance

If three or more hours of overtime are worked in a day, employees are entitled to receive a meal allowance of $10.00. To be reimbursed for the meal allowance, these amounts should be

M/WBE Participation

G

LiRo's Subconsultants

LiRo's subconsultants and their roles are shown on the Project Team Organization Chart (Section C.) The members of our team include:

1. Subconsultants
2. M/WBE Participation

- ***McLaren Engineering Group*** – providing project management support.
- ***PMA Consultants, LLC (MBE)*** - providing project controls support and construction inspection.
- ***Works-In-Progress Associates, LLC (WBE)*** - providing construction management and administrative support.
- ***DY Consultants (MBE)*** - providing project management support.

The multiplier for each subconsultant on LiRo's Team is shown in Section F. With respect to the percent distribution of hourly participation for our minority-owned and women-owned business enterprises, LiRo will meet or exceed the Authority's-stated goals of 12% for certified MBEs and 5% for certified WBE participation. Technical qualifications of LiRo's subconsultants are provided in Section C which also includes the resumes of their construction professionals.

M/WBE Participation

LiRo is fully committed to meet or exceed The Port Authority's goals for M/WBE participation for Construction Management Services to be provided under this contract.

M/WBE firms have held meaningful roles on LiRo contracts, providing a broad range of technical services including project management, construction management, construction inspection, cost estimating, scheduling, risk analysis, survey, mechanical/electrical design, environmental engineering, community participation, and more.

LiRo's policy is to make a good faith effort to identify meaningful work that will be assigned to certified M/WBE subconsultants as specific tasks are identified.

List of Firm's Affiliates

H

LiRo Engineers, Inc.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Architects + Planners, P.C.
EIN: [redacted]
Type of Business: For profit
111 Broadway – Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Program and Construction Management, P.C.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Consulting Engineer, P.C.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Contractors, Inc.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Architects & Engineers West, P.C.
(New Jersey)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Architects & Engineers, P.C.
(Connecticut)
EIN [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Architects + Engineers, P.C
(Pennsylvania)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Program and Construction Management, Inc. (California)
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

Conflict of Interest

I

At this time, LiRo Program and Construction Management, P.C. does not have any nor do we foresee any potential conflict of interest.

Terms and Conditions

J

LiRo Program and Construction Management, P.C. does not have any exceptions to the standard agreement.

MALCOLM PIRNIE

Malcolm Pirnie, Inc.
17-17 Route 208 North
Fair Lawn, NJ 07030
T: 201.797.7400 F: 201.797.4399
www.pirnie.com

October 20, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attn: RFP Custodian

Re: Proposal for the Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014 (RFP #22388)

Dear RFP Custodian:

Malcolm Pirnie Inc. is pleased to submit the enclosed proposal both in hard copy and on compact disk for review and consideration by the Port Authority in evaluating our qualifications for the above referenced services.

We value our long-standing relationship since the late 1980's/early 1990's with the Port Authority and our work with your staff over the years. We have assembled an excellent and motivated team of engineers who have worked on a wide range of environmental projects at locations in New York and New Jersey as well as throughout the United States. Malcolm Pirnie would welcome the opportunity to provide project management services to the Port Authority.

The attached proposal outlines our qualification, rates, multiplier and other requirements outlined in RFP #22388. With respect to Part II.J., Malcolm Pirnie has no objections to the terms outlined in the standard agreement.

Please contact myself (201-398-4405) or Carmine Marra (718-609-8700) if you have any questions or require more information.

Very truly yours,

MALCOLM PIRNIE, INC.

Robert S. Johnston, PE, PG
Vice President

dev
enclosures; A490727

THE PORT AUTHORITY OF NY & NJ

PROPOSAL

Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014

RFP# 22388

October 2010

A490727

Solutions for Life

MALCOLM PIRNIE

The Port Authority of New York and New Jersey

Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014

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Attachment B

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ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

Malcolm Pirnie, Inc.
(Company)

(Signature)

Vice President
(Title)

10/20/10
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

The Port Authority of New York and New Jersey

Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014

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ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   Malcolm Pirnie, Inc.

2. Business Address (to receive mail for this RFP):

   17-17 Route 208 North, 2nd Floor
   Fair Lawn, NJ 07410

3. Business Telephone Number: 201-398-4405

4. Business Fax Number: 201-797-4399

5. Firm website: www.Pirnie.com

6. Federal Employer Identification Number (EIN): _ [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 02 / 25 / 1921

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   Please refer to Section H - Affiliates.

9. Officer or Principal of Firm and Title:

   Robert S. Johnston, Vice President

10. Name, telephone number, and email address of contact for questions:
    Robert S. Johnston, 201-398-4405

    RJohnston@Pirnie.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

The Port Authority of New York and New Jersey

Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014

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Staff Qualifications and Experience

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Staff Qualifications and Experience

Management Approach To "Call-In" Projects

We have assembled a team of experienced program and construction managers who have experience with call in contracts, and have performed thousands of similar projects in the New York/New Jersey area, including program and construction management. Malcolm Pirnie's service with the Port Authority spans the last 15 20 years, resulting in over 100 projects performed for the Port Authority. We have provided a short bio of the proposed Program Manager, Mr. Carmine Marra and Contract Officer, Mr. Robert S. Johnston below. **Professional resumes for Mr. Marra and other key members of the contract team are provided on the following pages as requested in the RFP.** Resumes for additional technical support are available upon request. A majority of the team members have worked on the projects discussed in Section D.

Carmine Marra, PE - Program Manager

The program manager role is critical to the effective functioning of the delivery team for large, complex projects. This individual is the technical and administrative leader for the project staff and is the direct contact person for the client's contract manager. The program manager is responsible for:

- Facilitating communications among the Malcolm Pirnie project team members and between the respective Malcolm Pirnie and client project teams.
- Providing overall technical and administrative guidance and insight on all aspects of project execution.
- Reviewing scoping, staffing, and budgeting for individual project assignments as well as performing conflict of interest inquiries.
- Adherence to project control and QA/QC procedures.
- Disseminating information and lessons learned to task order leaders in the interest of controlling costs and streamlining project activities.
- Maintaining a high level of consistency and quality on all administrative and technical deliverables to achieve client satisfaction throughout the entirety of the contract.

Mr. Carmine Marra, PE will serve as Program Manager for this project. Mr. Marra has more than 35 years in the industry and has extensive experience as program manager supervising the construction and startup of a broad range of engineering projects. Currently, he is the Program/Construction Manager for the Newtown Creek Water Pollution Control Plant, a $4.0 billion dollar construction upgrade, located in Brooklyn, for the New York City Department of Environmental Protection (NYCDEP) which is nearing completion. As the

Program/Construction Manager, he is responsible for all activities associated with the plant's capital improvement program including the management of the resident engineering staff of over 100 engineers and technical assistants. He also administers the priorities and phasing of multidisciplinary activities for NYCDEP to meet New York State Department of Conversation imposed Consent Decree to achieve Federal clean water standards.

Another large project performed for the New York City Department of Environmental Protection includes the Owls Head Water Pollution Control Plant located in Brooklyn NY. As Program Manager, Mr. Marra managed contract administration, project and construction management for $90-million capital improvement project, including powerhouse building renovation on replacing power and raw sewage handling equipment.

Other large projects have included the Cedar Creek Water Pollution Control Plant for Nassau County NY. He was responsible for contract administration and project and construction management for capital improvement projects including a $55 million digested sludge complex, sludge thickening facility, odor control facility, a $20 million primary sedimentation tank including process air blowers, installation of a 96 in force main and odor control facility, a $5 million water analysis laboratory, and a $29 million RAS building with six 110 ft diam final sedimentation tanks.

Robert S. Johnston – Contract Officer

Robert Johnston, PE, PG, Vice President, will serve as Contract Officer, as he has on our current "call in" contracts. Over 25 years, Mr. Johnston has managed hundreds of projects, and provided assistance and consultation during construction. He is familiar with all of the Port Authority's facilities, and with their operating and contracting procedures.

Summary of Project Experience

As requested in the RFP, to the right we have provided a table illustrating our key staff's project experience with respect to number of projects and overall costs.

Staff Name	No. of Projects	Project Costs
Carmine Marra	25+	>$1B
Dinesh Patel	25+	>$500M
Mark Duryea	20+	>$500M
Bob Vargo	20+	>$200M
Tom Husband	25+	>$500M
John O'Sullivan	20+	>$300M
Paul Romano	15+	>$200M
Frank Diffley	15+	>$200M
Jon Westervelt	25+	>$500M
Dan Lopez	20+	>$300M
Craig Murray	25+	>$100M
Steve Thayer	20+	>$500M
Mark DelBove	25+	>$500M
Tricia O'Loughlin	25+	>$500M
Jim Brown	25+	>$1B
Dan Weiss	20+	>$1B

With more than 35 years in the industry, Mr. Marra has extensive experience supervising the construction and startup of a broad range of engineering projects. Currently, he is the Construction Manager for the Newtown Creek Water Pollution Control Plant, a $4.0 billion dollar construction upgrade, located in Brooklyn, for the New York City Department of Environmental Protection (NYCDEP). As the Construction Manager, he is responsible for all construction management activities associated with the plant's capital improvement program including the management of the resident engineering staff of over 100 engineers and technical assistants. He also administers the priorities and phasing of multidisciplinary activities for NYCDEP to meet New York State Department of Conversation imposed Consent Decree to achieve Federal clean water standards. Other large projects include the Cedar Creek Water Pollution Control Plant for Nassau County NY.

Detailed Experience

- **New York City Department of Environmental Protection: Newtown Creek Water Pollution Control Plant / Brooklyn NY.** As Construction Manager since 1998 for the $4.0 billion upgrade of the 310 mgd wastewater treatment plant, New York City's largest, supervises the construction and startup of a broad range of engineering projects. Prepares budgets and billings for construction services as well as the project's staffing plans and forecasting of manpower needs; supervises the staff of 100 engineers, inspectors, and technical assistants; implements electronic document control management and e mail system; sets standards and guidelines for consistent project management among the various projects; is in daily communication with the client, design engineer, plant operations personnel, and the community; and completes monthly reports and presentations to client management.
- **New York City Department of Environmental Protection: Owls Head Water Pollution Control Plant / Brooklyn NY.** Managed contract administration, project and construction management for $90-million capital improvement project, including powerhouse building renovation on replacing power and raw sewage handling equipment. Equipment included engine generators, raw sewage pumps, air blowers,

Carmine A. Marra

Project Role:

Program Manager

Title/Firm:

Vice President
Malcolm Pirnie, Inc.

Years of Experience

36

Education

BS Physics New York Institute of Technology 1974
MS Nuclear Engineering Polytechnic Institute of New York 1979
MBA Finance Pace University 1989

Licenses and Certifications

Professional Engineer
Certified Construction Contract Administrator (CCCA)

Health and Safety Training

Construction Safety Awareness
H & S Orientation NTC

Societies

Construction Management Association of America, Member
Water Environment Federation, Member

Employment History

Malcolm Pirnie, Inc. 1988 to present
Metcalf & Eddy, Inc. 1984 to 1988
Gibbs & Hill, Inc. 1976 to 1984
Stone & Webster Engineering Corp. 1974 to 1976

grit handling equipment, and influent bar screen equipment.

- **Nassau County Department of Public Works: Cedar Creek Water Pollution Control Plant / Wantagh NY.** Construction Manager and Resident Engineer (1988 1998) for the 70 mgd plant, which is located in a residential area on the south shore of Long Island. Because of the sensitivity of the plant's location, it was important to minimize adverse effects of construction activities on the community. Construction had to be carefully monitored and controlled, requiring the implementation of construction modifications in an operating plant and installation of odor control facilities. Responsible for contract administration and project and construction management for capital improvement projects including a $55 million digested sludge complex, sludge-thickening facility, odor control facility, a $20 million primary sedimentation tank including process air blowers, installation of a 96 in force main and odor control facility, a $5 million water analysis laboratory, and a $29 million RAS building with six 110 ft diam final sedimentation tanks. Placed facility and equipment into service. Equipment included primary and recirculation gas compressors, air compressors, hot water pumps, hot water and sludge heat exchangers, thickened sludge equipment, odor control equipment, process air blowers, sludge collection equipment, final tank collection equipment, and WAS and RAS pumps. Other facets of construction included installation of timber piles, grout injected piles, excavation, backfill, steel sheeting, concrete, and HVAC and plumbing systems.
- **Auxiliary Power Plant Systems, Stone & Webster Engineering Corp. / New York NY.** Directed and coordinated engineering analyses for design of system, equipment specifications, and supporting calculations. Supervised mechanical designers in preparation of flow diagrams and for compliance with design documents. Provided field inspection and technical support.
- **Nuclear Power Plant / TX.** Provided technical expertise and guidance to complete critical path method (CPM) activities at Texas facility. Liaison with client and field construction personnel to implement system and equipment design specifications and evaluation of construction modifications. Directed mechanical engineers and designers on design of nuclear facility. Directed computer analyses for special studies and analytical evaluation of data. Implemented government requirements, corporate standards, and QA requirements. Defined scope of work and developed engineering criteria, procedures, and administrative controls.

Mr. Johnston has over 25 years of experience managing large projects, of which over 14 years have been with Port Authority properties and task order contracts. Throughout a career that spans over 20 years, Mr. Johnston has conducted and directed extensive site investigations, developed remedial solutions, and provided oversight of the implementation of these remedies. Mr. Johnston is a PE in NY and NJ, and has conducted and directed over 1000 environmental projects with over 150 No Further Action or closure letters.

Detailed Experience

- **Port Authority of NY & NJ (Eng. Dept): Call-in Contract/ New York/New Jersey.** Principal in Charge/Project Officer for over 30 projects at JFK, Newark, and other Port Authority Locations since 2001. Manages the call-in contract, and provides quality assurance/quality control on the projects to meet or exceed the Port Authority expectations. Assists the Port Authority in regulatory negotiations with NYSDEC and other agencies as required.
- **Port Authority of NY & NJ (Eng. Dept.): BFF and SFF Upgrades Contract JFK-1036 / Jamaica NY:** Mr. Johnston is the engineer of record for the design to further upgrade the Bulk Fuel Farm and Satellite Fuel Farm Remediation Systems. The design drawings and specifications were prepared in accordance with Port Authority CAD Standards and incorporated Port Authority Standard Specifications.
- **Port Authority of NY & NJ (Eng. Dept.): BFF and SFF Construction Services Contract JFK-981A & JFK-981MA / Jamaica NY:** Mr. Johnston is the engineer of record for the design and provided engineering consulting services during the construction activities to upgrade three dual phase extraction systems located at John F. Kennedy Airport. Mr. Johnston attended bi-monthly progress meetings with the Port Authority and the contractor.
- **Port Authority of NY & NJ (Eng. Dept.): Site Closure Workplans / Jamaica NY.** Evaluated historical remedial activities, current site conditions and developed a workplan to achieve site closure for three LNAPL contaminated sites (Terminal 1, Terminal 2, Terminal 4) located within the

Robert S. Johnston

Project Role:
Contract Officer

Title/Firm:
Vice President
Malcolm Pirnie, Inc.

Years of Experience
25

Education
BA English Rutgers University 1982
BS Civil Engineering Rutgers University 1982
MS Civil Engineering University of California 1985

Licenses and Certifications
Professional Engineer
Regist Environmental Assessor
Registered Civil Engineer
Registered Geotechnical Engine

Health and Safety Training
Initial 40 Hour Hazardous Waste Operations Safety Training
Medical

Societies
American Concrete Institute
American Society of Civil Engineers
Association of Firms Practicing in Geosciences, Past President
National Fire Protection Association

Employment History
Malcolm Pirnie, Inc. 2001 to present
Dames & Moore 1995 to 2001
GeoCon Environmental Consultants, Inc. 1987 to 1995
GeoCon Inc. 1984 to 1987
University of California 1982 to 1983
Melick & Tully, Inc. 1977 to 1982

Central Terminal Area of the John F. Kennedy International Airport. The workplans incorporated a combination of remedial activities through vacuum truck extraction, closure sampling plans, and quarterly progress monitoring plans.

- **American Airlines: Terminal-wide Cleanup Program / NY.** Principal in Charge in the evaluation, design, and implementation of $40 million dollar terminal wide clean up program in anticipation of a terminal redevelopment project at JFK Airport Terminals 8 and 9. Negotiated a consent order within a 3 month period; and implemented remedial actions at the site within a 12 month period. Managed an ongoing field staff I at the site for conducting operations and maintenance, remediation, drilling activities, groundwater monitoring, remediation monitoring, and the development of design specifications for the environmental aspects of a $1.5 billion dollar terminal expansion.
- **John F. Kennedy Airport: Terminal 4 Redevelopment Project / NY.** Principal in Charge for all due diligence and environmental oversight for Terminal 4 1AB project. Oversaw range airside investigation. Negotiated with NYSDEC, reviewed existing remediation systems, and provided field oversight during initial construction. Prepared TAAs, implemented badging processes and security program, and oversaw field and laboratory testing program.
- **American Airlines: LaGuardia Airport Remediation Project / NY.** Principal in Charge of investigation and remediation activities relating to underground storage tanks at LaGuardia Airport. Negotiated out requirements for drain investigation and initiated airside soil removal / tank removal program.
- **New Jersey Transit: Environmental Services / NJ.** Principal in Charge for a variety of projects, including the Newark Subway and the Long Slip Canal Project. Project interaction included remediation evaluation, geotechnical analysis and transactional consulting.
- **New Jersey Schools Construction Corporation: Proposed Elementary and Middle School / Gloucester City NJ.** Principal in Charge for geoenvironmental investigation for of a near coastal contaminated site. Installed geotechnical borings, evaluated subsurface meadow mat layer, including consolidation, and provided recommendations for embankments and cut slopes, remedial excavations, dewatering, and site drainage.
- **U.S. Army Corps of Engineers, New York District: NJ Flood Control Studies / NJ.** Principal in Charge of a large economic evaluation for flood control of the River.
- **Consolidated Electrical Distributors: Environmental Site Assessments.** Developed protocols for evaluating the properties with respect to the risk and implemented Phase 2 investigation including regulatory liaison in over 30% of the properties.

Mr. Brown has many years of experience in the management and administration of environmental and civil engineering construction projects. This experience encompasses design, review of contract drawings and specifications, value engineering and analysis, project planning and scheduling, and resident engineering. He manages submittal review, change order preparation, and construction claims evaluation and negotiation. He is responsible for all of Malcolm Pirnie's construction services work, which, during his tenure, has amounted to a total of more than $3 billion of construction.

Detailed Experience

- **Nassau County Department of Public Works: Cedar Creek Water Pollution Control Plant / Wantagh NY.** Responsible for construction administration of $200 million upgrading of a 75 mgd facility
- **New York City Department of Environmental Protection: Coney Island Water Pollution Control Plant / Brooklyn NY.** Responsible for construction administration services for $690 million upgrade of a 110 mgd facility that included 35 construction contracts.
- **New York City Department of Environmental Protection: Newtown Creek Water Pollution Control Plant / Brooklyn NY.** Manager of the Design Services During Construction effort of three joint-venture firms and numerous subconsultants on the upgrade of the Newtown Creek WPCP, a $2.5 billion, multicontract project. Work includes overseeing shop drawing reviews, contract interpretations, change order preparation and negotiations, and claims management. Role includes strong emphasis on the necessary coordination among the multiple engineering contracts and parties.
- **Northeast Ohio Regional Sewer District: Southerly Wastewater Treatment Center / Cleveland OH.** Managed construction of a 200 mgd, $290 million upgrading and expansion of a regional wastewater facility through 64 separate construction contracts.
- **Elizabethtown Water Company: Raritan-Millstone Water Treatment Plant / Bridgewater NJ.** Responsible for

Jim Brown

Title/Firm:
Vice President
Malcolm Pirnie, Inc.

Years of Experience
41

Education
BS Civil Engineering Clarkson University 1970
MS Environmental Engineering New Jersey Institute of Technology 1982

Licenses and Certifications
Professional Engineer
40-Hour Value Engineering
Certified Construction Contract Administrator (CCCA)
OSHA Occupational Safety and Health Training

Health and Safety Training
Health and Safety Orientation

Special Recognition
Former Chair, Engineers Joint Contract Document Committee

Societies
American Society of Civil Engineers
American Water Works Association
Construction Management Association of America
Construction Specifications Institute

Employment History
Malcolm Pirnie, Inc. 1972 to present
Clough Associates 1970 to 1972
Clough Associates 1967 to 1968

construction administration of a $12 million program, including new chemicals and pumping facilities, and modifications to the 150 mgd plant.

- **Erie County Water Authority: Jerome D. Van de Water Water Treatment Plant / Tonawanda NY.** Directed construction management of the $40 million, 50-mgd plant.
- **Liberty Environmental Systems, Inc.: Westchester County Sludge Drying Project / Yonkers NY.** Responsible for construction administration of a sludge dewatering and residue disposal facility.
- **Massachusetts Water Resources Authority: Renovation of North Main Pump Station, Boston Harbor Project / Boston MA.** Managed construction services for $60 million renovation of an 800-mgd pump station.
- **Pequannock, Lincoln Park and Fairfield Sewerage Authority: Two Bridges Advanced Wastewater Treatment Plant / Lincoln Park NJ.** Directed construction management of the $40 million program for the construction of a regional wastewater system, including 16 miles of interceptors and force mains, 7 sewer pumping stations, and a 7.5 mgd treatment facility.
- **Puerto Rico Aqueduct and Sewer Authority: Ocean Outfall for the Ponce Wastewater Treatment Plant / Ponce PR.** Responsible for construction administration phase of a 22,000 feet long, 48 inch diam ocean outfall to depths of 400 feet.
- **Veterans Administration: New Wastewater Treatment Plant / Lyons NJ.** Responsible for construction administration of a 0.5 mgd facility that treats hospital wastes employing the extended aeration activated sludge process with combined single stage nitrification and effluent filtration using automatic backwash sand filters.
- **Washington Suburban Sanitary Commission: Patuxent Filter Plant / Laurel MD.** Coordinated design for rehabilitation of a 65 mgd, all steel construction water plant.
- **Water Works and Sewer Board of the City of Birmingham: Drinking Water Services / Birmingham AL.** Responsible for construction administration of water works system improvements, including a new water treatment plant, modifications and expansions at two plants, sludge dewatering facilities, six storage tanks, and two pumping stations.
- **Westchester County Department of Environmental Facilities: Mamaroneck Outfall Sewer / Mamaroneck NY.** Responsible for construction administration phase of a 7,000-feet long, 60 inch diameter outfall into Long Island Sound.

Mr. Del Bove has extensive experience in the planning and design of environmental facilities, including advanced wastewater treatment and sludge management processes and facilities. He has prepared study and design reports; prepared plans, specifications, and cost estimates for the design of advanced treatment and sludge handling systems; negotiated and reviewed federal and state discharge permits; participated in value engineering studies; designed water, wastewater, storm water, and sludge pumping stations and water treatment facilities as well as sanitary, storm and combined sewer conveyance systems; and acted as resident engineer during the construction of system components.

Detailed Experience

- **Bergen County Utilities Authority: Digestion Facility Upgrade / Little Ferry NJ.** Managed the design and construction phase services for improvements to anaerobic digestion facilities including replacement of gas mixing equipment with new bubble generator mixing systems for four 80 ft diameter digesters, and new sludge recirculation pumping and heat exchanger equipment.
- **Bergen County Utilities Authority: Thickening / Dewatering Improvements / NJ.** Directed and Managed the design and currently the construction of improvements to sludge thickening and dewatering equipment including replacement of existing centrifuges with gravity belt thickener units for waste actuated sludge thickening and three belt combination gravity belt thickener/dewatering units to thicken or dewater digested sludge for a 94-mgd secondary treatment facility.
- **Borough of Edgewater: Edgewater-Marina C/A / NJ.** Provided Program Management services and Construction Management services associated with construction of the new Edgewater Marina, Park and Ferry Landing project. Services included acting as Owner's representative during project design, conducting project management meetings and serving as overall construction manager during project implementation phase.

Mark P. Del Bove

Title/Firm:
Vice President
Malcolm Pirnie, Inc.

Years of Experience
33

Education
BS Civil Engineering The Cooper Union 1976
MCE Civil Engineering University of Delaware 1978

Licenses and Certifications
Professional Engineer
Board Certified Environmental Engineer (BCEE)

Health and Safety Training
Construction Safety Awareness

Special Recognition
Board Certified Environmental Engineer

Societies
American Academy of Environmental Engineers
New Jersey Water Environment Association
Water Environment Federation

Employment History
Malcolm Pirnie, Inc. 1989 to present
Killam Associates, Inc. 1978 to 1989

- **City of Newark: Delancy Street Improvements / Newark NJ.** Managed the design of water, sewer, and storm water improvements for Delancy Street project. Work included investigation and design of infrastructure and traffic improvements, including the use of microtunneling techniques, for new sanitary sewers to support a major new planned distribution and bottling facility.
- **City of Newark: Downstream Improvements to Adams Street, Avenue A and Vanderpool Street Drainage Ditch System / NJ.** Directed and managed improvements to major drainage ditch systems within the City of Newark including debris removal, conduit replacement and sediment removal consisting of ID 27 contaminated material.
- **City of Trenton: Route 29 Sewer System Improvements / Trenton NJ.** Managed the construction phase services for lining 5,300 feet of large diameter brick sewer as a part of the NJDOT Route 29 Sewer System Improvements.
- **Essex County Department of Public Works: Essex County Environmental Center / West Caldwell NJ.** Managed the design of a 10,000 square foot environmental center utilizing sustainable design concepts, as well as reuse of existing materials and complete environmental permitting.
- **Madison Chatham Joint Meeting and Township of Bernards Sewerage Authority: WWTP Construction Management / Chatham NJ.** Construction management for advanced wastewater treatment projects, including pay estimates, contractor coordination, and contract administration.
- **NYCDEP: Zebra Mussel Control / New York NY.** Managed the design and preparation of contract documents for chemical feed systems at over 50 separate City facilities including dams, gatehouses, tunnels, aqueducts, and aqueduct inlet and outlet structures for zebra mussel control. Chlorine gas and hypochlorite are control chemicals with sodium bisulfite being used as dechlorination agent.
- **Ocean County Utilities Authority: Expansion of NWPCF / Bayville NJ.** Managed an expansion feasibility study for the 28 mgd NWPCF. Project involved detailed engineering evaluations of influent and effluent pumping requirements, computer analysis of plant hydraulics, investigation of an effluent equalization basin to accommodate peak hourly flows, analysis of chlorine produced oxidants in the ocean outfall, and investigation of advanced wastewater treatment for a future average flow of 44 mgd. Also, managed the design for improvements to the 32 mgd facility including raw sewage pumping, screening, grit removal, primary clarification, effluent flow equalization, sludge thickening, and electrical improvements and managed construction phase services for all selected system improvements.

Mr. Diffley has over 20 years of experience in the Construction industry with background as a scheduling manager, project manager, project scheduler, office engineer, field superintendent, and inspector. Mr. Diffley also has 12 years experience as a General Construction Field Superintendent. Supervised field operations in Residential, Light Commercial, Specialty Retail and Restaurant construction. Familiar with all trades and construction practices, including excavation, form work and foundations, wood and steel framing, MEP installation and architectural finishes.

Detailed Experience

- **NYCDEP: Newtown Creek WWTP - Contract NC-36G / NY.** Project Manager with overall cost and schedule responsibility for the $225 Million renovation and upgrade of a NYCDEP Wastewater Facility. Responsibilities include, schedule development, schedule maintenance, identification and resolution of schedule issues. Prepared purchase orders to vendors and subcontractors and insured that material and labor were on the job site to support the project schedule. Prepared monthly requisitions to the clients and authorized all payments to all subcontractors and vendors. Supervised a staff of engineers to insure the timely submission of shop drawings, RFI's, change orders and oversaw general administration.
- **American Airlines: JFK Terminal Redevelopment / Jamaica NY.** Developed Detailed Baseline Schedule for new $1.4 Billion Terminal Building at JFK. Employed by owner to monitored work progress and developed recovery plans to regain any work slippage. Provided bi monthly schedule updates while working closely with the all members of the Project Team (Owner, Designer, Contractor and Sub Contractors). Chaired weekly schedule meeting with Project Management and the Sub Contractors to insure project milestones were understood and sufficient manpower was being dedicated to the Project. Project is to be completed in phases and schedule addresses interfaces with new roadway and Air Train construction, new fuel line construction to existing terminals and staged demolition of old terminals while maintaining passenger service.

Francis Diffley

Title/Firm:
Sr. Proj Control Spec
Malcolm Pirnie, Inc.

Years of Experience
20

Education
Program completed in BS Economics Iona College 1974

Employment History
Malcolm Pirnie, Inc. 2009 to present
Malcolm Pirnie, Inc. 2005 to 2007

- **NYCDEP: Newtown Creek WWTP / New York NY.** Schedule Manager for multiple projects in excess of $250 Million. Duties included review and approval of multi prime contract schedules, prepare monthly schedule, cost and delay analysis reports and chair monthly schedule and issues meetings. Additionally, provide analysis and documentation of all contract delay claims and initiate recovery plans. Maintain a strong field presence to provide the client with an accurate assessment of real project progress and issues.
- **NYCDEP: North River WPCP / New York NY.** Project Scheduler for $100M wastewater facility. Duties included review and approval of multi-prime contract schedules; preparation of monthly schedule, cost and delay analysis reports.
- **New York City DOT: Various Projects / New York NY.** Provided scheduling, inspection and office engineering services for high profile infrastructure project in New York City. Projects included the installation of replacement of and distribution and service water mains, sewers, highway, curbs, Sidewalks, traffic signals and street lighting. Developed and monitored construction schedules, Reviewed plans and specifications and reconciled plans to field conditions. Prepared change orders and recorded field measurements tabulated quantities for payment and record drawings. Coordinated the resolution of conflicts between New York City agencies, contractors, public utilities and the public.
- **Fluor Daniel: JFK Airport Terminal 4 / Jamaica NY / Jamaica NY.** Senior Scheduler for a $1.2 Billion air terminal project. Revised schedule logic to recover delays. Expanded and manpower loaded schedule to accurately reflect project conditions. Prepared schedule and labor bimonthly reports for Senior Management. Maintained constant presence in field to monitor progress and appraised Project Management and Field Superintendents for schedule slippage. Developed workable construction sequencing to reclaim lost time and keep project on track. Included $110M highway component of new bridges, bypasses, overpasses, roads and parking.
- **JA Jones - GMO: Continental Airlines Global Gateway Project / Newark NY.** Developed integrated baseline CPM for $350M expansion and renovation of an operation airline terminal. Schedule managed both fast track design and construction of new highway and access toads, major airside site work, construction of new passenger concourse and additions to existing buildings as well as the maintenance of passenger flow and terminal operations during construction. Scheduling addressed new mechanical, electrical, and vertical transportation systems and their integration with existing systems.
- **NYCDEP: Croton Filtration Plant / Bronx NY.** Project Scheduler for $1.8 B water treatment plant. Duties included the development and maintenance of an integrated Project Master Schedule, review and approval of multi-prime contract schedules, prepare monthly schedule delay analysis reports.

Extensive experience with twenty four years P/L responsibility encompassing all areas of management including finance, engineering and operations. Proven track record of success in design, negotiating, organizing and estimating. Demonstrated ability to innovate and produce. P.E. with MBA and BS in Civil Engineering. Hands on management style with superior presentation and communication capabilities.

Directed an estimating staff for major general contractors in New York City in preparation of public and private bids up to $500 million. Selected projects for bidding; managed engineers in preparation of simultaneous project bids; purchased and setup estimating, quantification, cost accounting and project management software; recruited, hired and trained all personnel; finalized all bid and profit computations. Results: Performed in the top three in our market niche for all bids, enabling company to triple volume to over $100 million.
Lead project management staff and oversaw field construction operations. Negotiated subcontracts and purchases; reviewed correspondence and contract changes; directed management controls through use of Critical Path and other methods; oversaw and reviewed preparation of claims; provided direction and support to corporation subsidiaries and insurance, surety and banking institutions.

Results: Consistently outperformed original bid estimates by an average of 5%. Supervised consulting engineering staff in project designs. Initiated and promoted use of first programmable desktop computers; developed programs for project geometry and designs; directed staff in integrating programs into designs. Results: Eliminated need for mainframe computer and technicians and cut turnaround time by 67%. Managed consulting engineering staff in supervision and inspection of multi million dollar projects. Insured contractor compliance with plans and specifications; developed alternative methods of construction for cost and time savings; provided assistance to contractors in design process; reviewed and approved all submittals; directed all activities insuring minimal disruption and timely completion of projects; prepared and processed payment requisitions.

Mark A. Duryea

Title/Firm:
Associate
Malcolm Pirnie, Inc.

Years of Experience
33

Education
Program completed in BSCE Structural Engineering Pennsylvania State University 1976
Program completed in MBA Management St. John's University 1984

Licenses and Certifications
Professional Engineer

Professional Training
Training Course In The Use Of Heavy Construction Software Systems For Professional Estimators
Training Course In The Use Of Paydirt/Sitework A 3d Quantity Takeoff Program For Construction And En
Training Course In The Use Of Primavera Project Planner
Various Training Courses At Saddle Island Institute For Claims Preparation And Analysis

Employment History
Malcolm Pirnie, Inc. 2010 to present
Tully Construction Co. 2009 To 2010
Yonkers Contracting Co Inc 2007 To 2008
Grace Industries Inc 1986 To 2007
Goodkind & O'dea Inc 1983 To 1986
Ammann & Whitney Inc. 1979 To 1983
King & Gavaris Inc. 1976 To 1979

Detailed Experience

- **NYCDEP: Deputy Construction Manager / NY.** In charge of staff for review of most reports; attend all principal meetings; prepare, review and supervise substantial change orders; ensure compliance with all specs and standards; monitor, evaluate and hire for staffing needs; interface with client and construction manager to insure satisfaction of client as well as recommend changes in policies to make project more efficient and effective.

Mr. Husband has extensive experience in the design and construction of a variety of public and private projects. He has worked as the overall construction project director of large industrial projects as well as design engineer for a major environmental consultant. His accumulated work experience with consultant engineering firms, general contractors, and specialty subcontractors on technically diverse projects has provided him with expertise in project controls and scheduling to bringing such projects to successful completion.

Detailed Experience

- **Long Island Railroad: Railroad Bridge Rehabilitation / Long Island NY.** Project Manager on a joint venture for the rehabilitation of 12 main line railroad bridges. Responsible for all aspects of the project, including office administration and field operations. The work required the replacement of bearings, steel repairs, and replacement of abutment seats while maintaining full service across each bridge.
- **NYCDEP Construction: Tallman Island WPCP CM / NY.** Construction Manager overseeing construction of Contract TI 3 contracts for plant upgrades including the provision of biological nutrient removal (BNR) at the Tallman Island WPCP. All work performed under this $300 million project is being constructed within an operating treatment plant while maintaining compliance the wastewater permit limitations. New facilities include 27 kV substation, new RAS pump station, new aeration blowers and main sewage pumps, renovations to existing aeration tanks, and improvements to the solids handling facilities. In his role as CM, Mr. Husband oversees a staff of 15 engineers and inspectors who are responsible for construction inspection, change order processing, schedule monitoring, payment tracking, and startup/operations support.
- **NYCDEP: Flushing Bay CSO, CS-4-4 Combined Sewer Overflow Retention Facility / Flushing NY.** Construction Manager for $160 million project. Responsible to manage contractors in the construction of a major CSO Facility for the NYCDEP. Responsible for the scheduling and coordination of 4 Prime Contractors.

Thomas Husband

Title/Firm:
Senior Associate
Malcolm Pirnie, Inc.

Years of Experience
35

Education
BCE Civil Engineering Manhattan College 1975
MEng Environmental Civil Engineering Manhattan College 1980

Licenses and Certifications
Professional Engineer

Health and Safety Training
Ergonomics
Initial 40 Hour Hazardous Waste Operations Safety Training
Health and Safety Orientation

Employment History
Malcolm Pirnie, Inc. 2005 to present
Tully Construction Co., Inc. 1999 to 2005
Perini Corporation 1998 to 1999
WDF Inc. 1997 to 1998
Arben Corporation 1995 to 1997
JWP, Inc. 1991 to 1995
KSW Mechanical Service, Inc. (Formerly JWP Mechanical Services) 1991 to 1995
Briar Contracting Corporation 1984 to 1991
Malcolm Pirnie, Inc. 1975 to 1984

- **NYCDEP: North River Process Optimization Odor Minimization / New York NY.** Construction Manager providing construction manager services which requires the coordination and maintenance of the existing facilities during extensive upgrading work.
- **New York State DOT: Reconstruction of the West Side Highway, Segment 3 / New York NY.** Assistant Project Manager for the $54 million project, which included work for all major private and public utilities, including a new 48 in water main, fiber optics, electrical services, etc. Responsible for all layout, engineering, utility coordination, material ordering, and scheduling.
- **Port Authority of New York and New Jersey: John F. Kennedy Airport Cogeneration Plant / New York NY.** As Project Manager, coordinated activities of the JWP Companies on this work, producing project scheduling and cost reports. The value of the mechanical contract was approximately $44 million. This project entailed the complete renovation of the heating and air conditioning plant for all of the airport's terminals, with the addition of a cogeneration facility plant to provide electricity and steam. Responsibilities included the development of project schedule and costing.
- **New York State DOT: Gowanus Expressway / NY.** Provided services to the concrete roadway and structural steel for this elevated highway (a $44 million project). Numerous emergency repairs requiring on-site decisions had to be performed on a daily basis.
- **New York State DOT: Reconstruction of the West Side Highway, Segment 2 / New York NY.** Participated in the $90 million project, which includes work for all major private and public utilities. All bonuses for early completion received $2.8 million.
- **Triborough Bridge and Tunnel Authority: Verrazano Narrows Bridge Approach Pavement Rehabilitation / New York NY.** On a project for the reconstruction of the pavement and utilities on the bridge's Brooklyn approach lanes, performed value engineering that saved the TBTA $300,000.
- **Various Clients: Construction Administration / NY.** Construction Project Manager for numerous projects. Responsible for cost controls and project scheduling on multi prime public and private work. Prepared bids for public and private work, and performed over 200 estimates bidding at risk on projects ranging from $300,000 to over $100 million.
- **WDF Inc.: Upgrade of NYCDEP Jamaica WWTP / NY.** As Project Manager on a $10M subcontract for the mechanical work for refurbishing the plant's secondary process system. Design issues caused delay in the performance of the work for over one year.
- **New York Organic Fertilizer Company: Hunts Point Pelletization Project / Bronx NY.** Project Director on the Hunts Point Pelletization Project. Through use of Primavera P3 scheduling and cost controls, the project was successfully completed with all bonuses for early completion received.

Mr. Lopez-Rendon has extensive experience in the design of small and large industrial and municipal wastewater treatment facilities. His work includes all phases of design, including from facility planning, conceptual and preliminary design, final detail design, development of contract specifications, budgetary and construction cost estimating, and construction administration services. He has supervised and coordinated the work of civil, mechanical, structural, electrical, HVAC, and plumbing engineers as well as architects, both among Malcolm Pirnie divisions and with subconsultant firms, during the design of new and existing facilities. He also has ample experience in the solution of hydraulic problems and has participated in problem solving and troubleshooting of hydraulic problems at various treatment facilities. Mr. Lopez-Rendon has also participated in the planning and development of wastewater treatability studies, pilot plant work, and treatment process design.

Detailed Experience

- **New York City Department of Environmental Protection: Wards Island WPCP / Manhattan NY.** As Malcolm Pirnie's Program Manager for the planning and detailed design of improvements at the Wards Island WPCP, a 275 million-gallons per day (mgd) average dry weather flow and 550-mgd wet weather flow wastewater treatment plant in New York City, managed the following: Upgrade Design of Manhattan and Bronx Grit Chambers ($91 million project, completed in 2008). Provided new equipment for the collection and handling of screenings and grit and the upgrade of the physical facilities to restore the buildings and bring them into compliance with current codes, meeting Art Commission of the City of New York and New York City Landmarks Preservation Commission requirements. Plan for Upgrade of Plant Facilities. Developed a comprehensive facilities plan for the phased upgrade of the plant, including the improvements necessary to implement biological nitrogen removal (BNR) treatment. The plan addressed existing conditions of facilities and equipment, the design of new and modified treatment processes, evaluation of alternatives, recommendation of a plan for the upgrade of every existing facility and for the provision of new facilities, preparation of an analysis of deviations from previous plans

Daniel Lopez-Rendon

Title/Firm:
Vice President
Malcolm Pirnie, Inc.

Years of Experience
25

Education
BS Civil Engineering Tecnologico De Monterrey 1984
MS Environmental Engineering University of North Carolina at Chapel Hill 1988

Licenses and Certifications
Professional Engineer

Health and Safety Training
Health & Safety Training for Project Management
Health and Safety Orientation

Special Recognition
Awarded BSA's 2-year Bachelor's studies scholarship, Buenos Aires, Argentina.
Awarded Master's studies scholarship by the World Health Organization, 1986.

Societies
American Water Works Association
Inter-American Association of Sanitary Engineering and Environmental Sciences
New York State Water Environment Association
Sociedad Mexicana de Aguas
Water Environment Federation

Employment History
Malcolm Pirnie, Inc. 1988 to present
University of North Carolina at Chapel Hill 1986 to 1988
Department of Hydraulic Construction and Operation, Mexico DF 1985 to 1986

and other citywide efforts and their associated impacts, overview of other work required for the implementation of the recommended plan (such as environmental assessments, permits, etc.), and a staging plan for the phased implementation of the recommended upgrade. Project Management. Managed various project managers and over 70 design professionals, including engineers, architects, and technicians, for over two years to: [1] design upgrade of the plant's solids handling facilities in support of compliance ($212M); [2] design upgrade of the deteriorated and inadequate plant administrative and personnel facilities and air system ($96M); and [3] design upgrade of the plant's secondary system facilities ($450M).

- **NYCDEP: Grit Chambers Upgrade Design / Bronx NY.** Program Manager for the $91 million project while it was under construction. The project's purpose was to upgrade the Bronx and Manhattan grit chambers by providing new equipment for the collection and handling of screenings and grit, upgrading the physical facilities to restore the buildings and bring them into compliance with current codes, and meeting Art Commission of the City of New York and New York City Landmarks Preservation Commission requirements.
- **NYCDEP: Expansion and Upgrading of the Wards Island WPCP / Bronx NY.** Project Manager for the upgrade design of the 275-mgd plant. Responsible for day-to day management of facility planning, conceptual, preliminary, and detail design, bidding assistance, and startup and operations assistance for the three phase upgrade project, which is estimated at more than $200 million dollars in construction costs.
- **Puerto Rico Aqueduct and Sewer Authority: Program Management for Infrastructure Upgrade / Various Sites PR.** As Design Manager, currently providing assistance to CPM MPPR Infrastructure Managers, PSC on management, planning, design, bidding, construction, and postconstruction projects and activities for multiple capital improvement projects for PRASA. This represents consulting and engineering support to Malcolm Pirnie and MPPR who are currently working on or have recently completed work on over 100 projects, representing consulting services in excess of $4 billion of infrastructure development and service delivery contracts in Puerto Rico.
- **NYCDEP: Various Assignments / Bronx NY.** Managed various project managers and over 70 design professionals, including engineers, architects, and technicians, for over two years to develop the following: Solids Handling Facilities Upgrade Design iV This $212 million upgrade was designed to provide for the general upgrade of the plant's solids handling facilities to support compliance with the PSRP operation necessary to meet Class B pathogen reduction requirements for land disposal of biosolids. Secondary Treatment Facilities Upgrade Design iV Under this $450 million project, the planti+s secondary system facilities (i.e., Aeration Tanks, Final Settling Tanks, return activated sludge pumping system, waste activated sludge pumping system, and the Return Sludge Pump Stations and associated operating galleries) upgrade was designed.

Mr. Murray has a variety of experience in water and wastewater design, construction management and field work, including work chemical addition facilities, pipelines, pump stations, flow splitting and distribution systems, maintenance of plant operations, HVAC and odor control systems.

Detailed Experience

- **New York City Department of Environmental Protection: Design of WWTP Flow Distribution System / NY.** Design leader for a new flow distribution system at the Newtown Creek WPCP. The system consisted of four 96" diameter pipes and a splitter box designed to split 700 mgd 12 ways. Structures had to be constructed on an extremely congested existing site, connections had to be made without shutting down the treatment system, and the system had to be able to accommodate future expansion.
- **Arlington County: Design Project 1, Advanced Wastewater Treatment Upgrade / VA.** Design leader for a $90 million upgrade to a 40 mgd advanced wastewater treatment facility. Design components included new 11 MG equalization tanks, multi point ferric addition system, new denitrification filters, methanol feed system, odor control facilities, large diameter pipelines, demolition activities, and post aeration system. Extensive maintenance of plant operation issues were resolved to allow construction with minimal disruption to the treatment process.
- **City of Hopewell: Regional WWTF - Centrifuge Dewatering Facility / Hopewell VA.** Lead design engineer for a new centrifuge dewatering facility and cake handling system for a 50 mgd regional wastewater treatment facility. Dewatering system consisted of two solid bowl centrifuges, cake pumps, screw conveyors, cake receiving station, truck loadout facility, cake storage pad and incinerator feed piping. The system provided the client with the flexibility to distribute cake to multiple locations within the plant, accept cake from other facilities for incineration, and load trucks to transport cake to other plants or to the onsite storage facility. Design also included polymer feed system, new restroom facility and administration area.

Craig W. Murray

Title/Firm:
Vice President
Malcolm Pirnie, Inc.

Years of Experience
19

Education
BS Mechanical Engineering University of Delaware 1993
MS Environmental Engineering Old Dominion University 1999

Licenses and Certifications
Professional Engineer
Certified Construction Documents Technologist (CDT)

Societies
Water Environment Federation

Employment History
Malcolm Pirnie, Inc. 1993 to present
Irwin-Jurkewiecz Corporation 1992 to 1992
Rockport Construction Company 1991 to 1991
Sterling Steel 1989 to 1990

- **DCWASA: Upgrading of Blue Plains Advanced WWPT / Washington DC.** Assisted with field investigations, cost estimating and detailed design of varying aspects of the rehabilitation of the primary sludge pumping stations including new sludge pumps, HVAC, electrical, piping and valve modifications, and maintenance of plant operations.
- **Tampa Bay Water: Chloramine Implementation Project / FL.** Lead Project Engineer for the design of five separate chemical feed facilities serving the 158 MGD distribution system of Tampa Bay Water, the largest wholesale water distributor in Florida. The new facilities converted the entire Tampa Bay Water surface water treatment system to chloramine disinfection. The design consisted new chemical buildings, storage facilities, and dosing systems for caustic soda, sodium hypochlorite and aqua ammonia feeds.
- **City of Roanoke: Expansion and Upgrading of WPCP / VA.** Civil/Sanitary design for upgrade and expansion. Design items included a new gravity thickener and thickened sludge pump station, 36 mgd primary influent pump station, dredge system, biological aerated filter, polymer system, and hydraulic profile for the plant. Project Engineer for construction administration services during construction. Prepared conceptual and final cost estimates. Developed control strategies and construction sequences to maintain plant operations during construction.
- **Coca-Cola Bottling Company of New York: CCPRB Design / Cayey PR.** Design leader for a new industrial wastewater treatment system utilizing membrane bioreactors with supporting equalization tanks, high strength waste segregation, chemical addition for pH control and nutrient loadings, centrifuge dewatering of waste sludge, and effluent pumping and reuse. In addition to maximizing treatment within a limited footprint, the membrane bioreactor technology provided a high quality effluent suitable for reuse as cooling tower makeup water and other non potable plant uses.
- **Frito-Lay, Inc.: Industrial Waste Treatment Facilities.** Project Engineer for several industrial wastewater design projects. Projects included preliminary and detailed designs for a new primary influent pump station, new oil/water separator, new primary clarifier and various treatment system evaluations at two Frito Lay plants. Conducted site visits, pre bid meetings, pre-construction meetings and site inspections. Performed shop drawing review and construction administration during construction. Prepared conceptual and final cost estimates. Developed process control strategies.
- **Philadelphia Water Department: Fowler Street Pipe Bridge Rehabilitation / PA.** Project Manager for the rehabilitation of an aging pipe bridge that supports two 30 inch raw water transmission mains. Due to the criticality of these mains, the repair work needed to be completed with the pipes in service. A detailed jacking plan was prepared to raise the pipes to allow removal of the existing supports and installation new supports. Grading, retaining walls, painting and environmental permitting were also included.

Ms. O'Loughlin is experienced in all phases of the design of large wastewater treatment plants. Her experience ranges from preliminary layout of facilities, sizing, and selection of equipment and piping, to final design. She has coordinated duties and responsibilities with subconsultants on both new and existing facilities, and has performed problem solving and troubleshooting with field engineers during construction. Ms. O'Loughlin has been involved with the Massachusetts Water Resources Authority Boston Harbor project, and was responsible for overall development of the two million gallon water storage tank at Deer Island as part of the DP 28, CP 205 phase, as well as the addenda phase for CP 205 which included answering contractor questions and developing addenda to revise contract documents as required. The project also involved the coordination of work between the client, subconsultants, internal specialty groups, and outside consulting firms.

Detailed Experience

- **New York City Department of Environmental Protection: Wards Island WPCP Upgrade - Phase 5 / Bronx NY.** Project Manager for the upgrade planning and design of the 70 year old, 275/550-mgd average/peak flow plant. Project included the management of facility planning and the conceptual, preliminary, and detailed design of a $450 million upgrade of the secondary system to meet biological nitrogen removal treatment capabilities.
- **Puerto Rico Aqueduct and Sewer Authority: North Coast Superaqueduct / San Juan PR.** Project Manager for Malcolm Pirnie as a major design subconsultant to Vincenty, Heres y Lauria. Provided detail design and construction administration services for a $300 million, 100 mgd water supply, treatment, and conveyance system to help solve the island's critical water shortage. Project components included an intake on the Rio Grande de Arecibo, a 300 mil-gal reservoir, raw water pumping station, water treatment plant, and 50 mi long transmission main with satellite storage facilities.
- **City of Norwalk: WWTP Upgrade and Expansion / CT.** As Project Manager, designed a comprehensive upgrade for

Patricia A. O'Loughlin

Title/Firm:
Vice President
Malcolm Pirnie, Inc.

Years of Experience
30

Education
BS Civil Engineering Villanova University 1980
ME Environmental Engineering Manhattan College 1989

Licenses and Certifications
Professional Engineer
Board Certified Environmental Engineer (BCEE)

Health and Safety Training
Construction Safety Awareness
Health and Safety Orientation

Societies
Society of Women Engineers
Water Environment Federation

Employment History
Malcolm Pirnie, Inc. 1980 to present

complete BNR and plant expansion from 15 to 20 mgd. Plant upgrade and expansion includes the addition of a 5th primary settling tank modifications to 4 existing primary settling tanks. This brought the plant up to code and current standards. Extensive consideration was given to the maintenance of plant operations to ensure that water quality standards were met at all times during construction.

- **Metropolitan District Commission: Water Pollution Control Solids Handling Facility / Hartford CT.** Managed design review and special inspection at the 80 mgd Hartford Pollution Control Facility. The new brick and block building houses the screens, two 25,000 gal blending tanks with mixers, an odor control system, control room, and sludge transfer pumps.
- **Philadelphia Water Department: Northeast Water Pollution Control Plant - Aeration System Rehabilitation / Philadelphia PA.** Project Manager for aeration system upgrade to the city's largest WPCP. Project consisted of assessing the conditions of the existing installation and designing an upgrade for in tank process equipment and main air header.
- **City of New Haven Water Pollution Control Authority: Morris Cove Pumping Station Upgrade / New Haven CT.** Group manager for the study and design of a new pump station containing five 200 hp variable speed pumps using variable frequency drive technology.
- **City of Norwalk: Main Sewage Pumping Station Upgrade / Norwalk CT.** As Project Manager, designed comprehensive upgrade for complete BNR and plant expansion from 15 to 20 mgd. Included modifications to the main pumping station, primary settling tanks and aeration tanks, addition of new final settling tanks, new return sludge pump station, new chlorine contact tank, addition of dechlorination, and modifications to gravity thickeners.
- **City of Norwalk: Wastewater Services / CT.** As Project Manager for interim modifications, performed a retrofit of the aeration system for partial BNR to achieve interior nutrient reduction quantities set by regulatory agencies.
- **Metropolitan District Commission: Water Pollution Control Facility Gravity Thickeners / Hartford CT.** Managed preliminary design, design review, and construction administration for water pollution control facility gravity thickener addition.
- **Seaman Paper Company: Tertiary Wastewater Treatment Plant / Baldwinville MA.** Managed the design of the company's secondary wastewater treatment facility modifications. Design included converting a clarifier to a third aeration basin pass, converting an effluent chamber into an aeration basin effluent pump station, and design of return and waste sludge systems, together with modifications to associated plant processes.

Mr. O'Sullivan has extensive experience in resident engineering of large construction projects, including CSO facilities, wastewater treatment facilities, bridge and road projects, and other types of heavy construction projects. He has worked with several companies in the supervision, coordination, and administration of construction projects. Mr. O'Sullivan's responsibilities have included project planning, scheduling, estimating, cost control, claims analysis and negotiations, and oversight of construction activities. For the past 17 years, Mr. O'Sullivan has worked exclusively on New York City Department of Environmental Protection projects as Resident Engineer.

Detailed Experience

- **NYCDEP: Flushing Bay CSO Storage Facility - Contract CS4-4 / NY.** Resident Engineer on $180 million project to construct a 28 million-gallon underground CSO storage tank. Project is third phase of $250 million multiphase contract to reduce CSO discharges into Flushing Bay. This phase constructs above grade facilities which will house mechanical and electrical equipment as well as a segregated area for use by NYC Parks Department. New equipment will include main pumps to discharge flow to Tallman Island, new odor control systems, boilers and flushing water systems. Contract is being constructed under Wicks Law arrangement with four (4) separate prime contracts.
- **NYCDEP: Flushing Bay CSO Storage Tank: Contract CS4-3 / NY.** Resident Engineer on the $113 million project to construct a 28 million-gallon underground CSO storage tank. The project is the third phase of a $250 million multiphase contract to reduce CSO discharges into Flushing Bay by capturing the flow which, after the passing of the storm event, is pumped to the Tallmans Island Water Pollution Control Plant for treatment. Located on a 6.7-acre parcel of land in Flushing Meadow Park, the project includes the construction of a state of the art 2,200 ft perimeter excavation support system some 100 ft deep, which also acts as a cut off wall to limit site dewatering requirements.

John J. O'Sullivan

Title/Firm:
Sr. Proj Resident Engineer
Malcolm Pirnie, Inc.

Years of Experience
31

Education
BS Civil Engineering Manhattan College 1979
MS Structural Engineering Polytechnic Institute of Brooklyn 1983

Licenses and Certifications
Professional Engineer

Health and Safety Training
Construction Safety Awareness

Employment History
Malcolm Pirnie, Inc. 1988 to present
basil engineering 1980 to 1988
Ebasco Services 1979 to 1980

- **New York City Department of Environmental Protection: Coney Island WPCP: Contracts 20G, E, H, P / Brooklyn NY.** Resident Engineer for the $70 million project which included the construction of a new odor control building housing 4 wet scrubbers and 11 carbon adsorbers, as well as associated chemical handling systems, reconstruction and covering of the primary settling tanks, installation of new 60-in main sewage pump valves and piping, conversion of a former chemical storage building to a materials storage building, and various site and systems improvements.
- **New York City Department of Environmental Protection: Coney Island WPCP: Contracts 7G, 7E, and 7H / Brooklyn NY.** Resident Engineer on a $63 million dollar project for the construction of two new aeration tanks and an odor control enclosure which housed three wet scrubbers together with associated chemical pumping systems, refurbished the aeration blowers with new 48 in SS aeration piping and valves, and provided covers for the new aeration tanks.
- **New York City Department of Environmental Protection: Coney Island WPCP: Contracts 9G, 9E, 9H, and 9P / Brooklyn NY.** Resident Engineer on a $65 million project to reconstruct two aeration tanks, construct a new plant administration building supported on auger cast piles, construct a new chlorine contact tank and associated hypochlorite building which houses six hypochlorite tanks and four chemical metering pumps, and place a new 48 in underground thickener overflow line.

Mr. Patel has extensive experience in the construction management for wastewater treatment facilities. He has been involved in the construction of facilities for the New York City Department of Environmental Protection for more over 26 years. Currently, he is Construction Manager for the Catskill and Delaware Water Treatment Ultraviolet (UV) Disinfection Facility, a $1.2 Billion construction contract with consent dates, located in Westchester County. The Project includes construction of world's largest Ultraviolet Disinfection Facility as well as two off-site contracts - Installation of water Main for the Town of Mount Pleasant and a Wetland Mitigation project. The UV Disinfection Facility will enhance the disinfection and improve the quality of water supplied to New York City's nine million residents from the Catskill and Delaware watersheds. The project is a multi-prime contractor project that is currently ahead of schedule and all contractors have completed 4 of 9 milestones ahead of schedule.

Detailed Experience

- **New York City Department of Environmental Engineering: Rehabilitation/Reconstruction of the Newtown Creek WPCP / Brooklyn NY.** Responsible for administration of contract documents and management of construction inspection staff, for a construction contract totaling $600 million with a consent decree date. Project includes construction of new north battery, which includes construction of influent conduit with splitter box, grit tanks, aeration tanks, final settling tanks, new north control building; installation of process air blowers and odor control system with carbon adsorber. Project includes construction of eight egg shaped digester, two sludge storage tanks, centrifuge building, and grit building. Also responsible for the inclusion of pre purchased equipment and material, preparing purchase orders, and preparing and negotiating subcontracts for construction contracts of $65 Million. Responsible for administration of contract documents and management of construction inspection staff, for a construction contract totaling $600 million with a consent decree date, includes field inspection, payment processing, change order preparation and negotiation, coordination among other contractors, project planning, and scheduling.

Dinesh Patel

Title/Firm:
Associate
Malcolm Pirnie, Inc.

Years of Experience
30

Education
BS Civil Engineering Sardar Patel University, India 1977

Licenses and Certifications
Professional Engineer

Health and Safety Training
H & S Orientation NTC

Societies
Water Environment Association

Employment History
Malcolm Pirnie, Inc. 2003 to present
WDF Inc., a Subsidiary of KEYSPAN Business Solutions 2000 to 2003
Michael Baker Corporation 1995 to 2000
C.C.Johnson & Malhotra P.C. 1984 to 1994
Earth Engineering & Sciences, Inc. 1983 to 1984
Government of Gujarat, India, Irrigation Department 1978 to 1981

Duties included responsibility for the coordination with Plant Operations to interface between the existing plant and the new expansion. Active with on site design engineer, responses to RFIs, resolution of daily construction issues, and submittal review process.

- **NYCDEP: Construction of Catskill and Delaware Water Treatment Ultraviolet Light Disinfection Facilities / Brooklyn NY.** Construction Manager responsible for administration of contract documents and management of construction inspection staff, for a construction contract totaling $ 1.2 billion with consent dates. Projects includes construction of world's largest Ultraviolet Disinfection Facility and two off site contracts, such as Installation of water Main for Town of Mount Pleasant and Wetland Mitigation. The disinfection facility will enhance the disinfection and improve the quality of water supplied to New York City's nine million residents from the Catskill and Delaware watersheds. Prepares Budgets, staffing plans and forecasting of manpower needs; supervising the staff of 60+ engineers, inspectors and technical assistants, set standards and guidelines for consistent project management the various project, is in daily communications with the client, design engineer, plant operations personnel, and the community; completes monthly reports and presentation to client management.
- **NYCDEP: Rehabilitation/Reconstruction of Coney Island WPCP / Brooklyn NY.** Responsible for supervision of construction, coordination among other contractors, process payments and prepare and negotiate change orders. Projects completed: Construction of seven7 mi long sludge force main including highway crossings and water crossings, sludge pump station, construction of gas holders, and reconstruction of sludge storage tanks. Construction of new sludge thickening tanks, reconstruction of existing sludge thickening tanks and sludge digesters. Reconstruction of existing final settling tanks and sludge thickening tanks.
- **NYCDEP: Rehabilitation/Reconstruction of the Coney Island WPCP / NY.** Project includes construction of recycle flow pump station, skimming removal system and washer and compactor system for primary screening system. Responsible for construction administration and management of construction inspection staff. Also responsible for the management of construction contents totaling over $200 Million, including field inspection, payment processing, change order preparation and negotiation, contract closeout, coordination among other contractors, project planning, and scheduling. Also responsible for the coordination with New York City Plant Operations to interface between the existing plant and the new expansion.
- **Earth Engineering & Sciences, Inc.: Extension of Subway for Mass Transit Administration.** Duties included: Inspection of construction of storm drain and sewer lines, 4 ft-diam steel liner tunnel under railroad, concrete culvert, and open channel with gabions.

Mr. Romano specializes in providing construction management services for facilities including wastewater treatment plants, sludge management systems, and radioactive waste systems.

Detailed Experience

- **New York City DEP Construction: Newtown Creek Sludge Handling Facilities / Brooklyn NY.** Resident Engineer responsible for a $400 million contract to construct NYC's first eight egg shaped digesters. Project includes installation of centrifuges, grit removal systems and supporting structures.
- **New York City Department of Environmental Protection Construction: WP-283 Newtown Creek / Brooklyn NY.** Resident Engineer responsible for A $400 million contract to construct NYC's first eight egg shaped digesters, each digester being approximately 3MG and 140ft tall and two sludge storage tanks each tank being approximately 2.5MG and 110ft tall supported by a 9ft thick concrete foundation. Project included installation of 24 centrifuges, grit removal systems and supporting structures including electrical substation and mechanical piping systems. Recipient of the 2003 Concrete Industry Board Award of NY.
- **NYC DEP: NYC Water Tunnel #3.** Resident Engineer for fast track project to construct two Hypochorite chlorination facilities in NYC to support the startup of NYC Water Tunnel #3
- **NYC Department of Corrections: Steam Tunnel Restoration Project.** Resident Engineer for $20 million project to renovate approximately two miles of utility tunnels in Rikers Island Correctional Facility. Construction included asbestos removal, renovation of existing structures and welding of 14" high pressure steam piping.
- **Nassau County Department of Public Works: Cedar Creek Water Pollution Control Plant: Final Settling Capability / Wantagh NY.** Responsible for the management of a $25 million construction project to increase plant final settling capability. Project included construction of six new 110 ft final settling tanks and return sludge pumping station.

Paul Romano

Title/Firm:
Sr. Proj Resident Engineer
Malcolm Pirnie, Inc.

Years of Experience
32

Education
BS Chemical/Environmental Engineering
Polytechnic Institute of New York 1978

Licenses and Certifications
Professional Engineer
CDT(Construction Document Technologist)

Health and Safety Training
Construction Safety Awareness

Professional Training
Construction Contracting for Public Entities
Overview of New York Construction Law

Societies
Water Environment Federation

Employment History
Malcolm Pirnie, Inc. 1988 to present
Ebasco Services, Inc. 1980 to 1988
Texaco Inc., Port Arthur Plant 1978 to 1980

- **Nassau County Department of Public Works: Cedar Creek Water Pollution Control Plant: Heating / Cooling System / Wantagh NY.** Responsible for the management of a $10 million construction project to increase plant heating and cooling capability. Project included installation of four hot water boilers, four centrifugal chillers, and associated piping.
- **Nassau County Department of Public Works: Cedar Creek Water Pollution Control Plant: Effluent Screening / Wantagh NY.** Responsible for construction management and quality control for the $7 million renovation of the effluent screening facility. Tasks included replacement of effluent screens and odor control facility. Installation of new plant protected water system and fire protection system was also included.
- **Nassau County Department of Public Works: Cedar Creek Water Pollution Control Plant: Sludge Degritting / Wantagh NY.** Responsible for construction management and quality control for $25 million renovation of sludge degritting facility and influent screening building. Work in grit building included addition of new aerated grit tank and renovation of two with pumps, piping, and grit conveyance. Work in influent building included replacement of two screens with four new climber screens and addition of odor control facility. Contract also included construction of separate sodium hypochlorite storage facility to house eight 6,800 gallon hypochlorite storage tanks and provide odor control via scrubber to aeration tanks.
- **Carolina Power and Light: Radioactive Waste Staff Engineer, Shearon Harris Plant.** Responsible for the purchase and installation of a volume reduction and polymer solidification system. Work included preparing process and instrumentation drawings, associated piping drawings, and contract administration.
- **New York City Department of Environmental Protection: Expansion/Upgrade of the Coney Island Water Pollution Control Plant / Brooklyn NY.** As Project Engineer in the headquarters office in White Plains, responsible for construction management for Contract 6 (final settling tanks) and Contract 15 (sludge digesters and sludge thickening facilities). Duties included contract administration, design coordination, and change order proposals.
- **Taiwan Power Company: Radwaste Staff Engineer.** Responsible for the design, engineering, and construction support of radwaste treatment systems. Radwaste systems have included such unit operations as filtration, demineralization, settling, neutralization, evaporation, and solidification. Each system designed specifically to reduce waste volume and return usable water back to plant use.
- **Tennessee Valley Authority: Radwaste Engineer, Watts Bar Nuclear Power Plant / TN.** Responsible for providing engineering support for the design and construction of the plant's radioactive waste treatment systems.

Mr. Thayer has extensive experience in the environmental engineering field, concentrated heavily in the management of municipal and industrial wastewater treatment and disposal projects. His experience includes facilities planning and environmental studies, detailed design, construction administration, and treatment plant operations. He has recently been involved with the South Essex Sewerage District in managing both design and construction activities related to the upgrading of treatment and pumping facilities. He has also been involved with the Massachusetts Water Resources Authority's Boston Harbor Project for the past ten years, serving in a variety of roles related to program planning and management, lead design engineering, detailed design management, and construction-related services. Previously, he engineered and managed a considerable number and variety of both large and small wastewater planning and treatment disposal evaluation studies, as well as subsequent detailed design and construction coordination activities.

Detailed Experience

- **Arlington County: Wastewater Treatment Improvements / Arlington VA.** Project Manager responsible for providing engineering services required to expand and upgrade existing facilities to provide increased levels of treatment. Phases included conceptual design, detailed design and bidding services. Major facilities included screening, grit removal, flow equalization, multi point chemical addition for phosphorus removal, biological nitrogen reduction, effluent filtration, secondary treatment, pumping, effluent water facilities, and chlorination/de chlorination systems.
- **NYCDEP: Newtown Creek / NY.** QA/QC manager/coordinator/participant on quality management reviews for Newtown Creek design contracts in 2007 and 2008. A total of ten reviews of interim submittal documents were organized, managed, and completed on behalf of the Design JV. These submittal packages were as follows:
    - The 60% submittal package for NC 47 and The 90% submittal package for NC 50.
    - A limited package (developed to at least 60% level) for certain NC-47 disciplines.

Steven E. Thayer

Title/Firm:
Senior Associate
Malcolm Pirnie, Inc.

Years of Experience
45

Education
BS Civil Engineering University of Massachusetts 1964
MS Civil and Environmental Engineering University of Maine 1965

Licenses and Certifications
Professional Engineer

Health and Safety Training
Ergonomics

Societies
New England Water Environment Association
Water Environment Federation

Employment History
Malcolm Pirnie, Inc. 1993 to present
Metcalf & Eddy, Inc. 1990 to 1992
Maguire Group, Inc. 1987 to 1990
Briley Wild & Associates, Inc. 1972 to 1987
Metcalf & Eddy, Inc. 1966 to 1972
University of Maine 1965 to 1966

- A construction schedule workshop/review for NC 47and NC 36.
- A final review package for NC 50.
- The 90% (or final) submittal package for NC 47.
- A change order package for NC 41F work in the Kingsland Avenue ROW.
- A pre 90% submittal review on the re packaged contract NC 41.

- **Massachusetts Water Resources Authority: Deer Island WWTP / Boston MA.** For the MWRA's Program Management Division, managed all of the firm's work related to secondary treatment and related facilities over a 10 year span, including managing the ongoing detailed design packages, the bidding services related to contractor procurement, and the engineering services provided by the firm during the construction, testing, startup and initial operation of six separate contract packages. Prior to that time for the same owner and project, worked as design manager for the lead design engineer firm, and managed and guided the detailed designer's preparation of design documents for secondary treatment. Also managed a variety of pre construction activities including permitting, public participation, review and management of designs by others, financial support and value engineering.
- **MWRA: Norumbega Covered Storage Reservoir / Weston MA.** For the MWRA, managed all of the Consultant's services to the MWRA as the owner's representative on this 115 million gallon, $90 million key storage facility component of the potable water system. The project is the MWRA's first utilization of the design/build (D/B) method of project delivery. The project consists of two major tasks: Assistance during the procurement process, including establishment of the RFP and its technical requirements, evaluation of qualifications packages and proposals, and selection of the D/B team. Providing oversight of all D/B activities on behalf of the MWRA during the design and construction periods, including on site representation.
- **City of Newport: Design/Build/Privatized Operation Procurement / Newport RI.** Managed and contributed to most aspects of this project to prepare an RFP and evaluate proposals leading to the selection of a DBO team to improve the wastewater system serving the City, the U.S. Navy, and two neighboring towns. Participated in lengthy negotiations with the preferred vendor, leading to contract execution for an agreement which provides for capital improvements and 20 years of operation.
- **Metropolitan District Commission: Wastewater Facilities and Financial Planning / Hartford CT.** Project Manager responsible for providing an assessment of the capital needs of four wastewater treatment plants over a 25 year planning period. The services included an inventory of all equipment, structure and system assets; an assessment of their condition; a prioritization for their replacement or expansion; and the development of plans for managing the assets themselves, as well as the capital requirements associated with implementation.

As Construction Manager, Mr. Vargo is responsible for overseeing several large, high profile construction management projects for New York City Department of Environmental Protection (NYCDEP) wastewater and water supply projects within the metropolitan New York watersheds. Mr. Vargo's diverse experience in construction management, wastewater treatment plant operations and equipment, and system and process startup enables him to oversee and manage projects from commencement to completion.

Detailed Experience

- **NYCDEP: DEL-159 Construction Management / Carmel NY.** Construction Manager overseeing a multi discipline Resident Engineering Staff for this High Profile, Consent Order Project in the NYC Watershed. Project consists of the rehabilitation and upgrading of three shafts on the NYCDEP aqueduct system. Responsible for budgeting and forecasting, Project Management, project staffing and quality of Construction Management and Resident Engineering services. Oversight responsibilities include review of change orders, reports, scheduling and estimating, inspection services and client service.
- **NYCDEP: Flushing Bay Vortex Facility and CSO Retention Facility-Effluent Channel / NY.** Construction activity oversight included supervision of inspection staffing for Soil Mix Wall installation (first of its kind in NYC), 48 in. diameter microtunneling, steel sheeting installation, compaction and chemical grouting, hazardous and contaminated soil borings, excavation and disposal, pipe pile and minipile installation, concrete and reinforcing steel placement, structural steel, mechanical, electrical, HVAC and plumbing and water main installation, sewer installation and cleaning, dewatering and site restoration. In addition to the field staff oversight, has also been responsible for the overall operation of the field office including record-keeping, overview of CPM scheduling, writing and negotiating change orders, shop drawing review, negotiating monthly payments and writing general correspondence. As Resident Engineer, was responsible for coordination of construction activities with other Intercity

Robert P. Vargo

Title/Firm:
Senior Associate
Malcolm Pirnie, Inc.

Years of Experience
26

Education
BA Physics State University of New York at Geneseo 1984
BS Mechanical Engineering State University of New York at Buffalo 1984

Licenses and Certifications
Professional Engineer
Certified Construction Contract Administrator (CCCA)
Certified Construction Documents Technologist (CDT)
Certified Construction Manager

Health and Safety Training
Construction Safety Awareness
Ergonomics
Medical
Health and Safety Orientation
EPA Resource Conservation and Recovery Act for treatment, storage, disposal of hazardous waste

Employment History
Malcolm Pirnie, Inc. 1990 to present
The Briar Contracting Corporation 1985 to 1990
Star Expansion Company 1984 to 1985

and NYS Agencies including the NYC Department of Buildings, Department of Transportation, Parks, Recreation and Forestry, Department of Sanitation, Department of Design and Construction NYSDEC and other interdepartmental agencies of the NYCDEP.

- **NYCDEP: Coney Island WPCP / Brooklyn NY.** Responsibilities at the 110 mgd facility include: Tracking, scheduling, and expediting of construction activities related to the startup and operation of secondary treatment equipment and systems. Operation of systems and equipment were required for a state mandated consent order date. The systems and equipment were put into operation before the consent order date. Works closely with the scheduling engineer for revising the CPM schedule to show more detailed construction activities, revised scheduled dates, and actual progress made for construction activities related to equipment and systems required to meet the consent order date. Coordinates daily construction activities with plant operation personnel for the operation of the wastewater treatment plant without disruption. Monitors and expedites vendor submittal approvals and contractor equipment delivery. Overall equipment and system training for plant operations and maintenance personnel. Coordinates checkout engineer's, electrical inspector's, and instrumentation and control inspector's daily responsibilities for equipment required to meet the state mandated consent order date. Coordinates equipment checkout, testing, and startup with plant operations personnel. Proctors and evaluates vendor training sessions and authors training reports. Schedules vendor training with contractor, vendor, and plant operations and maintenance personnel. Startup and field testing of three 1,000-hp, two stage aeration tank process air blowers with variable inlet guide vanes. Tracking construction and startup of two 3.5 million gallon fine bubble aeration tanks. Authored technical memos concerning the operation of the aeration tank equipment and process. Authored operator pocket guides for the fine bubble aeration blowers and the fine bubble aeration system. These pocket guides included process overview, startup and shutdown procedures, operator and maintenance duties, troubleshooting, and alarms and emergency response procedures. Trained plant O&M personnel on wastewater treatment equipment, systems and processes. Reviews and approves training lesson plans, vendor trainers, and operation and maintenance manuals. Reviews and approves equipment and system field testing procedures and witnessing of field performance testing. Schedules and coordinates vendor and system training for newly installed equipment and treatment processes. Provides operations and maintenance information feedback on new equipment and processes to design engineers.
- **Construction Activities Coordinator / New York NY.** As resident engineer, responsible for the coordination of construction activities with other Intercity and New York State Agencies. These include the New York City Department of Buildings, DOT, Parks, Recreation and Forestry, Dept. of Sanitation, Dept. of Design and Construction, NYSDEC and other interdepartmental agencies of the NYCDEP.

Mr. Weiss has broad experience in construction and design of municipal and industrial projects with emphasis on environmental facilities. As Deputy Construction Manager/Compliance Manager for Malcolm Pirnie at the Newtown Creek Water Pollution Control Plant, New York City's largest treatment plant, he is responsible for the closeout of projects totaling over $1 billion in construction cost. He is also responsible for resolving problems that arise in the design and construction associated with equipment, instrumentation and control systems, and wastewater treatment processes. In the past he has been manager for all construction services performed by a major environmental engineering firm in New York, New Jersey, Delaware, and eastern Pennsylvania. He has held positions for contractors as project manager, superintendent, and senior/chief estimator, and for engineering companies as construction manager, construction coordinator, resident engineer, and senior engineering project manager. Mr. Weiss has extensive experience in estimating, cost control, CPM scheduling, and the review of project schedules.

Detailed Experience

- **New York City DEP Construction: Newtown Creek WPCP - Construction Management / Brooklyn NY.** As Deputy Construction Manager/Compliance Manager, responsible for the closeout of projects totaling over $1 billion in construction cost. Also responsible for resolving problems that arise in the design and construction associated with equipment, instrumentation and control systems, and wastewater treatment processes. Other responsibilities include: Overseeing the overall project compliance with NYCDEP SOPs and quality control required to meet DEP audit standards for construction management.
- **Camp, Dresser & McKee, Inc.: Construction Manager/Construction Coordinator, Project Manager / Fort Lauderdale.** Construction manager and project manager for a variety of construction service projects throughout South Florida.
    - As project manager, responsible for several million dollars in fees while managing construction services and construction management for more than $200 million

Dan Weiss

Title/Firm:
Associate
Malcolm Pirnie, Inc.

Years of Experience
37

Education
BE Civil Engineering New York University 1973
ME Civil Engineering with Environmental Option University of South Florida 1994

Licenses and Certifications
Professional Engineer

Employment History
Malcolm Pirnie, Inc. 2008 to present
Camp, Dresser & McKee, Inc. 2000 to 2008
Florida Engineering and Design, Inc. 1993 to 2000
Vogel Brothers Building Co. 1987 to 1993
Olson Construction Co. 1979 to 1987
Naclerio Contracting Company 1978 to 1979
New York City Department of Environmental Protection 1973 to 1978

worth of constructed facilities, including upgrades to the GTL wastewater treatment plant in Fort Lauderdale, the Boca Raton water treatment plant membrane softening project ($50 million) sodium hypochlorite generation system project ($4 million), and the Deerfield Beach water treatment plant membrane softening project ($13 million).

- Responsible for construction services for the Fort Lauderdale Water Works 2011 Program, a 10 year, billion dollar program, for which CDM was involved in projects totaling in excess of $125 million.
- Other projects included construction services for the City of Deerfield Beach, the City of Dania Beach, and the City of Pompano Beach in Florida.

- **Camp, Dresser & McKee, Inc.: Group Leader/Senior Project Manager/Resident Engineer / Fort Lauderdale, New Jersey and Woodbury, New York.** Responsible for construction services for CDM for a large portion the North Atlantic Region, supervising all construction managers, resident engineers, and inspectors in the area, as well as being the resident engineer on a 90 million dollar NYCDEP construction project, while supervising the resident engineers on another ($50M) NYCDEP project.
- **Olson Construction Co.: Construction Manager / Denver CO.** Managed construction at a sawtooth fish hatchery in Stanley, Idaho, a hydroelectric power plant in Dillon, Colorado and office buildings in Denver. Also provided estimating services as senior estimator and chief estimator.
- **Florida Engineering and Design, Inc.: Construction Manager, Senior Engineer / Lakeland FL.** Completed projects involving water recycling systems, design, development and installation of sludge collection equipment in wastewater treatment plants, design build sewage treatment facilities, and conveying systems for sludge in water treatment plants.
- **Florida Engineering and Design, Inc.: Construction Manager/Resident Engineer, Chemical Plants / Lakeland FL.** Responsible for design procurement and construction for projects totaling several million dollars at IMC Agrico Company, in their three large chemical plants and washer plants.
- **Naclerio Contracting Company: Assistant Project Manager/Field Engineer / New York NY.** Responsible for quality control, field layout, cost control, and owner liaison on a 14 million-dollar interceptor project. Designed sheeting, shoring, and dewatering systems.
- **New York City Department of Environmental Protection: Design Team Group Leader/Field Resident Engineer / New York NY.** Designed and subsequently supervised teams of engineers and inspectors on various public works projects. Responsible for quality assurance, approving contractors' pay estimates, checking shop drawings, and approving change order requests.

Mr. Westervelt has experience in the design and construction administration of water and wastewater treatment facilities. His design experience includes development of design documents and specifications, construction cost estimation, and project scheduling. His construction administration experience includes project management, resident engineering, construction inspection and material testing.

Detailed Experience

- **City of Phoenix: 91st Avenue WWTP Upgrade and Expansion / Phoenix AZ.** Resident Engineer responsible for coordination of all contract administration and on site inspection activities. Malcolm Pirnie provided construction administration, inspection and commissioning services for the $70M, 40 mgd plant expansion, new headworks odor control system, and new blower building project. The 28 month construction project was constructed at the existing 91st Avenue Wastewater Treatment Plant and increased the plant capacity to 180 mgd. The project included: new headworks facility (bar screens, grit basins and grit pump station); modifications to existing headworks and grit/screenings facility by addition of grit cyclones and grit washers; primary sedimentation basins and pump station; aeration basins; secondary sedimentation basins and RAS/WAS pump station; headworks odor control facilities; blower building; solids handling facility improvements; electrical power improvements; and site work.
- **City of Phoenix: UP01 Field Services / Phoenix AZ.** Project Manager responsible for coordination of all contract administration and on site inspection activities. Malcolm Pirnie is providing construction administration, inspection and commissioning services for the $105M, 25 mgd plant expansion. The 32 month construction project is being constructed at the existing 91st Avenue Wastewater Treatment Plant and increased the plant capacity to 205 mgd. The project includes: new interceptor and junction structure; new influent metering and sampling facilities; new headworks facility (bar screens, grit basins and residuals handling facilities); new primary sedimentation basins and pump station; new aeration basins and blower

Jon W. Westervelt

Title/Firm:
Associate
Malcolm Pirnie, Inc.

Years of Experience
18

Education
BS Civil Engineering University of Arizona 1993

Licenses and Certifications
Certified Construction Documents Technologist (CDT)
Certified Construction Manager

Health and Safety Training
Construction Safety Awareness

Professional Training
Alternate Project Delivery Methods Seminar
Primavera Project Planner Training
Scheduling and Claims Prevention

Societies
American Society of Civil Engineers
Construction Management Association of America
National Society of Professional Engineers

Employment History
Malcolm Pirnie, Inc. 1992 to present
Western Technologies, Inc. 1991 to 1991

facility; new secondary sedimentation basins and RAS/WAS pump station; new headworks odor control facilities (including chemical handling); new centrate facilities; solids handling facility and solids thickening facility improvements; new electrical substation and distribution; and site work.

- **NYCDEP: WP-249 Tallman Island WPCP Upgrade / Queens NY.** As construction scheduling engineer, responsibilities included review and approval of the contractor's monthly schedule updates on the multi prime contract. Project comprised of construction of the $225M conversion of the 120 MGD existing WWTFs. The construction work includes the BNR conversion of the four aeration tanks, a new RAS/Blower building, new 27kV substation and Emergency Power Generation Facility, demolition of the existing blowers and replacement of the existing raw sewage pumps.
- **City of Phoenix: Tres Rios Electrical Substation / Phoenix AZ.** Resident Engineer responsible for coordination of all contract administration and on site inspection activities. The project included the construction of new dual 20-MVA transformers at a new substation site located on the 91st Avenue Wastewater Treatment Plant, and the de energizing of the existing plant substation. The project, with a construction cost of $1.6 million included new transformers, switches, switchgear, ductbank, fencing and lighting.
- **City of Phoenix: 23rd Avenue WWTP Upgrade and Expansion / Phoenix AZ.** Inspector. Responsibilities included as built preparation of existing utilities, inspection of earthwork, structural concrete and piping installation, equipment checkout and system startup, and related work inspection. Prepared field orders, change orders and detailed drawings of Design Review Committee items.
- **City of Phoenix: 91st Avenue WWTP Nitrification/Denitrification / AZ.** Improvements to the 154-mgd capacity plant include chemical handling facilities, secondary facilities and improvements to the existing primary, aeration, and secondary facilities. Responsibilities included review and approval of the contractor's cost and resource loaded schedule, monthly updates to the schedule, design improvements to existing sidestream chlorination system, construction cost estimates, construction sequencing, milestone development, and maintenance of plant operations development.
- **City of Scottsdale: Scottsdale CAP WTP Expansion / Scottsdale AZ.** As construction scheduling engineer, responsibilities included review and approval of the contractor's monthly schedule updates. Project expanded the 50 MGD CAP WTP for the city of Scottsdale by 30 MGD. The Project includes new raw water transmission piping, raw water distribution structures and piping to a new Plant III. The new 30 MGD Plant III facilities will include DAF Pretreatment followed by Pressure Membrane Filtration which will connect to the existing post filter GAC facilities. The project also includes finished water conveyance piping and an additional 6 million gallon storage reservoir.

The Port Authority of New York and New Jersey

Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014

D

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Relevant Experience

Experience With The Port Authority of New York and New Jersey

Malcolm Pirnie, Inc (Malcolm Pirnie) has provided a full range of engineering and project management services to the Port Authority in the Metro Area (New York and New Jersey) since the 1980's. These assignments have supported efforts for line departments including Aviation, Tunnels Bridges & Terminals, Port Commerce, and Real Estate & Development. We have worked at all three major airports (JFK International, LaGuardia, and Newark International), the West 30th Street Heliport, and the Goethals Bridge, as well as at other facilities, including tunnels and real estate projects owned, or operated by the Port Authority. To date, we have completed or are working on more than 100 separate assignments and 25+ call in contracts in the New York/New Jersey Area. This is in addition to our environmental support experience for major infrastructure projects by NYCDEP, NJ Transit, NYC MTA, NYC EDC, and NYC DOS. We understand the Port Authority mission is to keep the region moving, and understand that the current contract is to assist with the environmental aspects of infrastructure development, compliance and maintenance.

Our critical differentiator is: our team is familiar with the Port Authority operations and understands Port Authority priorities. As a result of the economic downturn, the Port Authority is taking aggressive action to control operating expenses and prioritize capital spending through a zero growth operating budget in 2009 and a flat 2010 operating budget. Pirnie is sensitive to the Port Authority's fiscal discipline and will continue to assist the Port Authority in reducing consulting expenses for various projects; we have been working on large infrastructure projects in the Metro Area for over 100 years, and have an experienced core team who has worked together on Port Authority projects for the last 6 10 years we have no learning curve, which results in very productive, cost effective project execution.

Malcolm Pirnie, Inc.

Malcolm Pirnie is a 110 year old New York City firm that has focused on large infrastructure projects since its inception. In 2009, Malcolm Pirnie merged with ARCADIS (AUS), a 120 year old Dutch firm, to facilitate global growth we are now a wholly owned subsidiary of AUS. The combined firm's roots are in engineering, project/construction management and consulting. Our early design services for the City of New York water system required all levels of engineering for the water tunnels, waterfront design and infrastructure consistent with the AUS designs in the late 1800's for the various levees and dikes in the Netherlands.

Currently the firm has over 16,000 employees worldwide, with almost 7,000 employees in the U.S. and over 1,100 in the Metro Area to serve the Port Authority. The firm has 12 offices in the Metro Area, with major offices in New York City, White Plains, Fair Lawn, Edison, and Somerset. The firm is well positioned to support the Port Authority due to its unique management structure (no profit centers and experienced core teams centered around the Port Authority) that allow the project managers execute projects with the right professionals without the

obstacles of geographic profit centers.

The firm also has almost 300 professionals committed to environmental engineering in the Metro Area and can draw on technical experience from our 16,000 employees around the world. This access represents world class experience, in an almost unlimited number of technical areas, from air dispersion modeling of vehicular tunnels from our experts in Paris, to the environmental impacts of slurry walls on water quality from our experts in New York.

Relevant Experience

It is understood that the Port Authority Environmental Engineering Department requires project management and related support services for an array of Port Authority capital projects at the various facilities in the Metro area. The current RFP requires experience executing the following types of projects:

- Project/Program Scoping.
- Cost and Schedule Control Oversight from conceptual design through contract preparation.
- Construction Completion.

On the following pages, we provide our qualifications and experience in conducting program management services. Our execution of the above project types have provided us with extensive experience with the core team performing the following tasks:

- Project Initiation Services.
- Project Implementation Services.
- Project Monitoring and Reporting Services.
- Program Level Management Services.
- Program Management Services.

Relevant Experience – Project Type

Program/Project Scoping

Malcolm Pirnie implements project scoping for every program/project regardless of size or scope. A well thought out project plan is paramount for any project to be completed efficiently and cost effectively. For each task order the Port Authority assigns, Malcolm Pirnie first prepares a task based proposal that clarifies the scope and estimates the cost of the task. The project proposal will also provide the Program Manager with the proposed project schedule and project staff. Maintaining open lines of communication with the Port Authority Project Manager throughout a project is a top priority of Malcolm Pirnie, and it starts in the project scoping phase with a clear and concise project proposal.

Cost and Schedule Control Oversight from Conceptual Design through Contract Preparation

Program Management of Indefinite Delivery/Term Contracts. The delivery order type of contract requires a firm with technical expertise in numerous disciplines, experience in managing multiple concurrent activities, and the flexibility and staff resources to undertake several task orders at different sites simultaneously. Malcolm Pirnie has demonstrated these

capabilities on numerous projects for federal and state agencies and for private organizations.

Our client-centered functional organization enables our program management teams to successfully meet project objectives and our responsibilities to our clients. Our program managers have the expectation and the ability to mobilize project teams and individual staff from any location that best satisfies the needs of the client and its project sites. This approach has led to a long history of successful program management on a wide range of environmental term contracts.

Orion Program Management System. Malcolm Pirnie developed the Orion Program Management System to facilitate the management of documents and data in conjunction with a Superfund site remedial investigation and cleanup that was being managed by the United States Environmental Protection Agency (USEPA) and Army Corps of Engineers (USACE). Orion is a web based application that provides a paperless, secure system to manage all aspects of planning, design, construction, and post construction information.

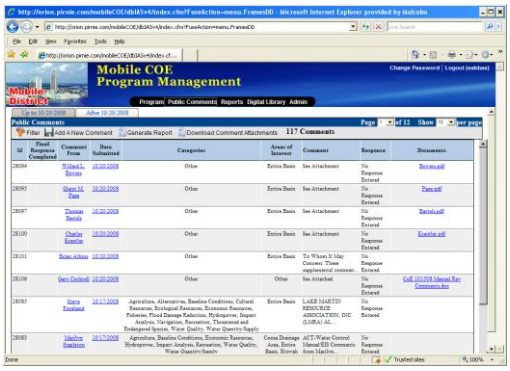
Orion Optimizes Efficiency through Client-oriented Information Management

- Readily adaptable to any program management environment
- Unlimited number of user-configurable workflows
- Enterprise-capable document tracking
- Extensible security module supports complex project roles and role relationships
- Comprehensive reporting tools available within the application
- Individual "portal" view provides immediate access to the most critical summary information

Since its initial implementation in support of the USEPA/USACE Superfund site project data management, Orion has been deployed in support of numerous clients to manage many billions of dollars in capital projects. The system offers efficient information management with the flexibility to accommodate each client's unique needs and goals.

Orion encompasses the features and functional capabilities of both a project and program management system:

- Configurable workflows that proactively manage the routing of documents and information to system users. An unlimited number of workflows and data entry forms can be defined.
- Security restriction on the projects, contracts, menu items, files, folders, reports, and workflows that an individual can view, download, or execute.
- Document management that stores any type of file including spreadsheets, Microsoft Word documents, CADD files, photographs, and scanned documents.
- Tracking of project progress through the project's work phases. Work phase management provides for unlimited phases of activity. Cost estimates, basic schedule dates, and progress by day, week, or month can be managed and monitored for each activity.



- A module for web based scanning. Users have scanners connected to their computers to scan documents directly into the system; the scanning module is fully integrated with workflow routing.
- A bar coding module to support large program and construction management jobs on which the volume of documents dictated the use of bar code detection and routing.
- Automatic e mail notification alerts for workflow items and for submittal of documents through the document management feature.
- Dynamically generated reporting to present up to the-minute information. Reports can have user selectable parameters to enable tailoring of information based on each user's information requirements.
- Information output in either Adobe PDF format (for printed reports) or Microsoft Excel format (for further analysis).
- Automatic generation of letters using Microsoft Word templates.
- A search tool that enables users to search for any document based on contract, project, type of workflow, type of file, date, keywords, or plain text.

Pirnie manages the software, and the Orion program sites are hosted by an off site hosting facility that provides 99.99 percent uptime guarantee and 24x7x365 support. The off-site hosting facility also provides data security and backup. Malcolm Pirnie provides ongoing maintenance and support, as well as development of additional client-specified features.

Primavera Expedition: Project Control for Complex Projects. Malcolm Pirnie uses Primavera Expedition project control software to assist in the management of complex projects. Expedition is a Web browser based program that provides proactive cost control and document management so that projects and programs are successfully executed and completed on time and on budget. The application is easily deployed to all project team members because of its Web interface, which precludes the need to install programs locally on laptops or work stations. The entire project team, including general contractors, subcontractors, engineers, and all other local and remote team members, has immediate access to all project information in a standardized, collaborative environment. Through the use of Expedition, all project information (such as correspondence, design reports, meeting minutes) in the database is accessible and searchable by key words or phrases. Expedition also allows clearly defined responsibilities, due dates, and overdue items, providing the entire project team with up to date status of all open items. The Expedition program is hosted on two Citrix servers located in our White Plains office. Internal access is available over a wide area network, and remote users with intranet connections can access the program and entire database.

Product Functionality. Among many features and functions, Expedition can verify cost categories for existing contracts and related change documents and provide separate modules for budgeted and committed contracts. The program also can verify existing purchase orders and related change documents by automatically converting all purchase orders that are not assigned to a cost category to the commitment side. For example, all change documents linked to the purchase orders also are automatically assigned to the same cost category. Purchase orders that were distributed to the budgeted side of the cost worksheet are converted and

accessible through the application. Expedition also can verify access to existing funding data through the reporting functionality.

The DRAWINGS module provides a user-friendly distribution and tracking process that tracks the distribution of each drawing revision or each drawing set. Existing review revision data are converted and available through drawings reports.

The LETTERS function supports MS Word 2000 and MS Word XP so that Word documents can be created, accessed, modified, and stored.

In brief, Expedition provides visibility into contractor performance, enables timely payment for completed work to avoid claims, facilitates collaboration to minimize surprises, and streamlines contract and document administration.

Security Settings/User Profiles. The Expedition system enables enhanced cyber security through the use of custom security templates. Project managers can assign view, add, edit, delete, and export rights for each module for each user as well as field level security for critical modules such as requests for information (RFIs). The security templates restrict access to private data and ensure that users see only the information they need. The setup is performed by internal IT staff working with the key project team members in order to correctly assign access to applications and different levels of data.

Construction Cost Estimating. Malcolm Pirnie uses Timberline Precision Estimating™ system to prepare detailed construction cost estimates. The software package incorporates a well-recognized spreadsheet interface that allows easy customization of reports or estimate presentations. Estimates may be broken out by location, division or item, takeoff order, assembly, bid item, or other customizable work breakdown structure (WBS) code. "What if" scenarios can be played out quickly and accurately to assist the project team in the decision-making process.

Construction Completion

We have documented construction completion for $1B NYCDEP projects through the use of a dedicated program management staff, and a sophisticated document management system. The system has the capacity for as builts and project completion documents for large $1B+ projects.

Relevant Experience – Tasks

Task A. Project Initiation Services

Develop and Implement Program/Project Management Plans. Malcolm Pirnie's project management process and quality assurance and quality control (QA/QC) procedures are applied and documented through the development of a project specific project management plan. We customize standard processes to accommodate each project's unique technical, environmental, regulatory, and stakeholder considerations so that value is embedded into every aspect of our project deliverables.

Our project managers use the project management plan as a 'living' document that is continuously monitored and updated to achieve the ultimate project goals. If required, on very

large and complex projects, our project managers are assisted in the development and execution of their work by specialists in the areas of cost/schedule, risk management, and subconsultant management. Our subcontractors are usually selected based on their skills, historical insights, and experience that are critical to project success.

Business Analysis / Scope. A primary management responsibility on all Malcolm Pirnie projects is to constantly monitor whether we are "doing the right job" for our clients. We define the right job through strict project scope management that involves identifying all of the elements that are required to achieve an individual client's vision of a successful project while excluding elements that are not relevant to or hinder the accomplishment of the client's stated goals. The primary tool we use in scope management is the development of a detailed WBS, which defines all activities that are required to complete the project. This WBS is utilized by our project managers, the project team, and our clients throughout the project to identify changes in scope and to prompt the authorization of activities to begin at the appropriate time.

Coordinate Project Team / Team Building. Our project managers are used to dealing with multiple design professionals, contractors and subcontractors. Coordination, meetings and allocation of responsibility/accountability are typical for our project managers.

RFP Assistance. Malcolm Pirnie's professionals have extensive experience crafting Request for Proposals to meet the specific needs of various projects. We avoid the "cookie cutter" approach when crafting these documents which ensures the project will receive a thoughtful, detailed proposal that completely meets its unique needs.

Risk Analysis/Management. All projects involve risk to the client and to Malcolm Pirnie. Malcolm Pirnie's risk management process includes risk planning (identification, analysis, and mitigation) and risk monitoring and control. The development of a risk register (a database) in which potential risks and opportunities are identified and qualitatively or quantitatively ranked by the likelihood that they may occur and their likely impact on project scope, schedule, budget, or quality – is one feature of our project management approach. Mitigation measures for high risks are implemented into the project's work breakdown structure (WBS), schedule and budget.

Presentation and Document Preparation. Malcolm Pirnie staff members have successfully prepared numerous documents and presentations for interviews, project status and community related needs

Task B. Project Implementation Services

Manage Project Management Plans (PMPs) and Implementation by other Members. In addition to creating our own PMPs, we have also managed those being performed by others.

Conduct Meetings. Our team attends and assists clients in conducting project meetings. We develop and issue meeting minutes and assist the client in familiarizing the contractor(s) with: project-specific requirements and provisions; departmental procedures associated with the contractor's execution of the work; the project management control systems to be used to administer the work; the responsibilities and interrelationship of the various parties directly associated with the project; routing of shop drawings and correspondence; progress schedule;

payment procedures; mobilization and access to work site; health and safety requirements; Minority/Women owned Business and prevailing wage requirements; criticality of maintaining the operation of vital systems and record drawings.

Preparation of Reports and Contract Documents. Malcolm Pirnie manages the preparation of reports and contract documents. We also develop cost estimates during the course of design and construction management work based on our past project experience, vast databases, and computer programs. Our engineers base their estimates on real feedback received on past projects, enabling us to achieve high precision in our estimates (often within 5 percent of actual costs.)

O&M Constraints. With many projects operational and maintenance constraints need to be established with the project teams. During team meetings these issues are address and recorded so that they are adhered to.

Review Conformance of Documents. Our program managers monitor and control project performance through utilization of Earned Value Management Systems (EVMS). Regular reports document expenditures to date, estimates to complete, estimates at completion, and activity progress.

Our team monitors the shop drawing process for the timely submission and approval of shop drawings and to ascertain the impact of the shop drawing process on the overall project schedule. Typical elements of this role include:

- Review of the schedule of working drawings prepared by the construction contractor for completeness and to ascertain if the submittal dates support the overall project schedule.
- Monitoring of the submittal of working drawings
- Monthly reporting on the progress of the submittal process based on the schedule of working drawings as part of the monthly CPM update process.
- Monitoring of the design engineer's review period and reporting on a monthly basis the average review period as well as any shop drawings that are outstanding > 21 days.
- Monthly review of the schedules and determination of the shop drawings that are required to perform the work scheduled for the next 120 days.
- Review of submitted working drawings for any field conditions or issues that may affect the approval of these drawings.
- Review of all shop drawings returned with comments from the design engineer to determine if the comments on the shop drawings will have potential schedule or cost impacts on the construction contracts. The construction manager establishes a tracking system for such potential impacts from working drawing that involves extra work.

Coordinate Requests for Information. Our team handles the RFI and clarification process, managing the flow of information between the design engineer and the contractors. This task involves:

- Logging and tracking of contractor RFIs.

- Preparation and tracking of requests for clarification (RFCs) to resolve technical questions identified.
- Issuing to the construction contractor the design clarifications prepared by the design engineer.
- Monitoring of the design engineer's review period for RFIs and RFCs and reporting on a monthly basis average turnaround times as well as RFIs and RFCs outstanding > 14 days.
- Establishment of a tracking system within the CMIS for all potential change orders with number and file for each RFI, RFC, or design change that involves extra work.

Post Award Contract Changes (PACC's). Pirnie emphasizes a proactive, collaborative approach with our clients to streamline the process of preparing, approving, and negotiating changes orders in order to minimize delays.

Construction Progress Meetings. Malcolm Pirnie routinely coordinates, schedules, and chairs briefings and progress meetings during projects as well. Our role during these meetings involves:

- Preparing meeting agendas.
- Providing updates on the project schedule, procurement, or other technical aspects.
- Identifying critical issues for each aspect of the project.
- Recommending actions to be taken and securing decisions.
- Issuing minutes of the meetings, including clarification of decisions, action items, and assigned responsibility.

Task C. Project Monitoring and Reporting Services

Update and Review Monthly Actual and Forecasted Project Costs and Schedule(S). As mentioned previously, our program managers monitor and control project performance through utilization of Earned Value Management Systems (EVMS).

Monitor Progress of Construction. Malcolm Pirnie can perform continuous monitoring as required. Continuous monitoring of actual progress against the baseline schedule helps to identify variances early in the project. We have used BIM/4D modeling to demonstrate 3D status and completion and compare it with the projections. We used Building Information Modeling (BIM)/4D Navisworks Scheduling for John Wayne Airport's new $270 million Terminal C project. 4D Modeling allows our team to tie the project schedule into the 3D building geometry and show the 3 dimensional progress of the building construction which corresponds to the schedule progress. Terminal C is being designed using Revit, a premier Building Information Modeling (BIM) software. We have actively provided guidance to the airport on the use of the Revit BIM model to mitigate design and construction conflicts.

Task D. Program Level Management Services

Coordination of Program Level Services. Our primary concern in providing program level services is protection of our clients' interests. We understand that the crucial elements of client satisfaction in construction projects are conformance of the completed work with the contract documents, achievement of the project's intended function, and completion of construction

within the desired schedule. We meet these goals by strictly enforcing the provisions of the contract, carefully monitoring and documenting construction activities, and working closely with owners and contractors to answer the questions and overcome the problems that typically arise during construction.

Resources Requirements / Staffing. Malcolm Pirnie performs analyses on a regular basis so that adequate resources are available for each program. Malcolm Pirnie has built and implemented a project tool that enables our project managers to leverage our resources as required for each task. Our workload management system is fully integrated with both our project management system and our on line system of staff resumes and skill profiles. This tool aids our project managers in the initial staffing of projects as well as in making crucial staffing changes to accommodate the needs of our clients and the changing demands of multiple simultaneous projects. The system also gives us the ability to predict and prevent any potential shortfall in staff resources.

Program Level Schedules. Our program level schedule management approach is based on the use of Primavera or Microsoft Project (or other similar software tools where requested by our clients) to plan, execute, monitor, and control the time management component of project control. Our project managers rely on the knowledge and experience of the project team for the review of an accurate project schedule. Schedule development is an iterative process designed to assure that a realistic schedule that meets the project requirements is adhered to by all parties at the project's outset. As required, our program managers may be assisted by a schedule specialist in identifying schedule variances from the initially proposed plan and in developing strategies to address these variances.

M/WBE Sub-Contractor Goals. Malcolm Pirnie puts diversity into practice on the job. We have awarded millions of dollars in assignments to minority and women owned firms (MBEs/WBEs). We are proud to meet, and often exceed, the minimum established participation goals for local municipal, state, county, and federal projects, even in geographic areas with limited numbers of certified firms.

Task E. Program Management Services

Program Management Services. Malcolm Pirnie has executed large infrastructure programs throughout its 100 year corporate history, including tunnels, terminals and marine facilties. In recent decades, the firm also has provided program management in the environmental restoration arena. Our clients engage our proven program management services to complete large projects or groups of projects efficiently and cost effectively.

To assist our process, we also use BIM in our program management services. BIM is used to graphically demonstrate the processes of construction and facility operation to aid the building process. Systems, assemblies and sequences are able to be shown in a relative scale with the entire structure. The ability to identify areas of potential construction conflicts – detailed in a "clash" report – allow for the design team to correct problems prior to receiving construction bids. The result is a significant reduction in change orders and construction delays.

Malcolm Pirnie is experienced in providing program management for large-scale projects to help clients gain numerous advantages:

- Single source of responsibility (schedule, design, construction, safety, costs)
- Quick mobilization of work forces
- Deployment of both local and national resources
- Wide range of experience at similar facilities
- Delivery of large quantities of work on schedule
- Shifting of risk to others
- Assistance with responsibilities (purchasing, procurement, agency approval)
- Minimal impact on client staffing levels
- Minimal contribution to the base workload of client staff

Malcolm Pirnie's approach is to customize our program management services to each client's specific needs. Our services are scalable, flexible, menu driven, tool supported, staff-supplemented, and environmentally focused. We plan the details of each program with the client and make necessary modifications as the program moves forward in order to maintain schedules, control costs, and deliver projects of the highest quality.

Biddability / Constructability Reviews. Malcolm Pirnie's experience has shown that effective constructability reviews result in clearer contract documents, which in turn promote significant cost savings, smoother construction, and fewer changes and claims. Senior construction personnel assist and direct the constructability review, which is performed by staff who have experience on similar projects. We approach constructability reviews from four points of view:

- *Contractor's Perspective.* We study the design while adopting the contractor's point of view, specifically asking, "How will the project be built?" while examining site layout, equipment use, construction durations, logical construction phasing, and potential delivery and interference conflicts.
- *Operator's Perspective.* We examine the design from an operations standpoint, considering equipment and system requirements, maintenance needs, and ease of operation.
- *Design Efficiency.* We consider the construction efficiency of the design and the materials used in a similar manner as we perform value engineering and life-cycle cost analyses.
- *Construction Sequencing.* We analyze the sequencing of construction to promote the most efficient implementation of resources.

Maintenance of Records and Preparation of Record Drawings. For large, complex projects, Malcolm Pirnie can develop a web based, client-specific construction management information system (CMIS) to be used as a tool to manage the voluminous records for ongoing construction projects. This tool provides the project team with convenient access to pertinent information such as requests for information (RFIs), change orders, reports, permits, and correspondence. The system provides a controlled flow of up to date information to decision makers for timely managerial actions. The control system includes concise and useful action reports that employ "management by exception" concepts to highlight problem areas.

Project Management Manual of Standards and Procedures. Malcolm Pirnie prepares O&M manuals for use in training operations personnel and as reference guides for day to day operation. The manuals include descriptions of assumptions, major system components, and each project. In addition, we provide supervisory training for O&M document management and control. This training covers routine content evaluations, updating and redistribution of training and O&M materials, and re training.

Oracle's Primavera Contract Manager/Portfolio Management Software. Our team is familiar with and able to document and coordinate control through Oracle's Primavera Contract Manager software as well as the portfolio management software currently being used.

Presentations and Public Requests. Public awareness and concern about environmental impacts has increased steadily in recent decades. The viability of many projects that affect the environment now depends greatly on the degree of understanding and cooperation received from the public. Our program managers are prepared to respond to the public's questions and concerns through presentations as well as responding to calls and emails.

Training / Workshop Sessions. Effective, performance based training of management, administrative, operations, and maintenance personnel is an essential element in successful system operations. Our experienced trainers routinely enhance staff competence through development and delivery of customized training programs, integrating classroom, on-the job, and videotape instruction.

Below are some of the large program management projects conducted by Malcolm Pirnie.

PROGRAM MANAGEMENT EXPERIENCE

NYCDEP: Newtown Creek WPCP / Brooklyn, NY

Project Information: Start Date: August 1999; End Date: Ongoing; Total Cost: Engineering Fees, $38,306,640; Construction Cost, $4B; Client Contact: DJ Patel, [redacted]

Malcolm Pirnie is providing construction management services for the $2.4 billion upgrade of New York City's largest wastewater treatment plant. The plant occupies a 36 acre site (being expanded to 53 acres) on Newtown Creek in the Greenpoint section of Brooklyn. The project includes 14 design packages and 14 construction projects to be built over a twelve year period.

Modifications and Additions to the Main Building. The building will be remodeled and major equipment, including raw sewage pumps, process air blowers, and boilers will be replaced.

Three Treatment Batteries of Grit Tanks, Aeration Tanks, and Sedimentation Tanks. The two existing batteries will be upgraded and a new north battery will be built. The new battery will consist of eight new grit tanks, followed by eight aeration and sedimentation tanks with the same layout as the other batteries. Sixteen aerated grit tanks are being upgraded under Phase 3 of the Interim Upgrade program and eight new grit tanks will be constructed at the head of the new north battery.

A New Thickening and Digestion Building. The building will be located on the former Mobil Oil tank farm to the east of the original plant site adjacent to the waterfront. All storage tanks,

piping, and foundations on the site have been demolished. The solids-handling system will consist of gravity thickeners, anaerobic digesters, sludge storage and disposal, and gas handling and odor control facilities. Waste sludge will be pumped to four existing and eight new gravity thickeners. Digested sludge will be stored in two existing and two new sludge tanks and ultimately pumped to the East River sludge-loading dock for marine transport to a dewatering facility.

A New Central Residuals Facility. The new facility will be located in the area between the new central screening facility and existing gravity thickeners Nos. 5 and 6. The central residuals facility centralizes the material handling for plant residual solids (grit, scum, and screenings) in one location.

A New Support Building. The new building containing personnel and administrative facilities as well as the central laboratory will be located on the site of the former Exxon distribution center to the north of the plant and adjacent to Whale Creek Canal.

A New Electrical Substation. The new substation will be located just east of the main building near the existing substation for ease of operation.

Electronic Document Management. Managing a large number of documents is a key function of the construction manager. With input from the NYCDEP, Pirnie developed a program that uses Electronic Document Management (EDM), scanning, and routing of information to users. This "paperless" electronic system allows the team to respond to and route documents quickly, considerably decreasing the response time to the contractor. Filing and retrieval of documents is now completed electronically, reducing the time and resources required. Storing, routing, and retrieving documents electronically increases timeliness and efficiency of the project.

Demolition and Removal of the Former Williamsburg Steel Building. A 120,000 sq ft concrete, brick, and steel frame building was torn down and removed with the use of typical heavy equipment including grapplers, cranes, and bulldozers. The structure contained friable and nonfriable asbestos, lead paint, and fluorescent light fixtures, the latter containing mercury and PCBs in the ballasts.

Demolition and Removal of the Former Mobil Oil Tank Farm. The tank farm had aboveground steel tanks 95 ft in diam, 33 ft high, and painted with lead paint. The tanks were cut with hydraulic shears into pieces of manageable size for loading into trucks off-site removal. The work area was monitored to characterize and quantify the presence of chemical contaminants such as total VOCs, total dust, hydrogen sulfide, and % LEL, and provided construction inspection services to the NYCDEP.

NYCDEP: Flushing Bay CSO / Flushing, NY

Project Information: Start Date: April 1995; End Date: Ongoing; Total Cost: Engineering Fees, $9,229,125; Construction Cost, $166,663,000; Client Contact: Louis Huang, [redacted]

Malcolm Pirnie is providing construction management services for a new vortex and combined sewer outfall retention facilities serving portions of Elmhurst and Corona, Queens, west of

Flushing Meadow Park, and tributary to the Bowery Bay Water Pollution Control Plant. The facility connects to the CS3 outfall. Also included as part of the project is the construction of a 48 in diam sewer and modifications to 14 regulators located along the Long Island Expressway. All flow, including dry weather flow, will be directed through the facility. Dry-weather flow and some wet-weather flow during storm will be conveyed to the Bowery Bay Water Pollution Control Plant via the foul waste sewer and 108th Street pump station.

The CSO retention facility includes the construction of underground tanks that will temporarily store 28 million gallons of storm water and sanitary water during wet weather flows. The waste will be stored until such time after the wet weather when the capacity of the Tallman Island Water Pollution Control Plant becomes available.

Some of the major items of work for these projects are:

Excavation Support System (ESS). The CSO retention facility requires a deep excavation below the water table into soft mud and ash. Excavation support will involve the construction of more than 300 48 in diam reinforced concrete caissons. Jet grouting will be performed between the caissons to cut off the groundwater.

Permits. Malcolm Pirnie is responsible for obtaining permits from the New York State Department of Transportation (for traffic control and structural design) and the Department of Environmental Conservation (for dewatering).

Hazardous Soils. Soil boring and sampling will identify materials requiring special disposal.

Sheeting/Dewatering/Underpinning. The project has stringent dewatering requirements with major impact on excavation procedures and sheeting design. Construction will require excavation 80 ft wide, 40 ft deep, and 200 ft long, with sheeting to restrict dewatering to 150 gpm maximum. Dewatering restrictions are primarily employed to minimize settling of structures. Extensive underpinning may be required, which analysis has yet to determine.

Microtunneling. Over 1,500 ft of 48 in foul waste sewer is to be installed by micro tunneling technology, a laser guided system of installation which provides extremely accurate line and grade tolerances, criteria critical to the success of this project.

Pipe Jacking. The foul waste sewer is divided into two separate 36 in lines for approximately 125 ft of length where it passes under the CS3 outfall sewer. This portion of the sewer is to be installed within 48 in casings which are jacked below the outfall.

Utilities. Close coordination between the contractor and public utilities will be required to provide for the relocation of utilities within the area of the vortex facility with minimal disruptions in service to the local residents.

CS3 Connection. The live tie in and connection of the diversion chamber to the CS3 sewer will be affected by the tidal fluctuations to which this line is subject.

NYCDEP: Croton Filtration Plant / Bronx, NY

Project Information: Start Date: October 2003; End Date: Ongoing; Total Cost: Engineering Fees,

$12M; Construction Cost, $2,001,870,000; Client Contact: Gerard Cox, [redacted]

Malcolm Pirnie is providing management services for the construction of New York City's 290 mgd Croton Water Treatment Plant. The entire Croton WTP will be constructed underground, with the exception of a small entry building and chemical unloading station. Construction of the plant at the Mosholu site will include a new raw water tunnel to convey untreated water from the New Croton Aqueduct to the water treatment plant; a raw water pumping station; a main treatment building located underground which would house all the process elements, administrative offices, a conference room, a small process laboratory, maintenance and storage facilities, electrical and heating installations, ventilation and air conditioning (HVAC) rooms; a treated water pumping station; and a new tunnel to convey treated water from the proposed plant back to Jerome Park Reservoir and the city's distribution system. During construction, an approximately 800 ft long ornamental wall to be built along Jerome Avenue would provide a visual barrier and aid in noise attenuation. Construction of the proposed plant would also require the rehabilitation and stabilization of several off site Croton system facilities, including Gate House No. 1 and modifications to the facilities in and around the Jerome Park Reservoir, both in the Bronx. The Mosholu Golf Course will be kept in operation during the construction of the WTP.

Phase 1, Site Preparation (Contract CRO-311, currently in progress). Removal of 200,000 cy of soil and 950,000 cy of rock, leaving a 40 ft to 60-ft deep footprint. Construction cost is approximately $130 million.

Phase 2 (Contract CRO-313). Construction of a raw water tunnel connecting the plant to the New Croton Aqueduct and a finished water tunnel connecting the plant to Jerome Reservoir. The project has a construction cost of about $200M and began construction in August 2006.

Phase 3 (Contract CRO 312). This project will provide the complete build-out of the facility, and will be constructed under four separate prime contracts (G, E, H, & P). The current estimated cost for this phase of work is over $1.4 billion.

Consent Order Compliance. The construction of the plant is being performed under a strict Consent Order schedule. The Consent Order includes over 20 separate milestone dates which impact each of the construction contracts. Work for the first two milestone dates was completed on or ahead of schedule.

Community/Agency Relations. Sensitivity to the surrounding community is considered to be of utmost importance. Because of the large volume of soil to be removed and corresponding quantities of concrete needed for the construction of the plant, the construction contract includes a number of obligatory "quality-of-life" measures. Stringent directives relating to dust, emissions, noise, vibration, and water levels for wetlands must be followed and enforced. Monthly outreach meetings, open to the public, are to be held in the local community to address the issues raised by community members. A community outreach center has been constructed at a central location to provide assistance to community members seeking education and

employment, as well as additional information regarding the project.

Nassau County DPW: Cedar Creek WWTP / Wantagh, NY

Project Information: Start Date: July 1985; End Date: 2005; Total Cost: Engineering Fees, $49,170,509; Construction Cost, $250M; Client Contact: Richard Webber, [redacted]

Malcolm Pirnie has been providing a wide range of engineering consulting services on a continuous basis since 1984 for the $250 million upgrading of the 75 mgd Cedar Creek facility. Our services have included all phases of work--studies and investigations, permitting, detailed design, construction administration, resident engineering, O&M manuals, startup assistance, and operator training.

Wet-Stream Facilities. Wet-stream facilities include new influent screens and grit chambers, new primary tanks and retrofitting of existing tanks, new aeration tanks and blowers, replacement of aeration system in existing tanks with fine bubble diffusers, replacement of final clarifiers with six new tanks, a new 25 mgd return activated sludge pumping station, centralized skimmings and scum handling facilities, a new hypochlorite storage and distribution system, and modified effluent screening facilities.

Solids Handling Facilities. New facilities include four dissolved air flotation thickeners and five anaerobic digesters; four existing digesters were renovated. Malcolm Pirnie also designed a 40 tpd sludge pelletizing facility that was not built when Nassau County decided to transport dewatered sludge out of state.

Other Facilities. In conjunction with the new and upgraded wet stream and solids handling facilities, Pirnie has upgraded the plant's computer and instrumentation/control systems. We designed a new 15 mw cogeneration plant capable of operating on digester gas and natural gas that produces both electricity and steam for in plant use. We also rehabilitated the plant's ocean outfall which had been damaged by a passing vessel, and expanded and upgraded the laboratory with state-of the art analytical equipment.

NYCDEP: Upgrading of WWTPs in the Catskill Watershed / Catskills, NY

Project Information: Start Date: May 1992; End Date: 2005; Total Cost: Engineering Fees, $10,255,287; Construction Cost, $93,744,000; Client Contact: Emory Chase, [redacted]

With the first stage of a massive watershed-wide wastewater facilities upgrade project, the NYCDEP has taken the leading role in protecting one of the city's most critical resources – the water quality of the Catskill reservoir system, which supplies a portion of New York City's 1.4 bil-gal drinking water supply to nearly nine million people in the New York City area. As an initial task under the project, Malcolm Pirnie provided engineering services for the upgrading of four small sewage treatment plants to the highest level of treatment feasible. The plants are: Grand Gorge (0.5 mgd), Tannersville (0.8 mgd), Pine Hill (0.5 mgd), and Chichester (0.06 mgd). Malcolm Pirnie's services included facility planning, environmental review, nutrient removal pilot

studies, preliminary engineering, final design, cost estimates and construction management.

Construction Management Services. The contracts for the plants included the construction of completely new treatment facilities as well as operator support facilities. The staging of the projects required the construction of a temporary treatment plant at Grand Gorge in order to allow demolition of the existing plant and construction of new facilities.

Construction management services provided included:

- Construction inspection services for each of the four Wicks Law contracts (CAT 132G, 132E, 132H, 132P) with a combined construction value of more than $60,000,000.
- Concrete testing and quality assurance.
- Conducting regular construction progress meetings.
- Review/processing of contractor payment requests.
- Preparation and tracking of construction change orders.
- Review of CPM scheduling and monitoring compliance with Consent Order milestone dates.
- Operations assistance, startup assistance and O&M preparation.
- Maintenance of as built contract drawings.

UV Disinfection Systems. All three plants were originally designed and constructed with chlorination/dechlorination systems, however, ultraviolet disinfection facilities were also constructed as primary disinfection systems at each of the treatment plants.

Project Complexity. Although the plant capacities are small compared to larger downstate plants operated by the NYCDEP, the Catskill facilities are as or more complex, because the process train includes 10 major processes to achieve the strict effluent limits, producing effluent that is "tap water" clean.

The projects were constructed under tight consent order driven schedules, meeting each required milestone date. Even when major design changes were made after construction had begun at the Tannersville and Grand Gorge plants, and severe winters hindered construction activities, the project achieved all milestone dates.

Community Relations. The Tannersville and Grand Gorge plants are constructed within village limits, and access to the plants by construction vehicles, personnel, and equipment delivery were a daily occurrence. Malcolm Pirnie, working with the DEP, kept the community informed and actively pursued mitigative actions for common problems associated with such activities (i.e., noise, dust, etc.).

NYCDEP: Construction Management and Liaison Services at North River WPCP / New York, NY

Project Information: Start Date: August 1991; End Date: Ongoing; Total Cost: Engineering Fees, $32,515,118; Construction Cost, $116,554,270; Client Contact: Mike Dastparvardeh, [redacted]

The 170 mgd North River plant on the Hudson River in upper Manhattan is one of New York City's most unusual wastewater treatment facilities. A 28 acre, $130 million park, offering every

major indoor and outdoor sporting activity, was built on the roof to make the facility more attractive to its host neighborhood. Unfortunately, the plant was plagued by odor problems when operation began in 1986. The NYCDEP was under pressure from the local community to mitigate the odor problem. Malcolm Pirnie was contracted to provide engineering design, design services during construction, and on site liaison assistance to the NYCDEP in order to successfully reduce the odor emissions at the plant as well as implement several important process improvements. Additionally, we are also providing comprehensive construction management services for two construction phases currently underway at the plant. Work being performed under these two phases includes the following:

- Replacement of existing and installation of new chemical metering equipment and installation of new chemical storage tanks and fill stations.
- Resident engineering and inspection services for revisions to existing chemical disinfection system for future total chlorine residual TRC management. Revisions include installation of induction mixing units to reduce chemical consumption and improve chlorination effectiveness as well as revisions to provide uninterrupted operation of the disinfection system in the event of failure of the primary disinfection system.
- Rehabilitation of wet scrubber and carbon adsorber odor control systems under Contract 33 and installation of additional odor control systems under Contract 35.
- Replacement of air diffusers, associated piping, dissolved oxygen monitoring system and controls in the Aeration Tanks.
- Installation of a new process air blower for the Aeration Tanks, including associated piping and controls.
- Replacement of the plant's water booster system.
- Installation of covers on the Final Settling Tank launders and connection to the plant's odor control system.
- Upgrade of the plant's emergency generator system.
- Construction Management Services

Malcolm Pirnie is presently providing the following construction management services for construction contracts NR 33 and NR 35:

- Resident engineering services
- Inspection of construction work activities
- Facilitating communication and coordination among the NYCDEP, the design joint venture, contractors, utility companies, and other affected agencies
- Review and monitoring of CPM construction schedules
- Responding to contractor's requests for information (RFIs)
- Preparation of field condition change orders
- Negotiation of all change orders (field and design conditions).
- Markup and maintenance of as built drawings.
- Resolution of field issues.
- Specialized inspection and field support services (electrical and I&C work).
- Monitoring of hazardous material remediation

- Startup and commissioning of processes and new equipment.
- Liaison Services during Construction. The joint venture is also providing the following liaison services during construction.
- Coordination of schedules for equipment orders, shop drawings, acceptances, turnover, and occupancy.
- Review of city procedures, property acquisition and leases, permits, insurance, and utility agreements.
- Review of working drawings and shop drawings.
- Preparation of design condition change orders.
- Startup and commissioning assistance for new odor control equipment.
- Review and approval of permanent record microfilming.

NYCDEP: Coney Island WPCP / Brooklyn, NY

Project Information: Start Date: January 1979; End Date: Ongoing; Total Cost: Engineering Fees, $95,698,963; Construction Cost, $607,238,131; Client Contact: Reza Marandi, [redacted]

Malcolm Pirnie provided Construction Management services on a continuous basis since 1984 for the upgrading of the 110 mgd Coney Island Water Pollution Control Plant. The upgraded plant provides treatment for 110 mgd of wastewater at average conditions. Peak capacity was increased from 140 to 220 mgd. All flows receive primary treatment. Full secondary treatment is provided for all flows up to 165 mgd. Treatment processes consist of screening, raw sewage pumping, grit removal, primary settling, air-activated sludge (capable of operation in the step-aeration mode), final settling, and chlorine disinfection. Sludge treatment at the plant site consists of degritting of primary sludge, screening of waste sludge, gravity thickening, and high-rate anaerobic digestion. Project Include:

- New sodium hypochlorite disinfection facilities and modifications to outfall structure, including construction of chlorine contact tank and hypochlorite storage building.
- Six new motor driven Main Sewage Pumps as well as the reconstruction of the entire main sewage pump station.
- Installation of five new process air blowers with associated large diameter SS aeration piping.
- Reconstruction of two existing aeration tank and construction of two new aeration tank including the installation of new aeration piping and diffuser systems.
- Construction of a new Return Activated Pump (RAS) station.
- Construction of a new 27 kV Substation and switchgear.
- New covered primary settling tanks and sludge removal system.
- New final settling tanks to supplement the existing settling tanks which were reconstructed.
- Six new gravity thickeners to supplement existing thickeners, all enclosed in a new building. Ventilation air is treated for odor control.
- Rehabilitation of the digesters in stages to maintain the digestion system in continuous operation including new digester covers.
- Four new engine generators.

Construction Management Services. A full range of construction management services was provided for the upgrading of the Coney Island WPCP. This includes Project Administration as well as Resident Engineering Inspection. Our responsibilities included: Preparation, review and monitoring of CPM construction schedules. Resident Engineering Inspection. Permitting and Certificate of Occupancies. Mark-up and maintenance of as built drawings. Resolution of field issues. Preparation and negotiation of construction change orders. Preparation of Fixed Asset Surveys. Preparation of Color Flow Diagrams. Review and approval of microfilm records and Project Closeout.

Operator Training and Startup Services. Operations services included preparation of written operation and maintenance (O&M) materials, startup assistance, training videotapes, training lesson plans, vendor training overview, and delivery of training to operations staff. Operations specialists coordinated all new facility and equipment startups including the preparation of startup plans, coordinating staffing requirements and providing 24 hour on-site assistance as needed. Following successful startup, we continued to provide process performance evaluation and assistance, working with the plant supervisory staff and operators to optimize process operations. We also prepared one year operations performance certification reports for each major contract.

John Wayne International Airport: Terminal C Const. Program / Irvine, CA

Project Information: Start Date: 2007; End Date: Ongoing; Total Cost: Engineering Fees, $14M; Construction Cost, $207M; Client Contact: Larry Serafini, [redacted]

The passenger volume at John Wayne Airport (JWA) has been increasing at a steady 6% per year since 1982. John Wayne Airport's last expansion program was completed in 1991 and included the construction of two terminals that totaled 435,000 SF with 14 bridged aircraft gates to support 12 commercial carriers. JWA will construct a third 300,000 SF Terminal C that will provide an anticipated capacity of 10.8 million air passengers (MAP) by 2011.

ARCADIS is providing all Construction Management services, including Building Information Modeling (BIM)/4D Navisworks Scheduling, during the design and construction of John Wayne Airport's new $270 million Terminal C program. Terminal C is being designed using Revit, a premier Building Information Modeling (BIM) software. ARCADIS is actively providing guidance to the airport on the use of the Revit BIM model to mitigate design and construction conflicts.

The program begins with the controlled demolition or "de construction" of a 4 level, 1,200 space, post tensioned concrete parking structure to facilitate the construction of the new Terminal C. The cost of this "de-construction" is estimated at approximately $10 million. This is a controlled demolition project as the existing TSA baggage screening room is located inside of the existing parking structure, which requires the TSA baggage screening room to be isolated during demolition activities to maintain screening operations. The construction of the new $270 million Terminal C will begin after the demolition of the parking structure. Terminal C includes the construction of 6 new bridged aircraft gates that will increase JWA's commercial passenger gate capacity to a total of 20, and will provide new facilities for the 7 commuter/regional jet carriers at the north and south ends of the terminals.

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Management Approach

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Project Management Approach

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Management Approach To "Call-In" Projects

The "Call In," delivery order type of contract requires a firm with the capabilities of managing multiple, concurrent activities, and the flexibility and personnel resources to undertake task orders on short notice. Perhaps our best demonstration of these capabilities is the service we have provided to the Port Authority under our "call in" contracts from 1993 to the present.

Since March 1993, Malcolm Pirnie engineers, and consultants (and administrative support staff) from our Northern New Jersey, New York City (Queens/Long Island City) and White Plains, New York offices have provided thousands of hours of service on almost a 100 projects, from JFK, LGA to tunnels and dredging. We understand the Port Authority system and approach.

Malcolm Pirnie's approach to managing work assignments maximizes the use of our experienced and qualified project team members to provide the Port Authority with cost-effective and responsive results. We also have extensive program management experience on "on call" contracts for NYCDEP, MTA and NJ Transit. Our management team's experience with the Port Authority provides us with the opportunity of providing you the quality of service and personal relationship that you have enjoyed for the past seventeen years.

A general services, or call in, contract is built on the ability of the management team to form a close working relationship with its client. Our management team strategy will:

- Encourage communication between Malcolm Pirnie and the Port Authority and maintain a pro active pursuit of strengthening the partnership between the Port Authority and the management team.
- Provide committed, experienced personnel capable of performing routine consulting services; especially tasks requiring immediate response.
- Provide personal Principal in Charge service, especially with quality control/quality assurance of the documents along with value added consulting.
- Maximize the advantages gained by Malcolm Pirnie staff relationships with regulatory agency personnel in New York and New Jersey to gain support from them on critical issues pertaining to regulatory negotiations, and obtaining grants and/or loans for work assignments where appropriate.

Project Management Approach

Malcolm Pirnie's approach to Program Management is to generally organize the Program Management Team into two groups. The first group is organized around program level tasks. These include tasks such as General Program Management, Master Program Activity Schedule, and Budget and Cost Control, which impact the overall coordination and delivery of all of the Program's projects. The second group is organized around the delivery of the

projects. The delivery of each project will be different to accommodate the specific characteristics of the project. Our typical Project Delivery Model (shown on the side panel) shows the phases that most of the design and construction projects will go through for delivery and final completion, and as detailed below.

Program Management Plan

As noted above, the Port Authority is requesting assistance with their Program Management Program. The Program Management Plan will serve as a detailed guide to the development of the Projects Program and will include a Mission Statement and Guiding Principles developed specifically for this Program. The Plan will also include a description of the Program Organization and Coordination and Support Activities. The individual Project Management Plans will be attached to the Program Management Plan.

Master Activity Schedule

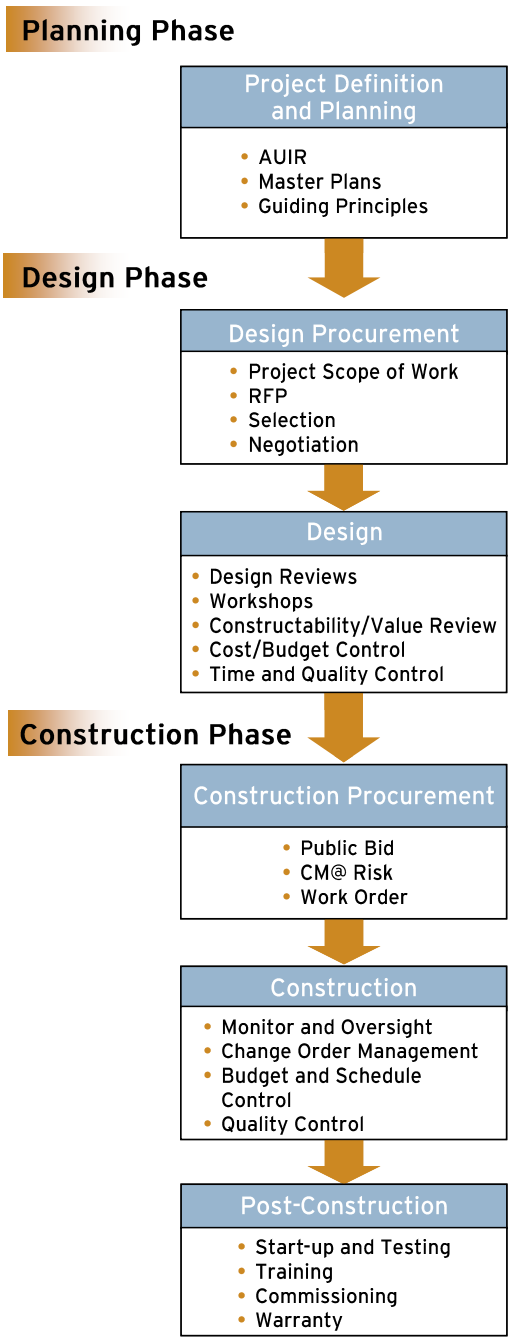
A master program schedule will be used for scheduling, coordination and tracking of the Port Authority Projects. The master program schedule is a critical part of and will be included in the Program Management Plan.

The Port Authority Program is made up of multiple separate but potentially interrelated projects. In order to create a program schedule showing the critical path of tasks and activities, each project must be broken down into its own interrelated tasks with appropriate durations and predecessor/successor relationships. Since each project is critical to the successful completion of the Program, the interrelationship between projects or project tasks will be established with predecessor/successor relationships.

One integrated master program schedule will be prepared, which includes activities for permitting, engineering design, procurement, construction, commissioning, and initial operation activities of all the program projects. The schedule will be prepared in the Port Authority's standard format, and could be viewed in any of several formats.

Individual project schedules drive the master program schedule. The Project and Task Managers will closely monitor detailed project schedules and report summarized progress and status to the Program Manager each month for inclusion in the master program schedule.

Project Delivery Model



The Program Manager will identify and proactively manage critical path tasks so that corrective actions at the project level can be identified and implemented before the program schedule is delayed. The master program schedule will be validated each month as individual project schedules are finalized and/or updated.

The master program schedule is a dynamic working document and will be used to track progress and forecast schedules on a monthly basis.

Budget and Cost Control

Updated project budget information is needed for the Port Authority's fiscal planning activities. One of our first priorities will be to review the project budgets for each of the Port Authority Projects and coordinate to provide updated cost information. If necessary, an independent estimate of the project cost would be obtained.

Budget and cost control is integral to the success of any project. Over the years Malcolm Pirnie has managed thousands of design and construction projects for our clients, ranging in size from small projects to large programs. We understand the intricacies of managing budgets and controlling costs. Our approach to controlling cost is two fold: addressing design elements prior to design and implementing good management systems during construction.

Change orders are typically the biggest contributor to cost overruns on projects. Change orders result from several types of situations, most of which are controllable. Some of the specific activities or initiatives that the Program Manager will implement for reducing change orders are development of well defined plans and specifications through design reviews, and owner involvement in the design review process.

In addition to minimizing change orders, the use of effective cost control policies and procedures are critical throughout the life of the program and on each project. Our Program Management system includes effective management tools such as Microsoft Project Primavera for scheduling, project assessment via Monthly Status Reports, a Policies and Procedures Manual, and promotion of strong communication amongst stakeholders.

Monthly Status Report

A Monthly Status Report will be prepared for Port Authority Management. The report will summarize and compile project progress reports on each active project and include an overall Program summary page. The individual monthly project progress reports will include:

- Project Description
- General Project Information
- Schedule of key milestones
- Recent Progress/Current Status
- Critical Activities/Matters

In Progress Review Meetings

We will assist the Port Authority in organizing and preparing for In Progress Review (IPR) Meetings. The purpose of these meetings is to provide an overview of the Program progress and discuss activities affecting the development and implementation of the Port Authority

Projects. The IPR Meetings also provide an opportunity to request guidance and direction from the Port Authority's Management Team on critical matters. The IPR meetings would be held 1 week after submission and distribution of the Monthly Status Reports.

Obtaining Federal, State, and Local Permits

Permitting is one of the major areas that the Program Manager and the Port Authority must effectively and efficiently address in order to maintain the Projects Program schedule and budget. Although the responsibility to apply for individual permits lies with project engineers and contractors, a coordinated effort is required. Our approach to permitting is to make it an integral part of project delivery. The project permitting strategy must be flexible to accommodate inevitable changes to project design, feedback from the public, and comments from regulatory agencies.

Proactively Identify Issues and Develop Creative Solutions

The Port Authority is seeking a Program Manager that will be proactive and take a leadership role in identifying issues and new approaches. Our entire Program Management system is designed to identify and resolve issues at a project level before they can adversely affect the Program. Each Program Management activity, including contract administration, public information, scheduling, budget and cost control, and particularly communications, lead to identification and response to issues arising during the development of each project in the Program. Malcolm Pirnie's position as a leader in both transportation and Program Management make us uniquely qualified to proactively identify issues and new ideas, and develop creative solutions and implementation strategies.

The initial approach to problem solving is problem avoidance. We are reminded that "an ounce of prevention is worth a pound of cure". Problem prevention through proper planning is the first step in the quality assurance process, consisting of up front decision making and early reviews to identify and resolve potential problems.

When issues do arise, which is inevitable on every project, the Program Manager typically uses the five step "engineering approach" to resolve the issue:

- Understand the Problem
- Identify alternative solutions
- Evaluate the alternatives
- Select the best value solution
- Implement the recommended resolution

Not all problems require this process. Many issues are resolved by merely clarifying the issue. With effective, on going communication between the project delivery team members, most issues are resolved before they amount to any more than a question and an answer.

The skill and experience of the program management staff goes a long way toward resolving issues and minor disputes before they grow into a problem. It is in the best interest of every project team member to identify and resolve issues at the lowest level and with the least effort possible so the project focus can remain on delivery.

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Technical Rates and Multiplier

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Technical Rates and Multiplier

The expanded technical personnel schedule is included on the following pages. As requested, the personnel schedule lists the name, job title, and hourly rate of personnel expected to work on the Geotechnical Engineering Services Port Authority projects. Resumes for these individuals have been provided in Section D as requested in the RFP.

Company Policy

It is the company's policy to compensate certain employees for time worked in excess of 40 hours in a work week as follows:

Non-exempt employees (scientist or engineer) are paid time-and-one-half for time worked in excess of 40 hours in a work week, except as otherwise required by law. Employees may make up for hours missed by working additional hours within the same work week, as defined previously. Exempt employees (project scientist/engineer, senior project scientist/engineer) are paid straight-time for time worked in excess of 40 hours in a work week. There is no overtime provision for Associates, Senior Associates and Officers, unless there is a special condition (i.e. extended duration due to project requirement).

The following provisions apply in computing overtime:

- Time-off for meals do not count as time worked.
- Paid absence and/or PTO- paid time off do not apply to overtime computations as time worked.
- Holidays are included in overtime computations.
- Time absent from work for any other reason, is not included in computing overtime.

Travel time on company business in excess of normal commutation time is considered time worked.

All other full and part-time salaried (not hourly) employees who are required to work on a Malcolm Pirnie designated holiday receive credit for the holiday plus applicable overtime pay for time worked in excess of 40 hours in a work week.

Key Personnel Schedule

Name	Title	Hourly Rate
Carmine Marra	Principal	$230.00
Jim Brown	Principal	$230.00
Mark DelBove	Principal	$230.00
Frank Diffley	Sr. Project Control Specialist	$65.00
Mark Duryea	Associate	$80.00
Tom Husband	Senior Associate	$85.00
Dan Lopez	Principal	$230.00
Craig Murray	Principal	$230.00
Tricia O'Loughlin	Principal	$230.00
John O'Sullivan	Sr. Project Resident Engineer	$69.90
Dinesh Patel	Associate	$79.60
Paul Romano	Sr. Project Resident Engineer	$68.20
Steve Thayer	Senior Associate	$73.00
Bob Vargo	Senior Associate	$82.00
Dan Weiss	Associate	$77.50
Jon Westervelt	Associate	$65.90

Call-In Services Multiplier

Malcolm Pirnie proposes to perform services on a "call-in" basis during 2011 using a 2.89 multiplier on the actual salaries of "professional and technical personnel (but not partners or principals)." The Multiplier for work performed at Port Authority offices shall be 2.20. The back-up data is provided below.

Costs for allowable expenses are as follows:

Transportation: $0.50/mile for vehicles

Reproduction: $0.76/direct labor hour

Equipment: a schedule for usage rates for specialty equipment is available for field assignments.

Malcolm Pirnie Full Overhead Costs-Summary 2011 Projection (In Thousands)

Direct Labor	$95,337
General & Administrative	
Employee Benefits	$48,253
Management Costs	42,590
Office Operations	38,904
Marketing	23,123
Human Resources	13,865
Financial Services	4,993
	$171,728
Overhead Rate	1.80
Direct Labor	1.00
	2.80
Profit@3.39%	0.09
Multiplier	2.89

Full Overhead Costs- Details 2011 Projection (In Thousands)

Employee Benefits	
Employers FICA	$11,651
Optional Holiday Payout	341
Paid Time Off (PTO)	13,311
Group Coverages	9,839
Pension	7,180
401K Plan	4,134
Unemp Dbl Wc	818
Overtime Differential	389
Overtime Offset	(609)
Licenses and Dues	537
Tuition	306
Employee Activities	314
Paid Absence	288
Short Term Disability	290
Benefits Allocation	(536)
	$48,253
Management Costs	
Incentive Compensation	$13,320
Insurance Costs	2,985
General Management	11,228
Legal Costs	2,499
Technical Services	7,134
Amortization of Intangibles	323
Management Costs Continued:	
Contributions	371
Corp. Computer Operations	1,302
Corp. Computer Depreciation	667
Management Fee - AUS	3,296
Other	(535)
	$42,590
Office Operations	
Rent & Utilities	$14,157
Office Services/Supplies & Maint	5,951
Computer Services	10,239
Communications	2,326
Administrative Reproduction Costs	773
Library	419
Expendable Off Furn & Suppl	48
Automobile Expenses	2,854
Automobile (Contra)	(1,943)
Deprec-Off Furn & Fixt	1,830
Amortization of	1,587

Leaseholds	
Archiving	265
Postage	398
	$38,904

Marketing

Proposals & Marketing Labor	$15,787
Proposals & Marketing Exp.	3,771
Project Contracts	572

Marketing Continued:

Corporate Communications	423
Mktg Admin & Support	1,579
Advertising	271
Entertainment	720
	$23,123

Human Resources

Moving Expenses	$1,203
Human Resources Admin	3,628
Employment Costs	1,885
Learning	2,131
Personal Development	694
Professional Activities/Leadership	2,599
Employee Partnerhip/Perf Reviews	852
Employee Orientation	59
Health and Safety	814
	$13,865

Financial Services

Accounting & Auditing	$3,719
Billing Rate Variance	(806)
Interest Expense	646
Amort. Deferred Loan Costs	93
Payroll Variance	253
Miscellaneous Taxes	753
Bank Service Charges	228
Bad Debts	0
State Income Taxes	107
	$4,993

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M/WBE Participation Plan

If subcontractor or sub consultant assistance is required on a project, Malcolm Pirnie will contact the Port Authority's Office of Business and Job Opportunity to obtain a list of certified MBE/WBE firms. We will determine if we have worked with any certified MBEs in the required area of expertise and, where possible, we will attempt to subcontract with certified firms that have worked with us on other projects. We maintain ongoing working relationships with several local MBE/WBE firms. Firms are chosen for their ability to augment Malcolm Pirnie's in-house technical resources and typically provide specialized services for discrete tasks such as laboratory analysis, surveying, drilling, and reproduction. To further our efforts, we are in routine contact with Affirmative Action bureaus, which maintain listings of Small, Minority and Women Business Enterprises (SBE, MBE and WBE). The RFP states that the Authority has set a goal of 12 percent participation by qualified and certified MBEs and 5 percent by qualified and certified WBEs. We are confident that we can easily meet this goal.

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Affiliations

Ownership Interests in Other Firms

Malcolm Pirnie is a wholly owned subsidiary of ARCADIS US, Inc. Malcolm Pirnie or its officers have an ownership interest in several other firms including:

- **ARCADIS U.S., Inc.**
  630 Plaza Dr.
  Highlands Ranch, Colorado 80129
  EIN: [redacted]
- **HaulPass. L.L.C.**
  104 Corporate Park Drive
  White Plains, NY 10602
  Owners: Malcolm Pirnie, Inc. (100%)
  EIN: [redacted]
- **Rostan Solutions, L.L.C**
  1300 E. 8th Street, Suite F100
  Tampa, FL 33605
  Owners: Malcolm Pirnie, Inc. (100%)
  EIN [redacted]
- **Malcolm Pirnie of Michigan, Inc.**
  645 Griswold Street, Suite 1950
  Detroit, MI 48226
  Owners: Malcolm Pirnie, Inc. (100%)
  EIN: [redacted]
- **Malcolm Pirnie Consulting Engineers India Private.**
  Limited"Trade Center"
  306, 3rd Floor, "C" Wing
  North Main Road, Koregaon Park
  Pune 411001, Maharashtra, India
  Owners: Malcolm Pirnie, Inc. (99%) / Mr. K. Sridhar (1%)
  India Corporate Identity Number: [redacted]
- **Malcolm Pirnie Engineers, PLLC**
  3101 Wilson Boulevard, Suite 550
  Arlington, VA 22201
  Owners: Millard Robinson (50%) / James Noonan (50%)
  EIN [redacted]
- **Malcolm Pirnie - Middle East FZC**
  PO Box 27471
  Abu Dhabi, UAE
  Owners: Robert McCollum (50%) / Mohsen Mortada (50%)
  Ras Al Khaimah Free Trade Zone
  Registration: [redacted]
- **Malcolm Pirnie Australia Private, Limited**
  Level 29 Saint Martins Tower
  31 Market Street
  Sydney NSW Australia 2000
  Owners: Malcolm Pirnie, Inc. (100%)
  Australian Corporate Number: A.C.N. 127 906 030
- **InfraMetrix, LLC**
  9208 Florida Palm Drive
  Tampa, FL 33619
  Owners: Malcolm Pirnie, Inc. (72%) / Aqua Data, Inc. (28%)
  EIN [redacted]
- **MP Engineers of Puerto Rico (MPPR)**
  Las Vistas Shopping Village Ste 23
  300 Av Felisa Rincón de Gautier
  San Juan, PR 00926
  Owners: Raul Torres (90%) / Guillermo Marxuach (10%)
  EIN: [redacted]

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Conflict of Interest Statement

To the best of our knowledge, Malcolm Pirnie, Inc. has no current assignments with or obligations to other clients and no contracts or property interests which will conflict with the interest of The Port Authority of New York and New Jersey with respect to the services we propose to perform for The Port Authority of New York and New Jersey.

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Terms and Conditions

Malcolm Pirnie has reviewed the Terms and Conditions as presented in the RFP.

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www.pirnie.com

MALCOLM PIRNIE

Solutions for Life™

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

Request for Proposals

PROFESSIONAL PROJECT MANAGEMENT SERVICES

AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013, AND 2014

Presented to:

THE PORT AUTHORITY OF NY & NJ
ONE MADISON AVENUE, 7TH FLOOR
NEW YORK, NEW YORK 10010

Attention:

RFP CUSTODIAN

Reference Number:

22388

Submission Deadline:

OCTOBER 21, 2010 2:00PM

Presented by:

MAST
CONSTRUCTION SERVICES

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ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

MAST Construction Services, Inc.
(Company)

(Signature)

President
(Title)

10.19.10
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   MAST Construction Services, Inc.

2. Business Address (to receive mail for this RFP):

   96 East Main Street

   Little Falls, New Jersey 07424

3. Business Telephone Number: 973-837-1515

4. Business Fax Number: 973-837-1517

5. Firm website: www.mastconstruction.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 06 / 01 / 2001

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   MAST Construction Services, Inc does not have any affiliates.

9. Officer or Principal of Firm and Title:

   Theodore Domuracki, President/Principal in Charge

10. Name, telephone number, and email address of contact for questions:
    Susan DiGiacomo (973) 837-1515 Extension #234

    sdigiacomo@mastconstruction.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☒ Yes ☐ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

by

Office of Business & Job Opportunity

MAST Construction Services, Inc.

Certificate PA-27263

This certificate acknowledges that the above named firm is certified as a **Small Business Enterprise (Architectural and Engineering Program).** This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: July 17, 2009

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: July 16, 2014

Form: 6/10/93

Ted Domuracki
President, Principal in Charge

Richard Brown
Project Executive

Michael J. Palumbo, P.E., A.S.C.E.
Director of Technical Services

John A. Delutis
Project Executive

Gerard Carbone
Senior Project Manager, LEED Green Associate

Troy Marzziotti
Senior Project Manager

Jim Napolitano
Project Manager

Paul Skabich
Project Manager

Sean Edmonds
Assistant Project Manager

Nick Lucarelli
Assistant Project Manager

SUMMARY OF PROJECT EXPERIENCE

NAME	TITLE/POSITION	YEARS OF EXPERIENCE	RELEVANT PROJECT	PROJECT COST
Ted Domuracki	President, Principal in Charge	35+	• World Trade Center Transit Hub, One World Trade Center, Towers 2, 3 and 4	$ 19 B
			• Newark Housing Authority Downtown Core District Redevelopment & NJ Devil's Arena	485 M
			• Harrison Waterfront Redevelopment Roadwork	30 M
			• DPMC – DMAVA Park & Walkway	16 M
			• Bergen County Juvenile Detention Center & Youth Shelter	30 M
			• Jersey City Annex & Parking Garage	120 M
			• Atlantic City Convention Center Corridor	35 M
			• Cape May Ferry Terminal	21 M
Richard Brown	Project Executive	25+	• DPMC – DMAVA Park & Walkway	$16 M
			• Building 77 Adaptive Re-use	24 M
			• Union County Courthouse Fire Code Renovations, New Court Building and Parking Deck	32 M
			• Jersey City Annex & Parking Garage	120 M
			• South Ward 5th Police Precinct	60 M
			• Bergen County Juvenile Detention Center & Youth Shelter	30 M
			• Harrison Waterfront Redevelopment Roadwork	30 M
			• NHA Downtown Core District	485 M

			Redevelopment & NJ Devil's Arena	
			• NJ Turnpike Authority Widening Program	85 M
			• Atlantic City Convention Center Corridor	35 M
John Delutis	Project Executive	27	• Union County Courthouse Fire Code Renovations, New Court Building and Parking Deck	$32 M
			• Jersey City Annex & Parking Garage	120 M
			• Hudson County Plaza	
			• Secaucus Recreational Center	11 M
			• Burlington County Library Addition	7 M
			• Pulte Homes Fulton's Landing	25 M
			• Atlantic City Convention Center Corridor	35 M
Gerard Carbone	Senior Project Manager, LEED Green Associate	30+	• Building 77 Adaptive Re-use	$24 M
			• Harrison Commons Parking Garage	45 M
			• Bijou Properties – Garden Street Lofts	26 M
			• Montclair Bay St. Parking Garage	8 M
			• East Orange Police Facility	19 M
Troy Marzziotti	Senior Project Manager	17	• The Actor's Fund Assisted Living Facility	$8M
			• Hudson County Community College: North Hudson Campus, 2 Enos Pl., New Welcome Center, New Library, Culinary Art Institute & Conference Center, Culinary Park Plaza, Administration Center and various renovations.	104 M
			• Flatrock Residential Complex	25 M
			• Hudson County Correctional Center	40 M

Jim Napolitano	Project Manager	13	• Bergen County Juvenile Detention Center & Youth Shelter • DPMC – DMAVA Park & Walkway • Harrison Waterfront Redevelopment Roadwork • HCCC College Facilities Management & Renovations • NHA Downtown Core District Redevelopment & NJ Devil's Arena	$30 M 16 M 30 M 14 M 485 M
Paul Skabich	Project Manager	12	• South Ward 5th Police Precinct • City of Newark Parks Initiative • Newark Arena Roadwork Completion • HCCC: Culinary Art Institute & Conference Center, Culinary Plaza Park, Renovations	$60 M 10 M 55 M 38 M
Michael J. Palumbo, P.E.	Director of Technical Services	42+	• Visy Paper Complex • Par Pharmaceutical • 220-5th Avenue • Colgate-Palmolive Company • Tweed Courthouse • High School of Performing Arts • Hackensack Childcare Center • Warlaw-Hartridge School • Avalon Cove • Port Liberte	$125 M 5 M 10 M 35 M 8 M 25 M 3.5 M 6 M 35 M 115 M

MAST CONSTRUCTION SERVICES, INC.

TED DOMURACKI

PRESIDENT, **Principal in Charge**

PROFILE

Ted has worked as a real estate and Construction professional for more than **35** years and has held senior executive positions at some of the nation's largest construction management firms. In 2001, Ted founded **MAST Construction Services, Inc.**, a construction management consulting firm offering construction management, owner's representation, project management and distressed project consulting. The firm is dedicated to providing senior level hands on services to public entities, institutions, corporations and developers.

Currently, Ted serves as General Manager of Program Integration for the World Trade Center Downtown Restoration Program in the capacity of liaison between The Port Authority of NY & NJ and Silverstein Properties Inc. In this role he facilitates communications and identifies and solves project interface issues for the rebuilding of the $19 Billion, 16 acre World Trade Center site, specifically, One World Trade Center, the Transportation Hub, and Towers 2, 3, and 4.

Ted is personally responsible for heading Distressed Projects Intervention and Consulting at **MAST Construction Services, Inc.**; his service to one of our Fortune 500 clients recently earned him a position on their corporate oversight risk assessment committees for project management and bid review. Ted also serves on the Blue Ribbon Committee and the AD HOC Committee for Hudson County Community College.

EDUCATION

1974 – Penn State University, BSCE in Civil/Structural Engineering
1983 – Rutgers University, MBA Finance/Management

PROFESSIONAL ASSOCIATIONS

- USGBC
- Boy Scouts of America
  Executive Board Member, Northern New Jersey Council, 1992 – 2002
- Eagle Scout

AWARDS

- 2000 – Good Scout Award, New Jersey Construction Industry Luncheon
- 1995 – Construction Manager of the Year, New Jersey BCA

EXECUTIVE COACHING

1996 - 2000 Oher & Associates
ITT – Innovative Information Techniques

EMPLOYMENT HISTORY

June 2001 – Present
Founded **MAST Construction Services, Inc**

1984 to June 2001 **York Hunter, Inc.**
President

1981 – 1984 **Lehrer McGovern, Inc.** *New York, NY*
1984 Vice President
1981-1984 Project Manager

1979 -1981 **Philip Morris, Inc.** *New York NY*
Senior Auditor Construction Specialist

1977 - 1979 **Research Cottrell** *Somerville, NJ*
Construction Estimator

1974 - 1977 **Bechtel Power Corp.** *Gaithersburg, MD*
Structural Engineer

MAST CONSTRUCTION SERVICES, INC.

CAREER HIGHLIGHTS

INDUSTRIAL/SCIENCE/TECHNOLOGY

- South Ward Industrial Park
- MetroNexus Data/Telecom
- Davis Besse Nuclear Power Plant
- Cleveland Cliffs Power Plant
- Miller Brewery
- Cabarrus Cigarette Manufacturing Facility
- KeySpan Business Solutions

CULTURAL AND FINE ARTS

- Newark Symphony Hall
- Lambert Castle
- Light keeper's House at Absecon
- New Jersey Historical Society
- New Jersey Vietnam Vets Memorial
- New York Public Library
- St. Peter Rectory – 18 Vesey Street

TRANSPORTATION AND INFRASTRUCTURE

- World Trade Center Transit Hub
- Atlantic City Roadways, Utilities, Landscape/Streetscape
- Cape May Ferry Terminal
- Colgate-Palmolive Waterfront
- MSU Infrastructure/Roads
- Tower Hill Parking Garage
- Montclair Bay Street Parking Garage
- Newark Housing Authority – Downtown Core
- Harrison Redevelopment
- Prudential Center Arena

GOVERNMENT AND JUSTICE

- Jersey City Garage and Annex
- City of Newark City Hall
- DPMC: DMAVA Park and Walkways
- Bergen County Juvenile Detention Center
- MSU Police Facility
- Northwestern Academy Juvenile Detention Facility
- Sunset Park Patrol Boro Command
- Tweed Courthouse
- Wilentz Court Complex
- East Orange Police Facility
- Hudson County Correctional Center

HOSPITALITY AND RECREATION

- AmeriSuites Hotel
- Atlantic City Casino Reinvestment Development Authority Hotel Expansion
- County College of Morris Natatorium
- Holiday Inn
- Stevens Institute of Technology Recreational Facilities
- Town of Harrison – Red Bull NY Soccer Stadium
- Secaucus Recreational Center
- Alpine Country Club
- Newark Downtown Core Redevelopment Corporation
  - Prudential Center *Devil's Arena*
  - Arena Asset Management
- City of Newark, Multiple Parks Projects

COMMERCIAL

- One World Trade Center, 3 Office Towers
- Bank of America Madison Avenue, NY
- 744 Broad Street Newark, NJ
- Lanidex Center, NJ
- Allendale Industrial Park, NJ

INTERIORS

- Gateway Center
- JM Huber
- Bank of America
- Tenant Work Bank of America
- Allendale Industrial Park
- 345 Adams Street
- Bank of Bavaria
- Bloomingdales

MAST CONSTRUCTION SERVICES, INC.

RICHARD BROWN
PROJECT EXECUTIVE

PROFILE
A program management and civil construction expert, Richard has garnered more than **25 years** of experience at some of the region's top construction firms. Richard joined **MAST Construction Services, Inc.** in 2002. Richard's expertise in phasing and staging complex projects offers a great asset to both our public and private clients. He is currently involved in several large scale high profile projects in the State of New Jersey.

Today, Richard is Senior Vice President and serves as Operations Manager and Project Executive of all of **MAST Construction Services, Inc.** projects, including some of great significance such as South Ward 5th Police Precinct, valued at $60 million for the City of Newark, Hudson County Community College, collectively worth an approximate $150 million, Harrison Waterfront Redevelopment valued at $1.3 Billion. In this capacity, he oversees program management services, develops value-engineering concepts to meet owner budgets, creates and manages overall project schedules, helms owner/architect meetings, reviews bids, and negotiates contract awards.

EDUCATION
Burlington County College
A.S. Engineering - 1985

PROFESSIONAL CERTIFICATIONS
- National Institute for Certification in Engineering Technologies Level IV [redacted]
- Environmental and Occupational Science Institute for Hazardous materials [redacted]
- American Red Cross First Aid

PROJECT EXPERIENCE AT MAST:
- Department of Military & Veteran Affairs Park & Walkway, DPMC, *Jersey City, New Jersey* $16M
- Building 77 Improvements *Kearny, New Jersey* $24M
- Union County Courthouse Fire Code Renovations, New Court Building and Parking Deck $25M
- Jersey City Annex with approximately 120,000 SF of office space, 50, 000 SF of retail space and a Parking Garage for 1200 vehicles $120M
- South Ward 5th Police Precinct with Office of Emergency Management *Newark, NJ* $60M
- Bergen County Juvenile Detention Center and Youth Shelter - *Teterboro, NJ* $30M
- City of Newark Arena Area Road Network Completion - $55 Million
- The City of Newark –complete renovation of 8 Parks scattered throughout the City of Newark valued at $15 Million
- St. Peter's College *Jersey City, New Jersey* New Student Center valued at $40 Million
- Town of Harrison Waterfront Redevelopment with Red Bulls Stadium $1 Billion over 15 years
- Newark Housing Authority - Downtown Core District Redevelopment & NJ Devil's Arena $485M
- Hudson County Community College *Jersey City, New Jersey*:
  - New North Hudson Campus $40M
  - Culinary Institute & Conference Center – 73,000 SF, $25M
  - 70 Sip Street, Interior Renovations $10M
- Hudson County Correctional Center *Kearny, New Jersey* $45M
- Montclair Bay Street Parking Garage $8M

EARLIER CAREER HIGHLIGHTS:

Senior Project Manager

Capital Health System FULD Campus *Trenton, New Jersey*
$17 million, 70,000 SF addition and renovation to house a new emergency room, psychiatric screening, and outpatient center; Project was split into three phases to allow emergency room and trauma center to remain in service during construction.

Granville Charter High School *Trenton, New Jersey*
$7 million gut renovation and conversion of the Schriner's Building into a charter High School.

Project Manager

Rutgers University *Piscataway, New Jersey*
$42 million Higher Education Capital Improvement: Project (HECIP) included new roofing, windows, ADA upgrades, HVAC/plumbing and electrical work on Bush and College Avenue Campuses. Work was performed to minimize class interference.

Atlantic City Convention Center Corridor Projects *Atlantic City, New Jersey*
$35 million roadway, infrastructure, and landscape improvements: this project included relocation of overhead, high-pressure steam, water and sewer utilities as well as construction of a lighthouse and several parks.

Colgate Palmolive Site Redevelopment *Jersey City, New Jersey*
$35 million waterfront restoration project that included permit procurement from government agencies installation of 1100 LF of bulkhead of bulkhead construction in the Hudson River, and 84' sanitary/storm combined sewer outfall with tide gate construction.

Cape May Ferry Terminal *Cape May, New Jersey*
$21 million, 40,000 SF construction of a new ferry terminal with an elevated 600 LF connected pedestrian bridge equipped to meet boat-docking requirements. The building was complete with high end materials. Project included creation of wetland retention basin.

West New York Public Schools *West New York, New Jersey*
$5 million gut renovation of 20,000 SF building, plus construction of a 10,000 SF addition. Project included construction of 10 classrooms, Multipurpose Room and Kitchen.

Project Engineer

New Jersey Turnpike Authority Widening Program
Five-year $85 million program to widen five miles of highway in each direction: 12 bridge structures were realigned to accommodate construction.

East Penn School District *Lehigh Valley, Pennsylvania*
$20 million program management project to renovate various schools within East Penn School District.

Massachusetts Turnpike Authority Rehabilitation Program
$7 million pump station and water main project to include installation of eight miles of water main.

Garden State Parkway, New Jersey
Program included bridge and road widening, ramp realignment, and several construction projects on the Garden State Parkway.

MAST CONSTRUCTION SERVICES, INC.

MICHAEL J. PALUMBO, P.E., A.S.C.E.

DIRECTOR OF TECHNICAL SERVICES

PROFILE

Michael has over **42** years experience in the construction industry. He has designed and managed the construction of major residential, commercial, educational, and governmental projects in New York and New Jersey. As a Structural engineer for a major New York City Structural Engineering Design firm, he designed and inspected the construction of numerous buildings. His experience encompasses the construction of reinforced concrete and structural steel buildings, including local Law 10 inspections, structural failure reports and load tests. Michael holds a degree in Civil Engineering from City College of New York and is a licensed Professional Engineer in New York and New Jersey, as well as a member of ASCE.

As project executive, Michael is responsible for direct project supervision; interfacing with prime contractors, reviewing and negotiating bid packages, reviewing estimates/schedules/contracting plans, reviewing progress payments, bidder qualifications with emphasis on pre-construction value engineering, constructability review and conceptual estimating. Specialist at conceptual system alternative studies; foundation, structural façade and mechanical systems.

EDUCATION

1976 - City College of New York New York, NY
B.S. in Civil Engineering
1968 – New York City Community College
New York, NY
A.A.S. in Construction Management

EMPLOYMENT HISTORY

2001 – Present
Glenwood Management *New York, NY*
Vice President of Construction

1987 – 2001 **York Hunter** *Newark, NJ*
Director of PreConstruction/Project Executive

1984 - 1987 **Sordoni Construction Company**
Parsippany, NJ
Sr. Project Manager/Purchasing Manager

1974 – 1984 **Pike Construction** *Paterson, NJ*
Project Manager

1970 – 1974 **HRH Construction** *New York, NY*
Assistant Supervisor/Project Manager

1968 – 1974 **Robert Rosenwasser** *New York, NY*
Structural Engineer

CAREER HIGHLIGHTS

INDUSTRIAL/SCIENCE/TECHNOLOGY

- **Visy Paper** Staten Island, NY
  $125 Million, 550,000 SF paper recycling plant complex

- **Par Pharmaceutical** Spring Valley, NY
  $5 Million, 100,000 SF structural steel/masonry/aluminum panel pharmaceutical manufacturing facility.

- **220-5th Avenue** New York, NY
  $10 Million restoration of a 19-story office building, including a rehabilitation of the lobby to its original 1911 condition.

- **Colgate-Palmolive Company**
  Jersey City, NJ
  $35 Million infrastructure project, the first phase of a $2 Billion redevelopment of Colgate's industrial facility.

- **375 Pearl Street** New York, NY
  The renovation and restoration of a 21-story office building.

MAST CONSTRUCTION SERVICES, INC.

GOVERNMENT AND JUSTICE

- **Tweed Courthouse** New York, NY
  $8 Million rehabilitation and restoration of 52 Chambers Street, NYC & National Historic Landmark

EDUCATIONAL/INSTITUTIONAL

- **High School for the Performing Arts** New York, NY
  $25 Million restoration of 1894 NYC landmark. 80,000 SF, 6-story building damaged by fire, completely gutted and restored.

- **Hackensack Childcare Learning Center** Hackensack, NJ
  $3.5 Million, 35,000 SF childcare center built as a free standing, self-contained facility on the Hackensack Medical Center Campus.

- **Warlaw-Hartridge School** Edison, NJ
  $6 Million Phase I, 44,000 SF expansion of the School's Edison campus.

RESIDENTIAL

- **London Terrace** New York, NY
  $7 Million conversion of 120 apartments into condominium units.

- **Avalon Cove** Jersey City, NJ
  $35 Million waterfront apartment tower consisting of 269 apartment units, 300 car parking garage, 1,000 SF of bulkhead and waterfront walkway.

- **Port Liberte** Jersey City, NJ
  A new $115 Million, 363-unit condominium/luxury townhouse complex complete with yacht club and marina.

- **Essex and Phoenix Mills** Paterson, NJ
  A HUD funded $6.2 million project consisting of the renovation and restoration of two 159 year old historic landmark silk mills into a 150-unit, low income housing project.

- **2 Lincoln Square, 65th Street and Broadway** New York, NY
  A new 730, 000 SF, 42-story, 600 unit condominium building.

- **Harlem River Housing** New York, NY
  A 4800 SF intermediate abutment, structural steel and concrete pedestrian/vehicular bridge over the Major Deegan.

- **1930 Broadway** New York, NY
  $88 Million, 460,000 SF, 29-story, 229 Unit High Rise Apartments

- **10 Liberty Street** New York, NY
  $79 Million, 387,000 SF, 4-story, 287 Unit High Rise Apartments.

- **10 Barclay Street** New York, NY
  $168 Million, 560,000 SF, 60-story, 396 unit High Rise Apartments.

- **320 West 38th St.** New York, NY
  $220 Million, 715,000 SF, 2-24-story, 569 unit High Rise Apartments.

Michael J. Palumbo

MAST CONSTRUCTION SERVICES, INC.

JOHN A. DELUTIS

PROJECT EXECUTIVE

PROFILE

John is a **27 year** veteran of the construction industry and has been with **MAST Construction Services, Inc.** since its inception. His past work ranges from Project Engineering for luxury residential communities to Program and Construction Management for medical, educational and municipal facilities.

John oversees **MAST Construction Services, Inc.** Construction Management projects from the pre-construction phase through owner occupancy. His responsibilities include interfacing with clients and prime contractors; analyzing estimates, schedules, and contracting plans; negotiating bid packages; and reviewing bidder qualifications. John is currently overseeing the adaptive reuse of Building 77, a 4 acre site in Kearny, NJ, home to an existing dilapidated 80,000 SF warehouse. This building will be brought down to its steel and rebuilt to serve the shared storage, office and vital technological needs of the Hudson County Office of Emergency Management Command Center, record storage for the Hudson County Prosecutor's Office and record storage, secure storage and general warehousing for the Hudson County Department of Corrections. The goal for this building is to achieve LEED Silver Certification. As such, the components encompass the following: geothermal wells, a photovoltaic roof system, a green roof, radiant heat flooring, 3 wind turbines and bioswales for collection and control of storm water runoff.

John proves to be an invaluable asset to each of the clients he works with. With a strong handle on financial impact in design and construction, design details and solution driven temperament, John is a successful overall project manager, working with owners, client representatives from inception through project completion; ensuring a success, delivered on time and within budget.

EDUCATION

Moravian College – 1983, B.A. Accounting
Minor: Business Administration

PROFESSIONAL ASSOCIATIONS

Construction Management Association of America

PROJECT EXPERIENCE AT MAST:

- Union County New Court Building & Parking Deck *Elizabeth, New Jersey* $25M
- Jersey City Annex and 1200 car Parking Garage *Jersey City, New Jersey* $120M
- Burlington County Library Addition & Renovation *Westhampton, NJ* $7M
- Hudson County Plaza *Jersey City, NJ* $45M
- East Orange Police Facility *New Jersey* $19M
- St. Peter's Rectory, 18 Vesey Street *NY, NY*
- Hudson County Correctional Center *Kearny, NJ* $42M
- Columbus Towers, *Jersey City, NJ* $108M
- Secaucus Recreational Center *Secaucus, NJ* $11M
- Pulte Homes Fulton's Landing *Jersey City, NJ* $25M
- Jewish Home of River Vale *New Jersey* $20M
- Alpine Country Club *Demarest, NJ*$15M
- Bay Street Parking Garage *Montclair, NJ* $5M
- Memorial High School Grandstands West New York, NJ $2.3M

EARLIER CAREER HIGHLIGHTS

Project Executive/General Project Manager

University of Medicine and Dentistry of New Jersey, *Piscataway/New Brunswick, New Jersey*
$43 million seven-project plan of construction and renovation which included a new laboratory research annex; 20,000 SF, $5 million RWJ Medical School/School of Public Health; and 120,000 SF, $36 million standalone building with vivarium, NMR and 32 wet labs.

Jewish Home Rehab Center
Rockleigh, New Jersey
$28 million gut renovation and retrofit of 180,000 SF into a 181-unit skilled nursing facility Equipped with kosher kitchen.

West New York Early Childhood Center
West New York, New Jersey
$5 million gut renovation of 20,000 SF and construction of a 10,000 SF addition. Project included installation of 10 classrooms, a Multipurpose room and a kitchen.

Senior Project Manager

Atlantic City Convention Center Corridor
Atlantic City, New Jersey
$35 million roadway infrastructure and landscape improvements. Included relocation of overhead, high-pressure steam, water and sewer utilities; as well as construction of a lighthouse and several parks.

Montclair State University
Montclair, New Jersey
$34 million Master Plan expansion targeting new construction and renovation over a five-year period. Included a new 94,000 SF academic building, a 40,000 SF addition to the library, expansion/renovation to three buildings of the Fine and Performing Arts Center, and a new 5,000 SF campus safety facility.

New York Public Library Central Research Branch, 5th Avenue, *New York, New York*
$8 million infrastructure rehabilitation. Included new emergency generator, storm leaders, security
system, and fire alarm/protection systems. Special
care given to the historic landmark interior and exterior.

Gladys Hillman Jones Model Middle School
Newark, New Jersey
$7 million conversion of a historic school in to a model educational facility.

Brooke Astor Rare Books Reading Room, New York Public Library, New York, New York
$3.5 million phase gut renovation of 5,000 SF space
to create the new Reading Room; custom monumental bookcases with state-of-the-art security and fire alarm systems, HVAC systems with extra filtration, humidification control, and extensive marble
and oak millwork.

New Jersey Institute of Technology
Newark, New Jersey
$2.8 million gut renovation of 20,000 SF Cullman Hall, plus other fast-track interior renovations throughout campus over a four-year duration.

Project Engineer/Assistant Superintendent

Port Liberte *Jersey City, New Jersey*
$115 million construction of 363-unit luxury condominium and townhouse complex including Yacht Club and Marina. Project also included major infrastructure work, such as a manmade island and timber bridge.

MAST CONSTRUCTION SERVICES, INC.

GERARD CARBONE

SENIOR PROJECT MANAGER, LEED GREEN ASSOCIATE

PROFILE

Gerard has been working in the construction industry for over **30 years**, and he has been with **MAST** since April of 2003. Gerard's active day to day management on projects over the past three decades has resulted in his expertise in technical aspects, constructability, phasing and logistics. He is very well versed in all trades and has forged strong relationships with multiple contractors.
At **MAST**, Gerard has completed the construction of a parking garage which consisted of a three and one-half level precast structure for both a private developer and the Parking Authority in Montclair, New Jersey. He has also completed the rehabilitation of 15 South Munn Street and other adjacent properties to serve as the Headquarters for the East Orange Police Department in East Orange, NJ.

Gerard has recently completed an adaptive reuse project for Hudson County Community College. A former Welfare building has been transformed into a thriving educational environment. The 20,000 SF, 3 story building with basement, now offers 10 classrooms, a computer testing lab, administrative offices including the Dean of Instruction and a Student Lounge.

At the present time, Gerard is overseeing the adaptive reuse of Building 77, an 80,000SF warehouse on a 4 acre site in Kearny, NJ. This building will be brought down to its steel and rebuilt to serve storage, office and vital technological needs of the Hudson County Office of Emergency, Management Command Center, record storage for the Hudson County Prosecutor's office and record storage, secure storage, and general warehousing for the Hudson County Department of Corrections. The goal for this building is to achieve LEED Silver Certification. As such, the components encompass: Geothermal Wells, a Photovoltaic roof system, a green roof, Radiant Heat, 3 Wind Turbines and Bioswales for collection and control of storm water runoff.

AFFILIATIONS

- LEED Technical Committee
- LEED Material and Resources; Technical Advisory Group
- USGBC Government Correspondence Committee
- USGBC Codes Correspondence Committee
- United Brotherhood of Carpenters and Joiners of America – Member

PROJECT EXPERIENCE AT MAST:

- 2 Enos Place – Education Building J, Hudson County Community College *Jersey City, NJ* $5M
- Building 77 Adaptive Reuse, Hudson County, NJ $24M
- Redevelopment of 7 Public Parks for the City of Newark $9.8M
- Harrison Commons 1500 car Parking Garage $45M
- Bijou Properties - Garden Street Luxury Condominiums *Hoboken, NJ* LEED Certified Gold, **SBIC Beyond Green High Performance Building Award** $26M
- Montclair Bay Street Parking Garage $8M
- East Orange Police Facility $19M
- St. Peter's Rectory 18 Vesey Street *New York, New York* $6M
- West New York Board of Education $8M
  - Memorial Field upgrades: grandstands, paver installation and windscreen installation
  - School #4 chimney restoration
  - On Call services for the District; cost estimating, deficiency reports, etc.

EARLIER CAREER HIGHLIGHTS:

491 Greenwich Street Condominiums New York, New York
$14 million gut renovation of an existing six-story brick warehouse capped with a four glass and steel addition along with a new 11-story structural steel building with 8,300 SF of architecturally detailed glass curtain wall.

West New York Early Childhood Center West New York, New Jersey
A $5 million gut renovation to an existing 20,000 SF building with a new two-story addition including all new mechanical systems and the installation of one new elevator.

Haagen Dazs Warehouse Expansion Bronx, New York
New construction of an 11,200 SF sub-zero freezer along with a 1,700 SF office addition. All work performed within a fully functional warehouse.

Dylan Hotel New York, New York
$9.5 million 65,000 SF gut renovation of an existing landmark quality ten- story hotel (formerly The Chemist Club) and a four-story addition to create a new 14-story, 108 key boutique hotel in Midtown Manhattan. Construction included a complete interior demolition of the existing 10 story structure and a four story addition with refurbishment of the marble staircase, reuse of the existing millwork throughout the new dining area and the restoration of plaster columns and ceiling.

Avalon Willow Mamaroneck, New York
$28 million 268,000 SF new 227 residential rental units in three 4 ½ story buildings. Buildings were framed using light gauge metal framing throughout, including a very complicated roof and wind bracing system, installation of six new elevators and extensive millwork in the main lobby.

Saint Barnabas Medical Center MOB

Sussex County Courthouse

Courtyard Marriott

Saint Josephs Hospital nursing residence

Hyatt Regency Restaurant renovation

Datascope Corporate Headquarters

Cost Estimating, coordination and scheduling of Manpower and materials for projects such as:

UMDNJ Martland Building Newark, New Jersey
A complete renovation of four floors within an operating 15-story building.

NJIT Cullimore Hall Newark, New Jersey
Renovations

Rutgers University Newark, New Jersey
Classroom ceiling replacement, lecture hall ceiling renovation.

Ameri-Suites Hotel Secaucus, New Jersey
New construction of a nine-story luxury hotel.

TROY MARZZIOTTI
SENIOR PROJECT MANAGER

PROFILE

Troy joined **MAST** Construction Services in June of 2004. With **17 years** of experience in construction management, Troy has a keen ability to succinctly move a project through to completion. His technical expertise and attention to details proves him an asset on distressed projects, in particular. Expertise gained from institutional and corporate projects, he is detail oriented; he mobilizes team members, especially in the construction phase to accomplish goals and milestones.

Troy has been responsible, in the field, for various renovations, additions and new construction for Hudson County Community College in Jersey City and in Union City, New Jersey for the past 3 years. Currently he is working on the new North Hudson Campus in Union City; a Welcome Center at Journal Square; and new Educational building in Jersey City. He is also overseeing the construction of Flatrock Residential Complex in Englewood, New Jersey, a four-story, 126 new luxury condominium residence community. In the private sector, Troy recently closed out the addition and renovation of the Englewood, NJ Assisted Living facility for the Actors Fund.

EDUCATION

Stevens Institute of Technology
Masters of Science Construction Management
New York University
Diploma in Building Construction Management
Iona College
Bachelor of Science Business Administration

PROJECT EXPERIENCE AT MAST:

- The Actor's Fund Assisted Living Facility *Englewood, New Jersey* $8M
- Hudson County Community College *Jersey City, New Jersey*
  - North Hudson Campus $40M
  - 2 Enos Place Education Building J $5M
  - New Welcome Center $1.2M
  - New Library 65-79 Sip Avenue $19M
  - Culinary Institute & Conference Center $25M
  - Culinary Park Plaza $1.8M
  - Administration Center 70 Sip Street, Interior Renovations; 40,000 SF on four floors $9.5M
  - Renovations to 25 Pathside, 87 Sip Avenue & 870 Bergen Street $1.5M
- Flatrock *Englewood, New Jersey* mixed use residential that includes 126 new luxury residences $25M
- Hudson County Correctional Center *Kearny, New Jersey* $40M
- Multiple projects in the *NY Metro area* for Fortune 500 companies (confidential): Size of projects range from $2M to $55M

EARLIER CAREER HIGHLIGHTS

Dormitory Authority State of New York
Brooklyn College Library, Brooklyn, New York
$12 million 450,000 SF rehabilitation and expansion to create the library.

State University Construction Fund
Student Union at Old Westbury, Old Westbury, NY
$13 million 180,000 SF three story new construction.

Albert Einstein College of Medicine
Bronx, New York
$3 million mechanical upgrade including two 850 ton liquid absorption chillers, three cooling towers and installation of structural steel for sound attenuators for cooling towers.

Pratt Institute Library
Brooklyn, New York
$3 million renovation of MEP systems of historical landmark building including three new architectural skylights and replacing and reappointing brick façade.

Pratt Institute ARC Building
Brooklyn, New York
$1 million HVAC upgrade of an existing including demolition and installation of two new air handling unites (50 ton and 80 ton Trane units).

IBM, 320A
East Fishkill, New York
$3 million HVAC upgrade of an existing building including phased construction for office space, renovations and temporary office for worker relocation.

MAST CONSTRUCTION SERVICES, INC.

JIM NAPOLITANO

PROJECT MANAGER

PROFILE

Jim joined **MAST** Construction Services in 2002. He has approximately 13 years of experience working on construction projects. His responsibilities include complete Project Management Services during preconstruction and construction phases of the project: preparation of preliminary schedules and budgets; reviewing/negotiating bid packages; project schedules; review/coordinate/maintain shop drawing and request for information logs; initiate/respond to all project correspondence; review/negotiate change orders; review of contractor monthly applications for payment.

Jim's strengths in technology provide an invaluable asset to **MAST** and to each of its clients. His technical expertise in Prolog, Suretrak, Microsoft and Mac based programs enable a smooth process for the connectivity and flow of information allowing for project success.

Currently, Jim is serving as Senior Project Manager for the new Juvenile Detention Center & Youth Shelter for the County of Bergen and the Department of Military and Veteran Affairs Bulkhead & Waterfront Walkway project for the New Jersey Department of Property Management and Construction.

EDUCATION

Manhattan College
B.S. Civil Engineering 1998

PROFESSIONAL ASSOCIATIONS

Construction Management Association of America

PROJECT EXPERIENCE AT MAST:

- Bergen County Juvenile Detention Center, Youth Shelter *Teterboro, NJ* $30M
- Department of Military & Veteran Affairs Park & Walkway *Jersey City, NJ* $16M
- Town of Harrison Waterfront Development & Red Bull Stadium *Harrison, NJ*
  $1 Billion over 15 years
- Hudson County Community College *Jersey City, NJ* $14M
  - College Facilities Management
  - 70 Sip Street Renovations
  - Renovations at 25 Pathside, 87 Sip Avenue & 870 Bergen Avenue
- St. Peter's Rectory 18 Vesey Street *New York, NY* $6M
- Newark Housing Authority – Downtown Core District Redevelopment & NJ Devil's Arena:
  - Arena and Infrastructure $485M
  - Parks $9.8M

EARLIER CAREER HIGHLIGHTS:

Project Manager

Rye Country Day School Rye, New York
An $18 million project that included 20,000 SF, 2 Story addition. The project also included a gut renovation of an existing kitchen and cafeteria that serviced the entire school K-12.

West New York Early Childhood Center West New York, NJ
A $5 million gut renovation to an existing 20,000 SF building with a new two-story 10,000 SF addition including all new mechanical, sprinkler, HVAC, roof and electrical work.

Assistant Project Manager/Assistant Supervisor:

Jewish Home and Rehabilitation Center Rockleigh, New Jersey
$28 million gut renovation and retrofit of an existing 2-story, 180,000 SF building into a 181 unit Skilled Nursing Facility on a 16-acre site, producing a comfortable atmosphere within a state-of-the-art sub-acute care facility.

744 Broad Street Newark, New Jersey
$8 million multi project renovation of the Bank Hall (Mezzanine) level and lobby and a loading dock addition.

South Ward Industrial Park Newark, New Jersey
$13 million construction of a 100,000 SF light industrial building and associated on and off-site development.

New Jersey Institute of Technology – Cullimore Hall Newark, New Jersey
$1 million gut renovation of two 16,000 SF floors for faculty and administrative office space. The 20,000 SF interior renovation includes all new mechanical, electrical, plumbing and fire/life safety systems.

MAST CONSTRUCTION SERVICES, INC.

PAUL SKABICH

PROJECT MANAGER

PROFILE

Paul has worked at **MAST** for 5 years and is responsible for Project Management Services during the preconstruction and construction phases of projects which include preparation of preliminary schedules and budgets; review/negotiate bid packages; develop project schedules; review/coordinate/maintain shop drawing and request for information logs; initiate/respond to all project correspondence; review/negotiate change orders; and review contractor monthly applications for payment.

Prior to joining **MAST**, Paul was a staff engineer/field engineer. His responsibilities included: performing and preparing geotechnical investigation feasibility reports; design and inspection of shallow and deep foundations; investigating and reporting existing utilities locations for facility expansion; design and inspection of mechanically stabilized earth walls; submitting dam breach inundation studies to municipalities for emergency action plan approvals; analyzing sites for storm water management, submitting analysis reports for municipal approval and providing engineer costs estimates for proposed development.

Paul is currently overseeing the construction of the new Newark 5th Police Precinct Building which has been designed to be LEED Silver, four stories, 75,000SF building situated on 1.7 acres in urban Newark, NJ, anticipated completion July 2011. Paul is also involved in the close out stages of two of the six remaining parks in the City of Newark Park Redevelopment Initiative.

EDUCATION

New Jersey Institute of Technology; MS Civil Engineering 2003
Manhattan College; B.S. Civil Engineering 1998

PROJECT EXPERIENCE AT MAST:

- The new Newark 5th Police Precinct with Office of Emergency Management $60M
- City of Newark, Parks Initiative $9.8M
  - St. Peter's Park
  - Hays Park East
  - Boys Park
  - Kasberger Field
  - 1st. Steet, 3rd Street & Thomas Silk Park Project
  - Pre-School/Garden Spires Park
- Newark Arena Area Road Network Completion - $55M
- Hudson County Community College:
  - Culinary Institute and Conference Center $25M
  - Culinary Arts Plaza Park $1.8M
  - 70 Sip Street Renovations $10M
  - Renovations at 25 Pathside, 87 Sip Avenue & 870 Bergen Avenue $1.5M

EARLIER CAREER HIGHLIGHTS:

Staff Engineer/Field Engineer

Rikers Island Correction Facility New York, New York
$3 million 50,000 SF Building

Target Mount Vernon, New York
$2.5 million 250,000 SF Building

Wal-Mart Neptune, New Jersey
$500K 150,000 SF building

Modular Block MSEW Bethel, Connecticut, Christiana, DE, Clifton, NJ
$50K

MTA West End Line Signal Modernization
New York, New York

SEAN J. EDMONDS

ASSISTANT PROJECT MANAGER

PROFILE

Sean, in his third year here at **MAST**, has proven to be an invaluable asset to the **MAST** team. Serving in the role of Project Manager, Sean has worked in the field to push towards completion of various Hudson County Community College projects. Recently completed, Education Building J, located at 2 Enos Place in Jersey City is the adaptive reuse of an existing former Welfare building into a thriving educational environment. This 20,000 SF, 3 story building with basement, now offers 9 classrooms, a writing center, a computer testing lab, administrative offices including the Dean of Instruction and a Student Lounge. Currently, Sean is involved in the conversion of approximately 2000 SF of retail space into a prominent new Welcome Center and public accessible Computer Lab offering 30 computer stations for the college and the expansion of the North Hudson Campus for the college. This project is the new construction of a 7 story, 92,000 SF facility to be located adjacent to the Hudson Bergen Light Rail Station. The new facility will house all programmatic space for the North Hudson Campus. With direct access to the Light Rail and bus transportation, this is an ideal location to appropriately serve the community. Sean's project experience includes Higher Education new construction and renovation, public parks, and mid to high-rise mixed-use residential.

EDUCATION

Stevens Institute of Technology
Master of Science Construction Management

Saint Thomas Aquinas College
Bachelor of Science Social Sciences

PROJECT EXPERIENCE AT MAST:

Hudson County Community College, North Hudson Campus *Union City, NJ* $40M

Hudson County Community College, Welcome Center *Jersey City, NJ* $780,000

Hudson County Community College, 2 Enos Place *Jersey City, NJ* $5M

Bijou Properties, Garden Street Lofts *Hoboken, NJ* $26M
Project Manager
This project is the conversion of an 80 year old, seven story warehouse building into loft-style residential condominiums. This redevelopment also includes 7,744 SF of ground floor retail space. LEED Gold certified and USGBC Award winner, this project offers 30 new residences. Located on the corner of 14th and Garden Streets, this prized location in uptown Hoboken has direct access to all modes of transportation including ferry, bus and PATH. Neighborhood amenities include boutiques, parks and upscale dining.

Hudson County Community College, Culinary Arts Plaza *Jersey City, NJ* $25M
Project Manager
MAST served as Construction Manager for the conversion of a 13,025 SF commercial parking lot into a new plaza. Located directly across from Hudson County Community College's new Culinary Art Institute and Conference Center, the new Plaza offers green space in this urban center Students, faculty and visitors are provided with a sense of place via the new plaza with its tree lined setting, water feature walls and a circular designed paving area with seating. A portion of the Park will also be available for private College events.

NICK LUCARELLI
ASSISTANT PROJECT MANAGER

PROFILE

Nick joined **MAST** this year in the role of Assistant Project Manager on projects during construction. Project experience includes public parks, recreational facilities and the construction of the new Newark 5th Precinct Police building which consists of a LEED Silver, four story, 74,980 SF building situated on 1.7 acres in urban Newark, New Jersey.

EDUCATION

Temple University; Bachelor of Science Architecture

PROJECT EXPERIENCE AT MAST:

The New Newark 5th Police Precinct with Office of Emergency Management $60M
Assistant Project Manager
This project is the first new police station for the City of Newark. It is a Prototype design for the facilities. Special to this location in the South Ward is the incorporation of Office of Emergency Management Services. The building will be located at Clinton Avenue between Bergen and Hunterdon Streets. Three stories with a full basement totals approximately 74,000 SF. The basement will house holding cells. The first and second floors are for the Police while the third floor will be dedicated to the Office of Emergency Management and Communications.

City of Newark, Redevelopment of Public Parks $9.8M
Assistant Project Manager
MAST is serving as Construction Manager for the renovation of seven (6) public parks throughout Newark. Most parks will offer new playing fields for soccer, baseball and volleyball along with walking paths, landscaping and lighting.

- *Hayes Park* will offer a new swimming pool with the renovation of existing Bath Houses, a new children's playground area, new public seating area, new synthetic turf soccer field, volleyball and basketball courts and new prominent park entry features.
- *St. Peter's Park* includes upgrades to the current Little League Filed with new synthetic turf, Field House, scoreboard and lighting. A new playground area, renovated swimming pool and new basketball court surfaces.
- *Kasberger Field* includes a new Senior League baseball field and little league fields, new Field Houses and new prominent park entry features.
- *First Street Park* includes a new water spray feature, playground and basketball court and community garden area.
- *Thomas Silk Park* includes community gardens.
- *Newark Pre-School Park* will have a new playground and basketball court

Hudson County Community College, North Hudson Campus *Jersey City, NJ* $40M
Assistant Project Manager
MAST is serving as Construction Manager for the expansion of the North Hudson Campus for Hudson County Community College. This project is the new construction of a 5 story, 92,000 SF facility to be located adjacent to the Hudson Bergen Light Rail Station (at 48th & 49th Street along Kennedy Boulevard). The new facility will house all programmatic space for the North Hudson Campus. With direct access to the Light Rail and bus transportation, this is an ideal location to appropriately serve the community.

EARLIER CAREER HIGHLIGHTS

Assistant Superintendent
D. Haller, Inc. 350 West Broadway *New York, NY* $40M
This project was the construction of a Green 10 story luxury condominium with 1st & 2nd floor retail space, seven full-floor residences and penthouse in an international style new building in the heart of Soho. Downtown loft living and park avenue-inspired layouts.

Intern
MAST Construction Services, Inc. *Little Falls, NJ*

- Assisted Project Manager in overseeing daily on-site construction activities
- Drafted monthly progress reports
- Documented meeting minutes for several projects

Provided herein is a listing of project experience with which **MAST Construction Services, Inc.** has had contracts similar to the work that may be required in New York & New Jersey for the PANYNJ:

The Port Authority of NY & NJ

WORLD TRADE CENTER DOWNTOWN RESTORATION PROGRAM

MAST's responsibilities for this comprehensive redevelopment in Downtown Manhattan include facilitating communications to identify and solve project interface issues for the rebuilding of the $19 Billion, 16 acre World Trade Center site, specifically, One World Trade Center, the Transportation Hub, and Towers 2, 3, and 4.

The WTC Memorial and Memorial Museum will incorporate the box beam footprints of the original WTC North and South Towers and the construction of the 1,776 foot tall, 104 story, 3 million SF One World Trade Center, formerly known as the Freedom Tower. Construction of this high-rise tower has a completion date targeted for 2013. Steel and concrete work below grade has been completed along with framing of the podium. Construction is proceeding on the office level above the podium at a rapid pace of approximately one floor per week. Topping out of the steel frame at the 1368 foot level is scheduled for fall 2011.

The complex infrastructure involves the construction of a new Port Authority Trans-Hudson Terminal, which will feature 10-car platforms, updated signal systems, fare collection equipment, and new lighting and finishes, and provide intermodal connections to a variety of subway lines, other modes of transportation and connections to surrounding buildings.

Contact:	**Alan Reiss, Deputy Director WTCC**	**Start Date:**	**September 2008**
	212.435.5530	**End Date:**	**TBD**
	areiss@panynj.gov	**Cost:**	**$19 Billion**

The Newark Downtown Core Redevelopment Corporation (NDCRC)

THE NEWARK ARENA REDEVELOPMENT $430 Million major redevelopment in Newark, including the construction of the following: 17,500 seat professional sports arena for New Jersey Devils and Entertainment Center, 300 room Hotel, 40 story residential tower, mixed-use buildings, retail and residential facilities, realignment of streets and utilities, construction of new public parks and plazas, reconnect Newark Penn Station Rail system, relocation of businesses, new Board of Education Headquarters Building. The new Prudential Center has become the centerpiece of all New Newark and was awarded the **New York Construction magazine's Project of the Year, Best of 2008 Award.**

NEWARK HOUSING AUTHORITY (NHA)

ARENA AREA ROAD CIRCULATION PROJECT INFRASTRUCTURE IMPROVEMENT

MAST, Owner's Representative for the Newark Housing Authority, oversaw the arena redevelopment project. This major redevelopment and infrastructure improvement in Newark is of great significance. **MAST** took on the additional role of Construction Manager, responsible for the completion of the infrastructure surrounding Prudential Center. The cost of the project is in excess of $55M, which is part of the $430M redevelopment plan. The project included roadway realignment reconstruction, utility relocations and coordination with all of the developers.

Contact: **William Crawley, COO**
[redacted]

Start Date: **December 2005**
End Date: **January 2008**
Cost: **$485 Million**

Town of Harrison

HARRISON WATERFRONT REDEVELOPMENT

Valued at $1Billion over 15 years, this redevelopment is 250+ acres in the southern portion of Harrison, in a formerly industrial waterfront area. The area represents approximately 32% of the towns 1.2 square miles. The plan calls for the following elements: 18,000 seat professional sports arena for Red Bull Soccer, a public waterfront walkway and green area, structured parking facilities, an urban entertainment center, a street oriented 4 to 5 story mixed use, boulevard, with ground floor retail and upper floor for office/residential waterfront corporate center, residential opportunities, large scale movie production studio, improvement of the Harrison Path Station, public street improvements, expansion of exits off of Route 280.

Contact: **Mayor Raymond McDonough**
[redacted]

Start Date: **June 2002**
End Date: **TBD**
Cost: **$1 Billion over 15 yrs.**

NJ DEPARTMENT OF PROPERTY MANAGEMENT & CONSTRUCTION

DEPARTMENT OF MILITARY AND VETERAN AFFAIRS PARK AND WALKWAY

The DPMC has embarked on the stabilization of waterfront in Jersey City. The team is responsible for stabilization of structure, development, pedestrian concourse and DMAVA Park Installation in Jersey City. Fronting the Morris Canal Basin (from Green Street) down to Goldman Sachs at the Hudson River is approximately 1500 linear feet that will be redeveloped into a pedestrian walkway. This project includes a kayak launch and open space of approximately 105,000 SF that will become green with various paths to serve the office complexes and residential developments in the area. This site may become the new home for The Colgate Clock.

Contact: **Leonard D. Savino,**
Senior Associate
[redacted]

Start Date: **March 2009**
End Date: **2011**
Cost: **$16 Million**

JERSEY CITY REDEVELOPMENT AUTHORITY (JCRA)

JERSEY CITY ANNEX & PARKING GARAGE

The City of Jersey City and the Jersey City Redevelopment Agency have embarked on an ambitious project to provide for a new Parking Garage and Annex for the City of Jersey City. The site is located adjacent to the existing Jersey City Medical Center which is at the intersection of Grand Street and Jersey Avenue. This new mixed-use project includes; a parking garage for 1200 vehicles to be shared amongst city employees, school staff, hospital employees and visitors, an Annex (Administration Complex) and 120,000 SF of office space to serve various City entities including but not limited to: Department of Housing and Economic Development, Health and Human Services, Engineering and Architecture. The ground floor of approximately 50,000 SF will be dedicated to retail. This site is part of a larger Redevelopment Area that requires environmental cleanup and new infrastructure including utilities, roadways and rail access.

Contact: **Gregory J. Corrado, Assistant Business Administrator**
[redacted]

Start Date: **November 2008**
End Date: **On Hold**
Cost: **$120 Million**

NEWARK HOUSING AUTHORITY

SOUTH WARD 5TH POLICE PRECINCT

This project is the first new police station for the City of Newark. It is a Prototype design for the facilities. Special to this location in the South Ward, is the incorporation of Office of Emergency Management Services. The building will be located at Clinton Avenue between Bergen and Hunterdon Streets. Three stories with a full basement totals approximately 74,000 SF. The basement will house holding cells. The first and second floors are for the Police while the third floor will be dedicated to the Office of Emergency Management and Communications.

Contact: **Morris Warner, Assistant Director**
[redacted]

Start Date: **January 2009**
End Date: **June 2011**
Cost: **$60 Million**

THE COUNTY OF HUDSON

BUILDING 77 ADAPTIVE REUSE

In close proximity to the Hudson County Correctional Facility, this 4 acre site in Kearny is home to an existing dilapidated 80,000 SF warehouse. This building will be brought down to its steel and rebuilt to serve the shared storage, office and vital technological needs of the Hudson County Office of Emergency Management, record storage for the Hudson County Prosecutor's office and record storage, secure storage, and general warehousing for the Hudson County Department of Corrections. The building will include a new HVAC system, plumbing, electrical and a new façade along with a roof replacement. The site will receive a complete development and upgrade including paving, parking striping, concrete curbing, landscaping and site grading, filling and raising above the flood plain and constructing wetlands, and bioswales for storm water management.

The building has been designed and will be constructed for LEED Silver Certification. Some highlights of Green components incorporated within this project include: wind turbines, solar panels, geothermal system, and radiant heat.

Contact: **Abraham Antun, County Administrator** [redacted]

Start Date: **December 2009**
End Date: **October 2011**
Cost: **$24 Million**

COUNTY OF BERGEN

BERGEN COUNTY JUVENILE DETENTION CENTER AND YOUTH SHELTER

The County of Bergen has embarked on an ambitious project to provide for a new Juvenile Detention Center. To be located at 200 North Street in Teterboro, New Jersey, the proposed new Juvenile Detention Center will be progressive and provide for a safe and secure environment. The new center will provide for a dormitory; two pods to house the male population, one pod to house the female population and one pod for youths who are medically ill and those with psychiatric emergencies, lavatories, indoor and outdoor recreation areas, a cafeteria and kitchen, classrooms, outpatient facility, administration offices and guard facilities.

A new Youth Shelter will be designed to be located at the same site, The JDC and the shelter will share common functions and operations such as the kitchen, medical personnel, outdoor recreation area and gymnasium.

Contact: **Timothy J. Dacey, County Administrator** [redacted]

Start Date: **March 2008,**
End Date: **April 2012**
Cost: **$28.5 Million**

Hudson County Community College:

CULINARY ARTS INSTITUTE AND CONFERENCE CENTER

This new 73,000 SF, 5 story expansion of the College includes, eight state of the art teaching kitchens, a Production Kitchen, Line Kitchen, Bakery, Hot Foods, Garde Manager, Pastry/Finishing and Ice Carving/Fish Butchery Area, a 300 person banquet facility, 5,000 SF conference facility, 7 general classrooms and facilities offices and a small library. The College can now expand its culinary program from 250 students to 500 students. The total project cost was $25 Million.

NORTH HUDSON CAMPUS

The $35 Million project provides for the expansion of the Community College, offering a location in Northern Hudson County. The new campus will offer a 5 story 85,000 SF facility adjacent to the Hudson Bergen Light Rail. Space is dedicated to filling programmatic needs and shared spaces including an auditorium and conference rooms.

CULINARY PARK PLAZA

MAST served as Construction Manager for the conversion of a 13,025 SF commercial parking lot into a new plaza. Located directly across from Hudson County Community College's new Culinary Art Institute and Conference Center, the new Plaza offers green space in this urban center. Students, faculty and visitors are provided with a sense of place via the new plaza with its tree lined setting, water feature walls and a circular designed paving area with seating. A portion of the park is also available for private College events.

VARIOUS RENOVATIONS

Ranging in size from 6,000 SF to 40,000 SF totaling $11 Million, this work includes renovations into offices for staff and administration at four different locations.

Contact: **Frank Mercado, VP of Operations** [redacted]

Start Date: **February 2004**
End Date: **June 2011**
Cost: **$71 Million**

THE COUNTY OF UNION

UNION COUNTY COURTHOUSE

The County of Union has embarked on an extensive renovation program of the County Courthouse in Elizabeth in order to provide for the safety of its employees and visitors. The Tower will be renovated to meet fire code for egress. In addition to this the County will move forward with the design of a new Parking deck and New Facilities to house courtrooms, creating an extension of the Courthouse Campus down to Cherry Street.

Contact: **Joseph Graziano, Director**
Department of Works & Facilities
[redacted]

Start Date: **July 2010**
End Date: **August 2014**
Cost: **$32 Million**

Actor's Fund

LILLIAN BOOTH ACTOR'S HOME

The Lillian Booth Actor's Home was designed and constructed in 1961 to accommodate 109 senior Screen Actor's Guild professionals and their families. The facility housed 42 seniors that required Assisted Living and provided 67 seniors with Extended Care. This project is a vital expansion to meet the needs of this growing community. Significant in meeting the growing needs of the Lillian Booth Actor's Home; is the network expansion which includes the following: an additional 15 beds to the skilled nursing facility, increasing capacity from 67 to 82, the expansion of sub-acute care, offering more residents IV therapies, wound care, pain management, and hospice, the creation of a progressive rehabilitation and activities wing to provide physical, occupational and speech therapies, and the renovation of the lobby to enhance security, improve reception services and promote access to management and staff.

Contact: **Joe Benincasa, Executive Director**
[redacted]

Start Date: **October 2007**
End Date: **April 2009**
Cost: **$10.8 Million**

Phoenix Realty LLC (Equity Partner)

MIXED-USE REDEVELOPMENT

A portion of this redevelopment that includes 126 new luxury residences; the condominiums include one and two bedroom units in a four story construction with the convenience of above ground parking garages that will accommodate 400 vehicles and are centrally located and shared by each building.

Contact: **Brian Desiderio, VP Asset Management**
[redacted]

Start Date: **February 2008**
End Date: **September 2010**
Cost: **$25 Million**

The MAST Construction Services, Inc. Team brings several advantages to PANYNJ that are demonstrated throughout our proposal. We understand our role as an extension of your staff, and can hit the ground running with no learning curve; Our management philosophy is based on the following principles:

CLIENT SATISFACTION is paramount in our business. To remain successful and stay ahead of our competition, our commitment to exceeding client expectations guides our services. We continue to challenge ourselves to improve and excel through training, implementing lessons learned and keeping abreast of new technologies. Our organization structure, our team professionals, and the controls that we put in place during each project phase are designed to ensure that we meet your goals to:

- Manage and monitor a complete and well defined project scope before design begins to prevent misunderstanding, disputes, changes, and claims;
- achieve design excellence within budget, with the flexibility to accommodate future needs, and be energy efficient and respectful of the environment;
- create livable, healthy, productive environments;
- review and monitor that work conforms with contract requirements, is completed on time, and within budget.

TEAMWORK & RESOLVING ISSUES We work together with the owner and design team to foster teamwork by developing a shared understanding of and commitment to the project goals. We manage a process for efficient decision-making, dispute resolution and regularly conduct risk analyses with stakeholders to address potential issues before they arise. By focusing on developing and sustaining our relationships with local firms throughout the project life cycle, we promote an improved working climate of mutual trust and respect, establish a win-win relationship, and achieve mutually beneficial goals.

Our team spends much of their day solving problems and making decisions. We define our effectiveness based upon our ability to predict, prevent, and resolve problems. Throughout the project, our team will be looking ahead to identify potential risks that might impact schedule, cost or quality and we will develop alternatives, mitigation or workarounds to reduce or eliminate their probability or impact.

Our involvement may be thought of as a second set of eyes or compared to an insurance policy. The intent is to eliminate design/scope and/or quality ambiguities that could result in higher than expected bid results and/or unforeseen cost overruns. We establish quality objectives, minimize quality deficiencies & non-conformances, properly identify deficiencies when they occur, properly track deficiencies and provide for corrective action, verify contract compliance, and provide detailed reports. We establish protocols for inspecting work-in-progress and work in-place, delivered materials and equipment; submittals review, approval, and management; documentation procedures, proposed report formats; and procedures to identify, record, track and complete non compliant work and rework.

SCHEDULE CONTROL in concert with cost control is paramount to the success of every project. Our Master Schedule and Phasing Plan incorporate program requirements, key dates and milestone information. Utilizing Microsoft Project and Primavera, we prepare CPM Milestone

Schedules to track project activities, dates and the party responsible for accomplishing an activity. We have successfully used this management software to organize numerous projects with a challenging number of moving parts.
We will be responsible for monitoring and analyzing the contractor monthly progress schedules, recording items such as new activities, deleted activities, float, changes in the critical path(s), milestone completions, material deliveries, acceptance testing, etc. To ensure schedule compliance, the team will prepare a monthly schedule narrative report; maintain a current monthly as-built project schedule; review/analyze contractor change orders, fragnet schedules for time impact; provide notification to contractor of schedule slippage and review/analyze submitted recovery schedules; review/analyze on any other contract required schedules such as submittal schedules, area schedules, look ahead schedules, etc.

COST CONTROL AND ESTIMATING We will review estimates of construction used to assist in evaluation, confirmation and revision of project budgets as a baseline throughout each project. Following approval of the budget, we will monitor a uniform cost estimating framework through design, procurement, and construction phases. As design drawings and specifications are developed, our multi-disciplinary professionals will review value engineering reports, taking into account capital, operating, and maintenance costs, to verify that the most cost effective design solution has been incorporated and achieved.

ORGANIZATION, DEPTH & RESOURCES OF THE TEAM: We operate out of one main office, our headquarters, which is based in Little Falls, New Jersey. With the progression of technology, we are able to manage projects valued at hundreds of millions of dollars in value. Personnel at different sites communicate and share information with ease due to our network system, monitoring progress and channeling communication 24 hours a day, 7 days a week, from any secure internet connection. These resources allow the team the ability to effectively respond to workload fluctuations and maintain continuity of personnel assigned to projects from beginning to end over the term of the contract.

RESPONSIBILITIES & LINES OF COMMUNICATION OF DEDICATED PERSONNEL: Ted Domuracki is the President & Principal in Charge at the firm. Leading the team for these projects is Richard A. Brown, Project Executive. He is responsible for overall management, direction and satisfaction of contract requirements including assignment of staff. All communication will flow through Mr. Brown, who will oversee the Project Managers and be the point of contact to PANYNJ. We develop effective communications among our team, key stakeholders, the designers, and contractors using project directories, communications flow charts, correspondence files, written lines and levels of authority, partnering and coordination meetings. The Project Managers are responsible for management of the team in delivering the services required for a project on time, on schedule meeting quality requirements. The PM interacts with the PANYNJ PM and the GC and AE and other consultants for coordination, work progress, issues and corrective actions.

PROPOSED PROJECT METHODOLOGY
Electronic Project Management (ePM) We will fully integrate the use of Prolog in the oversight of

the project. Our personnel are trained in all of the popularly used software systems. Our team is also familiar with the use Buzzsaw and Constructware, and can easily work with these applications if so required. The ePM system will include all project documentation: written, drawn, and photographic. Project documentation and filing will be retained and maintained by the project team in the internet-based information and project communication system.

Budget Control We will monitor the budget and report on the status in the monthly progress reports advising the CO of observed or potential shortfalls. The monthly report includes design and construction costs and related administrative costs. We will track PANYNJ Shell Cost, Tenant Allowance Improvement Costs, and Tenant Reimbursable Improvement Costs separately for each change order. Our budget and cost control management includes; updating and distributing cost reports; reviewing contractor requests for payment; preparing PANYNJ forms for processing; monitoring project financial data and budgetary cost accounting maintaining spread sheets indicating project fund allowances, PANYNJ obligations, payments, balances, planned expenditures, and anticipated costs to complete; administrate construction change orders including; issuing RFPs, preparing cost estimates, assisting in negotiations, and preparing change order packages for processing.

Financial Records We will maintain financial records and budgetary information, for all disbursements, payments, cash flow for contractors, project team and others as required and provide regular status reports to PANYNJ.

Change Order Tracking The effective management of changes is key to avoiding potential dispute and delay to the project. If changes are required, whether PANYNJ or Contractor initiated, we will work to resolve them quickly and completely. We will assure the scope of work is specific and precise and then prepare a detailed and accurate independent estimate of both the cost and time impact of the change. Reconciliation between the estimate and contractor's proposal will be prepared and documented in our findings. We will support PANYNJ in negotiations and prepare a complete record of all negotiations along with the appropriate modification documentation. We will also be prepared to identify changes or issues which might escalate to a claims situation. All such issues will be monitored with a separate log for "potential claims" and tracked and updated regularly. We will manage the Construction Contingency funding, and will maintain the contingency balances at all times We will also prepare change order proposal requests as needed.

Record Keeping, Progress Reports We will prepare and/or review periodic reports for PANYNJ, document project actions and keep PANYNJ apprised of progress. The progress reports include the schedule, budget, submittals, modifications, clarifications, meetings, etc. Throughout the project, monitoring, interpreting, forecasting, and reporting of project activities and progress will be conducted by our project site team. The Monthly Progress Report will present the current project status and include an Executive Summary, correspondence, change and submittal log and other documentation.

Schedules: Computer Software The Team will use MS project to prepare CPM milestone schedule 30 days after award and update monthly. We will provide diligent monitoring of the contractor's progress as an effective means to identify and preclude delays which often impact

project time and cost. From initial schedule review and analysis, we place emphasis on the logical and accurate network structure, ensuring that such items as submittals and long-lead items have been addressed. We will produce and submit an As Built Schedule.

Meetings We will attend meetings with stakeholders including, PANYNJ staff, tenants, A/E, and the GC to prepare for the project start. We will also organize, conduct, and record both regularly scheduled meetings, and issue specific meetings. Regular Owner/Architect/ meetings to cover issues such as open issues and pending matters, new items; shop drawing submittal/approval status; RFIs, clarifications and supplemental instructions, QC, and safety. We will also attend community meetings as needed.

Sustainable Design We will assign our LEED® Accredited Professionals to facilitate exploration of LEED® Sustainable opportunities for achieving sustainability goals with the AE, PANYNJ and other relevant stakeholders. Based on the project objectives and constraints, various strategies will be analyzed and compared to identify and integrate sustainable building technologies into building systems and features.

Alternative Disputes Resolutions We have extensive experience in resolving differences through Alternative Dispute Resolution (ADR) practices. This experience includes: negotiation, facilitation, mediation, fact-finding mini-trial, arbitration, or any combination thereof. ADR practices will be integrated into our Partnership efforts to facilitate the furthering of successful project completion

Supplemental Services We will provide supplemental services as requested that may include: additional design reviews; claims processing; testing; Surveys; studies; expert testimony; tenant relocation; a qualified partnering facilitator; and other services as needed.

Hourly Rate Schedule

Name	Title	Billing Rate	Actual Hourly Rate
Ted Domuracki	President, Principal in Charge	$243	
Richard A. Brown	Project Executive		$108.94
John A. Delutis	Project Executive		$95.48
Michael J. Palumbo, P.E.	Director of Technical Services		$95.48
Gerard Carbone	Senior Project Manager		$85.06
Troy Marzziotti	Senior Project Manager		$82.38
Jim Napolitano	Project Manager		$70.27
Paul Skabich	Project Manager		$63.87
Sean J. Edmonds	Assistant Project Manager		$37.99
Luisa Santos	Clerical		$39.34

MAST's company policy for compensation for pemium pay (i.e. holidays, shift differentials, regular days, weekends and night work or union required payments must be included) is as follows:

MAST recognizes 11 paid holidays for full time employees.

The hours worked by salaried/exempt employees are often irregular, begin and end beyond the normal workday. Salaried employees that are exempt from the overtime provisions of the Federal Wage and Hour Law do not receive overtime pay.

Shift differentials, weekends, night work and union required payments are not applicable.

MAST Construction Services, Inc.

Description		Multiplier
Direct Personnel Expense		
Paid Time Off (sick, vacation, holiday, personal)	11.48%	
Workers' Compensation	0.52%	
Payroll taxes (SUI, FUI, FICA, DIS,UI, WF)	7.72%	
401(k)	5.00%	
Bonuses	4.85%	
Health, Dental, Vision, Life, LTC	10.28%	39.86%
Overhead		
Rent, Utilities, Janitorial	7.50%	
Automobile and Travel	7.61%	
Telephone	3.50%	
Professional Fees/Accountant & Legal	4.00%	
Professional Fees/Consultants	8.00%	
Office Supplies	5.00%	
PC support/computer exp	2.50%	
Furniture and Fixtures	2.00%	
Depreciation	1.10%	
Dues,Subscriptions, Contributions	7.50%	
Licenses, etc.	4.80%	
Training, Education, Seminars	6.50%	
Advert. & Business Development	6.50%	
Liability Insurance	15.50%	
Fair Profit	15.00%	97.01%

MAST Construction Services, Inc. (MAST) is a Small Business Enterprise. We have, since our inception in 2001, had the opportunity to work as the construction manager/project manager responsible for the success of millions of dollars worth of design and construction in both the private and public sectors.

While we may fit into a title of "SBE" and our team may be small in quantity of staff, we are large in capacity; we have seasoned experts and eager professionals who utilize the technological resources such as Prolog, Primavera Suretrak, Microsoft Project, Timberline and WinEstimator in order to provide our clients with projects that are completed within schedule and on budget.

Since the founding of our firm in 2001, MAST has continued the practice of incorporating the services of skilled Women and Minority owned Business Enterprises as part of our team. Some of the firms we have worked with on a regular basis over the years include those firms that are prequalified with the PANYNJ such as Dack Consulting, KS Engineers and YU Associates.

We will work towards achieving the set aside goals of the PANYNJ by adding firms such as these to our team in order to provide services such as cost estimating and inspection.

MAST Construction Services, Inc. does not have any affiliates.

MAST Construction Services, Inc.

MAST Construction Services, Inc. does not have any conflict of interest.

MAST Construction Services, Inc.

MAST Construction Services, Inc. is in agreement with the standard agreement and its terms and conditions.

MAST Construction Services, Inc.

MAST CONSTRUCTION SERVICES, INC.
96 East Main Street
Little Falls, NJ 07424
973-837-1515
Facsimile 973-837-1517
www.mastconstruction.com

MWH

BUILDING A BETTER WORLD

October 21, 2010

Tim Volonakis, Manager
The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

Reference: Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis during 2011, 2012, 2013 and 2014 (RFP Number 22388)

Dear Mr. Volonakis:

MWH is ideally situated to provide the PANY&NJ, the Authority, with Expert Project Management Services for the Authority's facilities or other locations, within New York and New Jersey. MWH is one of the world's premier full-service program management, construction and engineering management firms, with more than $1 billion in annual revenues. With 6,000 employees in 156 offices worldwide, including Offices in New York and New Jersey MWH brings 150 years of expertise and a full range of professional talent in program and project management.

A privately held, employee-owned company, MWH has completed billions of dollars of infrastructure and building projects for private and public companies, as well as government agencies throughout the world. Through this experience, MWH has developed the expertise and project management systems to ensure that quality, safety, budget, and schedule goals are met on projects. MWH offers clients a global network of resources, local responsiveness, advocacy, innovative technical solutions, a broad range of services and products, and flexible project delivery systems and approaches.

As this proposal will demonstrate, we have not only a wide range of experience performing Project Management and Program Management Services, but also direct relevant experience on similar efforts for the Authority as well. This experience drives our commitment to operate independently of other project participants, so that we can represent clients objectively and without conflicting priorities. By focusing on managing project activities, expectations, and, most importantly, risk, we lead, support, and advise clients throughout the project's lifecycle.

1412 Broadway
Suite 1620
New York, NY 10018

TEL 646 827 4100
FAX 646 827 4101
www.mwhglobal.com

Why Chose MWH?
Our clients choose MWH to provide project management solutions because:

MWH Represents the Client
MWH's program and project management group aims to be the client's trusted advocate on all project matters, representing them to consultants, stakeholders, contractors, and outside agencies. While we take ownership of projects as if they were our own, our approach strikes the right balance between project leadership and support. This enables clients to stay involved at the level they desire while giving them the tools needed to make informed project decisions.

MWH Complements Existing Staff
One myth of independent project management is that it threatens the reputation and authority of the client's project team. The reality is that MWH's approach complements and enhances the client's staff without aiming to replace them. By building relationships based on trust and respect, we work collaboratively with the client, creating an integrated Client-MWH team that is truly greater than the sum of its parts.

MWH is Flexible
Our aim is to build the most effective project team possible. As a result, we listen carefully to our clients' needs before suggesting appropriate services and personnel. From advisory and support services to program and project management leadership, our level of involvement is determined by what's best for the client and their project.

We look forward to the opportunity to develop a relationship with the Authority and assisting you in achieving your goals.

Please do not hesitate to call should you have any questions regarding our submission or require further information.

Sincerely,

Jerry Notte

Jerry Notte, PE
President
MWH Americas, A New York Corporation

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Attachment 1 – Resumes

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf,* not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

MWH AMERICAS
(Company)

(Signature)

VICE PRESIDENT
(Title)

Oct 21, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   MWH Americas, A New York Corp.

2. Business Address (to receive mail for this RFP):

   1412 Broadway, Suite 1620

   New York, NY 10018

3. Business Telephone Number: (646) 827-4100

4. Business Fax Number: (646) 827- 4101

5. Firm website: Http://www.mwhglobal.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: ____/____/1954

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See attached separate sheets

9. Officer or Principal of Firm and Title:

   Jerry J. Notte, President

10. Name, telephone number, and email address of contact for questions:

    Dina Keirouz, Director of Construction Management

    Tel:(646) 827-4081 Email: dina.keirouz@us.mwhglobal.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

Section B

Company Profile

Additional Information: ATTACHMENT C

Question #8: Name, Address and EIN of Affiliates or Subsidiaries:

Affiliates	EIN#	Address
MWH Architects & Engineers of New York, P.C.	[redacted]	1412 Broadway., Ste 1620 New York, NY 10018
Montgomery Watson Engineers of New York, P.C.	[redacted]	1412 Broadway., Ste 1620 New York, NY 10018
Harza Associates of New York, PLLC	[redacted]	1412 Broadway., Ste 1620 New York, NY 10018
MWH Constructors, Inc.	[redacted]	370 Interlocken Blvd., Ste 300 Broomfield, CO 80021
MWH Europe Limited	[redacted]	370 Interlocken Blvd., Ste 300 Broomfield, CO 80021
MWH Asia Limited	[redacted]	370 Interlocken Blvd., Ste 300 Broomfield, CO 80021

Section C

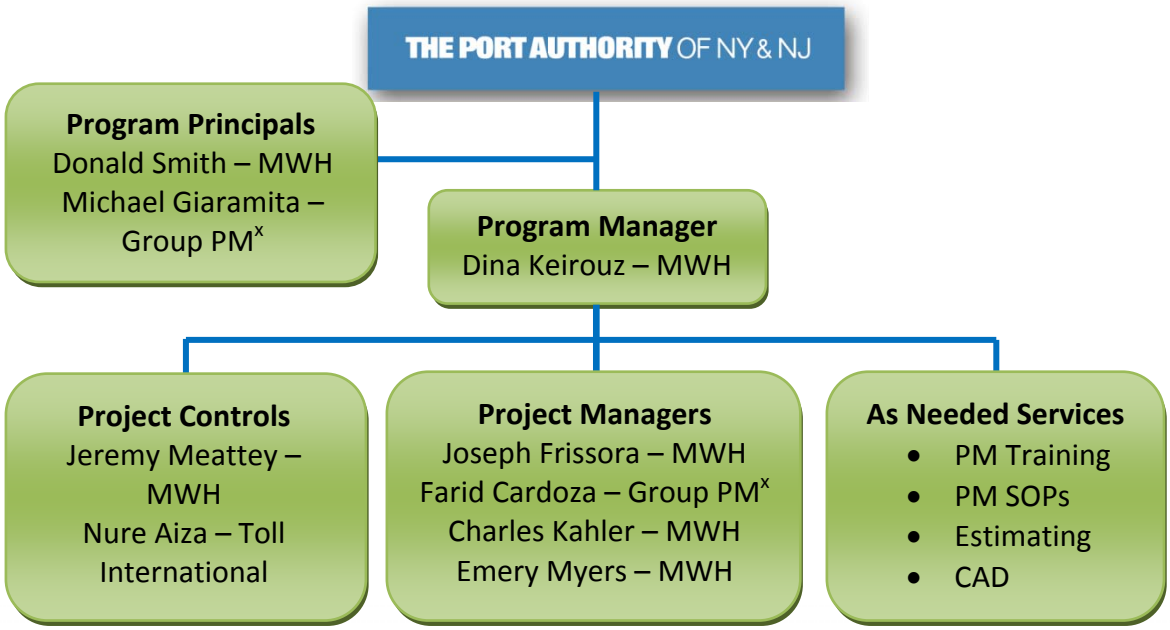
Qualifications and Experience of Staff

The MWH approach to providing the Authority with the highest level of professional services starts with staffing the program with outstanding local individuals with a proven track record of performance on similar programs and the availability to engage immediately.

The knowledge and experience possessed by the MWH Team provides the Authority with local talent and experience, accompanied by proven, industry-leading approaches to managing programs of work.

In addition, the MWH Team has access to technical experts in all relevant fields at a moment's notice via our internal communications and technology network, KNet. MWH's award-winning KNet helps our Program and Project Managers develop effective solutions to managerial and technical challenges. KNet is a single portal from which all information at MWH may be accessed. It links project teams together through knowledge centers that connect staff with other employees with professional expertise and similar project experience. These centers are central repositories for project and technical knowledge, and enable teams to collaborate and share lessons-learned.

An organizational chart showing our project team members and their responsibilities and reporting structure is provided below, and resumes for all proposed personnel are provided in Attachment 1.



1. Profile of Program and Project Managers

Below we provide highlights of the Program and Project Managers' project experience. **Full resumes are in Attachment 1**.

Donald Smith, PE – MWH

Program Principal

Mr. Smith has over 33 years of experience and serves as the Chief of Strategy and Implementation. Mr. Smith is one of MWH's most seasoned experts in the areas of utility-wide wastewater planning and strategy development. He continues to maintain executive level relationships with key clients including Los Angeles, San Diego, Atlanta, Houston, Singapore, the United Kingdom, Australia and New Zealand.

Michael Giaramita – Group PM[x]

Program Principal

As a project management industry leader, Mr. Giaramita has over 30 years of experience in the fields of project management, program management, construction management, and general construction. He specializes in bringing off schedule, off budget projects back on-line by efficiently expediting design and construction problems. From highway construction to airport improvements and major facility renovations, he possesses an invaluable ability to direct a project through all of its phases. Prior to founding Group PMX, Mr. Giaramita served as Senior Vice President/Managing Principal/ Regional for Jacobs/Carter+Burgess and a Vice President for Stantec.

Dina Keirouz, PMP – MWH

Program Manager

Ms. Keirouz has 19 years of progressively responsible experience in program, project and construction management. Her project experience includes airports, major transit facilities, professional athletic facilities and water and wastewater programs. Ms. Keirouz is an expert in project controls and the implementation of program/project management information systems. She has successfully delivered numerous design and construction projects on time and within budget and has expertise in completing large construction projects with challenging sites conditions and within operational facilities. Some of Ms. Keirouz's relevant experience includes Landside and airside projects at all three of the Authority's airports; LGA, JFK and Newark airport and program management support services for NYC Department of Environmental Protection.

Joseph Frissora, PE – MWH

Senior Project Manager

Mr. Frissora has 22 years of experience in planning, design and construction of large environmental, drinking water, sanitary wastewater, stormwater, and industrial projects. He is a senior project manager for MWH in the Northeast region, responsible for leading various water and wastewater design projects, including several phases of the NYCDEP

Citywide Collection Facilities SCADA System, the distributed control and instrumentation system for the Delaware River Water Treatment Plant; and a pretreatment and facilities improvement project for the Trenton Filtration Plant in Trenton, NJ.

Charles Kahler, PE – MWH

Senior Project Manager

Mr. Kahler has 15 years of experience in project management of Dam Engineering focusing on hydrology, hydraulic, stability, settlement and seepage analyses. Project management tasks have included management of scope, schedule and budget as well as the preparation and implementation of Project Management Plans and Quality Management Plans. Additional project management tasks include the assistance in the management of the preparation of technical reports, contract documents, and construction cost estimates and the procurement and administration of subcontracts.

Farid Cardozo, CCM – Group PM[x]

Senior Project Manager

Mr. Cardozo has 15 years of experience in various aspects of pre-construction, design, construction, and program and project management with a strong background in project controls and scheduling. Mr. Cardozo has worked on a variety of projects and for different clients; including Airports, Government, Highway, Environmental, Colleges and Universities, and research / development facilities. Mr. Cardozo has proven that even the most challenging projects can be accomplished successfully when the right project controls tools and a proactive, collaborative approach is used.

Emery Myers, PE, PMP – MWH

Project Manager

Ms. Myers has 11 years of experience in project and program management of environmental and civil engineering projects. Her project management experience includes development and implementation of project management plans; the preparation of technical memorandum, studies and master plans, including construction cost estimates. As a part of the Post-Hurricane Katrina recovery efforts in New Orleans, Ms. Myers was responsible for the coordination of program resource needs, recruitment, and on-boarding and development and implementation of quality assurance and quality control programs.

Nure Aiza – Toll International

Project Controls Specialist

Mr. Aiza has more than 14 years of experience in delivering professional and technical services to public and private clients. Mr. Aiza has assisted the Port Authority's Engineering Department in several cost and schedule project control technology initiatives and has helped the School Construction Authority to streamline its project delivery practices and internal business processes.

2. Experience of other Key Personnel (Resumes)

Staff resumes are included in Attachment 1 and provide educational background, chronological history of employment, relevant licenses and certifications

3. Summary of Project Experience for Key Personnel

Personnel (Subconsultant)	Relevant Project Experience, Project Cost
Donald Smith	• United Utilities, Asset Management Program 3, Warrington, United Kingdom, $3.5 B • City of Los Angeles, Hyperion Wastewater Treatment Plant Energy Recovery System Program, Los Angeles, CA, $200 M • City of Los Angeles, Clean Water Program, $4.3 B
Michael Giaramita (Subconsultant, Group PM[x])	• City of New York, American Airlines Terminal, JFK International Airport, Jamaica, $1.3 B • City of New York, World Trade Center Recovery Project Site Restoration, $100 M • City of New York, Path Station Reconstruction, $350 M
Dina Keirouz, PMP	• New York City Department of Environmental Protection, Capital Program Management, $14 B • US Airways Terminal, Philadelphia International Airport, PA, $550M • Continental Global Gateway Program, Newark International Airport, New Jersey, $1.3 Billion
Joseph Frissora, PE	• New York City Department of Environmental Protection, System-wide SCADA, $80 M • City of Trenton, New Jersey, Trenton Filtration Plant Pre-Treatment and Facilities Improvement Project, $62 M • Lackawanna County, Pennsylvania, Lackawanna Watershed 2000 CSO Program, $50 M
Charles Kahler, PE	• New York City Department of Environmental Protection, New Croton Dam, Croton Falls Dam and Croton Falls Diverting Dam, $230 M • Cobb County Marietta Water Authority, Hickory Log Creek Dam Design, $70 M • Walton County Water Authority, Hard Labor Creek Dam, $15 M
Farid Cardozo, CCM (Subconsultant, Group PM[x])	• City of New York, American Airlines Terminal, JFK International Airport, Jamaica, $1.3 B • New York City, Long Island Expressway Rehabilitation, $157 M • New York City, Williamsburg Bridge Rehabilitation, $200 M

Personnel (Subconsultant)	Relevant Project Experience, Project Cost
Emery Myers, PE, PMP	• New York City Department of Environmental Protection, Program Management Information System, $9.4 B • New York City Department of Environmental Protection, System-wide SCADA, $80 M • City of New Orleans, Office of Recovery and Development and Administration Program, $1 B
Nure Aiza (Subconsultant, Toll International)	• World Trade Center Department at The Port Authority of New York and New Jersey – WTC Memorial $800 Million • MTA Capital Construction Corporation / East Side Access Project - $1.2 Billion • New York City Department of Environmental Protection – Capital Program $14 B
Jeremy Meattey	• New York City Department of Environmental Protection, Capital Program Management, $14 B • New York City Department of Environmental Protection, Program Management Information System, $9.4 M • Cameron Parish, Disaster Recovery Program, $400 M
Other Key Staff	
Michael Musgrave	• City of Denver, Redevelopment of the Former Stapleton International Airport, $1 B • City of Denver, Denver International Airport Construction, $300 M • San Francisco International Airport, LAX International Airport, Dulles International Airport, Washington, D.C., Airport Tenant Improvements, $1 B
Gavin Gilchrist	• City of New Orleans, Office of Recovery and Development and Administration Program, $1 B • New York City Department of Environmental Protection, Capital Program Management, $25 B • City of Kansas, Program Management and Integration of Capital Improvements, $1.2 B
Seth Yoskowitz, PE	• City of New Orleans, Office of Recovery and Development and Administration Program, $1 B • New York City Department of Environmental Protection, Capital Program Management Training, $14 B • City of Kansas, Program Management and Integration of Capital Improvements Program and Project Management Training, $1.2 B

Section D

Relevant Experience

The MWH Team is fully qualified to meet the technical requirements for the program's scope of services. Specializing in the planning, evaluation, design, management, and construction of all sizes of various infrastructure, MWH not only has some of the best project managers in the industry, but also the collective knowledge and best practices from years of experience performing similar work. The projects described on the following pages highlights our Team's qualifications for providing the required scope of services.

BEDC Capital Program Management (Phases 1, 2 and 3)

New York Department of Environmental Protection, Flushing, NY
Phase 1: 2006 – 2007; $25 B;
Phase 2: 2007 – 2009; $13 B;
Phase 3: 2010 – ongoing

Client Contact: Jim Mueller, Deputy Commissioner, Bureau of Wastewater Treatment
NYC Department of Environmental Protection, BEDC
[redacted]

Summary

The New York City Department of Environmental (DEP) is experiencing challenges in cost control, resourcing, meeting schedule milestones and prioritization for capital projects because of $8 B in projects currently underway, and another $17 B in investments planned for the next 10 years. Phase 1 of MWH's invovlement was a study which included: review of DEP's existing organizational structures, processes and procedures; benchmarking against best industry standards; identifying the capital program's strengths/ weaknesses; and providing recommendations.

During Phase 2 of the Capital Program Management, MWH assisted DEP with implementation of the Phase 1 recommendations which included: implementation of program governance; workforce development; program controls and systems set up; and business process improvements.

In Phase 3, MWH continues to provide the Bureau of Engineering, Design and Construction (BEDC) program management services support to include: workforce development; engineering; permitting; cost estimating; schedule controls; information technology; and in-house design support services.

Program Features

- Developed and implemented a Program Delivery Manual with program management improvements.
- Worked closely with senior staff from the City Commissioner's Office and eight City bureaus to provide strategic direction.
- Communicated with 400 members of DEP staff who are involved with delivery of DEP's capital program.
- Implemented Program controls and estimating groups and systems.
- Streamlined key BEDC processes and Implemented a permitting tracking and management system.

American Airlines Construction Program

American Airlines, JFK International Airport, NY

2000 – 2001; $1.3 B

Client Contact: Ken Bower, Managing Director of Corporate Real Estate, American Airlines
[redacted]

Summary

Group PM[x] personnel served on the Owner-led Program Management Team responsible for managing American Airlines' approximately $1.3 B capital construction program at New York's JFK International Airport. This multi-year project involved the demolition of facilities within existing Terminals '8' and '9' to allow for construction of concourses, a new terminal, a new roadway system, a federal inspection station, 36 jet gates and expanded retail and support space. Group PM[x] staff implemented innovative owner-controlled change order and scheduling management which resulted in owner savings of over 30 percent (worth tens of millions of dollars) on change orders submitted.

Program Features

- $1.3 Billion new terminal building.
- Maintained operations during construction.
- Maintained Program continuity during several major devastating events (9/11, AA plane crash off of JFK Airport).

Newark Airport Monorail Design/Build Project

AEG Monorail, Newark, NJ

1996 – 1997; $350 M

Client Contact: Ray Betler, President AEG Monorail
Now Group Executive, Wabtec Corporation. [redacted]

Summary

Group PM[x] personnel were brought on to this $350 M design/build airport monorail project at the request of the NYNJ Port Authority, when the project was approximately 70% complete, to assist in putting this troubled project back on track. The project was more than one year behind schedule and $150 million over budget. He assumed the role as Assistant Site Manager for the design/build Team. He managed various problem areas on this automated people mover project; directed engineering, procurement, management and field construction forces to meet project goals, managed the automated train control hardware/ software subcontractor, and directed scheduling effort to complete this project on the completion date established over 14 months earlier.

Program Features

- $350 M grass roots monorail airport people mover.
- Implemented successfully full schedule and cost control systems at the field level.
- Opened new technology project on established schedule date.

Construction Management for the Port of Long Beach Pier S Terminal Optimization Project

Port of Long Beach, Long Beach, CA

2005 – 2007; $27 M

Client Contact: Doug Thiesen and Gary Cardamone, Director of CM

[redacted]

Summary

Civil-site construction includes storm water systems; demolition and relocation of existing infrastructure, grading and pavement, roadways, street lighting, a railroad-grade crossing warning system; and a design/construct element of a mechanically stabilized earth retaining wall. The MWH team provided comprehensive construction management and support services including constructability reviews; master project schedule and cost planning; weekly meetings; change order costing; progress payments; environmental mitigation monitoring and permit compliance. Team member IEM provided resident engineering, project controls, and inspection services for development of the Pier S Shipyard Facility.

Program Features

- MWH cost estimating department prepared Change orders cost estimates and schedule impacts to be used in evaluating alternative solutions to construction problems and for negotiating change orders.
- The MWH CM Team performed closeout procedures for all tasks. This

was done very efficiently using the project's computerized document tracking system, Primavera's Expedition.

Kansas City Revitalization Program

City of Kansas City, Kansas City, MO

2004 – 2006; $1.2 B

Client Contact: John Franklin, Assistant to the City Manager, City of Kansas City

[redacted]

Summary

MWH served as program manager for this capital infrastructure improvement program that involved planning, project control, project management, organizational development/training and program management for more than 300 City projects. The capital spending progressed in less than three years and saved the City more than $70 M in management costs and avoided cost of inflation. Projects included streets, bridges, storm/sanitary sewer, traffic signalization, and construction of several City facilities such as police and fire stations, museums, parking garages, training facilities, convention center expansions, arena infrastructure, building renovations and downtown redevelopment projects.

MWH brought the City proven programmatic tools and processes in the areas of project management, project controls, contracting, communications, construction management, quality management and health and safety. Our project delivery system provides tested procedures for managing all aspects of projects from initial planning; risk management; contracting strategies to reduce management costs, liability and risk; design management; and construction management.

Program Features

- Saved the City more than $70 M in management costs and avoided cost of inflation.
- Created a program management office with MWH and City staff focused on the planning, management and control, and expediting delivery of multiple complex projects.
- Provided a proven project delivery system and a continuous improvement model for managing all aspects of projects from initial planning to construction management.
- Developed an integrated programmatic project controls system to provide control and forecasting for more than 200 projects simultaneously.

O'Hare International Airport Terminals 1, 2, and 3 Modifications and Up-Grades *And* Modernization of Project Design of South Airfield Drainage System

City of Chicago, Chicago, IL

Terminal Upgrades: 2003–2007; $300 M; Modernization of Drainage System: 2007–2013; $1.2 B

Client Contact: Christopher P. Arman, Deputy Director, OMP
[redacted]

Summary

MWH provided the City of Chicago with preconstruction services for the modifications and upgrades of Terminals 1, 2, and 3 at Chicago's O'Hare International Airport.

The project included the construction of 3,600 linear feet of steel and glass canopy to be connected to each terminal, modifications to the terminals' facades, and the improvement of user circulation with the addition of two elevator cores and escalators at each of the terminals.

After completion of the terminal upgrades, MWH was retained to complete the hydrologic and hydraulic modeling, and design of hydraulic conveyance and storm water detention system for the 2700 acre area located south of O'Hare Airfield. The project includes detail design engineering of nearly 8 miles of new large diameter storm sewers, several junction chambers, two major storm water detention basin facilities (total of 2400 acre-feet), eight hydraulic / energy dissipation structures, eight large size oil water separators, two major storm water pump stations (total capacity of 10,000 gpm), two intake structures, and an overflow structure for major 100-year flood events. The storm water is contaminated with deicing chemicals, salts, oils and other chemicals from the airport operation.

Program Features

- A new canopy at Terminals 1, 2, and 3 will provide O'Hare's terminals with a unified image.
- Terminals 2 and 3 will extend 20 feet toward the roadway providing new space for circulation elements, such as elevators, escalators, and stairs.
- Other public areas of Terminal 3 will be updated utilizing new technologies to achieve energy and efficiency.
- Detailed site investigation to characterize the subsurface soil, rock, and groundwater aquifers. The investigation included several deep angle holes, large diameter pump test holes, a geophysical study, and grout test sections.

Redevelopment of the Former Stapleton International Airport

City and County of Denver, Denver, CO
2000 – 2003; $1 B
Client Contact: Turner West, Director of Aviation, City and County of Denver
[redacted]

Summary

MWH served as program manager and overall coordinator for redevelopment of the former Stapleton International Airport, ensuring that all activities are completed without interruption or conflict. The complex redevelopment project represented a 10- to 15-year redevelopment of the former 4,700-acre airport site and is the largest urban infill project in the nation. This high-profile sustainability project is transforming the site into a mixed-use master planned community with residential neighborhoods; 1,180 acres of parks, trails, recreation facilities and natural areas; and more than 13 million square feet of commercial, industrial, and institutional space. Prior to MWH's involvement, the schedule had slipped, contractors were defaulting, the local economy was softening, and the developers' constraints and requirements had not been addressed in the overall redevelopment schedule. MWH developed a program and construction management plan, created a master schedule and budget, and a document control system to address issues that were slowing the project. MWH improved coordination and communication between customer agencies and stakeholders by developing progress meetings, an open action item report system, and implementing effective cost control and forecasting methods. Additionally, to improve the City's coordination efforts across departmental lines, MWH formed an integrated public/private team to manage the City's site preparation duties to a successful completion. The MWH program management team set the project on track for build-out in less than the original 20 years predicted prior to our involvement.

Program Features

- Collaborated with neighborhood leaders along with the City and the Stapleton Development Corporation.
- Supported the City's successful public finance initiatives and successful funding of more than $300 M in infrastructure projects.
- Coordinated all City responsibilities as a single point of contact for the developer.
- Managed an extensive community outreach program to seek input from a broad spectrum of Denver residents.

Section E

Management Approach

MWH's project management approach could be summed up, in a nutshell, as proactive anticipation.

Leadership, teamwork, responsiveness, transparency, collaboration, and effective communication are the cornerstones of MWH's Project Management philosophy. The MWH Team's mission is to facilitate the thorough, cost-effective, coordinated program/project management activities required to successfully complete the program/projects elements for the Authority. We will accomplish this as an extension of the Authority's staff and our key staff will apply best practices and lessons learned from years of working in this type of collaborative environment.

MWH's organization and strategy will focus around the project manager as lead delivery manager. MWH Team will be responsible for managing the entire project life cycle process from pre-construction through commissioning, occupancy, and close-out. Project managers will be responsible and accountable for leading and managing their projects from the initial planning stages, through to commissioning and closeout. MWH project managers will be responsible for leading a multi-disciplinary team to successful project completion and for ensuring appropriate communication with the Authority's staff; providing detailed up-to-date information on their projects and implementing standard project management procedures.

TASK A - PROJECT INITIATION SERVICES

Develop and implement program/project management plans

The MWHproject manager (PM) will work with the Authority's project management department early in the project to develop a comprehensive project management plan (PMP), which will be presented to the Authority for review and approval. Upon approval, the document becomes the blueprint for the successful delivery of the project and is used as the baseline against which all progress and deviations will be monitored and controlled. It is a living document, as it is periodically reviewed and updated as required through the course of the project. The document defines/confirms the project objectives in terms of total scope, budget, schedule and quality/functionality, in addition to developing contracting strategies best suited for executing the specific project. Key components of the plan may include:

- Project goals and objectives
- Team member roles and responsibilities
- Master schedule, including milestones, and master budget
- Risk mitigation protocols
- Work flow planning
- Work breakdown structure
- Safety, health and environment
- Project controls procedures
- Change management procedures
- Project reporting requirements
- Quality assurance procedures
- Design criteria requirements
- Communication protocols

Provide business analysis services, as required to identify owner's project requirements and define/document project scope

MWH has managed planning and design programs all over the world. We have developed industry-leading design and planning management processes as well as the tools that will ensure project quality and minimize risk. Our design philosophy is founded on the principle that a formal process that emphasizes close attention to detail during the planning and design phases of a project will have a lasting impact to the cost and performance lifecycle of the facility. Our project team will utilize our value management approach to ensure a balance of value, cost and facility performance.

Prior to the start of the formal planning process, the MWH project team will coordinate a value scoping exercise with the major goal of formalizing the desired project outcomes. Critical components of this exercise include:

- Need confirmation
- Solidify process design
- Design criteria consensus
- Identification of alternate solutions

At the completion of the planning phase, the MWH team will perform a value analysis with the major goal of formalizing the design criteria with respect to desired quality, schedule and budget and includes the following key components:

- Alternative review
- Final alternative selection
- Establish design criteria (30-percent design level)
- Formalize project risks and formulate mitigation plan
- Preparation of construction cost estimate
- Preparation of detail construction master schedule

Coordinate project team alignment and team-building activities

The MWH PM will enable project team alignment with project goals and objectives by creating a cooperative relationship between all stakeholders, contractors, subcontractors, vendors, etc. The project team is there to serve the best interest of the project/program, meeting or exceeding project goals and objectives. Team Building is based on mutual trust, open communication, and a desire to have all members of the team win. Elements of Team Building include:

- Early preparation and education
- Clear lines of authority
- Management commitment
- Team Building workshop
- Team Building charter
- Issue resolution process

- Joint evaluation process
- Regular communication
- Final evaluation and celebration

Assist in the preparation of Requests for A/E Proposals (RFP's)

The MWH PM will assist the Authority in the development of design contract scope statements and documents in accordance with the Authority's standard contract protocols and preparation of RFP's for A/E consultant services in accordance with standard Authority procurement policies.

Coordinate project related risk analysis and management activities

The MWH PM will work with the Authority to develop a Risk Management Plan (RMP) at the onset of each project. The RMP will be included as an attachment to the Project Management Plan. This typically involves identifying all potential risks that may impact design, construction, commissioning or operations; qualifying and quantifying identified risks and their potential impacts; developing strategies for risk mitigation; and translating those strategies into tangible avoidance techniques. The MWH PM will monitor compliance with the RMP throughout the entire project life cycle - design development, contract document, tender, construction, and commissioning stages of the project to ensure that the Authority is not inadvertently put at risk. The Project Manager will also report on the effectiveness of the plan via monthly project status reports.

Prepare presentations, documents and conduct presentations

When requested by the Authority, MWH will prepare and make presentations to communicate project information and provide briefings on special issues related to the project. We will utilize electronic media and meaningful distribution documents to support these presentations. All presentations will be forwarded to the Authority for review and approval prior to use or disclosure. Depending on the Authority's particular need, presentations may be led by our program manager or the respective project manager, if authorized by the Authority.

TASK B - PROJECT IMPLEMENTATION SERVICES

Manage the implementation of the project management plans and the work performed by all of the program and/or project members

The MWH PM will take the PMP one step further and convert it into an actionable plan with deliverables due, budgets for each deliverable, time frames and person(s) responsible for completing each item, etc. This actionable plan will be managed daily and updated weekly at each progress meeting. One of the important roles of the program manager is to assess the status of the plan and assist in removing obstacles from affected team members so they can complete their deliverables as intended.

Conduct meetings (including project kick-off and progress meetings) with the project team, record all minutes, distribute for review and revise as necessary

MWH will promote communication through well-planned, productive, documented meetings. As a general rule we will identify working groups with proper representation from the Authority and each of the stakeholders. Each meeting will be scheduled to include all required stakeholders without encumbering the decision process with a "cast of thousands." An agenda will be emailed to all attendees at least 48 hours prior to the meeting. Minutes and action items will be recorded and distributed by the Project Manager and logged through the document control process.

Manage preparation of study reports, construction cost estimates and preliminary and final contract documents

MWH often plays a key role in managing the design process on behalf of the client as part of their overall project management role. In this capacity, the MWH team can coordinate with the Authority's in-house staff and monitor the performance of the A/E consultant team to facilitate the completion of all design related tasks and deliverables in accordance with the project scope, schedule, and budget. The MWH PM will:

- Manage consultant contracts on behalf of the Authority
- Establish design milestones/dates and monitor design progress against baseline schedule
- Coordinate and chair consultant team meetings
- Coordinate final drawings and specifications prepared by the consultant team
- Review drawings and specifications with the Authority for Authority approval
- Review and/or if required, prepare cost estimates at various stages of the design process
- Coordinate and facilitate value engineering workshops
- Coordinate and manage user group and stakeholder input as required
- Review, evaluate, and recommend change orders submitted by consultants
- Review/evaluate billings from consultants and submission to Authority of appropriate updates

Establish, through meetings with facility personnel, staging restrictions/ requirements based upon operational and maintenance constraints

Phasing and scheduling are the heartbeat of every project and maintaining safe operations for NY/NY residents, passengers, tenants and personnel is the top priority of the MWH Team. Through meetings with line department, facility and operations personnel, we will evaluate the operating environment and develop staging requirements that will be incorporated into the contractor's schedule submission and phasing plans.

As a proactive measure, the MWH PM will conduct a pre-scheduling workshop with the Authority's operations, the design team, the construction management team and the successful bidder to review the staging restrictions and establish a workable construction schedule at the beginning of each project. Outcomes from the pre-scheduling workshop will be:

- Identifying and quantifying staging needs, including construction support facilities, lay down areas, dump sites, and batch plant sites.
- A staging site plan, locating staging facilities, access routes, and security fencing. Indicate utility sources and temporary construction utility routing
- Develop access/security plan and site management procedures as well as coordination with the Public Safety personnel and/or the Authority Police

Review studies, preliminary designs and contract documents for conformance to approved scope and budget

The MWH PM will provide a clear and concise definition of the scope of work to be included and provide a list of "assumptions" or other caveats/details required to support the proposed scope of work.

MWH will work with the Authority, Authority Counsel, and the design consultant in the review of the construction documents at agreed-upon completion levels. At each design milestone (preliminary, 30%, 60%, 100%) or as designated by the Authority, the construction scope, budget, and schedule will undergo a reality check before advancing into the next design milestone for completeness and compliance, and specifically to ensure that it conforms to the original scope intent and budget. At each of the design milestones, the MWH PM will meet with the design team to:

- Reconcile estimates and resolve discrepancies in costs, scope, or quantities
- Confirm consistency with packaging and delivery strategy
- Provide a review of the construction phasing and validate same with operations
- Support the Authority in the preparation of draft construction agreements for review
- Support the Authority in the preparation of standard front-end bid documents (including General Conditions)

Prepare project documentation, correspondence and maintain project file

Maintaining good documentation is paramount to reducing claims on a project. The MWH PM, working with the Authority's assigned Document Distribution Specialist (DDS) will use a thorough, efficient process for collecting, organizing and disseminating data related to their respective projects. Our approach will be streamlined to conform within the Authority in-house document control system as well as industry standards and will allow for rapid retrieval and use. Should any of the project team members or any of the Authority stakeholders need access to the project files, the electronic documents as well as the hard copies will be filed with an identical filing system that facilitates their retrieval and accurate record-keeping. In addition, during the construction phase, procedures will be provided so that the GC also conforms to the uniform filing system.

Coordinate bidding and award of construction contracts

During the Bidding and Negotiation Phase, the MWH Team will develop a procurement strategy that follows all the

Authority's procurement requirements and provide the best competitive bids from the best responsive and qualified contractors and construction managers in the industry. MWH will manage the process so that it is fully transparent and auditable.
The MWH PM will:

- Develop Bid Strategy.
- Manage Bid Document Preparation and Process.
- Support the Authority in implementing procurement strategies
- Manage the bidding/selection process including preparation of addenda if necessary.
- Negotiate contracts with successful bidders.
- Prepare award authorization documents and briefing materials for Authority executive staff.

Coordinate and monitor shop drawing review process and respond to contractor's (RFI's)

The MWH PM will coordinate and monitor shop drawing, submittal review and processing of Contractor's RFIs paying particular attention to turnaround time. Outstanding submittals and RFIs that are approaching the specified review time limit will be flagged and the responsible reviewer(s) notified that their immediate action is required with special attention given to submittal/RFI turnaround times exceeding the allowed range and that impact critical path activities. In those cases where submittals are complex or where review time is critical to the project schedule, The MWH PM will hold a submittal conference to discuss and expedite the approval process with meeting minutes prepared to document it. The submittal conference can be an effective way to review long-lead equipment or discuss complex submittals that might involve several re-submittals. The MWH PM will use the Authority's Primavera Contract Manager to track Submittals and RFI. Submittals and RFI exception reporting logs will be addressed at the weekly construction progress meetings.

Coordinate preparation of Post Award Contract Changes (PACC's)

The MWH PM will follow the Authority design and construction change order processes and protocol to coordinate the preparation of PACC's and to ensure that changes are incorporated into the monthly progress schedule updates as they occur so that any requests for time extensions can be equitably assessed.

The PM will:

- Coordinate with the appropriate design task leaders or Engineer/Architect (L/EA) for in-house projects (or Consultant as appropriate) to prepare revised drawing(s), specification(s) changes and cost estimate, for changes that involve changes to the drawings or design intent.
- Review the change with the task leader and Resident Engineer (RE) from the Engineering Department's Construction Management Division before finalizing.
- Coordinate review of the final PACC and associated drawings, specifications and construction cost estimate with the lead task leader and

forwards to the Engineering Program Manager, or designated Engineer of Projects for signature.

- Ensure accurate routing of the documents based on the required signature authority.
- Ensure that the appropriate funding is available and entered into the financial system (SAP).

Attend construction progress meetings and coordinate facility force account work, as required

During the construction phase, effective communication must be timely, clear and frequent and consists of weekly (if not daily) communication between the project manager, resident engineers, project inspectors, the contractor and the Authority. The MWH PM will attend weekly construction progress meetings attended by the Authority, contractor, design engineer and impacted agencies, where he/she will address the scheduled work, safety, submittal and RFI status, potential change orders, shutdowns/ interconnections, potential delays and resolution of construction problems, which may affect the overall project objectives. The MWH PM will coordinate any facility Force account work to ensure efficient scheduling and execution of that work so as to minimize cost and schedule impact to the project.

TASK C - PROJECT MONITORING AND REPORTING SERVICES

Monitor and report on the actual consultant/contractor/staff performance, comparing the approved management plan versus the recommended corrective action, when required

The MWH PM will, in alignment with the Authority's existing implementation, create a comprehensive project master schedule, utilizing the established Work Breakdown Structure (WBS) and the necessary activity detail to ensure all tasks have been identified. The master project schedule will incorporate more detailed schedules provided by architects, engineers, and contractors for their particular portions of the work. This allows for a comprehensive view of the entire project and clear visibility into the overall progress of the project. A project baseline schedule will be created and maintained, according to the Authority's approved management plan.

Project progress, Actual and Remaining Work, will be recorded and tracked against the approved baseline. In case of schedule slippage or delays, correction action plans will be developed and corrective actions recommended to the Authority for implementation. Reports and presentations will be utilized to clearly and effectively communicate schedule and cost performance to various levels of stakeholders.

Update and review monthly actual and forecasted project costs and schedule(s) on an earned value basis in a manner consistent with the Authority's project management methodology

On a monthly basis, current project status will be compared to the current approved baseline. Actual progress, including resource units, costs, activity durations and percent complete, will be recorded according to data collected from the

consultant/contractor/staff. In addition, remaining effort projections, from the project teams, will be compared against the remaining effort, as calculated from the project plan, in order to verify the collected data.

The Project Management Institute (PMI) Earned Value Management standard will be followed in order to develop Performance Measurement Baseline curves using the Master Schedules, which will then be used to track cumulative Planned, Actual and Earned Value metrics, by Project, Portfolio and Program. Key Performance Indicators (KPIs) such as Cost Performance Index and Schedule Performance Index will be calculated and reported monthly.

Monitor progress of construction, including review of actual and forecasted construction in place (CIP) and schedule versus authorized contract budget and schedule

The MWH PM will monitor construction progress for authorized construction projects. MWH's PM will conduct weekly and monthly construction schedule progress meetings attended by the Authority, contractor, design engineer, and impacted stakeholders. These periodic meetings will address the scheduled work, submittal and RFI status, potential change orders, potential delays, and resolution of construction problems. The MWH PM will prepare and distribute meeting minutes.

Monthly updates will be examined for accuracy and estimates to complete evaluated for reasonableness and to ensure that potential change orders and other risks are included in the calculation of the Estimate at Completion (EAC). Tracking the EAC and reporting on budget variances will be done monthly and negative budget variances will be brought to the immediate attention of the Authority. Additionally, the PM will perform routine site inspections to verify the accuracy of construction contractor reporting. Any discrepancies or other findings will be reported immediately to the Authority and resolved with the construction contractor. Should the project fall behind schedule the contractor will be requested to submit a recovery schedule. In addition to being a key management tool, the schedule is also a key to resolving claims and disputes. MWH staff is available to support the Authority in resolving claims and disputes.

Prepare monthly status reports addressing accomplishments, issues, schedule and budget status, including corrective actions, if required

MWH has significant experience developing Project and Program Reports to communicate Performance, Status and Path Forward and believes strongly that the 'exception reporting' philosophy should guide the construction of management reporting. Exception reporting focuses attention on areas of deviation from plan that require management's attention or intervention. The MWH PM, in coordination with the Authority's reporting requirements, will prepare, a set of monthly reports which will provide essential project information, including, project narratives, KPIs/metrics, cost and schedule variances, and issues and action item logs. The reports will be

standardized using a reporting tool, such as Crystal reports, in order to deliver project data from the Authority's data repositories if needed.

Evaluate design consultant invoices for earned value and recommend payment

Earned Value is a proven method for planning and managing project performance. The MWH PM will evaluate the consultant invoices against the cost and schedule status updates submitted by those consultants. Earned Value will be calculated according to the Percent Complete or Milestone Achievement method, as appropriate, with the status updated and verified by the MWH PM. Any discrepancy between Earned Value-to-Date and the Consultant's Invoiced-to-Date amount will be immediately reported to appropriate Authority personnel and recorded for publication during the Monthly Reporting Cycle.

Evaluate impact of changes on approved scope, schedule and budget and obtain approval for the change

We understand that an affective change order management process is vital to the success of the project and as such the accuracy and timeliness of this information is essential. Our approach to change management is tailored to meet the specific client and project needs and the goal is always to proactively manage each change in order to minimize the effect on both the project budget and the schedule. The MWH PM will minimize the potentially adverse effects of such changes by following the five-step approach described in detail below:

Accurate Documentation of Design Baseline. The accurate documentation of a project's starting point is essential to acknowledging actual changes that may occur in the future, as well as in evaluating potential impacts. The as-contracted scope of work must be clearly captured and concurrence must be obtained with respect to its authenticity. It is against this baseline that any and all variations will be measured in order to establish the value of the associated impacts to the project in the terms of cost or time, or both. An in-depth scope review workshop will be conducted prior to construction contract execution. The product of this workshop will be an integrated WBS that is recognized as the baseline against which all modifications will be compared.

Identification/Documentation of Potential Contract Impacts (PCI). Any potential increase or reduction in contract scope of work needs to be appropriately documented and processed through the potential change evaluation procedure. The assignment of a PCI number initiates the evaluation procedure.

Impact Assessment. Once identified as a PCI, the consequences of this possible modification need to be established. First the impact to project cost and/or project schedule is determined. If no impact to the contract or baseline cost or schedule results, then the work is incorporated into the management system by modifying the WBS. If an impact is identified, we will conduct a Recovery

Plan Analysis and develop a recovery plan.

Recovery Plan Analysis. As soon as it is determined that a PCI will negatively impact the baseline schedule and/or affect the baseline cost, a recovery plan is developed to minimize the impact of the change. Recovery plans may include acceleration of construction forces (via extended work hours, additional crews, weekend work, etc.), re-analysis of work sequence and critical path logic, modification to change scope, and/or the use of value engineering efforts. At all times, our first approach will be to value engineer the change to produce a zero-dollar impact to the contract, if at all possible.

Incorporation of Changes into a WBS and updating the Budget and Schedule baselines. If the work represents a contract-changed condition, a written notice is prepared and forwarded to the Authority in accordance with the time requirements and defined procedures of the contract documents. If the Authority approves this change, then a change order with all appropriate documentation will be executed following the Authority's internal standard process and procedures. In addition, the change is incorporated into the contract work breakdown structure, reflected in the project schedule and revised budget thus updating the project baseline. This will ensure that progress and resources associated with this new work can be tracked and analyzed in similar fashion as the original baseline work activities. The MWH PM will also ensure that field as-built drawings are red-lined to reflect these changes.

Schedule and organize briefings for executive staff on status of projects, as required

The MWH PM will report on the status of projects using a template presentation format that is approved by the Authority. This will ensure standard and consistent reporting on all the projects. The PM will organize and schedule briefings, as needed and required, to communicate project status to Executive staff.

TASK D - PROGRAM LEVEL MANAGEMENT SERVICES

Assist Authority staff in the scheduling and implementation of selected programs and/or group of projects including coordinating and managing the activities of subordinate Project Managers

The Program Management Team will provide expert scheduling services to plan, schedule, and monitor performance of implemented programs as requested by the Authority. We will develop schedules that breakdown the scope into manageable tasks to be accomplished, identify dependencies and interrelationships between tasks, and identify the person responsible for accomplishing each task by incorporating an Organizational Breakdown Structure (OBS). This will allow us to monitor the performance of each project manager

and/or responsible entity and in turn maintain overall schedule performance.

Establish annual and/or program level resources requirements

The MWH Program manager will develop the annual and/or program level resource requirements based on the information provided in the Summary Task Card. The Summary Task Cards are used to aggregate or compile the cost and schedule information prepared by the project team members. In conjunction with the Program Level Schedules and Engineering Estimates, an annual awards plan and construction in place forecast will be developed consisting of a list of projects and their corresponding engineering estimates for projects in construction and their corresponding construction in place (CIP) amounts. Based on this workload, enterprise resource planning will take place across the different Authority Line Departments and a staff (In-House and Consultant) budget will be prepared along with funding for the Construction Awards.

Ensure that selected projects and/or programs are staffed and started as planned

Each month current projects will be reviewed as well as projects scheduled to start within a 12 month timeframe. When future project starts are within the upcoming quarter, weekly notice will be given to the affected providers of staff, both internally and externally. Ample notice of scope, schedule, budget and staffing plans will be given to the Authority and outside consulting firms in order to ensure successful startup of new projects/programs.

Update program level schedules

On a monthly basis program level schedules will be updated to reflect progress and/or hindrances to progress from each project. Progress on Projects will be summarized to produce Program Level Schedules. The MWH Program Manager will coordinate with the Engineering Department's project control process of communicating project commitments and follow the internal guidance documents provided in the Authority's Program Management Manual, to update program level schedules in an efficient fashion.

Evaluate and recommend appropriate M/WBE sub-contractor goals

The Program Manager will maintain an active list of approved M/WBE sub-contractors and their capabilities. As new projects are developed and projects are scheduled to begin, realistic goals will be established based on current capacity to avoid over or under commitment of the M/WBE community.

TASK E - PROGRAM MANAGEMENT SERVICES

Provide ancillary program management support services

In 2007, MWH performed $458M of program management services in the US and $743M worldwide. This encompassed the management of capital improvement programs with a total value of over $15B.

One of the major benefits of that global program management experience is our knowledge of the development and deployment of program management tools and best practices that we can apply to individual, local projects as well. One of the keys to MWH's continued success is the ability to tailor our services to each program based on the specific needs of the client, minimizing challenges and exploiting opportunities that save time and money.

Although the sophistication of any given program management approach can be tailored from client to client—from a simple project control function to a centrally-governed, decision making process—MWH's substantial experience in this field has allowed us to identify a number of core program management support services that are largely consistent across program types, clients served and delivery methods employed.

Figure E-1 represents a myriad of program management services MWH has provided on program. Key elements of MWH's programs include:

- Overall program strategy and schedule development
- Coordination with multiple stakeholders, including federal, state, and local funding agencies
- Management of multiple, simultaneous projects performed by a variety of local firms. In many cases, we provide both design and construction oversight
- Reporting of key program status information to the client, other companies, and the public

Figure E-1 - Program Management Services

Recent examples of similar MWH program management jobs are shown in Section D.

Coordinate biddability and/or constructability reviews with the Authority's in-house or externally retained technical staff

Constructability and biddability reviews offer key opportunities to control cost, verify schedule and ensure quality of construction. Goals of a constructability review include ensuring clarity of the construction documents, that specifications define roles clearly, that space and time constraints are minimized and that there is a focus on reducing bid contingencies and project risks. By including field personnel on the constructability review team, staff will become thoroughly familiar with each project and the associated construction issues prior to the start of work. Ownership of the project is therefore reinforced. The MWH PM will coordinate biddability and constructability reviews with the Authority's in-house or externally retained technical staff, ensuring that these reviews are properly and timely

scheduled and that findings and comments from these reviews are incorporated into the final design documents or incorporated via addendum prior to bid opening.

Maintain records for and preparation of Record Drawings

The MWH philosophy emphasizes the continuous updating of construction drawings so that the production of record drawings is accurate and timely. The Contractor's Record drawing updates will be included as a requirement for his monthly progress payment submittal and approval to ensure that the Contractor keeps his records drawings updated with the latest information. Throughout the construction phase, the MWH PM will also maintain a redline markup set of contract drawings, which incorporate clarifications, design revisions and as-installed information. This is used to compare against the Contractor's record drawings for completeness and accuracy as well as in the preparation of the final project record drawings.

Provide support services for the following:

a. **Updating of the Agency's project management manual of standards and procedures including development of new modules and/or procedures, as requested**

MWH's own PM and CM project delivery systems are built on a model that combines industry best practices with our own lessons learned delivering program, project management and construction management services. Our industry practices are based on standards as defined by the Project Management Institute's (PMI's) PMBOK, CMAA's Standard of Practice as well as those specific technical disciplines such as estimating and scheduling. MWH will use that knowledge and skill set in assisting the Authority with updating their own project management manual of standards including development of new modules and procedures as requested.

b. **Document control including, tracking and expediting shop drawing process through the use of Oracle's Primavera Contract Manager software currently used by the Authority**

MWH has deployed and implemented Primavera Contract Manager on many of our program management and construction management assignments. Regardless of which system is used for tracking RFIs and Submittals, being an excel spreadsheet maintained by in-house design or Primavera's contract manager, the focus will be to ensure that submittals and RFIs from the Contractor are reviewed and responded to in accordance to the time limits stipulated in the contract requirements.
We often coordinate and facilitate submittal review workshops with the Design Consultant, the contractor and the owner (if necessary) to expedite shop drawing reviews that are on the critical path and which may affect project schedule. We will provide similar support in this area to the Authority.

c. **Coordinate project control functions through the use of Oracle's Primavera project portfolio management software currently used by the**

Authority and as assisted by the PMO's Project Control staff

The Program Manager will utilize the WBS to organize programs/projects/tasks to enable progress to be reported at the project, portfolio and program levels. Once the project is under way, the Project Manager will meet with the designated Project Control Specialist (PCS) to provide him/her with actual and forecasted dates and relevant cost information that should be updated by the PCS on a monthly basis or as required utilizing the Authority's Oracle Primavera P6 V7.0 platform. The program level schedules will be updated based on the detailed information received from designers when in Stage III (Contract Documents) and from contractor schedules when the project advances to Stage IV (Construction).

d. Prepare technical presentations and assist in responding to inquiries from outside entities and the public, as requested

The Program Manager will assist in the preparation of technical presentations to aid the Authority in communicating to outside entities and to the public. In addition, through the Authority, the PM Team will respond appropriately to inquiries.

Provide Project Management training/workshop sessions, as requested

MWH will coordinate with the Authority to design and customize an educational training course focused on the Fundamentals of Project Management.

The overall objective of the course is to establish a base line level of consistent project management skills to the Authority's Project Managers to enhance performance through standard work processes.

Our MWH University is the heart of the learning community for the company. With campuses in the Unites States, Europe and Asia, MWH University provides creative educational opportunities for our staff to develop and enhance skills in the areas of Leadership, Communications, Pricing and Negotiations, Finance and Administration, a variety of different technical specialties, and Project Management. The Authority's course participants have the option of receiving fully accredited Continuing Education Units (CEUs) for the course through the International Association of Continuing Education and Training (IACET).

Section F

Billing Rates and Compensation

This section provides the required information for billing rates of MWH and subconsultant personnel.

MWH Multiplier Breakdown

The multipliers proposed for this project are shown with a breakdwon requested below. They are to be applied to all full-time personnel listed in all classifications below with the exception of Partners/Principals of the firm. Consultant staff assigned project management responsibilities will be provided office accommodations and necessary equipment by the Port Authority for the performances of said services as appropriate.

Office Multiplier Breakdown

Labor Portion of Multiplier	1.00
Overhead Rate Portion of Multiplier	1.59
Labor Plus Overhead	2.59
Profit of Labor Plus Overhead	1.10
Total Office Multiplier	**2.85**

Field Multiplier Breakdown

Labor Portion of Multiplier	1.00
Overhead Rate Portion of Multiplier	1.29
Labor Plus Overhead	2.29
Profit of Labor Plus Overhead	1.10
Total Office Multiplier	**2.52**

Group PM^{x} Multiplier Breakdown

Labor Portion of Multiplier	1.00
Overhead Rate Portion of Multiplier	1.00
Labor Plus Overhead	2.00
Profit of Labor Plus Overhead	1.10
Total Office Multiplier	**2.20**

Toll International Multiplier Breakdown

Labor Portion of Multiplier	1.00
Overhead Rate Portion of Multiplier	1.14
Labor Plus Overhead	2.14
Profit of Labor Plus Overhead	1.10
Total Office Multiplier	**2.35**

The following listing of personnel is representative of the rates and classifications anticipated for the "Call-in" agreement. Specific names and rates will be provided once each work order has been identified and the scope of work and estimated effort is negotiated with the Port Authority.

Name	Company, Business Title	Billing Rate for Partners / Principals	Actual Hourly Rate
Donald Smith	MWH, Program Principal	$300	
Dina Keirouz	MWH, Program Manager		$77.84
Michael Musgrave	MWH, Sr. Program Manager		$92.73
Cynthia Collyard	MWH, Program Manager		$66.05
Charles Kahler	MWH, Sr. Project Manager		$64.38
Joseph Frissora	MWH, Sr. Project Manager		$69.16
Christopher Porcello	MWH, Sr. Project Manager		$74.29
Gavin Gilchrist	MWH, Program Manager		$59.52
Emery Myers	MWH, Project Manager		$54.37
Kevin Ellenwood	MWH, Project Manager		$44.64
Jeremy Meattey	MWH, Project Controls		$37.87
Seth Yoskowitz	MWH, Project Manager		$56.25
Subconsultants			
Michael Giaramita	Group PM[x], Program Principal	$275	
Farid Cardozo	Group PM[x], Sr. Project Manager	$200	
Nick Haralambidis	Group PM[x], Project Manager		$ 57.69
Nure Aiza	Toll International, Project Controls	$165	
Felicia Pittman	LPE, Administrative Assistant		$28.39

Compensation for Premium Pay

The MWH company policies are included below with a detailed description of working hours and pay administration as well as paid time off.

Working Hours and Pay Administration

General

Regular working schedules are provided whenever possible and employees are compensated for authorized overtime in accordance with applicable federal and state laws. Compensation is provided to employees on a regular schedule.

Policy

- **Work Schedule** – Regular business hours may vary by department and/or location. Supervisors will advise employees of the regular business hours for each department and/or location, as well as individual work schedules. Schedules may change due to business needs and employees will be given as much notice as possible when this is necessary. The Company has the sole authority to assign duties according to need, to change starting and stopping times, and to alter the size of the work force. Generally:
    - A typical workweek consists of forty (40) hours. The typical work schedule consists of eight (8) hours per day for five (5) consecutive days, Monday through Friday. For payroll purposes, the workweek begins at 12:01 a.m. on Saturday and runs through 12:00 midnight the following Friday.
    - A workday is typically from 8:00 a.m. to 5:00 p.m. with minor variations at some locations: subject to management approval.
    - While in the field, the regular daily work period shall conform to the work schedule of the contractors on the projects concerned.
    - Employees are neither paid for travel time between his/her residence and the regular job site nor for the return trip.

  Federal and state law requires accurate recording of the time worked in order to calculate employee pay. Time worked is all of the time actually spent on the job performing assigned duties. Employees are required to complete time entry each day summarizing, by job number, the amount of time worked on each project. Timecards are to be approved by supervisors at the end of each week.

- **Notification of Absences** – An employee must notify his/her supervisor as soon as possible, should s/he have to be absent from work. Failure to provide proper notification when absent from work for three (3) consecutive workdays may be treated as job abandonment and result in employee termination. Additionally, in order for employees to be reached immediately in the event of family and business emergencies, and for proper scheduling and coordination, the Company requires employees to provide updated contact information and emergency contact information.
- **Lunch Periods and Breaks** – It is Company policy to provide breaks from work during the regularly scheduled workday. Supervisors will inform employees of the length of their regular lunch period as this can vary depending on the position. One (1) hour is normally allowed for lunch, to be taken on the employee's own time and is non-compensable. Employees should coordinate their lunch period and breaks with their supervisor to ensure proper coverage. Employees are encouraged to leave their work area during their lunch period.

  Non-Exempt Employees are required to take a minimum of a thirty (30) minute non-compensable lunch break after working a five (5) hour shift unless their workday is six (6) hours or less. Non-Exempt employees are also allowed one (1) fifteen (15) minute break in the morning and another in the afternoon in an eight (8) hour workday, these are taken on Company time. No additional break time is provided beyond the two (2) fifteen (15) minute breaks. Break time that is missed may not be "banked" in order to take a longer break, a longer lunch or to leave work early.

- ***Travel*** *– While traveling on business, employees should record all time spent traveling.*
  - *During normal working hours, time should be charged to jobs or indirect, depending on the reason for the travel.*
  - *Time spent traveling outside normal business hours should generally be recorded as excess travel time. However, if the employee works while traveling that time should be charged to the activity the employee is working on.*
  - Some Non-Exempt Employees, as classified under the Fair Labor Standards Act (FLSA), may be required to travel, and are eligible for compensation for the time spent traveling during normal business hours. Any portion of authorized travel time that takes place within normal work hours (defined as 8:00 a.m. to 5:00 p.m.) on any day of the week, including Saturday and Sunday, is treated as work hours to be paid at the employee's regular hourly rate and will be factored into overtime calculations.

- ***Overtime*** *– Employees must record all hours worked, including any overtime, in accordance with Company Labor Charging Guidelines.*

    - For the purposes of determining overtime pay, paid time off (PTO) will not be used in calculating the hours worked in excess of eight (8) hours per workday or forty (40) hours per workweek. Paid time off (PTO) for holidays will NOT be used in calculating hours "worked".
    - All Employees at Career Level Five (5) or Senior Level and below will need to obtain prior approval from their supervisor to record more than forty (40) hours per week or more than their normal work schedule per week.

    Exempt Employees

    - Exempt Employees, as defined under the Fair Labor Standards Act (FLSA), are exempt from the overtime provisions of the FLSA.
    - Exempt Employees are expected to work the hours necessary to meet the requirements of their jobs, with a minimum of forty (40) hours (or their standard scheduled hours) per week. In general, employees also must be present during normal business hours each day.

Non-Exempt Employees

- *Non-Exempt Employees are eligible for overtime pay as defined under the Fair Labor Standards Act. Non-Exempt Employees should report to their work area no more than ten (10) minutes prior to their scheduled starting time and not stay more than ten (10) minutes after their scheduled stop time without expressed, prior authorization from their supervisor.*
- *Non-Exempt Employees are entitled to overtime pay for all overtime worked. Overtime work should be performed only with pre-authorization from the employee's supervisor. Failure to obtain pre-authorization for overtime work could result in disciplinary action.*
- *The Company does not permit employees to take time off in lieu of receiving overtime pay.*
- *Overtime is paid to Non-Exempt Employees for hours worked in excess of forty (40) hours in the workweek and in accordance with any other state requirements. For purposes of calculating overtime, the workweek begins at 12:01 a.m. on Saturday and ends at 12:00 midnight on Friday. Employees are required to work overtime as requested by their immediate supervisor or department manager.*

- *Employees should not request, and supervisors should not grant the opportunity to make up time for time missed if the make-up time will result in overtime work.*
- *Approved overtime for Non-Exempt Employees will be compensated in accordance with the requirements of the Fair Labor Standards Act (FLSA), state laws, and the Company's compensation policies as follows:*
  - ❖ In California, Non-Exempt Employees will be paid at the rate of one and one-half (1½) times their regular rate of pay for all hours worked in excess of eight (8) hours in a workday, up to and including twelve (12) hours in any workday, and for the first eight (8) hours worked on the seventh (7th) consecutive day worked in a workweek. Employees will be paid at the rate of two (2) times their regular rate of pay for all hours worked in excess of twelve (12) hours in any workday and for all hours worked in excess of eight (8) hours on the seventh (7th) consecutive day worked in a workweek.
  - ❖ In locations outside of California, unless state laws dictate otherwise, non-exempt employees will be paid at the rate of one and one half (1½) times their regular rate of pay for all hours worked in excess of forty (40) hours in a workweek.
  - ❖ Minor employees shall not work in excess of eight (8) hours per day or forty (40) hours per week.

- **Pay Administration -** Employees of MWH are typically paid bi-weekly with paychecks being distributed on Fridays. Unless prior arrangements are made, paychecks will be delivered to employees located in Company offices. Paychecks will be mailed to all other employees, including those on field assignments. Paychecks are not released to anyone other than the employee for whom it is intended unless prior written authorization has been provided to the Payroll Department.

  To avoid any potential problems with the timely delivery of paychecks, all employees are encouraged to arrange for automatic electronic ("direct") deposit of their paychecks. The Payroll Department should be contacted to make arrangements for this service.

  MWH does not allow deductions that violate the Fair Labor Standards Act (FLSA). If an employee believes that an improper deduction has been made to his/her salary, this should immediately be reported the employee's direct supervisor or Human Resources. Reports of improper deductions will be promptly investigated. If it is determined that an improper deduction has occurred, the employee will be promptly reimbursed for any such improper deduction.

Unpaid absences are deducted from a Non-Exempt Employee's base pay at the straight-time rate. Exempt Employees are not docked for a partial day's absence, but are to charge such partial day absences to an overhead account.

Deductions from pay for Exempt Employees are permissible to offset amounts employees receive as jury or witness fees or for military pay and for unpaid disciplinary suspensions of one (1) or more full days imposed in good faith for workplace conduct infractions.

For Exempt Employees, an employer is not required to pay the full salary in the initial or terminal week of employment; for penalties imposed in good faith for infractions of conduct or safety rules, or for weeks in which an Exempt Employee takes unpaid leave under the Family and Medical Leave Act (FMLA) or state-mandated leaves. In absences under the FMLA or other state-mandated, either partial day or full day deductions may be made.

- **Employees Covered Under Labor Union Agreements** - Employees covered under labor union agreements will be compensated in accordance with their appropriate written contracts.

Paid Time Off

General

MWH values its employees and recognizes that time away from work plays an important part in maintaining personal well being. It enables employees to balance the demands on their time between work and other life events. These time off programs include:

- Paid Time Off (PTO)
- Holidays
- Bereavement
- Jury Duty
- Time Off to Vote
- Maternity/Paternity
- Others, as required by law

Policy

If an employee is classified by MWH as a regular employee who is scheduled to work 24 or more hours a week, s/he is eligible to participate in the MWH paid time off programs. Employees scheduled to work between 24 and 40 hours per week, receive holiday, paid

time off, and bereavement leave as described in this Policy, except such benefits will be accrued at a rate that corresponds with their regularly scheduled work hours.

- **Paid Time Off** - PTO can be used for any reason by employees. Reasons may include vacations, volunteering, school events, personal illness, health needs of a family member, personal appointments, religious observations, and any other circumstances whether foreseen or unforeseen, that may cause an employee to need time off from work. Employees begin to accrue PTO credits the first of the month following date of hire. PTO accrues as follows:

Length of Service	**Annual Days Accrued**
Less than 5 years	15
Years 5 – 10	20
Year 11	21
Year 12	22
Year 13	23
Year 14	24
Year 15 and Beyond	25
Level	**Annual Days Accrued**
Lead/Supervisor	17
Principal/Manager	20
Fellow/Regional Chief/Director Executive Officer	25

*Employees hired prior to December 30, 2006 will be “grandfathered” to accrue PTO credits at the previously effective rate, if that rate provides a higher PTO accrual than the current effective rate.

PTO should be prearranged with employees' manager when possible. Employees should ask for approval for the time off as far in advance as possible, especially if s/he is considering extended paid time off. This will give managers time to manage project workflow.

- **Accrual Parameter** - An employee accrues time off based on his/her years of service, the number of hours worked and job classification. Part-time employees receive a pro-rated amount of PTO according to the number of hours worked per week. Accruals are reflected each pay period on employee pay statements. Employees do not accrue PTO while out on a paid or unpaid leave of absence.

  If an employee needs time off before s/he has accrued any PTO, s/he may use his/her available floating holiday. An employee may not use unpaid time off until floating holidays and paid time off have been exhausted. Unpaid time off must be requested with as much notice as possible, and used at the discretion and approval of the employee's manager for emergency purposes only.

  Non-Exempt employees may take and charge PTO in increments of a tenth of an hour (i.e. 0.2). PTO is not paid at an overtime premium rate nor is it considered time worked for the purpose of calculating overtime premium pay.

  The Company will not reduce an exempt employee's pay for any day in which s/he works some part of the day. Exempt employees may take and charge PTO in half-day or full-day increments (depending on employee's regular work schedule). However, if an exempt employee works part of a day and elects to take the rest of the day off as PTO, but lacks sufficient PTO credits, the time off in excess of the available PTO credits must be charged to an overhead account. A part-time exempt employee's PTO increment will be equal to their prorated work schedule.

- **PTO Balance and Carrying Forward Limits** - MWH will maintain a PTO account for each eligible employee and track the beginning balance, current balance, accruals, and usage on a calendar year basis. Limits are imposed on the amount of PTO that can be maintained as a balance and on the amount of PTO that can be carried forward at any time during the year.

  Employees' PTO account balances may not exceed 50 days or 400 hours at any time during the year. Once an employee has reached this maximum, no further PTO credits will be accrued until the PTO balance falls below the maximum. After the employee has either taken PTO or

participated in the Buy-Back Program and the balance has dropped below the maximum, PTO credits will begin to accrue again.

- **PTO "Buy-Back" Program** - While the Company strongly urges employees to use PTO, it recognizes that there may be circumstances under which an employee may prefer to be paid for a portion of his/her paid time off accrual as follows:

Employee's Annual Accrual Rate	**Maximum Allowable Buy-back per 12 month Period**
≤ 19 days	10 days
20 + days	15 days

The employee must concurrently take or have taken a minimum of five days PTO during the preceding 12 months, and the employee's PTO balance must remain above 40 hours after the "buy-back" is completed. The employee must send a memo of request to the Benefits department at least three weeks before the anticipated payment date.

- **Separation of Employment** - If an employee has unused PTO that has formally posted to his/her PTO balance when s/he leaves the Company, it will be paid to him/her upon termination. An employee may not use accrued PTO to extend his/her employment with MWH.

- **Holidays** - The Company recognizes certain days as paid holidays for Regular Full-Time Employees. These holidays may vary from year to year and from office to office. Employees scheduled to work part time over 24 hours per week are eligible to receive reduced holiday benefits.

  The following holidays will be observed as paid time off for the full day (except December 24, which is treated as a half-day holiday when it falls on Monday through Thursday):

January 1	New Year's Day
January (third Monday)	Martin Luther King Jr. Day

May (last Monday)	Memorial Day
July 4	Independence Day
September (first Monday)	Labor Day
November (fourth Thursday)	Thanksgiving Day
December 24 (afternoon)	Afternoon of Christmas Eve
December 25	Christmas Day
Floating Holiday	(See Below)

- **Exceptions and Clarification of Holidays**
  - The half-day holiday preceding Christmas Day will be observed as a paid holiday (4 hours) if December 24th falls on Monday through Thursday.
  - If New Year's Day, Independence Day or Christmas Day falls on a Saturday, the preceding Friday will be observed as the paid holiday.
  - If New Year's Day, Independence Day or Christmas Day falls on a Sunday, the following Monday will be observed as the paid holiday.
  - Field employees who are required to work on-site with contractors or other outside groups, or agencies, that observe holidays different from those listed above, will observe the holidays of the outside group or agency in lieu of the holidays on the above list; provided, however, that the employees will be entitled to a total of at least eight holidays a year. Domestic field employees will be limited to a maximum of nine paid holidays per year.
  - Overseas employees will observe the holidays of the local office or group.
  - Employees who are eligible for paid time off and hired on, or before June 30 of the current calendar year, may be granted one Floating Holiday per year, which may be requested at any time during the calendar year, subject to prior approval of their

supervisor and based upon company business needs. Employees must request approval a minimum of one week prior to the date requested. The Floating Holiday must be taken as a full-day holiday and may not be carried over into the subsequent calendar year.

- **Holiday Pay Provisions** - In the event it is necessary for an employee to work on a holiday, and such work is properly authorized, s/he is compensated in a manner determined by his/her classification:
    - Holiday benefits are paid at an employee's straight-time rate of pay.
    - Paid holiday time off will not be considered as time worked for the purpose of calculating overtime premium pay.
    - Exempt employees who are eligible for straight-time overtime will receive their regular wages for the holiday, and in addition, may be compensated for such holiday work at his/her straight-time rate of pay if such compensation is pre-approved by the employee's Business Unit Leader. Exempt employees, however, do not earn additional compensation when working on a holiday.
    - Non-exempt employees will receive their regular wages for the holiday, plus their straight-time hourly rate for each hour worked on the holiday.
    - Employees whose employment is governed by a union contract will receive the holiday pay in accordance with their contract.
    - In order to receive holiday pay, employees must record paid time (regular pay or paid time off pay) on the employee’s scheduled workday before and after the observed holiday.
    - Employees on leave of absence for any reason are ineligible for holiday pay for holidays that are observed during the period they are on leave of absence.

- **Religious Holidays** - The Company recognizes that some employees may want to observe various religious holidays. Supervisors will attempt to grant any reasonable request for time off for matters of personal religious conviction. Such time off is without pay unless the employee chooses to use his/her floating holiday or available paid time off credits.

- **Bereavement** - In the event of a loss of a family member, Regular Full-Time Employees are granted paid bereavement leave of up to three (3) regularly scheduled work days whenever there is a death in the employee's immediate family. Eligible employees who are normally scheduled to work on the days covered by the leave will receive their normal pay for the workdays missed.

  In addition to the normal bereavement leave, an employee on overseas assignment at the time of the funeral will also be authorized three (3) additional working days off with pay for round-trip travel purposes if the death is in a country other than the one in which the employee is working.

  Immediate family is defined as a spouse, child, parent, brother, brother-in-law, sister, sister-in-law, grandparent, grandchild, stepfather, stepmother, stepchild, mother-in-law, father-in-law or legal guardian. Immediate family also includes a registered domestic partner, or the child, parent, brother, sister of the domestic partner. Employees must request bereavement leave from their supervisor. The Company reserves the right to require acceptable evidence of death as a condition of approval under this policy.

- **Jury and Court Duty** – Regular Full-time Employees who receive a court summons for jury duty are eligible to be paid for time off, not to exceed five days, as a result of these events. The payment is the difference between the employee's base pay and the compensation received from the Government for participating in this capacity. Written verification of the jury summons must be given to your supervisor with the date(s) and times of court as soon as they are established. Supervisors are responsible for notifying Human Resources of these absences.

  Employees should report to work when their presence is not required by the Court, unless distance or time makes this impractical. Payment for jury duty requiring more than two weeks will be reviewed by management on a case-by-case basis.

  All employees will be paid their normal wage or salary if required by a subpoena to appear in court on Company business. Non-exempt employees will not be paid for their time if summoned to appear in court on matters not pertaining to Company business or on personal matters. Exempt employees who have exhausted all PTO credits must be paid for such absences, if they work during the week in which the court appearance occurs for which they are summoned.

- **Time Off To Vote** - Employees should normally have sufficient time to vote outside of working hours. Any request for paid time off to vote, therefore, must always have the prior approval of the employee's supervisor.

  The Company will provide each employee who is a registered voter sufficient time off from work, without loss of pay in accordance with all applicable laws, to allow such employees to vote in a statewide or national election under the following conditions:

  - Work schedules are such that the employee must be allowed time off in order to vote.
  - Not more than two hours of paid time is taken off from work.
  - The voting time off is taken only at the beginning or end of the regularly scheduled work shift, whichever allows for the most time for voting and the least time off from the regular work shift.
  - The employee has given his/her supervisor not less than two work days notice that s/he will required time off for voting, unless the employee did not know or have reason to believe that such time off was necessary.

- **Maternity/Paternity Leave** - MWH also offers eligible employees three (3) additional paid days off for the birth and bonding of a newborn child(ren) or the adoption of minor child(ren). The additional days should be taken within 6 months of the birth or adoption of the child.

Section G

MBE/WBE Participation

MWH has read paragraph 20 of the attached agreement and understands the Minority /Women-Owned Business Enterprise (MBW/WBE) goals that the Port Authority has established for this contract. MWH intends to meet those goals by using the following MBE/WBE firms in the following capacity:

Subconsultant Name	Certification	Anticipated participation	Area of Expertise
Group PM[X]	MBE*	7%	Project Management Support
Toll International	MBE	5%	Project Controls Support
LPE Enterprises, Inc	WBE	5%	Administrative Support

* In the process of getting certified. All paperwork has been submitted and was reviewed with the EDC.

Section H

Complete List of Firm's Affiliates

The following table summarizes the complete list of MWH's affiliates.

MWH Entities *(not including General Partnerships or Joint Ventures)*		***as of 10-19-10***
Entity Name	**Domestic Jurisdiction**	**Formation Date**
Dhamwari Holding Company, Inc.	Mauritius	02-15-1995
Harza Engineering Company International S.A.	Panama	02-03-1977
Harza Environmental Services, Inc.	Illinois, US	01-15-1986
Harza Hydropower, Inc.	Delaware, US	04-20-1989
Harza Northwest, Inc.	Washington, US	12-26-1990
MCapitol Management, Inc.	Illinois, US	02-02-1995
Montgomery Engineers Limited (Bermuda)	Bermuda	09-27-1977
Montgomery Watson (Bermuda) Ltd.	Bermuda	09-14-1993
Montgomery Watson Engineers of New York, P.C.	New York, US	03-16-1983
MW Brasil, Ltda.	Brazil	01-26-1998
MWH Americas of Costa Rica, S.A.	Costa Rica	09-09-2003
MWH Americas, A New York Corporation	New York, US	02-16-1910
MWH Americas, Inc.	California, US	10-08-1954
MWH Architects and Engineers of New York, P.C.	New York, US	06-22-1979
MWH Architects and Engineers, Inc.	Delaware, US	05-18-1999
MWH Argentina, S.A.	Argentina	05-27-1993
MWH Canada, Inc.	Federally Chartered, Canada	05-18-2006
MWH Constructors Holding B.V.	Netherlands	02-26-2003
MWH Constructors Limited	United Kingdom	01-14-2003
MWH Constructors, Inc.	Delaware, US	07-20-1993
MWH Corporation (Malaysia) Sdn Bhd	Malaysia	01-10-1995
MWH ednolichno druzhestvo s ogranichena otgovornost	Bulgaria	01-10-2000
MWH Energy Solutions, Inc.	Delaware, US	08-09-2000
MWH Engineers of D.C., P.C.	District of Columbia, US	02-09-1984
MWH Enterprises, Inc.	Delaware, US	10-14-1997
MWH Europe Limited	United Kingdom	10-31-1989
MWH Geologists of North Carolina, PC	North Carolina	12-11-2006
MWH Global, Inc.	Delaware, US	11-27-1970
MWH Holding B.V.	Netherlands	06-30-1992
MWH Holdings, Inc.	Delaware, US	04-06-1992
MWH India Private Ltd.	India	09-09-1985
MWH Integrated Project Solutions, Inc.	Washington, US	10-22-1996
MWH International, Inc.	Delaware, US	06-30-1988
MWH Michigan, Inc.	Michigan, US	10-01-1993
MWH Overseas Fiduciary Corporation	Delaware, US	12-03-2001
MWH Pakistan (Private) Limited	Pakistan	07-12-2007
MWH Panama, S.A.	Panama	06-12-2001
MWH Pardevo societe anonyme	Belgium	04-15-1987
MWH Peru, S.A.	Peru	11-24-1997
MWH Programme Management Limited	United Kingdom	08-13-1999
MWH Societe Anonyme	Belgium	03-06-1997
MWH Soft Americas Inc.	Texas, US	09-06-2001
MWH Soft Australia Pty Limited	Australia	03-14-2003
MWH Soft Malaysia Sdn. Bhd.	Malaysia	01-01-1993
MWH Soft, Inc.	California, US	02-29-1996
MWH UK Limited	United Kingdom	10-22-1974
MWH Venezuela C.A.	Venezuela	06-06-2007
MWired, Inc.	Delaware, US	03-31-2000
Nam Mo Development Company	Cayman Islands	02-17-2000
Northern EnviroSearch (NWT) Ltd.	Federally Chartered, Canada	09-13-2006
Philadelphia Corporation	New York, US	11-15-1984
Philaqua Consultants Inc	Philippines	03-10-2000
Servicios de Infraestructura SDI C.A.	Venezuela	08-28-1997
Konsultan MWHC	Brunei Darussalam	07-22-1975

MWH Entities *(not including General Partnerships or Joint Ventures)*		***as of 10-19-10***
Entity Name	**Domestic Jurisdiction**	**Formation Date**
CICP Consultores Internacionales, LLC	Delaware, US	12-21-2009
Companhia Ambiental de Canarana Ltda.	Brazil	06-02-2000
Ecologic, LLC	Delaware, US	12-03-1997
Harza Associates of New York PLLC	New York, US	06-23-1999
Harza Engineering Company International S de RL	Honduras	05-05-1997
Harza International Development Company, LLC	Delaware, US	01-09-1998
HTC Infrastructure Management Limited	New Zealand	07-01-1997
JMM Environmental Enterprises, Limited	Taiwan, Province of China	12-16-1991
Montgomery Watson Asia Limited	Hong Kong	07-07-1989
MWH (DRC) S.P.R.L.	Congo, The Democratic Republic of the	09-11-2008
MWH Americas Inc. Chile, Limitada	Chile	08-17-1995
MWH Asia Limited	Hong Kong	07-14-1999
MWH Australia Pty Limited	Australia	02-22-1977
MWH B.V.	Netherlands	11-24-1999
MWH Brasil Engenharia e Projetos Ltda.	Brazil	10-10-1996
MWH Constructors Australia Pty Limited	Australia	01-07-1999
MWH Constructors Holdings Limited	Hong Kong	07-14-1999
MWH Constructors NZ Limited	New Zealand	07-01-1997
MWH Consultants (Singapore) Pte Limited	Singapore	04-22-1986
MWH Consulting (Shanghai) Co., Limited	China	10-22-1998
MWH Delaware, LLC	Delaware, US	04-24-2001
MWH Environmental Asset Management Pte Limited	Australia	
MWH Environmental Engineering (Shanghai) Co., Limited	China	07-13-2005
MWH Holdings Limited	New Zealand	09-25-1995
MWH IFI Limited	Hong Kong	05-10-2000
MWH Muhendislik ve Musavirlik Limited Sirketi	Turkey	03-15-1999
MWH New Zealand Limited	New Zealand	07-30-1979
MWH NZ International Limited	New Zealand	06-09-1993
MWH ResourceNet (India) Private Limited	India	02-07-2008
MWH Romania SRL	Romania	02-16-1999
MWH Soft Limited	United Kingdom	07-29-2009
MWH Venezuela (SA), LLC	Delaware, US	06-16-2000
MWH Venezuela (VE), LLC	Delaware, US	06-16-2000
R.G. Consulting Group Limited	New Zealand	01-21-1992
RDC of Nepal	Cayman Islands	02-15-1996
Royds Resource Consultants Limited	New Zealand	02-20-1991
Soils & Foundations 1973 Limited	New Zealand	11-12-1973
Bhote Koshi Power Company Private Limited	Nepal	
Dhamwari Power Company Private Limited	India	
MWH Societa' Per Azioni	Italy	05-09-1973

Section I

Statement of No Conflict of Interest

MWH confirms no conflict of interest with the Authority.

Section J

Agreement Exceptions

Enclosed with this proposal is a letter with the exceptions and clarifications to the agreement provided in the RFP.

Attachment 1

Resumes

Charles Kahler, PE

MWH, Senior Project Manager

Relevant Project Experience

Assistant Project Manager, New Croton Dam, Croton Falls Dam and Croton Falls Diverting Dam, NYC

Assistant Project Manager for an $18 million design services contract requiring rehabilitation designs of four dams in the New York City Watershed System. Responsibilities included the preparation and implementation of a Project Management Plan and Quality Management Plan for the rehabilitation of New Croton Dam, which is 103-year old, 140-foot high rubble masonry dam with a 1000-foot long side channel spillway. Assisted with the monitoring of project scope, schedule, and budget on a routine basis. Conducted monthly progress meetings with NYCDEP and routinely coordinated workshops and other meetings with various project stakeholders for the benefit of the project. Solicited proposals from potential subconsultants, administered the subcontracts, and managed the preparation of the work product by the subconsultants. Technical responsibilities included the management of the subsurface exploration of the existing rubble masonry weir at New Croton Dam using a barge located on the reservoir side of the weir, while water was discharged over the spillway weir at a rate of approximately 700 cfs. Assisted in the management of the preparation of technical reports, contract documents, and construction cost estimates

Assistant Project Manager, Hickory Log Creek Dam Design, City of Canton, Georgia

Assistant Project Manager and Design Engineer for a $42 million, 180-foot high RCC dam in Canton, Georgia. The new dam now impounds a 411-acre pump-storage reservoir for the Cobb County Water Authority and the City of Canton. A very aggressive project schedule was implemented to design and construct the dam within three years. Responsibilities included monitoring the

Educational Background

- BS & MS, Civil Engineering, Villanova University

Chronological History of Employment

- MWH since 2008
- Schnabel Engineering 1997 - 2008

Relevant Licenses and Certifications

- Professional Engineer – PA, MD,GA,
- Engineer of Record-GAEPD Safe Dams Program

project scope, schedule, and design budget on a routine basis. Conducted progress meetings with the client. Administered the subcontracts, and managed the preparation of the work product by the subconsultants. Technical responsibilities included performing a RCC mix design using available local aggregates, dam type alternatives analysis (preliminary study), hydrology and hydraulics analysis, stability analysis, geotechnical analysis and design of the dam and appurtenances as the civil design engineer. Other technical responsibilities included the preparation of contract drawings and numerous engineering reports. Also performed the role of on-site construction manager during construction of the dam and responsibilities included the management of an on-site staff of 10 employees for a construction schedule that included a five month period of 24-hours workdays for 6 to 7 days a week.

Project Manager, Hard Labor Creek Dam, Walton County, Georgia

Project Manager and assistant lead geotechnical engineer for a geotechnical engineering study of a proposed 92-foot high, Category I earth embankment dam in Walton County, Georgia. The proposed dam will impound a 1900-acre water supply reservoir for the Walton County Water Authority. Managed and coordinated the subsurface exploration, soil laboratory testing, slope stability analysis, seepage analysis, and settlement analysis.

Feasibility Study and Preliminary Design, Houston County State Park Dam (Andel Dam) State of Georgia Department of Natural Resources

Performed a preliminary site investigation for the proposed dam site on an intermittent stream owned by The Georgia Department of Natural Resources. The feasibility study included subsurface exploration, soil laboratory testing, and a water balance analysis. Utilized field data obtained from an existing lake on-site to enhance the water balance analysis. The preliminary design included sizing the principal and emergency spillways, establishing the top of the dam, and preparing a cost estimate for construction of the dam. Results of feasibility study and preliminary design were published in two separate reports.

RCC Quality Control Ghatghar RCC Dam, Ahmanadgar Irrigation District, India

Instituted RCC quality control testing program and established frequency of testing for the construction of three hydroelectric dams ranging in height from 11 m to 85 m (279 ft). Trained contractor's engineers on performance of RCC quality control tests, including mixer performance testing, nuclear density testing of RCC, thermal readings, moisture contents, vebe times, unit weights, aggregate gradations, and specific gravity and absorption of aggregates. Provided review of contract specifications as they related to RCC construction for completeness and constructability.

Christopher Porcello, PE

MWH, Senior Project Manager

Relevant Project Experience

NY/NJ Port Authority – Newark Airport

Mr. Porcello was part of the project team in the design and management with respect to the environmental remediation in all three of the main baggage and handling terminals. The project included a close coordination of remediation with terminal activities in facilities with thousands of travelers per hour and the retro-fitting of new computerized handling systems

Project Manager, NYC Department of Transportation, NY,NY

Project Manager for multi-year and multiple locations for consulting engineering and materials testing for the Dept. of Transportation for major arterial roadways, bridges and concrete structures managed by NYCDOT. Project also included oversight of bridge rating, evaluation and re-construction programs for capital improvement projects.

Project Manager, NYC Department of Sanitation, NY,NY

Project Manager for design of pre-engineered steel structure to house the Solid Waste Transfer Station in Staten Island NY. This project involved one of the largest solid waste transfer stations in the US and handles nearly 80% of all NYC's solid waste transfer for disposal

Program Manager, City University of New York (CUNY)

Program Manager for multiple planning, design and renovation projects at CCNY, Baruch College, Queens College, Hunter College, College of Staten Island, Hostos Community College and John Jay College of Criminal Justice. Projects consisted of interior redesign, structural and environmental evaluations and oversight of construction work.

Educational Background

- BS, Civil Engineering, University of Colorado

Chronological History of Employment

- MWH since 2008
- PEI Consulting Engineers 1996-2008
- TCL, NY & Boston, 1987-1996

Relevant Licenses and Certifications

- Professional Engineer – HI, NC, WY, LA, NE, UT, MD, MO, SD, KS, PA, ID, AZ, CO
- Asbestos Inspector, NY

Cynthia Collyard, PE, PMP

MWH, Program Manager

Relevant Project Experience

Program Manager, Plant Enhancement Program, City of Cleveland, OH

Ms. Collyard is currently the Program Manager for the City of Cleveland's Plant Enhancement Program (PEP) which is a $750M program to upgrade three of the City's four water works plants and their serving pump stations. As Program Manager, Ms. Collyard works as the owner's representative to oversee commercial terms and conditions of the various consulting engineering firms and construction contractors. In this role she works to ensure that clear, effective and timely communications occur among the various project stakeholders and team members. During design efforts, Ms. Collyard works as the owner's representative to oversee the scope, schedule, budget and quality of designs performed by various consulting engineering firms. In addition to overseeing the commercial terms and conditions of the various professional service contracts, she is responsible for ensuring that the technical aspects of the various design deliverables conform to the City's engineering and project standards and accepted engineering practices, and that the overall projects are cost-effective relative to capital, operating and maintenance costs.

Principal Construction Manager, ORDA Recovery Program, City of New Orleans, Louisiana

MWH was hired by the City of New Orleans to manage the Recovery of Municipal sites. There are over 200 recovery projects ranging in scope from total rebuild to minor modifications. Sites range from Fire Houses and Court Houses to Playgrounds and Golf Courses. The recovery of these sites include repair and restoration to Pre-Katrina conditions, as well as additional modifications that enhance the functionality of the site and bring it up to current code requirements. As Project Managers, MWH oversaw all

project activities from start-up through completion including the direction of A+E and General Contractor activities. Ms. Collyard's

Educational Background

- BS & MS, Civil Engineering, Case Western Reserve University

Chronological History of Employment

- MWH since 1990

Relevant Licenses and Certifications

- Professional Engineer – IL, OH
- Project Management Professional, Project Management Institute

role initiated as Principal Construction Manager with initial responsibility to work with architectural firms defining scopes and managing design efforts and development of construction documents and with responsibility for the development and execution of the Program Construction Plan and subsequent project plans, and to direct and manage the activities of all Construction Managers assigned to ORDA. Ms. Collyard's role grew to encompass the program's schedule and control group, contracting and invoicing group, and data management group in full support of project delivery from planning through construction completion.

Project Manager, O'Hare Modernization Program-South Airfield for the MWH/Delta Joint Venture, Chicago, Illinois

The project includes the design of 8 major drainage systems from 60-inch to 144-inch diameter RCP totaling 36,000 linear feet and two detention basins with pump stations with a storage capacity over 1800 acre-feet. The pump stations were comprised of 80' deep by 62' diameter structures with control and electrical buildings. The design criteria were based on maintaining field operations at a 50-year one hour storm and to this end MW provided existing conditions and final conditions hydraulic models as well as 8 interim conditions models. Ms. Collyard led a technical design team of engineers and modelers for MWH. MWH scope included development of detailed cost estimates and reconciliation processes with the OMP to maintain budget, pre-bid/pre-award meetings and bid evaluations as part of design bid phase services. Ms. Collyard also acted as Project Manager during the construction phase to cover a scope including both engineering services during construction and resident engineering services. OMP has successfully awarded construction contracts for $600 million with four additional construction contracts to be bid. Phased design was scheduled to be complete in early 2009 and construction complete in 2011. Construction costs are estimated at $500 million. Ms. Collyard led a 35-person in-house design team, which is joint ventured with two Chicago-area MBE firms. The total South Airfield Modernization Program represents nearly $3 Billion in construction.

Project Manager, City of Sandusky Filter Improvements Projects.

This was a set of 3 multi-prime contracts for the rehabilitation of the filters and the installation of a plant control system. The work was based in a five story building for filters systems, electrical and controls. Work included structural, process/chemical, mechanical, electrical and control designs. The construction value was approximately $8.5 million. Ms. Collyard also performed the Primavera scheduling for the project. The project completed in December, 2004 and was performed without any disruption to the water quality or delivery to the City of Sandusky or Erie County systems.

Dina Keirouz, PMP

MWH, Program Manager

Relevant Project Experience

Director of Construction Management – MWH Americas

- Providing leadership, vision and strategic direction for a newly created Estimating Group with the objective of improving estimating quality and process and reducing risk to the company
- Responsible for growing the CM Practice at MWH
- Responsible for establishing and implementing a CM delivery framework to include CM Standard Operating Procedures and best practices
- Responsible for the development and execution of quality control procedures on CM projects
- Responsible for CM staff career development and training

City of New York, DEP – Bureau of Engineering Design and Construction (BEDC) Program Management Services

Program Controls, Management Systems and Tools Manager - Provided leadership and management of 9 controllers, schedulers and IT Staff on the implementation of Program Controls, Systems and tools for BEDC's $14 billion Capital Program. This effort included the creation and implementation of a new Program Controls Team and processes at BEDC.

Project Delivery Manual (PDM) and Project Management Training -Task Lead - Responsible for the development of the project controls sections of the PDM, and establish standard processes and tools based on the industry's best practices for project execution at DEP's Bureau of Engineering, Design and Construction. Responsible for the PDM roll out and training of about 85 Project Managers of all different skill level.

Project/Construction Manager Multiple Airlines

As Owner's Representative, provided project and construction management activities to include: Design management, bid phase assistance, contract administration and inspection services. Responsible for projects at LaGuardia (LGA), JFK International,

Educational Background

- BS, Construction Management, University of Washington
- BA, Architecture, University of Washington

Chronological History of Employment

- MWH since 1999
- Gilbane Company 1998-1999
- O'Brien Kreitzberg, 1991-1996

Relevant Licenses and Certifications

- PMP Certified
- In the process of getting CCM certified

Philadelphia (PHL), Baltimore (BWI) and Newark (EWR) Airports. Responsibilities included program planning and development, design management and oversight, coordination with Local authorities, permitting process, construction bidding, and the construction oversight.

Resident Engineer - Gilbane Company,US Airways Terminal A1, Philadelphia International Airport, Pennsylvania

The $550 million project consisted of a 780,000 SF, four-story terminal and a concourse with 13 gates, accommodating 777-Boeing aircraft. The schedule was fast track and included 24 bid packages. Pre-construction responsibilities included contracting strategy development, scheduling and construction phasing, permits acquisition and regulatory agency coordination. As Construction Manager was responsible for construction bid packages bid-outs, bid phase management and bid award and contract administration and inspection services oversight.

Project Manager – Continental Airside Baggage Room, Newark International Airport, New Jersey

This was a 45,000 SF steel frame structure housing a permanent tilt-tray system with 66 baggage piers. Challenges included a tight schedule, tight staging and lay-down areas, and maintaining gate aircraft capabilities and operations during construction. Innovative workarounds during both the design and construction were used to fast track the schedule for a completion of Phase I on time. Responsible for managing and administering Design and CM contracts; cost and schedule control and coordination with Port Authority of New York & New Jersey, Continental airlines operations, and end users.

Project Manager - Wide Body Hangar Newark International Airport, New Jersey

This project included a 90,000 SF-Widebody Hangar for 737 and DC-10 Aircrafts, and a fire protection pump house. Challenges included a tight site with confined airside access and staging areas; a fast track schedule where different construction trades had to be overlapped; and double/triple shifts were used to complete the steel erection and the full interior fit-out of the hangar in five months. Activities included construction oversight, schedule development and updating, change order negotiations, sequencing and work-arounds to maintain the tight schedule, and project close out.

Project Engineer – METRO Transit Facilities Improvements, Seattle, WA

Involved in both the design and construction phases of the project. During design, helped owner coordinate and schedule design activities and develop the specification section on scheduling and construction phasing for a 24-hour operational facility. During construction, provided contract administration and project control services. Activities included schedule development and tracking, change order estimating and negotiating, submittal review and processing, and cost and document control.

Donald L. Smith, PE

MWH, Program Principal

Relevant Project Experience

Plant Manager, Hyperion Solids Handling Program

Mr. Smith served on a contracted basis for 2-1/2 years as manager of the 400-mgd Hyperion Treatment Plant. Major effluent quality improvements resulted from initiation of an interim improvements program that increased primary treatment removal efficiencies from approximately 45 percent to almost 80 percent. This effort resulted in the facility receiving the Outstanding Performance Award from the Water Environment Federation.

Program Director, Asset Management Program 3

Mr. Smith was the program director for this five-year, $3.3 billion program consisting of over 1,000 individual projects associated with water and wastewater services to a service area population of 7 million domestic users and 200,000 business customers in a 14,000-square-kilometer area. The system includes 147 water treatment works, 617 wastewater treatment plants, 25,000 miles of water mains, 18,000 miles of sewers and 600 miles of aqueduct. This effort included the mobilization and development of a delivery team of over 800 people. MWH continues to provide comprehensive program management, optioneering, design, procurement, construction management and commissioning services.

Supervising Operations Engineer, Water Pollution Control Plant, Los Angeles, CA

As supervising operations engineer for the County Sanitation Districts of Los Angeles County, Mr. Smith was in charge of solids disposal at the Sanitation Districts' 350 mgd joint water pollution control plant in Carson, California.

Manager, Management and Coordination of Numerous Projects in the Southwest

As manager of the Wastewater Department of MWH's Southwest Regional Office, Mr. Smith was responsible for the management and coordination of numerous projects in the Southwest. As

Educational Background

- MS/MSc Environmental Engineering, California Institute of Technology
- BS/BSc, Engineering, California Institute of Technology

Chronological History of Employment

- MWH since 1977

Relevant Licenses and Certifications

- Professional Engineer – CA
- WWTP Operator V, California

design engineer with the County Sanitation Districts of Los Angeles County Mr. Smith was responsible for design activities associated with solids dewatering, advanced primary treatment, and digester cleanings treatment.

Deputy Manager, Hyperion Energy Recovery System Program

Mr. Smith served as deputy manager for the construction of the $200 million Hyperion Energy Recovery System program, which incorporated over 20 separate contracts. Major process contracts included digester renovations, centrifuge dewatering, materials storage and handling facilities, sludge drying and combustion, and energy production using steam and gas turbine technology. The scope of this facility provided for the processing of 2,000 gpm of digested sludge and over 6.0 mcf/d of digester gas.

Principal-in-Charge, Clean Water Program, Los Angeles, CA

As principal-in-charge, Mr. Smith provided technical and managerial guidance for this $4.3 billion wastewater program. He was responsible for program organization, development of the CIP (including prioritization of over 300 separate contracts), research, planning, supervision of professional consultants, and program implementation. In addition, he represented the City of Los Angeles, regularly interfacing with regulatory agencies, construction firms, environmental organizations and members of the public.

Manager, Hyperion Treatment Plant Solids Handling, Energy Recovery, and Interim Improvements Program

Mr. Smith served for two years as manager of the 400 mgd Hyperion Treatment Plant. An Interim Improvements CIP was developed which, once implemented, resulted in major improvements in effluent quality by increasing primary treatment removal efficiencies from approximately 45 percent to almost 80 percent. Through a combination of improved primary effluent quality and the emergency conversion of the coarse-bubble, air-activated sludge system to fine-bubble technology, the quantity of flow receiving secondary treatment at this partial secondary facility increased from 90 mgd to 180 mgd.

Principal-in-Charge, Wastewater Capital Improvement Program, San Diego, CA

Mr. Smith headed a strategic transition team for the City of San Diego Wastewater Capital Improvements Program. Its purpose was to develop an initial organizational framework for the program, and to guide the City through the first few months of implementation. A comprehensive framework plan was developed to fulfill the facility and operational objectives of complying with federal and state standards for the metropolitan area, including the reclamation of 45 mgd of water by the year 2010. Under his guidance, the organizational structure evolved into a new City department, the Metropolitan Wastewater Department.

Emery Myers, PE, PMP

MWH, Project Manager

Relevant Project Experience

Technical Support, Panama Canal Design and Construction of the Third Set of Locks, Panama Canal Authority

Serving as manager for GlobalSCAPE, the document control system for the ongoing Panama Canal Design and Construction Project. Providing overall management and maintenance of GlobalSCAPE, coordinating between 6 global design centers located in Europe, North America, Central America and South America. Set-up and maintenance of high-level folder structures, overall coordination of set-up and maintenance of local folder structures through liaison with Document Controllers in the design centers. Coordination and liaison with technical IT support and general communication of GlobalSCAPE issues.

Assistant Project Manager, Citywide SCADA, New York Department of Environmental Protection

Serving as assistant Project Manager for an ongoing SCADA project that was initiated in 2002 and is projected for completion in 2011. The project involves planning, design, construction management, and implementation services for SCADA installation on the citywide sewer collection system in New York City. The project was initiated in response to a Consent Order for New York City to address combined sewer overflows. Project management tasks include management of budget, scope and schedule including internal MWH monthly reporting, external (client) monthly reporting, project invoicing, and monitoring of risks and issues.

Assistant Project Manager, Program Management Information System (PMIS), New York Department of Environmental Protection

Served as Assistant Project Manager for a technology project that was initiated in 2008 and completed in 2010. The Program Management Information System (PMIS) involved planning, design, configuration, and training for a computer based Dashboard reporting application and Workflow application. The PMIS integrates information on cost, schedule and scope of projects in planning, design and construction. Project management tasks included

Educational Background

- BS & BSc Environmental Engineering, Tulane University
- MS & MSc Environmental Engineering, Tulane University

Chronological History of Employment

- MWH since 1999

Relevant Licenses and Certifications

- Professional Engineer – LA
- Project Management Professional, Project Management Institute

management of budget, scope and schedule including internal MWH monthly reporting, external (client) monthly reporting, project invoicing, and monitoring of risks and issues. In addition, served as team lead for technical training. The technical training tasks included management of budget, scope and schedule specific to training tasks, supervision of 2 to 3 staff, interaction with the client, and development and review of training materials including Training Manual, Systems Manual, User's Manual and web-based training.

Project Manager, Florida Avenue Transfer Station Improvements, City of New Orleans, LA

Served as project manager for the design and construction management for structural rehabilitation of an existing facility. The project was initiated in response to the facility damage incurred by Hurricane Katrina in 2005 and the project was a part of the New Orleans Recovery Program managed by MWH. The design and construction included structural, electrical and architectural repairs and improvements. Project management tasks included management of budget, scope and schedule including internal MWH monthly reporting, project invoicing, monitoring of risks and issues, and management of 2 subconsultants.

Project Manager, Recycling Request for Proposals (RFP), Department of Environmental Affairs, Jefferson Parish, LA

Served as project manager for the Recycling Request for Proposals (RFP) for a municipality in Southeast Louisiana. This project was a direct result of the project previously performed by MWH for the client for the evaluation of the Jefferson Parish recycling program. The residential curbside recycling program in Jefferson Parish was suspended in response to the Hurricane Katrina disaster. The evaluation project concluded with the recommendation to re-instate and improve the curbside residential recycling and set a future goal for curbside collection of compostable waste. The Recycling RFP project included development of an RFP for Jefferson Parish, establishment of evaluation criteria for the proposals, coordination of a pre-proposal conference, and evaluation of the proposals.

Recruiter, New Orleans Recovery Program, City of New Orleans, LA

Served as the recruiter for the New Orleans Recovery Program which entailed program delivery for 352 building projects valued at $817 M for Post-Hurricane Katrina rebuilding efforts. Coordinated hiring needs for the program, scheduled and lead interviews for potential candidates and provided on-boarding for new hires. The program was a quick-start with over 60 engineers, architects and support staff hired over the course of 6 months.

Farid Cardozo, CCM

Group PM[x], Senior Project Manager

Relevant Project Experience

Senior Scheduler, American Airlines Terminal, JFK International Airport, Jamaica, NY

This project included a complete replacement of terminals 8 and 9 with a single-terminal complex. The entire complex encompassed approximately 2.3 million square feet of floor space and 54 fixed aircraft gates. As Scheduler, part of the Program Management team, responsible for developing and updating the master baseline design, construction and procurement schedules, preparing monthly narrative reports and progress schedules, coordinating, phasing, logistic, and scheduling issues with the client, contractors, designers and the facilities.

Resident Engineer, 92nd Street Ramp at FDR Drive, NY, NY

Project included the construction of the 92nd Street ramp on the FDR Drive. As a resident engineer and a member of the scheduling and project controls group, developed and maintained project data using Primavera software. As Scheduler, developed and updated master construction and procurement schedules, prepared monthly narrative reports, prepared progress schedules, developed and prepared performance and delay analysis.

Resident Engineer, LIE Rehabilitation, NY, NY

Project included the rehabilitation of the Long Island Expressway from the Midtown Tunnel to the Maurice Avenue Exit in Queens, NY. Work included the resurfacing and repair of the entire roadway, the installation of a smart traffic system and work related to the entry and exit ramps of the Expressway. As a Resident Engineer and a member of the scheduling and project controls group, developed and maintained project data using Primavera software. Developed and updated master construction and procurement schedules, prepared monthly narrative reports, prepared progress schedules, developed and prepared performance and delay analysis and when required evaluated schedules in support of claims.

Resident Engineer, Mineola Boulevard Bridge, Mineola, New York

Project included various maintenance repairs to the bridge structure.

Educational Background

- Bachelor of Science, Building Construction, University of Florida

Chronological History of Employment

- Group PM[x] since April, 2010
- Stantec, 2008 – April 2010
- Jacobs/Carter & Burgess,2001 – 2008
- FAI Management, 1999 – 2000
- O'Brien Kreitzberg, 1996 – 1999

Relevant Licenses and Certifications

- Certified Construction Manager, CMAA 2006

As a resident engineer and a member of the scheduling and project controls group, developed and maintained project data using Primavera software. As Scheduler, developed and updated master construction and procurement schedules, prepared monthly narrative reports, prepared progress schedules, developed and prepared performance and delay analysis and when required evaluated schedules in support of claims.

Claim Consultant, Wall Street Esplanade and Ferry Pier, NY, NY

Project included the reconstruction of the Wall Street esplanade along the East River and the access routes to the Ferry Pier. Working as a claim consultant for the contractor was responsible for the review and analysis of all project documents. The schedule analysis included the preparation of an as-built schedule, comparison of the baseline and allocation of responsibility for delays in support of a claim presented by the contractor.

Resident Engineer, Williamsburg Bridge Rehabilitation, NY, NY

Project included various maintenance repairs to the bridge structure. As a resident engineer and a member of the scheduling and project controls group, developed and maintained project data using Primavera software. As Scheduler, developed and updated master construction and procurement schedules, prepared monthly narrative reports, prepared progress schedules, developed and prepared performance and delay analysis and when required evaluated schedules in support of claims.

Scheduler, New York Advance Wastewater Treatment Program, NY, NY

As Scheduler, serving as a sub-consultant to the joint-venture team of Montgomery Watson / Hazen & Sawyer to perform master scheduling services for the construction of five new water pollution control plants for New York City's DEP as a part of the City's Advanced Wastewater Treatment Program. Responsibilities included master scheduling, construction scheduling analysis, coordination and detailed construction review.

New York Department of Environmental Protection, NY, NY

This program included the development of a comprehensive nitrogen management and implementation plan, the implementation of a pilot BNR program that included a sampling and analysis program, to allow NYCDEP to develop the most cost-effective and technically feasible methods for meeting current and anticipated nitrogen discharge permit limits. Provided program management and scheduling support to Metcalf & Eddy on the New York City Biological Nitrogen Removal and PO-55A test pilot programs. Responsible for the development and monthly maintenance of the program master schedule, using Primavera software; development and updating of project-specific design, analysis and construction schedules, and reporting requirements.

Felicia Pittman

LPE Enterprise, Administrative Assistant

Relevant Project Experience

Project Assistant, LPE Enterprise for MWH

- Provide administrative support to six Professional and Civil Engineers.
- Record and transcribe meeting minutes, prepare agendas, reports and files for meetings.
- Compose correspondence; prepare letters, memoranda and forms for general instructions.
- Print weekly and monthly reports specific to various project deliverables.
- Make sure budgets and scope of work is in accordance with city and state guidelines.
- Review/approve office and project related invoices.
- Monitor overhead and direct cost for multiple projects as well as office related expenses.
- Review weekly and monthly financial reports for errors that may delay our invoice/payment process.
- Submit change orders, proposals and general specifications to clients for review/comments.
- Organize an electronic and hardcopy filing system for project managers and engineers.
- Other responsibilities include scheduling meetings, conferencing calls via telecom, managing calendars, reviewing emails, travel arrangements, expense reports and other general administrative duties.

Administrative Assistant ,Geller Group Ltd

- Heavy and timely processing of 401k contribution/distribution for trading
- Prepared hands on tutorial material for weekly executive meetings.
- Create pie charts, fund comparison and scatter plots for use in sales meetings
- Draw proposals and fiduciary reviews for Ceo/Directors.

Educational Background

- Interboro College, 2001

Chronological History of Employment

- LPE Enterprise for MWH since 2005
- Geller Group, 2002-2005
- City Spring, 1999-2002
- Fidelity Investments 1997-1998

Relevant Licenses and Certifications

- Notary Public, New York State

- Prepare termination, loan, liquidation distributions packages for participants
- Daily calculation of trade agents (Schwab, Fidelity, Schwab Trust and Matrix) to match accuracy of buy/sell report before trading.
- Reconcile participant balances, provided reruns for quarterly statements
- Coordinate travel, answer phones and trained new employees

Administrative Assistant, City Sprint

- Resolved customer related issues concerning lost, Stolen or delayed packages
- updated the tracking system for all documentation received from clients
- Intake three hundred phone inquires daily for clients needing delivery services.
- Trained and monitored new employees to insure customer satisfactory

Administrative Assistant, Fidelity Investments

- Maintained spreadsheets for beneficiary changes for participants
- Retrieved fiche for employees from archive dept for quarterly update
- Intake Initiated calls to participants concerning basic application errors.

Jeremy Meattey

MWH, Project Controls

Relevant Project Experience

Project Controls Lead, Lima, Peru

- Develop Program Schedule, including bottom-up budget development from Resource-Loaded Schedule.
- Managed and provided Quality Assurance review for schedule and budget updates from Technical Teams.
- Assist with development of what-if acceleration schedules on Report Delivery projects.
- Coordinate international Project Controls Team from Broomfield, CO.

Project Controls Specialist, Broomfield, CO

- Provides portfolio management support for Management Consulting and Technology including resource and cost planning, budgeting and scheduling at the portfolio level.
- Provides BSG Management Consulting with project control support on their projects including client-specific reporting and analysis.
- Provide direct Project Control support to the emerging programs.
- Providing support to BSG business development pursuits and proposals.

Program Controls Lead, NYCDEP, New York, NY

- Coordinated management of NYC DEP Bureau of Engineering Design and Construction (BEDC) project portfolio (168 active projects, $15B Capital Plan) Master Schedule through complete lifecycle (Planning through Closeout).
- Coordinated management of NYC DEP BEDC project portfolio (168 active projects, $15B Capital Plan) Master Schedule through complete lifecycle (Planning through Closeout).
- Individually maintained a Master Schedule portfolio of 89 active projects including $1.6B Croton Water Treatment Plant and $1.3B Cat/Del UV Disinfection Plant in Primavera P6.2.1.
- Managed tasks and roles for Program Controls team of 4 members, served as primary client interface for team, and developed Program Controls position/strategy for Bureau.

Educational Background

- BS & Mechanical Engineering, University of Florida

Chronological History of Employment

- MWH since 2008

- Contributed to development of the BEDC Interim Cost Control Database to manage lifecycle Program/Project budget and cost performance utilizing Microsoft Excel, SQL Server 2005 and Crystal Reports.
- Developed Interim Schedule Control System for rollout of Program Master Schedule processes, Agency-wide. System consists of web-based end user interface, virtual MySQL database and Crystal Reports tool. System is to be rolled-out in June 2010.
- Coordinated with multi-disciplinary team for DEP PMIS, completed gap-analysis for BEDC Dashboard, completed final approved Dashboard wireframe mockups, helped define/evaluate/optimize BEDC Business Processes for workflow integration, including: Monthly Progress Update, Project Schedule/Cost Baseline, and Schedule Re-Baseline.
- Implemented "Interim Business Processes" for BEDC Project Management, including Schedule Re-Baseline, Delay/Gain Tracking, and Schedule Variance Issue/Risk Description.
- Produced Monthly Schedule and Cost Summary reports by Portfolio/Program/Stage.

Program Controls Specialist, Lake Charles, LA

- Produced an internal Monthly Program Report, in addition to a published Quarterly Program Report, utilizing Crystal Reports XI with data gathered from multiple sources, including Primavera P6 and Microsoft Excel/Access.
- Developed/monitored/controlled the Cameron Parish Disaster Recovery Program, consisting of 111 individual projects in various stages of start-up, design, construction and closeout.
- Engaged in monthly status meetings with 4 Project Managers.
- Performed daily upkeep of Program Schedules with Primavera P6, maintained and expanded Program Document Control Database with Microsoft SharePoint and assisted in the development of the Master Program Financial Database.
- Assisted with Program Financial analysis for Earned Value budget analysis.

Joseph Frissora, PE

MWH, Senior Project Manager

Relevant Project Experience

Project Manager, SCADA Task 1, NYCDEP, New York, NY

Mr. Frissora managed several phases of the NYCDEP Citywide Collection Facilities SCADA System, including implementation planning, conceptual design, and preliminary design. The project consisted of the four different design/construction contracts. When completed, the SCADA system will provide monitoring and control from wastewater pollution control plants and crew quarters for over 250 facilities, including pump stations, regulators, and flow monitoring sites. Mr. Frissora has returned to this project as project director, and will oversee design services during construction and construction management for three of the four construction contracts. Mr. Frissora is now the Project Director for the ongoing Design Services During Construction for the SCADA Project.

Project Manager, Trenton Filtration Plant Pre-Treatment and Facilities Improvement Project, City of Trenton, NJ

Mr. Frissora managed a multidisciplinary team for the design and construction of this project which involves implementing the results of a master plan and facility audit. He is providing coordination with the New Jersey Department of Environmental Protection and permit assistance. Major improvements include demolition of clarifiers, replacement of raw-water pumps and force main, new flash mixers and Superpulsator clarifiers, conversion of sedimentation basins to chlorine contact chambers, and replacement of existing high-service pumping equipment.

Project Manager, Pumped Storage Reservoir System, Brick Township Municipal Utilities Authority, Brick, NJ

Mr. Frissora managed design and construction of this new raw-water reservoir, including modifications to an existing pump station/intake; a new 5-mile, 42-inch-diameter pipeline; and conversion of a sand quarry into a 900-MG raw-water storage reservoir. He oversaw a multidisciplinary team of engineers, and provided coordination with NJDEP and permit assistance during design. This project was financed through the New Jersey

Educational Background

- BS & Electrical and Computer Engineering, Clarkson University

Chronological History of Employment

- MWH since 1998

Relevant Licenses and Certifications

- Professional Engineer – NY, NJ, DE

Infrastructure Trust Program.

Project Manager, Lackawanna Watershed 2000 CSO Program, Lackawanna County, PA.
Mr. Frissora managed this Program from 2008 through 2010. Lackawanna Watershed 2000 is a watershed improvement program that was undertaken in the anthracite region of Northeastern Pennsylvania to mitigate Acid Mine Drainage (AMD) and Combined Sewer Overflows (CSOs) polluting the Lackawanna River. The Program, funded by a grant from the USEnvironmental Protection Agency to Lackawanna County, entailed planning, design, and implementation of solutions to restore the environmental vitality of the Lackawanna River basin

Project Manager, Carl J. Olsen Water Treatment Plant Upgrade and Expansion, Middlesex Water Company, Edison, NJ.

Mr. Frissora managed the startup and closeout of the construction phase of this project. The project included increasing plant capacity from 30 to 45 mgd, four Superpulsator clarifiers, four filters, a chemical and lab building, pumping upgrades, backwash clarifiers, and a distributed control and SCADA system. He oversaw design services during construction, including a multidisciplinary team.

Project Manager, SCADA System Design, Ocean County Utilities Authority, Bayville, NJ.

Mr. Frissora managed installation of a new SCADA system at three wastewater pollution control facilities. The project included replacement of control systems, demolition of programmable logic controller and local control panel equipment, and modifications to motor controls for interface to a new plant-wide control system.

Project Manager, SCADA System at William Miller Water Treatment Plant, Brick Township Municipal Utilities Authority, Brick, NJ.

Mr. Frissora managed design and construction of a SCADA system and 33 remote sites, including booster stations, storage tanks, interconnections, and sewage pumping stations. Spread-spectrum, random-frequency radios were used to communicate between the remote sites and the plant, while fiber-optics were used to communicate between remote terminal unit's at the plant. The control room included four computers and a projection system. The SCADA system was networked into the plant's computer system.

Kevin Ellenwood, EIT

MWH, Project Manager

Relevant Project Experience

Project Manager, NYCDEP, Program Management Support

Mr. Ellenwood is currently assisting in the management of the Program Management Support project with the NYCDEP. His responsibilities include earned value management of the $11M budget, managing subcontractor invoices, and managing project scope, schedule and budget.

Mr. Ellenwood is managing the design of an electrical upgrade of a water pump station, including replacement of switchgear, motor control centers, and electric motor. His responsibilities include overseeing Bureau of Engineering Design and Construction (BEDC) engineers, reviewing contract drawings and specifications, and interfacing with the client Bureau.

Mr. Ellenwood is assisting in the management of the construction of mechanical and electrical equipment at ten riser shafts located in mid and downtown Manhattan, and the coordination with a City agency responsible for installation of water trunk mains at six of the shaft sites for connection to the City distribution system. His responsibilities include coordination of shop drawing review, processing of change orders, and management of project issues.

Mr. Ellenwood participated in the re-writing of the BEDC Project Delivery Manual (PDM). His responsibilities included issuing new standard operating procedures (SOPs), flowcharts, and forms related to monthly progress reporting, schedule and budget development, quality management, and project management plan development.

Project Manager, NYCDEP, Capital Program Management

Mr. Ellenwood assisted in the management of the Capital Program Management Support project with the NYCDEP. His responsibilities included earned value management of the $8.9M budget, managing subcontractor invoices, and preparing monthly reporting (progress reports, scope change management, estimate at completion).

Mr. Ellenwood helped coordinate a series of 10 training modules

Educational Background

- BS/BSc, Environmental Technology, Cornell University
- MS/MSc, Environmental Engineering, Cornell University

Chronological History of Employment

- MWH since 2004
- Parexel, 2001-2002
- Cu-Tech, 1997-2001

Relevant Licenses and Certifications

- Engineer in Training, NY 2005

related to project delivery and standard project management practices, delivered to municipal project managers, executive project managers and division chiefs. He also helped coordinate a series of 5 technical modules focused on discipline reviews and coordination. Specifically, Mr. Ellenwood helped develop module content, coached content experts on delivery of the modules, and facilitated training sessions.

Mr. Ellenwood coordinated subconsultant development of Permit Resource Division guidelines and templates, and staff augmentation. He contributed to the development of Permit Tracking Database (PTD) training for BEDC project managers, In-House Design staff, and consultants, improvements to PTD reports and tools, and improvements to PTD business processes.

Project Manager, St. John's Creek Restoration, PA

Mr. Ellenwood led an evaluation of the St. John's Creek watershed. Results of the evaluation were used to design the repair and relocation of the creek, which loses baseflow to underground mines, and to design the relocation of a combined sewer and improvement of a combined sewer overflow which discharges untreated combined sewage to the creek. Repair of the creek will reduce the amount of abandoned mine drainage impacted flow entering downstream water courses. Mr. Ellenwood worked cooperatively with the regulatory agencies including the US Environmental Protection Agency and the Pennsylvania Department of Environmental Protection to work through the permitting of the project. His responsibilities included coordination of two design teams and two modelling teams, schedule and budget development and oversight.

During the preliminary phase of this project, Mr. Ellenwood led the modeling effort to convert, update, and calibrate a hydraulic model for seven CSOs in a combined collection system. He incorporated geographic information system (GIS) and survey information into building of model. Model results will be used to design a sewer sized to accommodate combined flow from three combined sewer overflow (CSO) facilities, and to determine chamber dimensions for a relocated CSO facility.

Project Manager, TWW Asset Valuation, City of Trenton, NJ

As project manager, led effort to evaluate the City of Trenton distribution system and associated assets as part of an initiative to manage City of Trenton assets and provide an opinion of value for possible sale. Assets included in valuation were 250 miles of pipeline and appurtenances, elevated storage tanks, booster stations, City-owned property and service connections.

Michael Giaramita

Group PM[x] , Program Principal

Relevant Project Experience

Principal-in-Charge, Logan International Airport, Boston, MA

Principal-in-Charge of the Owner-led Program Management Team responsible for managing a host of projects, including new terminal building, parking garage, roadways, and various airside and landside improvements. Successfully completely all projects on time and on budget.

Principal-in-Charge, American Airlines Terminal, JFK International Airport, Jamaica, New York

Principal-in-Charge of the Owner-led Program Management Team responsible for managing American Airlines' $1.3 billion capital construction program at New York's JFK International Airport. This multi-year project involved the demolition of facilities within existing Terminals '8' and '9' to allow for construction of concourses, a new terminal, a new roadway system, a federal inspection station, 36 jet gates and expanded retail and support space. Mr. Giaramita implemented innovative owner-controlled change order and scheduling management which resulted in owner savings of over 30 percent (worth tens of millions of dollars) on change orders submitted.

Denver International Airport, Denver, Colorado

Mr. Giaramita was requested to join the project team when the project was approximately 50% complete. He reorganized several departments and instituted the Department of Program Management Services to facilitate a proactive and collaborative work environment. He supervised a staff of over 80 in scheduling, time-impact schedule analysis, estimating, negotiations and claims analysis. Mr. Giaramita provided leadership to settle over 22,000 change issues worth in excess of $350 million. He developed integrated construction schedules to identify potential conflicts and aid in their management. Also, Mr. Giaramita was responsible for the development and implementation of a program-level change tracking system, the central repository and reporting mechanism for the more than 35,000 change issues worth over

Educational Background

- Bachelor of Science, Colorado State University

Chronological History of Employment

- Group PM[x] since January 2010
- Stantec, 2008 – January 2010
- Jacobs/Carter & Burgess, 2000 – 2008
- O'Brien Kreitzberg, 1992 – 2000
- Barba Int., 1991 – 1992
- S&B Engineers, 1990 – 1991
- Metropolitan Transit Authority of Harris County, TX, 1983 – 1990

Relevant Licenses and Certifications

$520 million. Was one of four senior staff members involved in directing the Airport to completion.

Project Director, New Jersey Department of Transportation, Analysis of Capital Program Delivery, Trenton, New Jersey

Project Director responsible for the initial phase of this project, directed the project team in analyzing the effectiveness of existing processes and systems. The team made recommendations to move projects more expeditiously through the identification, evaluation, planning, design, bid/award and construction cycles, at the lowest possible cost and least amount of time, with each step developed under optimum control and sound management practices.

Principal-in-Charge, World Trade Center Recovery Project, New York, New York

Principal-in-Charge. Served as a member of the Plaza/Turner team, which was assigned a portion of the World Trade Center recovery work following the attacks of September 11, 2001. Work focused on the removal of the debris field at and around WTC 7, a 47-story, 2 million-square-foot steel frame structure. WTC 7 recovery work initially ran 24 hours / day, 7 days / week, comprised of two 12-hour shifts per day. Mobilized personnel and began on-site coordination with all subcontractors, general contractors, and all local, state and federal agencies.

Principal-in-Charge, Path Station Reconstruction, New York, New York

Principal-in-Charge of the Owner-led Program Management Oversight (PMO) Team working directly for the FTA overseeing the reconstruction of this facility which was fallen from the September 11, 2001 attack. Our role was to review and report on a host issues, mostly related to cost and schedule performance by the grantee.

Principal-in-Charge, MTA ($16 billion Capital Program), New York, New York

Principal-in-Charge of the Owner-led Program Management Team responsible for overseeing the MTA's $16 billion capital program spanning seven years. Answering directly to the MTA Chairman of the Board, reporting any deviations on projects which varied from best practices with respect to cost, schedule and quality management. During the seven year term the MTA awarded more projects than any other time in history.

Michael Musgrave, JD

MWH, Senior Program Manager

Relevant Project Experience

Project Principal, Denver International Airport, Construction and Claims Management, Denver, CO.

As Project Principal, Mr. Musgrave led the O'Brien Kreitzberg team assisting the airport on several projects. Projects included the fuel farm, automated people mover, and parking structures. O'Brien Kreitzberg worked directly in support of the engineering and legal staffs in areas of procurement, construction management, and claims support.

Account Executive, O'Brien Kreitzberg Inc. Airport Tenant Improvements, San Francisco International Airport, San Francisco, CA; Los Angeles International Airport, Los Angeles, CA; and Dulles International Airport, Washington, D.C.

As Account Executive, Mr. Musgrave served United Airlines in support of its installation of a new baggage system at three international airports. Assignments included the development of a new procurement process that requires greater contractor performance and higher accountability, review of bid specifications and the negotiation of final construction contracts, contract administration, schedule review, and on-site inspection.

Manager of Public Works, Denver International Airport, Denver, CO.

As Manager of Public Works, Mr. Musgrave was responsible for the successful completion and opening of the Denver International Airport. Mr. Musgrave managed the airport's program management team and was personally responsible for the negotiation of over $100M in change orders, design, and construction of an Alternate Baggage Handling System. In addition, Mr. Musgrave represented the City during audits and reviews of the airport project conducted by the U.S. General Accounting Office, Federal Aviation Administration, Department of Transportation, and congressional subcommittees. Mr. Musgrave served as a member of the airport's financial team who successfully marketed over $3B in revenue bonds. Mr. Musgrave was also responsible for public construction and operation of

Educational Background

- JD, Law Ohio Northern University, Petit School of Law
- BA, Political Science, Business, University of Northern Colorado

Chronological History of Employment

- MWH since 1998

Relevant Licenses and Certifications

- Attorney at Law, CO

Stapleton International Airport in the delivery of basic services.

Program Manager, Redevelopment of the Former Stapleton International Airport, Denver, CO.

Mr. Musgrave managed this $1B project, which converted a former airport site into a mixed-use master planned community. The project is the largest urban infill project in the nation, and ultimately will include 12,000 homes, a senior housing project, more than 13 million sf of commercial, industrial and institutional space, and 1,180 acres of parks, trails, recreation facilities and natural areas.

Nick Haralambidis, LEED AP

Group PM[x] , Project Manager

Relevant Project Experience

Senior Project Manager, Bronx Commmunity College, Bronx, New York

As a Senior Project Manager, oversees Construction Management services for this $75 million Campus Wide Utility Upgrade. The upgrade includes removal of existing boilers, chillers, cooling towers, and distribution pumps in the Selective Energy Plant and two stand-alone buildings. The campuses twenty-two existing buildings and one new building will receive new power distribution, steam, hot and chilled water (new 4pipe system) through heat exchangers and steam generators, BAS data loop, and campus internet distributed throughout the campus in 6,000 LF of new utility distribution system. This upgrade will convert the old Selective Energy Plant into a Central Plant. The two stand-alone buildings will also receive new equipment and be tied-in to the CP. Several of the old boilers required asbestos abatement of insulation and built-up brick. Replacement equipment will include new energy efficient, chillers, cooling tower, steam generators, boilers, and emergency generator.

Senior Project Manager, Sky Ute Casino-Resort, Ignacio, Colorado

Senior Project Manager for a 320,000 sq ft casino-resort with 160 key hotel, consisting of three new buildings, RV park, new site amenities and rework of existing highway totaling $180 million with $131 million in construction. Supervisor for a field staff of five. Oversight of estimating department in reviewing all bid packages and negotiations with general contractor. Responsible for budget, monitoring schedule, monthly reports, coordination of end users, and all owner contractors/consultants (low voltage, surveillance, audio/visual, commissioning agent), review of all payment applications. Managed bidding, selection, installation, and coordination of FF&E/OS&E design team. Prepared RFP's, PCO review/negotiations, design review, coordination with public utilities, and other surrounding projects.

Educational Background

- Bachelors of Architectural Science, New York Institute of Technology, Islip, NY
- Various courses in Construction Management, Arizona State University, Tempe, AZ

Chronological History of Employment

- Group PM[x] since October 2010
- Stantec, 2008 – October 2010
- Parsons – 3D/International, 1999 – 2008
- Durrant Architects, 1998 – 1999
- Structural Development, 1996 – 1997

Relevant Licenses and Certifications

- Leadership in Energy and Environmental Design (LEED) Associate Professional, US

Maintained internet based project management software and responsible for updating finance management system.

Project Manager, Apache Boulevard Police Substation and Evidence Facility, Tempe, Arizona

Project Manager from pre-design phases throughout construction for an area redevelopment project of multiple buildings totaling 80,000 sq ft and $23 million total project budget with $19 million in construction costs. Created preliminary budget estimate and design specifications prior to selection of CMAR firm. Created questionnaire for CMAR interview and presentation process. Managed design, value engineering, design review, end user needs/wants, and FF&E/OS&E design. Reviewed RFI's, and submittals prior to architect review for completeness. Responsible for tracking contractors progress with project schedule, reviewed all invoices, budget control, PCO review/negotiations, and QC. Responsible for civil installation review per plan and specifications. Created move/orientation package for Police Department. Negotiated demolition of neighbor's existing property fence and relocation of neighboring non-code compliance trailer park. Maintained internet based project management software.

Mohave Educational Cooperative Job Order Contract Program, Various Cities/Public Entities, Arizona

Involved in starting and incorporating policies of a Job Order Contracting program providing at-risk construction services for small to medium size projects covering a wide variety of trade disciplines. At inception of program responsibilities included Estimator, Project Manager and Superintendent for all projects. Construction responsibilities included scoping out work, RS Means estimating, and buyout.

Estimator, Scottsdale Unified School District No. 48, Scottsdale, Arizona

Estimator for $120 million, three-year bond program consisting of renovating, remodeling and retrofitting 29 existing campuses, replacement of one elementary school and the new construction of a middle school and an elementary school.

City of Phoenix 2000 Bond Election, Phoenix, Arizona

Created cost models and budget sheets based on historical project information for various facilities (police, fire, library, office, recreation centers and others) to assist in the establishment of the $754 million 2000 Bond Election. Trained City of Phoenix and 3D/International staff to use and update cost modeling database.

Nure Aiza

Toll International, Project Controls Specialist

Relevant Project Experience

Primavera Expert

- Implemented Primavera Project Manager for Construction and delivered CPM scheduling, P6 and Earned Value Management training for a variety of clients including Sciame Construction, Microdesk, CPM Consultants.
- Served as scheduler for the Madison Yard structures in Manhattan. Chaired weekly schedule meeting, prepared and presented six-week look ahead schedule for Madison Yard structures to the construction management team. Collected monthly progress from contractor team project engineers and updated monthly schedule for submission to the client. Conducted time-impact analysis for construction schedules and assisted the project manager in the preparation of recovery schedules to ensure milestones will be achieved as expected by re-sequencing the job and updating productivity of resources. Prepared construction schedule graphs for presentation at executive meetings and evaluated liquidated damages and penalties based on contract documents and potential delays.
- Served as an expert in Capital Program Management support for New York City Department of Environmental Protection. He collaborated with client staff in optimizing project management databases and internal project management processes for New York City School Construction Authority. He is an expert in benchmarking and workflow design and collaborated in the change order management initiative for New York City wide Advanced Water Treatment and Bionutrient Removal Projects. He is an independent advisor in budget management and capital program planning. Developed and conducted training programs for over 50 professionals in Critical Path Method (CPM) scheduling and in the use and implementation of enterprise project management systems that utilize Primavera P6 V7.0
- Served as management liaison for interdepartmental operating analysis of design and construction management

Educational Background

- Masters of Science Construction Management, MIT
- Masters in Project Manager, Northwestern University
- Bachelor of Science in Civil Engineering, University of the Americas, Mexico

Chronological History of Employment

- Toll Int'l LLC since 2007
- PMA Consultants LLC 2002-2007
- MCI Worldcom 2000-2002
- Modern Continental Construction 1999-2000

Relevant Licenses and Certifications

- Professional Engineer – Mexico

at Port Authority (P.A.). Represented P.A. at Interagency Benchmarking Collaborative with NYCT, GSA, Amtrak, DDC and DOT in the development of comparative construction management practices and scheduling metrics. Implemented monitoring of design staff budgets for new $2 billion downtown transportation center at Port Authority. Introduced monthly workload analysis of design projects by combining SAP financial data with Primavera schedules. Implemented Primavera web-based project management system at Columbus Regional Airport Authority in Ohio.

In 2003, he was the key expert consultant in award winning Primavera P3e/c implementation and migration at Port Authority. Also volunteered in the organization of first international conference for PMI-College of Scheduling in Montreal, Canada. Implemented web-based integration of capital planning budget project management at Port Authority as part of operating efficiencies initiative to save Port Authority $100 million out of its $1.7 billion 2006 capital plan. Retained by Primavera Systems to develop sample construction industry schedules included with P3e/c software

Senior Project Controls Specialist

Corporate Scheduler for construction of data centers to house telecomm switching equipment in ten major cities. Delivered project management training based on PMI's Project Management Body of Knowledge (PMBK). Facilitated meetings to develop new service delivery methods and documented enterprise wide business processes

CPM Scheduling Engineer

Main project scheduler and cost control specialist for Ft. Point Channel underground water tunnel for MBTA. Project planner and construction estimator for highway projects and construction bid support.

Design Lead Engineer

Coordinated substructures design and monitored construction for mass transit projects in Mexico City and Puerto Rico and provided geotechnical and structural engineering support services for underground construction activities.

Seth Yoskowitz, PE

MWH, Project Manager

Relevant Project Experience

Program Training Manager – Client: Panama Canal Third Set of Locks Project

Mr. Yoskowitz currently serves as the Training Manager for the Panama Canal Third Set of Locks Project and developed the Quality Management Training Program. The purpose of the QMP Training Program is to provide key training on processes and critical skills to team members located in geographically disperse design centers. Training is delivered on a wide range of topics to six infrastructure design centers spread across North America, South America and Europe.

Task Leader, Capital Program Implementation –City of New Orleans

Mr. Yoskowitz served as a Task Leader in the City of New Orleans Recovery Program. In this capacity, Mr. Yoskowitz lead the team charged with helping the City of New Orleans Office of Recovery map out key project management-related business processes that exist for Hurricane Katrina related reconstruction and restoration projects. Mr. Yoskowitz worked with the Executive Council to the Mayor of New Orleans developing the process for quarterly reporting of the Capital Budget to City Council. Mr. Yoskowitz also worked with the City to refine the processes for establishing prioritization schemes for the various Recovery Program project opportunities. Key recent business process mapping and evaluation efforts on behalf of the City include: Procurement, Project Closeout, Invoice Payment and Change Order Processing

Asset Management Program and Training Leader – United States Air Force

Mr. Yoskowitz worked with the United States Air Force developing an asset management program for all civil engineering and base infrastructure related functions for all bases and installations across the Air Force. Mr. Yoskowitz served as the Training Task Leader and On-Base Workshop Facilitator for Air Force personnel participating in the asset management program providing instruction on how project participants will lead others in

Educational Background

- Master of Science, Civil Engineering, Stanford University
- Bachelor of Science, Civil Engineering, Stanford University

Chronological History of Employment

- MWH since 1998

Relevant Licenses and Certifications

- Professional Engineer – MD

gathering and utilizing existing asset data. The Air Force maintains infrastructure-related data in many separate databases. Because decisions need to be made at the base-level, Major Command level and the Air Force HQ level, collecting all of the required data is difficult. The overall goal of the effort was to define a set of data processes and supporting data infrastructure that will allow easier summary reporting of past, present and future facility and civil engineering needs and expenditures. Mr. Yoskowitz worked with the team to map out the required data processes and flows that will enable the Air Force to manage asset data at the base, command, and HQ levels.

Project Management Training – NYC Dept. of Environmental Protection

Mr. Yoskowitz worked with the New York City Department of Environmental Protection (NYCDEP) on their organizational assessment and strategic transformation of their capital program. NYCDEP was seeking ways to improve how its capital program, one of the largest in the world, is planned and executed. Mr. Yoskowitz was part of the assessment team that conducted benchmarking against other infrastructure entities, developed options for organizational structures, evaluated business process improvements, and assisted with strategic planning. This organizational assessment study led to the implementation of the NYCDEP Capital Program Workforce Development task for which Mr. Yoskowitz served as the Workforce Development Task Leader. In this implementation capacity, Mr. Yoskowitz lead the team charged with helping NYCDEP establish a workforce development program to provide project and construction management training to key staff involved in the capital program.

Program and Project Management Training – City of Kansas City, MO

Mr. Yoskowitz worked with the City of Kansas City's Capital Improvement Management Office (CIMO) to develop and implement their organizational goals around workforce development and leadership training. The client was a new department responsible for managing the capital improvements projects for the City's aviation, downtown redevelopment, utility, and recreation entities with a goal of developing into a first-class project management organization. Mr. Yoskowitz worked with Kansas City to identify specific skills as the core competencies targeted for improvement. The implementation involved development of a series of inter-related courses geared for PMs and other leaders in the organization. Mr. Yoskowitz developed and delivered the following course topics: project management, construction management, quality management, negotiations, communications, and leadership skills.

MWH

BUILDING A BETTER WORLD

October 21, 2010

Tim Volonakis, Manager
The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

Reference: Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis during 2011, 2012, 2013 and 2014 (RFP Number 22388)

Dear Mr. Volonakis:

In response to Section III, Item J of the Request For Proposal for the above referenced solicitation, MWH offers the following clarifications with the form of agreement provided in the RFP.

1. Paragraph 6, Page 2: If selected, MWH would request clarification relative to the Standard of Performance required. To remain in compliance with our insurance coverage, MWH will provide the standard of performance normally employed by professional consultants providing similar services.

2. Paragraph 8, Page 2: MWH understands the intent of this paragraph to mean that the Authority can request a different level of personnel based on a specific employees salary or the Authority may impose a cap on a level of personnel provided with these services. If selected, MWH request clarification on this paragraph.

3. Paragraph 10, Page 5: Our understanding is that billing for services would be based on a hourly rate for each hour of service provided. If selected, MWH would request clarification of portion of this paragraph that states that the Authority will estimate the amount of compensation earned.

4. Paragraph 12 and 13, Page 6: MWH would take exception to these paragraphs to the extent that MWH's communication of information related to the Services are compelled by law or valid order of any court of other tribunal or agency having jurisdiction over the matter in question.

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Suite 1620
New York, NY 10018

TEL 646 827 4100
FAX 646 827 4101
www.mwhglobal.com

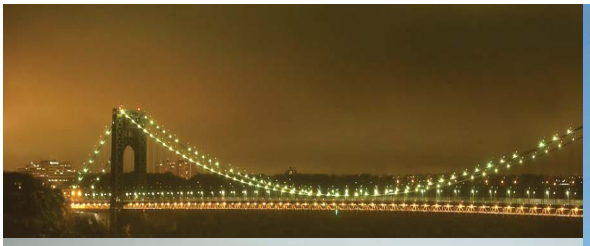
5. Paragraph 22, Page 9: If selected, MWH would request clarification that indemnification and limitation of liability throughout subparagraphs A-D applies to the extent that such claims result from Consultant's negligent performance of the Services.

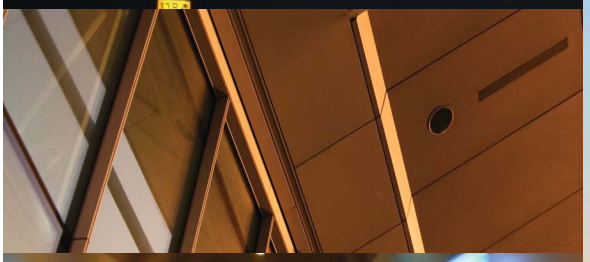
6. Paragraph 23, Page 10: MWH does not carry $5 Million in auto liability insurance, but can offer excess coverage and umbrella coverage that meets the $5 Million requirement. This also applies to the $25 Million auto liability insurance requirement for airside services.
   MWH considers its insurance policies to be proprietary and does not provide copies of such information to our clients. MWH can provide evidence of insurance in the form of certificates and copies of endorsements as necessary.

7. Paragraph 28, Page 16: Similar to comment number 4 above, MWH would take exception to this paragraph to the extent that any disclosure of information is required by law or valid order of a court or other tribunal having jurisdiction over the matter.

Sincerely,

Jerry Notte, PE
President
MWH Americas, A New York Corporation





Request For Proposal

Performance of Expert Professional Project Management Services as Requested on a “Call-In” Basis During 2011, 2012, 2013 and 2014

RFP #22388

Submitted to:

RFP Custodian
The Port of Authority of NY and NJ
One Madison Avenue, 7th Floor
New York, NY 10010

Submitted by:
Netta Architects
25 Route 22 East, Suite 290
Springfield, NJ 07081
T: 973-379-0006
F: 973-379-1061

NettaArchitects

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Introductory Letter

October 20, 2010

The Port Authority of NY and NJ
One Madison Avenue, 7th Floor
New York, NY 10010
Attn: RFP Custodian

RE: RFP #22388
Request for Proposals for the Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014

Dear RFP Custodian:

The firm of **Netta Architects** is submitting the following Request for Proposal for your consideration to provide Professional Project Management Services on a "Call-In" Basis during the years of 2011 through 2014.

Netta Architects, established in 1993 and located in Springfield, New Jersey is a successful award winning public sector architectural firm that holds an excellent reputation, with an impressive client list on a growing portfolio of complex projects as evidenced by our experience, knowledge and attention to detail creating superior, sustainable architecture through innovative thinking and exceptional design paired with unmatched client service.

Netta Architects has provided a full range of professional services to a large number of Government Agencies. Additionally, the firm has provided design services for the Authority's New York Airport Group. Currently, we are involved in a variety of projects for the following agencies: The Port Authority of New York and New Jersey, New Jersey Transit, the Counties of Union, Essex, Passaic, Middlesex and Somerset as well as the local municipalities of Newark, Elizabeth, Linden, Roselle, Roselle Park, Union, Piscataway, Berkeley Heights and the Union county Improvement Authority.

Netta Architects has thoroughly reviewed this Request for Proposal, and we are confident that we can handle any potential assignment. In addition to our diverse project experience, Netta Architects is intimately familiar with all Port Authority Standards. We have developed a strong relationship in the past and would welcome the opportunity to continue that relationship. We look forward to your favorable response.

Respectfully submitted,

Nicholas J. Netta, AIA, NCARB
Principal

Submission Requirements

Firm's Information and Key Contact Person

Firm Name:

Netta Architects
25 Route 22 East
Suite 290
Springfield, New Jersey 07081
Phone: (973) 379-0006
Fax : (973) 379-1061
Email: Info@nettaarchitects.com

Netta Architects has been in business for a total of 17 years under the direct management of Nicholas J. Netta, AIA, NCARB as described below:

Netta Architects, LLC (for 8 years) is a Limited Liability Company, designated as an S-Corp registered in the State of New Jersey, effective June 3, 2002 Nicholas Netta is 100% stockholder); previously d/b/a

Nicholas J. Netta Architects and Associates, (for 2 years) a Limited Liability Company as a sole proprietor holding 100% ownership; since February 1, 2000; and previously d/b/a

Nicholas J. Netta, R.A., (for 7 years) a sole proprietor, since 1993 holding 100% ownership

Key Contact Persons:

Nicholas J. Netta, AIA, NCARB
Principal of the Firm
Email: Nnetta@nettaarchitects.com

Francisco J. Melendez, AIA
Vice President of Operations for the Firm
Email: Fmelendez@nettaarchitects.com

Netta Architects
25 Route 22 East
Springfield, NJ 07081
Phone: (973) 379-0006
Fax: (973) 379-1061

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf,* not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

Netta Architects
(Company)

(Signature)

Principal
(Title)

October 20, 2010
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   Netta Architects

2. Business Address (to receive mail for this RFP):

   25 Route 22 East, Suite 290

   Springfield, NJ 07081

3. Business Telephone Number: (973) 379-0006

4. Business Fax Number: (973) 379-1061

5. Firm website: www.nettaarchitects.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 02 / 01 / 2000

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   Not Applicable

9. Officer or Principal of Firm and Title:

   Nicholas J. Netta, AIA, NCARB Principal

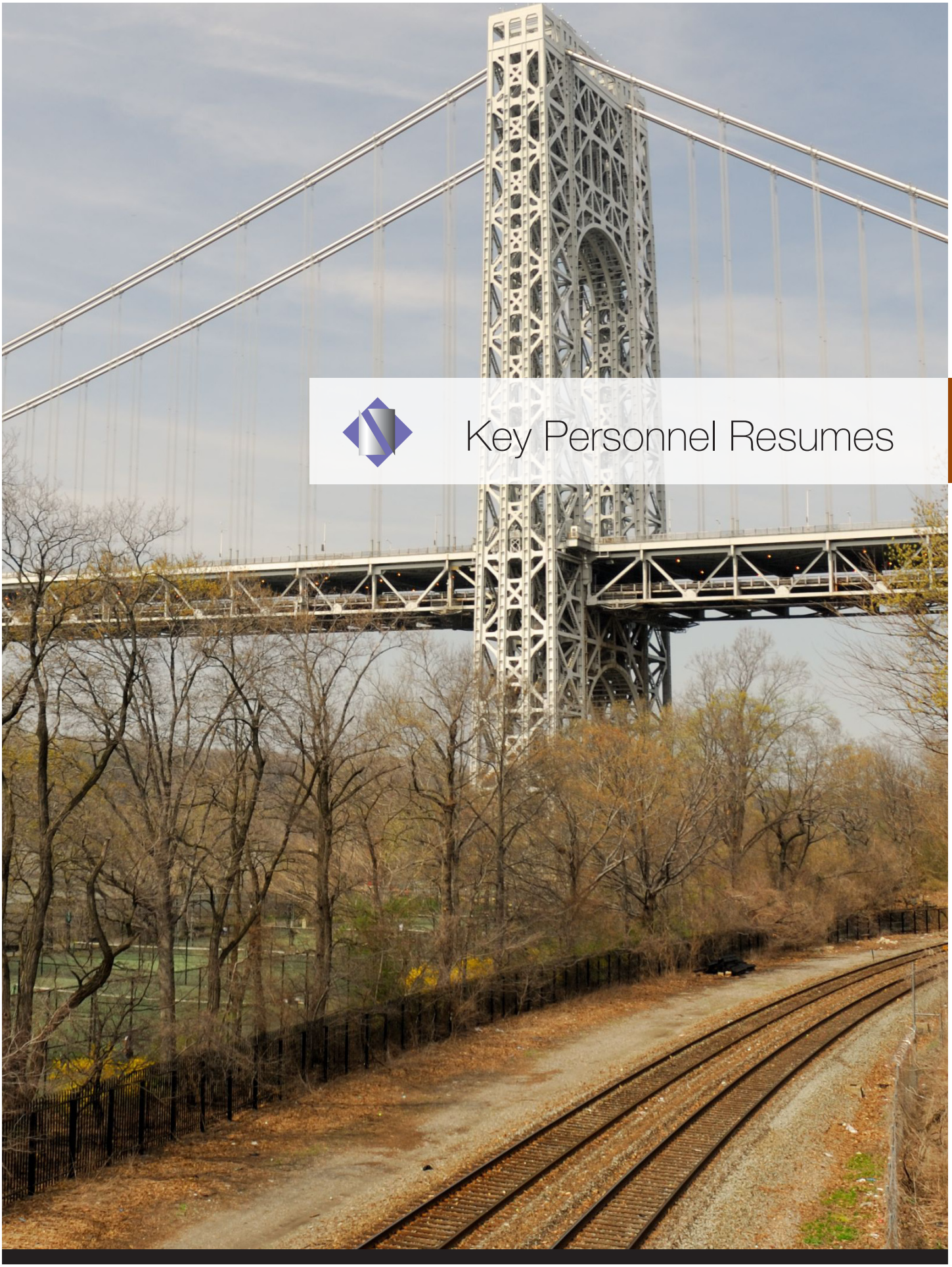
10. Name, telephone number, and email address of contact for questions:
    Francisco J. Melendez, Sr., AIA, Vice President of Operations (973) 379-0006

    Fmelendez@nettaarchitects.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.



Key Personnel Resumes

Nicholas J. Netta Resume

Nicholas J. Netta, AIA, NCARB
Principal

Professional Registrations: New York, New Jersey, Florida, Pennsylvania, Kentucky, Oklahoma

Professional Experience: 23 years

Education:
New Jersey Institute of Technology
School of Architecture
Bachelor of Architecture, 1986

Professional Affiliations:
American Institute of Architects
National Council of American Registration Boards
Restore National Trust for Historic Preservation
Board Member - New Jersey State Board of Architects

Background: Mr. Netta is an Architect with over twenty years experience in the architecture and construction industries. Mr. Netta is the principal of Netta Architects. He has shown a unique ability to network his firm by offering personalized performance based service; He maintains an efficient team of architects, planners and designers; under his direction, Netta Architects strives to manage and deliver projects within budget and on schedule. Mr. Netta has gained an excellent reputation in managing various types of projects for a large number of public and private clients including public safety, transportation, historic restoration, medical, education, commercial and residential project types.

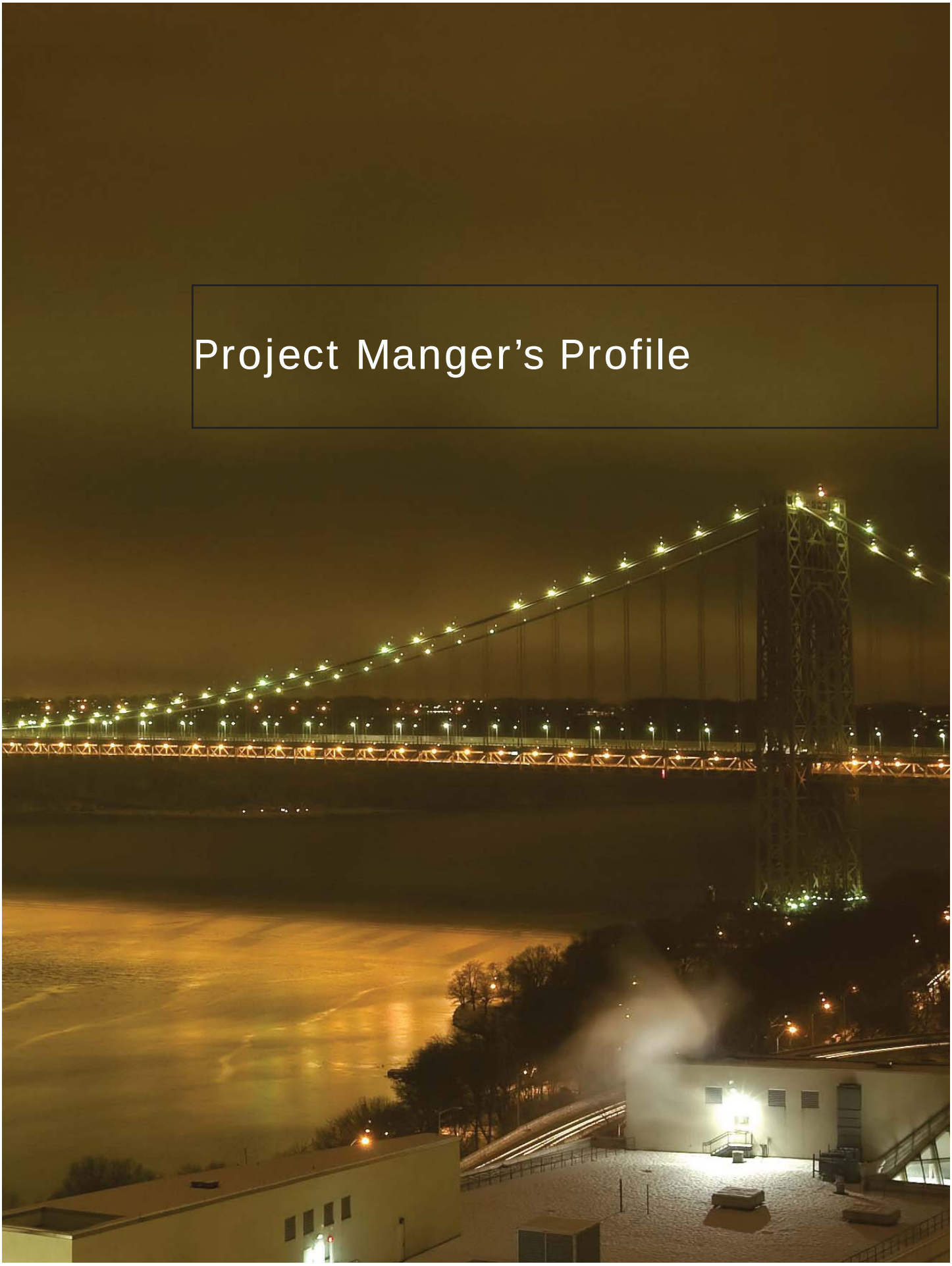
Neville G.W. Crooks Resume

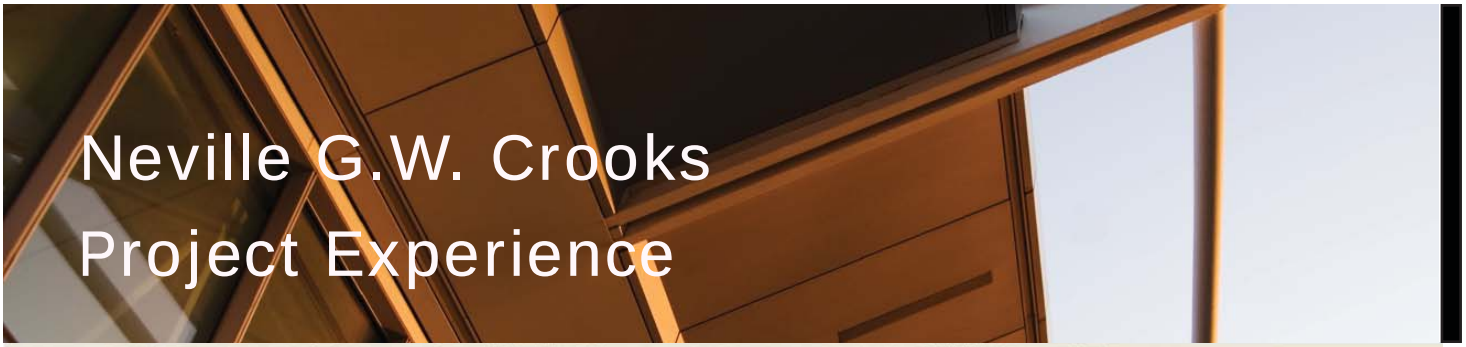
Neville G.W. Crooks.
Director of Construction Services

Professional Registrations:	New Jersey
Professional Experience:	33 Years
Education:	New Jersey Institute of Technology Bachelor of Science Civil Engineering Technology Construction and Contracting Construction Engineering Technology - NICET - Associate Engineering Technologist New York Community College A.A.S. Construction Technology

Background: Mr. Crooks has over 30 years of experience in consulting engineering with extensive experience in construction management, project and resident engineering for new construction, rehabilitation / replacement of various infrastructures. His expertise encompasses multi-disciplinary technical inspection of construction for compliance with contract documents and staff supervision. Mr. Crooks has a very strong background in airport projects, runway / taxiway expansion, replacement and rehabilitation, wastewater and city water treatment plant design & construction, bridge construction and rehabilitation, utilities and micro-tunneling.

Project Manger’s Profile





Neville G.W. Crooks
Project Experience

JFK International Airport Redevelopment Program, Jamaica, NY (2007 - Present) - $10 Billion: (TFO Project Value $60M) As a senior airport engineer/project manager in the Tenant Facilities Office**,** manages the Airport Tenant Alteration Applications process for construction, renovation and improvements and issuance of approvals for Tenant Maintenance. Handles several Federal Aviation Administration Projects, including ASDE-X, Baseline and Gate coverage, ATCT generator replacement, flight simulator system D & C, Phase 1 (Airport Surface Detection Equipment – Model X), ATCT EMG. Power critical bus circuit breaker sub panel and other special projects. All FAA Systems maintenance and improvement projects at JFK. Buckeye Pipeline leak remediation, 110,000sf $25M Flying Food Group Kitchen Facility, Install 1 mile+ 500MCM Electrical Cable from Sub-station to S&C switch-gear & transformers etc. Construction of the first Shell Hydrogen Fueling Station at JFK, Clean & TV major sanitary lines etc,

John F. Kennedy Airport, Jamaica, NY (2001 – 2005) – (TFO Project Value $55M): Airport Engineer in the Tenant Facilities Office – Projects included: New Large Aircraft (NLA) R/W & T/W Rehabilitation, & Improvements, New 30” Sanitary Sewer Main Design and Construction (Micro-tunneling), Airport Bridges Replacement & Repairs, R/W & T/W Drainage, Storm Water Outfall Rehabilitation/Replacement, Knee Wall Demolition & Construction, Alternate Source of Landscape Water Supply, Terminal 4 Compound Remediation, Satellite & Bulk Fuel Farm LT Remediation, Stairs to Snow Desk/Equipment Area Design and Construction, Butler Building/#215 Design & Construction, Pump Stations Rehabilitation, Underground Storage Tank Removals, Building #14 Parking Lot Site Drainage Improvements and Fencing, Airport Security Projects, ILS Improvement, UMS (PA–AOA Security Clearance).

Baltimore PWD (2005 - 2006) - $21,000,000: Construction of New Interceptor Sanitary Sewer for the City of Baltimore MD. The construction methods used was Open-cut and micro-tunneling including bypass pumping and construction of diversion structures, Relocation / Restoration of Utilities, Roadway & Curb, and Park Areas.

City Infrastructure & City Water - $46,000,000: New water mains and sewer lines and appurtenances for the Borough of Staten Island, NY – micro-tunneling. Responsibilities included establishing contract quantities and payment, change order negotiations, sketches, liaison between Homeowners and Contractor and Contract coordination, bridge replacement and expansions, etc. New water main for Borough of Staten Island, City of New York, City DEP - Bureau of Water Supply and Wastewater Collection. Installation of new water main on Richmond Avenue, Forest Avenue and Clove Road. Included all appurtenant work. Installation of 48”, 20” and 12” diameter pipe and appurtenances, e.g., valves, regulators, hydrants, manholes and chambers, etc. Interface with all existing utilities, design changes and sketches, change orders, reports and record keeping, construction inspection, testing and restoration, etc.

Neville G.W. Crooks

Project Experience

New Sewer System & Pump Station & Waste Water Pollution Treatment & Air Quality - $11,000,000: East Millstone Sewer Project, Somerset, New Jersey – Construction inspection of 3.5 miles of local sewer lines, two pump stations & main force, liaison between the community, contractor, utility companies and various agencies. Handled contract compliance, shop drawing reviews, job meetings and records, correspondence, progress update, work sequence coordination, pavement of roads and restorations, etc. Evaluate claims and negotiate change orders, start up operations, etc. Water Pollution Control Plant, Hamilton Township, New Jersey - Chemical Storage Tank Replacement at $1.3M in March of 1993. Electrical Substation Modification and Expansion - $3.4M in April 1992. Phase II Primary Clarifiers and Trickling Filter Odor Control Facilities -$1.13M in February 1992. Rotating Biological Contactors Supplemental Aeration System and Crane Storage $1.81M in July 1992. Modification to 1954 and 1968 Digester Facilities $4M in September 1990. Construction inspection, cost estimating, change order approval and negotiations, review and approval of shop drawings, approval of progress payments, approval of contract modifications, job
meetings and records, progress update, contract compliance and record documents, etc.

City Water $1,500,000: Old Croton Aqueduct, Village of Ossining, NY - Cleaning, repair and bulkhead construction. Reviewed and approved shop drawings and inspected the meter chamber and pump station. Installation of large valves and meters.

Waste Water Treatment $2,000,000: International Flavors and Fragrances, Union Beach, NJ – Additions and Modifications to the existing Aroma Ingredient Plant Construction inspection cost estimating and change order approval and negotiations etc.

Waste Water Pollution Control Plant - $4,000,000: Water Pollution Control Plant, Hamilton Township, NJ - 16mgd plant; construction inspection, cost estimation, and change order negotiations for the primary sludge force main and pump station, head-works and odor control system, and hypo chlorite systems modifications.

Waste Water Pollution Control Plant - $40,000,000: Waste Pollution Control Plant, Brooklyn, NY - 100 mgd plant; construction of primary clarifiers and modernization of the degritter building. Partial payment approval, estimating, field orders, change order, job meetings and records progress update, shop drawing reviews, liaison between community and contractor, inspection, contract compliance and contractor claim negotiation.

Waste Water Pollution Control Plant - $42,000,000: Coney Island Water Pollution Control Plant, Brooklyn, NY – Engineering coordination and approvals for construction of sludge thickening and digestion facilities. Coordinate four prime contractors, submittals, shops drawing reviews, correspondence and approvals and problem resolution.

Neville G.W. Crooks

Project Experience

Waste Water Pollution Control Plant - $98,000,000: Phase II Primary Treatment Systems, Passaic Valley Sewage Commissioners, Newark, NJ - Civil and mechanical inspection for construction of primary clarifiers. Storm and sanitary sewer installation, road and bridge construction, storm drain cleaning, creek drainage and cleaning, demolition of structures, modernization of wet weather pump station, mass excavation, shoring and bracing, pile driving, testing, extracting and pay length estimating, reinforced concrete construction.

Waste Water Pollution Control Plant - $350,000,000: Phase I Secondary Treatment System, Passaic Valley Sewage Commissioners, Newark NJ - Construction inspection of oxygenation tanks, return and waste sludge pump station for the 300 mgd sewage treatment plant. Pile driving, pile pay-length calculations, rock anchor layout, drilling, grouting and testing. Reinforced concrete and masonry construction structural steel erection, HVAC installation and insulation, mechanical piping systems for oxygen, potable and non-potable water lines, and sludge, storm drains, sewer and sanitary piping. Installation of large pumps, including screw pumps

Building Renovation - $3,000,000: Hall Neighborhood House Childcare Facility, 430 and 500 Street, Bridgeport, CT -renovation/conversion of 42,000 sq. ft. Office space into a childcare facility. Job duties included efforts to negotiate sub-contracts, secure permits, negotiate change orders, attend progress meetings, correspondence, demolition and removal. Other tasks included remediation of contaminated soil, asbestos removal, project planning and sequencing, process payments, estimating, procurement of labor, material and equipment and coordination of the various trades.

Horseneck Road Bridge, Morris and Essex County, New Jersey - $3,200,000: Construction of a New Bridge over the0 Passaic River between Montville and Fairfield Township. Responsible for material purchases, equipment procurement, labor force and work crews. Coordinate utility relocation, traffic controls, etc. Other tasks included process payment and change order negotiations, updating the progress schedule, project planning, coordination of subcontractors and project staging. Also negotiated and represented contractor at all meetings related to the project. Jersey City Path, Journal Square - Railroad Yard Improvements.

3.5 Miles Pipeline Contraction - $4,000,000: Mad River Interceptor Sewer Project, Town of Wolcott, City of Waterbury, CT - Coordination between utility companies and contractor on relocation of utilities, job meetings and records, progress reports, liaison between municipalities and contractor, inspection, contract compliance, estimates and partial payments, change orders and claim negotiation, permits, etc.

Neville G.W. Crooks

Project Experience

30K sq. ft. Lab Construction $1,400,000: Malcolm Prime Environmental Laboratory and Equipment Facilities, Tarrytown, NY - Construction and Renovation of an existing building (approx.30,000 sq. ft.) into laboratory facility of 14,000 sq. ft, office facility of 4,000 sq. ft. and equipment facility of 12,000 sq. ft. Purchased and installed all necessary equipment negotiated all subcontractors' contracts, electrical, plumbing, carpentry, and HVAC. Directed the installation of equipment and services. Approved progress payments and change orders.

Solid Waste & Air Quality Control - $26,000,000: Betts Avenue Incinerator, New York City Department of Sanitation, Woodside, NY - Rehabilitation, modernization and general construction of the air pollution control facilities. Estimating, quantity take-off and pricing, change orders, vendors and suppliers, inspection, job records and progress update.

Contracting $1,400,000: M W Contracting, Inc., New Jersey Transit Project - Subway station improvement/renovation for Norfolk Warren Street stations.

Project Experience

Port Authority Project Experience

1. Terminal - 6 - JFK International Airport Jamaica, New York

Completed terminal renovations including new automatic entrance doors, restrooms, elevators, fire alarm systems, lighting upgrades and interior design.

Owner: Port Authority of New York and New Jersey
Project Manager: Kim Nguyen
Cost: $3.5 Million

2. Building 254-269 - High Speed Roll Up Doors - JFK International Airport

Jamaica, New York

Design the installation of (9) new F.A.A. compliant high-speed hydraulic overhead roll-up doors.

Owner: Port Authority of New York and New Jersey
Project Manager: Rochelle Joyner
Cost: $850,000.00

3. Building 78 - Roof Repair - JFK International Airport Jamaica, New York

Prepared designs for the stabilization of an existing metal roof by using a liquid ceramic coating system.

Owner: Port Authority of New York and New Jersey
Project Manager: Rochelle Joyner
Cost: $500,000.00

4. Bulk Fuel Farm - Tank Stabilization - JFK International Airport Jamaica, New York

Prepared design for the painting and stabilization of bulk fuel storage tanks.

Owner: Port Authority of New York and New Jersey
Project Manager: Rochelle Joyner
Cost: $500,000.00

Port Authority Project Experience

5. Hangar 15 - Chimney Stack Replacement - JFK International Airport
Jamaica, New York
Designed new chimney breach connection from existing boiler to a new pre-fab metal chimney stack.

Owner:	Port Authority of New York and New Jersey
Project Manager:	Rochelle Joyner
Cost:	$85,000.00

6. Sodium Acetate Facility - JFK International Airport Jamaica, New York
Designed various building modifaications including new push walls, overhead roll-up doors and electrical service relocation.

Owner:	Port Authority of New York and New Jersey
Project Manager:	Rochelle Joyner
Cost:	$185,000.00

7. Farmers Substation - JFK International Airport Jamaica, New York
Designed a new pre-cast concrete screen wall around an electrical substation project is part of over airport security program.

Owner:	Port Authority of New York and New Jersey
Project Manager:	Rochelle Joyner
Cost:	$2.4 Million

8. Satellite Fuel Farm - JFK International Airport Jamaica, New York
Designed of a new masonry screen wall along the south service road with entrance control systems around Satellite Fuel Farm.

Owner:	Port Authority of New York and New Jersey
Project Manager:	Rochelle Joyner
Cost:	$2.25 Million

Port Authority Project Experience

9. LRS Substation - JFK International Airport Jamaica, New York

Prepared Stage-1 outline conceptual designs and estimates for a proposed screen wall along with entrance control system.

Owner: Port Authority of New York and New Jersey
Project Manager: Rochelle Joyner
Cost: $3.0 Million

10. Storage Building No. 14 - JFK International Airport Jamaica, New York

Designed a complete lighting upgrade for the Port Authority vehicle storage facility.

Owner: Port Authority of New York and New Jersey
Project Manager: Rochelle Joyner
Cost: $750,000.00

Port Authority Tenant Alteration Application Experience

1. Flying Foods - Building 146 - JFK International Airport Jamaica, New York
Prime design consultant on the complete renovation and upgrade of a 84,573 square foot building into a new state of the art flight kitchen facility. Coordinated all TAA applications, Rider Responses and performed all required administrative duties.

Owner: Port Authority of New York and New Jersey
Cost: $33.0 Million

2. Airport Plaza - Building 125 - JFK International Airport Jamaica, New York
Prime design consultant for the complete alteration of Building 125 into a new 20,000 square foot Airport Plaza Facility.

Owner: Port Authority of New York and New Jersey
Cost: $15.0 Million

Active Municipal Projects

1. Union County Court Building and Parking Deck Elizabeth, NJ

Prime design consultant on a new 45,000 sf Court Facility and 350 Car Parking Deck. Proposed building will be a Platinum Leed Rated Building.

Owner: County of Union
Contact: Niel Palmieri, Director of Facilities
Estimated Construction Cost: $16 Million
Project Completion Date: August 2011

2. Galloping Hill Golf Club House Kenilworth, NJ

Prime design consultant on a new 34,000 sf Golf Club House located a Union County Public Golf Course. Facility will be run by Kemper Sports and will contain locker facilities, pro-shop, banquet facility grill and New Jersey Golf Association offices and museum.

Owner: County of Union
Contact: Armando Sanchez, Director of Golf Operations
Estimated Construction Cost: $11 Million
Project Completion Date: June 2011

3. HACE Senior Housing Building Elizabeth, NJ

Prime Design Consultant for the development of an affordable senior housing project in the Elizabeth Port neighborhood.

Owner: City of Elizabeth
Contact: Jorge W. Valencia
Estimated Construction Cost: $10 Million
Project Completion Date: April 2011

Active Municipal Projects

4. Oriscello Correctional Facility Elizabeth, NJ

Prime Design Consultant for the addition and interior alterations to the 225,000 sf, 14-story detention facility. Scope of work includes the design of a new control room, installation of 400 camera surveillance system, new communication system, elevators along with upgrades to all detention pods.

Owner: County of Union
Contact: Niel Palmieri, Director of Facilities [redacted]
Estimated Construction Cost: $8.0 Million
Project Completion Date: Phased - September 2011

5. Women's Detention Facility Elizabeth, NJ

Prime Design Consultant on a new 34,000 sf, 150-person facility, which will serve as a satellite for the Oriscello Detention Facility which will house only a female population.

Owner: County of Union
Contact: Niel Palmieri, Director of Facilities [redacted]
Estimated Construction Cost: $5.8 Million
Project Completion Date: April 2011

6. Community Center / YMCA Piscataway, NJ

Prime design consultants on a new state-of-the-art 65,000 sf, one-story community center. Building program includes a competition aquatic center, gymnasium, health club, recreation center along with computer training areas and associated office space. The building's structural system is a hybrid of a structural steel space frame and poured-in-place concrete.

Owner: Township of Piscataway
Contact: Mayor Brian Wahler, [redacted]
Construction Manager: Joseph Jingoli and Son
Estimated Construction Cost: $18.5 Million
Project Completion Date: May 2011

Active Municipal Projects

7. South Ward Police Precinct Newark, NJ

Prime design consultant for a new 74,000 sf, state-of-the-art police facility located in the City of Newark's South Ward. The proposed station will contain the Office of Emergency Management, a 100-persondetention facility, three sally ports and will serve as a designate command vehicle location in the City.

Owner: City of Newark
Contact: Robert G. Dooley, Jr., Chief Architect, [redacted]
Estimated Construction Cost: $24.0 Million
Project Completion Date: November 2011

8. North Ward Police Precinct Newark, NJ

Prime design consultant for a new 36,000 sf, state-of-the-art police facility located in the City of Newark's North Ward. The proposed station will be incorporated into a site which includes the city's new heliport and the Housing Authority's new community center.

Owner: City of Newark
Contact: Robert G. Dooley, Jr., Chief Architect, [redacted]
Estimated Contract Value: $24.0 Million
Project Completion Date: June 2011

9. Union County Courthouse Tower Elizabeth, NJ

Primary design consultant of the complete exterior restoration and stabilization of the Elizabeth Public Library Building. Scope of work to include installation of a new slate roof, exterior veneer replacement and stabilization of the stone veneering system, exterior lighting and full cornice replacement.

Owner: City of Elizabeth
Contact: John Papetti, Director of Public Works, [redacted]
Estimated Construction Cost: $3.2 Million
Project Completion Date: May 2011

Active Municipal Projects

10. Historic Restoration of the Free Public Library Elizabeth, NJ

Primary design consultant of the complete exterior restoration and stabilization of the Elizabeth Public Library Building. Scope of work to include installation of a new slate roof, exterior veneer replacement and stabilization of the stone veneering system, exterior lighting and full cornice replacement.

Owner: City of Elizabeth
Contact: John Papetti, Director of Public Works, [redacted]
Construction Manager: TBD
Construction Cost Estimate: $3.2 Million
Project Completion Date: May 2011

11. New Fire Station No. 1 Linden, NJ

Prime design consultant on the new 21,000 sf, main headquarter building for the City of Linden Fire Department. Proposed station includes 5 vehicle bays, office of the Fire Chief and plan review.

Owner: City of Linden in association with the Union County Improvement Authority
Contact: Mike Burdalski, [redacted]
Construction Manager: Joseph Jingoli and Son
Estimated Contract Value: $6.8 Million
Project Completion Date: July 2010

Active Municipal Projects

12. New Fire Station No. 3 Linden, NJ

Prime design consultant on the new 15,000 sf, main headquarter building for the City of Linden Fire Department. Proposed station includes 4 vehicle bays and houses the department's main training facility.

Owner: City of Linden in association with the Union County Improvement Authority
Contact: Mike Burdalski, [redacted]
Construction Manager: Joseph Jingoli and Son
Estimated Contract Value: $3.5 Million
Project Completion Date: May 2010

13. Interior Modernization of the John F. Kennedy Library Piscataway, NJ

Primary design consultant on the interior modernization of the 25,000 sf, main public library building in Piscataway. Design program includes a full lighting upgrade, space re-allocation along with the full upgrade of all interior floor, wall and ceiling finishes.

Owner: Township of Piscataway
Contact: Mayor Brian Wahler, [redacted]
Contract Value: $3.2 Million
Project Completion Date: June 2011

14. Middlesex County Adult Correctional Facility North Brunswick, NJ

Prime Design Consultant on the complete upgrade of the facility's food preparation kitchen along with the replacement of mechanical systems.

Owner: County of Middlesex
Contact: Lino DeAlmeida, CCMS, [redacted]
Estimated Construction Cost: $1.4 Million
Project Completion Date: April 2011

Management Approach

As an organization, we employ a creative management approach to each of our projects. **Netta Architects** will assign the right project manager for the particular task based on their expertise in the building type. The project manager then becomes the single point of contact for the client –we call it the Single Point of Responsibility system (SPR).

We realize that the relationship between the client and our firm is very personal in nature. The SPR system ensures personalized service and communication throughout the project life cycle, including daily updates to the Port Authority and our consultants.

As a public sector firm, we fully understand that our services need to be innovative as well as cost-effective. Netta Architects prides itself on tight project coordination and the adherence to deadlines. We make sure our clients are fully apprised and engaged throughout the project process.

Our experience as a full service firm specializing in governmental projects has given our management team the ability to control projects throughout the full design and construction process.

Our construction services division routinely manages our projects throughout the building process, we have proven ourselves through our long standing client relationships and by our track record of successfully delivering projects on-time and within budget.

Personnel Costs

Key Personnel Costs

Nicholas J. Netta, AIA, NCARB
Principal .....$ 225.00

Neville G.W. Crooks
Director of Construction Services .....$ 74.00

Andrew A. Forano, AIA
Senior Architect .....$ 67.50

Netta Architects employees do not receive additional premium pay above their base compensation packages. Overtime work is normally compensated with additional Flex-Time for use at the employees discretion.

Multiplier

Professional services as related to this Port Authority's Request for Professional Project Management Services on an "Call-In" Basis during the years of 2011 through 2014 will be billed by a "multiplier' in the amount equal to 2.0 times the actual salaries paid to our professionals.

BREAKDOWN

*Overhead	=	1.0
Profit (10%)	=	1.0
Multiplier	=	2.0

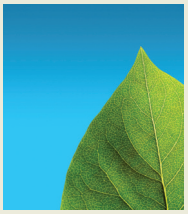
*OVERHEAD

Employee Benefits
Office Expenses
Advertising
Insurance
Taxes
Accounting
Legal Fees
Depreciation
Equipment Rental
Federal Unemployment

Professional Information

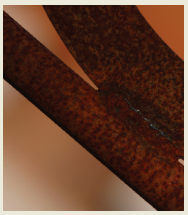
Netta Architects:
Different by Design

Netta Architects fully embraces the idea that collaboration and innovation are integral to creating built experiences for our clients. From architecture to construction management, we have consistently delivered effective solutions to the public and private sectors. What makes us different from other firms? Our people. We are a collection of passionate design professionals who are driven by excellence. Our clients have benefited from our unique perspectives and real-world experience—and that translates into everything we create.

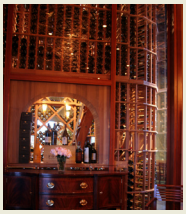


Securing relationships through sustainable design. Netta Architects is committed to designing healthy and sustainable living, working and learning environments. We are proud of our standing as a LEED®certified design firm and our ability to minimize the environmental impact of our buildings. Our clients in the commercial, municipal and county government, hospitality, education and industrial market sectors demand nothing less than best design practices—and it shows in every project we undertake.

Civic pride. For over a decade, Netta Architects has been selected to design a multitude of high profile municipal projects. From civic centers and police stations to firehouses and libraries. We understand the complexities and nuances associated with publicly-financed projects and have the technical skill and knowledge to deliver projects which will maintain an enduring, functional, inspirational and innovative presence in their communities.



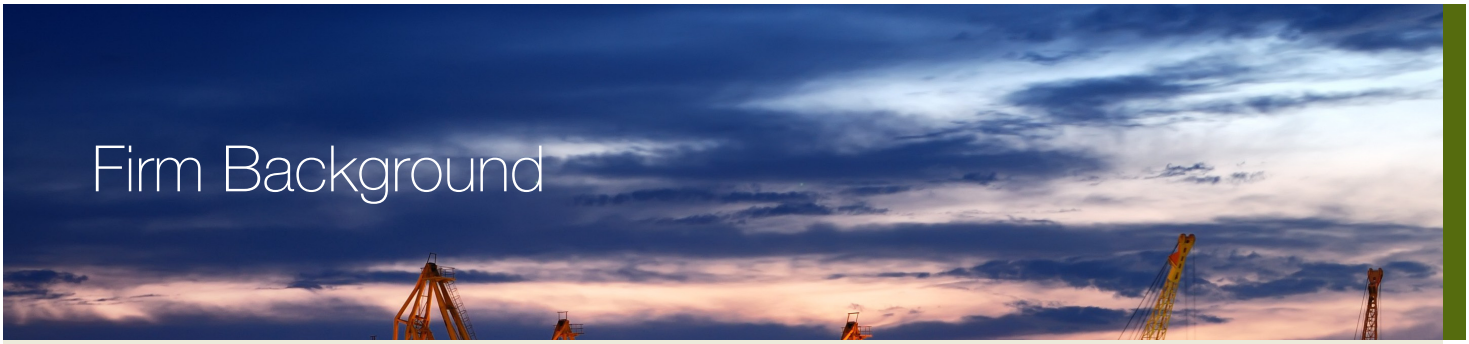
A rich history in historic renovations. Netta Architects specializes in the preservation of historic landmark buildings. We have acquired a broad range of experience in addressing issues related to adaptive and creative re-use, conservation of materials and preservation agency regulations. Netta Architects has successfully completed a large number of award winning historical preservation projects for private and public clients throughout New Jersey. We are certified by the states of New Jersey and New York Historic Preservation Offices.



Designing the best of all worlds. Collaborating with developers to deliver successful mixed-use projects is a Netta Architects specialty. As communities revitalize their downtown areas, mixed-use developments have once again become the best solution. Because we have an intricate understanding of urban planning and zoning laws, we are well positioned to design and develop vibrant and economically viable downtown communities.

Creating welcoming environments. Delivering world-class experiences to diners and travelers is a Netta specialty. The diversity of our creative team brings a unique perspective to each of our hospitality projects. We have designed restaurants and hotels in the United States, Caribbean and the South Pacific. Every detail and amenity is considered to ensure guests the very best accommodations.

NettaArchitects



Firm Background

The firm of **Netta Architects** was established in 1993 as a full service architectural design firm centrally located in Springfield, New Jersey. Since our inception, Netta Architects has positioned itself as one of the leading architectural firms in the Union, Essex, and Middlesex County areas performing over 100 million dollars in design work annually.

Netta Architects has won numerous design awards which include two for our most recent fire stations and has broadened the scope of its practice to an international level having recently completed projects in the Caribbean and New Zealand.

Currently, the firm employs a staff of about 25 people including architects, interior designers, and project managers all dedicated to one goal—client service along with innovative architectural design.

Our talented staff of professionals strives on assisting our valued clients with sensible design alternatives, cost control, and time management.

Personnel breakdown:

Total Staff:	25 employees
Registered Architects:	6
Licensed Interior Designers:	1
LEED Certified Designers:	3
Construction Managers:	1

Areas of Expertise

Netta Architects, as an Award-winning design firm possess extensive experience in the following areas:

NEW BUILDING DESIGN

- **Detention Facilities**
- **Transportation Facilities**
- **Public Safety Facilities**
- **Veterinary Facilities**
- **Commercial Facilities**
- **Recreational Facilities**
- **Multi-Family Housing**

HISTORIC RESTORATION

- **Exterior Restoration**
- **Interior Restoration**
- **Assessment of Need Studies**

Netta Architects is certified by the State of New Jersey's Historic Preservation office as an expert in the field of preservation.

INTERIOR DESIGN

- **Space Planning**
- **Interior Design**
- **Programming & Space Planning**
- **Interior Architecture**
- **Furnishings & Fixtures Selection**
- **Way Finding**
- **Sustainable Interior Design**

Professional References

Mr. George Devanney
County Manager
Union County
Union County Administration Building
Elizabethtown Plaza
Elizabeth, New Jersey 07207
[redacted]

Honorable Brian Wahler
Mayor
Township of Piscataway
455 Hoes Lanes
Piscataway, New Jersey 08854
[redacted]

Honorable Richard J. Gerbounka
Mayor
City of Linden
Municipal Building
301 N. Wood Avenue
Linden, New Jersey 07036
[redacted]

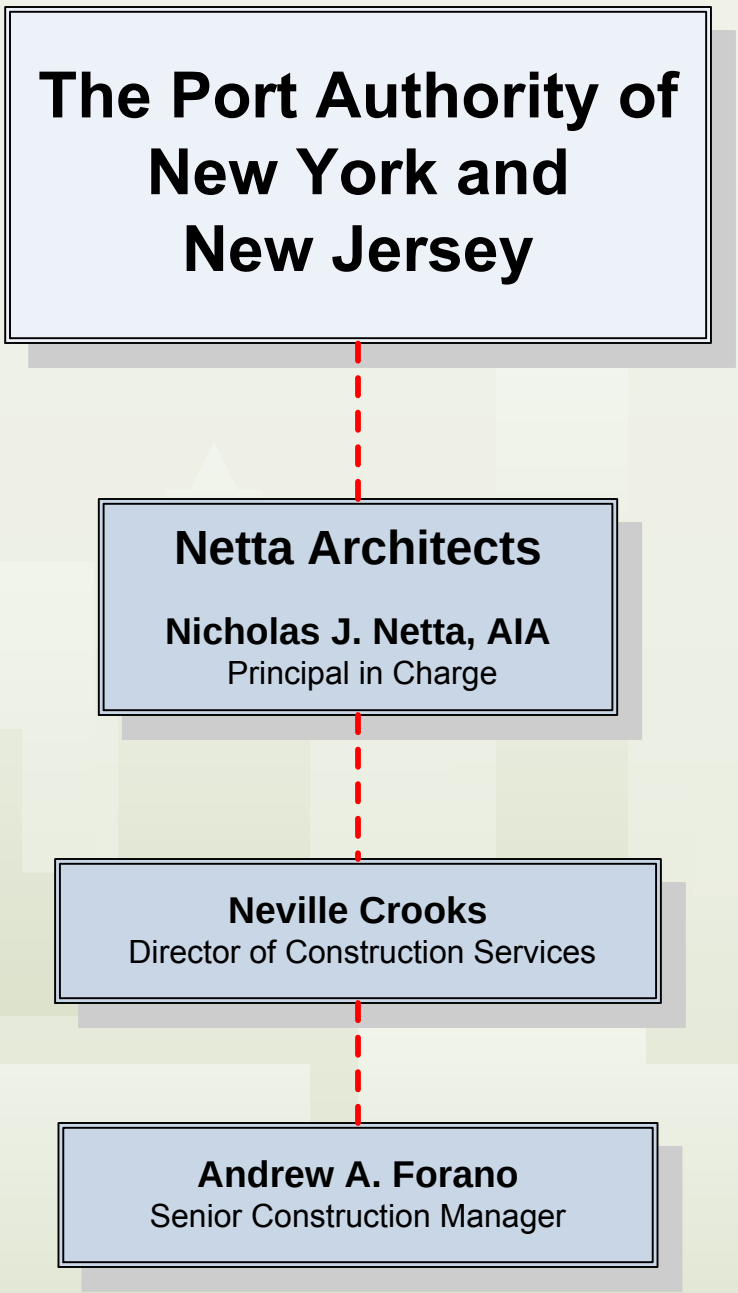
Honorable Cory Booker
Mayor
City of Newark
920 Broad Street
Newark, New Jersey 07102
[redacted]

Mr. Jorge Valencia
Director of Redevelopment
The Housing Authority of the City of Elizabeth
688 Maple Avenue
Elizabeth, New Jersey 07202-2690
[redacted]

Mr. Nicholas Salerno
Director of Architecture
New Jersey Transit
One Penn Plaza East
Newark, New Jersey 07102
[redacted]

Mr. John Papetti
Director of Public Works
City of Elizabeth
50 Winfield Scott Plaza
Elizabeth, New Jersey 07201
[redacted]

Honorable J. Christian Bollwage
Mayor
City of Elizabeth
50 Winfield Scott Plaza
Elizabeth, NJ 07201
[redacted]


The Port Authority of New York and New Jersey
Netta Architects
Nicholas J. Netta, AIA
Principal in Charge
Neville Crooks
Director of Construction Services
Andrew A. Forano
Senior Construction Manager

STATEMENT OF COMPLIANCE

Netta Architects has carefully reviewed the Port Authority of New York and New Jersey Request for Proposal for The Performance of Expert Professional Project Management Services as requested on a “Call-In” basis during 2011, 2012, 2013 and 2014 (RFP Number 22388). and if selected for a project, do hereby fully understand and will comply with the Authority’s Standard Performance of Professional Services.

NETTA ARCHITECTS

_____

NICHOLAS J. NETTA, AIA, NCARB DATE

Affirmative Action Statement and Certificate

I, NICHOLAS J. NETTA, AIA, NCARB, being the owner and principal architect of the architectural firm of NETTA ARCHITECTS located at 25 Route 22 East, in the Township of Springfield, State of New Jersey, County of Union do hereby certify the following statements;

Should the firm of Netta Architects be awarded any contracts for Expert Professional Project Management Services as Requested on a “Call-In” Basis during 2011, 2012, 2013 and 2014:

The firm of Netta Architects is registered and in compliance with the State of New Jersey. We firmly support the equal opportunity employment standards, ethics and procedures as stated in N.J.S.A. 10.:5-31 et seq. and N.J.A.C. 17-27. A copy of our (affirmative action certification) is attached hereto and made in part hereof.

NETTA ARCHITECTS

Nicholas J. Netta, AIA, NCARB
Principal

Certification 38245

CERTIFICATE OF EMPLOYEE INFORMATION REPORT

INITIAL

This is to certify that the contractor listed below has submitted an Employee Information Report pursuant to N.J.A.C. 17:27-1.1 et. seq. and the State Treasurer has approved said report. This approval will remain in effect for the period of 15-MAY-2010 to 15-MAY-2013

NETTA ARCHITECTS, LLC
25 RT. 22 EAST, SUITE 290
SPRINGFIELD NJ 07081

State Treasurer

Request for Proposals
RFP Number 22388

THE PORT AUTHORITY
OF NEW YORK & NEW JERSEY

Performance of Expert Professional Project Management Services Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014

Submitted to:

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attention: RFP Custodian

Submitted by:

Urban Engineers of New York, P.C.
Two Penn Plaza
Suite 1103
New York, NY 10121

October 2010

URBAN
ENGINEERS OF NEW YORK, P.C.
Formulating Excellence®

URBAN ENGINEERS OF NEW YORK, P.C.
Formulating Excellence®
ISO 9001:2008 Certified | Founded 1960
Two Penn Plaza
Suite 1103
New York, New York 10121
(212) 736-9100 Fax (212) 736-9101
www.urbanengineers.com

October 21, 2010

The Port Authority of New York and New Jersey
One Madison Avenue, Seventh Floor
New York, New York 10010
Attn: RFP Custodian

Re: RFP #22388: Performance of Expert Professional Project Management Services on a "Call-In" Basis During 2011, 2012, 2013, and 2014

Dear Sir or Madam:

Urban Engineers of New York, P.C. (Urban) is pleased to submit the enclosed proposal to The Port Authority of New York and New Jersey (the "Authority") to provide Professional Project Management Services on an as-needed basis for various projects and programs at the Authority's facilities.

To meet your requirements, we have assembled a strong multidisciplinary Team, including highly experienced staff from ***Urban, KS Engineers, PC (MBE), Talson Solutions, LLC (WBE), and Armand Corporation (WBE.*** We bring a combined staff of more than 500 professionals qualified in the requisite areas for this on-call services contract. The Urban Team brings extensive experience in planning, engineering, program/project management, cost monitoring/control, biddability/ constructability reviews, scheduling, and construction management for port facilities, airports, transit systems, and bridges. In addition, Urban is **ISO 9001:2008-certified** and has an exceptionally strong commitment to quality control. We have demonstrated experience as the prime consultant on the following major infrastructure construction programs:

- ***Frankford Transportation Center (FTC)*:** Urban provided program and construction management services to the Southeastern Pennsylvania Transportation Authority (SEPTA) for the construction of a major intermodal transit terminal facility for the Market/Frankford elevated train line in Philadelphia. The FTC is the largest single-site construction project ever undertaken by SEPTA, completed on time, within budget, and was valued at **$180 million.**

- ***Meadowlands Railroad and Roadway Improvement Project*:** The New Jersey Sports and Exposition Authority engaged Urban to provide construction management and construction inspection services for this project, which includes constructing two new tracks to serve a proposed new rail station to be built at the Meadowlands Sports Complex, as well as major improvements to existing roads and a new rail bridge. The program's cost is in excess of **$200 million.**

- ***Keystone Corridor Improvement Project:*** Urban provided program management services to the Pennsylvania Department of Transportation (PennDOT) for a **$145 million** upgrade program on Amtrak's Keystone Corridor between the Harrisburg Transportation Center and Amtrak's 30th Street Station in Philadelphia. Urban initially participated in an assessment study to determine the condition of the infrastructure and identify requirements to bring the line to a state of good repair. Urban then monitored the capital project construction progress to promote compliance with schedule and budget; conformance with design criteria; and construction to approved plans and specifications.

In addition to the above projects, Urban has participated in and led numerous Program Management Oversight (PMO) assignments for the Federal Transit Administration (FTA) since 1988. At present, Urban is the Project Management Oversight Consultant (PMOC) for the FTA in the New York City region, with responsibility for PMO of the MTA Capital Program. In this capacity we are responsible for the federally-funded projects in the New York City Transit Capital Program; the Long Island Rail Road Capital Program; and the East Side Access and 2nd Avenue Subway mega projects. In addition, we recently completed PMO responsibility for federally-funded New York City Department of Transportation marine projects (ferry terminals and purchase of new ferries). Furthermore, we have been selected as part of a JV to provide on-call program management services in support of PATH capital improvement program. In addition, we have begun providing program management services to NJ Transit for for the Portal Bridge Project on the Northeast Corridor.

Urban has also provided aviation design services to Authority facilities at Teterboro Airport. In addition, Urban currently holds on-call services contracts at Philadelphia International, Atlantic City International, and a number of other major airports, as well as serving as the civil engineer for the Dulles Tier 2, 48-gate terminal expansion valued at more than $1 billion.

Currently, more than 40% of Urban's work is comprised of as-needed design and construction management agreements with major transportation authorities, such as NYSDOT, NY State Thruway Authority, NJ Transit, South Jersey Transportation Authority, Philadelphia Regional Port Authority, Southeastern Pennsylvania Transportation Authority, Philadelphia International Airport, Metropolitan Washington Airports Authority, and PennDOT. As can be demonstrated from the continuation of repeat business in this type of engineering services contract, Urban brings a proven management approach to responding to our clients' needs through on-call service agreements.

Our proposed Program Manager, **Victor Simuoli, PE**, is a Professional Engineer registered in New York. Prior to joining Urban, Mr. Simuoli served for seven years as a consultant Project Manager for the Authority's Priority Capital Program Department on the JFK AirTrain project. He brings a wealth of experience and knowledge of the Authority's project management policies and procedures, as well as a demonstrated ability to effectively manage a large program in a complex environment. In addition, **William T. Thomsen, PE**, will serve as the Program Director and is licensed as a Professional Engineer in both New York and New Jersey to satisfy your requirements. Our personnel resources, diverse technical expertise, and proven management approach allows us to respond to requests quickly, and perform project management tasks in an efficient and cost-effective manner.

In closing, the Urban Team brings a wealth of experience and demonstrated success in project management for the design and construction of rail/transit systems and facilities, as well as aviation facilities, marine terminals, and bridges and tunnels. Please contact **William T. Thomsen, PE,** at **212-736-9100** if you have any questions or require additional information. Thank you for your consideration.

Very truly yours,

URBAN ENGINEERS OF NEW YORK, P.C.

Joseph P. McAtee, PE
Executive Vice President

Urban is an Outstanding Choice for this Assignment

In an effort to prepare an outstanding proposal, careful consideration was give to the proposer requirements defined in the Authority's RFP. The chart below demonstrates that Urban's proposal successfully addresses each requirement. Urban is excited to implement our proven approach to project management and demonstrate to the Authority why Urban continues to be the first choice of agencies throughout the region.

Proposer Requirements	The Urban Team
Experienced project/program management firm	✓ Urban has performed project management services on major capital projects for more than 35 years.
Five years of experience in the performance of Project/Program Management Services on major infrastructure construction programs (>$100 million in construction value)	✓ ▪ Meadowlands Railroad & Roadway Improvement Project, NJSEA, $200 million ▪ Keystone Corridor Improvement Project, Amtrak/PennDOT, $145 million ▪ Frankford Transportation Center, SEPTA, $180 million
Extensive experience providing "call-in" management services	✓ On-call assignments account for more than 25% of Urban's gross revenues, including more than 50 active on-call agreements with various agencies throughout the region.
Highly-qualified leadership	✓ Our proposed Project Manager, Victor Simuoli, PE, brings a wealth of experience and knowledge of the Authority's project management policies and procedures.
Qualified, local and available personnel	✓ Our firm's resources, including more than 400 project managers, planners, design engineers, construction managers, project control specialists and 100 New York and/or New Jersey Professional Engineers are located in the region, and available to support the Authority.
Comprehensive technical resources that address the needs of the Authority's diverse facilities	✓ Urban's Project/Program Management Services are strengthened by our experience providing planning, design, and construction management services for projects involving transit facilities, airports, marine/port facilities, bridges/ highways, and buildings.
Office in the New York/New Jersey Metropolitan Area	✓ Urban's New York City office is located at Two Penn Plaza, Suite 1103, New York, NY 10121.
Certificate of Authorization to practice Professional Engineering in the states of New York and/or New Jersey	✓ Urban possesses Certificates of Authorization to practice Professional Engineering in the states of New York and New Jersey.

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Project Management Services as Requested on a "Call-in" Basis
during 2011, 2012, 2013 and 2014

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D. **Firm Experience**
E. **Management Approach**
F. **Hourly Rate Information**
G. **M/WBE Participation**
H. **Firm Affiliates**
I. **Conflict of Interest**
J. **Exceptions to the Standard Agreement**

A. Attachment B – Agreement on Terms of Discussion

ATTACHMENT B

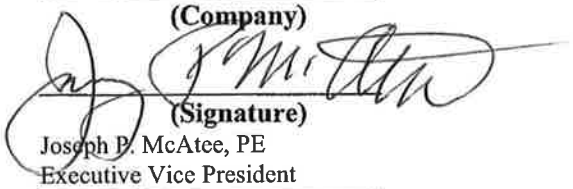
PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

Urban Engineers, Inc.
(Company)



(Signature)

Joseph P. McAtee, PE
Executive Vice President
(Title)

October 21, 2010
(Date)

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DO NOT RETYPE.

B. ATTACHMENT C – COMPANY PROFILE

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):
   Urban Engineers of New York, P.C.
2. Business Address (to receive mail for this RFP):
   Two Penn Plaza, Suite 1103
   New York, NY 10121
3. Business Telephone Number: (212) 736-9100
4. Business Fax Number: (212) 736-9101
5. Firm website: www.urbanengineers.com
6. Federal Employer Identification Number (EIN): [redacted]
7. Date (MM/DD/YYYY) Firm was Established: 07 / 03 / 1973
8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):
   See attached document
9. Officer or Principal of Firm and Title:
   Edward M. D'Alba, PE, President
10. Name, telephone number, and email address of contact for questions: [redacted]
    wtthomsen@urbanengineers.com
11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

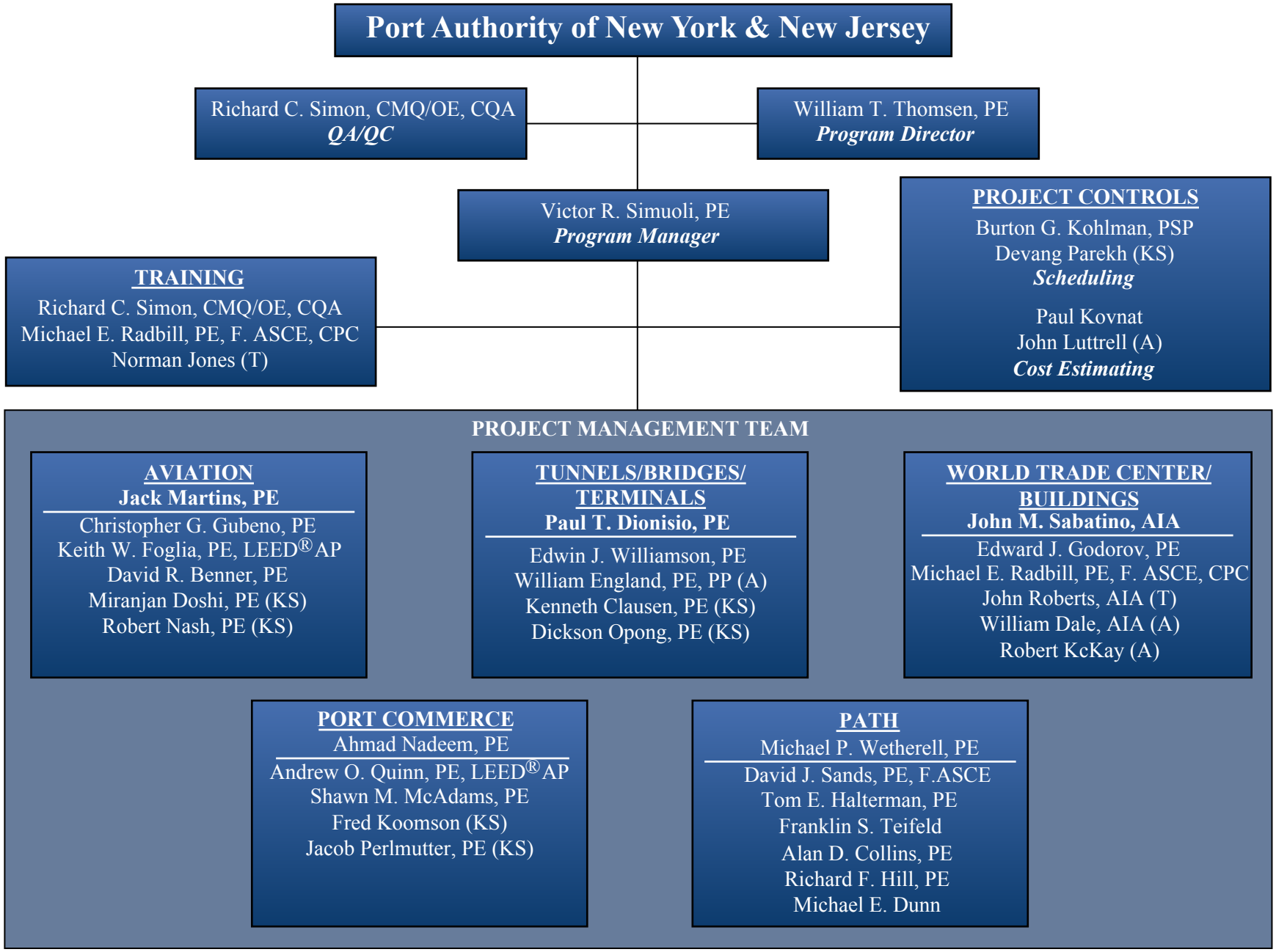
    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

Name	Address	City	State	Zip	EIN
Urban Engineers, Inc.	530 Walnut Street 14th Floor	Philadelphia	PA	19106	[redacted]
Urban Engineers of Erie, Inc.	1319 Sassafras Street	Erie	PA	16501	[redacted]
Urban Construction Systems, Inc.	530 Walnut Street 14th Floor	Philadelphia	PA	19106	[redacted]
Urban International, Inc.	530 Walnut Street 14th Floor	Philadelphia	PA	19106	[redacted]

C. QUALIFICATIONS AND EXPERIENCE OF STAFF

Performance of Expert Professional Project Management Services
Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014
RFP Number 22388

THE PORT AUTHORITY
OF NEW YORK & NEW JERSEY



Legend

KS Engineers, P.C. (MBE) (KS)
Talson Solutions, LLC (WBE) (T)
Armand Coporation (WBE) (A)

URBAN ENGINEERS OF NEW YORK, P.C.
Formulating Excellence®

Expert Professional Project Management Services
As Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014

Port Authority of New York and New Jersey
Key Personnel Experience Summary

Name/Title	Years of Experience	Number of Projects	Key Project Experience, Last 5 Years	
			Project Name	**Cost**
William Thomsen, PE	34	50+	Integrity Monitoring Consultant, Freedom Tower, PANYNJ	$3B
Project Director			PM Oversight, MTA Second Ave. Subway and East Side Access, FTA	$12B
			Risk Assessment, LAC MTA Redline West Side Extension, FTA	$5B
Victor Simuoli, PE	28	40+	PM Oversight, MTA NYCT Signals/Systems, FTA	$1.1B
Program Manager			PM Oversight, MTA LIRR Capital Program, FTA	$250M
			Integrity Monitoring Consultant, Freedom Tower, PANYNJ	$3B
Jack Martins, PE	41	50+	Design, Runway 17-35, Philadelphia International Airport	$65M
Task Leader - Aviation			Design, International Arrivals Building Expansion, Wash. Dulles Int. Airport	$120M
			Design/CM, Critical Taxiways Rehabilitation, Phila. International Airport	$10M
Paul Dionisio, PE	34	30+	Rehabilitation of the West End Line, Brooklyn, NY, MTA NYC Transit	$160M
Task Leader - Bridges/Tunnels			Rehab. of Atlantic Ave. Viaduct, Brooklyn, NY, MTA LIRR	$150M
			Trenton Station Renovation, Trenton, NJ, NJ Transit	$79M
John Sabatino, AIA	42	20+	Integrity Monitoring Consultant, Freedom Tower, PANYNJ	$3B
Task Leader - WTC/Buildings			PM Oversight, MTA NYCT Second Ave. Subway, FTA	$5B
			Pennsylvania Convention Center Expansion, Phila, PA	$700M
Ahmad Nadeem, PE	22	70+	Design/CM, Eagle Point Dock Rehab., Westville, NJ, Sunoco Logistics	$22M
Task Leader - Port Commerce			Design/CM, Duraport Marine Terminal, Bayonne, NJ	$12M
			Preliminary Design, Bush Terminal Pier 6 Rehabilitation, Brooklyn, NY	$40M
Michael Wetherell, PE	23	20+	PM Oversight, NYC Transit Rail Vehicle Procurement, FTA	$5B
Task Leader - PATH			PM Oversight, MTA Second Ave. Subway and East Side Access, FTA	$12B
			Risk Assessment, LAC MTA Redline West Side Extension, FTA	$5B

Note: The Key Personnel Experience Summary was prepared in response to the submission requirements, Sections III.C.1 and III.C.3.

NAME **WILLIAM T. THOMSEN, PE**
TITLE **SENIOR VICE PRESIDENT, PROGRAM MANAGEMENT**
PROJECT ASSIGNMENT **PROGRAM DIRECTOR**

Years of Experience: 34

Registrations/Memberships

- Professional Engineer – NY, PA, NJ, MD
- NJDOT ETRP Compliance NJ
- American Society of Civil Engineers
  - Past President - Philadelphia Section
  - Past Chairman of Transportation and Urban Development
  - Secretary - District IV Legislative Affairs Committee
  - Member - National Committee, High Speed Ground Transportation
- American Public Transit Association
  - Light Rail Transit Committee
  - High Speed Inter City Ground Transportation Subcommittee
  - Capital Projects Subcommittee
  - Intercity Corridor Development Committee

Education

- MS, 1985, Drexel University, Engineering Management
- BS, 1978, Clarkson College of Technology, Civil/Environmental Engineering

Mr. Thomsen's experience with Urban Engineers, Inc. encompasses the management/engineering of major projects in the field of railway, electric traction power, and transportation systems. He presently serves as Senior Vice President and has performed project management, design, construction, value engineering, construction claims support, and expert witness services. Mr. Thomsen served as the Quality Assurance officer and chaired the Executive Advisory Committee for the Schuylkill Valley Metro Feasibility Study, providing support through team leadership. He has significant national experience with major capital improvement projects from planning through construction for SEPTA, MARTA, Tri-Rail, MDTA, Lynx, and MTA. He has served as an associate professor (part-time) at Temple University, lecturing on transportation engineering, and has taught a professional engineering registration review seminar.

Mr. Thomsen has special expertise concerning track, catenary, signal, and communications for transit systems. He has participated as a member of Urban's in-house constructability review committee, which examines contract documents for their constructability in order to mitigate construction claims. He is familiar with all aspects of civil engineering as they relate to transportation, and is well-qualified in the special requirements for coordination of engineering projects with active railroads and systems of public transportation. He has represented ASCE on the planning committee for the Area Coalition for Transportation in support of funding for SEPTA and is active in legislative affairs. Mr. Thomsen's recent relevant experience includes the following:

Schuylkill Valley Metro Feasibility Study, Southeastern Pennsylvania Transportation Authority, Philadelphia to Reading, PA - Quality Assurance/Executive Advisor for the feasibility study of introduction of rail service in a 60-mile corridor, including branches to major suburban locations. Project includes right-of-way assessments, route selection and operations planning, ridership forecasting, station location and evaluation, operating and capital costs, and performance evaluation. Both commuter rail and light rail modes were evaluated.

Newark Waterfront Connection, New Jersey Transit Authority, Newark, NJ - Performed value engineering services on the Newark Waterfront Connection, which provides a new direct connection from Newark Penn Station to the Hoboken Waterfront. The eastbound connection will provide direct electrified rail connection between the Northeast Corridor and New Jersey Transit's Morris and Essex line. He was responsible for reviewing track systems and rail operation elements of the program during this assignment.

Project Management Oversight, Baltimore Central Light Rail Line, Federal Transit Administration, Baltimore, MD - Project Manager for provision of PMO services for the Phase II extension to the Central Light Rail Line project. The Mass Transit Administration completed the Phase I core system. When the Phase II extensions were complete, the total project was be approximately 28 miles in length with a total project cost of $465 million. This project is the first design/build rail facility in the United States. He was appointed to a national design/build committee for transit projects by the Federal Transit Administration.

Mainline 9th Street Branch Bridges and Systems Rehabilitation, Southeastern Pennsylvania Transportation Authority, Philadelphia, PA - Project Manager for Urban's efforts on the Mainline 9th Street Branch Rehabilitation Program, now referred to as "Railworks." This included value engineering and cost confidence studies during the planning and engineering phase of the project. It also included participating in the rescheduling planning effort to reduce the program from a three-shutdown scenario to two shutdowns. Urban also provided catenary engineering for the electrical construction in a design/build effort with the electrical contractor.

Project Management Oversight, Los Angeles County Metropolitan Transportation Authority Metro Red Line Tunnels, Federal Transit Administration, Los Angeles, CA - Project Manager for an in-depth evaluation of the Metro Red Line subway tunnels (MOS1). The study reviewed and evaluated the structural integrity and safety of a 3.5-mile segment of twin bored transit tunnels. The study was commissioned in response to questions of potential construction deficiencies. A series of testing programs, both destructive and nondestructive, were performed. A final report was delivered to the LACMTA and presented publicly, which proved the tunnel's capacity under extreme static and seismic loading. This evaluation has been said to be the most comprehensive review ever performed on a subway construction project.

Project Management Oversight, Project Management Oversight, Bus Maintenance Facilities, Federal Transit Administration, Various Locations- Completed PMO for the construction of bus maintenance facility rehabilitation projects at several midwestern transit properties, including the KCATA in Kansas City, the VIA in San Antonio, Texas, and the CATA in Little Rock, Arkansas. Under this assignment, he served as the FTA's representative for the construction programs that were occurring to assure the FTA that project management objectives were being achieved. This assignment included assessment related to budget, schedule, and the quality of the constructed product. The total value of projects he oversaw was more than $50 million.

Philadelphia International Airport High Speed Rail Line, City of Philadelphia, Philadelphia, PA - Managed the construction phase activities for the systems contracts on the Philadelphia Airport High Speed Line for the City of Philadelphia. Included in this assignment was the coordination of construction of a new reverse running color lit cab signal system for the line, and the construction of a new constant tension catenary system along the entire route. All of this work was coordinated with the construction of approximately 12 miles of new track and overhead bridge construction while freight operations remained in service. He also assisted the City of Philadelphia in construction phase negotiation of claims associated with the project. The total project cost was $105 million and it received the Engineering Excellence award from the Consulting Engineers Council of Pennsylvania in 1986.

General Engineering Consultant, Light and Heavy Rail and Related Projects, Southeastern Pennsylvania Transportation Authority, Philadelphia, PA - Program Manager for all tasks undertaken on this on-call contract. Services provided include rail planning and design, yard modifications, electrification upgrades, signals, communications, station improvements, and corrosion control studies.

NAME **VICTOR R. SIMUOLI, PE**
TITLE **VICE PRESIDENT**
PROJECT ASSIGNMENT **PROGRAM MANAGER**

Years of Experience: 28

Registrations/Memberships

- Professional Engineer – NY
- Institute of Electrical and Electronic Engineers (IEEE)
- Construction Management Association of America (CMAA)
- Transportation Research Board (TRB)

Education

- MS, 1984, Polytechnic University, Electrical Engineering
- BS, 1982, Polytechnic University, Electrical Engineering

Mr. Simuoli has extensive experience in project management and systems engineering with qualifications in transit systems engineering, management, and implementation, and demonstrated experience in successfully managing large-scale, diverse projects from inception through conclusion. Prior to joining Urban Engineers, Mr. Simuoli was a senior associate at an international consulting firm that provided technical and project management support to the Port Authority of New York & New Jersey for the design and development of the JFK AirTrain ($1.9 billion project) and to New Jersey Transit for the Southern New Jersey Light Rail System ($500 million project). In addition, Mr. Simuoli previously served as Director of Engineering at MTA New York City Transit and as a Senior Capital Program Manager at MTA Long Island Bus.

His experience includes project management, construction management, design engineering, and testing and commissioning. His technical expertise encompasses systems integration, automatic train control, signaling, communications, system safety and security, and operations and maintenance. Mr. Simuoli's experience includes:

URBAN ENGINEERS of New York, PC, 2004 - PRESENT

Project Management Oversight Consultant, Federal Transit Administration - Currently providing project management oversight for the New York MTA Capital Program. Responsible for oversight of New York City Transit Signals and Systems capital projects valued at over $1.1 billion. Projects include the Automatic Train Supervision (ATS); Communications Based Train Control (CBTC) Canarsie Pilot; Public Address/Customer Information System (PA/CIS); Flushing Interlocking Phase II; and the Concourse Line Signal Modernization projects. Also responsible for oversight of the Long Island Rail Road Capital Program valued at approximately $250 million.

Performed risk assessments for the systems portion of two major New Start projects: the Second Avenue Subway, Phase 1, valued at $3.8 billion; and the East Side Access project, valued at $6.3 billion.

Integrity Monitoring Consultant, Port Authority of NY & NJ - Currently providing integrity monitoring services for construction of the Freedom Tower. Served as the Deputy Director of Engineering for the first six months of the contract and currently serves as the Senior Systems Engineer. Provides engineering support and expertise in the areas of construction management, project management and control processes, as well as providing support to other integrity monitoring functions, including investigation, forensic accounting, and executive management.

BOOZ ALLEN HAMILTON

JFK AirTrain, Port Authority of New York & New Jersey - Systems Project Manager providing project management and systems engineering expertise for the JFK AirTrain, a $1.9 billion fully automated light rail system built at JFK International Airport that opened successfully in December 2003. Managed a

consultant budget of over $2.5 million a year and led a team of twelve technical and rail operations professionals during the design, procurement, fabrication, and testing and commissioning of the system. Responsibilities and accomplishments in this position included:

Participated in the proposal evaluation process and counseled the Port Authority during contract negotiations and the development of a conformed Design Build Operate and Maintain (DBOM) contract. Analyzed cost proposals and developed a milestone payment scheme for the systems portion of the contract. Developed the design review process for the systems portion of the contract and led the preliminary and final engineering design reviews for the system.

Directed and guided systems integration and engineering activities (Automatic Train Control, Communications and SCADA, Vehicles, Operations and Maintenance, Reliability, Availability, Maintainability and Safety, Security, and Fare Collection). Successfully managed and led the system testing and commissioning activities through demonstrated system operation and system opening.

Southern New Jersey Light Rail System (River Line), New Jersey Transit - Lead Systems Engineer for the Southern New Jersey Light Rail Transit System. Led the preliminary and final bid evaluation effort for the systems portion of the project. Developed specifications for the rail signaling and traffic control interfaces at grade crossings and control center interfaces with communications and signaling systems, and prepared and delivered industry review presentations in these areas.

MTA NEW YORK CITY TRANSIT

MTA, New York City Transit, Engineering Director - Led the technical and administrative project management of a multi-million dollar, interdepartmental Automatic Vehicle Location and Control (AVLC) pilot project utilizing Global Positioning Satellite (GPS) technology to locate and track buses in real-time and provide real-time customer information at bus stops and kiosks. Participated in the development of technical specifications, contract negotiations, and proposal evaluations; developed the project management plan, and an operational test and evaluation plan which was to be used to determine the feasibility of implementing the AVLC system throughout New York City.

Instrumental in initiating New York City Transit's participation in Intelligent Transportation Systems (ITS) projects: prepared a proposal for a traffic signal prioritization pilot project for the Department of Buses; and developed criteria for obtaining real-time video data of traffic conditions in the Bus Command Center as part of a regional Interagency Remote Video Network (IRVN) project.

MTA LONG ISLAND BUS

MTA Long Island Bus, Senior Manager, Capital Programs - Led the planning, development and oversight of various large-scale transit projects in a multi-million dollar, five-year Capital Program. Provided technical and program management for these projects. Performed cost/benefit analyses, project alternative analyses, and determined operating budget impacts of capital projects. Specific projects included: Conversion of the main bus depot to accommodate compressed natural gas (CNG) buses. Conversion included design and implementation of a methane detection system and redesign of smoke purge, ventilation and building electrical systems; Design-build for a fast fill CNG fueling station; Procurement of 180 CNG buses; Automatic Vehicle Location (AVL) system based on GPS technology for entire bus fleet; computer-assisted scheduling and information system for a paratransit bus service.

NAME **RICHARD C. SIMON, CMQ/OE, CQA**

TITLE **VICE PRESIDENT, QUALITY SERVICES**

PROJECT ASSIGNMENT **QA/QC / TRAINING**

Years of Experience: 47

Registrations/Memberships

- American Society for Quality (ASQ) - Senior Member
- ASQ Certified Manager of Quality/Organizational Excellence
- ASQ Certified Six Sigma Green Belt
- ASQ Certified Quality Auditor
- Design and Construction Quality Institute (DCQI) - Past Vice Chairman, Board of Directors

Education

- BS, 1963, Cooper Union, Mechanical Engineering
- 1966, General Electric, Three-Year Manufacturing Management Program

Mr. Simon has extensive experience in all areas of Quality Assurance/Quality Control. He presently serves as a Senior Project Quality Manager and is the Lead Quality Manager for all of Urban Engineers' Federal Transit Administration Program Management Oversight Consultant (PMOC) assignments. He has extensive experience in developing and implementing quality programs and has had widespread practice helping contractors and their subcontractors resolve problems. Mr. Simon has dealt with many different customers throughout his career. Mr. Simon's experience includes:

Federal Transit Administration Project Management Oversight Consultant, National Assignments - Lead Quality PMOC for FTA Projects for Region 2 in New York City. He is overseeing more than $15 billion in projects including the Second Avenue Subway (SAS), East Side Access (ESA), and New York City Transit (NYCT). Previous assignments included Long Island Rail Road (LIRR) and New York City Department of Transportation (NYCDOT) in NYC; MARTA in Atlanta, GA; Tri-Rail in Pompano Beach, FL; DART in Dallas, TX; RAILTRAN in Fort Worth, TX; West Corridor LRT in Denver, CO; and the Las Vegas Monorail in Las Vegas, NV. He has worked with Quality Managers at these transit agencies to develop cost-effective quality systems that meet the intent of the FTA QA/QC Guidelines. During one of his quality assurance audits, he identified an opportunity for an agency to develop a two-way traceability system. This suggestion was implemented and that agency now has better control of its products. He also served as the Project Manager for all NYCDOT projects.

National Transit Institute, Rutgers University, New Brunswick, NJ - Project Director and Lead Instructor on a contract to develop and present a training course throughout the United States on the revised 2002 FTA Quality Assurance and Quality Control Guidelines. Under his leadership, Urban was selected to deliver this course for another five years through March 31, 2013. Through May 2010, he presented this course 27 times throughout the United States and Puerto Rico.

Frankford Transportation Center, Southeastern Pennsylvania Transportation Authority, Philadelphia, PA - Quality Assurance Manager for an Urban Engineers Joint Venture that provided Program Management Services for the rehabilitation of SEPTA's Frankford Transportation Center. Program tasks included erection of a new elevated guideway, construction of a new Main Terminal Building, and replacement of turnouts in a rail yard. Personal activities included managing the efforts of Contract Quality Control representatives from each of the eight prime contractors, extensive interface with several subcontractors, and resolving on-site construction problems.

Kvaerner Shipyard, Philadelphia, PA - Quality Assurance Lead for the Pennsylvania Shipyard Engineering and Architecture (PSE), LLP project; a fast track contract with Kvaerner,

a Norwegian Company that is building ships at the former Philadelphia Naval Shipyard. PSE was a joint venture of three companies plus a DBE firm that provided manpower from multiple sources. Mr. Simon was responsible for developing consistent systems that all PSE employees could follow. He created a unified document control system that listed the status and revision of all drawings on the project.

Other Urban Assignments - Quality Manager on the following projects: a Joint Venture that is providing integrity monitoring on the WTC Freedom Tower for the NYNJ Port Authority's Inspector General; a subcontractor to LAN who are providing: (1) design services on the SE Corridor for METRO in Houston, TX; (2) General Engineering Consulting Services for VIA in San Antonio, TX; and (3) design services for SRT in Sacramento, CA. He was also the lead person on a Joint Venture that prepared a Quality Assurance Manual for MTA in Baltimore, MD and provided quality training to MTA's engineering staff. He helped prepare a Quality Plan for METRA in Memphis, TN.

TAMS Consultants, Vice President and Director of Corporate Quality - Mr. Simon was directly responsible for TAMS entire Quality Assurance Program. He designed and implemented one of the first Total Quality Management (TQM) programs in the architectural/engineering industry, training nearly 400 employees. As a result of his efforts, TAMS earned a national reputation for TQM among competitors and clients. He played a key personal role in the successful promotion and sale of projects worth $6 million in design fees. While at TAMS, Mr. Simon was a charter member of the Design and Construction Quality Institute (DCQI) and Vice Chairman of its Board of Directors.

Space Systems Division of General Electric, King of Prussia, PA, Increasingly Responsible Quality Assurance Management Positions - Mr. Simon is a graduate of the prestigious three-year General Electric Manufacturing Management Program. This Program consisted of diverse assignments in manufacturing at different GE plants throughout the United States. Mr. Simon then held a series of increasingly responsible Quality Assurance positions as Manager of: Process Control; Supplier Quality; Quality Systems; Failure Analysis; and Quality Assurance at the Space Systems Division in Valley Forge, PA. Among his most significant accomplishments was leading a failure analysis team that conducted a comprehensive investigation of the Solar Maximum Mission satellite that had failed in orbit. The team identified the failure cause as an undersized fuse design in an attitude control module. A Shuttle Challenger crew restored the $50 million satellite to full operational status by installing a re-designed module. He also established and implemented a Quality Cost System; categorized prevention, appraisal, and failure costs; and trained 250 employees. Failure costs as a percent of applied direct labor were reduced by 40% over the following three years.

Mr. Simon's additional experience includes facilitating a partnering session between executives of the American Consulting Engineers Council and the US Army Corps of Engineers. This resulted in the first partnering agreement between a professional society and a US government agency. He has completed an ISO 9000:1994 Lead Assessor Training Course and an Internal Auditor Course for ISO 9001:2000 and is an internal ISO auditor for Urban Engineers. Mr. Simon is a Team Leader for the Keystone Alliance for Performance Excellence (KAPE) and was a Lead Senior Examiner and Examiner Training Facilitator for the Pennsylvania Quality Award and a National Examiner for the Workforce Excellence Network (WEN). WEN is a public/private partnership of Federal, State, Local and Private Organizations/Agencies. Mr. Simon has written several articles on TQM and has been a featured speaker for many organizations including clients, professional societies, and other consulting firms.

During his career, Mr. Simon has had extensive interaction and negotiation with many customers including: Federal Transit Administration, Federal Aviation Administration, NASA, Air Force, Army, Navy, National Security Agency, US Postal Service, SEPTA, Long Island Rail Road, and DCMC Quality on-site Department of Defense representatives.

NAME **MICHAEL E. RADBILL, PE, F.ASCE, CPC**

TITLE **VICE PRESIDENT**

PROJECT ASSIGNMENT ***TRAINING*** **/ WORLD TRADE CENTER/ BUILDINGS**

Years of Experience: 34

Registrations/Memberships

- Professional Engineer – NY, NJ, AZ, CO, CT, DE, FL, MD, NC, UT, OH, TX, PA
- Certified Advanced Metric Specialist
- Certified Professional Constructor
- Certified Documents Technologist
- Fellow - American Society of Civil Engineers
- American Institute of Constructors
- Society of American Military Engineers
- US Metric Association
- Construction Management Association of America
- Elected to Who's Who of International Professionals
- Fellow - National Transit Institute
- Elected to Panel of Neutrals, American Arbitration Association

Education

- MRP, 1976, Pennsylvania State University, Regional Planning
- BSCE, 1968, Clarkson University, Civil Engineering
- Diploma, 1995, US Air Force War College
- Diploma, 1986, US Army Command & General Staff College
- Certificate, 2007, Harvard Law School, Program of Instruction for Lawyers at PON - Mediation

Mr. Radbill has extensive technical and management experience in the construction of federal, state, local, and private projects. These projects include transportation, power generation, petrochemical, correctional, military, aviation, commercial, hotel, and others. His skills and management accomplishments include drafting and editing design and construction contracts and specifications; writing and updating corporate level construction procedures manuals; developing, updating, and analyzing critical path method (CPM) schedules; facilitating partnering for construction projects; preparing and analyzing construction claims for owners and contractors; participating in resolving of construction disputes during negotiation, mediation, mini-trial, and trial; testifying as an expert at trial; arbitrating construction disputes as an American Arbitration Association Arbitrator; and presenting training courses to owners and contractors on writing specifications, CPM scheduling, claims avoidance, and project and construction management. Mr. Radbill's experience includes:

URBAN ENGINEERS, INC. (February 2005 to Present)

Meadowlands Sports Complex, New Jersey Sports and Exposition Authority, New Jersey - Reviewed and edited construction contract general and special conditions, instructions to bidders, and special provisions. Merged the "boiler plates" from the Authority and New Jersey Transit into one contract document for a project that brings mass transit into the Meadowlands Sports Complex.

FasTracks, Regional Transportation District (RTD), Denver, CO - Facilitated a "mock" risk assessment workshop for the West Corridor Project. This 1½-day workshop reviewed the scope and schedule of the project, identified cost areas at risk for cost and schedule growth and with opportunities for cost and schedule savings. Explained the use of Monte Carlo statistical method for determining a confidence level that the project would be completed at the projected cost and schedule.

East Side Access Project, Metropolitan Transit Authority Const. Corp. (MTACC) New York City - Assessed risks of schedule and cost growth related to third party contracts with local railroads. Presented findings and

facilitated two-day risk-assessment workshop for the $6.3 billion project to bring the Long Island Railroad from Queens, under the East River, and into Grand Central Station in New York thru new tunnels and underground concourses.

Maryland State Highway Administration (MSHA) Baltimore, MD - Analyzed eight construction claims valued at over $1.2 million related to the reconstruction of the Interchange US 50 and Maryland Route 2 in Annapolis. In addition, Mr. Radbill led settlement negotiations with the MSHA and contractor.

Second Avenue Subway Risk Assessment, Federal transit Administration, New York City - Analyzed general conditions and general requirements of the construction contract for the Second Avenue Subway Project, Phase I in New York City. Using Federal transit Administration Program Guidance, prepared a report of potential risks to the project cost estimate resulting from language in the construction contract. Presented and discussed findings in a workshop with the New York MTA and project team.

Claims Analysis for the Connecticut Department of Transportation - One was a $2 million claim for extra work associated with the construction of a maintenance facility for one of the Department's District offices. The other was a $509,000 claim for delay and extra work related to the lengthening of the safety areas on each end of an airport runway near Waterbury, CT.

Quality Management & Audit Activities for Metro Solutions Phase II, Houston TX - Provided quality management services to include audit of preliminary engineering for the 7-mile Southeast Corridor Bus Rapid Transit (future light rail) Project. This is one of five corridors to be designed and constructed by 2012 at a cost of approximately $1.23 billion.

TRAUNER CONSULTING SERVICES, INC. (November 1990 to February 2005)

Senior Consultant - Mr. Radbill has provided construction claims analysis, dispute resolution, and litigation support for numerous projects to include: $2.4 billion Urban Train Project in San Juan, Puerto Rico; $147 million Polypropylene Plant, Linden, New Jersey; $100 million superfund cleanup site in southern New Jersey; $7 million Bachelor Enlisted Quarters, Naval Amphibious Base, Virginia Beach, Virginia; $50 million County Jail, Jacksonville, Florida; and a $15 million Highway and Bridge Project, Kentucky. He has provided analysis of termination cause and costs for a prime contractor on multiple school renovation projects for the surety. He assisted the Omaha District Corps of Engineers in the analysis of delays involving $27 million in construction of support facilities at the Strategic Air Command Air Force Base in Grand Forks, North Dakota. Services included preparation of an as-built schedule, analysis of the as-planned and as-built schedules, and preparation of a claim report, negotiation support, and testimony at a mini trial. He served as the American Arbitration Association appointed arbitrator on a panel of three arbitrators for a $1.6 million commercial construction dispute in New Jersey and as the sole arbitrator for a dispute between a subcontractor and the prime for a Delaware DOT highway construction project. He wrote and presented the training course entitled "Management of Transit Construction Projects" for the National Transit Institute for over ten years. He has been selected as a Fellow of the National Transit Institute at Rutgers University. He has facilitated partnering workshops for the construction of highway bridges and for service contracts for the U.S. Army. He has managed the metrication of and edited Construction Manuals for the states of Delaware and New Hampshire. He was the Project Director for the development and construction of a $50 million Intermodal Transportation Center for the Tri-State Transit Authority in Huntington, WV. He was also the project director for the updating and rewriting of three contracts; construction, professional services, and materials & supplies; for the Chicago Transit Authority. He was the project director for the creation of three project management plans for Federal Transit Administration funded projects: Washington Metropolitan Area Transit Authority; Tri-State Transit Authority, and the Ulster County, NY Area Transportation Authority. He assisted in the mediated settlement of a $6 million claim on the construction of a concrete pile highway bridge in Puerto Rico.

Norman Jones

Talson Solutions, LLC

306 Market Street, 4th Floor
Philadelphia, PA 19106

Norman Jones

EXPERIENCE

- 36 Years

EDUCATION

BA, Virginia State University
Science in Electronics

RECORD OF PROFESSIONAL EXPERIENCE

Mr. Jones has 36 years of experience in progressively responsible positions in the areas of Program / Project Management, Quality Assurance and Manufacturing. Service and product experience includes business startups, construction management, project coordination between government agencies and private industry, process development, system engineering, computer systems and high reliable satellite systems with associated test equipment. Highlights of Mr. Jones' relevant experience include the following:

Project Management / Quality Assurance, Project Management Oversight, Lead Quality Manager on Urban Engineers' Federal Transit Administration Program Management Oversight Contractor (PMOC) assignments. He has assisted in Program Management at various transit agencies to develop, implement, and maintain a cost-effective quality management system at MTA in New York, NY; MARTA in Atlanta, GA; SFRTA in Pompano Beach, FL; DART in Dallas, TX; TRE in Forth Worth, TX; RTD in Denver, CO; RTC in Las Vegas, NV; and MTA in New York, NY. In addition to his contributions to the PMO Team, Mr. Jones is a Course Developer and Instructor for the National Transit Institute (NTI). He assisted in the development of a training course and the on-going teaching of the course to familiarize transit agencies with the Revised 2002 FTA Quality Assurance and Quality Control Guidelines.

Project Manager, Communications and Power Center, -Key member of an implementation team charged with the responsibility to design and fast track construct a 350,000 square foot state-of-the-art satellite facility and the subsequent consolidation of capital equipment into the facility from two discontinued operations. Responsibilities included the optimization of the facility by product flow and space allocation, resolution of design issues, equipment relocation with special utility requirements, subcontract management and quality, cost and schedule control associated with each task.

Program Manager, NASA Ground Station, -Directly responsible for the manufacturing of 3 complex satellite communication systems. The system provides up-link and down-link communications among various satellites, the shuttle and ground control. Responsibilities included quality/cost/schedule control, interfacing with internal functional units, senior management, NASA and various subcontractors. An aggressive outsourcing plan identified over $613,000 in savings and the program was cited for positive and best practices during NASA audits.

Operations Manager, Electrical Aerospace Ground Support Equipment, -Directed a multifunctional team of 70 employees in fabrication, integration and test of complex electronic equipment and systems utilized in testing of communication satellites. Functional area exceeded all quality, cost and schedule goals.

Supervising Engineer, Failure Analysis and Non-destructive Testing, -Performed detailed failure investigations and managed the activity of 8

engineers in the timely investigation of failed spacecraft hardware and 3 technicians in non-destructive testing of incoming material and fabricated components. Selected to chair Failure Analysis Review Board. In this capacity reviewed and approved over 250 failure analysis investigations for technical content and corrective action implementation resulting in concurrence from many diverse customers.

Program Manager, Air Traffic Management Line of Business, -Responsible for hardware and software quality assurance activity on all FAA programs and coordinating the activity of Quality Program Managers assigned to various programs. Extensive interaction and negotiation with three resident FAA Quality Representatives and Contracting Officer, customers, major subcontractors and internal functional organizations.

Mr. Jones is a graduate of the General Electric Manufacturing Management Program. This Program consisted of four different assignments in manufacturing and quality at different GE facilities throughout the United States. Mr. Jones assignments included Advance Quality Assurance Engineering, Manufacturing Engineering, Production Supervision, and Work Simplification.

NAME BURTON G. KOHLMAN, PSP
TITLE SENIOR SCHEDULING ENGINEER
PROJECT ASSIGNMENT SCHEDULING

Years of Experience: 40

Registrations/Memberships

- OSHA 40 Hour Hazardous Waste Operations
- Emergency Response Training
- OSHA 8 Hour Refresher Course
- AACE Planning & Scheduling Professional
- American Society of Highway Engineers
- American Society of Civil Engineers
- Articles Published - Scheduling, Delay Claims, & Litigation for Pennsylvania Bar Association, Construction Litigation Committee, 1990

Education

- BS, 1979, Drexel University, Civil Engineering
- Certificate, 1997, Dale Carnegie Course

Mr. Kohlman has extensive experience, including two decades working with Urban Engineers (Urban) in critical path method (CPM) scheduling, design, construction management, claims analysis and mitigation, and computer applications. This experience comes from working on major airport, highway, marine, bridge, railroad structure, transit, and building projects, in addition to working on site layouts for heavy construction, project coordination between government agencies and private industry and multi-phase projects.

Integrity Monitor, Freedom Tower (1WTC) NYC, NY - Project Schedule Engineer on an integrity monitoring assignment responsible for the evaluation of the project controls methodology. Services include in-depth analysis and schedule characterization for integrated contracts leading to a new 1,776-foot high-rise tower at the World Trade center site. Conducts monthly reviews of schedule updates and meetings with the contractor to discuss status, trends and alternate approaches to the work. Participate in claim evaluations and negotiation sessions. Conducts a schedule risk assessment evaluation documenting potential risks and their time and cost implications for reporting to the Inspector General. This is done utilizing state of the art software and statistical methods and probabilities. The results are used to analyze progress and develop contingency or alternate plans. The effort supplements the search for waste, fraud and abuse that may be systemic to the construction industry and the evaluations, reports and analyses are forwarded to the NYNJPA Inspector General.

Meadowlands Rail Project, NJSEA (New Jersey Sports and Exposition Authority), East Rutherford, NJ - Served as a schedule engineer for a new $150 million commuter rail access and station for a professional sports complex. Responsibilities included conceptual construction packaging, master plan development, constructability review, and design monitoring. The Meadowlands Railroad and Roadway Improvement Project (MRRIP) is a multi-agency cooperative effort to provide a rail mass transportation access to the New Jersey Meadowlands Complex in East Rutherford, NJ. The overall construction program encompasses railroad and highway projects. The initial phase of the project included the construction of two new tracks, each approximately 12,300 feet in length and connected to the Pascack Valley Line. The rail station involved the construction of one island platform, approximately 950 feet in length. The platform included a waiting area for passengers including overpasses, stairs and elevators. In order to accommodate the new rail station, a highway interchange with Route 120 needed to be reconstructed. Special attention was necessary to allow both highway and rail construction while minimizing disruption to the existing Meadowlands operation. The two-track link allows customers throughout the state to travel to Meadowlands events by rail. Nine of New Jersey Transit's 11 rail lines indirectly connect with the Pascack Valley Line via Secaucus Junction. Mr. Kohlman is providing special services to NJSEA for their

consideration of a new NFL football stadium and the construction of the Xanadu retail complex.

Kvaerner Philadelphia Shipyard, Kvaerner Shipbuilding, Inc., Philadelphia, PA - The Philadelphia Naval Shipyard was closed through the Base Relocation and Closure Act (BRAC) and converted to a private state-of-the-art shipbuilding facility. The project required environmental cleanup; demolition of several structures; construction of new fabrication shops, paint shop, Goliath crane and administration facilities; drydock modifications; as well as site improvements. Construction of the 700,000-square-foot industrial floor space was a just-in-time construction project. Mr. Kohlman provided project control and administration for the design phase of the project. He developed a work breakdown structure, master schedule, phasing and bid packages for a compressed time fast track design and construction project; monitored drawing lists and owner supplied equipment purchases to meet the owner's needs to begin the ship building as soon as possible; monitored and tracked the preparation and application of over 20 federal, state, and local permits; and monitored and reported on the project status as design and construction continued at the same time. An approximate $251 million project.

New Terminal, Airfield, and Roadways, Washington National Airport, Metropolitan Washington Airports Authority, Washington, DC - Performed detailed design-phase scheduling; and developed, implemented, and updated CPM network schedules to coordinate with construction phasing schemes for this major airport expansion program.

Center City Commuter Rail Connection, City of Philadelphia, Philadelphia, PA - Schedule Engineer on construction of a four-track cut-and-cover commuter railroad tunnel through center city Philadelphia. This $350 million project integrated two independent railroads into a regional commuter facility. Responsibilities included schedule and cost control on system-wide contracts including track, traction power, signals, and communications, as well as some physical tunnel contracts. The project control team interfaced with city and federal agencies on a regular basis to monitor and report on status.

Project Management Oversight Experience - Schedule Engineer for the FTA's PMOC Program in Region 4. Projects included MARTA's (Atlanta, GA) North Line Extension; and MDTA's (Miami, FL) Palmetto Extension, East-West Corridor, and North Line Extension Projects. MARTA's North Line Extension was a $463.2 million heavy rail project that included a 2.3 mile double track extension, underground station with parking garage, elevated station with parking garage, and the acquisition of 56 railcars. The assignments involved conducting site visits and producing spot reports detailing an evaluation of the grantee's compliance with its management plan and the effectiveness of that plan. It also included interviewing management personnel to investigate and monitor the effectiveness of project controls. Other projects include:

Metropolitan Transit Authority (MTA), Federal Transit Administration, New York, New York - Project Schedule Engineer responsible for the evaluation of the grantee's project controls methodology. Services include in-depth analysis and schedule characterization for integrated contracts leading to new transit services. Conducted monthly reviews of schedule updates and meetings with the MTA to discuss status, trends and alternate approaches to the program. Lead a schedule risk assessment evaluation documenting potential risks and their time and cost implications. This was done utilizing statistical methods and probabilities. The results are used to develop a management plan with contingency reserves. These services are used on two MTA projects. **East Side Access (ESA**) is a $6.3 billion new alignment for Long Island Railroad that begins at the Harold Interlocking in Queens and runs under the East River to a new terminal station situated under Grand Central Station with eight tracks. **Second Avenue Subway (SAS)** is a $2.3 billion new subway line under Second Avenue. This work is the first of a four phase program that provides service from 96th street to 63rd Street.

Devang J. Parekh ***KS Engineers, P.C.***
Project Scheduler

EDUCATION
B.S.M.E. – New Jersey Institute of Technology, 1993
M.S.M.E. – New Jersey Institute of Technology, 1996

CERTIFICATIONS/TRAINING
Primavera P3 - Planning and Scheduling with Primavera P3
Primavera P6 – Introduction to Primavera P6

EXPERIENCE SUMMARY
Mr. Parekh has more than 9 years of experience in application, design, project and sales engineering. Some of the major industry experiences include, sheet piling, glass wall system for low and high-rise buildings, HVAC, nitrogen generator and co-generation plants and medical devices, FDA validation. His experience includes project analysis, document research, mechanical design and review of technical related issues. Other responsibilities included preparing technical proposals, equipment selection, presentations and design analysis of project updates and company products and summary of new design concept in a clear and concise manner. In addition, he is proficient in Primavera P3 & P6, Claim Digger, MS Project, MS Office, ACAD, CANVAS, ADOBE, Visio, Corel Draw, Concordance, Lexis-Nexis.

PANYNJ, NY – *Construction Claims Analyzer/Scheduler*
- Currently working on $204M reconstruction of the existing runway at John F. Kennedy Airport (JFKIA).
- Responsibility includes reviewing contractor's schedules and assist engineers in claims and estimation.
- Perform schedule analysis using Primavera P3, P6 and Claim Digger on weekly and monthly schedules.
- Created spreadsheets to track major project items for payment and schedule verifying.
- Advice Resident Engineer of any future claims and present the findings as required.
- Visit project job site and attend project and progress schedule review meetings.
- Create timelines for various contractors' claims as required.

Construction Claims Group, Cedar Knolls, NJ - *Senior Claims Consultant* responsible for the following:
- Worked on construction claims providing detailed analysis of entitlement, causation and schedule analysis.
- Met with State, City and County professionals for various negotiations on bridge, road and school projects.
- Building projects included the following:
    - Midwood High School (NY)
    - The Baruch College (NY)
    - East Orange PS #2 & #5 (NJ)
- Assisted in preparing Expert Report for Mediation, Arbitration and Litigation as required.
- Performed schedule claim analysis using Primavera P3 and Claim Digger and MS Project.
- Analyzed delays related to schedule delay claims, productivity claims and defective design claims.
- Created detailed As-built graphics to show job progress and any delays.

Capital Project Management, Inc., Fairfield NJ - *Claims Analyst / Consultant* responsible for the following:
- Provided construction services including claims consulting to various government and corporate clients.
- Used Primavera (P3), Claim Digger and MS Project to perform schedule review and analysis.
- Performed TIA (Time Impact Analysis) based on As-planned and As-built schedules.
- Projects included the following:
    - Miami Int'l Airport Expansion ($100M)

  - Morris County Bridge ($12M)
  - NJDOT Rt. 35 Shark River Bridge ($48M)
  - Watchung High School ($14 M)
  - New Brunswick School Renovation($5M)
- Interviewed key personnel, reviewed documents, schedules, payroll, contracts, etc.
- Assisted in preparation of Expert Report for clients based on our findings.
- Prepared as-built graphics using daily reports, equipment records, diaries, etc.
- Prepared presentations in PowerPoint for clients.

Bendheim Wall Systems, Passaic NJ - *Project and Sales Engineer* responsible for the following:
- Prepared quotations and proposals based on contractor's take-offs.
- As a Sales Engineer worked with architects, representatives and contractor's to fulfill their requirements.
- Worked with W&W Glass, Enclos Corp., Trainor Glass, Harmon, Karas & Karas.
- Developed price-sheet in Excel for estimating and officially used by the company for all estimating.
- Created and automated design calculation spreadsheet for glass wall design. These included deflection, stress/strain calculations, maximum glass height, moment of inertia, etc.

EKATO Corporation, Ramsey NJ - *Project Engineer/Sales Engineer* responsible for the following:
- Performed complete project review, design and estimation of industrial agitators/mixers.
- As a sales engineer visited many client locations for product presentations and review of design proposals.
- Designed agitators, which consisted of 5HP to 1500HP for various industries. Major industries include pharmaceutical, paint and adhesives, municipal wastewater treatment, flue gas desulphurization (FGD), mineral extraction, pulp and paper, chemical and other processes.
- Designed agitators to meet and or exceed stringent and complex mixing requirements.
- Performed Computational Fluid Dynamics (CFD) to visualize the agitator performance.
- Assisted in design and selection of multi-million dollar project for FGD applications. Major task of the plant was to convert the Sulfur Dioxide (SO_2) into Calcium Sulfate ($CaSO_3$) and by product is Gypsum.
- Assisted local municipalities in selection and design of wastewater agitators.

BOC Process Plants, Berkeley Heights NJ - *Project Engineer* responsible for the following:
- Performed detailed design and equipment selection for nitrogen generators. Assisted senior engineers in writing technical proposals for various projects.
- Performed process equipment sizing, selection and estimation for the project. The equipment included heat exchangers, pumps, compressors, filters, piping, etc.
- Spearheaded and created proposal tracking database in MS Access.
- Assisted the engineers in updating, tracking and modifying proposals to meet deadlines and perform reports.
- Prepared technical proposals for the client, based on final design and estimate.
- Assisted the Department in achieving a successful ISO 9001 audit.

National Medical Care, Rockleigh, NJ - *Validation Engineer* responsible for the following:
- Prepared technical proposal on test methods for FDA on medical devices, mainly kidney dialysis machines.
- Validated the devices to meet and/or exceed the stringent FDA, GMP and GLP rules and regulations.
- Designed performance and integrity testing of clinical and experimental dialysis devices.
- Enhanced existing test methods to attain the most saving and cost effective results.
- Responsible for keeping company's safety meetings and records updated in compliance with GMP and GLP.

NAME **PAUL KOVNAT, EIT, CEP**
TITLE **SENIOR ESTIMATOR**
PROJECT ASSIGNMENT **COST ESTIMATING**

Years of Experience: 27

Registrations/Memberships

- Certified Estimating Professional
- MCACES, 2nd Generation (MII) Basic Training
- National Civil Engineering Honor Society

Education

- BS, 1984, Drexel University, Civil Engineering

Mr. Kovnat is an Estimator with extensive, progressively responsible experience in heavy/civil construction. He has experience in estimating projects up to $180 million, including major bridges, highway interchanges, water/wastewater treatment plants, transit, rail, airport, tunnel, and underground utility projects. He is also familiar with joint venture bidding and design/build arrangements.

Mr. Kovnat has an understanding of union and open-shop environments, gained through exposure to multiple markets in the Mid-Atlantic region. He is also proficient with a number of construction industry software applications, including HCSS, P3, and Expedition. Mr. Kovnat's experience includes:

South Sacramento Light Rail, Sacramento, CA Performed capital construction cost estimates for three light rail stations on the South Sacramento Corridor Phase 2 (SSCP2) Project.

Southeastern Pennsylvania Transportation Authority (SEPTA) General Engineering Consultant, Philadelphia, PA Performed capital construction cost estimate**s** for four SEPTA projects funded through ARRA. These projects all located on SEPTA's Regional Rail Division, included three Station Improvement Projects (Ryers, Chestnut Hill West, Tulplhocken) and a Line Section Improvement Project (Mainline Schuykill).

City of Baltimore Municipal Dock Cost Estimates Performed a detailed cost estimate for the repair of a damaged floating dock structure. The damage was sustained during a severe winter storm, which affected the floating structure in addition to the water and electric utilities. An additional estimate for the complete in-kind dock renewal construction cost was used for comparison purposes. The estimates were submitted to the client for insurance claim resolution.

Olin Dock Damage Investigation Repair Cost Estimate Generated a detailed cost estimate following an alleged barge allusion at the Olin Dock, a T-head structure located on the Mississippi River in Louisiana. After contractor bids were submitted, the repair cost estimate was compared with the bid figures. Advised the client on the scope of work and bid values.

Conoco Philips Containment Bulkhead Construction Cost Estimates Estimated construction costs for a one-of-a-kind containment bulkhead that was designed to be fabricated in place. Site requirements dictated difficult construction staging to make the project possible.

Blanket Purchase Agreement for Cost Estimating Services, General Services Administration, Region 3 - Senior Estimator for over 50 cost estimates for this continuing open-ended assignment, which includes plan development from conceptual through final design and construction costs ranging from $300,000 to $4 million. These have included renovations and security enhancements throughout the full range of CSI divisions. Facilities users have included the US Marshals, EPA, SSA, FBI, Post Office, Federal Courts, and Immigration.

Third Party Technical Review, Aberdeen Proving Grounds, Aberdeen, MD - Senior Estimator for the following Aberdeen Proving Grounds projects: Edgewood Area Options A &

B - Site Work and Utilities for Maryland Fire & Rescue Institute (MFRI) Facility, Dahlgren Fire Station, Renovations to Building 316, Renovations to Accommodate Multiple Block Locations, and Downer Hall Electrical and Mechanical Upgrades.

East Side Access, Metropolitan Transportation Authority, Federal Transit Administration, New York, NY - Senior Estimator for project management oversight for the Metropolitan Transportation Authority's entry into a $2.6 billion Full Funding Grant Agreement with the FTA for the East Side Access Project. Included a detailed independent estimate performed in order to validate the project contractors' indirect costs. Also, the project soft costs, such as engineering fees, construction administration/management fees, agency support costs, and insurance costs were validated.

Second Avenue Subway Project, Metropolitan Transportation Authority, Federal Transit Administration, New York, NY - Senior Estimator for PMO Consultant services on federally-funded transit projects in the New York metropolitan area. Among the projects overseen is the design and development of the new Second Avenue Subway from 125th Street to the Financial District. Total costs for the line are estimated at $16.8 billion. The project scope includes: tunneling; station/ancillary facilities; track, signal, and electrical work; maintenance and equipment storage yards; vehicle procurement; and other subway systems necessary for operation.

Trenton-Morrisville Toll Bridge Project, Delaware River Joint Toll Bridge Commission, Trenton, NJ - Lead Estimator for this $87 million project for the Delaware River Joint Toll Bridge Commission.

Senior Estimator, Philadelphia Regional Division, The Conti Group, Langhorne, PA. Direct estimating efforts for rail, airport, and bridge/highway projects up to $100 million in the Philadelphia area. Managed a team of estimators, which varied in accordance with the demands of each project. Staff estimator role on projects pursued by other divisions; including bids to NYCDOT, NYCTA, NJ Turnpike Authority, PANYNJ, US Army, US Navy, and various corporate project owners.

Assisted Project Managers in buy-out and start-up processes for awarded projects. Assisted Marketing Department with technical writing required for design/build proposals.

Senior Estimator, American Infrastructure, Worcester, PA. Lead Estimator of structural work for the Allan A. Myers Public Division. Bid highway and bridge projects to PennDOT, Pennsylvania Turnpike Commission, MDSHA, Maryland Transportation Authority, and other entities. Bid water resource projects to county and municipal authorities in PA, DE, MD and VA.

Primarily responsible for estimating demolition, foundation excavation, temporary excavation support, piling, caisson, structural concrete, and structural steel activities. Also performed estimates for earthwork, underground utility, mechanical piping, and asphalt paving activities in response to department workload. Performed quantity take-off, solicited material pricing, assigned appropriate crew resources, and determined production rates to calculate costs for self-performed work.

Interfaced with senior management on issues of risk identification, equipment utilization, craft labor requirements, and assessment of competitive market conditions.

Estimator - Conti Enterprises, Inc. (a division of The Conti Group) - South Plainfield, NJ. Estimated direct costs on projects for NJDOT highways, the Boston Central Artery / Tunnel, a runway extension, fiber optic backbone systems, a toll plaza reconstruction, and "Intelligent Transportation Systems". Also responsible for the preparation of pre-bid schedules.

John Luttrell – Estimator

YEARS OF EXPERIENCE: 20+

EDUCATION:
Mechanical Engineering, New York Institute of Technology

TECHNICAL CAPABILITIES:
Timberline Project Management, Microsoft Project and Microsoft Office

PROFESSIONAL EXPERIENCE:

DACK Consulting Solutions, Inc., White Plains, NY 2009 - 2010
Senior Mechanical Cost Estimator
Responsibilities included performing plan & spec estimates based on engineered drawings, and conceptual estimates based on limited information; soliciting bids from vendors and subcontractors; maintaining historical estimate database. Also required providing estimating input on projects at varying stages of design, and completing accurate quantity takeoff and apply standard unit pricing techniques for Plumbing, Fire Protection and HVAC. Projects included:

- MEP Hegeman Estimate – consisted of sanitary piping, gas piping, storm piping, sprinkler mains and piping, duct work, packaged A/C Units, air handling condensing units, cabinet unit heaters, Pumps, and fans.
- Putman Water Filter Plant Mechanical Piping – consisted of Carrier/Protected Water Piping, Process Piping, and Centrifugal Pumping Equipment.

LiRo Engineers, Syosset, NY **2009 - 2010**
Senior Mechanical Estimator, Consultant to LIRR
Duties included performing plan & specification estimates based on engineered drawings, and conceptual estimates based on limited information; verifying accuracy of out-source estimating services; and maintaining historical estimate database. Also required providing estimating input on projects at varying stages of design, and completing accurate quantity takeoff and apply standard unit pricing techniques for Plumbing, Fire Protection and HVAC. Projects included:

- Amtrak Standpipe – consisted of 8" Buried Fire Service and compressors & piping.
- Penn Station Rest Room Rehabilitation – consisted of HW & CW Piping, waste piping, vent piping, and HVAC.

Sairam Consultants, Inc., West Orange, NJ **2007 - 2008**
Mechanical Estimator, Consultant to Con Edison
Duties included performing plan & specification estimates based on 100% engineered drawings, and conceptual estimates based on limited information; soliciting bids from vendors & subcontractors; and following national labor and material cost trends. Also required providing estimating input on projects at varying stages of design, and completing accurate quantity takeoff and apply standard unit pricing techniques for Plumbing, Fire Protection and HVAC. Projects included:

- Various Power Generating Stations (5 Boroughs) – consisted of gas piping, vent piping, boiler breeching, chemical piping, and process instrumentation

Concost Associates, Inc., Newark, NJ **2006 - 2007**
Mechanical Estimator, Consultant to Gilbane/TDX
Duties included performing plan & specification estimates based on 100% engineered drawings, and conceptual estimates based on limited information; soliciting bids from vendors & subcontractors; and following national labor and material cost trends. Also required providing estimating input on projects at varying stages of design, and completing accurate quantity takeoff and apply standard unit pricing techniques for Plumbing, Fire Protection and HVAC. Project included:

- **Kings County Hospital – consisted of** close out of all mechanical change orders; compare contract work to change order directives**;** and negotiate final costs with all subcontractors.

Hanscomb Faithful & Gould **2004 - 2005**
Mechanical Cost Estimator, Consultant to American Airlines
Duties included performing plan & specification estimates based on 100% engineered drawings, and conceptual estimates based on limited information; soliciting bids from vendors & subcontractors; and following national labor and material cost trends. Also required providing estimating input on projects at varying stages of design, and completing accurate quantity takeoff and apply standard unit pricing techniques for Plumbing, Fire Protection and HVAC. Project included:

- American Airlines, JFK Airport – consisted of close out all mechanical change orders; compare contract work to change order directives; and negotiate final costs with all subcontractors.

Durr Mechanical Construction, Inc., New York, NY **2001 - 2004**
Mechanical Estimator
Duties included performing plan & specification estimates based on 100% engineered drawings, and conceptual estimates based on limited information; soliciting bids from vendors & subcontractors; and following national labor and material cost trends. Also required providing estimating input on projects at varying stages of design, and completing accurate quantity takeoff and apply standard unit pricing techniques for Process Piping & Equipment, and Hard Bidding. Projects included: Hunts Point WPCP, Newtown Creek WPCP, North River WPCP, Owls Head WPCP, Tallman Island WPCP, and Red Hook WPCP.

Chesterfield Associates, Inc. , Westhampton Beach, NY **1992 - 2001**
Mechanical Estimator
Duties included performing plan & specification estimates based on 100% engineered drawings, and conceptual estimates based on limited information; soliciting bids from vendors & subcontractors; and following national labor and material cost trends. Also required providing estimating input on projects at varying stages of design, and completing accurate quantity takeoff and apply standard unit pricing techniques for Plumbing, Fire Protection, HVAC, Process Piping and Hard Bidding.

Overall Estimates Projects Completed:

AVIATION

URBAN
ENGINEERS OF NEW YORK, P.C.
Formulating Excellence®

NAME JACK M. MARTINS, PE

TITLE VICE PRESIDENT, AIRPORTS PRACTICE

SERVICE AREA AVIATION

Years of Experience: 41

Registrations/Memberships

- Professional Engineer – PA, VA, MD
- American Society of Civil Engineers
- American Association of Airport Executives
- Airport Consultants Council
- Aviation Council of Pennsylvania

Education

- BS, 1969, Newark College of Engineering, Civil Engineering

Mr. Martins offers extensive airport design, construction, and project management experience, including significant time spent with the Philadelphia International Airport Division of Aviation. His experience extends to all aspects of airport planning, design, and construction, including airside, landside, and terminal development. Mr. Martins is completely familiar with airport operations, airfield requirements, airline coordination, and the FAA and state grant process. He has direct responsibility for the technical design and construction documentation of all airport projects undertaken by Urban. Mr. Martins' experience includes:

Mr. Martins has broad ranging experience with airport design, site development, and civil design through his many airport-related projects. He offers extensive experience with airport design, construction, and supervisory experience, including significant time spent with the Philadelphia International Airport Division of Aviation. Mr. Martins' experience extends to all aspects of airport planning, design, and construction, including airside, landside, and terminal development. He is completely familiar with airport operations, airfield requirements, airline coordination, and the FAA and state grant process. He has direct responsibility for the technical design and construction documentation of all airport projects undertaken by Urban. Mr. Martins' relevant experience includes:

Runway 9R-27L, Philadelphia International Airport, City of Philadelphia, Division of Aviation, Philadelphia, PA - Resident Engineer for the construction of this 10,500 foot instrument runway. The runway was constructed of full depth bituminous pavement and included in-pavement centerline lighting.

City of Philadelphia, Division of Aviation, Philadelphia, PA - Resident Engineer for several major airfield projects including the construction of Runway 9R-27L, Philadelphia's 10,500 foot main instrument runway. Responsibilities included supervision of all contractor activities, quality assurance, contractor payments, coordination with airport operations, and supervision of the inspection team.

City of Philadelphia, Division of Aviation, Philadelphia, PA - Design Engineer Supervisor responsible for management of in-house airport design department and all consultants providing design services for both Philadelphia International and Philadelphia Northeast Airports. This included preparation of capital and operating budgets, FAA and State Grant applications, coordination with FAA, Airport Operations, City Departments, and Airlines.

New Tier 2 Terminal, Washington Dulles International Airport- Project Director for the civil design for the 48-gate terminal. Responsible for assigning staff, monitoring budgets, quality assurance, and maintaining schedule.

New Terminal A West Philadelphia International Airport, City of Philadelphia, Division of Aviation, Philadelphia, PA - Project Director the design of all civil/site work for this $600 million facility. This included landside roadways and parking facilities, utility relocations, aircraft parking aprons, taxiways, hydrant fueling, geotechnical and construction phasing. Responsible for meeting milestones,

quality assurance, and budget.

New Terminal F, Philadelphia International Airport, City of Philadelphia, Division of Aviation, Philadelphia, PA - Project Director for the civil/site work for a 38-gate, $150 million, commuter aircraft terminal. Responsibilities included supervision of design for the access roads, utilities, geotechnical, aircraft parking apron, hydrant fueling, and construction phasing.

New Terminal, Ronald Reagan Washington National Airport, Metropolitan Washington Airport Authority, Washington, DC - Project Director for the civil/site engineering of this major terminal expansion, estimated at $500 million in total construction cost. Managed such elements as planning and final design for a new bi-level roadway, new aprons, and all associated utilities.

Terminal A Expansion, Philadelphia International Airport, City of Philadelphia, Division of Aviation, Philadelphia, PA - Managed the design of apron, roadways, and utilities associated with this $105 million terminal expansion, an 11-gate addition to the existing terminal facility. The project was designed for phased construction and included three separate engineering design contracts (apron, land side roadways, and utilities) totaling $22 million in construction cost.

Various Projects, Teterboro Airport, Teterboro, NJ - Directed design and construction inspection for the rehabilitation of Taxiways G and A, new IFR holding apron, and airport-wide taxiway guidance sign replacement.

Dulles International Airport, Metropolitan Washington Airport Authority, Washington, DC - Directed the design of a 2,600-foot-long concrete taxiway with all associated utilities and lighting.

South Jersey Regional Airport, Lumberton, NJ - Project Director for replacement of the existing antiquated runway lighting system. The new system includes a pilot actuated medium intensity lighting system with REILs, VASI, additional taxiway lighting, and new constant current regulator.

Albany International Airport, Albany, NY - Directed the design of several projects both landside and airside, including rehabilitation of apron, taxiways, and service roads.

Naval Air Engineering Center, Lakehurst, NJ - Managed a condition survey and study for repair of Westfield Runways 6-24 and 15-33. Also managed final design of test department runway and diversion taxiway.

New Jersey Air National Guard Fuel Apron, McGuire Air Force Base, NJ - Directed the design of a six-position, 80,000 square yard parking apron with hydrant fueling for KC-135 aircraft.

Route 17 Park and Ride Facility, New Jersey Transit Corporation, Ramsey Borough, Bergen County, NJ - Project Director for this civil portion of this design/build project for a new commuter rail station on New Jersey Transit's Port Jervis Line. Civil responsibilities include soil erosion control design and permit application / approval, site drainage including the detention basin, "kiss-n-ride" area and sidewalk ramps to the platforms that conform to ADA requirements. Intersection improvements include signalization, lane islands, stripping, sidewalks and curbs and the extension of sidewalks into the surrounding residential area.

Atlantic County Park at River Bend, Mays Landing, NJ - Project Director for this assignment which involved the preparation of contract documents, plans, and specifications for a recreation center and various other sports facilities. Included incidental improvements to roadways, parking areas, walkways, and other amenities at the 250-acre park, required a high degree of environmental coordination for wetlands impact within the sensitive New Jersey Pinelands preservation area.

NAME CHRISTOPHER G. GUBENO, PE

TITLE DEPUTY DIVISION MANAGER, AIRPORTS/CIVIL/SITE

SERVICE AREA AVIATION

Years of Experience: 19

Registrations/Memberships

- Professional Engineer – PA, VA, MD
- Airport Consultants Council
- American Association of Airport Executives
- American Society of Civil Engineers
- Whitemarsh Township (PA) Planning Commission, (2003-Present)
- Whitemarsh Township (PA) Open Space Committee (2007-Present)

Education

- BS, 1990, University of Pennsylvania, Systems Science and Engineering
- Certificate, 1998, Dale Carnegie Course
- Certificate, 2006, Urban Engineers, Inc., Project Management Training

Mr. Gubeno has extensive airport planning, airport design, and civil engineering experience on various sized projects. Mr. Gubeno's civil engineering design and construction background includes the design of runways, taxiways, and aprons, utilities, roadways, terminal buildings and facilities, hangars, parking lots, land development for commercial properties, implementation of environmental controls and coordination for environmental permitting, and navigational aid design. Mr. Gubeno's planning background includes forecasting and alternatives analysis for master plans, master plan updates, and airport layout plans using FAA planning standards, and planning integration for environmental impact statements and environmental assessments. Mr. Gubeno's experience includes:

International Arrivals Building Expansion, Metropolitan Washington Airports Authority, Washington Dulles International Airport, Dulles, VA - Project Manager of the site/civil and construction phasing design for the expansion of the existing IAB west of the Main Terminal Building. The project included the design of an addition to the west of the existing IAB, expansion of the IAB facilities and operations, relocation of the mobile lounge dock and redesign of the airfield and landside pavements and utilities. The civil site portion of the work included the design of construction phasing to maintain the existing IAB and the existing or new mobile lounge dock open for operation during construction in addition to the redesign of the airside pavements and utilities south and east of the building addition, coordination of the design of baggage cart ramps into baggage basements, reconfiguration of surface parking lots for dignitary and VIP pickup and employee parking to the west of the addition and a design of a new employee parking lot to the west of the project site. The construction phasing of the project was integral to the overall completion of the construction to maintain a secure AOA, operations of ground service vehicles and mobile lounges, access to the existing IAB mobile lounge dock and construction of the phases of the building. Mr. Gubeno also managed the construction phase services for the project including requests for information (RFIs), submittal reviews, attending site meeting and directing civil/site changes to the contract documents during construction. Urban is a subconsultant to PGAL. The construction estimate for the overall project, including the civil work, is approximately $125 million.

Parking Garages A and B/C Expansion, Metropolitan Washington Airports Authority, Ronald Reagan Washington National Airport, Washington, DC - Project Manager of the site/civil and construction phasing design for the addition of an additional level onto the top of Garage A and Garage B/C. The project included the design of an additional deck onto each of the existing parking garages, including extension of stair towers and elevators, and relocation of rental car facilities within one of the garages. The civil site portion of the project included the widening of existing traffic lanes around the garages, the design of a temporary vehicle ramp to permit contractor use of an existing ramp during construction for

lay-down and staging space, temporary and permanent signage changes around the garages, and restoration of the site to the pre-construction conditions. The project required significant analysis of traffic and construction phasing to maintain access around the garages and recirculation roads. Additionally, the design included analysis of staging and scheduling of the work to maximize contractor use and production. Mr. Gubeno also managed the construction phase services for the project including requests for information (RFIs), submittal reviews, attending site meeting and directing civil/site changes to the contract documents during construction. Urban is a subconsultant to Ammann & Whitney. The construction estimate for the overall project, including the civil work, is approximately $35 million. (2005-2008)

Runway 17-35 Extension Project, Philadelphia International Airport, City of Philadelphia, Division of Aviation, Philadelphia, PA - Project Manager for the airfield design that included a 400-foot extension to Runway 35 (south) and a 640-foot extension to Runway 17 (north). The airfield design included the design of both runway ends and parallel taxiways D and E east and west of RW 17-35. The project required significant planning and phasing of the projects in advance of the final airfield construction that included significant stormwater management; design of the enclosure of the main drainage ditches north of RW 17; surcharging of the RW 35 end of the site due to subsurface soils; coordination of design with the FAA for new localizers, glide slopes, and MALSR systems; threatened and endangered species mitigation in the form of turtle ramps and nesting sites; erosion and sediment pollution prevention planning and phasing; utility relocations and installations; and paving of the runway and associated taxiways. The most important parts of the project were the incorporation of the phasing, scheduling, and packaging into the design and the coordination with the FAA Eastern Region regarding the design of the NAVAIDs and maintenance of the airfield to meet Part 139 Certifications. The project was broken into smaller packages for bidding and scheduling purposes to meet a fast-track opening date set for the project as part of the FAA RTAP and fast-track program - OEP. Mr. Gubeno managed the construction phase services for the airfield portions of the project including requests for information (RFIs), submittal reviews, and directing civil/site changes to the contract documents during construction. Urban was the prime consultant with six subconsultants. The overall cost of the project is estimated at $55 million.

Tier 2 South Apron Phase 1, Metropolitan Washington Airports Authority, Washington Dulles International Airport, Dulles, VA - Project Manager for a four position hardstand parking apron for wide body aircraft. The project entailed the design of a 35,000 square yard hardstand parking apron that included stormwater, hydrant fuel, dedicated fire service water mains and apron lighting. Managed the project and integrated the hardstand apron design issues into the future utilities and expansion for the full Tier 2 South Apron. Managed and led the coordination with the airlines and operations on construction phasing in order to maintain the current airline use of the adjacent Concourse G and Apron G operations as well as the adjacent baggage transfer building operations. Mr. Gubeno also managed the construction phase services for the project including requests for information (RFIs), submittal reviews, attending site meeting and directing civil/site changes to the contract documents during construction. Urban is a subconsultant to Kohn Pedersen Fox Associates. The construction cost for the project is approximately $11 million.

Terminal A West, Philadelphia International Airport, City of Philadelphia, Division of Aviation, Philadelphia, PA - Project Manager for the apron design of a $350 million facility. This included demolition of four existing buildings, coordination of environmental mitigation packages for asbestos and lead paint removal from the existing buildings, over 2 acres of wetlands mitigation, surcharging and phasing of the site, utility relocations and design including stormwater, sanitary and water mains, design of a 1,800,000 square foot aircraft parking apron, and overlay and construction of new and existing taxiways. Urban was subconsultant to Kohn Pedersen Fox Associates. The construction cost for the overall project was approximately $22 million.

NAME KEITH W. FOGLIA, PE, LEED® AP
TITLE PROJECT MANAGER
SERVICE AREA AVIATION

Years of Experience: 23

Registrations/Memberships

- Professional Engineer – PA, MD
- NICET Level III
- LEED® AP

Education

- BS, 1986, Rutgers University, Civil Engineering
- Certificate, 2004, Dale Carnegie Course
- Certificate, 2008, Urban Engineers, Inc., Project Management Training

During Mr. Foglia's service with Urban Engineers, he has had the unique opportunity to gain both design and field experience. As a Site Design Engineer, Mr. Foglia has experience in developing site construction plans and specifications for airports, airfields, parks, sporting arenas, and transportation facilities. His experience includes design for runways, taxiways, and aircraft parking aprons, roadways, parking lots, stormwater management, utilities, on-site sewage disposal, water supply systems, and site grading. Mr. Foglia's experience includes:

Terminal F Expansion, Philadelphia International Airport - Senior Project Engineer for stormwater management design for terminal expansion. The project included a baggage claim building, access roadways, a building for baggage make-up and the associated airfield utility relocation and apron reconstruction to accommodate expanded airfield terminal facilities.

New Jersey Air National Guard Arm / Disarm Apron, Atlantic City Airport - Senior Project Engineer for airfield design for this holding apron adjacent to Runway 31 where F-16 & F-15 fighter jets hold prior to takeoff so that their weapons can be armed. The project included an earthen revetment impact berm designed to prevent a misfire from endangering inhabited areas. A mix of FAA and Military design criteria were used to satisfy the needs of the Air National Guard operating at this civilian airport.

Terminal E Expansion, Philadelphia International Airport - Senior Project Engineer and Associate Project Manager for site civil and airfield design for terminal expansion. The project included a baggage claim building on the arrivals road, a building for baggage make-up, security screening, restaurants, concessions and VIP lounge on the departures road and an airfield concourse hammer head expansion that provided hold room and jetway access to seven new aircraft positions at the end of concourse E.

United Airlines Express ACA Aprons, Taxiway and Holdrooms, Dulles International Airport- Senior Project Engineer and Associate Project Manager for the airfield design, civil site work and taxiway design for 19 position and 24 position commuter aircraft aprons. Each apron had hold room buildings. They were connected by new bus parking areas, service roadways and a new taxiway.

Tier 2 / Concourse C APM Sitework and Excavation, Dulles International Airport- Senior Project Engineer and Associate Project Manager for the site civil design of underground station excavation, site utilities and service roads around a new underground station for the Automated People Mover system at Dulles.

Concourse C Connector Tunnel Bypass Taxiways, Dulles International Airport- Senior Project Engineer, Associate Project Manager for a temporary taxiway design to facilitate continuous aircraft traffic during the construction of a pedestrian connector tunnel under existing taxiway E.

Aircraft Parking Layout for Jet Blue at Terminal 6, JFK International Airport, NY - Prepared planning schematics and detailed striping layout plans for the layout of aircraft

parking around Terminal 6. Planning alternatives were developed to accommodate revised aircraft parking that allowed aircraft to make use of existing hydrant fuel pits. Several alternatives were developed that made use of existing and proposed jetways.)

Tier 2 North and South Aircraft Parking Apron, Washington Dulles International Airport - Project Engineer for the design of aircraft parking aprons around the proposed Tier 2 International Terminal. Pavement, grading, drainage and utilities layouts were developed for aircraft parking between existing Taxiway C and Taxiway F. Various grading alternatives were developed and estimated for earthwork quantities in an effort to determine the most practical and economical grading alternatives.

Tier 3 Northwest Aircraft Parking Apron, Washington Dulles International Airport - Project Engineer for the detailed design of a remote aircraft parking apron. This apron had to be designed for construction in advance of the future Tier 3 Terminal project. Detailed grading was developed for the entire apron area from south of Taxiway F to the north side of the Tier 4 Terminal. The Tier 3 Northwest Apron concrete pavement grades were designed to match the future apron grades. This project included stormwater management, oil/water separators, dedicated fire fighting water pipes, electrical utilities and a hydrant fuel system. The project also included relocated ground service vehicle and snow removal equipment parking areas and the design of additional parking apron in the area of Tier 2 Southeast Apron.

Hammerhead D Aircraft Parking Apron, Philadelphia International Airport, Philadelphia, PA - Project Manager for the design of aircraft parking apron around a new extension to Terminal D at Philadelphia International Airport. The apron had to be re-graded so that storm water would drain away from the proposed building. New inlets were provided to allow storm water run-off to collect between aircraft. A water main was run around the building to supply water for fire hydrants and sprinklers. Existing and proposed pavement was evaluated for the new aircraft mix including a gate for the Boeing 777-200. An adjacent taxiway was relocated as part of this design.

International Terminal A West, Philadelphia International Airport, Philadelphia, PA - Project Engineer for the design of new aircraft parking apron around a new international terminal at Philadelphia. Elements of this design included airport geometry, construction phasing, building and utility demolition, utility relocation, surcharge grading, hydrant fueling, apron pavement, drainage, grading and erosion control.

Commuter Terminal F, Philadelphia International Airport, Philadelphia, PA - Project Engineer for the design of a new 38-gate aircraft parking apron surrounding the new terminal for regional aircraft. Design scope included utility relocations, hydrant fueling, building demolition, surcharge grading concrete and asphalt pavement design, drainage, grading and erosion control.

US Airways Remote De-Icing Apron, Philadelphia International Airport, Philadelphia, PA - Project Engineer for the design of new aprons and taxiways for de-icing aircraft near the runways. The design includes provisions for fixed pedestal de-icing equipment, underground glycol and water supply, concrete apron and asphalt taxiways.

Philadelphia International Airport Runway 8-26 Paving, Drainage and Lighting Package, Philadelphia, PA - Civil engineer for the design of a new 5,000-foot runway for commuter aircraft. This project includes a 500 foot tunnel under the east end of the runway for the relocated Hog Island Road and Conrail service track.

Midvale Bus Facility, Southeastern Pennsylvania Transportation Authority, Philadelphia, PA - Civil engineer for the design of a bus maintenance and enclosed storage/parking facility for 250 buses and a parking lot for the personal vehicles of the over 500 employees that will work out of this facility. This site design included on-site fuel stations and over 1.2 miles of new and re-designed access roadways.

NAME DAVID R. BENNER, PE
TITLE VICE PRESIDENT
SERVICE AREA AVIATION

Years of Experience: 38

Registrations/Memberships

- Professional Engineer – PA, NJ, MD, VA

Education

- MS, 1975, Drexel University, Civil Engineering
- BS, 1972, Drexel University, Civil Engineering
- Certificate, 1997, Dale Carnegie Course

Mr. Benner has extensive and diverse engineering experience emphasizing airport development. His knowledge of airport design and procedures has been nurtured through exposure to a variety of projects and people at airports throughout the northeast. Before working in the private sector, Mr. Benner worked for the Division of Aviation at Philadelphia International Airport where he began his distinguished career in aviation. Therefore, he is familiar with and sensitive to the needs of airport owners/managers as well as those of the designer. Throughout his career, Mr. Benner has worked with various state aeronautical agencies and FAA personnel through which he has developed an excellent host of contacts who can facilitate the progress of project development. He brings broad ranging skills to projects gained through a wide variety of exposure on numerous airport project designs. Mr. Benner's experience includes:

Phase II Fueling Apron, McGuire Air Force Base, New Jersey Air National Guard - Project Manager for design of the 75,000-square yard extension of the KC-135, concrete parking apron which included provisions for hydrant fueling. The project was coordinated with the simultaneous construction of the new fuel cell maintenance hangar. Combined with the Phase I apron, the new apron has the capacity for parking 18 KC-135 aircraft. The grading concept for the apron was established to accomplish two goals: one, aircraft should each park on a ridge in order to level the planes and facilitate fueling and two, ensure that all paved surfaces slope away from the plane and toward a catch basin in the event of a fuel spill. Any spilled fuel would be captured by the stormwater system and passed through a gravity type oil/water separator. The separator was sized to contain fuel volume equivalent to the largest fuel cell on the KC-135. In addition to deadman shutoff controls at each fuel pit, there are radio controlled panic shutoff stations strategically placed around the apron perimeter. The project was carefully scrutinized using established quality assurance procedures employed by Urban and now incorporated with its recent ISO 9001 certification. Mr. Benner was involved in regular coordination with Urban's resident engineer during the construction phase.

Deicing Apron, Philadelphia International Airport - Project Manager for the aircraft deicing apron for two Group V, two Group IV, and six Group III aircraft deicing stations. Studies preceded design to select the appropriate apron location considering taxiing patterns and predominant arrival and departure directions during inclement weather. Airline schedules were compared to runway departure rates to assess the number of deicing stations. A graphical taxiing simulation was reviewed with the client and later demonstrated for the FAA and airlines to illustrate how the project would fit the existing taxiway flow. The simulation pointed out the need for a second taxiway connector to the runway end. That taxiway was subsequently included with the project. The extra taxiway would reduce holdover time on the applied glycol as well as allow clockwise taxiing routes, hence, efficient aircraft circulation. The apron included underground glycol distribution piping and pedestal mounted application equipment. The use of underground delivery of pre-heated glycol Types 1 and 4 combined with fixed pedestal glycol spray units was expected to shorten typical deicing times by as much as 50 percent. An added benefit of the underground delivery was reduced vehicle traffic to and from the apron and circulating around the aircraft.

Reduced vehicle circulation increased operational safety.

Apron B-C-D, Philadelphia International Airport, City of Philadelphia, Division of Aviation - Project Design Manager for complete reconstruction of Apron B-C-D (130,000 square yards of concrete), including phasing, demolition, utilities, aircraft parking layouts, pavement design, contract documents, and office technical support during construction. There are 26 active gates in the B-C-D work area; the design was prepared to maintain operations with no more than two gate closures at any given time.

Baltimore/Washington International Airport, General Engineering Services - Project Manager for a two-year on-call services contract for varied task order services to the Maryland Aviation Administration (MAA). Urban prepared a composite set of drawings cataloguing leaseable space in the entire Terminal building including accurate measurement of all spaces. The package was developed in AutoCAD with open architecture that would allow conversion to a Geographic Information System. Mr. Benner developed a training syllabus and conducted hands-on training classes for MAA personnel who would be using and updating the delivered system.

General Engineering Services, Atlantic City International Airport, South Jersey Transportation Authority - Project Manager for this continuing on-call services contract to supplement the engineering staff on a variety of task order assignments. Under his direction, Urban has developed contract documents for airport construction, aided the Authority in developing their CIP, performed various studies and surveys, plus responded to any needs of the client in a timely manner. As the Authority has a small engineering staff, Urban provides full-service engineering and also acts in a program management capacity. Urban also frequently provides construction management coordinated by Mr. Benner as in the Runway 13-31 rehabilitation project and the current terminal security improvement project.

Runway 6-24 Rehabilitation, Northeast Philadelphia Airport - Project Supervisor responsible for guidance and reviews and using airport design knowledge to set design criteria. This 7,200-foot-long primary runway was completed within the construction schedule with minimal traffic interruption. The intersection of two runways was rehabilitated during a weekend closure of the airfield in order to minimize impacts to operations.

Runway 15-33 Rehabilitation, Northeast Philadelphia Airport - Project Supervisor for the rehabilitation of this bituminous "W" section runway. The runway is the secondary runway with lightweight users. The pavement was beginning to fail due age factors such as oxidation and shrinkage cracking rather than load induced failure. During pavement aging, many surface cracks had developed which were repaired prior to overlay. Cracks were identified for the contractor's benefit through aerial photography after a rainfall; those aerial photographs were incorporated with the contract plans.

General Engineering Services Contract Manager, Philadelphia International Airport, City of Philadelphia, Division of Aviation, Philadelphia, PA - Mr. Benner has continuously managed the three-year, on-call services contracts for the City of Philadelphia for over 10 years. These on-call contracts provide services at Philadelphia International and Northeast Philadelphia Airports. The most recent contract has had over 100 task order assignments with tasks ranging from as little as $200 up to as much as $160,000. Mr. Benner establishes and tracks budgets for all task orders as well as orchestrates and supervises the engineering work. Assignments included engineering design and/or construction management; review of tenant development drawings; and miscellaneous engineering support. With over 100 task orders, the type of work ranges from new to renovation to simple repairs. Landside, airside, and building work are samples of the typical tasks required.

NIRANJAN DOSHI, PE *KS Engineers, P. C.*
Project Engineer – Civil

EDUCATION
BS / Civil Engineering / Gujarat University, Gujarat, India / 1964
Masters in Materials in Data Processing and Computer Programming, Computer Educational Institute, Philadelphia, PA, 1969

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
Professional Engineer – NJ ([redacted])
Certificate of Public Works Manager, NJ.

EXPERIENCE SUMMARY
Mr. Doshi has 39 years of civil engineering experience in the design of underground piping systems and site design. His experience includes the following: hydraulics and hydrology studies; highway and street design; site development; traffic and parking facilities; railroad maintenance facilities; storm sanitary and industrial waste sewer systems design; design of fire, process and potable water systems; design of underground fuel tanks and associated piping; preparation of permit applications for DEP and township approvals for sewerage systems; storm water management; soil erosions & sediment control and Environmental engineering; preparation of engineering specifications, requisitions, design reports; and shop drawing reviews, construction coordination and supervision of various private and government projects:

PANYNJ, Professional Civil Engineering Services (MBE/WBE) as Requested on a "Call-In" Basis during 2008, 2009 and 2010, NY/NJ – Senior Project Engineer/Task leader for the civil engineering services on a "Call-In" basis. Services provided generally consist of preparing civil engineering designs, contract drawings, technical specifications, and construction cost estimates for a variety of new projects, also rehabilitation, restoration and resurfacing of existing and new parking lots and roadways. Worked on the following projects as a Task Leader:

- SWF – New Employee Parking Lot – Design of grading & drainage, pavement design, roadway lighting, signing and striping design, etc. Responsible for Stage III (Final Design) drawings, specifications and estimates.
- SWF – The Milling and Resurfacing of a Portion of Cargo Road in the vicinity of Reese Aviation FedEx Maintenance Hanger - Stage IV – Design of the reconstruction of a portion of an existing land side roadway and adjacent parking area including design of the grading & drainage, pavement design, signing and striping design, etc. Responsible for preparation of Stage III (Final Design) drawings, specifications and estimates.
- SWF – Expansion of Parking Lot "D" – Design of the expansion of an existing parking lot including design of the grading & drainage, pavement design, signing and striping design, etc. Responsible for preparation of Stage III (Final Design) drawings, specifications and estimates.
- SWF – Rehabilitation of R/W 9 Approach Lighting & Cables – Design services for the replacement of runway approach lighting and cables. Responsible for preparation of Stage III Civil (Final Design) drawings, specifications and estimates. Work included removal of airfield pavement markings, design of new temporary and permanent airfield pavement markings and pavement restoration around lighting cans.
- SWF – Rehabilitation of Taxiway Edge Lighting & Installation of Flashing Runway Guard Lights - Responsible for preparation of Stage III Civil (Final Design) drawings, specifications and estimates. Work included removal of airfield taxiway pavement markings, design of new permanent airfield taxiway pavement markings, enhanced holding position marking plans and pavement restoration around lighting cans at holding position.
- JFK – High Pressure Fire Protection System Critical Valve Replacement Phase III - Stage III and IV Services – Design services for the replacement of eight (8) High Pressure Fire Protection System Critical Valves. Responsible for Stage III (Final Design) drawings, specifications and estimates.

KSE

PANYNJ, Engineering Department, Staff Service Engineer, Two gateway Center, 16th Floor, Newark, NJ 07102 (January 2003 to 2006) Lead Civil Engineer on following major NY Airport projects:

- Expansion of Runways & Taxiways at Kennedy Airport to accommodate future Airbus A380. Worked on grading, paving, airfield pavement markings and drainage design
- Designed very complex underground piping systems of Parking Garage for American Airlines and 3000 feet long Sanitary Sewer Forced Main Project for JetBlue Terminal. Projects submitted before deadline and saved thousands of dollars in design for both projects and were bid on time.
- Participated in updating civil specifications and many standard civil details of Port Authority Engineering Department, E/A Design Division, Civil Discipline.
- Also worked on Stage I – Civil Estimate, Contract No. JFK-946 and later worked on Stage III design for the Project following selection of the design option
- Hangar 12, Parking Reconfiguration, W.O. # 911.933.080, Stage I Report
- Hangar 12, Parking Reconfiguration, JFK-967 Stage III & IV, worked as a Civil Task Leader. Design of pavement, parking layout and island for bus Stop
- Widening of R/W 13R-31L, JFK-946, Stage I Report
- Relocation of T/W A & Rehabilitation of T/W B, JFK-931, Stage I
- Relocation of T/W A & Rehabilitation of T/W B, JFK-134.105, Stage III, Completed Drainage Design, Worked as a Lead Drainage Design Engineer
- Pump House Modification/Renovation, Civil Work, JFK-916, Stage I Report
- Pump House Modification/Renovation, Stage III, and Completed Civil Design of Fire Protection System around pump House. Worked as a Civil Task Leader.
- Priority Site Construction of 7 Slabs, T/L SB, JFK-911.933, W.O. # 72
- Red Garage, Stage III Civil design, JFK-134.100A, 2004 & Stage IV, JFK-134.100B, 2005 and 2006, worked as a Civil Task Leader. Design included relocation of existing large storm sewer and water quality control structure design, Domestic & Fire Protection water systems. Also worked on Stage IV, PACC's and construction coordination for the site work.
- Contribution in preparing Presentation for NLA – Widening of R/W & Pavement design
- Study of Outfall # 3, JFK-945
- Modification of Fire Protection System around building 263/264, Stage I, III, and IV. W.O. # 960.002 & JFK-973, 2004 & 2005. Worked as a Civil Task Leader.
- Completed stage III 100% design submission on Sanitary Sewer Force Main Project for Jet Blue, Terminal 5, Contract No. JFK-424.000. Worked as a Civil Task Leader. Also worked on stage IV at JFK Airport, review of shop drawings and construction coordination.

ROBERT S. NASH, PE, PTOE, CME, LEED Green Associate ***KS Engineers, P.C.***
Task Leader – Civil & Traffic Engineering Design

EDUCATION
MS/Transportation Engineering, Brooklyn Polytechnic Institute, Brooklyn, NY, 1980
BS/Civil Engineering, Brooklyn Polytechnic Institute, Brooklyn, NY, 1978

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
Professional Engineer - NJ ([redacted] Expires: 4/30/12)
Professional Traffic Operations Engineer (Expires 11/17/2011)
Certified Municipal Engineer
PPS Context Sensitive Design
TCC (Traffic Control Coordinator), Rutgers (02/22/05-02/25/05)
Traffic Signal Design Approval Process (1.5 PDH), Rutgers (Issued: 2/15/06)
Road Safety Audit Train the Trainer (Issued: 3/26-27/2008)
Electrical Signal Design (7/31-8/1/2008)
Construction Management (22.5 PDH & 2.25 CEU), (NJIT, Issued: 9/26/08)
LEED Green Associate

EXPERIENCE SUMMARY
Mr. Nash has 32 years of experience in the geometric and civil design of various types of highways, roadways, bridges, and park and ride lots. He has also managed numerous transportation facilities reconstruction projects. He has held the positions of Senior Highway and Traffic Engineer and Director of Transportation for private consultants and was a public transportation engineer for municipalities in New York State. He also served as Traffic Engineer for the City of Yonkers. His representative project experience includes:

PANYNJ, Expert Professional Civil Engineering Services (MBE/WBE) as Requested on a "Call-In" Basis during 2008, 2009 & 2010, Various Locations, NY and NJ – Project manager as Prime Consultant responsible for providing civil engineering services on a "Call-In" basis during 2008 and 2009. Services provided generally consist of preparing civil engineering designs, contract drawings, technical specifications, and construction cost estimates for a variety of new projects, also rehabilitation, restoration and resurfacing. To date *KSE* has worked on the following:

- JFK – High Pressure Fire Protection System Critical Valve Replacement – Design services for the replacement of eight (8) High Pressure Fire Protection System Critical Valves. Responsible for Stage III (Final Design) drawings, specifications and estimates.
- Stewart International Airport (SWF) New Employee Parking Lot – Design of grading & drainage, pavement design, roadway lighting, signing and striping design, etc. Responsible for Stage III (Final Design) drawings, specifications and estimates.
- SWF - Rehabilitation of Cargo Road and Parking Area for Building 2290 – Design of the expansion of an existing parking lot including design of the grading & drainage, pavement design, signing and striping design, etc. Responsible for preparation of Stage III (Final Design) drawings, specifications and estimates.
- SWF - Expansion of Parking Lot "D" – Design of the rehabilitation of a section of land side airport. The project also entailed all aspects of roadway design, preparation of MPT Plans, and Pavement Marking Plans. Responsible for preparation of Stage III (Final Design) drawings, specifications and estimates.
- SWF – Rehabilitation of R/W 9 Approach Lighting & Cables – Design services for the replacement of runway approach lighting and cables.
- SWF – Rehabilitation of Taxiway Edge Lighting & Installation of Flashing Runway Guard Lights - Responsible for preparation of Stage III (Final Design) drawings, specifications and estimates.

PANYNJ, Expert Professional Civil Engineering Services as Requested on a "Call-In" Basis during 2008 for New Employee Parking Lot at Stewart International Airport, NY – Project Manager responsible for providing civil design services for project at Stewart International Airport. The project entailed the design of a new parking lot including design of the grading & drainage, pavement design, roadway lighting, signing and striping design, etc. *KSE* responsible for among other tasks the preparation of Stage III (Final Design) drawings, specifications and estimates. *KSE* is currently awaiting the commencement of Stage IV (Construction Phase) Services

PANYNJ, Expert Professional Civil Engineering Services as Requested on a "Call-In" Basis during 2008 for Rehabilitation of Cargo Road and Parking Area for Building 2290 at Stewart International Airport, NY – Project Manager responsible for providing civil design services for project at Stewart International Airport. The project entailed the design of the rehabilitation of a section of land side airport roadway utilized by Federal Express to access a hanger. The project also entailed all aspects of roadway design, preparation of Maintenance and Protection of Traffic Plans, and Pavement Marking Plans. *KSE* responsible for among other tasks the preparation of Stage III (Final Design) drawings, specifications and estimates.

PANYNJ, Expert Professional Civil Engineering Services as Requested on a "Call-In" Basis during 2008 for Expansion of Parking Lot "D" at Stewart International Airport, NY – Project Manager responsible for providing civil design services for project at Stewart International Airport. The project entailed the design of the expansion of an existing parking lot including design of the grading & drainage, pavement design, signing and striping design, etc. *KSE* responsible for among other tasks the preparation of Stage III (Final Design) drawings, specifications and estimates.

City of Bayonne, Design of the Replacement of One Existing Signalized Intersection and Design of a New Signalized Intersection, Bayonne NJ – Project Manager responsible for design of the replacement of the existing Broadway and 38th Street signalized intersection and the design of a new traffic signal installation for the intersection of Prospect Avenue and 32nd Street. The purpose and objective of this project is to replace an existing, outdated intersection with a current state-of-the-art traffic signal installation and to install a completely new signalized intersection.

Union County, Design of the Upgrade of Three Traffic Signal Installations, City of Elizabeth, Union County, NJ. – Project Manager responsible for this project which entails the upgrading of three existing traffic signal installations. Services provided included traffic volume data collection, preparation of collision diagrams from accident data, preparation of traffic signal warrant analysis, preparation of traffic signal plans, and preparation of electrical plans, specifications, and engineer's estimate for construction documents.

Hudson County, Design of 10 Traffic Signal Installations at Various Locations Within Hudson County NJ (Package "P") – Project Manager responsible for the preparation of detailed design plans and construction bid documents for the installation of new traffic signals and upgrading of existing installations at various locations throughout the County. Services provided included traffic volume data collection, preparation of collision diagrams from accident data, preparation of traffic signal warrant analysis, preparation of traffic signal plans, and preparation of electrical plans, specifications, and engineer's estimate for construction documents.

TUNNELS, BRIDGES AND TERMINALS

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ENGINEERS OF NEW YORK, P.C.
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NAME PAUL T. DIONISIO, PE
TITLE SENIOR PROJECT MANAGER
SERVICE AREA TUNNELS, BRIDGES AND TERMINALS

Years of Experience: 34

Registrations/Memberships

- Professional Engineer – NY, NJ, CT, FL
- American Society of Civil Engineers
- AIA/American Consulting Engineers Council Committee
- American Consulting Engineers Council - Metro Region

Education

- MS, 1976, Cornell University, Civil Engineering
- BS, 1975, Cornell University, Civil Engineering

Technical Expertise: Railroad and highway bridge inspections and designs (over 5,000 bridges). Railroad station improvements (over 50 stations). Bus, rail, and highway maintenance facility studies, renovations, and new designs (over 35 shops). Various subway pump room and electrical room renovations. Various subway drainage system improvements. Extensive buildings and highway bridge designs.

Dewberry-Goodkind, Inc. - Senior Associate: Director Rail and Mass Transit. (May 1995-2010)

Stone & Webster Engineering Corporation - Assistant Structural Division Manager and Supervisor/Project Manager/Project Engineer. (1987-May 1995)

Iffland Kavanagh Waterbury, P.C. - Project Engineer/Resident Engineer/Team Leader/ Quality Control Engineer. (1979-1987)

Malcolm Pirnie, Inc. - Senior Structural Engineer/Assistant Resident Engineer. (1975-1979)

Rehabilitation of Four Stations and Elevated Structures on the West End Line, MTA New York City Transit, Brooklyn, NY - Project Manager for civil, traffic, structural, geotechnical engineering, and transit operations analysis for this $160 million project. Led the rehabilitation design of four elevated stations. Also led the rehabilitation design of six miles of elevated structure and component rehabilitation for eight stations. Served as key member of high profile, risk management study.

Rehabilitation of Atlantic Avenue Viaduct, MTA-Long Island Rail Road, Brooklyn, NY - Project Manager for preliminary design services to develop design-build bid documents for the $150 million rehabilitation of the 8,000-foot-long, 199-span Atlantic Avenue Viaduct.

Various MTA-NYC Transit Authority Indefinite Quantity Engineering Services Contracts - Various Counties, NY - Project Manager responsible for over 100 task orders. Major tasks included drainage improvements for 25 sites, painting of Astoria Line, and system-wide management study of elevator program.

Trenton Station Renovation, New Jersey Transit, Trenton, NJ - Project Manager for final design and construction support services for the $79 million program. Responsible for structural, geotechnical, civil, and traffic engineering.

Mount Vernon (East) Transportation Center, MTA Metro-North Railroad, Mount Vernon, NY - Project Manager responsible for extensive City interfaces; design services for the intermodal center, including a station building and platform; a new overpass; bus access; and a 350-parking space commuter parking facility.

Montclair Connection Value Engineering, New Jersey Transit, Bloomfield, NJ - Project Manager/Value Engineer responsible for civil, structural, and geotechnical value engineering services for this $50 million project. Provided key contributions to $7.3 million final accepted savings.

NAME EDWIN J. WILLIAMSON, PE
TITLE SENIOR PROJECT MANAGER
SERVICE AREA TUNNELS, BRIDGES AND TERMINALS

Years of Experience: 33

Registrations/Memberships

- Professional Engineer – NJ
- American Society of Civil Engineers
- National Society of Professional Engineers
- Construction Management Association of America

Education

- BSCE, 1980, New Jersey Institute of Technology , Civil/Structural Engineering
- Certificate, 2008, Urban Engineers, Inc., Project Management Training
- MSCM, 2009, Stevens Institute of Technology, Construction Management

Mr. Williamson has extensive diversified experience in the engineering, design and construction of transportation infrastructure facilities. Mr. Williamson served as Project Engineering Manager on a new light rail transit project in New Jersey. He was Project Manager and Field Project Engineer for resident engineering and construction inspections services agreements on three major highway/arterial projects having a total construction value exceeding $130 million. He is currently serving as Senior Project Manager providing project management oversight services on a federally funded multi-billion dollar rail transit project in New York City. Mr. Williamson's experience includes:

Project Management Oversight Consultant, Federal Transit Administration, Region II Major Capital Projects, NY.

Mr. Williamson is currently serving as Assistant Project Manager on the Project Management Oversight (PMOC) team responsible for monitoring the progress of Federal Transit Administration (FTA) funded projects for the New York Metropolitan Transportation Authority (MTA) and the New York City Department of Transportation.

MTA - East Side Access Project

Project Oversight and Monitoring

Since 2006, Mr. Williamson has served as Assistant Project Manager providing construction and railroad force account monitoring and schedule reviews, attending monthly and quarterly progress meetings and preparing PMOC observation reports.

Risk Analysis and Mitigation

During 2006, Mr. Williamson provided key support for preparation of the Risk Assessment and Risk Management Study for the $7.24 billion East Side Access Project (ESA) to provide Long Island Rail Road service directly into Grand Central Terminal located in midtown Manhattan, New York City. The Study was prepared for the FTA and involved an in-depth review and analysis of the project's scope, schedule and budget to identify and assess risks and to develop risk mitigation strategies for use throughout the duration of the project. Mr. Williamson developed and completed a final report to the FTA in 2007 that included the results and recommendations from the Risk Assessment and Risk Management Study. Starting in 2007 and continuing into 2008, he is leading the current effort to develop and complete two of the five major reports to the FTA that will provide updated status of the Project's risk profile and risk mitigation commitments.

Full Funding Grant Agreement

In 2006, Mr. Williamson completed a comprehensive report that confirmed the grantee's (MTA) readiness to enter into a Full Funding Grant Agreement (FFGA) with the FTA. This report was one of several key documents that provided the basis for the USDOT/FTA to enter into the FFGA with the MTA on December 18, 2006.

MTA - Long Island Rail Road

Mr. Williamson served as Project Manager providing oversight on two Long Island Rail Road projects: the $115 million Atlantic Terminal Improvement Project in Brooklyn, NYC; and the Annual Track Work Program typically valued at $50-60 million per year.

- Atlantic Terminal is the third busiest transportation terminal in New York City after Grand Central Terminal and Penn Station. The improvement project included the complete rehabilitation of an existing underground LIRR terminal station at Flatbush Avenue as well as the passenger connections from LIRR to 10 New York City Transit (NYCT) subway lines and 4 NYCT bus lines. A private developer constructed the 4-story, 450,000-sq.-ft. retail center and the 10-story, 364,000-sq.-ft. office tower above the LIRR terminal. NYCT rehabilitated and modernized the existing Atlantic Avenue subway station, which is part of the terminal, as a separate project.
- The Annual Track Work Program provides for the replacement and upgrade of deteriorated track components that have exceeded their life-cycle expectancy. The program includes the installation of both concrete and wood switches and ties, track surfacing, grade crossings rehabilitation, rail profiling, rail joint elimination and switch timber replacements. The associated Track Construction Equipment Program included the purchase of new construction equipment to replace existing equipment that has little or no useful remaining life and to add new equipment required for the safe and efficient maintenance, repair and upgrading of the LIRR track network.

Mr. Williamson's responsibilities on both projects included monitoring, analyzing and evaluating the cost, schedule and contractual performance of these projects. He reviewed Project Management Plans, attended progress meetings, provided evaluation of project management, schedules and budgets and prepared monthly reports to the FTA. Mr. Williamson also worked with the FTA Region II office in preparing for the Long Island Rail Road Quarterly Review meetings that presented progress on all FTA funded projects and programs including the Atlantic Terminal Improvement Project and the Annual Track Work Program.

Rehabilitation of Amtrak New York Rail Tunnels, Amtrak, Bergen Co., NJ and Boroughs of Manhattan and Queens, New York City, NY - Resident Engineer responsible for interface between Amtrak and the construction contractor, supervision of the inspection staff and coordination with other projects underway in the tunnels, ventilation shafts and evacuation shafts. Majority of the work was done during weekend track outages. Safety was a major aspect of the work involving continuous air monitoring in the tunnel, coordination of track outages, disconnection of power to both 13k V overhead catenary and 600 V third rail as well as other life safety issues. Scope of the $30 million project included installation of 72,000 linear feet of 6-inch diameter dry fire standpipe, associated valves and appurtenances, fire department connections and risers at portals and ventilation/evacuation shafts in the East River Tunnels [Lines 1, 2, 3 & 4] and the North (Hudson) River Tunnels [Tracks 2 & 3]. Responsibilities also included oversight and witnessing of hydrostatic pressure and flow tests per NFPA and development of the recommended inspection, testing and maintenance program for the completed system.

Newark Elizabeth Rail Link, Elizabeth Segment (MOS-3), Public Private Partnership: New Jersey Department of Transportation/New Jersey Transit; County of Union, New Jersey; Washington Group Int'l, City of Elizabeth, NJ - Project Engineering Manager, responsible for technical engineering support of project development efforts and environmental review and approval process (DEIS and FEIS). Managed multidiscipline team to complete the System Design & Performance Description, Design Criteria and Preliminary Engineering and Design (plans, specifications, schedule and construction cost estimate). Project is a 5.8 mile long electric light rail system connecting downtown Elizabeth with Newark International Airport and which will be implemented using the Design, Build, Operate and Maintain process with an estimated construction cost of $350 million. Major features include: dedicated two-track guideway with overhead contact system; nine passenger stations; four traction power substations; vehicle maintenance facility and yard; six new rail bridges; 900ft. long rail viaduct; rehabilitation of six existing rail bridges; seven new rail grade crossings and intermodal connections with NJ Transit Northeast Corridor service, Newark International Airport Airtrain and future water ferry service to New York City.

William England, PE, PP – Sr. Project Manager

YEARS OF EXPERIENCE: 30+

EDUCATION:
Masters of Science in Civil Engineering, New Jersey Institute of Technology, Newark, NJ.
Bachelor of Science in Civil Engineering, Newark College of Engineering, Newark, NJ.

CERTIFICATIONS/ REGISTRATIONS:
- Registered Professional Engineer (P.E.) – New Jersey, New York, Pennsylvania, Maryland, North Carolina, Ohio, Delaware, Florida
- Registered Planner (P.P) - New Jersey

AFFILIATIONS:
ASCE, NSPE, NJSPE, NJSME

SUMMARY:
Mr. England is an accomplished, detail oriented professional offering thirty years of engineering design, project management and municipal experience as a consultant and in house municipal engineer. He is a registered engineer in New Jersey, New York, Pennsylvania, Delaware, Maryland, North Carolina and Florida and also a Registered Planner in the State of New Jersey. He has served and Engineer of Record for more than twelve communities in New Jersey and developed complete plans and specifications for numerous schools in the region.

PROFESSIONAL EXPERIENCE:

PROFESSIONAL EXPERIENCE:

Armand Corporation, Cherry Hill, NJ **2009 - Present**
Principal Project Manager

Puerto Rican Unity for Progress (PRUP) New Administration Building. Principal Project Manager assigned to the construction of a new $3.1M administration building and after school center in Camden, NJ. Duties included preparing cost estimates, conducting inspections, reviewing change order and providing analyses; scheduling; punch list; conducting project meetings; and approval of contractor requests for payment.

Gloucester County Road Safety Improvements. Project manager assigned to the construction of road safety improvements in the Township of West Deptford. Work includes re-signalization of Kings Highway and Parkeville Station Road; new handicap ramps; repaving of Mantua Grove Road; and restriping, including the addition of designated left hand turn lanes. Particular attention is required due to the presence of a school and an emergency response headquarters.

Pennsylvania Emergency Management Agency. Project Manager assigned to a team of professionals working on behalf of the owner to develop a new facility for emergency management. Scope includes pre-construction review of construction documents through final construction documents, including cost estimate review. Make recommendations regarding construction estimates as it relates to the project budget, and analyze the site plan for conformance to sound engineering practices.

Fort Monmouth. Project Manager assigned to a team of professionals working with FMERA. Scope of work includes investigating the reuse of the base as part of the base closure by inspecting

the various facilities and completing a cost to upgrade/reuse the facility or demolish the structure(s). Items investigated will be overall condition of the building; code violations; maintenance issues; barrier free access; hazardous material (lead paint, asbestos, etc), and providing cost estimates for same.

CMX, Manalapan and Brick Offices, NJ **1999 – 2009**

Principal Project Manager

- Served as engineer of record for twelve communities in NJ. Responsibilities included roadway improvement, resolution of resident complaints, inspection of developer installed improvements and recommendations for bond releases.
- Provided engineering services for numerous planning and zoning boards.
- Developed complete plans and specifications for numerous schools in NJ, including concept planning, design of access roads, parking areas and bus drop off zones, utility design and stormwater management facilities.
- Construction management as part of a team of professionals for a major stream stabilization and water quality project, providing field and design support. Liaised with government officials in all aspects of the project.
- Design and construction manager for a new park in Hamilton Twp. Completed feasibility studies, hydraulic studies for converting a piped drainage system into a meandering stream, complete with waterfalls, pedestrian paths, ponds and lighting.
- Supported go-lives to accomplish all on time and on budget implementations.
- Design, plans and specification for numerous parks in NJ.
- Managed a department of landscape architects, planners, and GIS staff.
- Participated in management training and leadership workshops.
- Engineer of record for parking authorities.

Bergman Engineering, West Windsor, NJ **1991-1999**

Chief Engineer

- Review of Planning and Zoning Board applications for resolution compliance and final resolution conformance prior to bond release.
- Designed capital improvements for various municipalities including roads, stormwater management facilities, sanitary sewerage facilities, pump station improvements.
- Construction management for various public projects including shop drawing review, processing payment requests, inspection, and project closeout.
- Prepared complete site plans and specifications for numerous schools. Designed sewer, water, fire service, detention systems, etc., and submitted and secured SCS, stream encroachment and other state and local permits.
- Designed and inspected numerous park expansions and rehabilitations.
- Coordinated with government officials and public works directors on special projects.

Schoor and Canger Group, Manalapan, NJ **1989-1991**

Department Manager

- Supervised and managed the work product of a 40 person design department.

EDUCATION
MS/Civil Engineering, University of Illinois, 1967
BS/Civil Engineering, University of Illinois, 1966

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
Professional Engineer – NJ ([redacted], Received: 1985, Expires: 4/30/12), NY [redacted] Received: 1983; Expires: 9/30/11)

TRAINING
The Mini Bridge – Culvert Planning and Design, Rutgers University, Spring 2009
LRFD Steel Bridge Design course, presented by Highway Bridge Services, Boston MA, May 2010
Accelerated Construction Using the Northeast Extreme Tee (Next) Beam, presented by PCI, April 2009
Applications of Fiber Reinforced Polymer (FRP) Composites to Bridge Rehabilitation and Design, presented by ASCE at NJIT including a speaker from FHWA, April 2010.

PUBLICATIONS
Co-author and presenter of paper for 2003 NYC Bridge Conference
"Refined LRFD Analyses Used to Check Inverset Design."
Author and presenter of paper for 2004 national Concrete Bridge Conference
"Striving for 100-Year Bridge Decks –Overcoming Chlorides and Cracking"

EXPERIENCE SUMMARY
Mr. Clausen has 42 years of diverse structural/bridge engineering experience including corporate oversight, section and project management, and design for both highway and railroad bridges. He has designed steel girder and prestressed concrete girder railroad and highway bridges and miscellaneous structures for expressways, river crossings, and railroad relocation projects. He has also led numerous special structural investigations and repair/rehabilitation studies and plan preparation for a variety of clients including the Port Authority. He is the Director of Bridge Design at KS Engineers.

PANYNJ, Performance of Expert Professional Structural Engineering Services (MBE/WBE) On A "Call-In" Basis During 2008, 2009 and 2010 – PA Agreement #'s 415-08-058, 415-09-058 and 415-10-058 – Deputy Project Manager / Task leader for structural engineering services on a "Call-In" basis for the Port Authority of New York & New Jersey. Services provided under this contract generally consist of preparing structural engineering studies, condition surveys, designs, contract drawings, technical specifications and construction cost estimates for a wide variety of new facility structures and structural renovation and rehabilitation projects.

PANYNJ, Performance of Expert Professional Structural Engineering Services (MBE/WBE) On A "Call-In" Basis During 2008, 2009 and 2010 – JFK Airport – Aqueduct Bridge Crossing Stages 3 & 4, NY – Project Engineer for structural design services for contract repairs to the JFK Airport Aqueduct Bridge railings and expansion joints. He was Task Leader during Stage III for performing structural design and preparing the structural contract drawings for the necessary repairs. He investigated the use of Asphaltic Plug Joints, which were used and developed a simple method of ensuring field fit for the railing repairs. .The scope included preparation of General Drawings as well as the structural plans..

PANYNJ, Performance of Expert Professional Structural Engineering Services (MBE/WBE) On A "Call-In" Basis During 2008, 2009 and 2010 – Protective Structures at JFK Airport – Taxiways Q and A, NY - Project Engineer for providing design services for protective slabs at Taxiway A and Q at JFK Airport in Queens, NY. Led the structural design and preparation of structural contract drawings for protective structures over the Junction chamber and triple barreled culverts that run under Taxiway's Q and A. The protective structures are to carry the loads from various aircraft specified by the Authority with allowances for future increases in load and impact. Protective systems include precast slabs, cast-in-place slabs and a steel beam framing system with a steel plate

deck support system. The work also includes preparation of General Drawings and incorporating requirements and drawings from various non-structural disciplines. KSE prepared detailed cost estimates as well as an estimate of the construction duration. During stage IV, KSE attended a preconstruction meeting, reviewed shop drawings, and responded to requests for information.

PANYNJ, Performance of Expert Professional Structural Engineering Services (MBE/WBE) On A "Call-In" Basis During 2008, 2009 and 2010 – JFK Airport – Reconfiguration of Fuel Truck Loading Racks – Project Engineer for Stage I&II design of miscellaneous structural supports for the fuel truck loading racks.

PANYNJ, PATH Rail Structures East & West of Newark Penn Station, NJ - Structural lead for the inspection and rehabilitation of bridge superstructures, piers and abutments used by PATH, some of which were owned by AMTRAK. Project included the development of repair recommendations, contract plans, and services during construction. Bearings were monitored periodically over a 2-year period.

PANYNJ, Amsterdam Avenue Bridge over Trans-Manhattan Expressway, NY - Project Manager for the inspection, evaluation and plans for extensive deck and structural repairs to this structure to the west of George Washington Bridge. Staging of construction, utilities coordination, and M&PT were major considerations.

PANYNJ, Expressway over Amtrak and LIRR, NYC, NY - Project Manager for the inspection, evaluation and plans for extensive deck and structural repairs for this structure leading to the Lincoln Tunnel. Designed emergency repairs when it was discovered that the strands in a prestressed concrete deck panel were extensively corroded. M&PT and coordination with Amtrak, LIRR and NJ Transit were required.

NYSDOT, Richmond Road Bridge Design, Rehabilitation and TMS Measure as Part of 21 Bridge Contract on Staten Island Expressway, Richmond County, NY (Contract D010248) – Project Engineers for structural design of four bridges carrying Staten Island Expressway (S.I.E.) WB and EB over Richmond Road and Targee Street, replacing the steel beam bridges and widening the S.I.E. using prestressed concrete box beams. A similar project is underway for the steel beam superstructure and widening of the Renwick Street Bridge. Prestressed concrete NEXT beams and box beams were evaluated for the replacement. Abutments were also widened.

MTA LIRR, Contract No. 5973-1-5, Release A, POJ6243 – Design for Shinecock Canal, Montauk Highway and North Highway Bridge Rehabilitation Project – Project Manager for KSE's portion of the rehabilitation of three (3) Long Island Railroad bridges located in Hampton Bays, Suffolk County, NY. Responsible for computation of As-Built and As-Inspected Ratings for the North Highway Bridge and the Montauk Highway Bridge including estimates of remaining fatigue life. He performed the conceptual design study for the replacement of the North Highway Bridge abutments and superstructure according to two alternatives, attempting to accomplish the complete replacement in 48 hours. Construction schemes and conceptual cost estimates were prepared for the two schemes. Work also involves computing quantities and estimating costs at the various phases of the work as well as performing a general review of the rehabilitation plans by the prime consultant.

NYCDOT, 145th Street Bridge Reconstruction Support Services, New York, NY - Provided oversight for shop drawing review of bridge deck replacement using prefabricated Inverset and Effideck systems.

MTA Bridges & Tunnels, Brooklyn-Battery Tunnel Deck Slab Rehabilitation Study, NY - Project Engineer for study of methods for the long-term rehabilitation of the elevated deck slab in the Brooklyn Battery Tunnel. The deck slab was extensively deteriorated and lane closures were permitted only during night-time hours and on weekends. Various methods of demolition were investigated including hydro-demolition. Various repair and overlay materials were investigated including LMC, rapid-set concrete, and high performance concrete. SHRP Reports were studied and industry experts were contacted for state-of-the-art recommendations. An in-depth constructibility study was performed and cost estimates prepared.

DICKSON OPONG, PE *KS Engineers, P.C.*
Project Manager

EDUCATION
MSE, Civil Engineering, Princeton University/1983
BSE, Civil Engineering, Princeton University/1980

PROFESIONAL REGISTRATION/CERTIFICATIONS
Professional Engineer: New Jersey ([redacted] – received 03/1990) and New York ([redacted]
NHI Course 130053A, Bridge Inspection Refresher Course
NHI Course, Steam Stability and Scour at Highway Bridges
AASHTO LRFD Bridge Design Workshop, FHWA/NSBA

EXPERIENCE SUMMARY
Mr. Opong has nearly 30 years of experience in planning, preliminary and final design, development and implementation of bridge and highway projects for New Jersey Department of Transportation, Port Authority of New York and New Jersey, New Jersey Turnpike Authority and other public agencies in tri-state region. He has demonstrated excellent technical and managerial skills on several infra-structure improvement/rehabilitation projects for many pubic transportation agencies. He is a Vice-President and Head of the Structures Department of KS Engineers.

PANYNJ, Performance of Expert Professional Structural Engineering Services (MBE/WBE) On A "Call-In" Basis During 2008, 2009 and 2010 – PA Agreement #'s 415-08-058, 415-09-058 and 415-10-058 - Project Manager responsible for providing structural engineering services on a "Call-In" basis for the Port Authority of New York & New Jersey. Services provided under this contract generally consist of preparing structural engineering studies, condition surveys, designs, contract drawings, technical specifications and construction cost estimates for a wide variety of new facility structures and structural renovation and rehabilitation projects. Assignments to date have consisted of the following:

- Multi-Facility CAD Drafting Services
- JFK Airport –Protective Slabs on Taxiways, Q & A
- Structural Engineering Services / Staff Augmentation
- PATH - Installation of Backflow Prevention Devices
- LaGuardia Airport - Upgrade CTB East
- JFK Airport - Fire Alarm Connection for Gas Station - Bldg.#
- JFK Airport – Reconfiguration of Fuel Truck Loading Racks
- JFK Airport - Repairs to Aqueduct Bridge Railings/Expansion Joints
- Stewart Airport - Positive Air Pressure for Loading Bridges
- JFK Airport – Repair of Slab at Building
- CADD Design Services for Navigation Aids Improvements at JFK Airport
- CADD Design Services for Demolition- Hanger 12 &building #94 at JFK Airport
- SWF- Runway Incursion Mitigation Study
- PATH – Installation of Backflow Prevention Devices, Macmillan Bloedel Building
- EWR Airport – Structural Engineering Services –Shop Drawing Review – Stage 3
- EWR Airport – Structural Engineering Services –Shop Drawing Review – Stage 3

PANYNJ – Design Services for WTC PATH Terminal Transportation HUB Project – WP # 21 – Project Manager responsible for design services of various temporary structures for WTC PATH Terminal Transportation Hub Project, as design consultant to Phoenix Constructors, JV.. Design included, but not limited to, crane platform, structural bracings, roof structures and columns supports, support of excavation for footings and walls, supports under blast plates construction barricades, under-pinning columns and support beams. Services also included preparation of signed and sealed CADD drawings / calculations and review of shop drawings. Also responsible for additional design services on Task Order No. 26 (Design Engineering Services / MATOC) for cantilevered temporary work platform, and other miscellaneous structural design support for field modification during construction.

NYSDOT, Richmond Road Bridge Design, Rehabilitation and TMS Measure as Part of 21 Bridge Contract on Staten Island Expressway, Richmond County, NY (Contract D010248) – Project Manager for structural design of four bridges carrying Staten Island Expressway (S.I.E.) WB and EB over Richmond Road and Targee Street, replacing the steel beam bridges and widening the S.I.E. using prestressed concrete box beams. Abutments are also being widened.

NJTA, Bass River Bridge Widening and Rehabilitation, Garden State Parkway, Bass River Township, New Jersey—Project Manger for the in-depth structural inspection/evaluation, design of new MSE Retaining walls at approaches of new bridge including utility relocations, survey/mapping and right-of-way plans.

NJTA, Cedar Creek Bridge Replacement, Garden State Parkway, Berkeley Township, NJ. QA/QC Engineer for the replacement of a northbound and south bound 3-span deck slab bridges with wider single-span prestressed girder bridges, according to LRFD. Semi-integral abutments on steel pipe piles are being used. Construction staging to maintain traffic on the Parkway is required.

PANYNJ, 1998 Biennial Inspection of Outerbridge Crossing New Jersey Approach Bridges – Project Manager responsible for supervision and coordination of the project work. Project work involved inspection of fracture critical members, miscellaneous structures, bridge mounted sign structures and preparation of report.

PANYNJ, 1997 Biennial Inspection of the Lincoln Tunnel New Jersey Approach Bridges – Senior Project Engineer responsible for technical review and quality assurance of the project work. Project work involved routine NBIS inspection of approach structures, sign structures, structural rating analysis and preparation of reports. Major parts of the inspections were conducted at night to allow for minimal traffic interruptions.

PANYNJ, George Washington Bridge NBIS Inspection of the New Jersey Approach Bridges, NJ – Senior Project Engineer – Project work involved the NBIS inspection of approach structures, sign structures and light towers. Responsible for technical review of project work which included inspection, load ratings and report preparation.

PANYNJ, Biennial Inspection of 15 Bridges at LaGuardia Airport in Queens, New York – Senior Structural Engineer – Project work included inspection involving bridges with fracture critical members and reviewing inspection reports.

PANYNJ, Rehabilitation Design Study Report of the 102nd Street Bridge Over Grand Central Parkway In Queens, New York – Project Manager – Project work included the inspection and structural evaluation of the bridge for rehabilitation to meet current AASHTO and New York State Department of Transportation design standards and preparation of report.

PANYNJ, Structural Evaluation, Analysis and Load Rating of Floorbeams and Brackets of the Outerbridge Crossing between Perth Amboy, New Jersey and Staten Island, New York – Project Engineer – Project work included structural evaluation, load rating and fatigue strength analyses.

PANYNJ, Inspection and Rehabilitation of the PATH Vertical Lift Bridge over Hackensack River in Jersey City, NJ – Structural Engineer – Project work included the inspection of the lift span truss members, counterweights, sheaves and trunnions, fender system and development of repair details and shop drawings.

NJDOT, Design of Bridge Replacement Project on Libertyville-Plumbsock Road over Clove Brook in Sussex County, New Jersey – Project Manager – Project work included preparation of the final (Phase III and IV) design contract documents for the new replacement bridge and post-award construction engineering services. Designed the reinforced concrete abutments and prestressed box beams as per AASHTO Standard Specification and the New Jersey Department of Transportation Bridge Design Manual and reviewed shop

PATH

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ENGINEERS OF NEW YORK, P.C.
Formulating Excellence®

NAME MICHAEL P. WETHERELL, PE
TITLE VICE PRESIDENT
SERVICE AREA PATH

Years of Experience: 23

Registrations/Memberships

- Professional Engineer – NY
- American Society of Heating, Refrigerating and Air-Conditioning Engineers
- American Society of Civil Engineers

Education

- BS, 1982, US Naval Academy, Engineering
- Certificate, 2008, Urban Engineers, Inc., Project Management Training

Mr. Wetherell is an executive with diverse experience in Engineering, Project Management, Business Development, and Customer Service. He has contributed to the development of engineering designs and standards that have had an important impact on rail transit. Mr. Wetherell's experience includes extensive rail car project management and design analysis, maintenance procedure specification, operating rule development, component failure mode and safety analysis, component inspection, quality assurance and equipment specification development. He has a thorough understanding of the design development, production and acceptance and operation of rail vehicles from the Railcar Builder, Component Supplier, System Operator and Federal Rulemaking and Oversight perspectives. Highlights of Mr. Wetherell's experience include the following:

Risk Assessment Project Manager for Federal Transit Administration Programs - As FTA "Black Belt" in performing Risk Assessments, Mr. Wetherell has led the Risk Assessment team for Urban Engineers in the evaluation of Federal investment in a $7 Billion project to expand Long Island Rail Road service to Grand Central Station and a $5 billion project to construct a Second Avenue Subway line in Manhattan. The effort for these two projects has led the pioneered many facets of the new FTA Risk Assessment system and has introduced models for concepts such as Cost and Schedule Contingency Plans and the Project Scoping Document and Project Execution Plan. He has led a similar preliminary risk assessment effort for the Sound Transit U-Link Project, a $1.5 billion, 3.5-mile extension of light rail service in Seattle. Mr. Wetherell is presently leading an effort to perform the first risk assessment "re-look" of Federal investment in the New York MTA East Side Access Project.

Project Management Oversight, Metropolitan Transportation Authority (MTA), Federal Transit Administration, New York City, NY - Project Manager, part of a Project Management Oversight team responsible for monitoring construction of Federal Transit Administration funded R-142, R-142A and R-160 new rail cars and the New Corona Maintenance Facility and Car Washer in New York City. Responsibilities include monitoring and evaluating these major projects with regard to schedule, budget, and contractual performance. Provides in-depth evaluations of project management, construction progress and issues, budget and schedules, prepares monthly reports, reviews Project Management Plans, Management Manuals, and procedures. Provides contract administration support for Urban Engineers' contract with the FTA. Mr. Wetherell has been instrumental in the technical support of the FTA development of the revised method of assessing and mitigating potential risk on federally funded projects.

New Anthem Holdings, Corp., Uniondale, NY - Vice President, reported directly to Company Principals regarding engineering product development and applications. Developed and implemented market based applications for a new technology refrigeration compressor. Led the design of new applications for a new technology compressor for the Rail and Bus transit, supermarket refrigeration, and container ship refrigeration markets. Developed and successfully carried out a Strategic Plan to have this compressor installed in a major private sector project.

The Long Island Rail Road, Jamaica, NY - General Manager, Fleet Engineering responsible for Rail Vehicle Engineering, Testing, and Quality Assurance. Approved all modification designs to new and existing vehicles, directed new rail equipment specification writing, rail equipment testing and acceptance, configuration control, failure tracking and maintenance quality control for the largest commuter railroad vehicle fleet in the US. Achievements included the following:

1) New Dual Mode and Diesel Electric Locomotive Acceptance: Led the technical team in the resolution of locomotive engine skid and equipment rack metal fatigue cracking, participated in instrumented fatigue analysis, performed final LIRR review and approval of design modifications and repair methods. Participated in the analysis of brake system safety, including the redesign and testing of brake system pneumatic back-up for electronic brake systems as a modification to the original design. Worked closely with the manufacturer and LIRR maintenance personnel to resolve C-3 coach HVAC system design issues including balanced heat and reheat, temperature sensing and air flow design modifications. This effort brought the system into compliance with the specification. Participated as the lead mechanical department engineer in the calculation and verification of equipment braking charts for new train operations. As the lead engineer for LIRR, resolved several system reliability issues, resulting in a 300% increase in fleet reliability in three years.

2) Quality Control and Fleet Testing: Integrated the Quality Control function into the Fleet Engineering Group, overseeing and spot checking the inspection of fleet modifications to new and existing rail vehicles. Reported to the Chief Mechanical Officer on Quality Control issues. Brought the Fleet Testing function into the Fleet Engineering Group, overseeing the investigation of equipment problems and approving engineering modifications to resolve design issues.

The Long Island Rail Road - Assistant Chief Mechanical Officer - New Fleet/ Equipment Engineering; Implemented a series of technical advancements resulting in an additional passenger rail car life expectancy of 20 years for cars internally overhauled. Led the LIRR design effort for a combined procurement between LIRR and Merto-North Railroad of new M-7 Electric rail cars.

Chairman American Public Transit Association Passenger Rail Equipment Safety Standards Task Force (PRESS T.F.) - Charter Member; represented LIRR in the revision of Federal passenger rail car regulations and developed construction and operating safety standards for rail car construction in cooperation with the US Federal Railroad Administration. Elected Chairman of the PRESS T.F. in 1998.

Director of Production/Materials Planning and Project Support for the LIRR; Developed and implemented a Department Production Plan to manage the work flow and materials for the maintenance and inspection of an 1100 rail car fleet. Designed and developed a program for the internal overhaul of 30-year old rail vehicles, and performed an analysis of reliability of improvements to individual systems and their impact on fleet performance.

Director of Fleet Strategy at LIRR; Developed a 25-year program for rolling stock replacement and overhaul. Performed needs analysis and provided a preliminary design concept for a new locomotive maintenance facility built at the Sheridan Yard. Developed technical analysis of equipment performance specifications for new locomotives - presented to senior staff and Board Members.

Bombardier Corporation - Director, Marketing and Sales; Account Responsibility for 70% of the US Rail Transit Market. Led the development of technical and commercial proposals for, and negotiated major new rail vehicle contracts with, major railroad authorities. Developed, with the support of engineering staff, innovative new designs such as the New Jersey Transit Comet III high-low end door, and the Head end power arrangement for the Connecticut DOT Shoreliner Trains.

NAME DAVID J. SANDS, PE, F.ASCE

TITLE DEPUTY PRACTICE LEADER, TRANSIT

SERVICE AREA PATH

Years of Experience: 37

Registrations/Memberships

- Professional Engineer – PA, NJ, MD, OH, IN
- Fellow - American Society of Civil Engineers
- American Society of Highway Engineers
- American Railway Engineering & Maintenance of Way Association-Committee 6
- Metropolitan Railway Club of NY

Education

- MCE, 1980, Villanova University, Civil Engineering
- BCE, 1973, Villanova University, Civil Engineering
- 2002, OSHA 10 Hour Construction Safety & Health Training
- Certificate, 2006, Urban Engineers, Inc., Project Management Training
- Certificate, 2004, Dale Carnegie Leadership Development Course
- Certificate, 1989, Penn State Executive Program

Mr. Sands is responsible for managing the technical services associated with design of transit facilities. He supervises Urban Engineers' (Urban) Transit Practice Mr. Sands' extensive experience includes project management of large capital improvement projects for transit and railroad infrastructure modernization, upgrade, and improvement. During his time at Urban, he has participated in improvement programs, such as facilities expansion and rail yard rehabilitation. Mr. Sands' experience includes:

Southeastern Pennsylvania Transportation Authority, General Engineering Service Contracts 2007, Philadelphia, PA - Program Manager for a task order contract for design services. Projects to date include a route signage improvement project for regional rail stations, a signal power study for transient over-voltage, load rating of structural beams carrying SEPTA cranes, Girard Avenue trolley turn-back track, Bell's Corner bus loop survey, cost confidence and constructability review of a pedestrian tunnel for Malvern & Levittown Stations, Villanova Station improvements conceptual engineering, protective relay operation investigation & coordination study, Ryers Station improvement - structural engineering, North Philadelphia transportation center-elevator/escalator compliance, Woodland Shop roof replacement project, substation overhaul program, 20th St. through 30th St. wall rehabilitation, 69th St. Terminal restrooms renovation, Suburban Station locker room expansion, R8 Station amenity improvements including Station roof replacement and rehabilitation of retaining walls, Elmwood Shop fire suppression improvements, Frankford Bus Garage fire suppression improvements, Station agent kiosks and fareline modifications.

Frankford Transportation Center Rehabilitation Program, SEPTA, Philadelphia, PA - Resident Engineer for a $39 million dollar contract to relocate the guideway structure of the Market-Frankford Subway/Elevated Line and a $4 million dollar rail yard rehabilitation contract at SEPTA's Frankford Transportation Center in northeast Philadelphia, PA. Responsible for construction management of the projects to assure that the contractors construct the proposed facilities in compliance with the plans and specifications on schedule and within budget. The guideway relocation project involves installation of all systems associated with the proposed guideway including the section through the proposed Terminal Building including track, traction power, and signal and communications systems. Relocate Bridge Street between Bustleton Avenue and Penn Street, construct bus islands and canopies, a temporary run-around track for the existing guideway east of the Terminal, and a bus lane from Griscom Street to Frankford Avenue, south of Pratt

Street. Also, perform temporary work to allow continued bus, trackless trolley, and rail operations. Demolish part of the existing guideway and Terminal structures and demolish the Pratt Street Station entrance on the South side of Frankford Avenue. Modify the tank farm, the bus depot apron, the trackless trolley wirework, and maintain and protect traffic during construction. The scope of work for the modifications of Bridge Street Yard includes procurement and installation of track and special track work to relocate one existing turnout, replace 19 existing turnouts including nine single turnouts, two lap turnouts and two triplex turnouts, contact rail and rail bonding for signals and traction power. The work also includes the installation of traction power and a negative return system, duct banks, switches, breakers, data transfer devices to permit remote monitoring facilities, ducts for the proposed signal system, insulated joints and switch heaters. The project won the Project Management Institute-Delaware Valley Section 2003 Project of the Year Award.

Rail Connection to the NYS&W, Norfolk Southern Corporation, Jersey City, NJ - Project Manager for design coordination and obtaining environmental permits for construction of a rail connection to the NYS&W for the Norfolk Southern Corporation near Croxton Yard in Jersey City, NJ.

Intermodal Facility Expansion Project, CSX Intermodal, Kearny, NJ - Project Manager for obtaining environmental permits for expansion of the intermodal facility for CSX Intermodal in Kearny, NJ. Obtained NJDEP, US Army Corps and local permits for the project.

Intermodal Facility Expansion Project, CSX Intermodal, Philadelphia, PA - Project Manager for preparation of contract documents and obtaining proposals for wetland plantings in conjunction with mitigation of wetlands for expansion of the intermodal facility for CSX Intermodal in Philadelphia, PA.

Southeastern Pennsylvania Transportation Authority, Wayne Junction Station Improvement Project, Philadelphia, PA - Project Manager for the design and construction phase services for the rehabilitation of a major regional rail station. The project includes constructability and construction phasing, ADA compliance, historical preservation issues.

Southeastern Pennsylvania Transportation Authority, Design for the Replacement of Bridge 10.12, Jenkintown, PA - Project Manager for the design and construction phase services to replace Undergrade Bridge 10.12 carry SEPTA Main Line over the Tacony Creek. The project includes constructability, construction phasing, environmental permits and utility protection.

Locomotive Maintenance Building, Norfolk Southern Corporation, Conway, PA - Project Manager for a $15 million locomotive maintenance building for locomotive servicing and repair. The project involves design and construction management of a locomotive servicing and repair facility with pumps, piping, oil/water separators, tracks, overhead cranes, repair pits and platforms, offices and welfare facilities.

Morrisville Train Storage Yard Phase II for New Jersey Transit, Morrisville, PA - Project supervisor for construction phase services for the construction and electrification of a 12 track storage yard, yard sectionalization, feeder routing, new catenary structures, modification of existing catenary structures and grounding and bonding.

Southeastern Pennsylvania Transportation Authority, General Engineering Service Contracts, Philadelphia, PA - Project supervisor for development of comprehensive ADA checklists tailored to the needs of SEPTA to be used in the design of transit facilities. Also, design of engineering projects involving catenary systems, emergency power, station parking, environmental monitoring, hydrology studies, rail car procurement, surveying and station improvements.

Southeastern Pennsylvania Transportation Authority, Schuylkill Valley Metro - Project supervisor to study design alternatives for a 63-mile commuter rail corridor between Philadelphia and Reading, PA.

NAME TOM E. HALTERMAN, PE
TITLE SENIOR PROJECT ENGINEER
SERVICE AREA PATH

Years of Experience: 46

Registrations/Memberships

- Professional Engineer – PA, NJ, MD
- American Railway Engineering and Maintenance-of-Way Association
- PenTrans - Board Member

Education

- MS, 1978, University of Pennsylvania, Civil/Urban Engineering-Transportation
- BS, 1969, Drexel University, Civil Engineering

Mr. Halterman has extensive experience in the planning, analysis, and design of railway and mass transit facilities. This experience ranges from planning level studies to detailed final design, including preparing specifications and cost estimates. His experience includes intercity freight and passenger rail, commuter rail, heavy rail, light rail, electric bus, and diesel bus modes. He has served as Design Engineer, Project Engineer, and Project Manager on a variety of projects. Mr. Halterman's experience includes:

Risk Assessment for LA Metro Westside Extension, Los Angeles, CA -Participated in FTA Risk assessment process for a proposed 8.6 mile extension of the Los Angeles Purple Line subway. Evaluated the trackwork component of the project including main line track, crossovers, pocket tracks and connections to maintenance facilities, a proposed turnback facility, and additional storage yard.

Second Avenue Subway, New York, NY: Participated in characterization and risk assessment, focusing on track and stations, for Phase 1 of a heavy rail subway extension in New York City. Also reviewed concept of operations as basis for project design, and participated in FTA contract package review process for civil and utilities.

Eastside Access, New York, NY: Participated in characterization and risk assessment for project to extend Long Island Railroad service into a new terminal beneath Grand Central Terminal in New York City. Evaluated track, third rail, and catenary designs with special focus on the complex staging of construction to connect the project to existing Long Island Railroad and Amtrak line. Also participated in FTA contract package review process for civil and utilities.

Assessment of FastTracks Financial Plan, Denver, Co. - Reviewed and evaluated the operating costs component of the financial plan for a 10 year, $6.7 billion capital program to implement new and expanded light rail and commuter rail services in the Denver metropolitan region. Work included identifying risks in the plan's projected operating costs which included both direct operations by the regional transit agency as well as public/private partnership operations. Updated plan reviews were completed in 2009 and 2010.

Wayne Junction Station Project, Philadelphia, PA: Conducted operational study and prepared detailed report related to construction staging and intermodal improvements associated with rehabilitation of key commuter rail stations serving six rail routes and 3 bus routes. Also managing preparation of construction specifications.

Alexander Road Bridge over Amtrak, Princeton Junction, NJ: Provided design oversight and QA/QC for development of plans to modify the catenary system, structure bonding and grounding, and related facilities to accommodate replacement of a highway bridge crossing over Amtrak's 4-track Northeast Corridor main line.

Center City Master Plan, Philadelphia, PA: Sr. Engineer providing consulting services to the Center City District in developing the Public Transit Component of a Master Plan for Center City Philadelphia. Tasks included examination of capital requirements and operating costs for

upgrading the frequency and hours of operation of a commuter rail line, consideration of transfer improvements at existing transit hubs, and review of plans and updating of cost estimates for a proposed new subway station.

Center City District Light Rail Study, Philadelphia, PA: Project Manager for conceptual study of proposed light rail line serving Market Street and the north and south Delaware River waterfront. The study considered various options for placement of tracks, configuration of transit lanes and stops, and accommodation of existing bus routes. Order of magnitude capital and operating costs were estimated.

Center City Commuter Rail Connection, Philadelphia, PA - Design Engineer for track alignment and, ballasted, ballastless, and direct fixation track structures including interlockings for this four-track electrified commuter rail project. The project involved tunnel, open cut, and embankment right-of-way through dense (CBD). Was Project Engineer for coordination of signal and electrification design with civil design. Was Project planner and Project Manager for the location and design of a new supporting storage yard for 130 cars and modifications to an existing storage yard.

Philadelphia International Airport High Speed Line, City of Philadelphia, Philadelphia, PA - Design Engineer for track alignment and interlockings, and Engineer for coordination of signal and electrification designs.

Morrisville Train Storage Yard, Phase II, New Jersey Transit, Morrisville, PA - Senior Engineer providing design reviews for electrification of 12 storage tracks, yard sectionalization, feeder routing, new catenary structures, modification of existing catenary structures, grounding, and bonding.

Schuylkill Valley Metro MIS/DEIS, Southeastern Pennsylvania Transportation Authority, Philadelphia to Reading, PA - Project Manager for a Major Investment Study/Draft Environmental Impact Statement for this 62-mile corridor. Project included assessment of purpose and needs, development and evaluation of alternatives, environmental assessments, engineering and operating analysis, development of conceptual engineering plans, ridership forecasting, development of cost estimates, and financial analysis. The project also included extensive public outreach, coordination with planning and governmental jurisdictions, and production of documentation meeting federal requirements. The selected alternative consisted of a modern rail service with a projected project cost of $1.4 billion.

Review of Catenary Facilities - Airport Line Project, Southeastern Pennsylvania Transportation Authority, Philadelphia, PA - Project Manager for evaluation and preparation of designs for modifications to catenary system to enhance its performance and reliability. The work included structural modifications, wire replacement, and tension and hardware changes to a variable tension system; and development of a work program for repairs and adjustments to a constant tension system.

Falls Township Passenger Train Station, Redevelopment Authority of the County of Bucks, Morrisville, PA - Project Manager for evaluation of proposed addition of passenger station to commuter rail yard being constructed by New Jersey Transit. Evaluated alternative platform locations and related pedestrian and vehicular access issues; evaluated impacts to track, signals, and electrification facilities; and prepared conceptual cost estimates.

Mainline Schuylkill Phase II, Southeastern Pennsylvania Transportation Authority, Philadelphia, PA - Project Manager for the design of a $44 million project to rehabilitate seven bridges and replace the entire overhead catenary system for a major segment of SEPTA's four-track, electrified regional rail trunk line in Center City Philadelphia. Project also included security fencing, lighting, grounding and bonding, sectionizing switches, trackwork, and temporary signal system modifications. Maintenance of rail traffic required extensive multi-year phased construction sequence.

NAME FRANKLIN S. TEIFELD
TITLE SENIOR RAILROAD DESIGNER
SERVICE AREA PATH

Years of Experience: 32

Registrations/Memberships

- American Railway Engineering and Maintenance Association (AREMA) Committee #14 - Yards and Terminals

Education

- BS, 1977, New Jersey Institute of Technology, Civil Engineering

Mr. Teifeld has extensive railroad engineering, planning, and project management experience. During his distinguished career with Consolidated Rail Corporation (Conrail), he served in many positions, including Planning Engineer, Senior Transportation Analyst, and Office Engineer. Mr. Teifeld's duties involved developing proposal requests, plans, estimates, and specifications for rail freight and intermodal facilities, including major Conrail intermodal yards in the New York/New Jersey metropolitan area. He consulted with railroad customers, port authorities, and state transportation agencies regarding rail facility design and operation. He prepared reports to senior management; designed rail freight classification and intermodal facilities; estimated construction costs; and modeled rail freight yard operations and track-train dynamics using mainframe computer programs. Mr. Teifeld also performed studies of rail traffic flows and effects on terminal facilities, managed civil engineering personnel, and supervised and planned physical plant maintenance for various rail facilities. In addition, he is experienced in the use of IBM mainframes, personal computers, and Intergraph UNIX CADD.

At Urban Engineers, Mr. Teifeld served as Project Manager for design of Norfolk Southern Railway Corporation's Croxton Intermodal Rail Support Yard, Intermodal Premium Gate Facility, and container loading pad and track located in Secaucus, NJ. In addition, he served as Project Manager for design of Norfolk Southern Railway Corporation's E-Rail Intermodal Rail Support Yard and satellite parking facility in Elizabeth, NJ. For CSX, Mr. Teifeld provided design and project management services for both the Greenwich Intermodal Facility in Philadelphia, PA and the Kearny Intermodal Facility in Kearny, NJ. Mr. Teifeld's experience includes:

Work Experience:

Southeastern Pennsylvania Transportation Authority - Extension of Rt. 15 Light Rail Line - Responsible for track and civil design of extension of the existing Rt. 15 light rail streetcar line from a new junction at Girard and Frankford Avenues to a terminus loop at Delaware and Frankford Avenues. The project is being undertaken in connection with the temporary termination of rail service northward to Port Richmond as a result of a multiyear PennDOT reconstruction project of I-95. Additionally, the line will serve patrons and employees of the currently under construction SugarHouse Casino at Delaware and Frankford Avenues.

Jersey City and Secaucus, NJ - Norfolk Southern Croxton Yard Intermodal Terminal - Remote parking facilities feasibility study. Project entailed design and evaluation of remote and site adjacent trailer parking facilities to support increase volume of intermodal movements through existing transfer facility.

Inspection and Evaluation of the Salem Branch, Gloucester and Salem Counties, New Jersey - Project Manager responsible for track and undergrade structure inspection of approximately 18 miles of a former Conrail branch line purchased by the County of Salem, New Jersey in 1995. The purpose of the inspection of the line, operated at 5 MPH as "Excepted Track" under 49CFR213, was to develop a scope of work and rehabilitation cost estimate to bring the line into compliance with the requirements of Class II track to permit operation at 25 MPH.

Relocation of Conrail Perth Amboy Industrial Track, Perth Amboy, NJ - Project Manager responsible for design of relocated alignment of approximately a three quarter mile segment of Conrail branch line necessary to accommodate construction of City of Perth Amboy New Jersey Public Safety, Court and Recreation Complex. Work included design of earthwork, utility relocation, track construction and a new grade separation structure over a county highway.

Norfolk Southern Railway Croxton Intermodal Terminal, Jersey City, NJ- Project Manager responsible for all aspects of design and construction management, client interface, project budget and regulatory agency interface. The project consists of improvements and expansion of the existing intermodal transfer facility formerly operated by Conrail. The design entails a new 2500' long container/trailer loading area, a relocated seven track local freight yard, a new four track intermodal flat car storage yard, a new truck entrance gate facility, stormwater management facilities, all environmental permitting, wetlands remediation, public at grade crossing reconstruction, utility relocation or protection design and area lighting.

Norfolk Southern Railway E-Rail Intermodal Terminal, Elizabethport NJ - Project Manager responsible for all aspects of design and construction management, client interface, project budget and regulatory agency interface. The project consists of improvements and expansion of the existing intermodal transfer facility formerly operated by Conrail located adjacent to the Port Newark/Elizabeth Marine Terminal. The project consists of the design of a new 10-track intermodal flat car storage yard, a remote secure trailer storage area, paving repairs, storm water management facilities.

CSX South Kearny Intermodal Terminal, South Kearny, NJ - This existing former Conrail Intermodal terminal is one of two CSXI facilities serving the busy New York City metropolitan area. Improvements to the facility included new loading tracks and container handling areas, a new equipment maintenance facility and substantial improvements to the storm water management facilities. As Project Engineer design responsibilities included track and roadway geometry, earthwork and grading design and storm water management facilities. The necessity of maintaining current levels of operations of the terminal during construction required careful planning and staging of the improvements as well as detailed evaluation of the constructability of each planned improvement.

Oak Island Departure Yard West End Ladder Reconstruction, Newark, NJ - This project involved survey, design and construction layout of the complete replacement of the switching ladder track at the west end of the departure yard of Conrail's Oak Island Classification Yard. Oak Island is the major carload freight classification yard in the New York metropolitan area and as such, design and construction efforts required careful consideration of constructability issues as well the need to maintain operations throughout the duration of the project. Responsibilities included management and performance of all survey and design efforts.

Jersey City, NJ - Gateway Rail Transport LLC. Project Manager responsible for all aspects of design for a new Intermodal Transfer Facility located at Norfolk Southern's Croxton Intermodal Terminal. The facility is planned to receive Construction and demolition debris from the greater New York metropolitan area for transloading into rail cars prior to shipment to landfills in Ohio.

CONSOLIDATED RAIL CORPORATION, NEW JERSEY DIVISION, ELIZABETHPORT, NJ (1979 - 1984)

Office Engineer, New Jersey Division- Managed New Jersey Division civil engineering staff performing a variety of services to the Maintenance of Way and Operating departments including field surveys, construction layout, customer and local governmental liaison, facility design and engineering, cartography, construction management and office administration.

NAME ALAN D. COLLINS, PE
TITLE SENIOR PROJECT MANAGER
SERVICE AREA PATH

Years of Experience: 31

Registrations/Memberships

- Professional Engineer – NJ, PA, GA
- American Railway Engineering and Maintenance of Way Association (AREMA)

Education

- MSCE, 1997, Drexel University, Civil Engineering
- BSCE, 1979, Cornell University, Civil Engineering
- Certificate, 2006, Urban Engineers, Inc., Project Management Training

Mr. Collins has extensive experience in railroad design, construction, project management, and operations analysis. During his many years at Conrail, he worked as a Project Engineer in the field, in project control, in civil design, as a liaison to public agencies, and in transportation analysis. Since the split-up of Conrail, Mr. Collins has applied his experience at Urban Engineers, Inc., overseeing the design and regulatory submissions for projects at various locations, including intermodal sites for Norfolk Southern's Croxton Intermodal Terminal in Jersey City and CSXI's Kearny terminal and Livernois Terminal for both NS & CSXI in Detroit. He is design Project Manager for the expansion of New Jersey Transit's facility in Morrisville, PA. He managed bidding and budget control for CSX's $30 million Greenwich Yard expansion in Philadelphia, PA. His computer capabilities include MicroStation and Inroads, Primavera project management and scheduling software, and Excel. Mr. Collins' experience includes:

Inman Diesel Facilities, Norfolk Southern, Atlanta, GA - Project Manager for design of diesel facilities including a six locomotive fuel shelter, a locomotive rapid repair service building, and a turntable. This includes the process piping as well as the building MEP. Site work includes utility relocation, storm water management, erosion and sedimentation control, building demolition, upgrade to electrical power distribution, 18,000 feet of new track alignment and regulatory approvals.

Locomotive Inspection Pits, Norfolk Southern, Cleveland, Baltimore & Toledo - Project Manager for design of mini inspection pits and mechanical facilities to pump fresh oil into locomotive and to dispose of waste oil.

Croxton Car Shop, Norfolk Southern, Jersey City, NJ - Project Manager for design and regulatory approval of a shelter for rail car repair activity. New Jersey Meadowland Commission approval was secured in four months, soil district approval in seven weeks.

Storage Yard, New Jersey Transit, Morrisville, PA - Project Manager for design of track geometry and catenary work for a 9 track storage yard and intricate ladder and lead tracks. New Jersey Transit will take over "Clocker" service from Amtrak in 2006, and this yard expansion will support that service. Assisted in detailed schemes for staged reconstruction of three track bridges over the Northeast Corridor while maintaining rail traffic both above and below.

Chambersburg Intermodal Terminal, CSX, Guilford Township, PA - Project Manager for design of an intermodal terminal in a 'greenfield' site. Because the site was previously undeveloped, the stormwater management and erosion and sedimentation control permitting requirements were substantially more stringent than for a typical project in an existing rail yard.

Enola Fuel Shelter, Norfolk Southern, East Pennsboro Township, PA - Project Manager for the design of a shelter to accommodate the fueling of six locomotives at a time. A change in NS' operational requirements mandated a 3000 foot shelter location change, which in turn caused wholesale changes to track and sitework. NPDES approval was secured in seven weeks.

Livernois Intermodal Terminal, CSX and Norfolk Southern, Detroit, MI - Project Manager for design and permitting to reconfigure Livernois Yard. Norfolk Southern and CSX Intermodal upgraded the existing shared Conrail terminal into two separate facilities. Specific tasks include track layout, gate configuration, relocation of a 100 year old, 6 foot City sewer, staging of a temporary truck entrance, sitework, traffic analysis, lighting and regulatory issues.

Croxton Intermodal Terminal, Norfolk Southern, Secaucus, NJ - Project Manager for design of reconfiguration and improved lighting for the terminal. Managed the submissions process for the regulatory agencies, including the New Jersey Meadowlands Commission and the State Soil Conservation District. The regulatory approvals were obtained in a timely fashion.

Greenwich Intermodal Terminal and Yard Reconfiguration, CSX Intermodal & CSX Transportation, Philadelphia, PA - Managed bidding of trackwork, mechanical, electrical and demolition work at Greenwich Yard. Managed bidding and installation of remote controlled security treadles. Maintained comprehensive budget and contract quantity data for entire $30 million project, which involved several contractors, three separate funding sources, and an often-changing scope.

Intermodal Terminal, CSX Intermodal, Kearny, NJ - Project Manager for the $6 million expansion of the terminal acquired by CSXI, overseeing design and permitting for the entire project. Also served as CSXI's liaison with Conrail to expedite the project while the facility still belonged to Conrail.

Track Connection, Philadelphia, PA - Project Manager for design of a track connection from Norfolk Southern's Mustin Field Intermodal Facility to existing trackage. This project included a clearance restricting overhead bridge and pump system for the low point.

North American Terminal for FastShip, Philadelphia, PA - Project Manager for design and permitting work on $125M North American Terminal of FastShip adjacent to Packer Marine Terminal in Philadelphia. Developed various conceptual plans for ship berthing, track, truck circulation, security and gate layout. Evaluated trade-offs between terminal processes, equipment costs, and site improvement costs. Will manage the detailed design and formal regulatory submissions in the near future.

Prior to joining Urban Engineers, Mr. Collins spent 19 years at Conrail, where his experience included:

Project Control - Maintained scheduling and fiscal control of up to $20 million per year of capital expenditures on projects in the 1980s that helped bring Conrail into profitability. These projects consisted of track and signal rationalization and modernization, intermodal terminal site work, and interior renovations for modern train dispatching facilities.

Transportation Support - Performed line capacity studies, capital program coordination, and customer service functions for Conrail's Premium and LTL Intermodal Service.

Civil Design, Elimination of Antis Tunnel, Altoona, PA - Designed the track alignment for the reconfiguration of the former Antis yard to permit the elimination of the clearance restricting Antis Tunnel. Manipulated a complicated vertical profile and horizontal alignment to minimize the combined cost of the new bridge and the earthwork.

Value Engineering, North Bergen, NJ - Simplified New Jersey Transit's construction staging plan for replacement of the 69th Street crossing with a bridge. This will save NJT approximately $100,000, accelerate the completion of the bridge, while protecting the function of the adjacent gate to Conrail's North Bergen Intermodal Terminal.

NAME MICHAEL E. DUNN
TITLE SENIOR PROJECT MANAGER
SERVICE AREA PATH

Years of Experience: 40

Education

- BS, University of Michigan, Civil Engineering
- Penn State University , Amtrak Project Management Program
- University of Virginia, Amtrak Executive Training Program
- Wharton School of Business, Fundamentals of Finance and Accounting
- Harvard University, Project Management Training

Mr. Dunn has extensive experience in planning, directing, and managing railroad right of way maintenance, production, and capital construction, and station hardening security that includes project planning, design, project controls, and administration. Managed and directed both large and small staffs in traditional, matrix, and project-oriented management structures.

Urban - Senior Project Manager - New York, NY

As Senior Project Manager, Mr. Dunn is responsible for all program management oversight of the Eastside Access Program's railroad force account activities, which include Long Island Railroad, Metro North Railroad, and Amtrak. To do so, he maintains regular interface with Engineering Department managers of all three railroads as well as the Metropolitan Transit Authority's Capital Construction managers.

Amtrak - Director Design Support - Responsible to coordinate and review new capital construction project designs and act as Amtrak's engineering design representative for all large-scale projects in the NYPS area, including Moynihan Station and the Brookfield overbuild project. As a member of Amtrak's Fire and Life Safety staff, was also Project Manager for security-related projects such as Station Hardening and Movable Bridge Security, which were done on behalf of and in cooperation with Amtrak's Security Department.

Project Manager First Avenue Vent - New York, NY -Plan, direct, and manage the construction of the First Avenue Ventilation Project, a $172 million project to reconstruct the ventilation structures at First Avenue in Manhattan. The responsibilities of this Fire and Life Safety project included design direction and review, project control management, and construction management, and overall project direction.

Director NEC Business Operations - Philadelphia, PA, Director Budgets and Performance Measures, Technical Director Track Production - Manage and direct staff responsible for planning annual capital program for system production units, as well as preparation and daily oversight of capital and core budget performance for construction valued at $60-$80 million per year. Developed all annual and multi-year program schedules, estimates, and other financial and planning functions necessary to totally integrate a wide range of MW programs.

Program Director - High Speed Rail Planning and Program Integration -Directed activities of 14 professionals responsible for all design engineering, financial controls, scheduling, and interagency agreements required to complete the $1.5 billion Northeast Corridor High Speed Rail Program. Responsible for coordination with senior officials of Amtrak's many diverse departments to achieve goals of the program.

Special Assistant to the Vice President Engineering -Personal representative of the Vice President Engineering for state departments of transportation including California and New York, as well as prospective commuter clients Metrolink, Peninsula Commute, and North San Diego County. Responsible for coordinating all

engineering disciplines, including design, construction, mechanical, and maintenance of way to ensure that critical multi-million dollar projects were successfully completed in a political atmosphere.

Director Engineering Special Projects - Responsible for providing engineering support services to our Northeast Corridor commuter clients, particularly New Jersey Transit and Septa. Coordinated all early planning and design efforts for these agencies' capital programs, including NJT's Secaucus Transfer and Eastbound Waterfront Connection projects and Septa's Overbrook and Frazer Maintenance Facility projects, as they related to Amtrak.

Project Manager Atlantic City and Westside Connection Projects - Planned, directed, and managed all operational and administrative aspects for over 200 force account employees from 3 disciplines involved in the construction of the Atlantic City Line Project - a four-year, $70 million project to completely reconstruct the 57-mile main line between Frankford Junction, PA, and Atlantic City, NJ, done in partnership with New Jersey Transit. Technical representative between Amtrak and third party contractors involved in the construction of the Westside Connection Project in Manhattan, a three-year, $100 million project to convert an abandoned 10 mile long freight line into a 60 mph passenger line connecting upstate New York with Penn Station.

Division Engineer - Managed and directed a large management staff responsible for right-of-way maintenance, production, and capital construction for train operations at normal speeds up to 110 mph. This staff was responsible to manage up to 1300 employees. Responsible for coordination and teamwork of several diverse engineering disciplines with a total budget of $30 million per year.

Engineer Track Laying System (TLS) Planning - Directed and managed a staff of degreed engineers responsible for all planning and design aspects for Amtrak's Track Laying System. Developed all engineering, design, and survey work required ahead of all TLS construction, including publishing a Site Specific Work Plan (SSWP) for each railroad block in which the system worked.

Penn Central

Assistant Division Engineer - Harrisburg, PA

Supervisor Track - Philadelphia, PA

Supervisor Track - Camden, NJ

Assistant Supervisor Track - Wilmington, DE

NAME **RICHARD F. HILL, PE**
TITLE **PROJECT MANAGER**
SERVICE AREA **PATH**

Years of Experience: 47

Registrations/Memberships

- Professional Engineer – NJ, PA
- American Railway Engineering and Maintenance Association (AREMA)- Member of Committee 11 (Commuter Rail) and Committee 17 (High Speed Rail)
- Chairman of the Committee 11 & 17 subcommittee for developing seminars on Passenger Railroading
- American Public Transit Association (APTA)
- American Society of Civil Engineers

Education

- MCE, 1971, Villanova University, Civil Engineering
- BCE, 1963, Villanova University, Civil Engineering

Mr. Hill has extensive Mega Project experience as a Civil Engineer in both Design and Construction. At the Pennsylvania Department of Transportation (PennDOT), he was the project manager for 10 miles of the Interstate 95 Highway Project through Center City Philadelphia from south of the Girard Point Bridge to Girard Avenue. Work included the Girard Point Bridge, a major 8 lane bridge over the Schuylkill River, Interchanges with both the Walt Whitman and Benjamin Franklin Bridges over the Delaware River, a 10 lane cut and cover tunnel 1800 feet long, two transit stations on Southeastern Pennsylvania Transit Authority's (SEPTA) Market Frankford Subway/Elevated line and relocation of the Market Frankford line into the median.

At Amtrak, he was the Director-Contract Construction for the NECIP Project and other work between Boston, MA and Washington, DC. He directed all contracted construction on the Northeast Corridor for 17 years including 10 movable bridges, 10 stations, 4 maintenance of way bases, 3 Maintenance of Equipment facilities, multiple wheel truing facilities, substations, etc. He also directed the initial work on the Electrification Project between New Haven, CT and Boston, MA, which included the completion of the EIS statement, locating 10 substations, determining areas needing additional Right of Way to locate the Catenary poles, etc. For 6 months he was assigned the remaining Amtrak Contracted Construction, until Amtrak hired a person for non Northeast Corridor construction.

At Urban Engineers, Mr. Hill was the Senior Project Manager for the FTA, overseeing the MTA's management of the Second Avenue Subway Project in New York City. This project has an estimate in excess of $4.4 Billion. Prior to this assignment, Mr. Hill was the Program Manager for SEPTA's Frankford Transportation Center, which was the Terminal facility for the Market/Frankford line and SEPTA's largest single site project to that time.

Mr. Hill has extensive experience in program management and construction management of major highway, rail and rail transit facilities, planning, scheduling, budgeting and cost estimating, quality control/quality assurance, safety, agency/contractor coordination, documentation, inspection and community relations. Mr. Hill's experience includes:

Senior Project Manager - Responsible for providing Project Management Oversight (PMO) services to the Federal Transit Administration (FTA) as part of the Urban Engineers PMO team. Mr. Hill performs project oversight of Transit Agencies that receive funding from the FTA to assure the most efficient use of the Public Funding. Current duties include acting as Project Manager (PMOC) on New York City MTA's Second Avenue Subway Project Phase 1, which is estimated $4.866 Billion. Construction of Phase 1 began in the spring of 2007.

Mr. Hill has provided support to the FTA and the Grantee in reviewing the various required plans needed to get a Full Funding Grant Agreement. He has been involved in the

review and approval recommendation of the Second Avenue Subway's New Starts approval, Approval to Enter Final Design, Early Systems Work Agreements, Project Management Plan, Safety and Security Management Plan, Risk Characteristics, Risk Mitigation Planning Workshops, Before and After Plan, Real Estate Acquisition and Management Plan, etc.

Mr. Hill previously performed this function for MARTA in Atlanta, GA and Lynx in Orlando, FL.

Program Manager - Responsible for SEPTA's Frankford Transportation Center Project, FTC. This was the final part of SEPTA's $650 million Frankford Elevated Reconstruction Project and the largest site specific project in SEPTA's history. The $180 million center, constructed at the northern terminus of the Frankford-Market Elevated/Subway Line, serves as an intermodal transfer point for bus and rail passengers and is expected to promote the economic revitalization of the Frankford neighborhood. The Frankford Transportation Center Bridge-Pratt transit station serves about 50,000 commuters a day.

The project included improving high-speed rail, bus, and trackless trolley operations; providing improved and sheltered transfer capabilities; providing enclosed parking with access to transit; and creating a community focal point and catalyst for area revitalization. The new facility includes a four-level terminal building with a 450-foot-long platform, support facilities and terminal operations, retail space, a 36-berth local bus station, a 1,000-car parking structure, major modifications to an existing bus depot, and relocation and reconstruction of 1,500 feet of the elevated rail structure. The design included restoration of the original Bridge Street Terminal and its adaptive reuse as a major entry hall for the new terminal.

Responsibility included the documentation, inspection, quality assurance, schedule, contract administration, budget, contractor coordination, safety, cost estimating, etc. for the construction of the Facility. Other duties included interfacing with the client and other agencies, supporting SEPTA's community relations interface between the contractors and the local community, coordinating information between the FTC project and SEPTA Operations and the other programs on SEPTA's Market-Frankford Subway Elevated line.

Senior Project Manager - Responsibilities included providing Project Management Oversight (PMO) services to the Federal Transit Administration (FTA) as part of the Urban Engineers PMO team. Acting as Assistant Project Manager to MARTA in Atlanta and to LYNX in Orlando. Other duties included acting as an assistant to the Senior Vice President for Construction Management in administering the CM group.

DeLeuw, Cather and Company - August 19, 1996 to April 4, 1998

Senior Construction Manager - Responsible for managing the planning, scheduling, budgeting and cost estimating, agency/contractor coordination, inspection, quality control/quality assurance, documentation, etc. for the construction, procurement and railroad force account contracts for the Newark Airport Monorail Connection to Amtrak's Northeast Corridor. The project consists of multiple contracts (Site Development and Foundations, a Major Transfer Station for the Railroad and Monorail, foundations for the Monorail, reconstruction of Conrail's two running tracks from Island Yard to Amtrak's Northeast Corridor, Conrail signal work for the new Bud siding, Amtrak Signal work, Amtrak Track work, Amtrak ET work, Amtrak Switch exchange work for 7 turnouts, two turnout purchase contracts, signal bridge purchase contract, catenary pole purchase contract, construction of 2 new running tracks for the Northeast Corridor, administration of scheduling for New Jersey Department of Transportation's Foundations for Route 21 and Construction of route 21)and will run for three to four years, with a total budget of $120 million.

PORT COMMERCE

URBAN
ENGINEERS OF NEW YORK, P.C.
Formulating Excellence®

NAME AHMAD NADEEM, PE
TITLE PROFESSIONAL ENGINEER
SERVICE AREA PORT COMMERCE

Years of Experience: 21

Registrations/Memberships

- Professional Engineer – PA, LA
- American Institute of Steel Construction (AISC)
- American Concrete Institute (ACI)
- Delaware Valley Association of Structural Engineers
- Deep Foundation Institute (DFI)

Education

- MS, 2001, Louisiana State University, Engineering Science
- MS, 1995, Louisiana State University, Civil Engineering
- BS, 1987, M. R. Engineering College, India, Civil Engineering
- 2002, Drexel University, Project Management Course
- 2002, PSMJ, Marketing Boot Camp
- Certificate, 2006, Urban Engineers, Inc., Project Management Training

Mr. Nadeem is a marine and general structural engineer with extensive experience with various consulting engineering firms. He has extensive experience in managing, designing and engineering of marine, bulk material handling, heavy industrial, and building projects. He has designed and supervised the design, detailing, fabrication, erection, and other field operations of several steel and concrete projects. He also has several publications in the field of wind engineering. On the marine side, he has planned, designed, and managed the construction of several dry bulk, break bulk, liquid, and container handling terminals. His marine design and engineering experience also includes barge handling facilities, military ports, cruise terminals, ferry terminals, and marinas. Designed marine structures include bulkheads, soldier piles, retaining walls, low and high deck structures, dolphins, monopiles, cells, fender systems, crane and container crane rail foundations, tank foundations, minipiles, spud piles, mooring chains, anchors, barge hauling systems, buoys, sinkers, winches, wire ropes, and pad eyes.

PROJECT EXPERIENCE:

Project Management Oversight, U.S. Federal Transit Administration, Midtown Ferry Terminal, NY - Monitored the construction management of this $58 million Ferry Terminal on the Hudson River. Responsibilities included reviewing the progress of the construction and budget of the project. The progress was reported to the FTA.

CP Cement Terminal, Brooklyn, NY - Project Manager and Structural Engineer for the planning and design of a 40 million dollar cement import terminal in Brooklyn, NY. The scope of work included pier inspection, hydrographic survey, boundary survey, sedimentation analysis, dredge volume calculation, fish study, waterfront development permits, geotechnical investigation, layout of the proposed terminal, preliminary design of the terminal including a new dock to handle 50,000 DWT vessel, pneumatic pipes, stabilizing the existing finger pier, flat storage structure (warehouses), bin, equipment, and truck loadout support structure and foundations.

Lehigh Cement Terminal, Brooklyn Navy Yard, NY - Project Manager for the inspection of Pier K at Brooklyn Navy Yard, leased by Lehigh Cement. The inspection was conducted to evaluate the reasons for the observed depressions on the pier surface. It was determined that the reason for depressions may be the leakage through drain holes in the pier or the consolidation of fill. Remedies were suggested to alleviate this problem.

Plains All American, LP, Liquid Terminal, Paulsboro, NJ - Project Manager and Marine Structural Engineer for the design of rehabilitation to the existing T-Head dock. The scope involved the design of a new loading platform, 100 ft of new walkway, strengthening a breasting dolphin, two new breasting dolphins

and repairs to fender system of other existing breasting structures.

National Gypsum Company Terminal, Burlington, NJ - Project Manager and Structural Engineer for the design of pier rehabilitation to handle 65,000 DWT vessels. The existing timber piles supporting the dock with an elevated conveyor gallery were deteriorated to a critical condition. The design required a complete renewal of piles and the beams supporting this high deck concrete platform. The existing concrete deck was retained in place. The design accommodated for the construction work to be conducted in a way to not interfere with the daily pier operations. Mr. Nadeem has also managed several hydrographic surveys (soundings), dredging operations, waterfront development and dredging permits for this terminal.

Philadelphia Cruise Terminal Rehabilitation, Philadelphia Naval Shipyard - Project Manager and Structural Engineer for the rehabilitation of Pier 2, Cruise Terminal at Philadelphia Navy Yard. When it was determined that the existing timber piles of the existing pier were slender due to scouring of the mudline, Urban designed the rehabilitation effort that minimized the impact on the daily operations of the cruise terminal and allowed safe access to the cruise ships for normal services. Twenty five front row piles and 315 braces were installed. Urban also provided technical assistance during the construction work.

Sunoco Liquid Terminal Upgrades, Westville, NJ - Project Manager and Marine Structural Engineer for the waterfront development permit acquisition and design of Sunoco liquid terminal. Dock No. 3 is being upgraded to receive up to 160,000 DWT vessels involving mooring analysis using OPTIMOOR software and OCIMF guidelines. Design of several mooring and breasting structures, including fender system, walkways, capstans, and mooring hooks is required. Dock No. 1A and 2 are also being reviewed for rehabilitation requiring new mooring and breasting structures, encasement of cells, strengthening and jacketing of piles, and walkways. The project is currently being designed.

Pacific Atlantic Terminals, Liquid Terminal, Philadelphia, PA - Project Manager and Marine Structural Engineer for the waterfront development and dredging permit acquisition, dredging operation, and design of rehabilitation to the two Philadelphia terminals of PAT. The scope of dredging work includes performing hydrographic survey, calculating dredge material quantities, sampling and testing of dredge material, obtaining NJDEP, PADEP, and ACOE permits, bidding and managing the dredge activity at the North and South Terminals. The scope of other permit work includes securing a grandfather permit for the South terminal to perform future construction work activities without the need of going through the lengthy permit process and obtaining a waterfront development permit for the proposed rehabilitation of the existing liquid handling dock at the South Terminal. The South terminal has not been in use for quite some time and is abandoned. The scope of design work includes inspecting the pier underwater, coordinating geotechnical investigation, and providing various design options for the rehabilitation of the pier, including cost estimates, to handle liquid barges up to 640 feet. Two marine loading arms and two hoses will be installed to transfer the products. The option selected by PAT will be designed in details. The project is currently in the design phase.

Pier One Hays Bulk Terminal, Girard Point, Philadelphia, PA - Project Manager and Marine Structural Engineer for the planning, design, permit acquisition, litigation support, and construction inspection of this $5 million project. The pier was first inspected above and under water to assess the structural condition of the existing low deck structural elements after a partial collapse. A 400-foot long section of the pier was renewed as a mid-deck structure, isolated from the neighboring weaker section of the pier. The new pier deck was designed for 1000 psf live load and Caterpillar 950G front end loader. The project had several technical challenges during the design and construction due to the need of sustaining heavy loads at a site underlain by weak cohesive soils to a depth of 70 feet and the presence of unknown obstructions. PDA analysis and dynamic testing of piles was conducted to confirm pile capacities.

NAME ANDREW O. QUINN, PE, LEED® AP

TITLE STRUCTURAL ENGINEER

SERVICE AREA PORT COMMERCE

Years of Experience: 9

Registrations/Memberships

- Professional Engineer – NY, NJ, PA, MD, DE
- Association of Diving Contractors International (ADCI)
- Bridge Inspection Refresher
- Safety Inspection of In-Service Bridges
- Open Water Scuba Diver (PADI)
- LEED® AP

Education

- BSCE, 2001, Rutgers University
- Certificate, 2008, Urban Engineers, Inc., Project Management Training

Mr. Quinn is a Marine Structural Engineer with extensive experience relating to bridges and waterfront structures. As an Engineer Diver, he has personally performed more than 350 hands-on underwater inspections. His experience also includes the design of new steel marine structures, and the rehabilitation of existing steel, concrete, and timber marine structures. He has supervised field operations of several pier waterfront projects. Mr. Quinn's experience includes:

Urban Engineers, of New York P.C., New York, NY 2007 to present - Performed several in-depth above and underwater inspections of waterfront structures including piers, wharfs, and mooring platforms. Inspections were conducted for public and private sector clients, including the Philadelphia Regional Port Authority, Waste Management, Inc., Stonehenge Advisors, Inc., and Sonoco, Inc. Inspection work includes various types of timber, steel, and concrete structures. Responsibilities include oversight of diving operations, and report preparation. Generated detailed reports for all inspection work. Developed repair designs, specifications, and contract drawings to prolong the service life of multiple waterfront structures. Acted as a project manager and site engineer providing construction management of three large scale pier rehabilitation projects. Responsibilities include acting as the client's technical representative throughout the duration of rehabilitation contracts, and oversight of field operations.

Generated detailed reports for all inspection work. Developed repair designs, specifications, and contract drawings to prolong the service life of multiple waterfront structures. Acted as a project manager and site engineer providing construction management of three large scale pier rehabilitation projects. Responsibilities include acting as the client's technical representative throughout the duration of rehabilitation contracts, and oversight of field operations.

National Gypsum Services Company, Inc., *Engineering Analysis of Existing Unloading Structure Capacity for Installation of New Larger Capacity Receiving Hopper - Burlington, NJ,* Project Manager

Calculated required capacity of existing structure to handle the installation of a new, larger receiving hopper. Reviewed existing plans and previous rehabilitation efforts.

National Gypsum Services Company, Inc., *Inspection of Piers - Various Locations*, Project Manager

Underwater and topside structural inspection of port facilities throughout the United States. Personally performed hands-on inspection at each site as well as directly supervising local diving services companies:

- Rensselaer, NY - Steel H-pile dolphins connected with reinforced concrete caps, steel tube truss walkways.
- Baltimore, MD - Concrete encased fluted steel pile bents with reinforced concrete caps and main pier deck. One severely deteriorated steel H-pile supported reinforced concrete cap dolphin. Dolphin condition warranted rehabilitation design which includes auxiliary steel piles.

- Portsmouth, NH - Steel sheet pile bulkhead and steel sheet pile breasting / mooring cells. Severe corrosion in tidal zone required encasing existing structures with new steel sheet pile.
- Wilmington, NC - Reinforced concrete pile supported R/C dolphin caps and accessway bents with pre-stressed concrete double-T beam spans. The inspection recorded ongoing cracks and deterioration of the R/C piles as well as identified vessel impact damage which required repair of one dolphin.
- Tawas City, MI - Square steel sheet pile cells with a reinforced concrete pier deck and timber fendering. Wrote detailed inspection reports which include ratings of each structure, photographs and video recordings as well as tables of measurements establishing the extent of deterioration and remaining capacity. Repair options with cost estimates were prepared for each site to help the client forecast future maintenance and capitol improvement requirements.

Sunoco Logistics, Inc., *Eagle Point Pier Rehabilitation - Emergency Underwater Inspection, West Deptford, NJ*, Field Engineer

Performed underwater inspection of Fender Cluster 11, a steel pile supported structure following vessel impact. Fieldwork resulted in restriction of breasting and mooring access to maintain safety. Determined the extent of damage for insurance claim resolution between the client and the responsible party.

Previous Project Experience:

Churchill Consulting Engineers, P.C., Berlin, NJ

Served as a team leader for above and underwater routine bridge inspections, culvert inspections, and overhead sign structure inspections. Produced reports including CAD drawings and repair recommendations for the New Jersey Department of Transportation, New Jersey Transit, and the New Jersey Turnpike Authority. Performed underwater construction inspections for bridge rehabilitation work.

Collins Engineers, Inc., Albany, NY

Worked as an assistant team leader for routine underwater bridge inspections throughout New York, New Jersey, Connecticut, Wisconsin, Illinois, and South Carolina. Performed pier inspections for various state and federal agencies including the United States Coast Guard and U.S. Navy. Performed in-depth inspections on over 100 structures in the New York State Barge Canal system. Was a member of an emergency inspection team which responded to needs caused by Hurricane Katrina.

W.J. Castle P.E. & Associates, Inc., Lumberton, NJ

Served an assistant team leader for underwater and topside bridge inspections for the New Jersey Department of Transportation, New York Bridge Authority, Burlington County Bridge Commission, Delaware Joint Toll Bridge Commission, and the Delaware River Port Authority. Once took emergency action to close down a privately owned toll bridge due to structural problems. Performed video inspections of confined spaces with Remote Operated Vehicles. Design experience includes temporary works for bridge reconstruction projects and several bridge load rating analysis. Worked as a field engineer for the reconstruction of the Bay Head Yacht Club (historic structure built on timber piles above water).

New York State Thruway Authority, *Underwater Inspection - Barge Canal Structures, Engineer*-Diver Performed underwater inspections of 104 structures including locks, approach walls, mooring cells, and dams along the eastern portion of the Erie Canal system. Developed maintenance and repair recommendations, wrote inspection reports.

NAME SHAWN M. MCADAMS, PE
TITLE STRUCTURAL ENGINEER
SERVICE AREA PORT COMMERCE

Years of Experience: 13

Registrations/Memberships

- Professional Engineer – NY, NJ, DE, MD, VA, NC, PA, DC, NH, TX
- AISC

Education

- BS, 1999, Swarthmore College, Engineering
- Certificate, 2006, Urban Engineers, Inc., Project Management Training

Mr. McAdams is a Structural Engineer with extensive experience, including marine engineering and design of waterfront facilities, bridges, and foundations. The bulk of his experience covers design, analysis, and evaluation of both steel and concrete structures. Mr. McAdams' experience includes:

Marine Projects

Sunoco Eagle Point Dock Repairs, Westville, NJ - Responsible for multi-phase design of ship breasting facilities and pile-supported mooring dolphins, as well as analysis of existing structural elements in order to rehabilitate the dock to a safe and operational condition. Design included alternate construction methods to reduce the construction schedule and maintain dock operations during construction. Duties also included design and analysis of ship mooring line patterns and hose tower rehabilitation.

Plains All American Pipeline Dock Rehabilitation, Paulsboro, NJ - Responsible for the design of new and strengthening of existing pile-supported breasting structures, as well as a new steel loading platform and catwalks.

Monorail Hoist Beam Design, Delair NJ - Responsible for design of a monorail beam system and supports for hoisting heavy equipment. Challenges included retrofitting supports to existing site conditions.

Sunoco Hose Tower Repairs, Westville, NJ - Responsible for design of access catwalk and new pad-eyes and supports for existing hose tower structure.

Flemington Circle, NJ Route 31, New Jersey Department of Transportation - Completed allowable stress design for pier and abutments, as well as seismic design. Additional tasks included designing field splices for the steel girders and design of pot bearings.

Route 33 Bypass, New Jersey Department of Transportation (NJDOT) - Responsible for review and correction of shop drawings. Responsibilities also included redesign of four structures, ten retaining walls, and twelve sign structures based on comments received from NJDOT.

Commodore Barry Bridge Vessel Collision Protection, DRPA, PA/NJ - Responsibilities included quality analysis and design of two artificial stone islands around the base of the piers to arrest the movement of vessels and protect the structure and the vessel, as well as performing an analysis of the bridge response due to an impact scenario. Work also covered the assessment of other types of protection structures, such as cells, pile structures, and floating fenders.

Bridge Projects

Pennsylvania Turnpike Commission, Full Depth Reconstruction between Valley Forge and Norristown, PA - Responsible for design work, including steel and pre-stressed concrete bridges, noise and earth-retaining walls, and sign structures for the PA Turnpike full-depth reconstruction between Valley Forge & Norristown. Responsibilities also included cost estimates, preparation of T,S&L reports, final structure design, preparation and evaluation of PS&E plans, as well as construction staging management.

Pennsylvania Turnpike Commission, NorthEast Extension Full Depth Reconstruction, M.P. A20 - A30 - Responsible for analysis of structural alternates, preliminary design, and preparation of cost estimates and TS&L reports. Design included earth-retention systems, noise walls, and several bridges.

Pennsylvania Turnpike Commission Reconstruction Project, M.P. 85.0 to 94.0 - Responsible for TS&L and PS&E submissions, and review of comments. Designed structures included two single-span, steel girder bridges and nine retaining walls, including mechanically stabilized earth, modular Geogrid, post and plank, and steel sheet pile walls.

Merion Avenue Project, Pennsylvania Department of Transportation (PennDOT), District 6-0 - Designed single span steel bridge and two retaining walls. Responsible for converting and updating existing plans and design from LFD to LRFD design methodology.

SR 6220, PennDOT, District 6-0 - Preformed preliminary design and cost estimate for three bridge structures and prepared the TS&L submissions.

SR 6202, Section 711, PennDOT - Responsible for performing final design and preparing the PS&E plans for a two continuous span, prestressed concrete bridges.

SR 0030, Section S26, PennDOT - Responsible for T,S&L submission for four proprietary retaining walls. Performed cost analysis for several types of retaining wall systems; including cast-in-place concrete, soldier pile and plank, T-wall, Geogrid and M.S.E. walls.

Astra Zeneca, Delaware Department of Transportation - Performed the final design and plans for cantilever abutments, as well as four proprietary retaining walls.

SR 0222, PennDOT - Responsible for evaluation and approval of submitted shop drawings for prestressed concrete beams, drainage systems, bearings, and sign structures.

Ship Loader Rehab, Ashtabula, OH - Performed design and completed 3-D model and analysis of repairs to existing ship loader crane boom and supporting structure.

Breasting Dolphin Rehab, Anacostia, MD - Completed design for replacement of breasting dolphin structure.

Sugarhouse Casino, Philadelphia, PA - Responsible for design of earth-retaining sheet pile bulkhead, high deck structure supported on piles, rip-rap, and a pile supported C.S.O. sewer and foundation.

Pacific Atlantic Terminals Dock Rehabilitation, Philadelphia, PA - Responsible for design of ship breasting facilities and fenders and mooring dolphins, as well as strengthening and repair of the existing concrete and steel sheet pile seawall to prevent further movement.

Broad Street Bulkhead, Philadelphia, PA - Responsible for design of a sheet pile bulkhead structure to replace the existing deteriorated quay wall.

Rehabilitation of Pier 1 at Girard Point, Philadelphia PA - Responsible for design and evaluation of structural elements of a high deck pier structure and steel sheet pile bulkhead due to in-field and as-built conditions. Elements included were sheet pile wall, concrete pile cap and deck, and fender chain system for low pile capacities at site.

Kinder Morgan Bulk Terminals, Philadelphia, PA - Responsible for design of a cellular sheet pile extension to the existing bulkhead. Duties also included layout and design of a new liquid handling dock at the site.

EDUCATION
AS/Civil Engineering, City and Guilds of London Institute

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
NICET II Equivalent

EXPERIENCE SUMMARY
Mr. Koomson has over 16 years of Construction Inspection working for agencies that include the PANY&NJ, NYC DDC, NYC DEP and others agencies providing construction oversight. A sampling of project's with relevant project experience follows:

PANYNJ, New Jersey Marine Terminal Construction – Civil Inspector monitoring activities at Marine Terminal construction sites. Work includes installation, testing and inspecting Civil works. Provides oversight to ensure construction progresses as scheduled and contract specifications are adhered to. Prioritizes multiple assignments, maintain deadlines, and works in a team environment. Inspects construction site daily and works with contractors to schedule deliveries, follow safety requirements, adhere to quality and code compliance; files daily narratives and progress reports detailing personnel, equipment, materials and work summary.

Over the last twenty-six months, Mr. Koomson has performed construction inspection on the following projects:

- Port Elizabeth Expressrail, Elizabeth Lead Tracks & South Bay Avenue - work consisted of construction of second lead track into Expressrail, reconstruction of existing lead track, construction of rail bridge over McLester St., reconstruction of Bay Ave., construction of new South Bay Ave. roadway, utility and other related work.
- Port Newark – Berth 8 & Berth 10 Wharf Reconstruction - work consisted of demolition of existing wharf, dredging and berth deepening, steel pile & steel sheet piling installation, installation of gabion walls, concrete deck reconstruction, paving & utilities.
- Port Elizabeth – North Ave/McLester St. Curve Realignment – work consisted of roadway realignment, including paving, utilities, traffic controls, overhead signage, storm water treatment units and related work.
- Port Newark – Port Street Interim Traffic Improvements - work consisted of removal of concrete islands and traffic controls; installation of guiderails, traffic barriers, signage, pavement markings and electrified traffic control devices at Port Street and vicinity.
- Port Newark – Berths 36 & 63 Wharf Reconstruction - work consisted of removal and disposal of existing wharf, dredging, upland disposal of dredged materials, steel pipe piles, sheet piles and other marine construction, paving, utilities and related work.
- Immediate Repairs, Berths 10–12 - repair of concrete encased piles.
- Immediate Marine Rehabilitation, repair of concrete encased piles.
- Concrete Roadway Rehabilitation – Repairs to North Avenue Bridge & Corbin Street Ramp; work included removal of deteriorated concrete and placement of new concrete and Latex Modified Concrete.
- Immediate Repairs - Corbin Street – excavated deteriorated concrete and replaced with Latex Modified Concrete (LMC).

NYCDDC, Reconstruction of Frederick Douglas Circle Project, Borough of Manhattan – Senior Construction Inspector The project involves reconstruction of this circle to include the erection of Figure monument in tribute to Frederick Douglas, fountain and constellation wall and quilt pattern design. The project also includes installation of 48", 20" and 12" sewers, heritage and standard traffic signal and street lighting, along with complete granite curb,

sidewalk and roadway construction, and tree planting. He also attended all critical phase meetings.

NYCDDC, HWK614B1, Reconstruction of Bergen Avenue Area in Brooklyn – Senior Construction Inspector responsible for construction oversight on a $27.7 million project. The work includes the installation of sidewalks, roadway, center mall, storm and sanitary sewers and the complete street and sidewalk reconstruction within approximately 16 residential blocks just west of Paerdegat Basin. The storm sewers were built on piles while most of the sanitary sewers were placed on the same lane as the existing sewers that were removed.

NYCDDC, Contract MED-579/Abandonment of Existing High Pressure Fire System in Lower Manhattan – Senior Construction Inspector responsible for the inspection of the removal of hydrants, hydrant valve boxes and main line valve boxes. Inspection of concrete and asphalt restoration surveys and does the preparation of Punch list for the final inspection. Also, he does testing and inspection of the concrete (Slump test, Air test, Temperature), plus the inspection of MPT.

NYCDEP, Installation of Sewers in Linwood Avenue, Staten Island, NY, Project No. SE-247A/SER002155. This project involved installation of 12" ESVP gravity sewers and 5'6" x4" concrete box culvert sewers. His duties include record keeping, project status/completion reports, documentation supporting contract payments, balance of materials, fixed assets reports, field cards, in-service notification and change orders.

New Jersey Turnpike between Interchange 8 and 13 Linden City, Union County. Senior Construction Inspector for the widening project.

NYCDEP, Victory Boulevard Sewer Project in Staten Island (SE208A/362A). Construction Inspector responsible for construction oversight on project. This project included installation of gravity sewers, utility crossing and pavements and sidewalk restoration.

JACOB PERLMUTTER, PE *KS Engineers, P.C.*
Project Engineer - Structural

EDUCATION
BS/Civil Engineering, Rutgers University, New Brunswick, NJ, 1981

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
Professional Engineer - NJ ([redacted] Expires: 4/30/08); NY (#070751, Expires: 10/31/08)
NHI Course 130053A, Bridge Inspection Refresher Course (issued: 01/2008)
NHI Course, Inspection & Maintenance of Ancillary Highway Structures, (06/2005)
NHI Course [redacted] Fracture Critical Inspection Techniques for Steel Bridges, September 2002
NHI Course [redacted] Bridge Management Training - Inspection Session, June 1998
NHI Course # [redacted] Safety Inspection of In-Service Bridges, November 1994
ESRI Introduction to ArcGIS I, 3/4/05
NYSDOT - Bridge Inspectors NDE Showcase, March 13, 2008

EXPERIENCE SUMMARY
Mr. Perlmutter has 27 years of experience in project management; project engineering; bridge replacement and rehabilitation design; light rail structural design; construction supervision; inspection of bridges, buildings, airports, and marine facilities; and resident engineering for bridge and highway construction projects. His relevant project experience includes:

PANYNJ, Facility Condition Survey Services As Requested on a "Call-In" Basis During 2006, 2007 and 2008 – Assignment # 4 Biennial Inspection for LaGuardia Airport Bridges – Project Manager responsible for the condition inspection and report preparation of 16 bridges at LaGuardia Airport in Queens, NY. The bridges include 2 airport entrance roadways over the Grand Central Parkway, departure ramps adjacent to and partially within terminal buildings, 2 enclosed pedestrian walkway bridges connecting the parking garage buildings (Lot 2) to Central Terminal building, and several connector ramp bridges over airport access roads within airport limits. Inspection also includes inspection of overhead sign structures mounted to the bridge structure as well as bridge fascia mounted sign structures.

PANYNJ, Facility Condition Survey Services As Requested on a "Call-In" Basis (MBE/WBE) During 2006, 2007 and 2008 – Assignment # 3 – Condition Survey for 16 Buildings at Elizabeth Port Marine Terminal – Project Manager responsible for condition surveying services on a "Call-In" basis was responsible for the condition survey and report preparation of Buildings 1130, 4030, 4060, 4070, 5000, 5020, 5030, 5060, 5070, 5080, 5090, 5110, 5120, 5130, 5140, and 5160 at Elizabeth Port Marine Terminal. Purpose of the inspection was to determine the condition of the buildings' structure and to identify any structural or non-structural deficiencies that might present potential safety hazards and to develop recommendations for correcting any deficiencies found to prevent further deterioration requiring major repair work. All building structural elements received a 100% visual inspection with 10% hands-on, up-close inspection including connections.

PANYNJ, Facility Condition Survey Services As Requested on a "Call-In" Basis During 2006, 2007 and 2008 – Assignment # 1 – Condition Survey of High Mast Light Towers at Harrison and Substation 50 at Journal Square – Project Manager responsible for the condition survey of 11 high-mast light towers located at the PATH Car Shop facility in Harrison and the Substation 50 and Compressor Room buildings located at the PATH Journal Square Transportation Center in Jersey City.

PANYNJ, Facility Condition Survey Services As Requested on a "Call-In" Basis During 2006, 2007 and 2008 – Assignment # 2 – Condition Survey of High Mast Light Towers at Port Newark and Port Elizabeth Marine Terminal – Project Manager responsible for the condition survey of 275 High Mast Light Towers at Port Elizabeth and Port Newark facilities. All light towers received a 100% hands-on inspection of the exposed foundations and bases, including anchor bolts and base plate welds. All towers that were inspected previously received a complete hands-on inspection. Newly installed towers were mostly visually inspected above the base of the towers.

PANYNJ, Facility Condition Survey Services As Requested on a "Call-In" Basis During 2006, 2007 and 2008 – Assignment # 3 – Condition Survey of High Mast Light Towers at Howland Hook Marine Terminal – Project Manager responsible for the condition survey of 43 high mast light towers at the Howland Hook Marine Terminal in New York. All high mast light towers received a 100% hands-on inspection including all structural framing and connections, luminaire assembles and connections, structural support systems, visible portions of the foundations, and other appurtenances attached to the light towers including floodlights and signs.

PANYNJ, Facility Condition Survey Services As Requested on a "Call-In" Basis (MBE/WBE) During 2006, 2007 and 2008 – Assignment # 1 Condition Survey for LaGuardia Airport Sign and Lighting Structures – Project Manager for the inspections and report writing for approximately two hundred twenty four (224) sign structures; one hundred seventy one (171) high mast light towers; two hundred forty four (244) light poles; and ninety four (94) traffic light structures. Structural and non-structural related deficiencies that could present a potential safety hazard were identified as well as verifying the status of repairs identified in the previous inspection report.

PANYNJ, Facility Condition Survey Services As Requested on a "Call-In" Basis (MBE/WBE) During 2006, 2007 and 2008 – Assignment # 2 2007 Condition Survey of the Facades of Lincoln Tunnel Ventilation Buildings – Project Manager responsible for the inspection and report writing for facade inspections of the Lincoln Tunnel Ventilation Buildings (2 buildings in New Jersey and 3 buildings in (New York) to assure the structural integrity of the exterior walls in regards to safety of the general public. *KSE* was also responsible for verifying the status of repairs identified in the previous inspection report.

PANYNJ, Condition Survey for Tunnel and Bridge Facilities on "Call-In" Basis During 2006 – Project Manager responsible for inspection services for condition survey of tunnels and structures and other associated services as requested on the following task orders under this "Call-In" contract: P.O. 4900002420 – Condition Survey of PATH Tunnels G, H, J, K, Y and Waldo Repair Shop and P.O. 4900002421 – Condition Survey of PATH Tunnels A, B, E, F (Caisson 2 to Exchange Place) and Miscellaneous Structure.

NJTA, Garden State Parkway Miscellaneous Structural Repairs, MP28.0 to MP163.2, OPS 3084 – Project Manager for the contract documents for the rehabilitation of superstructure and substructure units for various bridges on the GSP. This project involved the field survey of deficiencies found in the inspection reports for the prioritization of repairs and the preparation of contract documents (construction plans, MPT plans, specifications, estimates, and schedules).

WORLD TRADE CENTER/BUILDINGS

URBAN
ENGINEERS OF NEW YORK, P.C.
Formulating Excellence®

William Dale, AIA – Project Manager

YEARS OF EXPERIENCE: 13

EDUCATION:
Executive Masters of Business Administration, Temple University, Philadelphia, PA – 2007
B.A., Architecture, Temple University, Philadelphia, PA - 1992

CERTIFICATIONS/ REGISTRATIONS:
Registered Architect - AZ

SUMMARY:
Mr. Dale has over 10 years of experience as a registered architect in the construction industry. His professional experience includes the design of educational, commercial, and institutional/industrial facilities for public and private owners in New Jersey and New York. He has managed both architects and engineers in several organizations. In addition, he has broad experience with codes and standards including the International Building Code, BOCA, and the Uniform Building Code.

PROFESSIONAL EXPERIENCE:

Armand Corporation **2007 - Present**
School District of Philadelphia - Capital Improvement Program. Assistant Project Manager - Providing project management services for various renovations in the School District of Philadelphia. Specific duties include reviewing designs for constructability; management of multiple and various types of construction projects; tracking and management of project costs, scheduled activities, communications and other relevant data utilizing Prolog; and coordination of construction site work through meetings with school administration, school district's program managers and other concerned parties.

Robert E. Lamb, Inc., Valley Forge, PA **2006 - 2007**
Project Manager - Responsible for coordination for multidiscipline projects in the energy section, i.e. data centers and control rooms. Duties included conducting building condition survey, disseminating information, researching and proposing alternative material selections, as well as developing and managing project time-lines and delivery schedules.

Hill International, Inc. **2003 - 2006**
Construction Manager/Project Engineer - Project Manager for multiple school construction and renovation projects in New Jersey, Pennsylvania, and New York. Duties included conducting weekly meetings, site inspection, change order review, estimating, constructability reports and document review. Other responsibilities included: analytical review of proposals for work in the technology sector; value engineering of projects from programming through construction document; and reports for dispute resolution centered on clarity of construction document scope and detail.

Beatty Harvey & Associates, New York, NY **2002 -2003**
Served as Project Manager for ongoing projects for USEPA in Edison, New Jersey. These projects included new building construction, building renovation, building condition surveys for new emergency response center, facility planning, feasibility studies and cost estimating. The tasks included RFI response, submittal review, site visits and coordination with contractors and engineers.

Industrial Design & Construction, Phoenix, AZ **2000 - 2002**

Served as Architectural Lead for on-site services during construction of a 148,000 s.f. sub-micron Class I clean room microelectronics manufacturing facility and central utilities building (Intel Corporation). Tasks included day-to-day interaction with the construction management team, resolving coordination issues between contractors and engineers, responding to RFI's, reviewing submittals and managing team during the "As-Built" document phase. Designed and prepared presentation documents for a microelectronic facility.

ARCADIS Giffels, Phoenix, AZ **1999 - 2000**
Served as Project Manager/Senior Designer for a waterproofing project of an existing underground garage for C.B. Richard Ellis. Also, performed adaptive reuse and asset surveys of existing properties for the Salt River Project. Coordinated Architectural, Mechanical, Electrical, Structural and Civil departments.

Sheller Architecture **1998 - 1999**
Manager for the design development and engineering process of a Southwest Access, Corporate Headquarters and an office addition. Reviewed UBC and city ordinances and participated in jurisdictional plan review and permitting process. Coordinated Mechanical, Electrical, Structural, Civil, Landscape and Interior consultants.

Day & Zimmermann International, Inc., Phoenix, AZ **1997 - 1998**
As Senior Designer, verified existing conditions for code compliance studies. Prepared drawing, specification and as-built drawings and equipment layouts for laboratory relocation for Intel Corporation and Motorola.

Day & Zimmer International, Inc. **1993 - 1997**
Provided construction administration and drawing lead for 33,000 s.f. bulk pharmaceutical processing pilot plant, pharmaceutical fill/finish manufacturing plant, warehouse and offices. Also, prepared construction documents for an 80,000 s.f. pharmaceutical plant, offices and R&D laboratories**.**

Urban, Philadelphia, PA **1992 - 1993**
As Contract Designer, responsibilities included conducting building condition survey, designing security gates and preparing construction documents for the SEPTA Suburban Station.

NAME JOHN M. SABATINO, AIA, LEED® AP

TITLE SENIOR PROJECT MANAGER

SERVICE AREA WORLD TRADE CENTER/ BUILDINGS

Years of Experience: 42

Registrations/Memberships

- Licensed Architect – NY, NJ
- LEED® AP
- American Institute of Architects
- National Council of Architectural Registrations Boards (NCARB)

Education

- BA, City College of New York, Architecture
- BS, New York Institute of Technology, Architectural Technology

Mr. Sabatino has extensive experience in all areas of building design and construction. He presently serves as a Senior Project Manager and is the Deputy Managing Director for our Integrity Monitoring of a major office building in New York City. He is licensed to practice Architecture and is a LEED® Accredited Professional. His experience has been centered around Capital Program and Project Management within the metropolitan area as well as around the country. Additionally, he has extensive experience in Real Estate and Safety management.

Second Avenue Subway

Performed the architectural portion of the technical capacity and capability review of the Second Avenue Subway project, which included reviewing the project management plan, design quality manual, and station design, and interviewing the architects on the project and preparing a report on findings.

Major High Rise Office Building

Deputy Managing Director for the Integrity Monitoring of the construction of a 3.6 million gross sf/2.6 million useable sf multi-billion dollar office building in downtown New York City. This responsibility reports directly to the Owner and is centered on eliminating fraud, waste, and abuse. It requires monitoring the activities of the design professionals and the construction manager. Additionally, it includes monitoring the construction for safety, compliance with drawings and specifications, schedule, and cost avoidance.

Expansion to and Renovation of a Convention Center

Owner's Representative - Project Executive for development of the design, construction documentation, and cost control of the $700 million state-funded project. This Expansion to and Renovation of the Pennsylvania Convention Center consisted of adding one million square feet to the existing center, consisting of new mechanical and electrical plant, new 35,000-square-foot Kitchen, 60,000-square-foot ballroom, new exhibit halls, and meeting rooms. Also included as part of this effort was a 70,000-square-foot renovation to the center's support space and renovation of the existing center to comply with the ADA and fire and life safety codes. The project was designed to qualify for a LEED Certification.

Feasibility Study for a Major Art Foundation

Project Executive for the Feasibility Study to move the Barnes Galleries and Art Institute to a new 150,000-square-foot facility in Center City Philadelphia. The study was used to successfully petition the Orphan's Court to break the will of Albert C. Barnes, which prohibited the Barnes from moving from its original location. Directed the preparation of the study that included land acquisition strategy, site/code analysis, building design tests of the site, and project budgeting, and developed the logistics to secure and move the art. The study became the program for the project design to house the largest collection of French and Post Impressionist art in the country valued at $9 billion.

Heating and Cooling Plant Replacement & Upgrade

Project Executive for the Design - Build Replacement & Upgrading of the Pennsylvania Convention Center's Central Heating and Cooling Plant. This $25 million project included

design and construction of a new heating and cooling plant that included reinforcement of the floor, removal of four gas absorption chillers and replacing them with two gas centrifugal chillers and two gas absorption chillers, two boilers, associated electrical equipment, air handlers, pumps, ductwork and piping, while keeping the facility up and running continuously.

Satellite Headquarters, Conference Training Center and Hotel

Project Executive for the Site Selection, Land Purchase, Design and Construction of a 1.6 million-square-foot suburban corporate complex. This $575 million project provided office space for 3,000 employees in one million square feet of office space, a 300,000-square-foot conference/training center and a 420-room, 300,000-square-foot hotel.

Major Office Park

Project Executive for a major corporate initiative that was achieved in several phases:

Phase 1 – Directed the land acquisition and site due diligence of a 900-acre farm site in a rural location.

Phase 2 – Managed the design development and governmental approval of a general development plan consisting of 7.5 million square feet of office, hotel, conference center, retail buildings and amenities

Phase 3 – Directed design and construction of a major infrastructure project that included constructing and dedicating to the County a new road that bi-furcated the 900 acres. This included design and installation of all new electric, telephone, and storm/sanitary sewers and distribution of same to the building pads.

Phase 4 – Directed design and construction of an $800 million, 14-building, multi-use corporate campus that houses 7,200 employees in 2.3 million square feet that included parking garages, three cafeterias, full service gym, medical/dental offices, retail spaces, and outdoor fields.

Phase 5 – Developed and implemented the real strategies for properties being vacated, including negotiating lease surrender, sub-leases, and liquidation of equipment and furnishings.

OSHA Compliance

Project Director for remediation of OSHA violations, fines, and subsequent lawsuits resulting from a death in a facility owned by a Fortune 100 corporation. This included negotiating the settlement of all lawsuits and implementing OSHA-approved environmental and building operations procedures for all facilities owned by the corporation. Additionally, developed the group that managed the implementation of all the safety and environmental programs.

Mr. Sabatino's additional experience includes developing a national strategic real estate plan and the tactical implementation of all lease negotiations and design/construction projects in the plan. This included: managing site location searches, structuring and analyzing real estate transactions, lease administration, audits of operating expenses, landlord interface through regional project teams, and strategic service partners.

During his career, Mr. Sabatino has also provided hands-on project troubleshooting services for a major London project that was behind schedule, over budget, and faced lease problems. This meant devising strategies for getting back on schedule, lowering the over-budget status of the project, while resolving lease signing and lease surrender issues. The results: the facility was opened as originally scheduled, all lease issues were resolved and the over-budget status was reduced by 60%.

NAME EDWARD J. GODOROV, PE
TITLE MECHANICAL ENGINEER
SERVICE AREA WORLD TRADE CENTER/ BUILDINGS

Years of Experience: 43

Registrations/Memberships

- Professional Engineer – NJ, PA, MD, IL
- American Society Heating, Refrigeration & Air Conditioning Engineers
- American Society of Plumbing Engineers
- American Society of Sanitary Engineers - Past Chapter President 1984 (Past Member)
- National Society of Professional Engineers - Past Chapter President 1988

Education

- BAE, 1967, Pennsylvania State University, Architectural Engineering
- BS, 1963, Pennsylvania State University, Mechanical Engineering
- Certificate, 2005, Dale Carnegie Course

Mr. Godorov is responsible for the design and construction management of the heating, ventilation, air conditioning, plumbing, and fire protection for shopping malls, food markets, hotels and motels, financial centers, corporate centers, industrial complexes, medical and pharmaceutical facilities, public and private educational institutions. Mr. Godorov's experience includes:

Philadelphia Navy Yard, Building 669, Philadelphia, PA - Chief Mechanical Engineer for the Renovation of an existing 2-story building for office and warehouse space.

The Franklin Institute Museum Addition and Building Project, Saylor Gregg Architects, Philadelphia, PA - MEP Principal for the 43,000-SF expansion will include new museum exhibit space, staff offices, and supporting mechanical space. The addition will feature two floors of permanent multi-story exhibit space, one floor of traveling exhibits, offices, and basement for mechanical space. This building is designed to obtain LEED Silver certification.

177th Fighter Wing Fire Station, New Jersey Air National Guard, Atlantic City International Airport, Philadelphia, PA - Chief Mechanical Engineer for the renovation and addition to the 177th New Jersey Air National Guard Fire House. The 14,775-SF space includes offices, locker rooms, apparatus bays, and training facilities.

US Airways Ground Service Equipment Facility, Philadelphia International Airport, Philadelphia, PA - Chief Mechanical Engineer for the design and construction of a new 56,000-SF ground service equipment facility, including a training room, break room, lavatories, paint booths, loading docks, parts storage area, and fluid and waste transfer systems. Responsible for the commissioning of the mechanical systems within the building and the opening of the building.

Atlantic Aviation's Terminal & Hangars, Philadelphia International Airport: DPK&A, Architects, Philadelphia, PA - Chief Mechanical Engineer for the project design and layout of a new terminal building, two new airplane hangars, and a new general maintenance building.

The University of Pennsylvania, Museum of Archaeology and Anthropology, MEP Infrastructure Upgrade, Project F.A.R.E., Philadelphia, PA - Chief Mechanical Engineer for the Mechanical & Electrical upgrades in the century-old building. The main complex, which was completed between 1899 and 1929, could no longer protect the artifacts against damage from changes in temperature and humidity, air pollution, and mold. The original mechanical and electrical systems did not meet current standards for environmental control or modern occupants. Upgrades and replacement of building systems were designed without compromising the architectural beauty and

historic character of the museum complex.

US Airways Ground Service Equipment Facility, Philadelphia International Airport
Mechanical Engineer for the design and construction of a new 56,000 SF ground service equipment facility for US Airways, Mr. Godorov provided plumbing, HVAC and other mechanical systems design for the project. Mr. Godorov designed mechanical and plumbing systems for the facility that included a training room, break room, lavatories, paint booths, loading docks, parts storage area, and fluid and waste transfer systems. Mr. Godorov provided design coordination for the mechanical and plumbing systems within the building and coordinated the design with the structural design and architecture. Mr. Godorov will be part of the team responsible for commissioning of the mechanical systems within the building and the opening of the building.

177th New Jersey Air National Guard Fire House Mr. Godorov served as the Mechanical Engineer team leader for the Renovation and Addition to the 177th New Jersey Air National Guard Fire House. The 14,775 SF space includes offices, locker rooms, apparatus bays and training facilities.

Rutgers University's Science Building Renovation, SaylorGregg Architects, Camden, NJ - Project Engineer for mechanical design and coordination including all phases of project design and layout from schematic through construction documentation including but not limited to feasibility studies, site surveys, load calculations, equipment selections, code and standards review, coordination with all related disciplines.

Atlantic Aviation's Terminals & Hangars, Philadelphia International Airport; DPK&A, Architects, Philadelphia, PA - Project Engineer for mechanical design and coordination for all phases of project design and layout from schematic through construction documentation including but not limited to feasibility studies, site surveys, load calculations, equipment selections, code and standards review, coordination with all related disciplines i.e. plumbing, electrical, structural, and architectural.

Elizabethtown Train Station Renovation, Borough of Elizabethtown, Elizabethtown, PA - Project Engineer for mechanical design and coordination for all phases of project design and layout from schematic through construction documentation including, but not limited to, feasibility studies, site surveys, load calculations, equipment selections, code and standards review, coordination with all related disciplines. The project consisted of split-type air-conditioning systems with indoor air-handling units and outdoor air-cooled condensing units, hot water cast iron boiler, hot water pumps, hot water radiation, hot water unit heaters, hot water duct heating coils, toilet exhaust system, domestic water piping and gas fired hot water storage tank.

Trenton Central Fire Headquarters and Museum, Venturi, Scott Brown Associates, Trenton, NJ - Chief Mechanical Engineer for all mechanical engineering design services from the project design phase through construction administration. This project focused on the restoration and renovation of an historical fire house to accommodate a museum, administration offices and the addition of dorms and a state-of-the-art fire truck repair facility. This modified fire house will serve as the Central Fire Headquarters for the City of Trenton. Led the development of the necessary specialty: above and below ground vehicle fume exhaust systems; fuel storage, transfer and automatic distribution systems; lubrication/vehicle maintenance fluids and storage automatic distribution systems; filtration exhaust/ventilation for fire extinguisher refill station; medium and low pressure screw type compressed air distribution system; self contained breathing apparatus refill station system; wood dust collection system; metal dust collection system; welding fume collection systems; and a petroleum fluid waste recycling system.

John B. Roberts, AIA

Talson Solutions, LLC

306 Market Street, 4th Floor
Philadelphia, PA 19106

JOHN B. ROBERTS, AIA

EXPERIENCE

- 37 Years

EDUCATION

BA, Howard University School of Architecture & Planning, 1972

NCARB Intern Development Program; certified January 1979

REGISTRATIONS/ MEMBERSHIPS

- Licensed Architect; New York [redacted]; Michigan [redacted] Illinois # [redacted]; Ohio [redacted] Indiana #[redacted] Texas [redacted]
- National Council of Architectural Registration Boards (NCARB), Certification [redacted]
- American Institute of Architects
- American Arbitration Association

RECORD OF PROFESSIONAL EXPERIENCE

John Roberts is currently a Senior Project Manager representing Talson Solutions on the Project Management Oversight (PMO) team of Urban Engineers of New York, PC. Mr. Roberts is experienced in project management oversight, program management, construction management and architectural design. He has worked on a wide range of facility types, including , new and existing subway systems, regional rapid transit stations, transit centers, major medical facilities, university health systems, airport expansion, schools, full service senior care facilities, office buildings, correctional facilities, sports complexes, parking garages, and community development housing. His diverse roles, for both public and private owners, have included Project Oversight Manager, Design Manager, Project Architect, Project Manager, Construction Manager, Owner Representative, Project Engineer, Resident Engineer and Construction Superintendent. Highlights of Mr. Roberts' experience include the following:

Project Management Oversight; Federal Transit Administration (FTA), Region II, Major Capital Projects. Grantee: Metropolitan Transportation Authority, New York, NY

Project Manager, New York City Transit Stations Rehabilitation Program, as a part of the Project Management Oversight team responsible for monitoring design and construction of Federal Transit Administration (FTA) funded stations projects. Responsibilities include monitoring the projects to determine if they are on schedule and within budget; are proceeding in conformance with the drawings & specifications; are being implemented efficiently and effectively. As Oversight Manager, Mr. Roberts provides FTA with evaluations of management procedures, construction progress and project issues; prepares monthly reports, reviews the grantee Master Project Management Plan, Supplemental Project Management Plans, Management Manuals and procedures, and provides reports to the FTA as to whether these documents are acceptable and makes recommendations for acceptance.

Risk Assessment; Mr. Roberts participates as a part of the multidisciplinary team analyzing the design, estimate, scheduling, procurement and construction aspects of the multi-Billion dollar Second Avenue Subway and East Side Access projects.

Second Avenue Subway Project; provides support to the lead oversight managers with regards to monitoring architectural design elements in the new subway stations.

East Side Access Project; provides support to the lead oversight managers with regards to monitoring architectural design elements for the new station at Grand Central Terminal.

Project Manager for the Program Management Team; Greater Cleveland Regional Transit Authority (GCRTA) – Reconstruction of Light Rail Stations, Cleveland, OH: Responsible for design and construction phase management for removal and replacement of 26 light rail, Green and Blue Line stations and construction of two (2) new power substations. Responsibilities included liaison with transit Board of Trustees

and City jurisdictional departments; coordination of A/E team and the A/E contract; coordination of estimates, bidding, bid analysis, client presentations; and construction contract administration.

Project Manager, GCRTA - New East 34th St. Station, Cleveland, OH: Responsible for the design of this light rail station, proposed to service the metro campus of Cuyahoga Community College.

Cost Consultant, GCRTA – New West 25th St. Station, Cleveland, OH: Responsible for preparing design phase estimates for the architect of record on this new heavy rail station on the "red' line.

Construction Manager, GCRTA – New Waterfront Line, Cleveland, OH: Responsible for managing the construction of four (4) new light rail stations, including Settler's Landing, East Bank and East 9th St. Stations; two (2) new power substations, all site work, streetscape, coordination of signage and the integrated public arts program. The new 2.2-mile line was the first extension of the system in the previous 25 years. Designed by Parsons Brinckerhoff, the new Waterfront Line features the first segmental bridge construction in a rail transit system in the United States.

Construction Manager, GCRTA – New Windermere Station, Cleveland, OH: Renamed the Louis Stokes Transportation Center, this Intermodal station is the largest in the RTA system and services both bus and heavy rail transit on the "red" line. This station will also serve as a transfer point from the new BRT line along Euclid Ave. Responsibilities included construction supervision and coordination of the integrated public art program.

Sound Transit – New Light Rail System, Seattle, WA: Participated as a member of the value engineering team during the pre-design study that was prepared by the independent design team Parsons Brinckerhoff, Inc. The value engineering study covered traffic analysis, parallel platform vs staggered platform analysis, utilities & drainage, aerial guideway analysis, and station design. The resultant team recommendations were accepted by Sound Transit and included as a part of the final design scope of work.

Project Architect/ Architect of Record, Detroit Department of Transportation (DDOT)
New Downtown Transit Center: The FTA funded Rosa Parks Transit Center is designed as a multi-modal public transit facility in the heart of downtown Detroit, Michigan. The facility occupies a 2.4 acre site and includes an enclosed 27,700 square foot (including three-levels) building with a central island passenger concourse serving fifteen bus bays. The passenger concourse and busway features a tensioned fabric roof structure for protection from inclement weather as well as to provide an environment with natural lighting. The enclosed transit building houses passenger waiting areas with fixed seating, staffed transit information and ticketing areas, commercial retail venues including a coffee shop, a convenience store, a newspaper and magazine shop, and a small food service venue. The facility also houses transit operations facilities and a transit police substation. The completed fabric canopy will be the largest tensioned fabric system in the United States.

Responsible for organizing and managing the design team; managing the design and construction document phases of the project; specification writing; coordination with the owner and all city agencies; and construction contract administration.

Project Manager, Detroit Department of Transportation (DDOT)
8 Mile Boulevard Corridor Improvements

- 8 Mile Bus Stop Improvements: Construction of 200 new bus stops along 8 Mile Boulevard including signage, trash receptacles and some new bus shelters.
- Eastland Transit Center, Harper Woods, MI: Design and construction of new transit center, including new pavilion, shelters, new sitework and landscaping.
- Northland Transit Center, Southfield MI: Rehabilitation of existing transit center, including new pavilion, breezeway shelters, new sitework and landscaping.
- State Fair Transit Center, Detroit, MI: Addition to existing transit center, including expanding existing pavilion, new sitework, landscaping, passenger waiting islands and shelters.

William Dale, AIA – Project Manager

YEARS OF EXPERIENCE: 13

EDUCATION:
Executive Masters of Business Administration, Temple University, Philadelphia, PA – 2007
B.A., Architecture, Temple University, Philadelphia, PA - 1992

CERTIFICATIONS/ REGISTRATIONS:
Registered Architect - AZ

SUMMARY:
Mr. Dale has over 10 years of experience as a registered architect in the construction industry. His professional experience includes the design of educational, commercial, and institutional/industrial facilities for public and private owners in New Jersey and New York. He has managed both architects and engineers in several organizations. In addition, he has broad experience with codes and standards including the International Building Code, BOCA, and the Uniform Building Code.

PROFESSIONAL EXPERIENCE:

Armand Corporation **2007 - Present**
School District of Philadelphia - Capital Improvement Program. Assistant Project Manager - Providing project management services for various renovations in the School District of Philadelphia. Specific duties include reviewing designs for constructability; management of multiple and various types of construction projects; tracking and management of project costs, scheduled activities, communications and other relevant data utilizing Prolog; and coordination of construction site work through meetings with school administration, school district's program managers and other concerned parties.

Robert E. Lamb, Inc., Valley Forge, PA **2006 - 2007**
Project Manager - Responsible for coordination for multidiscipline projects in the energy section, i.e. data centers and control rooms. Duties included conducting building condition survey, disseminating information, researching and proposing alternative material selections, as well as developing and managing project time-lines and delivery schedules.

Hill International, Inc. **2003 - 2006**
Construction Manager/Project Engineer - Project Manager for multiple school construction and renovation projects in New Jersey, Pennsylvania, and New York. Duties included conducting weekly meetings, site inspection, change order review, estimating, constructability reports and document review. Other responsibilities included: analytical review of proposals for work in the technology sector; value engineering of projects from programming through construction document; and reports for dispute resolution centered on clarity of construction document scope and detail.

Beatty Harvey & Associates, New York, NY **2002 -2003**
Served as Project Manager for ongoing projects for USEPA in Edison, New Jersey. These projects included new building construction, building renovation, building condition surveys for new emergency response center, facility planning, feasibility studies and cost estimating. The tasks included RFI response, submittal review, site visits and coordination with contractors and engineers.

Industrial Design & Construction, Phoenix, AZ **2000 - 2002**

Served as Architectural Lead for on-site services during construction of a 148,000 s.f. sub-micron Class I clean room microelectronics manufacturing facility and central utilities building (Intel Corporation). Tasks included day-to-day interaction with the construction management team, resolving coordination issues between contractors and engineers, responding to RFI's, reviewing submittals and managing team during the "As-Built" document phase. Designed and prepared presentation documents for a microelectronic facility.

ARCADIS Giffels, Phoenix, AZ **1999 - 2000**
Served as Project Manager/Senior Designer for a waterproofing project of an existing underground garage for C.B. Richard Ellis. Also, performed adaptive reuse and asset surveys of existing properties for the Salt River Project. Coordinated Architectural, Mechanical, Electrical, Structural and Civil departments.

Sheller Architecture **1998 - 1999**
Manager for the design development and engineering process of a Southwest Access, Corporate Headquarters and an office addition. Reviewed UBC and city ordinances and participated in jurisdictional plan review and permitting process. Coordinated Mechanical, Electrical, Structural, Civil, Landscape and Interior consultants.

Day & Zimmermann International, Inc., Phoenix, AZ **1997 - 1998**
As Senior Designer, verified existing conditions for code compliance studies. Prepared drawing, specification and as-built drawings and equipment layouts for laboratory relocation for Intel Corporation and Motorola.

Day & Zimmer International, Inc. **1993 - 1997**
Provided construction administration and drawing lead for 33,000 s.f. bulk pharmaceutical processing pilot plant, pharmaceutical fill/finish manufacturing plant, warehouse and offices. Also, prepared construction documents for an 80,000 s.f. pharmaceutical plant, offices and R&D laboratories**.**

Urban, Philadelphia, PA **1992 - 1993**
As Contract Designer, responsibilities included conducting building condition survey, designing security gates and preparing construction documents for the SEPTA Suburban Station.

Robert McKay, Sr. Project Manager

YEARS OF EXPERIENCE: 29

EDUCATION:
MBA, Management, Phila. College of Textiles and Science – 2000
B.S., Mechanical Engineering Tech., Temple University – 1983

CERTIFICATIONS/ REGISTRATIONS:

- Certification in Project Management, American Management Association – 1989
- Plumbing Insp. License (ICS) for Residential, Industrial and Commercial Structures, Dept. of Community Affairs Uniform Construction Code, NJ - 2004

SUMMARY:
Mr. McKay has over twenty years experience with emphasis in the area of project management including cost estimating and QA/QC. His experience has included design and commissioning of HVAC, fire suppression, electrical, and plumbing; remediation of office buildings, substations and other commercial structures; and renovation of bus garages, residential buildings, educational facilities, and food courts. Mr. McKay has hands-on knowledge of materials and equipment, as well as experience with vendor supplier negotiations, and staff direction.

PROFESSIONAL EXPERIENCE:

Armand Corporation **2005 - Present**

School District of Philadelphia Construction Management Services for the Capital Improvement Program. Project Manager - Providing construction management services for various renovations in the School District of Philadelphia. Specific duties include preparing cost estimates and reviewing designs for constructability; development of project master schedules utilizing Primavera P3; management of multiple and various types of construction projects simultaneously; tracking and management of project costs, scheduled activities, communications and other relevant data utilizing Prolog; commissioning of HVAC, mechanical, electrical and plumbing systems, and coordination of construction site work through meetings with community organizations, school administration, political representatives, school district's program managers and other concerned parties.

School District of Philadelphia, Jules Mastbaum Area Vocational Technical School (A.V.T.S.), Project Manager – Provided construction management services for the total renovation of all mechanical, electrical and plumbing systems at the high school. The project also included general construction encompassing major and minor renovation of classrooms, shops, computer laboratories, auditorium and offices. Duties included tracking and management of project costs, scheduled activities, communications and other relevant data utilizing Prolog; commissioning of HVAC, mechanical, electrical and plumbing systems; and coordination of construction site work through meetings with community organizations, school administration, political representatives, school district's program managers and other concerned parties.

School District of Philadelphia CM Services for the Ben Rush High School. Asst. Project Manager - Provided construction management services for various renovations of the $30M Benjamin Rush High School. Specific duties included reviewing designs for constructability; oversight of remediation of underground storage tanks, soil contamination and asbestos abatement; tracking and management of Contract changes, project costs, and scheduled activities; and

coordination of construction site work through meeting with Architects, Engineers, School Principals, and other concerned parties.

FTHA Physical Needs Assessment for NJ42-2. Project Manager - Provided inspections services for a physical needs assessment at a HUD funded development. Inspected 10% of the units for mechanical, electrical, structural, roof, and exterior deficiencies. A cost estimate was performed along with a complete narrative of each of the units inspected. The narrative, detailed inspection reports, and cost estimates will provide FTHA with the tools needed to make a determination as to whether to demolish/rebuild or renovate.

GOVCOM Enterprises, Inc., Willingboro, NJ **2000 – 2005**
Project Manager - Managed, developed budgets and coordinated the efforts of the subcontractors, project engineers, consultants, superintendents, and construction tradesmen in the execution of residential, industrial and commercial projects. Conducted progress, preconstruction, and pre-bid meetings. Maintained project schedule (CPM), negotiated project change order requests, and obtained the necessary permits and licenses for construction. Communicated with all levels of governmental, municipal, state, and regulatory agencies necessary to obtain permits, inspections, and approvals for construction and design work.

SEPTA, Philadelphia, PA **1991 – 1998**
Project Engineer, Engineering and Construction Department Managed and coordinated multiple 3rd party design and construction projects/contracts, and provided commissioning services for HVAC, mechanical, electrical and plumbing. Dealt with consultants, in-house engineers, community groups, government agencies (EPA, OSHA, U.S. Army Corps of Engineers, etc.), and all levels of management necessary to complete projects. These projects included construction or renovation of office buildings, railroad stations and railroad facilities, substations, parking garages, bus garages and shops, bridges, heavy highways, civil, architectural, and electrical services.

SEPTA, Philadelphia, PA **1989 – 1991**
Supervisor Facilities Construction Projects/Project Manager, Operations Support Managed multiple 3rd party contracts and in-house construction work force for the construction and renovation of various SEPTA facilities. Coordinated construction work with Facilities Engineering, related department management, and outside organizations. Ensured the contractors' work was done in strict adherence with construction and contract documents. Generated construction drawings and specifications, and coordinated work of other engineering disciplines necessary to complete the various design projects. Reviewed construction and contract documents submitted from outside consultants for compliance with design criteria, and performed commissioning services.

SEPTA, Philadelphia, PA **1984 – 1989**
Mechanical Engineer II/Facilities Engineering - Performed design for HVAC, fire suppression, plumbing services, and other mechanical facilities needed for a large mass transit system. Generated construction drawings and specifications, and coordinated work of other engineering disciplines necessary to complete the various design projects. Reviewed construction and contract documents submitted from outside consultants and contractors for compliance with design criteria.

D. FIRM EXPERIENCE

Integrity Monitoring
World Trade Center - Freedom Tower
New York, NY

"Rising to 1776 feet, the Freedom Tower will be the cornerstone of the World Trade Center site."

Client: *The Port Authority of New York and New Jersey*

Urban Engineers is a joint venture partner of the Fortress Monitoring Group (FMG), which brings together professional personnel recognized for their engineering, forensic auditing, investigative, legal abilities and experience. Urban's personnel constitute FMG's engineering division.

FMG was selected by the Port Authority of New York and New Jersey to serve as the Integrity Monitor for the construction of the Freedom Tower on the World Trade Center site in Lower Manhattan. In this role, FMG reports exclusively to and works closely with the Port Authority's Inspector General to design an appropriate integrity monitorship program. FMG's purpose is to prevent fraud, waste and abuse and/or corruption; to detect it; and, if detected, to coordinate with the Inspector General on definitive and effective actions to be taken.

HIGHLIGHTS:

- Integrity Monitoring
- Risk Assessment
- Constructability Reviews
- Construction Monitoring

Second Avenue Subway
Project Management Oversight
New York, NY

"The Second Avenue Subway will be the first major new subway development in New York City in over 50 years."

Client: Federal Transit Administration (FTA)

HIGHLIGHTS:

- Project Management Oversight
- Tunneling
- Tracks and Signals
- Vehicle Procurement
- Performance Monitoring

The Federal Transit Administration appointed Urban Engineers (Urban) to perform Project Management Oversight (PMO) services on federally-funded transit projects in the New York metropolitan area. Among the projects Urban is overseeing is the design and development of Phase I of the new Second Avenue Subway (SAS) from 106th Street to 63rd Street. Total cost for Phase I is $4.87 billion.

SAS will reduce overcrowding and delays on the Lexington Avenue Line, improve travel for both city and suburban commuters, and improve access to mass transit for residents of the East Side of Manhattan. In total, Phase I will include three new underground stations and an expansion of the existing station at 63rd Street. SAS will be the first major new subway development in New York City in over 50 years.

The current project scope includes: tunneling; station/ancillary facilities; track, signal, and electrical work; vehicle procurement; and all other subway systems necessary for operation. Phase I provides an Initial Operating Segment from 96th Street to 63rd Street that will connect with the existing Broadway Line that extends to Lower Manhattan and Brooklyn. Subsequent Phases will extend the line northward to 125th Street and to the southern terminus at Hanover Square in Lower Manhattan.

As PMO Contractor, Urban monitors the performance of the Metropolitan Transportation Authority (MTA) and its consultants to confirm that the federal government's funds are being appropriately spent and provides special consultations on a broad range of issues that may emerge throughout the project. A key portion of this work was the Risk Assessment effort, which included the first schedule contingency plan and the first project execution strategy for a multi-billion-dollar FTA program. Urban's continuing effort includes in-depth analysis of risk factors, development and tracking of cost and schedule contingency plans, and identification of issues that may require mitigation strategies. The assignment includes a detailed and on-going review of the MTA's cost estimate and schedule for Phase 1.

Whitehall Ferry Terminal
Project Management Oversight
New York, NY

"A new terminal for the venerable Staten Island Ferry will benefit the 1.7 million people who use the ferry each month."

Client: Federal Transit Administration (FTA)

HIGHLIGHTS:

- Intermodal Terminal
- Rehabilitated Ferry Slips
- Improved Structural Integrity
- Improved Public Access
- Public Open Space

Urban Engineers (Urban), under its New York area project management oversight contract, is responsible for oversight for the design of the Whitehall Ferry Terminal (WFT), a 180,000-square-foot ferry terminal located on the southern tip of Manhattan. The intermodal terminal incorporates three rehabilitated slips for the Staten Island Ferry and the marine craft facilities servicing the ferry. Reconstruction of the WFT improves the structural integrity of the ferry terminal, the three ferry slips, and the timber piles that support the building; enhances the appearance of the terminal and overall site; and creates a major new open public space.

The project includes connections to two subway stations, a terminal for three bus lines, a taxi drop-off space, and space for 96 bicycles. On the north side of the new terminal building, a two-acre public open space, the Peter Minuet Plaza, will improve access to the terminal.

The monthly Staten Island Ferry ridership is approximately 1.7 million people. The annual ridership is approximately 20 million people.

Meadowlands Railroad & Roadway Improvements
East Rutherford, NJ

> **"This new rail service helps cement the Meadowlands' status as a world-class destination for spectator sports and other major events."**
>
> Dennis Robinson
> President and CEO of NJSEA

Client: New Jersey Sports and Exposition Authority

HIGHLIGHTS:

- Program Management
- Construction Management
- Construction Inspection
- Scheduling
- Cost Estimating
- New Rail Spur with Station
- Extensive Interagency Coordination

The New Jersey Sports and Exposition Authority hired Urban Engineers, Inc. (Urban) to provide program management, construction management, and construction inspection services for the Meadowlands Railroad and Roadway Improvement Project. The assignment also included development, tracking, and updating a master schedule, and preparation of an independent cost estimate.

Multiple clients created the need for extensive interagency coordination to keep players on the same page through the process. Urban successfully worked within this multi-agency environment in a cooperative effort to provide rail access to the Meadowlands Sports Stadiums and the future Xanadu entertainment and retail complex.

The project included construction of a 2.1-mile dual track rail spur off New Jersey Transit's (NJT) Pascack Valley Rail Line, which serves NJT's new Meadowlands Rail Station. The station, located within the Meadowlands Complex, is directly adjacent to the new Giants/Jets Stadium. The line included three interlockings, bi-directional signaling, hazardous material remediation, and approximately 3,500 feet of viaduct over wetlands. The rail station features an island platform approximately 950 feet in length, and a waiting area for passenger queuing and shelter. All aspects of code required egress and passenger flow, including pedestrian overpasses, escalators, stairs, and elevators.

The project was completed on time and within budget through two superfund sites, with constraints due to unreliable utility information, a moratorium due to anadromous fish, construction impacts due to race track operations, and numerous major concurrent construction projects on the site, including the Giants/Jets Stadium, Xanadu Entertainment Complex, and New Jersey Turnpike Authority's Interchange 16W.

Keystone Corridor Improvement Project (KCIP)
Harrisburg, PA

Client: Pennsylvania Department of Transportation

"The KCIP is an example of the Commonwealth's and PennDOT's commitment and vision in establishing the state as a leading advocate for major transportation improvements."

HIGHLIGHTS:

- Project Management Oversight
- Monitor the following:
  - Construction Progress
  - Schedule
  - Budget
  - Design Conformance
- Five Year Capital Program

Urban Engineers (Urban) was the Project Management Oversight (PMO) Consultant for the $140 million PennDOT/Amtrak KCIP. The Commonwealth of Pennsylvania defines the Keystone Corridor as Amtrak's 104-mile Harrisburg Line from the Harrisburg Transportation Center to Amtrak's 30th Street Station in Philadelphia. Urban performed PMO services during the three-year annual capital program starting in the fall 2000. The ultimate goal of Corridor improvements is to support high-speed travel at up to 120 miles per hour, thus affording 90-minute travel times between Harrisburg and Philadelphia.

Urban's association with this significant transportation project is a continuation of its previous involvement as team member responsible for performing the Keystone Corridor Assessment and Business Plan. This prior study was completed to determine the current condition of the infrastructure and to identify requirements to bring the line into a state of good repair. Assessing the importance of the line to the Commonwealth, determining an appropriate role for the Commonwealth's ownership, management, and operation, as well as developing a business plan to support the proposed service and institutional issues related to the lines purchase or lease option were major issues investigated.

Under this contract, Urban monitored the capital project's construction progress to determine whether the KCIP was meeting objectives such as schedule, budget, conformance with design criteria, construction to approved plans and specifications, and efficiency and effectiveness of implementation.

Frankford Transportation Center
Philadelphia, PA

"FTC was the largest single-site construction project ever undertaken by SEPTA. The work had to be performed with minimal disruption to the 50,000 riders that pass through the terminal each day."

Client: Southeastern Pennsylvania Transportation Authority

Urban Engineers' (Urban's) Program Manager, in conjunction with our Joint Venture Partner, maintained close coordination with SEPTA's Capital and Operations Departments, the designer, contractors, community, and SEPTA riders. Construction for this terminal was performed while maintaining accessibility and service for the more than 50,000 commuters who pass through the facility daily. The Frankford Transportation Center (FTC) Program consisted of five overlapping projects.

HIGHLIGHTS:

- Program Management
- Construction Management
- Safety
- Quality Assurance
- Master Schedule Management
- Operations Coordination
- Community Relations
- Contract Administration

Quality assurance, safety, and community relations were essential elements of the program management services, in addition to the usual tasks that are included in construction management. Urban substantiated the inspection and certification of material before it was shipped to the terminal, as well as the quality of the installation processes. The program required constructing a major terminal facility for the Market/Frankford Elevated line in a confined space with little room for storage of material and equipment. At the same time, service was maintained for 16 separate bus and trackless trolley routes that interchange with the elevated line at the terminal, requiring close coordination with SEPTA's bus operations.

Except for a scheduled nine-day system outage, rail service was not interrupted. During these nine days, the existing guideway was demolished and a new pre-built guideway was constructed to the west. During Project 3, the Guideway and Systems Contract, a temporary trestle was constructed to support the elevated rail line while a new portion of Bridge Street was constructed below. To complete all tasks within the outage time, construction was performed around-the-clock. When complete, Frankford Avenue was opened to natural lighting for the first time in 75 years.

The new transportation center features enclosed, climate-controlled waiting areas; a four-level, 1,000-vehicle parking garage adjacent to Bustleton Avenue; a renovated historic Bridge Street Station building; a two-story main hall; 7,000 SF of retail space; and escalators and elevators to comply with the federal Americans with Disabilities Act.

The FTC was named Project of the Year by the Project Management Institute - Delaware Valley Section.

On-Call Engineering Services
Philadelphia International/Northeast Philadelphia Airports
Philadelphia, PA

"Urban has held a three-year contract to provide on-call engineering design and construction administration services at the Philadelphia International and Northeast Philadelphia Airports for more than 25 years."

Client: City of Philadelphia
Division of Aviation

HIGHLIGHTS:

- On-Call Services include:
  - Design
  - Construction Inspection
  - Environmental Investigations
  - Structural Analyses

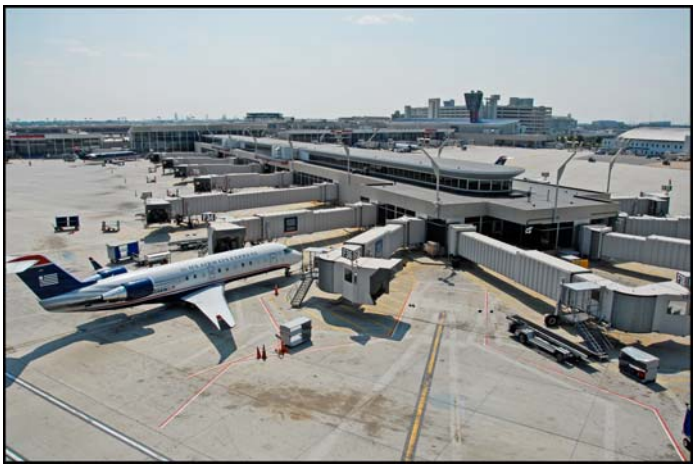
Recent projects include the following:

Philadelphia International Airport

Taxiways M, N & K3 Study
Obstruction Surveys
Additional Parking at Security Gate One
Airport Master Plan Project Management Oversight
Resident Engineer Emergency Pavement Repairs
Overheight Vehicle Detection System & Sign Structure Lighting
9R Safety Area Contract Documents
Terminal F Taxilanes Modification to Standards
Master Utility Plan Update
Terminal C Beam Replacement
De-Icing Management Support
Terminal F Pedestrian Crossing Study 2
Garage Entrance Road Rehabilitation
Runway 17-35 Extension Pre-Design Services
EIS Report Review
Communications Demarc No. 2, Study
Airfield Construction Impact Analysis
Cargo City Apron Reconstruction
Tenant Permit Reviews
Deicing Boom Replacement Estimate
Overheight Vehicle Escape Road Two-way Traffic Study
Taxiways K, K3, M, N, S, S1, W & H Rehab
Cell Phone Lot Signing Study
PCI for Runways & Taxiways
Convenience Store/Gas Station Traffic Study
Roadway Configuration Study
Sidewalk Feasibility Study
AHSL Platform Repair Study
Rent-A-Car Expansion Metes & Bounds Survey
Resident Engineer Employee Parking Expansion
Roadway Safety Improvements
Perimeter Service Road - Phase 1
Taxiway C Resident Engineer/Inspection Services
Taxiway J Resident Engineer/Inspection Services
Security Fence Replacement Inspection Services
Structural Inspections
Approach Light Pier Condition Survey
SR 291 Re-route Traffic Mitigation
Sign Information Study
Roadway Facility Condition Report
Resident Engineering Services
Bond Report

Northeast Philadelphia Airport

Perimeter Path - Phases 2-4
Taxiway C Extension
Pavement Management System Update Taxiway D - Environmental Permitting
Taxiways A & L Rehabilitation
Taxiway C Resident Engineer/Inspection Services
Compass Calibration Study



Civil Engineering Services "Call-In" Basis during 2008, 2009 & 2010

New York and New Jersey

KS Engineers, P.C.
Engineers . Surveyors
Construction Managers

New Jersey
New York
Pennsylvania

info@kseng.com
www.kseng.com

PROJECT NAME

Expert Professional Civil Engineering Services (MBE/WBE) as Requested on a "Call-In" Basis during 2008, 2009 and 2010

PROJECT OWNER/CLIENT

Port Authority of NY&NJ
2 Gateway Center
Newark, NJ 07102
Joseph A. Calautti, PE
973.792.4337

START/END DATES

2008 – 2010

CONTRACT AMOUNT

$454,909 (Amount to Date)

KEY PERSONNEL

Kamal Shahid, PE, Principal-in-Charge
Robert Nash, PE, Project Manager
Niranjan Doshi, PE, Task Leader
Dewan Rahman, EIT, CADD Manager

PROJECT DESCRIPTION

KS Engineers, P.C. (KSE) was retained by the Authority as a Prime Consultant to provide civil engineering services on a "Call-In" basis during 2008, 2009 and 2010. Services generally consist of preparing civil engineering designs, contract drawings, technical specifications, and construction cost estimates for a variety of new projects, rehabilitation, restoration and resurfacing projects. Assignments were completed on schedule and within budget. *KSE* has worked on the following individual assignments:

- SWF – Design of a New Employee Parking Lot – Civil Stage III Services –
- SWF – The Milling and Resurfacing of a Portion of Cargo Road in the vicinity of Reese Aviation FedEx Maintenance Hanger – Stage IV
- SWF – Design of the Expansion of Parking Lot
- SWF – Design of Rehabilitation of R/W 9 Approach Lighting and Cables
- SWF – Design of Rehabilitation of Taxiway Edge Lighting and Installation of Flashing Runway Guard Lights
- JFK – High Pressure Fire Protection System Critical Valve Replacement Phase III - Stage III and IV Services
- GWB – Sanitary Sewer Study at Administration Bldg Parking Lot

KS Engineers, P.C.
Engineers . Surveyors
Construction Managers

New Jersey
New York
Pennsylvania

info@kseng.com
www.kseng.com

PANYNJ 2008 - 2010 MBE/WBE "Call-In" for Structural Engineering Services

New York and New Jersey

PROJECT NAME
Performance of Expert Professional Structural Engineering Services (MBE/WBE) on a "Call-In" Basis during 2008, 2009 and 2010

PROJECT OWNER/CLIENT
Port Authority of NY & NJ
Gateway Center, 14th Fl., Newark, NJ 07102
Amit Chatterjee, Principal Structural Engineer/EAD, 973.792.4497
Robert Kumapley Project Manager, 212-792-4486

START/END DATES
2008 - 2010

CONTRACT AMOUNT
$500,000 (Approximate amount to Date for Combined Assignments)

KEY PERSONNEL
Kamal Shahid, P.E., Principal-in-Charge
Dickson Opong, P.E., Project Manager
Kenneth Clausen, P.E., Task Leader

PROJECT DESCRIPTION
Services provided under this contract generally consist of preparing structural engineering studies, condition surveys, designs, contract drawings, technical specifications and construction cost estimates for a wide variety of new facility structures and structural renovation and rehabilitation projects. To date *KSE* has been given the following assignments under this "Call-In" agreement:

- Multi-Facility CAD Drafting Services
- JFK Airport –Protective Slabs on Taxiways, Q & A
- Structural Engineering Services / Staff Augmentation
- PATH - Installation of Backflow Prevention Devices
- LaGuardia Airport - Upgrade CTB East
- JFK Airport - Fire Alarm Connection for Gas Station - Bldg.#
- JFK Airport – Reconfiguration of Fuel Truck Loading Racks
- JFK Airport - Repairs to Aqueduct Bridge Railings/Expansion Joints
- Stewart Airport - Positive Air Pressure for Loading Bridges
- JFK Airport – Repair of Slab at Building
- CADD Design Services for Navigation Aids Improvements at JFK Airport
- CADD Design Services for Demolition- Hanger 12 &building #94 at JFK Airport
- SWF- Runway Incursion Mitigation Study
- PATH – Installation of Backflow Prevention Devices, Macmillan Bloedel Building
- EWR Airport – Structural Engineering Services –Shop Drawing Review – Stage 3
- EWR Airport – Structural Engineering Services –Shop Drawing Review – Stage 3

ARMAND CORPORATION

Project Title:	American Airlines JFK Terminal Redevelopment
Client Contact:	Jerry Gold, Project Manager Jacobs Carter Burgess 260 Madison Avenue New York, NY 10016 [redacted]
Contract Duration:	October 1998 - January 2003
Project Cost:	$1.2B

Armand Corporation provided communications and special systems program management services for the American Airlines JFK Airport Terminal Redevelopment Project. The $1.2 billion construction project provided for the demolition of the American Airlines terminal building and the construction of a new terminal complex. The Armand Corporation provided the program management for systems integration and related construction requirements. The company was responsible for the electronic distribution, archiving, and management of AE drawings and specifications for the project.

Our systems integration responsibilities included; Cable Plant – Fiber/Copper Cabling Distribution Systems; Public Address Systems; LAN/WAN/Internet Systems; Commercial Antenna Television (CCTV); SCADA; Building Management Systems; Fire Systems; Network and Cable Plant Management Systems; and Security Access Control/Closed Circuit Television

Project Title:	Port Imperial Ferry Terminal
Client Contact:	Jack Kelly, Regional Vice President URS Corporation 1628 John F. Kennedy Boulevard Philadelphia, PA 19103 [redacted]
Contract Duration:	June 2001 - August 2002
Project Cost:	$25M

Armand Corporation provided on-call services for design review and recommendations. The facility was constructed over water off the bulkhead in Weehawken, NJ. The work included ramps and docks associated with the ferry operation, dredging and a waterfront pedestrian walkway running along the bulkhead. The project also required the construction of a 3-story, 30,000 square foot building with two passenger levels and a third floor penthouse for mechanical equipment.

Project Title:	River Line Transit (formerly Southern New Jersey Light Rail System	
Client Contact:	Ty Dickerson, Project NJ Transit One Penn Plaza Newark, NJ 07102 [redacted]	Barbara Leavitt, Contracts Administration AECOM (DMJM+HARRIS) 520 8th Avenue, 10th Floor New York, NY 10018 [redacted]
Contract Duration:	April 1996 – March 2004	Project Cost: $620M

In April 1996, NJ Transit procured a General Design Assistance Consultant, (GDAC), to perform preliminary engineering and design services for a $620,000,000 transit system connecting Camden, Burlington, and Mercer Counties. The GDAC team produced solicitation documents and assisted in the selection of a design, build, operate, and maintain (DBOM) contractor. The GDAC team verified compliance of the DBOM contractor with technical and contractual requirements during the design and construction of the transit system. As part of the GDAC team, Armand Corporation responsibilities included quality assurance program implementation; on-call services for utility protection and relocation design, land surveying and mapping, geotechnical investigation, bridge inspection, capital cost estimate and corrosion control program. We inspected milling and resurfacing of roadways, construction and bridges, maintenance facility, park & ride facilities, shop yard center, and stations stops.

Project Title:	Newark Elizabeth Rail Link	
Client Contact:	Rich Amodei, Vice President 1818 Market Street, Suite 1410 Philadelphia, PA 19103 [redacted]	Peter Gentle, (former Resident Engineer) [redacted]
Contract Duration:	February 2003 - June 2006	Project Cost: $120M

The purpose of this project was to extend the existing Newark City Subway at Newark Penn Station for a distance of approximately one mile to Newark's Broad Street Train Station. Armand Corporation was part of the construction management team in which the objectives included:

- A Constructibility review of plans and specifications.
- Reviewing change orders and providing analyses.
- Monitoring CPM schedule.
- Inspecting milling and resurfacing of roadway, station, track, catenary, electrical, mechanical, and environmental work as specified.
- Monitoring and inspecting all construction activity, systems implementation and overall contract administration.
- Providing assistance to the Design Consultant in preparation of the project's final as-built drawings, and project close-out.

MAJOR PROJECT EXPERIENCE
(Listed by Project Value)

Client: **Federal Transit Administration (FTA)**
Projects: **New York City Metropolitan Transit Authority 2nd Avenue Subway and East Side Access**
Value: **$10.4 billion**

Since 2005, Talson has served as a member of the program management oversight team for the New York City Metropolitan Transit Authority's new 2nd Avenue Subway ($6.4 billion) and East Side Access ($4.0 billion) projects. Talson participates in contractor and agency meetings in order to provide independent assessments of funding submittals and project status including budget, design, and schedule performance to the FTA. Talson participated in readiness reviews of the project's cost control, schedule, documentation and quality management systems.

Client: **Office of Inspector General**, **Autoridad del Canal de Panama**
Project: **Canal Expansion Program - Third Set of Locks**
Value: **$5.2 billion**

Since 2008, Talson has assisted the Autoridad del Canal de Panama with the $5.2 billion Canal Expansion Program / Third Set of Locks project. Talson provided construction audit planning and consulting services for various scope of works including; (1) Business Process and Controls Review for the Third Set of Lock contract, (2) Project Team Readiness, (3) Multi-Year Audit Planning, (4) Construction Audit Training, (5) Project Reporting and Management Information System Review, (6) Staff Assessments and Organization Analysis.

Client: **Internal Audit Department, Marathon Oil Company**
Projects: **Equatorial Guinea Train 2, Alvheim FPSO and Training**
Value: **$3+ billion**

Talson reviewed Marathon's Project Management System and assisted in the development of audit plans for the Equatorial Guinea Train 2 project. Talson conducted a detailed review of the cost management plans, change management procedures and project controls for the Alvheim Floating Production Storage Offloading (FPSO) project ($2+ B) located in the Norwegian Sector of the Northern North Sea. Talson developed and conducted tailored capital project audit training classes for Marathon's worldwide internal audit staff supporting refinery and production type of projects.

E. MANAGEMENT APPROACH

MANAGEMENT APPROACH

GENERAL APPROACH

The Urban Team will build on successes realized on past and present program management and design and construction project management assignments. Effective performance will be achieved with the Team of project management professionals assembled for this assignment. The success of the Port Authority's "as-needed" contract for project management services requires both technical and administrative resources and effective communication between the consultant and client representatives. Urban has developed its approach to managing call-in contracts based on numerous similar assignments. Nearly 40% of Urban's total revenue is derived from task order-based contracts. The firm has developed internal task order procedures that address the technical and administrative aspects of project assignments. These procedures will enable the Urban Team to provide timely, efficient, and effective consultant services.

The contract is expected to include a wide variety of projects. The Urban Team has the necessary technical experience in the types of design and construction projects that the Port Authority may desire to undertake under this contract. We will approach each task by looking at who will be the "owner" of the project, and will work with that client group and the Port Authority's Project Manager in order to address the specific issues and project challenges.

Urban believes that single-point responsibility and management is necessary to successfully administer an "as-needed" services contract. Urban's Program Manager will be responsible for on-going coordination of task orders with the Port Authority's Contract Administrator. The Program Manager will have the authority to make overall program decisions and influence individual project decisions. The authority to negotiate with the Port Authority on individual assignments will also reside with the Program Manager.

The Program Manager will assign an appropriate Task Project Manager depending on the nature of the assignment. Each designated Task Project Manager has primary responsibility for execution of a given task order assignment after receipt of NTP from the client project manager. The Task Project Manager directs the team for that task on a day-to-day basis and maintains communication with the client's Project Manager.

The Program Manager and Task Project Manager roles are defined in more detail below.

Program Manager – The Program Manager has two major responsibilities: to administer the contract and to coordinate the management of the various task work orders that may arise. The Program Manager is the primary person responsible to the Port Authority's Contract Administrator for delivery of project management services. For each work order, the Program Manager and key staff will directly participate in the establishing the project work plan. The Program Manager assigns tasks to appropriate members of the Team, directs and reviews the prompt preparation of proposals, enforces Urban's corporate commitment to ISO 9001 standards of quality for Team members, and monitors that Team performance is timely and meets the requirements of the Port Authority's Contract Administrator and Project Managers/Engineers.

The Program Manager is responsible for directing and executing the technical work required by the Port Authority, including periodic "on-board" monitoring of assignments for responsiveness

to the task requirements and for budget and schedule performance. Specific responsibilities include:

- Coordinate contract execution
- Assign Task Project Mangers
- Determine project Team for each task
- Attend scope review meeting
- Approve cost proposal
- Monitor work order budget and schedule status
- Monitor M/WBE goal attainment
- Prepare monthly program status reports
- Meet with Port Authority Project Manager on a regular basis
- Maintain integrated deliverable schedule
- Establish quality review team for each assignment
- Monitor adherence to **ISO 9001:2008** Quality Program

Task Project Manager – The Program Manager will select an appropriate Task Project Manager. This individual will be responsible for the daily execution of tasks and subtasks associated with each project, and the preparation of project technical, budget, and schedule information for periodic reports to the Program Manager. In most cases, the Task Project Manager will be the lead technical member of the Team for each task. Specific responsibilities include the following:

- Establishing project objectives
- Monitoring program activities to achieve the objectives
- Scheduling project activities
- Budgeting the cost of each activity
- Directing Urban staff and subconsultants
- Monitoring performance to meet project objectives
- Preparing monthly task status report
- Reviewing and approving subconsultant and overall task order invoices.

In accordance with Urban's **ISO 9001:2008** Quality Policy, the Program Manager will perform contract and quality reviews at regular intervals to determine that the work meets the client's requirements and Urban's standards. These reviews are performed to check that the following project management activities are occurring on a timely basis:

- A kick-off meeting that describes the project and shares information, including the expectation of communication and project deliverable responsibility
- Work directions from the Task Project Manager are being followed
- Design calculations are being checked
- Action items from meetings are identified and responsibility for closing issues is assigned

- Project configuration is being reviewed with the Port Authority and the technical disciplines
- Agency coordination is being continuously conducted
- Periodic quality reviews are scheduled
- Responses to quality reviews are made
- Design Team is focused on production schedule
- Requests for Information (RFIs) are being promptly answered
- Contractor submissions are being reviewed on a timely basis
- Constructability reviews are performed and responses prepared
- Project Notebook is maintained

Our Team will prepare a Project Notebook at NTP for each task assigned to us. The Project Notebook is a management tool that has been utilized by Urban for many years, and was adopted as a formal **ISO 9001:2008** quality procedure. Use of the Project Notebook has standardized the technical execution of Urban's assignments. The Project Notebook format emphasizes the orderly summary of project scope and status, while providing documentation for the execution of the assignment and production of client deliverables

TASK MANAGEMENT APPROACH

Task A. Project Initiation Services

1. Develop Program/Project Management Plans

The Urban Team has extensive experience under its Program Management Oversight assignments with the FTA in reviewing and assisting transit agencies throughout the United States in preparing Project Management Plans (PMP) that meet strict federal guidelines. Our Team will assist the Port Authority in establishing PMPs that accurately define the following functions within a project:

- *Project Management*: including management control systems, cost management, schedule management, and project reporting requirements;
- *Quality Assurance/Quality Control*: including quality assurance and quality control objectives, the quality management system elements, quality assurance responsibilities, quality in design, and quality in construction;
- *Document Control*: including document control procedures, document control during design, and document control during construction and closeout;
- *Change Orders*: including change order processing, change order approval levels/signatures, and change order control;
- *Safety*: including safety in the design phase, safety in construction, site safety;
- *Security*: risks are to be identified and mitigated by appropriate security elements incorporated into the project;

- *Environmental*: including environmental compliance with federal, state, and local requirements; and
- *Project Closeout Procedures*: including substantial completion and final completion and acceptance.

We will assist in developing project scope, schedule, and budget for various stages of project delivery. Our experience in performing constructability reviews on large projects will be utilized in assisting the Port Authority in developing RFPs for design services that will help produce designs that can be implemented at reasonable costs.

Project budgets will be prepared by an experienced estimator(s) so that budget line items accurately reflect the project scope. Realistic and reliable initial project cost estimates are necessary to maintain project budgets and to mitigate potential cost-overrun risks. Often, overruns result from estimates that do not include the cost for work, materials, or equipment that is required to fulfill the intent of the design, but is not specifically identified in the contract documents. The need for specialized equipment or for an item that demands distinctive formwork, are two examples of this type of cost. Such items typically fall into the category of contractor 'means and methods' and are usually not considered in the Engineer's Estimate. Not recognizing site specific circumstances that can impact the cost of the work, such as access to the work site, or the cost of interfacing with other third parties, are also often overlooked. Our experience in construction management and in performing constructability reviews will help in developing realistic project budgets.

An experienced scheduler(s) will establish realistic project schedules that take into account resource requirements and accurately relate the major direct and indirect project elements to each other. Adequate detail and understanding of the processes to be undertaken is critical to developing a sound project schedule. A comprehensive schedule will enable the Team to continually monitor a project and quickly react to delays before they impact the critical path. The Urban Team has a wealth of experience in developing schedules using CPM programs such as Primavera Project Planner (P6). Urban has been utilizing P3 for construction management, oversight, and design schedules since 1984 and is currently working with P6. Urban has performed as a Construction Manager on many large projects, and has coordinated schedules of multiple contractors on large infrastructure and transportation programs.

2. Provide Business Analysis Services

The Urban Team will provide business analysis services, as required, to identify the owner's project requirements and to define/document project scope. Under our PMO assignments for the FTA, Urban reviews programs of projects and proposed scopes, and makes recommendations as to the adequacy of project scopes, budgets, and proposed schedules.

3. Coordinate Project Team Alignment and Team-Building

Urban recognizes that the successful implementation and execution of a project is dependent upon assembling a project team having the right skill sets and whose members can work effectively as a team. The proposed Urban project managers bring a wealth of experience in successfully implementing large scale, complex projects, and know what it takes to assemble, align, and manage project teams.

4. **Assist in the Preparation of Requests for Proposals (RFPs)**
   We will assist in developing RFPs for the performance of expert professional architectural and engineering services. As discussed above, our experience in performing constructability reviews on large projects will be utilized in assisting the Port Authority in developing RFPs for design services that will help produce designs that can be implemented at reasonable costs.

5. **Coordinate Risk Analysis**
   In addition to our traditional Program Management Oversight services, we have developed and provided a special area of assistance as one of FTA's prime Risk Assessment contractors. In this capacity, Urban has provided requisite schedule, cost estimating, QA/QC, and scope review for the readiness requirements by FTA for the approval of large projects as they have proceeded to obtain Full Funding Grant Agreements. Successes in the performance of these significant risk assessments have led to the development and implementation of monitoring tools that have benefited NYC programs and others throughout the country. The FTA continues to utilize Urban's skill to assist others involved in risk assessment programs.

6. **Prepare and Conduct Presentations**
   Urban understands that public relations is a critical and necessary component of major infrastructure projects and a successful means of providing information and receiving feedback to/from various project stakeholders.. Urban will support the Port Authority with project status reports, graphic support material, attendance and presentations at public meetings, or additional requested efforts. We are prepared to undertake any supplemental public relations activities the Port Authority may consider necessary.

Task B. Project Implementation Services

1. **Manage PMP Implementation**
   As discussed above, Urban has extensive experience under its Program Management Oversight assignments in working with agencies to help them develop and implement PMPs that meet federal guidelines.

2. **Conduct Meetings**
   Urban is prepared to conduct meetings with the Project Team. The meetings will provide a forum to: review the project schedule and budget; resolve coordination issues between stakeholders and internal Port Authority Departments; and identify critical issues that may need to be elevated to senior management.

3. **Manage Preparation of Contract Documents**
   Our Team will provide the technical support necessary to perform independent reviews of design documents, as well as supplemental constructability and cost estimating reviews. Urban will actively coordinate review with external stakeholders and internal Authority departments. The result will be a single review document for each project, which includes comments with references to the originating individual or organization. After a detailed evaluation of review comments by the design consultant, Urban and the design consultant will meet to discuss the ultimate disposition of review comments. The results of this meeting will be documented in a report to the Port Authority.

4. Identify Operational and Maintenance Constraints

Coordination among various Port Authority departments is critical to success. We will engage the appropriate Port Authority stakeholders during design to identify potential operational and maintenance constraints.

5. Review Contract Documents for Conformance to Approved Scope and Budget

Our Team will review studies, preliminary designs, and contract documents for conformance to approved scope and budget as called for in the RFP. We will prepare design status reports that will summarize outstanding design issues.

Urban will review the final design cost estimate prepared by the design consultant for projects and contracts for which construction bids have yet to be received. This review will check conformance to established Port Authority estimating guidelines, comprehensiveness, utilization of labor rates, equipment rates, and material prices, and application of appropriate factors for shift work. The results of Urban's review will be summarized and transmitted to the Authority in report format, including any calculated revisions to the estimated project contract cost. This effort will serve as a critical check of the construction budget and minimize potential budget overrun during construction bidding.

6. Prepare Project Documentation

Urban will prepare project documentation and maintain a project file, in accordance with Authority procedures.

7. Coordinate Bidding and Award

Our Team is ready and able to provide the Port Authority with any assistance required to advertise and issue the bidding documents to the prospective bidders. As Project/Program Manager, we will check the documents to see that agreed upon clarifications, changes, and alternate construction methods that were accepted on similar contracts have been incorporated into the contract documents by the design consultant. The following summarizes our approach to key tasks performed during the Procurement/Bidding Phase:

- *Innovative Contracting* – Innovative contracting practices encourage contractors to expedite projects, thereby reducing the economic burden to the public. Typically, innovative contracting practices are ideal for projects that could potentially create high user costs, impair emergency services, severely impact the flow of traffic on a major arterial, produce detours on inadequate roads, or impact adjacent commercial enterprises.

  The Urban Team, coordinating with our constructability and value engineering staff, is prepared to investigate and recommend innovative contracting methods to facilitate accelerated construction. We will assist the Port Authority and its design teams to perform the appropriate analysis to determine if an individual construction contract merits innovative contracting and, if so, which method is most appropriate. Innovative contracting methods that will be investigated include: Incentive/Disincentive (I/D); Cost-Plus-Time Bidding (A+B or A-B Methods); and Lane Rentals.

- *Pre-Bid Conferences* – Urban will assist the Port Authority in preparing the agendas and making the presentations for pre-bid meetings. We will emphasize interaction among contractors and their interdependencies, along with the need for cooperation. In

conjunction with the services provided at the pre-bid conference, our Team, together with and as requested by the Authority, will visit the project site with prospective bidders and discuss proposed locations' storage space, staging areas, access to the work, and disposal of material.

We will assist the Port Authority's Project Manager in answering questions on construction aspects, such as project scheduling, work prosecution, environmental concerns, organizational matters, project scheduling, and other pertinent items. Typically, items that require clarification or modification are identified at the pre-bid conference. Our Team will direct questions from the bidders to the appropriate design/engineering consultant or project participant. Minutes of these meetings will be prepared and issued. Answers to questions requiring a written response to bidders will be compiled and incorporated into the minutes for Port Authority review and issuance. We recognize the need for prompt response to pre-bid questions and for the preparation of any addenda to provide the bidders ample time to prepare their bids.

- *Evaluation of Construction Bids* – Urban has an excellent understanding and depth of knowledge and information on construction bids throughout the region. This information has been compiled from hundreds of projects for agencies and municipalities in the region. We will review construction bids and investigate any major variations between estimated costs and actual bids. Also, we will check to see if any bids are unbalanced and review the plans and specifications to determine the cause of the unbalance. By this action, we may uncover potential changes/claims that the contractor may have discovered and review its effect on the project. We will then recommend a meeting with the contractor to discuss these items and determine if a responsive bid has been submitted.

8. Coordinate and Monitor Shop Drawings and RFIs

Urban will establish procedures to track and monitor submittals and shop drawings. The contractor will provide submittals with a transmittal form that must include relevant information. The contractor will be required to describe any variations from the contract requirements or substitutions in each letter of transmittal. The design consultant will be required to identify any changes made to the submittal that add or delete from the original contract requirements, and to initiate a change order through Urban. Urban will establish and maintain a control and logging system for tracking individual submittals. Urban will continually review the tracking system and remind the contractor and/or design consultant of delinquent submittals or re-submittals

Requests for Information (RFIs) from the contractor will be tracked by Urban for each project. RFIs will typically be handled by the Project Resident Engineer, who should act immediately upon receipt of an RFI from the contractor so that an expedient response is provided. If a response cannot be rendered quickly by the Resident Engineer, the field inspection staff, or the Urban staff, then the designer of record will be contacted for clarification. An RFI log will be maintained to track the date of request and date of response for each RFI. Urban will advise the Port Authority of resolutions of issues stemming from contractors' Requests for Information and any other clarifications of the design documents that are necessary.

9. Coordinate Post Award Contract Changes (PACCs)

We bring extensive experience in evaluating change order control processes on a large number of major projects, and will leverage this experience and expertise in coordinating the preparation of post award contract changes (PACC) for the Authority.

10. Attend Construction Progress Meetings

Urban's extensive construction management experience will enable our Team to effectively participate in construction progress meetings and coordinate facility force account work as called for in the RFP.

Task C. Project Monitoring and Reporting Services

1. Monitor and Report on Consultant/Contractor/Staff Performance

Urban will monitor and report on the actual consultant/contractor/staff performance versus what is presented in an approved management plan. Urban brings a wealth of experience through its Program Management Oversight assignments with the FTA in monitoring adherence to accepted project management plans.

2. Update and Review Actual and Forecasted Costs and Schedules

The Urban Team will integrate cost and progress reporting with the schedule planning and reporting system. The integrated cost/schedule/progress reporting system will provide management with promptly issued, accurate data on costs, budgets and progress. We will recommend a frequency at which the Port Authority should require reports of the principal project tasks and the format necessary to properly monitor the project and then coordinate and produce these reports to the Port Authority's specification.

3. Monitor Progress of Construction

Urban will assist the Authority's construction managers in reviewing the contractor submitted CPM schedules to check that contract activities are logical, durations are realistic, specifications are met, and the critical path is not crowded with an unreasonable number of critical or near-critical activities. Urban will continue to measure as-planned performance vs. actual performance throughout the project. We will focus on the contractor's critical activities, track weekly progress and identify potential problem areas for early resolution, identify any areas where the contractor is not achieving the planned rate of progress, and review and make recommendations of possible alternative courses of action to recover lost schedule time. In addition, we will check that any time extensions for excusable delays that may have been approved since the last update are incorporated into the schedule.

4. Prepare Monthly Status Reports

Detail and summary level reports will provide periodic and cumulative costs, comparison of actual costs to planned costs of each element of work, analysis of any variances from the planned costs that may occur, cost relationships with schedule and progress and variations in the defined scope of project work. We will report engineering and administrative costs, as well as construction and procurement costs. The methodology of reporting will provide forecasts of the costs of work packages at conclusion and of the total project. Budget trends will be monitored early on to detect potential cost overruns before they become a significant issue.

In addition to routine cost forecasting, we will follow a process for conducting periodic reviews and updates from an overall management perspective as a design develops and contracts for materials, equipment, and services are awarded. Elements of the project cost estimate may be subject to varying degrees of re-estimating depending on the status of project development, changes in previously predicted economic conditions, unfavorable experience in contract awards, or refinement of quantities. Schedule impacts will be considered in conjunction with these periodic cost estimate reviews.

5. **Evaluate Design Consultant Invoices**
   Urban will evaluate design consultant invoices for earned value and recommend payment.

6. **Evaluate Impact of Changes**
   The system Urban will implement for governing cost control will also provide guidance for preparing and processing change orders. It will include a written order of authorization to the contractor to perform additional or extra work, adjustments, or the deletion of work. Change orders can encompass construction field changes, design changes, specification changes, changes in scope of work, emergency repairs and damage claims, as-built quantities, contract time adjustments, and assessment of liquidated damages. Urban will develop a change order spreadsheet that includes the item number and description of work, unit pricing, and quantity additions/deductions. The spreadsheet will be accompanied by a letter explaining each item number's adjustments – i.e. change in design or specification, reflection of actual work performed, and adjustments required to meet actual field conditions. Finally, the change order package submitted to the Authority will include justification with receipts, authorization, contractors' material, equipment and labor breakdowns, and any other supporting documents.

7. **Schedule and Organize Briefings**
   As required, Urban will schedule and organize briefings with Port Authority executives to: review and discuss the status of projects; present critical issues requiring Authority approval; and provide recommendations regarding policies and procedures. In addition, Urban will proactively seek feedback from the Port Authority regarding the quality and content of our monthly status reports. It is our goal to minimize the amount of time needed for executive staff to obtain a thorough and sound understanding of critical issues.

Task D. Program Level Management Services

1. **Assist Project Managers with Scheduling and Implementation**
   Urban brings vast experience in monitoring and assessing large capital projects throughout the United States for the FTA. This experience includes evaluating programs and projects for adequate project planning and staffing and assessing whether or not the agencies undertaking the projects have an adequate technical capacity to successfully implement their programs. Our experience in providing project management oversight for multiple, concurrent projects will prove invaluable in assisting the Authority's Project Managers in scheduling and implementing selected programs and/or groups of projects.

2. **Establish Annual and/or Program Level Resource Requirements**
   Aware of the diversity of assignments in a program such as this and the need for reliable and timely forecasts, Urban has a long history of assisting many public and private entities in

developing, validating, and providing financial analysis and alternatives to capital and operating budgets. Our staff includes experts in estimating, scheduling, finance, and grants management who have worked for public agencies, contractors, and professional service consultants, allowing Urban to provide the Port Authority with an element of reasonableness and practicality that many other firms cannot match. Urban realizes the importance of providing an owner financial forecasts that can be confidently depended upon in advancing complex, as well as relatively simple projects. We have witnessed many projects that needed to be suspended or cancelled due to poor planning and improper forecasting. Having this awareness and having successfully been engaged to remediate many program "budget busts" makes Urban one of the few firms that can offer full-service capabilities in the various areas, including budgeting and forecasting.

3. **Ensure that Projects/Programs are Staffed and Started, As Planned**
   In coordination with our efforts related to developing and updating the program level schedules (Item #4), Urban will check that the appropriate level of staffing, both Port Authority and consultant, is identified and coordinated with the project milestone dates. As projects/programs progress, Urban will monitor the staffing and provide recommendations to the Authority regarding staffing levels and qualifications.

4. **Update Program Level Schedules**
   Our approach to developing and/or monitoring program level schedules of this magnitude is based on our experience successfully performing similar schedules for program management assignments and numerous multi-contract infrastructure projects. The program level schedules will incorporate the design schedules for each project, administrative review cycles associated with processing contracts, development of utility agreements, right-of-way acquisition needs, environmental commitments and permit requirements, and detailed preliminary construction schedules. The key to a useful schedule is its accuracy in reflecting the interrelationships and dependencies of the numerous contracts. The restraints, constraints, and milestones linking the various sections must be identified and the activities labeled and coded accordingly. For an assignment of this magnitude, the program level schedule will be a crucial tool for program-wide monitoring, contract coordination, and funding projections.

5. **Evaluate and Recommend M/WBE Subcontractor Goals**
   During the planning phase of each project/program, Urban will review the project scope, including the level of required technical resources, and make recommendations regarding the M/WBE subcontractor goals. In performing this task, Urban will make sure that applicable Authority, federal, and/or state guidelines are followed.

Task E. Program Management Services

1. **Provide Ancillary Program Management Support Services**
   Part of the program management support called for in the RFP is to conduct biddability and constructability reviews. Urban, through past corporate initiatives and the firm's **ISO 9001:2008** Quality Certification, undertakes constructability reviews of design projects. Constructability review and analysis of the firm's design product is a staple of the organization's services, routinely conducted for every client. Urban has a five-year open-end contract with Pennsylvania DOT to provide constructability review services on an as-needed

basis and has provided constructability reviews on projects totaling over $2 billion over the last eight years.

2. Coordinate Biddability and/or Constructability Reviews

Urban's Integrated Constructability Evaluations Program enables designers to produce high-quality, cost-effective design documents that can be reasonably constructed in the field without unnecessary cost or project delays and without sacrificing quality. Reviews are performed by a Team of individuals with extensive field experience and a clear understanding of the project's design, the constraints of the project site, and the concerns of the various regulatory agencies involved. In working with owners, designers, and contractors, the Urban Team has identified the following critical components that form a useful framework for the Integrated Constructability Evaluations Program: early issue resolution, document reviews, site investigations, utility coordination, schedule analysis, biddability reviews, and estimate reviews.

Urban is prepared to perform and/or coordinate biddability and constructability reviews. We understand it is vital to expedite this task to allow review and evaluation of findings by the Authority and its design consultants to facilitate incorporation of agreed-upon revisions into the contract documents in time to support the construction advertisement schedule.

3. Maintain Records for the Preparation of Record Drawings

Our experience on past design and construction management assignments will enable us to maintain records for the preparation of record drawings that satisfy your requirements.

4. Provide Support Services

Urban is prepared to provide support services in the areas of: updating and developing new modules and procedures as requested for the Agency's project management manual document; support document control activities including tracking the shop drawing submittal process; coordinating project control functions; and preparing technical presentations and assisting in responding to public inquiries.

5. Provide Project Management Training/Workshops

Urban has a contract with the National Transit Institute (NTI) to provide a transit project management training course throughout the United States and has experienced personnel who can provide project management training/workshop sessions as requested. Urban's staff presents seminars nationally and develops training programs for agencies similar to the Port Authority.

F. HOURLY RATE INFORMATION

Port Authority of New York and New Jersey

Expert Professional Project Management Services

As Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014

Rate Schedule

Name	Firm	Rate
William Thomsen, PE	U	$96.50
Victor Simuoli, PE	U	$96.11
Richard Simon, CMQ/OE, CQA	U	$87.50
Kamal Shahid, PE*	KS	$120.00
Aviation		
Jack Martins, PE	U	$89.60
Christopher Gubeno, PE	U	$65.00
Keith Foglia, PE, LEED AP	U	$45.00
David Benner, PE	U	$56.14
Niranjan Doshi, PE	KS	$55.12
Robert Nash, PE	KS	$72.00
Tunnels, Bridges & Terminals		
Paul Dionisio, PE	U	$76.00
Edwin Williamson, PE	U	$81.45
William England	A	$46.90
Kenneth Clausen, PE	KS	$57.60
Dickson Opong, PE	KS	$64.60
PATH		
Michael Wetherell, PE	U	$96.30
David Sands, PE	U	$63.60
Tom Halterman, PE	U	$56.70
Franklin Teifeld	U	$54.25
Alan Collins, PE	U	$53.10
Richard Hill, PE	U	$80.26
Michael Dunn	U	$72.80

Name	Firm	Rate
World Trade Center/Buildings		
John Sabatino, AIA	U	$81.22
Edward Godorov, PE	U	$62.51
Michael Radbill, PE	U	$77.62
John Roberts	TS	$92.57
William Dale, AIA	A	$44.15
Robert McKay	A	$45.05
Port Commerce		
Ahmad Nadeem, PE	U	$70.00
Andrew Quinn, PE, LEED AP	U	$40.00
Shawn McAdams, PE	U	$42.41
Fred Koomson	KS	$42.85
Jacob Perlmutter, PE	KS	$74.50
Training		
Richard Simon, CMQ/OE, CQA	U	$87.50
Michael Radbill, PE	U	$77.62
Norman Jones	TS	$82.84
Project Controls		
Burton Kohlman, PSP	U	$63.00
Devang Parekh	KS	$47.00
Paul Kovnat	U	$63.63
John Luttrell	A	$52.90
Field Office Mutiplier:		2.10
Home Office Multiplier:		2.40

Legend

Urban Engineers of NY, PC	U
KS Engineers, PC (MBE)	KS
Talson Solutions, LLC (WBE)	TS
Armand Corporation (WBE)	A

* Principal billing rate, no multiplier applied

Notes

- 2010 hourly rates shown
- Anticipated annual escalation of 3%
- Premium pay policies attached
- Multipliers listed above will be used by all team members. Team members' supporting documentation attached.

URBAN ENGINEERS OF NEW YORK, PC

SCHEDULE OF FIELD AND OFFICE OVERHEAD RATES

YEAR ENDED DECEMBER 31, 2008

URBAN ENGINEERS OF NEW YORK, PC
FOR THE YEAR ENDED DECEMBER 31, 2008

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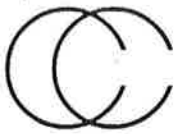

Citrin Cooperman & Company, LLP

CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITORS' REPORT

To the Officers and Directors
Urban Engineers of New York, PC

We have audited the accompanying schedule of field and office overhead rates (the "schedule") of Urban Engineers of New York, PC (the "Company") for the year ended December 31, 2008. This schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on this schedule based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the financial audit standards contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the schedule. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall schedule presentation. We believe that our audit provides a reasonable basis for our opinion.

The accompanying schedule was prepared on the basis of accounting prescribed by Part 31 of the Federal Acquisition Regulations and certain other Federal and state regulations as described in Note 2. Accordingly, the accompanying schedule is not intended to present the results of operations of the Company in conformity with accounting principles generally accepted in the United States of America.

In our opinion, the accompanying schedule referred to above presents fairly, in all material respects, the overhead rates of the Company for the year ended December 31, 2008, in conformity with the basis of accounting described in Note 2.

In accordance with *Government Auditing Standards,* we have also issued our report dated July 29, 2009, on our consideration of the Company's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and is important for assessing the results of our audit.

This report is intended solely for the use and information of the management of the Company and government agencies or other customers related to contracts employing the cost principles of the Federal Acquisition Regulations and is not intended to be and should not be used by anyone other than these specified parties.

Citrin Cooperman & Company, LLP
CERTIFIED PUBLIC ACCOUNTANTS

July 29, 2009

URBAN ENGINEERS OF NEW YORK, PC
SCHEDULE OF FIELD AND OFFICE OVERHEAD RATES
DIRECT AND ALLOWABLE INDIRECT COSTS
FOR THE YEAR ENDED DECEMBER 31, 2008

	Total Costs	Exclusions	Exclusion Note	Direct Costs	Allowable Indirect Costs
Direct expenses (excluding payroll)	$ 1,259,893	$ -		$ 1,259,893	$ -
Indirect expenses:					
Administrative fees	246,084	-		-	246,084
Advertising	13,100	13,100	(a)	-	-
Bad debts	19,600	19,600	(k)	-	-
Computer expense	16,183	-		-	16,183
Conference and seminars	14,741	-		-	14,741
Contributions	1,836	1,836	(b)	-	-
Depreciation	26,422	-		-	26,422
Dues and subscriptions	15,077	884	(b)(j)	-	14,193
Employee relations	13,706	4,199	(b)(c)(f)	-	9,507
Equipment maintenance	4,158	-		-	4,158
Equipment rental	5,137	-		-	5,137
Insurance, employee benefits	162,968	-		-	162,968
Insurance, other	34,305	-		-	34,305
Insurance, professional liability	44,124	-		-	44,124
Interest	55,586	55,586	(d)	-	-
Legal and accounting	39,642	13,038	(i)(l)	-	26,604
License and inspections	442	-		-	442
Meals and entertainment	42,876	30,268	(c)(f)(g)	-	12,608
Office expense	11,148	467	(b)(f)	-	10,681
Postage and freight	5,980	-		-	5,980
Profit-sharing expense	54,202	-		-	54,202
Recruiting	106	-		-	106
Rent, New York City	24,728	-		-	24,728
Rent, Buffalo	69,276	-		-	69,276
Supplies, reproduction	8,714	-		-	8,714
Telephone	26,225	-		-	26,225
Travel and lodging	144,887	25,587	(c)(f)(h)	-	119,300
Tuition	15,026	-		-	15,026
Taxes, miscellaneous	54	-		-	54
Taxes, New York City	3,112	-		-	3,112
Taxes, payroll	343,982	-		-	343,982
Payroll, production	2,665,747	-		2,665,747	-
Payroll, production, OT premium	45,692	-		45,692	-
Payroll, production, vacation	141,881	-		-	141,881
Payroll, production, holiday	81,260	-		-	81,260
Payroll, production, personal time	65,277	-		-	65,277
Payroll, production, paid absence	1,293	-		-	1,293
Payroll, production, general time	731,417	-		-	731,417
Subtotal, to page 3	$ 6,455,887	$ 164,565		$ 3,971,332	$ 2,319,990

See accompanying notes to schedule of field and office overhead rates.

URBAN ENGINEERS OF NEW YORK, PC
SCHEDULE OF FIELD AND OFFICE OVERHEAD RATES
DIRECT AND ALLOWABLE INDIRECT COSTS (CONTINUED)
FOR THE YEAR ENDED DECEMBER 31, 2008

	Total Costs	Exclusions	Exclusion Note	Direct Costs	Allowable Indirect Costs
Subtotal, from page 2	$ 6,455,887	$ 164,565		$ 3,971,332	$ 2,319,990
Payroll, administrative	694,673	-		-	694,673
Payroll, vacation	48,697	-		-	48,697
Payroll, holiday	6,953	-		-	6,953
Payroll, personal time	5,295	-		-	5,295
Payroll, paid absence	406	-		-	406
Provision for taxes, Federal	(32,724)	(32,724)	(e)	-	-
Provision for taxes, state	(2,658)	-		-	(2,658)
Deferred tax benefit, Federal	12,038	12,038	(e)	-	-
Deferred tax benefit, state	(12,488)	-		-	(12,488)
	$ 7,176,079	$ 143,879		$ 3,971,332	$ 3,060,868

Legend:

(a) To exclude advertising costs per FAR 31.205-1.
(b) To exclude gifts and contributions per FAR 31.205-8.
(c) To exclude entertainment costs per FAR 31.205-14.
(d) To exclude interest and other financing costs per FAR 31.205-20.
(e) To exclude Federal income taxes per FAR 31.205-41.
(f) To exclude unsupported costs per FAR 31.201-2.
(g) To exclude costs of alcoholic beverages per FAR 31.205-51.
(h) To exclude travel and meal costs in excess of maximum per diem rates per FAR 31.205-46.
(i) To exclude selling costs per FAR 31.205-38.
(j) To exclude legislative lobbying costs per FAR 31.205-22.
(k) To exclude bad debt per FAR 31.205-3.
(l) To exclude direct costs per FAR 31.202.

See accompanying notes to schedule of field and office overhead rates.

URBAN ENGINEERS OF NEW YORK, PC
SCHEDULE OF FIELD AND OFFICE OVERHEAD RATES
ALLOCATED FIELD AND OFFICE INDIRECT COSTS
FOR THE YEAR ENDED DECEMBER 31, 2008

	Allowable Indirect Costs	Allocation Method	Allocated Amounts	
			Field	Office
Administrative fees	$ 246,084	Gross PR %	$ 84,259	$ 161,825
Advertising	-	N/A	-	-
Bad debt	-	N/A	-	-
Computer expense	16,183	Build %	2,790	13,393
Conference and seminars	14,741	Direct PR %	5,525	9,216
Contributions	-	N/A	-	-
Depreciation	26,422	Build %	4,555	21,867
Dues and subscriptions	14,193	Direct PR %	5,320	8,873
Employee relations	9,507	Direct PR %	3,563	5,944
Equipment maintenance	4,158	Build %	717	3,441
Equipment rental	5,137	Build %	886	4,251
Insurance, employee benefits	162,968	Gross PR %	55,800	107,168
Insurance, other	34,305	Gross PR %	11,746	22,559
Insurance, professional liability	44,124	Sales %	16,026	28,098
Interest	-	N/A	-	-
Legal and accounting	26,604	Direct PR %	9,971	16,633
License and inspections	442	Build %	76	366
Meals and entertainment	12,608	Direct PR %	4,725	7,883
Office expense	10,681	Build %	1,841	8,840
Postage and freight	5,980	Build %	1,031	4,949
Profit sharing expense	54,202	Gross PR %	18,559	35,643
Recruiting	106	Direct PR %	40	66
Rent, New York City	24,728	100% Design	-	24,728
Rent, Buffalo	69,276	Build %	11,943	57,333
Supplies, reproduction	8,714	100% Design	-	8,714
Telephone	26,225	Build %	4,521	21,704
Travel and lodging	119,300	Build %	20,567	98,733
Tuition	15,026	Direct PR %	5,632	9,394
Taxes, miscellaneous	54	Build %	9	45
Taxes, New York City	3,112	Sales %	1,130	1,982
Taxes, payroll	343,982	Gross PR %	117,779	226,203
Payroll, production	-	N/A	-	-
Payroll, production, OT premium	-	N/A	-	-
Payroll, production, vacation	141,881	Actual	44,235	97,646
Payroll, production, holiday	81,260	Actual	28,134	53,126
Payroll, production, personal time	65,277	Actual	24,762	40,515
Payroll, production, paid absence	1,293	Actual	1,293	-
Payroll, production, general time	731,417	Actual	163,276	568,141
Subtotal, to page 5	$ 2,319,990		$ 650,711	$ 1,669,279

See accompanying notes to schedule of field and office overhead rates.

URBAN ENGINEERS OF NEW YORK, PC
SCHEDULE OF FIELD AND OFFICE OVERHEAD RATES
ALLOCATED FIELD AND OFFICE INDIRECT COSTS (CONTINUED)
FOR THE YEAR ENDED DECEMBER 31, 2008

	Allowable Indirect Costs	Allocation Method	Allocated Amounts Field	Allocated Amounts Office
Subtotal, from page 4	$ 2,319,990		$ 650,711	$ 1,669,279
Payroll, administrative	694,673	Direct PR %	260,363	434,310
Payroll, vacation	48,697	Direct PR %	18,252	30,445
Payroll, holiday	6,953	Direct PR %	2,606	4,347
Payroll, personal time	5,295	Direct PR %	1,985	3,310
Payroll, paid absence	406	Direct PR %	152	254
Provision for taxes, Federal	-	N/A	-	-
Provision for taxes, state	(2,658)	Sales %	(965)	(1,693)
Deferred tax benefit, Federal	-	N/A	-	-
Deferred tax benefit, state	(12,488)	Sales %	(4,536)	(7,952)
	$ 3,060,868		$ 928,568	$ 2,132,300
Direct Labor	$ 2,711,439		$ 1,016,309	$ 1,695,130
Overhead Rate =	Allowable Indirect Costs / Direct Labor	=	91.37%	125.79%
Facilities Capital Cost of Money (FCCM)	$ 2,204		N/A	$ 2,204
Percent of Direct Labor	0.081%		0.00%	0.13%

Allocation Methods	Field	Office
Direct PR %	37.48%	62.52%
Gross PR %	34.24%	65.76%
Sales %	36.32%	63.68%
Build %	17.24%	82.76%

See accompanying notes to schedule of field and office overhead rates.

URBAN ENGINEERS OF NEW YORK, PC
NOTES TO SCHEDULE OF FIELD AND OFFICE OVERHEAD RATES
FOR THE YEAR ENDED DECEMBER 31, 2008

NOTE 1. NATURE OF BUSINESS

Urban Engineers of New York, PC (the "Company") is a multi-disciplinary engineering firm specializing in the design and construction management of transportation projects from the feasibility and planning stages through design, construction, and post-construction services. The majority of the services the Company provides are undertaken as cost-plus-fixed-fee, specific-rate and fixed-fee contracts.

NOTE 2. BASIS OF PRESENTATION

The accompanying schedule of field and office overhead rates (the "schedule") was prepared on the basis of accounting prescribed in Part 31 of the Federal Acquisition Regulations (the "FAR"). Accordingly, this schedule is not intended to present the results of operations of the Company in conformity with accounting principles generally accepted in the United States of America. In addition, the schedule reflects the rates of the Company only and does not include the rates of any of the Company's affiliates.

NOTE 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Accounting system

The Company's method of estimating costs for pricing purposes during the proposal process is consistent with the accumulation and reporting of costs under its job-order cost accounting system. This system is maintained for the recording and accumulating of costs incurred under the Company's contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the job-order cost accounting system.

Contract costs

Contract costs include direct labor costs, subcontractor costs, and those indirect costs related to contract performance such as indirect labor, payroll taxes, employee benefits, supplies, and other contract costs.

The Company utilizes the accrual basis of accounting for financial reporting purposes and recognizes contract costs as incurred.

Labor-related costs

The Company charges project labor for all jobs based on actual labor costs. Overtime premium costs are included in the direct labor base.

Use of estimates

The preparation of the schedule in conformity with the basis of accounting prescribed in Part 31 of the FAR requires management to make estimates and assumptions that affect the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

NOTE 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Depreciation/leasing

Certain assets are purchased and depreciated, while others are leased and considered operating leases, and the annual lease costs are included in the overhead pool. Depreciation is provided on a straight-line and accelerated basis over the estimated useful lives of the various assets, which are as follows:

Equipment	3-5 years
Furniture and fixtures	7 years
Leasehold improvements	Shorter of useful life (4-5 years) or lease term

The Company leases certain assets under various operating leases. The annual lease costs are included in the overhead pool.

Income taxes

Deferred income taxes are determined using the liability method in accordance with Statement of Financial Accounting Standards ("SFAS") No. 109, "Accounting for Income Taxes." Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities (i.e., temporary differences) and are measured using enacted tax rates and laws that are expected to be in effect when the differences are expected to be recovered or settled. Deferred tax assets are reduced by a valuation allowance when it is more likely than not that some portion or all of the deferred tax assets will not be realized.

Uncertain tax positions

In June 2006, the Financial Accounting Standards Board ("FASB") released FASB Interpretation ("FIN") No. 48, "Accounting for Uncertainty in Income Taxes." FIN 48 interprets the guidance in SFAS No. 109, "Accounting for Income Taxes." When FIN 48 is implemented, reporting entities utilize different recognition thresholds and measurement requirements when compared to prior technical literature. On December 30, 2008, the FASB Staff issued FASB Staff Position ("FSP") FIN 48-3, "Effective Date of FASB Interpretation No. 48 for Certain Nonpublic Enterprises." As deferred by the guidance in FSP FIN 48-3, the Company is not required to implement the provisions of FIN 48 until fiscal years beginning after December 15, 2008. As such, the Company has not implemented those provisions in the accompanying schedule.

Since the provisions of FIN 48 have not been implemented in accounting for uncertain tax positions, the Company continues to utilize its prior policy of accounting for these positions, following the guidance in SFAS No. 5, "Accounting for Contingencies." Disclosure is not required of a loss contingency involving an unasserted claim or assessment when there has been no manifestation by a potential claimant of an awareness of a possible claim or assessment unless it is considered probable that a claim will be asserted and there is a reasonable possibility that the outcome will be unfavorable. Using that guidance, as of December 31, 2008, the Company has no uncertain tax positions that qualify for either recognition or disclosure in the accompanying schedule.

URBAN ENGINEERS OF NEW YORK, PC
NOTES TO SCHEDULE OF FIELD AND OFFICE OVERHEAD RATES
FOR THE YEAR ENDED DECEMBER 31, 2008

NOTE 4. PROFIT SHARING PLAN

The Company participates in a savings plan sponsored by Urban Engineering, Inc. ("Urban Inc."), which qualifies under Section 401(k) of the Internal Revenue Code. Urban Inc. is related to the Company through common ownership. The plan was amended, effective January 1, 2007, to allow participating employees to defer up to 100% of pre-tax salary, but not more than statutory limits. The plan provides for matching employer contributions of 50% of a participant's contributions, with a maximum employer contribution of 1.5% of a participant's earnings. The Company's matching contributions for the year ended December 31, 2008, included in profit sharing expense in the accompanying schedule, amounted to $54,202.

NOTE 5. RELATED PARTY TRANSACTIONS

The Company was charged administrative fees by Urban Inc. for management, accounting and administrative services. Fees for these services, included in administrative expenses in the accompanying schedule, totaled $246,084 for the year ended December 31, 2008.

Additionally, the Company is engaged by or engages Urban Inc., Urban Engineers of Erie, Inc. ("Erie"), an affiliate related to the Company through common ownership, and Marvin Waxman Consulting Engineers, Inc. ("Waxman"), an affiliate related to the Company through common ownership, on a sub-contract basis. For the year ended December 31, 2008, revenues for services provided to Urban Inc. and Erie totaled $2,961,817, and costs for services, included in direct expenses in the accompanying schedule, received from all three affiliates amounted to $248,060.

The Company also received advances from Urban Inc. during 2008. Interest on these advances accrues monthly at a rate of prime plus 1/2% per annum. Interest expense accrued and unpaid for the year ended December 31, 2008, amounted to $55,586.

NOTE 6. FACILITIES CAPITAL COST OF MONEY

The Facilities Capital Cost of Money (the "FCCM") Rate has been calculated in accordance with FAR Section 31.205-10, using the Company's average net book values of equipment and facilities multiplied by the average Treasury rates for the applicable period, as shown below:

Net capital assets - January 1, 2008	$ 37,616
Net capital assets - December 31, 2008	51,661
	$ 89,277
Average net capital assets	$ 44,639
Average treasury rate	4.9375%
Facilities capital cost of money	$ 2,204
Direct labor base	$ 2,711,439
FCCM Rate	0.081%

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Officers and Directors
Urban Engineers of New York, PC

We have audited the schedule of field and office overhead rates (the "schedule") of Urban Engineers of New York, PC (the "Company") for the year ended December 31, 2008, and have issued our report thereon dated July 29, 2009. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control over Financial Reporting

In planning and performing our audit, we considered the Company's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the schedule, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Company's internal control over financial reporting.

A *control deficiency* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A *significant deficiency* is a control deficiency, or combination of control deficiencies, that adversely affects the Company's ability to initiate, authorize, record, process, or report financial data reliably in accordance with Part 31 of the Federal Acquisition Regulations, such that there is more than a remote likelihood that a misstatement of the Company's schedule that is more than inconsequential will not be prevented or detected by the Company's internal control.

A *material weakness* is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the schedule will not be prevented or detected by the Company's internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

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Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Company's schedule is free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, and contracts, including the provisions of the applicable sections of Part 31 of the Federal Acquisition Regulations, noncompliance with which could have a direct and material effect on the determination of schedule amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

This report is intended solely for the information and use of management and government agencies or other customers related to contracts employing cost principles of the Federal Acquisition Regulations, and is not intended for and should not be used by anyone other than these specified parties.

Cotrin Cooperman & Company, LLP
CERTIFIED PUBLIC ACCOUNTANTS

July 29, 2009

URBAN PREMIUM/OVERTIME PAY POLICY

- Overtime is paid in accordance with the FLSA laws.
- Overtime is paid for hours worked in excess of 40 hours.
- Overtime can be paid at straight time or time and a half and shift differentials will only be paid should the client contract state it.

KS Engineers, P.C.

Multiplier: Overhead and Fee Summary - (October 2010)

Location	Direct Labor	Fringe	Subtotal	G&A	Subtotal	Profit	Total Multiplier
Home Office	1.0	46.0%	1.46	82.0%	2.28	10%	2.50

EXHIBIT A

KS ENGINEERS, P.C.
STATEMENT OF DIRECT LABOR, FRINGE BENEFITS AND GENERAL OVERHEAD
FOR THE YEAR ENDED DECEMBER 31, 2009

BASE/ELEMENT OF EXPENSE	PER GENERAL LEDGER	FAR DISALLOWANCES	NOTES	FAR ALLOWABLE COSTS	ALLOCATION TO FIELD	FIELD ALLOCATION METHOD	ALLOCATION TO OFFICE
DIRECT LABOR	$ 8,059,035	$ 176,375	a	$ 7,882,660	$ 3,620,900		$ 4,261,760
				100%	46%		54%
BURDEN AND FRINGE COSTS							
COMPENSATED ABSENCES	1,221,659			1,221,659			
PAYROLL TAXES	1,084,264			1,084,264			
BONUS	281,750			281,750			
401K , DEF COMP PLAN & MISC BENEFITS	223,113			223,113			
GROUP INSURANCE	816,019			816,019			
TOTAL FRINGE COSTS	$ 3,626,804			$ 3,626,804	$ 1,665,972		$ 1,960,831
FRINGE RATE				46%	46%		46%
OVERHEAD							
OFFICER SALARY	530,080			530,080	243,492	A	286,588
INDIRECT SALARIES	2,515,003			2,515,003	1,155,267	A	1,359,736
INDIRECT SALARIES - FIELD DIVISION	519,858			519,858	207,943	C	311,915
INSURANCE	278,827	2,605	b	276,222	126,883	A	149,339
TRAVEL AND MEALS	65,006	16,001	c	49,005	22,511	A	26,495
RENT	696,985	52,172	d	646,813	161,703	B	485,110
OFFICE SUPPLIES	48,524	5,444	e	43,080	10,770	B	32,310
DEPRECIATION	98,026			98,026	24,507	B	73,520
TELEPHONE & UTILITIES	169,101			169,101	42,275	B	126,826
BANK CHARGES	2,677			2,677	1,230	A	1,447
DUES AND PUBLICATIONS	39,901	3,237	f	36,664	9,166	B	27,498
PAYROLL PROCESSING FEE	23,617			23,617	10,848	A	12,769
PROFESSIONAL FEES	507,393			507,393	233,071	A	274,322
AUTO EXPENSES	209,020	109,941	g	99,079	45,512	A	53,567
TAXES	13,065			13,065	6,001	A	7,064
EQUIPMENT LEASES	73,052			73,052	18,263	B	54,789
SECURITY	9,684			9,684	4,448	A	5,236
COMPUTER EXPENSE	96,509			96,509	24,127	B	72,382
SUPPLIES	65,319			65,319	30,004	A	35,315
RECRUITMENT	12,770			12,770	5,866	A	6,904
REPRODUCTION AND PHOTO	14,224			14,224	3,556	B	10,668
REPAIRS AND MAINTENANCE	36,759	1,675	h	35,084	8,771	B	26,313
SEMINARS AND EDUCATION	67,731	12,135	i	55,596	25,538	A	30,058
POSTAGE AND DELIVERY	19,547			19,547	4,887	B	14,660
ADVERTISING	4,964	4,964	j	-	0		-
INTEREST	73,982	73,982	k	-	0		-
CONTRIBUTIONS	11,003	11,003	l	-	0		-
ENTERTAINMENT	525	525	m	-	0		-
PENALTIES	68	68	n	-	0		-
TOTAL OVERHEAD COSTS	$ 5,208,219	$ 294,752		$ 5,911,467	$ 2,426,639		$ 3,484,828
OVERHEAD RATE				76%	67%		82%
TOTAL BURDEN, FRINGE AND OVERHEAD COSTS	$ 9,833,023	$ 294,752		$ 9,538,271	$ 4,092,611		$ 5,445,660
OVERHEAD RATE				121%	113%		128%

ALLOCATION METHOD CODES

A - 45.9%	$ 3,620,900 / $ 7,882,660	FIELD LABOR / TOTAL DIRECT LABOR
B - 25%		ESTIMATED ALLOCATION
C - 40%		ESTIMATED ALLOCATION

Note References

a - Represents premium time excluded from the base.
b - Costs of financing an installment payment plan for insurance unallowable per FAR 31.205-20.
c - Meal and lodging costs in excess of the Jt. Travel Regulation unallowable per FAR31.205-46;
Costs of alcohol unallowable per FAR 31.205-51; Costs of entertainment unallowable per FAR 31.205-14;
Direct costs unallowable per FAR 31.202; Costs deemed unreasonable per FAR 31.201-3.
d - Costs in excess of the normal costs of ownership under common control unallowable per FAR 31.205-36.
e - Entertainment costs unallowable per FAR 31.205-14.
f - Lobbying costs unallowable per FAR 31.205-22.
g - Personal use of auto unallowable per FAR 31.205-6(m)(2);
Costs of direct use of company vehicles are unallowable per FAR 31.202.
h - Prepaid maintenance costs unallocable per FAR 31.201-4.
i - Entertainment expense unallowable per FAR 31.205-14; Unallowable advertising and public relations costs per FAR 31.205-1;
Meal costs in excess of the Jt. Travel Regulation unallowable per FAR31.205-46; Lobbying costs unallowable per FAR 31.205-22.
j - Advertising is unallowable public relations per FAR 31.205-1.
k - Interest is unallowable per FAR 31.205-20.
l - Contributions are unallowable per FAR 31.205-6.
m - Entertainment costs are unallowable per FAR 31.205-14.
n - Penalties are unallowable per FAR 31.205-15.

Prepared in compliance with the Federal Acquisition Regulations (FAR), Subpart 31.2.

KSE Engineers . Surveyors . Construction Managers
KS Engineers, P.C. 494 Broad Street, 4th Floor, Newark, NJ 07102 . P: 973.623.2999 . F: 973.242.2955 . www.kseng.com

KSE Premium/Overtime Pay Policy

- Only non-exempt employees are eligible for overtime pay.
- Overtime premium is paid for work hours over 40 hours per week, and during Holidays, Saturdays and Sundays.
- A 10% night pay differential is paid for all night work.

W&S

Armand Corporation
Statement of Overhead Rates
For the year ended December 31, 2009

Cost Element	Submitted	Adjustment	As adjusted
Direct labor	$ 708,978		$ 708,978
Overhead Expenses:			
Indirect labor	312,901		312,901
Payroll taxes	100,477		100,477
Employee benefits	45,051		45,051
Insurance	59,486		59,486
Office & supplies	27,061	(3,338)a	23,723
Travel and auto	80,490		80,490
Depreciation	17,296		17,296
Telephone	26,123		26,123
Equipment lease	13,637		13,637
Repairs & maintenance	27,974		27,974
Professional fees	14,898		14,898
Utilities	14,925		14,925
Advertising	3,260	(3,260)b	0
Property taxes	33,888		33,888
Meals & entertainment	2,426	(2,426)c	0
Payroll Service	2,002		2,002
Amortization	4,589		4,589
Dues and subscriptions	2,164		2,164
Conference and seminars	6,707		6,707
Bank charges	1,395		1,395
Contributions	1,350	(1,350)d	0
Corporate taxes	3,949		3,949
Total	$ 802,049	(10,374)	$ 791,675
Overhead rate	113.13%		111.66%

Explanation of adjustments:

(a) Xmas costs unallowed per prior years audit change.
(b) Advertising unallowed cost under FAR 31.205-1.
(c) Meals and entertainment unallowed cost under FAR 31.205-14.
(d) Contributions unallowed cost under FAR 31.205-8.

See accompanying notes and accountants' report

ARMAND

ARMAND CORPORATION

OVERTIME POLICY

Employees paid on an hourly basis are entitled to overtime pay as follows:

- All hours worked in excess of forty (40) per week are paid at the rate of time and one-half (rate x 1.5)
- Employees do not receive overtime if they work more than eight (8) hours in a single day until they have worked in excess of the weekly forty (40) hour requirement

PAID HOLIDAYS

Recognized by Armand Corporation for the Year 2010

New Year's Day – Friday, 01/01/10
Martin Luther King, Jr. Day * - Monday, 01/18/10
Memorial Day – Monday, 05/31/10
Independence Day – Monday, 07/05/10
Labor Day – Monday, 09/06/10
Thanksgiving Day – Thursday, 11/25/10
Day After Thanksgiving – Friday, 11/26/10
Christmas Day – Friday, 12/24/10

**This is a floating holiday. If you work this day you may substitute President's Day, Good Friday, or any other day prior to April 30th with straight pay.*

TALSON SOLUTIONS, LLC
Calculation of Overhead Rate
Year Ended December 31, 2007

Total Operating Expense for 2007	$ 826,659
Less: Direct Costs	
Direct labor (Billable)	(355,666)
Payroll taxes (Billable)	(12,815)
Outside Consultants	(63,209)
	(431,689)
Less: Unallowable Costs	
Donations	(2,800)
Interest expense	(271)
Marketing	(11,907)
Entertainment	(914)
Meals	(3,949)
	(19,841)
	375,129
Add Back:	
RSB Non-Chargeable	206,761
Total Overhead Costs - 2007	$ 581,889
Billable Labor, Taxes and Consultants	$ 431,689
Overhead Rate	1.35

TALSON SOLUTIONS LLC

306 Market Street
Fourth Floor
Philadelphia, PA 19106

215-592-9634 (P)
215-592-9636 (F)
www.talsonsolutions.com

Premium Pay Policy

When office or project commitments cannot be met during regular working hours, employees may be requested to work in excess of forty (40) hours per week. If overtime hours are incurred, all overtime must be coded to the project worked on when overtime actually occurred. Requirements for overtime must be pre-approved by the engagement manager. For all employees, all authorized hours worked will be charged to the cost objective for which the effort was expended, both for direct and indirect work. The Authority rates do not account for any uncompensated overtime.

G. M/WBE PARTICIPATION

COMMITMENT TO MBE/WBE PARTICIPATION

Urban is committed to meeting the Authority's goals for MBE/WBE participation on this assignment. If selected, Urban will provide details of our MBE/WBE participation plan at that time. The plan will identify our MBE/WBE partners, establish participation values in accordance with the Authority's goals, and define processes used to coordinate participation with the Authority.

Our Team includes long-standing partners of our firm and combines some of the most well-known firms in project management, design, and construction management in the region, including:

KS Engineers, P.C. (MBE)

KS Engineers, P.C. (KSE), a certified MBE with offices in Newark, NJ, New York City, and Philadelphia, PA, is a highly qualified professional engineering firm that provides civil engineering; structural engineering; geotechnical engineering; construction management and inspection; landscape architecture; aerial mapping ground control; and boundary survey, topographic survey, right-of-way and GPS mapping services. Over the past decade, KSE has grown from a small firm to a highly reputable, mid-sized, full-service civil/structural engineering firm. KSE has a staff of approximately 200 full-time employees, including 35 design professionals, 80 construction inspectors of various levels, four licensed land surveyors, five survey crews, 30 licensed civil/structural engineers, eight LEED certified professionals, and more than 20 support engineers and surveyors.

KSE's experience with the Authority includes numerous assignments as a prime consultant under the various "call-in" contracts listed below with the Port Authority of New York and New Jersey:

- Construction Management Services (MBE/WBE) on a "Call-In" Basis during 2010
- Topographic & Boundary Surveying Services (MBE/WBE) on a "Call-In" Basis during 2010
- Civil Engineering Services (MBE/WBE) as requested on a "Call-In" Basis during 2008, 2009 and 2010
- Structural Engineering Services (MBE/WBE) on a "Call-In" Basis During 2008, 2009 and 2010
- Construction Management Services (MBE/WBE) on a "Call-In" Basis 2007, 2008 and 2009
- Facility Condition Survey (M/WBE) as requested on a "Call-In" Basis during 2009, 2010 and 2011
- Facility Condition Survey for Building Facilities as requested on a "Call-In" Basis during 2009, 2010 and 2011
- Topographic & Boundary Surveying Services (MBE/WBE) on a "Call-In" Basis during 2007, 2008 and 2009
- General Traffic Engineering Services (MBE/WBE) on a "Call-In" Basis During 2003 and 2004

Whether project needs call for a professional CM to augment the owner's staff with pre-planning, design, construction, engineering, and management expertise or on-site construction teams consisting of resident engineers and inspectors for reviewing work in-progress for contractor conformance to the specifications, design intent, and safety programs, KSE has the expertise in carrying out successful field programs.

- *Bridges* - From simple to complex bridge projects involving rehabilitation, replacement, painting, demolition, or new facilities, KSE is a leader in providing full-service construction inspection and management for vehicular, rail, pedestrian, movable, trestle, viaduct, and culvert structures.

- *Highways* - KSE routinely provides construction inspection, administration, and management services for controlled access highways, arterial highways, county and municipal roadways, park-and-ride facilities, interchanges, toll plazas, and other highway-related construction programs.

- *Rail/Transit* - KSE provides comprehensive construction inspection assistance and management for light and heavy rail, subways, commuter rail, freight rail, and high-speed rail, including yards, shops, terminals, stations, bridges, and tunnels. KSE consistently meets client expectations and project objectives in a professional and cost-effective manner.

- *Facilities/Buildings* - For commercial, residential, educational, and transportation facilities and buildings, KSE provides on-site resident engineering, site safety inspection, management and inspection services for contractor conformance to project requirements and compliance to design intent, safety, and quality control.

Armand Corporation (WBE)

Armand Corporation is a minority and woman-owned engineering, construction management, and technology business created in 1990 and incorporated in 1991. Since the company's inception, Armand has successfully conceived and implemented numerous and varied projects in engineering and construction management. The company's experience encompasses a variety of markets, including transportation, utilities, commercial building, housing, and institutional facilities. Armand has had substantial involvement in projects with construction values from $500,000 to $1.2 billion. Armand's staff of 23 employees includes engineers, construction managers, estimators, and inspectors.

Armand has a proven history of high-quality services to federal, state, and local agencies in this region. The firm has excelled in providing quality services from the pre-design through the construction phase for our clients, and has earned a reputation for delivering projects on-time and on-budget. Armand has been ranked among the Top 50 CM Firms for four consecutive years by NJ Biz (2003 – 2007). Throughout the company's history, Armand has provided project management oversight, on-site engineering support, environmental permitting, contract administration, inspections, cost controls, and estimating services for our clients. In the past nineteen years, Armand has participated on variety of transportation and facility projects including:

- Quality Assurance and Quality Control services for NJ Transit River Line Transit System.
- Constructability Review Services for the $25 million Port Imperial Ferry Terminal.

- Project Management Services for Base Realignment and Closure at the Naval Air Warfare Center.
- Project Management Services for five K-12 contracts throughout New Jersey.
- Construction Management Services for the School District of Philadelphia's Capital Improvement Program.

Talson Solutions, LLC (WBE)

Founded in 2001, Talson has assessed risk, performed construction audits, and worked towards controlling project costs and improving quality across all disciplines to ensure that each party involved in the project provides the services expected within the costs allowed. Talson brings together an interdisciplinary team of seasoned accountants, architects, engineers, finance specialists, and project managers and attribute their success to their ability to work cooperatively with the many parties involved in a project. Presently, Talson is working with Urban on the Port Authority's Tower One Project (The Freedom Tower), as part of the Fortress Monitoring Group (FMG). FMG is a joint venture that brings together professional personnel recognized for their engineering, forensic auditing, investigative, legal abilities, and experience. Urban's personnel constitute FMG's engineering division and provide support related to its purpose of preventing fraud, waste, abuse, and/or corruption; to detect it; and, if detected, to coordinate with the Port Authority's Inspector General the definitive and effective actions to be taken. Talson is also a part of Urban's federal contract to provide Program Management Oversight to the Federal Transportation Administration on the Second Avenue Subway project here in New York City.

Talson was formed for the purpose of providing a wide range of specialty construction consulting services, contract audit and compliance monitoring, and risk reduction on major capital programs and projects. Talson's mission is to provide project stakeholders, including audit committees, funding sources, trustees, and executive management, with verifications and assurances that their project team and contractors are executing a well-planned project, are performing efficiently and effectively, and are minimizing risk. Talson's diverse staff backgrounds provide insight into complex contracts, design and construction management, financial controls, and project events. Services include:

- Capital Program Risk Assessment
- Contract Audit & Compliance
- Cost Recovery Audits
- Project Monitoring and Oversight
- Retail Construction Support
- Quality Audits
- Training
- ARRA Stimulus Oversight Support

KS ENGINEERS, P.C.

URBAN
ENGINEERS OF NEW YORK, P.C.
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THE PORT AUTHORITY OF NY & NJ

March 15, 2010

Mr. Kamal Shahid
President
KS Engieers, P.C.
494 Broad Street, 4th Floor
Newark, NJ 07102

RE: **MINORITY-OWNED BUSINESS ENTERPRISE CERTIFICATION**
TYPE: **ARCHITECTUAL & ENGINEERING**

Dear Mr. Shahid:

We have completed our review of your qualifications for certification as a **Minority-owned Business Enterprise (MBE)**, and we are pleased to inform you that your application has been approved. The references you submitted for **KS Engieers, P.C.** have been reviewed and are satisfactory. Your firm has been included on our roster of eligible **MBEs** for contracts with the Port Authority of New York and New Jersey.

Please be advised that the Port Authority's Office of Business & Job Opportunity periodically reviews all certifications and reserves the right to decertify any previously certified firm that no longer meets the Port Authority's guidelines for **MBE** designation.

Additionally, any **MBE** whose business incurs changes in any substantial manner must notify the Office of Business & Job Opportunity within thirty days of that change. These changes include, but are not limited to, a change of officers, directors, location, corporate name, or financial condition. Failure to advise of these changes may result in our removing the firm from our roster of eligible **MBEs**. If you have any questions regarding your certification, please feel free to call Weicong Mao at (212) 435-7816.

Sincerely,

Lash Green
Director
Office of Business & Job Opportunity

LG/LG

Enclosure: Certificate
Registration Notice

233 Park Avenue South
New York, NY 10003
T: 212 435 7000

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

by

Office of Business & Job Opportunity

KS Engineers, P.C.

Certificate PA-20373

This certificate acknowledges that the above named firm is certified as a **Minority-owned Business Enterprise.** This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10,1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: 3/15/2010

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: 3/14/2015

Form: 6/10/93

TALSON SOLUTIONS, LLC

URBAN
ENGINEERS OF NEW YORK, P.C.
Formulating Excellence

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Kenneth J. Ringler, Jr.
Executive Director

Certified

by

Small Business Programs

Talson Solutions, LLC

Certificate PA-25643

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
General Manager
Certified: July 28, 2006

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: July 27, 2011

Form: 6/10/93

ARMAND CORPORATION

URBAN
ENGINEERS OF NEW YORK, P.C.
Formulating Excellence®

THE PORT AUTHORITY OF NY & NJ

September 22, 2006

Ms. Barbara Armand
President
Armand Corporation
1815 Garden Avenue
Cherry Hill, NJ 08003

RE: M/WBE RECERTIFICATION
TYPE: ARCHITECTURAL & ENGINEERING

Dear Ms. Armand:

This is to acknowledge receipt of the recertification Application which your firm submitted. **Armand Corporation** continues to be on our roster of eligible **Minority/Women-owned Business Enterprises (M/WBEs)** for contracts with The Port Authority of New York and New Jersey.

Please be advised that the Port Authority's Small Business Programs Unit periodically reviews all certifications and reserves the right to decertify any previously certified firm that no longer meets the Port Authority's guidelines for **M/WBE** designation.

Additionally, any **M/WBE** whose business incurs changes in any substantial manner must notify the Small Business Programs Unit within thirty days of that change. These changes include, but are not limited to, a change of officers, directors, location, corporate name, or financial condition. Failure to advise of these changes may result in our removing the firm from our roster of eligible **M/WBEs**. If you have any questions regarding your certification, please feel free to contact Cecelia Wallace at (212) 435-7808.

Sincerely,

Lash Green
General Manager
Small Business Programs

LG/CAW/ps

Enclosures: Certificate
Registration Notice

233 Park Avenue South
New York, NY 10003
T: 212 435 7000

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Kenneth J. Ringler, Jr.
Executive Director

Certified

by

Small Business Programs

Armand Corporation

Certificate PA-11030

This certificate acknowledges that the above named firm is certified as a **Minority/Woman-owned Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
General Manager
Certified: September 22, 2006

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: September 21, 2011

Form: 6/10/93

H. FIRM AFFILIATES

FIRM AFFILIATES

For any assignments in New York, work will be performed by Urban Engineers of New York, PC, and for any assignments in New Jersey, work will be performed by Urban Engineers, Inc., an affiliate of Urban Engineers of New York, PC.

The affiliates of Urban Engineers of New York, PC are:

Name	Address	City	State	Zip
Urban Engineers, Inc.	530 Walnut Street 14th Floor	Philadelphia	PA	19106
Urban Engineers of Erie, Inc.	1319 Sassafras Street	Erie	PA	16501
Urban Construction Systems, Inc.	530 Walnut Street 14th Floor	Philadelphia	PA	19106
Urban International, Inc.	530 Walnut Street 14th Floor	Philadelphia	PA	19106

I. CONFLICT OF INTEREST

URBAN ENGINEERS OF NEW YORK, P.C.

URBAN
ENGINEERS OF NEW YORK, P.C.
Formulating Excellence®

CONFLICT OF INTEREST

Urban Engineers of New York, P.C. has identified the following potential conflicts of interest which may give rise to conflicts with assignments issued under this Agreement:

1. Integrity Monitoring at the Tower One (Freedom Tower) at the World Trade Center site as a member of a joint venture with Fortress Monitoring Group;
2. On-Call Professional Planning, Project Management, and Related Services for PATH as a member of a joint venture with Louis Berger Associates;
3. PMO assignments for the Federal Transit Administration in New York City; and
4. Team member firms that may be asked to perform work at the World Trade Center site could create a conflict of interest with this assignment and the assignment identified in paragraph 1, above.

Urban is committed to working with the PANYNJ to avoid, neutralize, or mitigate any conflict that may arise in the performance of this Agreement.

KS ENGINEERS, P.C.

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ENGINEERS OF NEW YORK, P.C.
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KSE Engineers . Surveyors . Construction Managers
KS Engineers, P.C. 494 Broad Street, 4th Floor, Newark, NJ 07102 . P: 973.623.2999 . F: 973.242.2955 . www.kseng.com

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attention: RFP Custodian

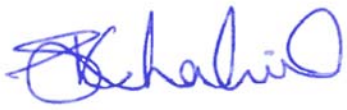
Re: RFP # 22388 – Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013 and 2014

Conflict of Interest Statement

To Whom it May Concern:

To the best of our knowledge, ***KS Engineers, P.C. (KSE),*** does not have any conflict of interest, nor give the appearance of a possible conflict of interest, in regards to the referenced project for Port Authority of New York and New Jersey.

Very truly yours,
KS Engineers, P.C.



Kamal Shahid, PE
President

TALSON SOLUTIONS, LLC

URBAN
ENGINEERS OF NEW YORK, P.C.
Formulating Excellence

TALSON
SOLUTIONS LLC

306 Market Street
Fourth Floor
Philadelphia, PA 19106

215-592-9634 (P)
215-592-9636 (F)
www.talsonsolutions.com

October 19, 2010

Urban Engineers of New York, P.C.
2 Penn Plaza
Suite 1103
New York, NY 10121

Re: Conflicts of Interest – Port Authority of New York and New Jersey

To whom it may concern,

To the best of our knowledge, Talson Solutions, LLC does not have any actual conflicts of interest should it be awarded this Agreement. However, Talson Solutions, LLC is currently under contract for the following assignments which may give rise to conflicts with assignments issued under this Agreement: 1. Integrity Monitoring at the Tower One (Freedom Tower) at the World Trade Center site as a member of a joint venture with Fortress Monitoring Group; and 2. PMO assignments for the Federal Transit Administration in New York City.

Talson is committed to working with the PANYNJ to avoid, neutralize, or mitigate any conflict that may arise in the performance of this Agreement.

Sincerely,

Robert S. Bright
President
Talson Solutions, LLC

ARMAND CORPORATION

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ENGINEERS OF NEW YORK, P.C.
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ARMAND

www.armandcorp.com

October 19, 2010

Urban Engineers of New York, P.C.
2 Penn Plaza
Suite 1103
New York, NY 10121

Re: Conflict of Interest – Port Authority of New York and New Jersey

To Whom It May Concern:

Armand Corporation is not aware of any conflicts of interest should Urban Engineers be awarded this Agreement. However, Armand Corporation is a joint venture partner in ARMAND/KSE JV that has just been awarded a contract to perform construction management services on a "call-in basis" for the Real Estate Division, of The Port Authority of New York and New Jersey.

Sincerely,

ARMAND CORPORATION

Barbara Armand
President

CORPORATE HEADQUARTERS 1815 Garden Avenue Cherry Hill, NJ 08003 [P] 856.489.8200 [F] 856.489.8212
NEW YORK OFFICE 45 W 36th St. 3rd FL., New York, NY 10018 [P] 646.895.0897 [F] 212.643.3456

J. EXCEPTIONS TO THE STANDARD AGREEMENT

EXCEPTIONS TO THE STANDARD AGREEMENT

Urban Engineers of New York, PC has included with this submission a letter contained in a separate envelope that requests specific exceptions to the standard agreement.

WorleyParsons
resources & energy

EcoNomics

Proposal for

Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014

RFP Number 22388

Prepared for

THE PORT AUTHORITY OF NY & NJ

Additions and Edits to Standard Agreements

1010R2734
21 October 2010

WorleyParsons

resources & energy

33 Wood Avenue South
Iselin, New Jersey 08830
USA
Telephone: 732-603-4963
Facsimile: 732-321-6562
www.worleyparsons.com

October 21, 2010

The Port Authority of New York and New Jersey
One Madison Avenue
7th Floor
New York, New York 10010
Attn: RFP Custodian

RE: PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT ENGINEERING SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013, AND 2014
RFP NO. 22388
WORLEYPARSONS PROPOSAL NO. 1010R2734

Dear RFP Custodian:

WorleyParsons Group Inc., in accordance with the above subject RFP, respectfully submits the attached suggested additions and edits to The Port Authority of New York and New Jersey's "Standard Agreements" and its related terms and conditions.

Should you have any questions please do not hesitate to contact me at 610-834-6802 or Mr. John D. Pauling at 856-217-7238.

Sincerely,
WorleyParsons

Chris Ashton
Senior Vice President and General Manager – Eastern Operations

INDEMNIFICATION - add the following as 25.E.

"Any and all personal injury or property claims, damages, losses and expenses arising from or caused by the joint acts or omissions of the parties shall be apportioned between the parties in accordance with applicable law."

INSURANCE – see attached for requested changes to Article 26

Add the following four Articles:

WARRANTY/REMEDY

Consultant warrants that the services to be performed hereunder shall be performed in accordance with the standards customarily utilized by an experienced and competent professional engineering organization rendering the same or similar services under the same or similar circumstances. Consultant shall reperform any of said services which were not performed in accordance with this standard provided Consultant is notified in writing of the nonconformity within one year after the performance of the deficient services. Consultant will perform the remedial work at no cost to the Authority; provided, however, that Consultant shall have no liability or responsibility for repair, modification or replacement of materials, equipment or facilities or the costs associated with such repair or replacement.

With respect to any materials and equipment procured by Consultant on behalf of the Authority, Consultant shall use reasonable efforts to obtain from vendors or suppliers of such equipment or materials the best available warranties for the benefit of The Authority at a price acceptable to The Authority. CONSULTANT MAKES NO WARRANTIES WHATSOEVER WITH RESPECT TO EQUIPMENT AND MATERIALS PROCURED FROM THIRD PARTY VENDORS OR SUPPLIERS. Consultant shall, at The Authority's request, assist the Authority in the enforcement of such warranties as may be extended by third party vendors and suppliers.

THE WARRANTIES SET FORTH IN THIS ARTICLE ARE THE ONLY WARRANTIES MADE BY CONSULTANT IN CONNECTION WITH THE SERVICES. NO OTHER WARRANTIES OF ANY KIND, WHETHER STATUTORY, ORAL, WRITTEN, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY. THE REMEDIES SET FORTH IN THIS ARTICLE ARE IN LIEU OF AND EXCLUDE ALL OTHER REMEDIES AVAILABLE TO THE AUTHORITY AGAINST CONSULTANT EITHER AT LAW OR IN EQUITY, AND REGARDLESS OF WHETHER SUCH CLAIMS ARE ALLEGED TO HAVE RISEN FROM NEGLIGENCE; BREACH OF WARRANTY; BREACH OF CONTRACT; OR OTHER ACT, ERROR OR OMISSION; OR FROM STRICT OR ABSOLUTE LIABILITY IN TORT; OR FROM ANY OTHER CAUSE WHATSOEVER; OR ANY COMBINATION OF THE FOREGOING.

CONSEQUENTIAL DAMAGES

In no event shall either party be liable to the other for special, indirect, incidental, punitive or consequential damages of any nature (regardless of whether such damages are alleged to have risen from negligence; breach of warranty; breach of contract; or other act, error or omission; or from strict or absolute liability in tort; or from any other cause whatsoever; or any combination of the foregoing) including, but not limited to: damages arising from the use or loss of use of any facility; loss of anticipated profits or revenues; costs of replacement services, goods and utilities; damages arising from delay; or interest.

LIMITATION OF LIABILITY

Consultant's maximum cumulative liability shall be limited to the compensation received by Consultant for the services performed.

FORCE MAJEURE

Neither party shall be liable for any unforeseeable event beyond its reasonable control not caused by the fault or negligence of such party (or its agents, employees and subcontractors), which causes such party to be unable to perform its all or part of its obligations under this Agreement and which it has been unable to overcome by the exercise of reasonable due diligence including but not limited to strikes, disturbances, riots, fire, severe weather, governmental action or inaction, acts of war, acts of terrorism or sabotage, acts of God, or any other causes similar or dissimilar to the foregoing. In the event of the occurrence of such a force majeure event, the party unable to perform shall promptly notify the other party in a writing which describes the circumstances. It shall suspend performance only for such period of time as is necessary as a result of the force majeure event and shall use its best efforts to resume performance as quickly as possible thereafter. The obligation to make payments when due for completed services shall not be excused by a force majeure event. A force majeure event shall be considered a change to the work scope.

26. INSURANCE AND WORKERS' COMPENSATION INSURANCE

A. Commercial Liability Insurance:

1) The Consultant shall take out and maintain at his own expense Commercial General Liability Insurance including but not limited to Premises-Operations, Completed Operations and Independent Contractor coverages in limits of $5,000,000 combined single limit per occurrence and in the aggregate for Bodily Injury Liability and Property Damage Liability. And if vehicles are to be used to carry out the performance of this Agreement, then the Consultant shall also take out, maintain and pay the premiums on Automobile Liability Insurance covering all owned, non-owned and hired autos in $5,000,000 combined single limit per accident for bodily injury and property damage. Any/all activities performed airside must, at all times, be performed while under security escort as approved in advance, and in writing by the Project Manager. If at any time, the Consultant is unescorted in the performance of any field services airside, or if so directed by the Authority, the Commercial General Liability Insurance and Automobile Liability Insurance must contain limits of $10,000,000 combined single limit per occurrence and in the aggregate, as provided in item 2) (a) below. In addition, the liability policies (other than Professional Liability) shall include the Authority and its wholly owned entities as additional insureds and shall be specifically endorsed with a provision that the policy may not be canceled, terminated or modified without thirty (30) days written advance notice to the Project Manager. Moreover, the Commercial General Liability policy shall not contain any provisions (other than a Professional Liability exclusion, if any) for exclusions from liability other than provisions or exclusions from liability forming part of the most up to date ISO form or its equivalent unendorsed Commercial General Liability Policy. The liability policy(ies) and certificate of insurance shall contain separation of insured condition (cross-liability) and severability of interests provisions so that coverage will respond as if separate policies were in force for each insured.

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Further, the certificate of insurance and the liability policy(ies) shall be specifically endorsed that "*The insurance carrier(s) shall not, without obtaining the express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its*

Commissioners, officers, agents or employees, the governmental nature of the Port Authority, or the provisions of any statutes respecting suits against the Port Authority."

2) Additional Coverages: The Consultant shall have the policy endorsed when required by the Chief Engineer for specific services hereunder and include the additional premium cost thereof as an out-of-pocket expense:

a) If the services of the Consultant, as directed by the Authority, require the performance of services airside, the Commercial General Liability and Automobile Liability coverage limits stipulated in subparagraph 1, above, shall be increased to an amount of $15,000,000 per occurrence and in the aggregate as provided herein.

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b) Endorsement to eliminate any exclusions applying to explosion, collapse and underground property damage.

c) Endorsement to eliminate any exclusions on account of ownership, maintenance, operation, use, loading or unloading of watercraft.

d) Coverage for work within 50 feet of railroad.

B. Workers' Compensation Insurance:

1) The Consultant shall take out and maintain Workers' Compensation Insurance in accordance with the requirements of law and Employer's Liability Insurance with limits of $1,000,000 each accident

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2) Additional Coverages: The Consultant shall have the policy endorsed when required by the Engineer for specific services hereunder and include the additional premium cost thereof as an out-of-pocket expense:

a) United States Longshoremen's and Harbor Workers' Compensation Act Endorsement.

b) Coverage B Endorsement - Maritime (Masters or Members of the Crew of Vessels), in limits of not less than $1,000,000 per occurrence.

c) Amendments to Coverage B, Federal Employers' Liability Act in limits of not less than $1,000,000 per occurrence.

C. Professional Liability Insurance:

$2 million each occurrence and in the aggregate, covering negligent acts, errors, mistakes, and omissions arising out of the work or services performed by Consultant, or any person employed by Consultant. All endorsements and exclusions shall be evidenced on the certificate of insurance. The coverage shall be written on an occurrence form or may be written on a claims- made basis with a minimum of a three-year reporting/discovery period.

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D. Compliance:

Prior to commencement of work at the site, the Consultant shall deliver a certificate from its insurer evidencing policies of the above insurance stating the title of this Agreement, the P. A.

Agreement number, compliance with notice of cancellation provisions, and containing a separate express statement of compliance with each of the requirements above set forth to the Project Manager.

1) Upon request of the General Manager, Risk Management/Treasury, the Consultant shall furnish to the Authority a certified copy of each policy itself.

Deleted: , including the provisions establishing premiums

2) Renewal certificates of insurance or policies shall be delivered via e-mail to the Authority's Project Manager at least fifteen (15) days prior to the expiration date of each expiring policy. The General Manager, Risk Management must approve the renewal certificate(s) of insurance before work can resume. If at any time any of the certificates or policies shall become unsatisfactory to the Authority, the Consultant shall promptly obtain a new and satisfactory certificate and policy.

3) If at any time the above liability insurance should be canceled, terminated, or modified so that the insurance is not in effect as above required, then, if the General Manager shall so direct, the Consultant shall suspend performance of the Agreement at the premises. If the Agreement is so suspended, no extension of time shall be due on account thereof. If the Agreement is not suspended (whether or not because of omission of the General Manager to order suspension), then the Authority may, at its option, obtain insurance affording coverage equal to the above required, the cost of such insurance to be payable by the Consultant to the Authority.

4) The requirements for insurance procured by the Consultant shall not in any way be construed as a limitation on the nature or extent of the contractual obligations assumed by the Consultant under this Agreement. The insurance requirements are not a representation by the Authority as to the adequacy of the insurance to protect the Consultant against the obligations imposed on them by law or by this or any other Agreement.

Date Date:

WorleyParsons
resources & energy

EcoNomics

Proposal for

Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014

RFP Number 22388

Prepared for

THE PORT AUTHORITY OF NY & NJ

1010R2734
21 October 2010

WorleyParsons

resources & energy

33 Wood Avenue South
Iselin, New Jersey 08830
USA
Telephone: 732-603-4963
Facsimile: 732-321-6562
www.worleyparsons.com

October 21, 2010

The Port Authority of New York and New Jersey
One Madison Avenue
7th Floor
New York, New York 10010
Attn: RFP Custodian

RE: PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT ENGINEERING SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013, AND 2014
RFP NO. 22388
WORLEYPARSONS PROPOSAL NO. 1010R2734

Dear RFP Custodian:

WorleyParsons Group Inc. is pleased to hereby submit to The Port Authority of New York & New Jersey our response to the above-referenced request for proposal, including Addendum 1 received on 13 October 2010.

The WorleyParsons team is committed to providing "Best in Class" resources for this project. WorleyParsons technical resources include on staff Project and Program Management Specialists and engineers with extensive hands-on expertise with the management of major infrastructure construction programs. This expertise includes architectural and engineering design – conceptual, preliminary, and final contract preparation and construction management services. We have a dedicated team of professional Project Management Specialists, in a wide variety of disciplines, which are prepared to support this contract.

We look forward to providing our project and program management services at the Authority's facilities; utilizing the high standards expected of industry leaders. Should you have any questions, or need additional clarification regarding our submittal, please contact me at 610-834-6802 or Mr. John D. Pauling at 856-217-7238.

Sincerely,
WorleyParsons

Chris Ashton
Senior Vice President and General Manager – Eastern Operations

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Section A
Attachment B – Agreement on Terms and Conditions

PERFORMANCE OF EXPERT PROFESSIONAL CORROSION CONTROL ENGINEERING DESIGN SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011

ATTACHMENT B

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

WorleyParsons Group Inc.
(Company)

(Signature)
Chris Ashton, Senior Vice President and General Manager – Eastern Operations
(Title)
October 20, 2010
(Date)

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DO NOT RETYPE.

Section B
Attachment C – Company Profile

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CORROSION CONTROL ENGINEERING DESIGN SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 (RFP #22013)

1. Company Name (print or type):

   WorleyParsons Group Inc.

2. Business Address (to receive mail for this RFP):

   33 Wood Avenue South
   Iselin, New Jersey 08830

3. Business Telephone Number: 732-603-4963

4. Business Fax Number: 732-321-6562

5. Firm website: www.worleyparsons.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 02 / 07 / 1980

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   WorleyParsons of New York, Inc. (EIN [redacted]
   2675 Morgantown Road
   Reading, Pennsylvania 19607

9. Officer or Principal of Firm and Title:

   Chris Ashton, Senior Vice President and General Manager – Eastern Operations

10. Name, telephone number, and email address of contact for questions:
    John Pauling Mobile Telephone: [redacted]
    john.pauling@worleyparsons.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? Yes (No)

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

Section C
Qualifications and Experience of Staff

Section C — Qualifications and Experience of Staff

This section provides a profile of the program managers proposed for this contract. Table 1 provides a representative project(s) for the three (3) proposed Program Managers, verses the overall scope elements stipulated in Attachment A. Also provided in this section is the proposed organizational structure, with resumes of the key staff and other key personnel.

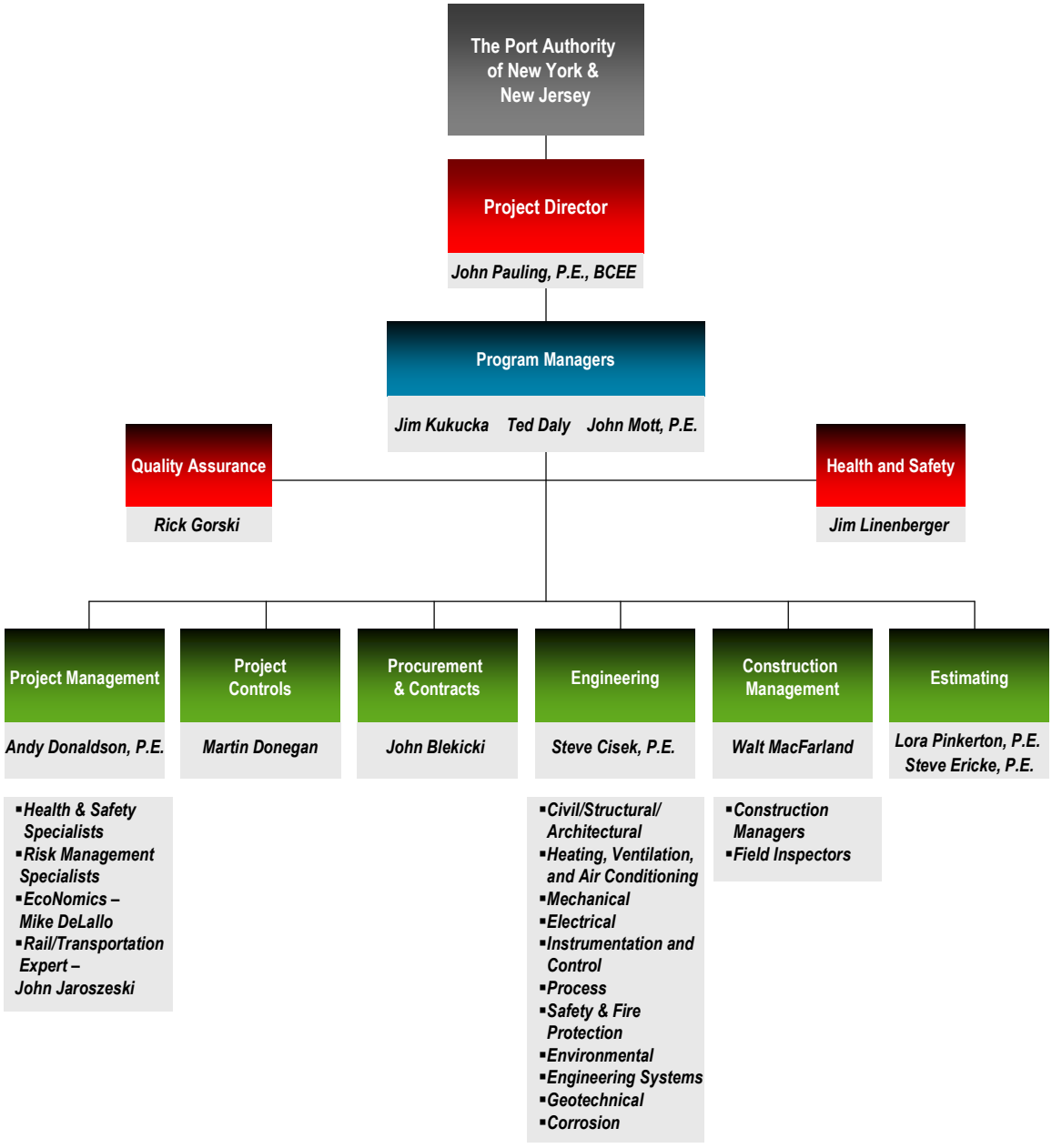

Table 1
Representative Projects of Proposed Program Managers

Name	Project	Cost	Project Initiation	Implementation	Monitoring/Reporting	Program Management	Marine	Aviation	Tunnels and Bridges	Terminals	Rail	Power Generation
Richard Gorski	Saudi International Petrochemical Company (Sipchem) Project Manager	$1.0 B	X	X	X	X	X			X		X
Richard Gorski	Ferrexpo - Iron Ore Expanssion, Ukraine	$500 M	X	X	X	X			X	X	X	X
Jim Kukucka	South Port Container Terminal Design and permitting development, PA	$500 M	X	X	X	X			X	X	X	X
Jim Kukucka	Battery Park City Authority, Project Manager for the design review and engineering of Pier A	$30 M	X	X	X	X	X			X		
Jim Kukucka	Global Terminal & Container Services, Inc, Program Manager / V.P. Asset Manager for the modernization and expansion of terminal	$189 M	X	X	X	X	X			X		
Ted Daly	Port Newark Container Terminal (PNCT) Rehabilitation Project. Owner's representative and project manager responsible for the completion of a 182 acre, $300 million terminal rehabilitation project.	$300 M	X	X	X	X	X			X		
Ted Daly	Pusan NewPort Corporation, Busan Container Terminal Equipment Procurement Program, Project Manager	$980 M	X	X	X	X	X			X		

Table 1
Representative Projects of Proposed Program Managers

Ted Daly	Caucedo Container Terminal Design. Lead project design engineer for the layout of the terminal and for the development of the equipment specifications.	$300 M	X	X	X	X	X			X	X	X
John Mott	PSEG Hudson Generating Station Front End Upgrades	$100 M+ (current) $100 M+ (planned)	X	X	X	X						X

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John D. Pauling, P.E.
Project Director

Resume

SUMMARY

Twenty-eight years of diversified experience in business/engineering management and engineering, including twenty-three years in the environmental field. Developed market entry and diversification strategies and business plans for seaports' and airports' programs. Experience includes design engineering, project management, sales/marketing, and business management. Mr. Pauling has experience with the design of cathodic protection systems for above ground and underground tanks and piping systems. Specific experience includes concept design, regulatory evaluation, permitting, detailed design, construction management, operations/maintenance, and privatization. Planned/developed engineering design and turnkey proposals up to $90 million in value.

EXPERIENCE

2010 - Present **Business Manager, Infrastructure and Environment – WorleyParsons, Reading, Pennsylvania**

Responsible for Eastern Operations Infrastructure and Environment business and Ports and Marine business strategic growth planning for United States and Latin America. Participate in Eastern Operations strategic planning and proposal preparation for Port of Long Beach and Public Service & Gas proposals.

2008 - 2010 **Vice President – Halcrow, Inc., New York City, New York**

- Market Sector Manager Coastal Programs for North American Region; Sustainability Director for North American Region; Maritime Lead for Mid- Atlantic Region.

2003 - 2008 **Vice President Seaports and Airports Programs – Weston Solutions, Inc., West Chester, Pennsylvania**

Responsible for business planning and strategic implementation on national/international basis; developed key personnel hiring and strategic partner teaming strategies; led development of key/significant proposals.

1998 - 2003 **Deputy Director/Program Manager Ports and Waterways – Weston Solutions, Inc., West Chester, Pennsylvania**

- Developed market entry strategies on national basis; responsible for ports and waterways business sales and profitability; established client/innovative sediment remediation technology partnerships. Achieved $4.3 MM for Ports and Waterways sales in 1999.

1996 - 1997 **Project Director – Weston Solutions, Inc., West Chester, Pennsylvania**

Developed client sales/marketing plans/strategies; responsible for individual utilization, sales and cost of sales goals; responsible for overall client coordination and development.

1994 - 1995 **Project Manager – Weston Solutions, Inc., West Chester, Pennsylvania**

Responsible for developing and obtaining concurrence for proposal/project scope of work, personnel assignments, quality assurance plan, budget, and schedule.

- Philadelphia Corps of Engineers - Upgrading hydrant refueling system ($20 million) at Dover Air Force Base, Delaware.
- FDA Consolidation Project in Association with the Kling-Lindquist Partnership, Maryland – Waste Management/Hazardous Material Abatement.

1993 - 1994 **Deputy Engineering Design Department Manager – Weston Solutions, Inc., West Chester, Pennsylvania**

Directed operations of Engineering Design Department of sixty personnel; responsible for staff utilization/staff development; assisted department manager in profit planning. Developed weekly/monthly engineering utilization/staffing report and coordinated weekly staff meetings.

1992 - 1993 **Section Manager – Weston Solutions, Inc., West Chester, Pennsylvania**

Provided management and technical leadership for Project Engineering Section of six professionals; responsible for Project Engineering Section profitability; responsible for assignment of project engineers on proposals/projects.

Rocky Mountain Arsenal, Colorado, Turkey Project Submerged Quench Incineration (SQI) – Developed project engineering and engineering staffing for $40 million award winning project completed on-time and under budget.

1989 - 1992 **Technical Manager – Weston Solutions, Inc., West Chester, Pennsylvania**

Responsible for preparation of engineering/turnkey proposals; developed standardized engineering approach/details for wastewater treatment/storage tank facilities; provided technical leadership, nationally, on engineering design proposals/projects.

1988 - 1989 **Project Engineer – Weston Solutions, Inc., West Chester, Pennsylvania**

Coordinated scientific and engineering disciplines; planned proposal and project technical approach; prepared/negotiated engineering budget and schedule for proposals and projects.

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Richard V. (Rick) Gorski
Quality Assurance

Resume

SUMMARY

Over 30 years in leadership and management positions in engineering and construction, public works, and government organizations, both U.S. and international. Experience includes upstream onshore and offshore and downstream hydrocarbons projects, minerals and metals extraction and processing projects, and execution of projects for Russia, Ukraine, and Australia. Over 10 years with WorleyParsons as a Program Director, Project Director, and Vice President. Skilled in all aspects of project and program management, project control, project cost control and analysis and contracting management.

EXPERIENCE

2009 - Present **Vice President and Program Director, WorleyParsons, Houston, TX**

Saudi International Petrochemical Company (Sipchem). Currently managing a $1 billion grassroots polymers plant, consisting of three process units (ethylene vinyl acetate, polyvinyl acetate, and polyvinyl alcohol) and related utilities, infrastructure, and product handling and storage facilities. The plant will be built in Jubail, Saudi Arabia. WorleyParsons is providing project management services from the process design package stage through project startup.

2007 - 2008 **Project Director, WorleyParsons, London, UK**

Ferrexpo – Iron Ore Expansion Projects. Managed the feasibility phase of the $2 billion development of an iron ore mine and ore processing facilities and the $500 million expansion of Soviet-era iron ore processing facilities in Ukraine. Involved open pit mining of low grade magnetite ore and processing into blast furnace grade pellets. Executed study work in Ukraine, South Africa, United Kingdom, Australia, and Kazakhstan and included cooperation with multiple Ukrainian design institutes. Worked with the following project components: mine design, process design, facilities layouts, environmental impacts, capital and operating cost estimates, and development of a detailed project execution plan that emphasized maximum use of Ukrainian engineering, manufacturing, and construction capabilities. Provided engineering, procurement, and construction management (EPCM) of critical “early works” facilities to support pre-stripping operations for the new mine.

2006- 2007 **Project Director, WorleyParsons – SNC Lavalin Joint Venture, Adelaide, Australia**

BHP Billiton – Olympic Dam Expansion Pre-Feasibility Study. Managed the $30 million pre-feasibility study for the ore processing facilities for a US$20-plus billion expansion of the Olympic Dam copper and uranium mine facilities. The one-year study included 30% design and +/-25% capital and operating cost estimates for the concentrator, hydrometallurgical, smelting, refinery, and process plant infrastructure greenfield facilities. Executed the engineering simultaneously in Australia, Chile, Canada, and China due to a tight time schedule and required metallurgical specialties. The project included the unprecedented (in the mining industry) use and long-distance ground transport of mega-modules. Served simultaneously as a Manager of the WorleyParsons - SNC Lavalin unincorporated joint venture that executed the study.

2005 - 2006 **Project Director, WorleyParsons, Perth, Australia**

Fortescue Metals Group, ltd. – Pilbara Iron Ore Development, Western Australia. Served as Deputy Project Director of a client-contractor integrated project management team executing a

greenfield $1.7 billion iron ore mining infrastructure project. The project included design and construction of facilities to deliver 45 million tonnes of iron ore per annum, consisting of crushing, screening, conveying and loading facilities at the mine, a 255 km railroad (rail bed and rolling stock), port facilities to offload trains, stockpile ore, and load ships and more than 70 separate contracts. Presented with special project challenges that included a "fast track" highly compressed schedule, very tight budget constraints, special environmental and cultural heritage restrictions, and "tight" personnel and contractor resources due to an overheated resources industry market. Served simultaneously as Project Director for the WorleyParsons incentive-based contract for Front End Engineering Design (FEED), detailed design, procurement, and construction management services.

2001 - 2005 **Project Director, Parsons E&C/WorleyParsons, London, UK**

Sakhalin II Onshore Gas Processing Facility Project, Sakhalin Island, Russia. Managed WorleyParsons' London-based team executing definition engineering, detailed design, procurement, and construction management services for a completely self-supporting 1.8 BSCFD, $800 million gas processing facility. Presented with special project challenges that included weather extremes, highly active seismic area, lack of local or regional infrastructure, requirements for high levels of local content, management of simultaneous engineering in London and Russian design institutes, extremely bureaucratic governmental approvals process, and uniquely sensitive environmental area.

1998 - 2000 **Program Director, Parsons E&C, Houston, TX**

Houston Special Projects Operations. Managed the Houston-based division of Parsons E&C (now WorleyParsons), which designed and constructed projects valued up to $50 million for Gulf Coast region hydrocarbon and chemical process plants. Managed over 300 people and a work program, with annual revenues of $65 million.

1991 - 1998 **Manager of Projects and Program Director, McDermott International, Houston, TX**

Sakhalin II Project Phase I Development, Sakhalin Island, Russia, 1996-1998. Seconded to client management team for first phase of $10 billion oil and gas development project offshore Far East Russia. Managed construction planning for $200 million in contracts, overall planning and scheduling, support effort to the Russian approvals, permitting and licensing process, and document control and records.
1994-1996. Developed McDermott's engineering and construction operations for the Sakhalin II project, including establishing alliances with Russian companies, managing three joint venture companies with Russian entities, negotiating engineering contracts, and managing McDermott's office on Sakhalin Island, Russia.

1966 - 1991 **Officer, US Army Corps of Engineers**

Served in progressive leadership and staff positions, including Platoon Leader, Company Commander, Battalion Commander, Pentagon Staff Officer, Executive to the Assistant Secretary of the Army, and Commander of the New Orleans Engineer District.

EDUCATION

MSCE, Stanford University

BS, U.S. Military Academy, West Point

WorleyParsons
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James P. Kukucka
Program Manager

Resume

SUMMARY

Senior level maritime industry professional with 27 years of experience in terminal master planning, operations management, automation design, evaluation, and integration; including vessel, yard, and gate, equipment, terminal expansion, layout and construction, IT systems, labor relations, and management/supervision of container and marine and waterfront facilities. Extensive hands-on experience in daily container terminal operations, facility maintenance and engineering services. Served as Terminal Manager, Vice President of Asset Management and Executive Vice President at a major container terminal in the Port of New York/New Jersey. Specific areas of competence are project management, asset management, facility maintenance and engineering services.

EXPERIENCE

2010 - Present **Manager Coastal, Ports and Marine Infrastructure & Environment, WorleyParsons, Conshohocken, PA**

- Senior Manager of coastal and marine infrastructure and environment projects.
- Provide lead and support services to business units throughout North and South America.
- Responsible for sales support, proposal and presentation preparation, conceptual design planning of marine facilities including development of order of magnitude costs and procurement of container terminal handling equipment.
- Provide industry specific knowledge on volume, capacity, throughput, gate operations, yard operations, marine and vessel operations, engineering, and maintenance.

2008 - 2010 **Project Manager/Senior Port Planner, Halcrow Inc., New York, NY**

Project manager and senior port planner in the Maritime Business Group. Senior vice president and technical advisor accountable in the areas of port planning and design, equipment procurement, and project management as owner's representative.

2010

USA, Ras Laffan Container Terminal, Qatar. Senior port planner and team member for the container yard layout, stacking arrangement, and striping plans for Phases 1 and 3 of the greenfield site development. Performed capacity and transit time analyses and terminal fluidity studies to confirm design. Travelled to Qatar and presented layout and design presentation to clients including Qatar Petroleum, Ras Laffan City, and Consolidated Contractors Group S.A.L. (CCC) representatives.

USA, Southport Container Terminal – Sub to Weston Solutions and the Commonwealth of Pennsylvania. Project manager for the conceptual design, development, and mode of operations for a $500 million green field container terminal on the Delaware River. Conceptual design and presentation of 30% design drawings, as well as Best Management Practices (BMP) manual.

Packer Avenue Marine Terminal, Philadelphia, PA – Sub to Urban Engineers and the Philadelphia Regional Port Authority. Senior port planner responsible for the redesign of the terminal's gate complex, as well as development of terminal operating system (TOS) specifications and Request for Proposal preparation for selection of a new TOS provider.

Pier A Column Settlement – Sub to H3 Hardy for Battery Park City Authority. Project manager to review design of engineering firm retained by the Battery Park City Authority for the renovation of the Pier A structure. Analysis of column settlement found in the 100-year old structure, required to allow the rehabilitation project to proceed.

2009

Port Authority of New York New Jersey (PONYNJ) – Strategic Business Assessment. Terminal operations consultant for a $700,000 port land-use optimization business assessment and optimization model development project for the PONYNJ. Project completed March 2009.

USA, Pier A Battery Park City Authority. Served as project manager for Pier A deck replacement design review.

2008

USA, Shell, Libya – Liquefied Natural Gas (LNG) Subsea Inspection. Served as project manager for subsea inspection of LNG wharf structure by engineer divers.

2007 - 2008

Vice President Engineering and Asset Management, Global Terminal and Container Services, Jersey City, NJ

Reporting to Chief Operating Officer. Oversaw $15 million crane replacement project from the specifications to the development, acquisition, and delivery of the equipment.

2001 - 2007

Executive Vice President, Global Terminal and Container Services, Jersey City, NJ

Reporting to President and CEO. Initiated and evaluated the bidding process for the design/build of a $60 million berth extension to the existing wharf. Acted as project manager for berth extension. Collaborated with the Port Authority of NY and NJ, Army Corp of Engineers, and the NJ DOT Maritime Division on the Port Jersey Channel dredging project.

2007

USA. Served as project manager for the design/build of a $60 million berth extension to the existing wharf. Coordinated with the NJDEP and Army Corps of Engineers for necessary permits.

2006

USA. Served as project manager for a $15 million crane replacement project from the specifications to the development, acquisition, and delivery of the machines.

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Edward (Ted) Daly
Program Manager

Resume

SUMMARY

Senior Level Coastal and Marine Manager with 21 years of experience in coastal, ports, terminals, marine operations and engineering including automation planning and design, port master planning, detailed facility design, and construction supervision of major port infrastructure. Extensive experience in port and project planning, design, contracting and construction supervision of major infrastructure projects. Detailed understanding and experience with contract development and management of major equipment procurement projects. The unique ability to manage all types of projects/programs from conceptual planning and design cost estimating, design support, vendor management and vendor contract negotiations.

EXPERIENCE

2010 - Present **Manager, Coastal and Marine Infrastructure and Environment, WorleyParsons, Conshohocken, PA**

Senior Manager of coastal and marine infrastructure and environment projects providing lead and support services to WorleyParsons' business units throughout North and South America. Responsible for sales support, proposal and presentation preparation, conceptual design planning of automated and semi-automated marine facilities, development and presentation of order of magnitude costs, and the procurement of container terminal handling equipment.

2008 - 2010 **Senior Principal Engineer, Halcrow Inc, NY**

Ras Laffan Container Terminal Layout and Design – Ras Laffan, Qatar UAE. Lead project manager for the design and development of a **$220 Million** dollar, 1,400 meter three-berth container terminal in the City of Ras Laffan, Doha. Project included part of the Ras Laffan City development project on behalf of Qatar Petroleum which included dry docks, tug berths, and liquefied natural gas (LNG) facilities and future automated terminal implementation.

State of Pennsylvania – Sub Consultant to Weston Solutions, Southport Container Terminal Development, Philadelphia, PA. Principal engineer for the development of a $500 million terminal design concept and presentation of 30% design drawings in support of Weston Solutions' preparation of an environmental permit application. Responsibilities included conceptual design concepts, including phasing plans to meet environmental requirements. Automated and non-automated capacity analysis, including yard, OCR gate, and marine productivity requirements. Equipment mode of operations, including quay cranes, horizontal transportation, and yard equipment. Traffic volume analysis, including hourly daily gate volume, seasonal peaks, and local infrastructure impacts. Provided cost estimate for development, by phase, including operations and maintenance cost estimate for ongoing operations after civil development.

2009 **Port Authority of New York New Jersey (PANYNJ) – Strategic Business Assessment, NY.** Lead Terminal Operations Consultant for Port Land Use Optimization Business Assessment and Optimization Model Development Project. Responsible for development of a port-wide, terminal specific cost structure for the development of a business optimization model for the development of common fully automated gate complexes on the north and south sides of the port. Presentation included a detailed cost estimate for the construction and the cost of inputting state-of-the-art technology - $700 thousand.

Resume

2008 — **King Abdullah Economic Development Corporation, Saudi Arabia.** Project manager responsible for overseeing development of 30% drawings for four 3,500 meter container berths and associated backland design. Provided conceptual level automation planning for ASC equipment within the yard. Provided conceptual design for an automated gate complex. $2 billion.

2003 - 2008 — **Director of Engineering, Ports Newark Container Terminal, Newark, NJ**

Ports America, Newark, NJ – Port Newark Container Terminal (PNCT) Rehabilitation Project. Reported directly to the President of PNCT. Owner's representative and project manager responsible for the completion of a 182 acre, **$300 million** terminal rehabilitation project.

Port Newark Container Terminal, Newark, NJ – Terminal Expansion Project. Project manager of a 15-acre, $27 million terminal expansion project directly accountable for the design, construction, and daily management of the development of 15 additional acres. Construction contract value $27 million.

2007 — **Port Newark Container Terminal, Newark, NJ – Terminal Expansion West End Phase I, II.** Owner's representative and project engineer responsible for all aspects of the design, layout, RFP work, cost control, and construction management. Construction contract value $15 million.

2000 - 2003 — **Director CSX World Crane Services, Charlotte, NC**

CSX World Terminals – Caucedo Container Terminal Design and Development, Caucedo Dominican Republic. Lead Project design engineer for the design and layout of the container terminal and associated equipment operational plan for a **$220 Million** Dollar terminal development project. Directly accountable for the development of the equipment specifications, RFQ and RFP development and distribution, RFP analysis and negotiations of the manufactures construction, erection and testing contract for over $14 Million dollars of container handling equipment.

Pusan Newport Corporation – Port of Pusan New Port, Busan, Korea. Equipment Purchase, Owner's Representative, Project Director, **$950 million** dollar purchase of 18 Super Post Panamax quay cranes and 49 semi-automated GPS ready rail mounted gantry yard cranes for the new container terminal.

EDUCATION

B.S., Marine Transportation, State University of New York at Maritime, 1989

Completed several classes at Norwich University in pursuit of M.S. in Civil Structural Engineering, Projected Finish – February 2011

REGISTRATIONS/AFFILIATIONS

American Society of Civil Engineers

PUBLICATIONS/PRESENTATIONS

"Avoiding Expensive Pitfalls," Cargo Systems, November/December 2009
"A Recipe to Avoid Disaster," Container Port, September/October 2001

WorleyParsons
resources & energy

John A. Mott, P.E.
Program Manager

Resume

SUMMARY

Thirty-two years of project and management experience, including nine years with WorleyParsons, in project management, engineering management, and civil and structural engineering including supervising engineering projects. Experience also includes analysis and design of steel, concrete and masonry structures; site development, storm drainage, roads, rail, permitting; technical specifications, bid evaluations, planning, scheduling, cost estimates, and construction field support for power generation facilities (coal, oil, gas turbine and nuclear), chemical plants, and infrastructure.

EXPERIENCE

2007 - Present **Project Manager – *Improve* - Asset Services – WorleyParsons, Reading, Pennsylvania**

Public Service Enterprise Group (PSEG) – Responsible for oversight of all projects across the PSEG fleet of fossil plants under the General Services Agreement.

PSEG, Bergen Generating Station Unit 2, Electro Hydraulic Control Tubing and Supports – Responsible for the upgrade of existing GE electro-hydraulic turbine control tubing and supports, necessitated by excessive vibration that led to system failures.

PSEG, Linden Generating Station Unit 2, High Energy (HE) Pipe Supports, Insulation and Lagging – Responsible for the inspection of HE piping supports showing damage due to excessive movement and insulation and lagging that exhibit premature corrosion and failure.

PSEG, Bethlehem Energy Center, Clarifier Project – Responsible for the preliminary engineering services consisting of technical scoping and funding packages for this project with the goal of eliminating clarifier freezing problems along with disposition of excess heat recovery steam generator (HRSG) blowdown.

PSEG, Mercer Generating Station Units 1 and 2, Replacement of Circulating Water Traveling Screens Project – Responsible for preliminary engineering services consisting of technical, commercial, and funding packages for this project which is required to meet Clean Water Act Section 316b permit and consent decree requirements.

PSEG, Kearny and Essex Stations, Scoping and Estimate for LM 6000 Peakers – Responsible for preliminary engineering and cost estimating to develop bid packages for the Pennsylvania, New Jersey, and Maryland (PJM) capacity auction. Kearny was successfully bid and is now an Execute project.

PSEG Hudson Generating Station Unit 2, Back End Technology (BET) Project and Non-BET Plant Upgrade Projects – Responsible for owner's engineer services consisting of technical, commercial, and managerial guidance in support of PSEG's implementation of the BET project, consisting of dry scrubbers, baghouses, selective catalytic reductions (SCR) and booster fans. Responsible for numerous plant upgrade projects including boiler upgrades, plant-wide distributed control system upgrade, sootblower replacement, low NOx burner upgrade, air and gas duct repair/replacement, air compressor upgrade, and continuous environmental monitorings and mercury monitoring projects.

Resume

2005 - 2007 **Engineering Manager – WorleyParsons, Reading, Pennsylvania**

Progress Energy Carolinas, Roxboro Power Station, Flue Gas Desulfurization (FGD), 2500 MW – Responsible for the technical coordination of the multi-disciplinary team for detailed engineering and design services, and coordination of construction and outage support services for the addition of FGD systems and associated support facilities. Project includes FGD systems on four units.

2000 - 2005 **Lead Structural Engineer – WorleyParsons, Reading, Pennsylvania**

2003 - 2005 **Progress Energy Carolinas, Roxboro Power Plant, FGD, Units 1-4, Material Handling System, and Unit 2, SCR –** Responsible for structural discipline budget, schedule, procurement contracts, structural engineering coordination, design development of engineering documents, bid packages preparation, and cost estimates. Responsible for project inter-discipline coordination, project engineering budgets, construction estimates, and construction support.

2001 - 2003 **Conectiv Energy, East Donegal, 2 x 2 x 1 GE 7FA Combined Cycle Power Plant –** Responsible for structural discipline budget, schedule, procurement specifications, coordination of structural engineering, design development of engineering documents including structural design drawings, plant design criteria, preparation of bid packages, and cost estimates. Responsible for project inter-discipline coordination, project engineering budgets, construction estimates, and construction support.

2002 **Reference Plant, GE S109FB-SS –** Responsible for development of engineering documents including site general arrangement drawings, plant design criteria, inquiry specifications, initial design, and quantities tabulation for the preparation of this prototype reference plant. Prepared seismic maps of reference plant applicability comparing the requirements of UBC 1997 and IBC 2000 building codes.

2001 - 2002 **Gemma Power Systems, Hines Power Block II, Combined Cycle Project –** Performed analysis and design of circulating water in-take structure.

Milford Power Company, Milford HRSG Study – Performed structural (failure) analysis of a partially erected HRSG structure that collapsed during construction operations. Prepared a report of the analysis in preparation for providing expert witness testimony on behalf of the owner.

EDUCATION

B.S., Civil Engineering, The Pennsylvania State University, 1978

REGISTRATIONS/AFFILIATIONS

Registered Professional Engineer – Pennsylvania, New York (inactive), New Jersey, West Virginia, South Carolina, Tennessee (inactive), and North Carolina

Member, American Society of Civil Engineers (ASCE)

Member, American Institute of Steel Construction (AISC)

SPECIFIC TECHNICAL EXPERTISE/SPECIALIST COURSES

STAAD-III, Microsoft Office, MicroStation

WorleyParsons
resources & energy

James A. Linenberger
Health and Safety

Resume

SUMMARY

Health, Safety, and Environment Regional Manager with more than thirty years of experience in development and implementation of safety programs for heavy construction, power plants, and industrial/commercial facilities, including ten years with WorleyParsons. Maintained innovative Zero incident safety and health programs, and provided programs for both the employer and employee safe work practices. Conducted safety audits and wrote safety reports to construction managers. Computer skills include MS Office.

EXPERIENCE

2004 - Present **Health, Safety, and Environment (HSE) Regional Manager – WorleyParsons, Reading, Pennsylvania**

Oversee the Health, Safety, and Environment management systems.

Responsible for program development and accountable for managing safety programs for the design, engineering, and construction management (CM) of major industrial projects.

Communicate and promote cooperation and trust between all WorleyParsons employees, subcontractors, and customers in the HSE arena.

Coordinate, develop, and present HSE training programs. Evaluate projects on HSE performance and compliance with established policy, procedures, and practices.

Coordinate all HSE activities on a management level to promote and support the "Zero Harm" philosophy in order to pursue and maintain an incident free environment for the reduction of personal injuries, equipment and property damage, and the protection of the environment.

OSHA Outreach Trainer providing 10-hour and 30-hour safety training to the Reading Operations' staff.

2003 - 2004 **Site Safety Manager**

Santee Cooper, Generating Station Unit 3, Cross, South Carolina – Managed and monitored construction safety and health programs for a multi-contractor construction project.

2001 - 2003 **Regional Safety Supervisor – The Haskell Co., Jacksonville, Florida**

Accountable for overseeing project safety for various construction projects throughout Florida, Texas, and Mexico. Implemented and coordinated corporate safety programs. Developed site-specific programs to reduce occupational injuries, illnesses, and fatal accidents. Coordinated specialized safety training needs. Conducted OSHA 10- and 30-hour training.

1999 - 2001 **Regional Safety Manager Florida Division – J. A. Jones/Metric, Charlotte, North Carolina**

Responsible for implementing and enforcing corporate safety and health policies throughout projects in the Florida division. Conducted safety audits in construction projects. Provided OSHA construction 10- hour training. Safety consultant to sub-contractors.

1997 - 1999 **Project Safety Manager – Bechtel, Houston, Texas**

Responsible for two maintenance projects in Charlotte, North Carolina (Dreyfus Research Park and Celgard LLC –BECON).

1995 - 1997 **Senior Safety Representative/Loss Control – ITT Hartford, Hartford, Connecticut**

ITT Hartford – Assigned to an integrated safety team located in Mulberry Florida with the CM, Bechtel, and owner of Polk Power Station Tampa Electric Company on a combined cycle state-of-the-art gasification project.

1994 - 1995 **Project Safety Engineer – The Industrial Co., Steamboat, Colorado**

Tampa Electric Company – Assigned to two separate projects including outage renovation project and new construction at Mobile Mining.

1991 - 1994 **Project Safety Manager – WorleyParsons, Reading, Pennsylvania**

Managed and monitored construction safety and health programs for a multi-contractor CM project for Santee Cooper.

1990 - 1991 **Safety Director – S & E Contractors, Clearwater, Florida**

Managed and developed company safety and health policies for an underground utility contractor. Developed New Employee Orientation.

1985 - 1989 **Loss Control Counselor – FEISCO-FCCI Fund, Sarasota, Florida**

Florida Employers Insurance Service Corporation, Workers Compensation Insurance Fund – Responsible for field underwriting prospective members.

1981 - 1985 **Project Safety Manager – WorleyParsons, Reading, Pennsylvania**

Tampa Electric Company – Managed and implemented construction safety and health programs for a multi-contractor site.

1978 - 1981 **Project Safety Engineer – Stearns Rogers, Denver Colorado**

Supervised and directed construction safety, health, and fire protection programs.

1977 - 1978 **Compliance Officer – COSH, Colorado State Department of Labor, Denver Colorado**
Colorado-OSHA- Occupational Safety and Health administration-compliance with Colorado State law and adopted Federal OSHA standards.

EDUCATION

Degree Program – Occupational Safety & Health, Arapahoe Community College, 1975 – 1977

REGISTRATIONS/AFFILIATIONS

Board of Certified Safety Professionals – CSP, Certificate Number 14508, since 1996

Professional Member, American Society of Safety Engineers, since 1981

OSHA 500 Outreach Trainer

WorleyParsons
resources & energy

Andrew M. Donaldson, P.E.
Project Management Lead

Resume

SUMMARY

Director of Major Projects with over 35 years of experience, including 18 years with WorleyParsons, in multi-disciplined engineering/procurement/construction project direction for fossil power generation projects for industrial and utility clients. Project management experience of major projects such as; fossil utility power plants, cogeneration plants, and independent power projects. Roles included program and project management of all aspects of construction such as; civil, mechanical and electrical processes and procedures. Technical experience in project development, project management, contracting and contract management, feasibility studies, plant design, cogeneration and independent power project design, heat balance cycle, and plant optimization.

EXPERIENCE

2004 - Present **Director of Major Projects, WorleyParsons, Reading, PA**

2006 - Present Responsible for major projects including new generation (gas turbine, combined cycle, and solid fuel), air quality, and renewable projects.

2004 - 2006 Responsible for new generation projects including combined cycle, gas turbine and solid fuel projects. Responsible for the project managers managing the projects

1994 - 2008 **Project Manager – WorleyParsons, Reading, PA**

2006 - 2008 **Husky Energy – Sunrise Oil Sands Project.** Project Sponsor for the 9.5 million pounds per hour energy island project supporting the development of the 200,000 bbls per day Bitumen production facility near Fort McMurray, Alberta, Canada.

Progress Energy – New Coal Plant Project. Responsible for the conceptual design and permit support for a new two-unit, 750 MW supercritical pulverized coal plant.

2005 - 2007 **Florida Power & Light – South Florida Coal Project, Preliminary Design Manager.** Responsible for the preliminary design and site certification application basis for two supercritical pulverized coal-fired units, each rated approximately 1000 MW net output.

2003 - 2004 **Western Greenbrier – Cogeneration Project, Rainelle, West Virginia.** Project Manager for the DOE Clean Coal Technology project for a 100 MW circulating fluidized bed boiler plant burning waste coal and utilizing the ash in a processing and manufacturing facility.

1999 - 2003 **Constellation Power Development – Holland Energy Facility Project, Beecher City, IL.** Project Director for the Joint Venture (Holland Engineers & Constructors). The facility is a 660 MW combined cycle facility in a 2-on-1 configuration. The gas turbines are GE frame 7FA machines rated at 171 MW. The steam turbine is a sliding pressure steam turbine generator rated at 343 MW. The project is a joint venture with TIC.

1997 - 1999 **Greater Toronto Airports Authority – Expansion of the Lester B. Pearson Airport, Cogeneration Development Project.** Responsible for the conceptual design of the cogeneration facility, the

preparation of the request for quotation document to select a developer of the combined cycle cogeneration facility and owner's engineer review of the design and installation of the plant.

1997 - 1998 **Power Block – Star Refineries Delaware City Repowering Project.** Responsible for the conceptual design and procurement to award major equipment for the power block portion of the petroleum coke integrated gasification project. The major equipment in the power block included 2 GE 6 FA combustion turbines, 2 Nooter Ericson Heat Recovery Steam Generators and a Praxxair air separation unit. The project is an integral part of the Star Delaware City, Delaware refinery.

1996 - 1998 **Westinghouse – Asir/Jizan Simple Cycle Project.** Responsible for the engineering for the addition of two D5A combustion turbines at the Asir (Saudi Arabia) site and two D5A combustion turbines at the Jizan (Saudi Arabia) site.

1995 - 1996 **Freehold Cogeneration Project – Freehold, NJ.** Responsible for engineering and procurement as part of the EPC contract being performed by the Dick-Gilbert joint venture. The project is a 120 MW gas turbine combined cycle cogeneration facility.

1994 - 1995 **Panda Kathleen Project, Lakeland, Florida –** Responsible for permitting, feasibility study, site development, and engineering for the Walsh Gilbert joint venture. The project is a 120 MW gas turbine combined cycle cogeneration facility.

EDUCATION

M.S., Mechanical Engineering, Stanford University, Stanford, California, 1971

B.S., Mechanical Engineering, Worcester Polytechnic Institute, Worcester, Massachusetts, 1970

REGISTRATIONS/AFFILIATIONS

Professional Engineer – California (1977) and New York (1975)

American Society of Mechanical Engineers (Fellow)

Industry Committees:

Member, ASME Executive Committee for Power Division (1993 – Present, Chairman 1997-1998)

Member, ASME Code Committee 0n Turbine Water Damage Prevention (1998 – Present)

Member, ASME Power Division Committee on Steam Turbines (1979-Present, Chairman 1987-88)

Member, ASME Power Division Committee on Cogeneration and Combined Cycles (1984-Present, Chairman 1991-1992)

Member, ASME Power Division Committee on Government Technical Relations (1983-Present, Chairperson 1984-87)

Member, ASME/IEEE Joint Working Committee on Turbine-Generators (1982-1993)

Chairperson of ASME Combined Cycle Users Group

WorleyParsons
resources & energy

Michael R. DeLallo
EcoNomics Facilitator

Resume

SUMMARY

Over thirty-five years of experience, including thirty years with WorleyParsons, in project management, business development, engineering management, and system analysis for utility and industrial power generation, air quality control, and research and development (R&D) facilities. Progressive technical and project management responsibility in gasification and carbon dioxide reduction power plant design, specification, construction management, operation and maintenance, and environmental compliance. Currently the WorleyParsons' Director of Gasification and Carbon Services, leading the development of market strategies, project execution, and delivery in our strategic markets.

EXPERIENCE

2007 - Present **Vice President and Director, Gasification and Carbon Services – WorleyParsons, Reading, Pennsylvania**

Responsible for identifying, planning, and implementing the business strategy for business initiatives in gasification and carbon reduction services. Assist location Managers/Directors of Projects in the direct management of projects under their profit and loss (P&L) responsibility through establishing market specific project execution practices and guidelines. Support business development, proposal preparation, and the development of markets and clients. Work with the department managers building and directing development of resources in gasification and carbon dioxide capture and transport technologies related to power generation. Member of the National Coal Council and Executive Board Member representative to the Gasification Technologies Council.

2002 - 2006 **Director, Business Development – WorleyParsons, Reading, Pennsylvania**

Responsible for Gasification and Government market sectors in North America. Services provided included engineering, procurement, construction management, and operations and maintenance in the power, industrial, and refinery markets. Lead responsibility for development and implementing market strategy, formation of risk profile and business alliances, identification and selection of prime opportunities, and contract negotiation. Company's Technology Manager for Integrated Gasification Combined Cycle projects.

2000 - 2002 **Project Manager – WorleyParsons, Reading, Pennsylvania**

Reliant Energy (formerly Orion Power), Cheswick (525 MWe) – Selected catalytic reduction (SCR) projects. Managed the preliminary and final engineering and design for erection of retrofit SCR. Responsible to Reliant Energy and coordinating with Babcock & Wilcox for final design documentation of the SCR balance-of-plant including engineering, fabrication, and construction drawings; procurement and construction specifications; and design reports.

1998 - 2000 **Department of Energy (DOE), National Energy Technology Laboratory (NETL)** – Responsible for engineering, design, process analyses, and project control for client programs and projects in advanced power generation and environmental control systems.

Resume

1993 - 1998 **DOE, Morgantown Energy Technology Center (now NETL-Morgantown)** – Responsible for engineering, design, construction management, and project control for client facilities and projects in fossil power generation systems.

1991 - 1993 **Duct Injection Test Facility –EPRI High Sulfur Test Center** – Responsible for the facility engineering, operation and maintenance activities. Directed a staff of 33 engineers, operators, and maintenance technicians responsible for continuous operation of a multi-unit flue gas control facility.

1986 - 1989 **Engineering Manager – WorleyParsons, Reading, Pennsylvania**

DOE, Pittsburgh Energy Technology Center – Directed a staff of 73 engineers, chemists and technicians in design, construction, startup, operation, testing, and maintenance. Areas of activity included new and modified combustion test equipment for research on combustion of coal and related fuels and in advanced air quality control technologies. Responsibilities included review and approval of all task budgets, schedules, preliminary designs, and construction cost estimates. Responsible for task management, and interface between engineering and technical functions through status reviews and design reviews. Designed advanced NOx/SO2 pilot scale test facility including P&ID, piping, vessels, and process control. Directed complete test facility support systems design, operation, and maintenance.

1983 - 1986 **Task Manager – WorleyParsons, Reading, Pennsylvania**

Mechanical engineering and project management for utility power generation involving the utility and industrial application of beneficial coal as a fuel for conventional boiler and gas turbine operation and alternative energy conversion systems.

1980 - 1983 **Energy Systems Engineer – WorleyParsons, Reading, Pennsylvania**

Responsible for advanced power cycle performance analysis of utility systems including pulverized coal steam cycles, gas turbine/steam combined cycles, fuel cells, and fluidized-bed combined cycles.

1978 - 1980 **Applications Engineer – Institute of Energy Conversion, University of Delaware**

Project engineering in utilization of latent heat thermal energy storage in conventional and solar energy systems. Co-principal investigator for a program directed toward utility load management through residential and commercial utilization of solar and energy storage technology.

1975 - 1978 **Mechanical Engineer – Singer Kearfott**

Responsible for heat transfer and structural engineering design of aerospace inertial guidance systems.

EDUCATION

M.B.A., Financial Analysis, Saint Joseph's University, 1984

M.S., Mechanical Engineering, Fairleigh Dickinson University, 1978

B.S., Mechanical Engineering, Clarkson University, 1975

WorleyParsons
resources & energy

John Jaroszeski
Rail/Transportation Expert

Resume

SUMMARY

Mr. Jaroszeski has over 16 years of experience in the rail industry. He has acquired expert knowledge of logistics, complex networks and supply chain management and health and safety within the industry. Mr. Jaroszeski has been responsible for compliance monitoring and implementation on railroad and trucking service design packages, analysis, development and execution of plans to optimize of railcar fleet utilization, productivity, fuel efficiencies and savings, mechanical repair, engineering, purchasing, disaster recovery, technology improvements and implementation of DuPont and United States Federal Railroad Administration health and safety programs and training. He has directed system wide train movements for the network, analyzing and evaluating traffic flows and patterns to apply resources based on supply and demand.

EXPERIENCE

2010 - Present — **Transportation Specialist – WorleyParsons, Houston, TX**

Confidential Client – Project Manager and lead analyst on condition assessment, operations analysis, risk register, and economic evaluation study of a mine, railway, and port operation in South America.

United States Steel Lorain Ohio Tubular Plant – Project Manager - Supplied analysis of current, planned and projected analysis for logistics multiple railway, railway rolling stock, multiple trucking, health and safety, and analysis to support multiple steel mill production operations to optimize resources for a $90 million project.

Confidential Client - Ethiopian Djibouti Railway/Red Sea Railway Project - Responsibilities included assessing infrastructure, rolling stock, workshops, maintenance assessment of current and projected operations planning of railway and ports, conducting stakeholder interviews, current and future organization alignment, forecasting capacity and logistics support to multiple personnel and equipment.

2008 - Present — **Instructor – University of Phoenix, Phoenix, AZ**

Instructor facilitating the following coursework to undergraduate college students: Management, Logistics, and Supply Chain Management

2007 - 2009 — **General Manager of Rail Logistics/Health and Safety – Trans Load America, South Orange, NJ**

Duties included monitoring $50,000,000 fleet of 800 railcars, supply and demand for rail cars at six transfer/recycling stations and five landfill locations, daily interaction with six class one railroads and multiple short line railroads, logistics and supply chain management for aforementioned facilities, accounts receivable and payable, implement, monitor and control OSHA/FRA health and safety program, creating freight and waybills, implemented and measured for compliance railroad and trucking service design packages, optimized the utilization of railcar fleet, freight rates, worked with various federal, state and local government agencies to maintain compliance, drive budgetary num-

bers, implemented SOP, improved and implemented new processes and procedures utilizing Six Sigma skills.

2004 - 2007 **General Manager, Locomotive Operations – CSX Transportation, Jacksonville, FL**

In the role of General Manager, responsibilities included monitoring all aspects of CSX Transportation's $8,000,000,000 fleet of 4,000 locomotives over a 21,000 mile network. Major responsibilities included safely managing and development of a department with 30 employees that worked 24 hours per day 365 days per year. Developed and executed short and long term budgetary commitments and supply and demand locomotive strategies.

1998 - 2004 **Assistant General Manager/Director Locomotive Distribution – CSX Transportation, Jacksonville, FL**

Supervised and lead the daily operation of CSX Transportation's Locomotive Distribution Group for maximum utilization of its locomotive fleet. Ensured efficient use of yard and local locomotives to maximize customer satisfaction and minimize operating expense. Minimize fuel costs by controlling vendor fueling and optimizing vendor fueling.

1995 - 1998 **Manager, Locomotive Distribution – CSX Transportation, Jacksonville, FL**

Responsible for supply and demand and continuous evaluation and the distribution of locomotive power to obtain maximum resource utilization while using the minimum operating expense

1994 **Yardmaster – CSX Transportation, Toledo, OH**

Responsibilities included safely supervising crew, mechanical, engineering, car department, train crews and railcar switching movements within five rail yards and rail yard terminal limits.

EDUCATION

MBA, Business Administration, Jacksonville University, Jacksonville, FL 1997
BA, Criminology, University of South Florida, Tampa, FL 1993

SPECIFIC TECHNICAL EXPERTISE/SPECIALIST COURSES

- Expert Knowledge of Logistics, Complex Networks, and Supply Chain Management
- United States Department of Labor Occupational Safety and Health Administration Certified.
- Strong Communication and Leadership Skills
- Proficient in all Microsoft Office Programs
- Exceptional Analytical and Problem Solving Skills
- Six Sigma Green Belt Trained

WorleyParsons
resources & energy

Martin Donegan
Project Controls

Resume

SUMMARY

Senior Project/Program Manager with over 15 years of experience. Worked on several major projects located throughout the U.S., China, South America, and Europe. Representative projects include circulating fluidized bed boilers (CFB), sub-stations, and various power plant outages and refinery turnarounds. Worked on many of these projects from contact award through unit start-up in the field. Responsible for implementing Primavera Enterprise solutions, including developing the plan, setting up global and project attributes, rolling-out, importing of existing project, training, and executing new projects. Over 10 years of significant large project experience with cost control and containment, contract compliance, and construction completion processes and procedures.

EXPERIENCE

2008 - Present **Senior Project Controls Manager, WorleyParsons, Reading, PA**

Kleen Energy – Richmond County Phase 5 Combined Cycle Projects. Primary responsibilities include managing schedule and cost. This includes progress and reporting of the project schedule, earned value tracking, resource forecasting, schedule variance, and construction schedule integration with the client.

1988 - 2008 **Project Controls Manager/Project Controls Engineer, Foster Wheeler/Ahlstrom Pyropower, Perryville, NJ**

Primary responsibility from the fall of 2000 to fall of 2008 included implementation and management in the Foster Wheeler Power Group Primavera Enterprise Initiative. This included coordinating with network administrators during the server/software installation and configuration, establishing the global EPS and OBS, setting up Earned Value Management Rules within Primavera, managing consulting services during the initiative, importing existing P3.1 projects into P3e/c, introducing and training new users and administrators, and continuing on-going improvements and upgrades. Additionally, responsibilities included cost and schedule tracking of various outages, refinery turnarounds, and cogeneration projects.

2003 - 2004 **Scheduler/Project Controls Manager, Areva T&D, Eddystone, PA**

Responsibilities included cost and schedule tracking of all North American substation projects from the proposal phase through unit commissioning and close-out. This included analyzing periodic progress for home office and site activities to determine risks, cost, and schedule impacts and opportunities.

1982 - 1988 **Engineer Assistant/Release Analyst/Engineer, Cubic Defense Systems, San Diego CA**

As an Engineering Assistant and Release Analyst, responsible for the design group's hourly forecasting, data submittals, configuration control of drawing changes, and various drafting and administrative tasks. These tasks required constant interfacing and coordinating between logistics, manufacturing, material/production control, design, and engineering. As an Aeronautical Engineer, responsibilities included the design, testing, and implementation of the roll and dive modules for

Ground Collision Avoidance System (GCAS). The purpose of GCAS is to signal a warning to the pilot should controlled flight into terrain be imminent.

EDUCATION

B.S., Aerospace Engineering, San Diego State University, 1984

A.S., Flight Operations, Monterey Peninsula College, 1979

SPECIFIC TECHNICAL EXPERTISE/SPECIALIST COURSES

Certificate, Primavera Advanced Training Course 106 - 2007

Project Management Professional, 1993

WorleyParsons
resources & energy

John F. Blekicki
Procurement & Contracts

Resume

SUMMARY

Project Procurement Manager with over 25 years of experience in purchasing, including 12 years with WorleyParsons. Over 15 years of experience in project, program, and purchasing management specializing in contract development and negotiations multi million dollar infrastructure projects. Experience focuses on developing project procurement programs, negotiation of vendor agreements, coordination of all purchasing activities including the developing and implementing of client based strategies. Lead negotiator of company-wide and worldwide purchasing agreements with hands on experience in the design and development of contracts for material and equipment procurement.

EXPERIENCE

1998 - Present **Project Procurement Manager, WorleyParsons, Reading, PA**

2010 - Present **Jo-Carroll Energy – Sand Prairie Station.** BFB Boiler and accessories associated with the construction of the Jo-Carroll Energy Bio-Fuel Project. The station is to be constructed near Thomson in York Township, Carroll County, IL. Responsibilities included the solicitation of proposals, negotiations, and award for major engineered equipment and construction contracts.

2009 - 2010 **PSEG Power LLC – Kearny Plant Site, Kearny, NJ.** Installed four General Electric (GE) LM-6000 PC Sprint aero-derivative gas turbines identified as Kearny Units 13a, 13b, 13c, and 13d and associated auxiliary equipment. Responsibilities included the solicitation of proposals, negotiations, and award for major engineered equipment and construction contracts.

PSEG New Haven LLC – New Haven Plant Site, New Haven, CT. Installed three General Electric (GE) LM-6000 PC Sprint aero-derivative gas turbines identified as New Haven Units 2, 3, and 4 and associated auxiliary equipment. Responsibilities included the solicitation of proposals, negotiations, and award for major engineered equipment and construction contracts.

2008 - 2010 **Mirant Potomac River, LLC Phase 1 Fugitive Dust Controls Project located in Alexandria, VA.** The project included the implementation of emissions controls with respect to fugitive dust and fine particulate matter emissions. Responsibilities include the solicitation of proposals, negotiations, and awards for engineered equipment, electrical and mechanical equipment and all construction related contracts.

2008 - 2010 **RC Cape May Holdings, LLC – B. L. England Unit 2 Emissions Control Project.** The B. L. England Generating Station (BLES) is located on a 442 acre site along the Great Egg Harbor Bay in the town of Beesley's Point, Cape May County, New Jersey. Responsibilities include the solicitation of proposals, negotiations, and awards for major engineered equipment including the selective catalytic reductions (SCR) catalyst, electrical and mechanical balance-of-plant (BOP) equipment and all construction related contracts including site services, foundations, flue gas desulfurizations (FGD) and electro-static precipitator (ESP) modifications, construction, and installation packages.

2006 - 2007 **ArcLight Capital Partners, LLC – Beech Hollow Power Project Waste Coal-fired Generating Station.** WorleyParsons is responsible to perform engineering, detailed design, construction management and support services for the 300 MW CFB project. Responsibilities include the solicitation of proposals, negotiations, and awards for major engineered equipment including the steam turbine generator, electrical and mechanical BOP equipment and all construction related

contracts including site services, concrete chimney, roads, foundations, piping and mechanical equipment construction and installation packages.

2006 - 2008 **SG Construction Management Company, LLC, River Hill Power Project Waste Coal-fired Generating Station.** WorleyParsons is responsible to perform engineering, detailed design and support services for the 300 MW CFB project. Responsibilities include the solicitation of proposals, negotiations, and awards for major engineered equipment including the steam turbine generator, electrical and mechanical BOP equipment and all construction related contracts including site services, dynamic compaction, concrete chimney, roads, foundations, piping and mechanical equipment construction and installation packages.

2003 - 2006 **Progress Energy Carolina – Asheville Units 1 and 2, and Roxboro Units 1, 2, 3, and 4 Coal-fired Generating Stations.** WorleyParsons is responsible to perform engineering, detailed design and support services for the FGD projects. Responsibilities include the solicitation of proposals, negotiations, and awards for major engineered equipment including the transformers, switchgear, SCR catalysts, continuous emissions monitorings (CEM), coal unloading system, limestone and gypsum handling systems, ammonia system, wastewater treatment systems, tanks, dampers, ID fans and motors, expansion joints, and miscellaneous other BOP equipment for the FGD and SCR systems.

2002 - 2003 **Santee Cooper – Cross Generating Station Cross Unit No. 3, Coal-fired Generating Station.** WorleyParsons is responsible for all necessary services for the engineering and design, procurement of equipment, preparation of construction specifications, management of construction, and supervision of the start-up test; and placing into commercial operation of Cross Unit 3, a 600 MW coal-fired plant to be constructed adjacent to Units 1 and 2 in South Carolina. Unit 3 is scheduled for commercial operation in January 2006. Responsibilities included the solicitation of proposals, negotiations, and awards for major engineered equipment including the condenser, circulating water and condensate pumps, limestone handling, conveying and preparation systems, water treatment systems, tanks, and miscellaneous other BOP equipment for the construction of the power plant.

2000 - 2002 **Elk Hills Power Project – Bakersfield, California.** The project is a joint venture with TIC for a two-on-one combined cycle unit. The project owner, Elk Hills Power LLC is a joint venture between Sempra Energy Resources and Occidental Energy Ventures Corporation. Project schedule was completed in 26 months. Responsibilities included the solicitation of proposals, negotiations, and award for all major engineered equipment including the heat recovery steam generators (HRSG), condenser, transformers, cooling tower, pumps, water treatment systems, and all BOP equipment for the construction of the power plant.

1998 - 2001 **Termocentro and LaSierra Power Projects – Colombia, South America**. The projects were joint ventures with GE and Parsons' South American partner Inelectra for the conversion of simple cycle combustion turbines to two-on-one combined cycle units. The projects were for two of Colombia's major utilities. Project schedules were 22 months. Responsibilities included the solicitation of proposal negotiations and award for all major engineered equipment including the steam turbine, HRSGs, condensers, transformers, cooling tower, pumps, water treatment systems, transportation, and BOP equipment and material for the construction of the projects. Both projects were completed on schedule and under budget.

EDUCATION

B.S., Business Administration, Drexel University

WorleyParsons
resources & energy

Stephen M. Cisek, P.E.
Engineering Manager

Resume

SUMMARY

Thirty-seven years of experience in project and engineering management, which includes twenty-five years with WorleyParsons, in the project management, engineering, design, and construction of flue gas desulfurization (FGD) and selected catalytic reduction (SCR) systems, fossil-fueled generating plants, combustion turbine-based and nuclear generating stations, switchyards and power distribution systems, and in utility bulk power system operations. Roles included project and program management, contract control, and construction completion services for major infrastructure projects.

EXPERIENCE

2010 – Present **Manager of Engineering – WorleyParsons, Reading, Pennsylvania**

Manage and lead the multi-discipline engineering and design resources for all power (gas turbine/combined cycle, fossil/hydro services), infrastructure and environment, and minerals and metal customer sector groups and project feasibility/development projects for the Reading, Pennsylvania office currently totaling over 400 engineering and design personnel. Also responsible for the technical integrity and assurance for the U.S. Eastern Operations sub-region of WorleyParsons U.S./Latin America/Caribbean region which includes the Reading, Pennsylvania; Chattanooga, Tennessee; and Chicago, Illinois offices. Responsible for automation technology implementation, quality and technical competency of services, staffing projects, salary administration, recruiting, and professional development.

2007 – 2010 **Project Manager – WorleyParsons, Reading, Pennsylvania**

O&G Industries, Kleen Energy Project – A two-on-one 620 MW combined cycle project based on Siemens 501F combustion turbines and steam turbine with anticipated commercial operation date of June 2010 – Responsible for all engineering, design, and procurement services in the areas of conceptual and detailed engineering and design.

2003 - 2007 **Progress Energy, Carolinas, Asheville Units 1 and 2 Coal-fired Units, Honorable Mention for Project of The Year (2006), each rated 200 MW –** Responsible for all project management, engineering, design, and procurement services, as well as coordinating with technology supplier and constructor, and start-up support for a wet FGD system and a SCR system added to each unit. Unit 1 FGD system went into commercial operation in November 2005, the Unit 2 FGD and SCR systems went into commercial operation in May 2006, and the Unit 1 SCR system went into commercial operation April 2007.

Progress Energy, Carolinas, Robinson Unit 1 Coal-fired Unit, rated 174 MW – Perform a technical evaluation of alternative FGD technologies, prepare conceptual design and cost estimate for FGD installation including supporting an economic analysis. Selection will be based on net present value for each technology.

2001 - 2003 **Combustion Turbine (CT) Production Unit Director/Project Manager – WorleyParsons, Reading, Pennsylvania**

Overall responsibility for all engineering services contracts whose plants use combustion turbines. Responsible for project administration program development, projects' staffing, training and

development, engineering process improvement, promoting consistency in engineering and design deliverables, business development and proposal support, and salary administration for engineering and project managers in the production unit.

2002 - 2003 **Project Manager – WorleyParsons, Reading, Pennsylvania**

SK Engineering & Construction, Kwang-Yang, 1000 MW combined cycle plant consisting of two 500 MW, 2 x 1 blocks – Responsible for all consulting services in the areas of conceptual engineering and design, detailed combustion turbine generator (CTG), and steam turbine generator (STG) foundation design, plant start-up support, and technology transfer.

2003 **Engineering Manager – WorleyParsons, Reading, Pennsylvania**

Tractebel Wise County and Hot Spring Plants, Two-on-one 750 MW each Combined Cycle – Engineer/procure/construct projects based on SWPC 501G combustion turbines with anticipated commercial operation dates in 2004 and 2005.

1996 - 2001 **Chief Engineer – WorleyParsons, Reading, Pennsylvania**

Control Systems and Electrical Engineering Department – Responsible for program development, technical direction, projects' staffing, employee training and development, engineering/design quality, engineering process improvement and development of standard specifications, drawings and design guides, business development support, development and management of operating budget, and salary administration for a department of control systems, electrical, and transmission/switchyard engineering personnel.

The department provides consulting, design engineering, and systems integration services for process control and automation systems and power distribution and other electrical systems. These services are for electric utility and independent power generation plants, cogeneration plants and industrial energy plants including their environmental controls.

Prepare proposals for coal-fired and combined cycle power plants. Assist on-going projects with study and calculation review, approval, and general engineering support.

EDUCATION

B.E.E., Electrical Engineering, Manhattan College, 1973

REGISTRATIONS/AFFILIATIONS

Professional Engineer – Texas (1982), Arkansas (2002), and Pennsylvania (1990)

Member, Institute of Electrical and Electronic Engineers

WorleyParsons
resources & energy

Walter MacFarland
Construction Management

Resume

SUMMARY

Director of Construction with over 20 years of demonstrated growth and success developing and executing corporate initiatives, creating and executing strategic/business development plans, and driving to achieve/exceed growth and profit performance targets, in both the public and private sectors within the construction industry. Experience in all disciplines of construction – civil, structural, mechanical, and electrical. Project work in all areas of construction – fossil, renewable energy, and nuclear; electrical transmission, distribution, and substation construction; paper plants and oil, petroleum, and refinery construction. Extensive knowledge and development experience in vendor and third party service provider contracting development and administration.

EXPERIENCE

2010 - Present **Director of Construction – Eastern Operations, WorleyParsons, Reading, PA**

Manage regional office and field construction activities to provide complete construction programs. Apply an extensive knowledge of various disciplines to be used during construction as well as the methods and techniques to be utilized for installation. Become thoroughly familiar with required contractual obligations and technical aspects of all facilities to be erected.

2008 - 2010 **Group President, Energy, Mastec, Inc., Coral Gables, FL**

Scope of duties centered on leading and directing the successful development and implementation of strategic business plans for the Energy Group, comprised of three operating companies – both a union and non-union company responsible for both overhead and underground infrastructure, including transmission, distribution, and substation work. The third company was a wind energy company responsible for balance-of-plant design/procure/install installations. Focus included growth of all three businesses to gain greater market share; integration of acquisitions into MasTec 3 development, and implementation of processes to support growth and improve profitability.

2007 - 2008 **Independent Consultant, Philadelphia, PA**

Provided consulting services to the industrial services business sector.

2005 - 2006 **Executive Vice President, Electric, Infrasource Services; Media, PA**

Scope of duties centered on directing the successful development and implementation of strategic business plans for the Electric Business Unit, comprised of three operating companies, responsible for above-ground electric infrastructure and oversight of all strategic corporate accounts. Focused on establishment of best practices of three operating companies to maximize EBITA and optimize utilization of limited resources in the market; increase of senior management talent pool in operating units to support growth and profitability; development and refinement of operating processes to increase profitability; and increased effectiveness of integrated resources for strategic accounts.

Responsibilities included:

- Led executive recruitment effort to strengthen and broaden senior management experience within all three operating companies of the Electric Business Unit. Hired seven outside executives and promoted three from within – positions from Unit President to Divisional VPs.

- Directed the organizational realignment of all three operating companies, including creation of a COO position within two units and the development of a double-breasted (union and non-union) operating unit with the third company.
- Initiated the expanded engineering capabilities from regional support of one operating unit to support all corporate operating units.
- Initiated capabilities integration strategy across the Electric Business Unit to develop 'best in class' processes across the operating companies.
- Grew revenue 30% while increasing profitability by 15% over a year and a half.
- Led Strategic Account team in development of improved processes, providing better alignment with client's goals, resulting in improved profitability for corporation.
- Initiated an Electric Business Unit strategy to improve project management/project controls functions, and processes to support key projects within corporation.

2000 - 2004 **Chief Operating Officer, The Hake Group Of Companies, Eddystone, PA**

Scope of duties centered on directing the successful development and implementation of strategic business plans focusing on integration and establishment of full service capabilities for five heavy industrial construction companies.

- Increased annual revenue within four years from $87 million to $450 million while simultaneously improving profit margin by a factor of three.
- Integrated five business unit operations (electrical, mechanical, civil/structural, boiler, heavy rigging) in order to facilitate a new marketing strategy and enlarge customer base. As a result, grew annual revenues 500% over a 4-year time frame.
- Developed and implemented major process improvement initiatives/organizational changes to support growth potential. Subsequently, awarded and implemented larger contracts with new and existing clients.

1999 - 2000 **Independent Consultant; Philadelphia, PA**

Provided business development services for clients in the engineering and IT management industries for WorleyParsons. Projects included:

- Guided technical development while assisting in preparation of proposal for enterprise asset management software analysis for a major company. (DMR Consulting Group, Inc. - A Fujitsu Company; Edison, NJ)
- Collaborated in the formulation of a strategy for presentation to venture capitalists for a third-party partnership for asset acquisition. (Parsons Corporation; Reading, PA)

EDUCATION

M.B.A., Widener University; Chester, Pennsylvania, 1989

B.S., Engineering, Widener University; Chester, Pennsylvania, 1971

REGISTRATIONS/AFFILIATIONS

Professional Engineers License, Pennsylvania – [redacted]

INPO Senior Nuclear Plant Managers Certificate – 1994

Member, American Society of Mechanical Engineers

WorleyParsons
resources & energy

Lora L. Pinkerton, P.E.
Estimating Manager

Resume

SUMMARY

Estimating Department Manager with over 29 years of experience with WorleyParsons in cost estimating and engineering, planning, scheduling, and structural design engineering for fossil, integrated gasification combined cycle (IGCC), nuclear, and industrial facilities. Domestic and international experience in estimating new and retrofit projects on a lump sum turnkey (LSTK); engineer, procure, construct (EPC); and program management or traditional engineer, procure, construction management (EPCM) basis for independent power producers (IPPs), utilities, and government clients. Additional responsibilities include cost consulting, review and analysis of management programs and procedures, and risk analysis modeling.

EXPERIENCE

2004 - Present **Estimating Department Manager, WorleyParsons, Reading, PA**

Responsible for the administration and technical supervision of all estimating services performed in the Reading, Pennsylvania operations center. Specific responsibilities include: Performing estimate reviews, providing technical advice and guidance, developing and scheduling resources, monitoring budget compliance, and interfacing with project teams, clients, and executive management. In addition, continue to act as an Estimating Sponsor on larger or more complicated projects.

Major projects include:

- Stanwell – ZeroGen IGCC, Australia, Phase 1. Initial phase feasibility study
- E.ON – Western Kentucky IGCC, 600 MW. Initial phase feasibility study
- Southern Company – Plant Scherer. Selective Catalytic Reduction (SCR) and Flue Gas Desulfurization (FGD) Projects, 4-unit, 3600 MW
- Xcel Energy – Western Colorado IGCC, 650 MW. Initial phase feasibility study estimate
- FutureGen – IGCC. Multiple design and plant site configurations for FutureGen Alliance3 – Initial phase feasibility study

2000 - 2004 **Chief Estimator and Project Estimating Group Leader, WorleyParsons, Reading, PA**

Responsible for oversight of both the definitive and conceptual project estimating groups, including estimate reviews, supervision of personnel, scheduling of resources, training, and mentoring. In addition, continue to fill the role of Lead Estimator or Estimating Sponsor, and provide on-going project support on a variety of projects.

Major projects included:

- Progress Energy Carolinas – North Carolina Clean Air Program, Roxboro Power Station (four-unit, 2400 MW) and Asheville Power Station (two-unit, 400 MW). FGD and SCR projects
- Santee Cooper – Cross Unit 3. 600 MW pulverized coal power plant (supercritical)
- Dominion Energy – Dominion Person Combined Cycle Facility. 1000 MW combined cycle power plant
- Oxychem/Sempra, – Elk Hills Power Project. 500 MW combined cycle power plant re-estimate
- Mirant – San Severo Power Plant, Italy. 400 MW combined cycle power plant
- Allegheny Energy Supply – St. Joseph's County Generating Facility. 550 MW combined and simple cycle power plant

- Constellation Power – Endless Mountains Energy Facility. 750 MW combined cycle power plant
- Constellation Power – Gateway Power Plant. 800 MW combined cycle power plant
- Dynegy – Renaissance Power Project. 500 MW simple cycle power plant

1998 - 1999 **Project Estimator, WorleyParsons, Reading, PA**

Lead Estimator for a number of lump sum turnkey (LSTK) engineer, procure, construct (EPC) proposals for combined cycle and nuclear decommissioning projects as well as a variety of conceptual estimates and studies. Responsibilities included: Coordination of cost estimates and final price development; overall estimate accuracy; development of indirect costs and cash flows; oversight of discipline estimators; preparation of proposal schedules and expediting of team members for schedule compliance; interface/coordination with engineering, management, partners, owners, and other third parties; participation in technical, commercial and management reviews; and support of bid negotiations.

Major projects included:

- Electricidad de Caracas – El Sitio Power Project, Venezuela. 500 MW combined cycle power plant
- Electricidad de Caracas – Arrecifes Power Project, Venezuela. 525 MW combined cycle power plant
- Pluespetrol Energy S.A., San Miquel de Tucuman Power Station, Argentina, 370 MW combined cycle power plant
- CSW Energy Inc. – Eastex Cogeneration Project. Combined cycle power plant
- Maine Yankee Nuclear Generating Station. Decommissioning
- Consumers Power Company – Big Rock Point. Major component decommissioning

1991 - 1997 **Project Cost Engineer, WorleyParsons, Reading, PA**

International Energy Agency (IEA) – Greenhouse Gas R&D Programme. Responsible for the development of capital and operating cost estimates, economic evaluations and sensitivity analyses for comparative studies of a variety of plant configurations associated with the production of electricity and/or chemical products. Traditional screening methods were utilized to determine a required cost of electricity or cost of product based on plant capital and operating costs combined with plant performance.

EDUCATION

B.S., Civil Engineering, The Pennsylvania State University, 1979

REGISTRATIONS/AFFILIATIONS

Registered Professional Engineer – Pennsylvania, 1986

American Society of Civil Engineers

Reading Branch, ASCE Board of Directors, 1982 - 1983

Stephen J. Ericke, P.E.
Estimating

Resume

SUMMARY

Over twenty years of experience, including nine years with WorleyParsons, in project planning, estimating, engineering, and construction services at fossil, nuclear, industrial, and commercial facilities for developers, utilities, and government clients. Estimating experience includes screening studies, order of magnitude (OOM) estimates, definitive estimates, and lump sum turnkey (LSTK) proposals. Estimates prepared using engineering, procurement, and construction (EPC) approach and engineering, procurement, and construction management (EPCM) approach for gas-fired combined cycle and coal-fired power projects. Experience in the review and analysis of conceptual, detailed, and for construction drawings of major engineering and architectural projects. Ability to work with all levels of management and contractors while developing cost estimates and revised cost estimates during project management.

EXPERIENCE

2000 - Present **Principal Project Estimator – WorleyParsons, Reading, Pennsylvania**

Lead estimator on several solar augmentation power projects, air quality control (AQC) projects for coal-fired plants and LSTK EPC proposals for combined cycle projects, including substation and power delivery estimates. Responsibilities include assuring estimating accuracy; orchestrating estimate development; planning resources; supervising discipline estimators; reviewing technical and commercial proposals; scheduling compliance; and interfacing with engineering, management, construction management, construction partners, owners, and various third parties. Activities include technical review of preliminary design, development of indirect and other costs, development of final price, cash flow development, participation in executive proposal reviews, support of bid negotiations, conversion to control estimate upon project award, and preparation of estimates to support change orders.

Major Projects include the following:

- EPRI, Progress Energy Mayo Electric Generating Station Solar Augmented Steam Cycle Project, 27.7 MW – Development of project screening estimate.
- EPRI, Tri State Generation Escalante Energy Facility Solar Augmented Steam Cycle Project, 35.8 MW – Development of project screening estimate.

1997 - 2000 **Senior Project Controls Engineer – Bechtel**

Prepared capital cost estimates ranging from Order-of-Magnitude (OOM) to LSTK estimates for domestic and international projects. Coordinated with engineering to determine the scope and objectives of the estimate; quantification of equipment and associated bulk commodities; and developed and/or applied the appropriate labor unit rate and equipment costs for the developed quantities. Participated in estimate reviews, presentations to business development, and team reviews with engineering, chief estimator, owner, and turnover to execution team. Project support provided in terms of preparing estimates for scope changes, reviews with the project team on optimization of design changes to minimize EPC costs.

Major projects included:

- PG&E Generating Company, Athens Power Project, 1000 MW, 4 x 2 "G" Technology Combined Cycle Generating Facility, Athens, New York.
- PG&E Generating Company, Millennium Power Project, 360 MW, 1 x 1 "G" Technology Combined Cycle Generating Facility, Charlton, Massachusetts
- InterGen, Millmerran Power Project, 840 MW Coal-fired Generating Facility, Queensland, Australia
- InterGen, Callide Power Project, 840 MW Coal-fired Generating Facility, Queensland, Australia
- InterGen, Sidi Krir, 680 MW Combined Cycle Generating Facility, Alexandria, Egypt
- Calpine, Sutter Energy Center, 500 MW Combined Cycle Generating Facility, Yuba City, California

1990 - 1997 **Electrical Engineer, Fossil and Nuclear Power Plant Projects – Bechtel**

Fossil power plant experience included preparation of specifications, calculations, technical evaluations, and coordination with suppliers for the motor control centers, UPS system equipment, panelboards, local control stations, and master/slave clock system. Prepared the 6.3 kV/400 V transformer sizing calculation and associated design documents for the above equipment, including one-line diagrams, block diagrams, schematics, and sketches using Microstation. Interfaced with procurement and project controls for change orders and equipment pricing.

Major projects included:

- Saudi Consolidated Electricity Companies (SCECO), Ghazlan Power Plant, 2400 MW Combined Cycle Generating Facility, Ghazlan, Saudi Arabia
- Public Establishment for Power Generation and Transportation (PEEGT), Aleppo Power Project, 1000 MW Combined Cycle Generating Facility, Aleppo, Syria
- Southern Nuclear Operating Company, Joseph M. Farley Nuclear Plant, 1800 MW PWR Nuclear Generating Facility, Dothan, Alabama
- Southern Nuclear Operating Company, Edwin I. Hatch Nuclear Plant, 1800 MW BWR Nuclear Generating Facility, Baxley Georgia

EDUCATION

M.S., Engineering Management, The University of Maryland, 1999

B.S., Electrical Engineering, The Pennsylvania State University, 1987

REGISTRATIONS/AFFILIATIONS

Registered Professional Engineer

Maryland, License Number [redacted] (2002)

Pennsylvania, License Number [redacted] (2000)

Virginia, License Number [redacted] (1993)

Member, Penn State Engineering Society

Section D
Relevant Experience of Firm

Section D Relevant Experience of Firm

Client	Location	Project Description	Project Start Date	Project End Date	Total Project Cost Contract Cost	Owner's Contact Information
Progress Energy Carolinas	North Carolina	WorleyParsons is the A/E (providing program/project management, procurement, and engineering/design) for Progress Energy's flue gas desulfurization (FGD) program in North Carolina. The project will extend through 2012, with an estimated 1 million man-hours to install FGD systems on 11 of the company's coal-fired plants. The work will proceed in an alliance comprised of WorleyParsons, Progress Energy, the OEM, and the constructor.	2002	2012	$800 million $80 million	Tom Cornell General Manager Project Development Tel: [redacted]
Sinclair Oil Company	Tulsa, Oklahoma	PMC, offsites, and utilities front-end engineering design (FEED), and overall construction management for the Heavy Crude Processing and Expansion (HCPE) Project, including the following grassroots units: 40,000 BPD hydrocracker; 115,000 BPD crude unit and naphtha splitter; 82 MMSCFD hydrogen plant; 30,000 BPD delayed coker; and three150 TPD sulfur units.	2007	2010	$1.260 billion $20 million (FEED portion only)	Jim Branch Project Director Sinclair Oil Corp Tel: [redacted] Mailing Address: P.O. Box 30825 Salt Lake City, Utah 84130-0825
Cross Generating Station – Units 3 and 4	Cross, South Carolina	Provided project management, engineering, procurement, construction management, start-up and testing services for Cross Generating Station Units 3 and 4.	2001	2009	$1.4 billion $81.7 million	Santee Cooper will only grant reference contact on a case by case request basis. Blanket reference approval is not granted by Santee Cooper.
Petrobras	Brazil	Integration and PMC services, front-end engineering design for utilities and offsites, and other technical services for the Rio de Janeiro Petrochemical Industrial Project (COMPERJ) to increase Brazil's heavy oil refining capacity and produce first- and second-generation petrochemical products for the internal and external markets.	2007	2013	$8.4 billion $110 million	Fernando A. S. Oliveira PMP - Sector Manager PetrÃ³leo Brasileiro S.A. Av. Almirante Barroso, 81 - 13th Floor – Centro 20031-004 Rio de Janeiro, RJ, Brazil Telephone: [redacted] Fax: 55-21-3229-3250 [redacted]
Saudi Aramco	Ras Tanura, Saudi Arabia	PMC, front-end engineering design (FEED) development, contract bid package development, detail design support, detail design package preparation, and construction management services for the Saudi Aramco East Coast Refinery Project.	2007	2012	$8 billion $75 million	Amer Shihabuddin Aramco Services Company/Saudi Aramco 181 West Huntington Drive Suite 200 Monrovia, CA 91016 Tel: [redacted]

						Fax: (713) 432-5711 [redacted]
Orifuels Sinoven SA	Venezuela	Front-end engineering design (FEED) and Project Management Consultancy for orimulsion complex. Facilities at Jose and Morichal include120,000 BPD extra heavy crude oil production facilities, crude desalting, diluent blending, pipeline, utilities, infrastructure, and 220,000 BPD orimulsion production facility.	2003	2006	$880 million $7 million	Lou Gongxun President CNPC Latin America Torre BVC Piso 8 Av. Intercomunal Sector Lasgarzas Barcelona Edo Anzoategui Venezuela Tel: [redacted]
Chevron Phillips	Al-Jubail, Saudi Arabia	Front-end engineering design (FEED), Program Management, and Construction Management for petrochemical complex, based on natural gasoline as feedstock, to produce styrene, propylene, and ethylbenzene as final products, along with by-product suitable for sale as motor gasoline blend stock.	2002	2007	$1.4 billion $85 million	Nigel Carling Principal Project Manager Chevron Phillips Tel: [redacted]
Kuwait Oil Company (KOC)	Kuwait	Five-year PMC consulting contract for optimizing capacity and enhancing facilities to reach goal of 4 million BPD production by 2020. Services include project management, coordination, planning, design, engineering, construction management, contracting, procurement, project controls, training, and other services for the construction of new facilities, upgrading of existing facilities, and transfer of technology.		2012	$305.6 million	
OPR	Geraldton, Western Australia	WorleyParsons is acting as the Program Management Team to conduct the final budget and engineering study for OPR's Bankable Feasibility Study (BFS) including management of design and engineering and capital and operating estimating for the deepwater port and associated heavy haulage rail network. The management of the site investigation activities together with the FEED activities for various aspects of the project works also forms part of the management team's scope.	2009	On-going	$200 million $26 million	Geoff Cowie Project Director Level 3 33 Richardson Street West Perth, Western Australia, 6005 PO Box 9031 Nicholson Rd Subiaco, Western Australia 6008 Mobile [redacted] Tel: [redacted] Fax: +61 8 9486 0799

Section E
Detailed Description of Proposed Management Approach

Section E WorleyParsons Proposed Management Approach

1. Proposed Organizational Structure

As one of the world's largest project management firms, WorleyParsons understands the importance of establishing a strong dedicated team whose sole objective is to deliver to the client professional quality services on time and within budget. To meet the objectives of this Port Authority of New York & New Jersey (PANYNJ) project we have put together an organizational structure that includes all the elements necessary to successfully deliver on the requirements for the project.

Project success starts at the top. For this project we have developed an organizational structure that provides the Port Authority with direct access to a seasoned Project/Process management engineering professional, John D. Pauling, P.E.

Mr. Pauling, through his experiences working within the region and through his work on many on-call contracts for the PANYNJ since 1986, is uniquely qualified to be the main point of contact for the PANYNJ. It is envisioned that Mr. Pauling would be the first point of contract for the PANYNJ on any task order associated with this RFP. Working together with the PANYNJ from the staff proposed for this work Mr. Pauling will identify the most qualified program management professional (PMP) specifically qualified to direct and lead the staff in the completion of the project. The PMP professional will be appointed based upon the type, location, and scope of the task order to be carried out.

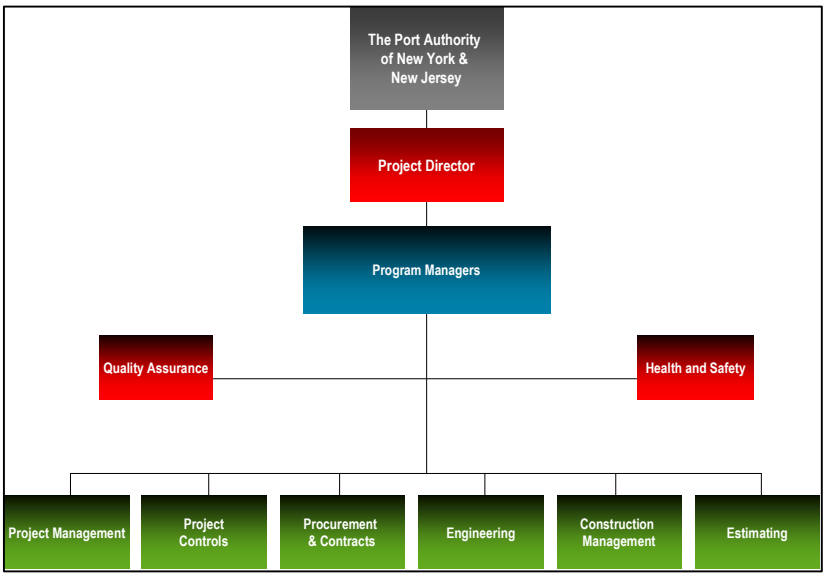


Figure 1.0
Project Team Organization

Once the PMP professional has been appointed the PANYNJ will have full access to that person as the main contact for the performance of the day-to-day operations and coordination of activities. It is further envisioned that our team will become an integrated part of the PANYNJ team providing seamless support with all aspects of the task order. The Program Manager will collaborate with the Engineering, Estimating, Procurement and Contracts, Project Controls, and Project Management leads to arrange for the required support. Other specialists, described below, will be defined within the categories outlined in figure 1.0 above, the organizational chart, and will be provided on a full or part time basis to the project as necessary. Some specialists may be full time at the beginning of the project to set

up procedures and establish a working relationship with the architectural and engineering company. The PMP professional will have access to the WorleyParsons team resources and through regular communications, web based and in person, will ensure that the PANYNJ needs are not only met, but exceeded.

WorleyParsons project team understands that the Architectural and Engineering Company will perform the EPC work, and that our goal will be to ensure that they are meeting contractual requirements and the needs of the Port Authority. The objective of the leadership team will be to ensure compliance with all technical requirements by the Port Authority, while keeping the team lean.

1.1 Role of Project Director

The Project Director will lead the overall effort and will concentrate on the following:
Manage the overall contract performance of WorleyParsons and will be the primary contact on all issues related to the performance and delivery of the on-call projects. The role and responsibilities of the Executive Sponsor will include, but not be limited to, the following items:

- Coordinate project team alignment and team building meetings
- Provide support to senior management of the Port Authority on any new business issues
- Make presentations to the Port Authority Management on project progress and concerns

1.2 Role of Program Manager(s)

The Program Manager will lead the overall technical team and will concentrate on the following areas:

- Prepare the roles and responsibilities of all the engineering specialists assigned to the project
- Monitor and review for the completion of technical deliverables by the Architectural and Engineering Company
- Supervision of engineering specialists and providing the day-to-day guidance to provide technical oversight with the Architectural and Engineering company and construction contractors. Engineering discipline specialists will include the following disciplines: Civil, Structural, Architectural, HVAC, Mechanical, Electrical, Instrumentation and Control Systems, Process, Process, Safety and Fire Protection, Environmental, Materials, Corrosion, Piping and Layout, and Engineering Systems.
- Monitor preparation of RFPs for the technical content and technical evaluation of bids and follow up of issues with the bidders
- Prepare an engineering execution plan for the engineering specialist and monitor adherence to the plan
- Evaluate the need for third party specialists and make recommendations to the Port Authority for approval. Manage the work of third party specialists.
- Perform QC surveillance of technical documents produced by the Architectural and Engineering Company and construction contractors
- Manage the project schedule for all technical activities with the Architectural and Engineering Company, construction contractors, and third party consultants
- Conduct weekly meetings with the Architectural and Engineering Company and record all minutes and issue for review and action
- Maintain an action item list and needs list and update weekly

- Make presentations to the Port Authority management on project progress
- Ensure that the design of the Infrastructure facilities is safe, operable, and reliable, which meets the Port Authority objectives

1.3 Quality (QA)

A WorleyParsons QA engineer will work with the Architectural and Engineering Company and the Port Authority to ensure that a project oversight plan is developed for the work. This plan will establish key requirements for review of critical project documents using an agreed document distribution matrix (DDM) and the timing of subsequent follow-up audits.

The QA position will be a part-time position.

1.4 Health Safety & Environment (HSE)

The project team will ensure that HSE practices and principles are brought into all phases of the project, starting with the Architectural and Engineering Company. Any work performed in the field with WorleyParsons' supervision will ensure that job safety assessments are performed prior to commencing work and that all contractors performing this work understand work scope and hazards. HSE will coordinate with the Architectural and Engineering Company and construction contractors to ensure that all required national codes and regulatory requirements are followed.

1.5 Roles & Responsibilities of the Project Support Team by Discipline

1.5.1 Scheduling

WorleyParsons will provide a Project Planner to prepare an overall project implementation schedule to include permitting, other regulatory studies, etc.

The schedule will be prepared in Primavera P6 with critical path fully identified.

WorleyParsons will monitor and report progress to the Port Authority and give early warning of any activities that are potentially impacting the overall end date of the project desired by the Port Authority.

WorleyParsons will also manage several workshops with all stakeholders to review the EPC project schedule.

The scheduling position will be a full-time position.

1.5.2 Cost Control

We will track expenditures by all parties for the project: Architectural and Engineering Company, construction contractors, WorleyParsons, and third party specialists and prepare a consolidated monthly report for the Port Authority. Cost Control will be a full-time position on the project.

Section E WorleyParsons Proposed Management Approach

1.5.3 Procurement and Contracts

The Procurement & Contracts Manager will provide procurement and contract support. The initial activities will be to prepare the Request for Proposal (RFP) for the selection of Architectural and Engineering Company for the EPC contracts, organizing and managing the bidding process, and communicating with bidders. This position ensures that the contract and bid packages comply with the client's requirements and expectations, properly document contractor responsibilities, comply with the applicable laws, and protect the contractual interests of the client. The Procurement & Contracts Manager will also monitor procurement activities during the execution phase of the project Typical Bidding Process.

WorleyParsons has had extensive experience in the process required for successfully bidding, awarding, and executing large EPC scope packages. We have helped other Owners award numerous contracts for projects ranging in value from $15 million up to $5 billion dollars. We have listed below the typical steps that we follow in this process, they are:

- Pre-market survey and EPC Contractor interviews
- EPC Contractors Expressions of Interest
- Issue Request for Proposal (RFP)
- Prequalification Discussions
- Site Visit
- Individual Pre-Bid Meetings Held with Each Bidder
- Execution and Technical Proposals Received
- Commercial Proposals Received
- Proposal Clarification Period
- Updated Scope and Bill of Quantities Released
- Updated Commercial Proposals Due
- Validate Cost (Selected Bidder)
- Award EPC Contracts
- Notice to Proceed

1.5.4 Engineering Discipline Specialists

The project team will have the following Engineering Specialists (Lead Discipline Engineers) and may be deployed full time or part time depending on the project phase.

- Civil/Structural/Architectural
- Heating, Ventilation, and Air Conditioning (HVAC)
- Mechanical
- Electrical
- Instrumentation and Control Systems
- Process
- Safety and Fire Protection
- Environmental
- Geotechnical

Section E WorleyParsons Proposed Management Approach

- Materials
- Corrosion
- Piping & Layout
- Engineering Systems

Every effort needs to be made during the engineering evaluation phase of the project to ensure that a well-defined, high quality, detailed engineering package issued for construction deliverables is produced. This package will look to incorporate value engineering, where possible, providing savings during the construction phase.

The Engineering Team should be in full alignment with the Architectural and Engineering Company's engineering team from Day One to produce the most productive environment for design optimization and for cost and schedule reduction.

Following are the highlights of the key activities of the engineering discipline specialists during the definition, detailed engineering, and construction phase of the project for which WorleyParsons will provide oversight, guidance, review, checking, and validation of engineering deliverables to achieve a quality design and cost estimate.

- Support the preparation of the technical scope of work and list of engineering deliverables required for the definition phase of the project and detailed engineering phase of the project. The list of deliverables need to be developed so that the list is included in the Request for Proposal (RFP)
- Support the preparation of the technical portion of the Request for Proposal for the Architectural and Engineering Companies and construction contractors
- Support the bid review and evaluation process and make recommendations for the technical portion of the work for the Architectural and Engineering Company and the construction contractors
- After project award, attend the project initiation kick off meeting with the Architectural and Engineering Company and Construction contractors
- Review the Architectural and Engineering Company's engineering execution plan and provide input
- Review the 90 day look-ahead resource-loaded schedule and deliverables to be produced during this period
- Review the list of engineering deliverables for the package and make recommendations for any new additions
- Preparation of the BEDD (Basic Engineering Design Data) document to be provided to the Architectural and Engineering Company
- Review of Architectural and Engineering Company's project specifications for customization to include functional requirements such as performance parameters, operating and design philosophy, and criteria for the overall facility.
- Review equipment data sheets
- Review all engineering design drawings
- Participate in 3D model reviews
- Review the Architectural and Engineering Company's recommendations on items that require engineering resolution
- Attend weekly progress meetings during engineering phase and construction phase
- Prepare a technical review matrix of all the deliverables that require approval by the project team

Section E WorleyParsons Proposed Management Approach

- Scrutinize equipment design philosophies, sizing guidelines, recommended practices and working procedures, and provide comments as necessary
- Evaluate engineering change notices and make recommendations
- Review commonality of equipment to reduce spare parts
- Check the level of detail of design deliverables
- Verify the design margin to limit the allowed design margin deviation
- Coordinate visits to fabrication shops
- Ensure consistent project philosophies are used
- Evaluate engineering schedule and the timelines for completion of deliverables
- Provide support for the development of the cost estimate to the estimating group and estimate validation effort
- Maintain and manage the completion of action items and needs list
- In the areas of advanced process controls, ensure that the best technology is selected
- Review the monthly progress report
- Monitor construction progress and review actual and forecasted progress with respect to schedule
- Evaluate request for change orders and make recommendations for approval
- Review the estimating plan and provide input
- Review and validate bulk material take-offs
- Review plot plan and provide on-going input to finalize with coordinates
- Participate in final cost estimate reviews
- Validate the final cost estimate report

1.5.5 Construction Management

The Construction Management team will provide leadership and management in the following areas:

- Provide support to review the construction contracts developed by the Architectural and Engineering Company
- Provide support to evaluate the construction bids and recommend for award
- Provide oversight at the construction site to ensure that all construction work is completed within schedule and budget
- Provide input to weekly and monthly progress reports
- Provide direction to the field construction supervisors and inspection personnel on various activities during the construction phase

1.5.6 Estimating

As an experienced contractor managing and designing facilities, WorleyParsons will provide an independent view of the Architectural and Engineering Company's EPC cost estimate and we will provide key analysis of hidden profit, contingencies, and risk monies in the estimate.

WorleyParsons will assign a full time Cost Estimator to the project to establish the key documents and philosophies. They will work with the Architectural and Engineering Company for the following activities:

- Establish an agreed work breakdown structure for the EPC cost estimate
- Assist in developing the cost methodology for labor, materials, and construction subcontracts
- Manage several workshops with all stakeholders to review the EPC cost estimate.

Independently, WorleyParsons will establish benchmarks for critical activities by unit rate, or more specific detail required by the Port Authority, to provide confidence to the Port Authority for the final cost estimate. These benchmarks will come from other worldwide facilities executed by WorleyParsons.
The Cost Estimator position will be a part-time position, as required.

2. Proposed Project Approach

The project management approach described herein is for a typical Project Management Consultancy (PMC) Role to act as the Owner's Engineer for The Port Authority of NY & NJ. This role will need to be further defined and developed in more detail; customized to meet the execution and contracting strategy for the specific type and size of project.

After project award, staffing plans will be developed to meet the work scope and the overall project schedule: The initial staffing plans will represent the best estimate of WorleyParsons for the resources required to execute the understood scope and will be progressively modified as more information becomes available. A formal process for allocation of personnel to the project will be used and the staffing will be presented to the Authority for review and approval. The aim of the process is to ensure appropriately skilled and qualified people are assigned to the project.
The Project Management team supplied by WorleyParsons will support and integrate with The Port Authority of NY & NJ for the awarded project to lead the effort(s) for the following key activities:

- Develop and implement a project execution plan for the project consistent with the Agency's guidelines
- Pre-qualify professional architectural and engineering companies and construction companies to bid on projects
- Develop the scope of work for the project and the contracting strategies to execute the work. The contracting strategies will consider what type of contract will be used e.g. cost reimbursable time and material, cost reimbursable with fixed fee, fixed price, negotiated (sole source), existing alliance, existing evergreen contract, fee at risk
- Develop a risk management plan and risk mitigation strategies
- Prepare the Request for Proposals (RFPs) for Professional Architectural and Engineering companies to bid on engineering work. Prepare RFPs for construction companies to bid on construction work
- Evaluate the bids and make technical and commercial recommendations for award of work
- Prepare contractual documents for the award of the project to the Architectural and Engineering companies and construction contractors
- Lead the effort to negotiate engineering, procurement, and construction (EPC) contracts
- Ensure sufficient technical oversight and guidance is provided to the Architectural and Engineering Company and construction companies
- Manage the project completion within budget and schedule
- Ensure the design is safe, operable, and meets reliability and availability goals
- Ensure vendor lists achieve the desired reliability and cost effectives objectives desired by the Port Authority

Section E WorleyParsons Proposed Management Approach

- Provide overall schedule integration plus other project activities undertaken by The Port Authority
- Ensure that the project execution plan proposed by the Architectural and Engineering company is achievable within economical guidelines and contains adequate risk mitigation measures
- Provide interface management with all entities
- Work with the Port Authority to prepare an overall Basic Engineering Design Data (BEDD) incorporating all information available for the project.
- Prepare an overall project schedule that incorporates all activities incorporating the project management approach
- Provide support services for updating the project management manual of standards and procedures and development of new procedures
- Provide support to maintain a document control system
- Provide support for other Port Authority activities outside the project area such as electrical ROW, other permits, etc.
- Provide local regulatory, environmental support.

The project management process, provided under this On-Call, will follow the WorleyParsons Project Management Process (WPMP), which has been developed to ensure quality, efficiency, and consistency in the WorleyParsons approach to project delivery. WPMP provides a common framework for project execution, which is intended to be applied to all business sector project activities throughout the WorleyParsons Group.

The WPMP is a risk-based process for developing (and supporting) a Project Execution Plan that is suited to the needs of the project. They key determinants are:

- Project Risk Classification
- Phase of Project

The majority of what the WPMP delivers is useful guidance on project delivery best practice. Application of this guidance will be at the discretion of each project/program manager. It is not intended that the content be rigidly followed in a 'cook book' approach. It will continue to be expected that project personnel will apply best judgment regarding the extent of application of project management systems, depending on specific project circumstances, and the value add to be gained.

Mandatory elements have been kept to a minimum and are clearly designated as such. The process has been designed to be scalable as a function of project size and risk. The larger, more complex projects would be expected to employ more of the WPMP elements than the smaller, more routine projects.

In other words, all projects are expected to be performed in accordance with the WPMP, but much of the WPMP is intended to provide guidance and serve as an aid. The requirements that are mandatory and auditable have been kept to a minimum.

Each project is required to have a Project Execution Plan (PEP) and the requirements specific to the project will be captured in the PEP, including all mandatory WPMP requirements. It is the PEP that is then auditable.

Section E WorleyParsons Proposed Management Approach

The WPMP is based on a phased / gated project life cycle, consistent with the staged project delivery processes used by most major operating companies. At this stage, WorleyParsons is primarily involved in the Evaluate, Define, and Execute Phases. The Identify and Operate Phases are typically managed by the Owners. However, there is an increasing potential for greater involvement in these two phases, especially in environments where we have long term relationships with the Owners (e.g. alliances).

WPMP Phased Project Approach

Projects are divided into five phases, with each phase corresponding to a key decision point. The five phases are:

- Identify
- Evaluate
- Define
- Execute
- Operate

The phased approach is based on:

- A Gate at the end of each Phase, where a decision is reached on whether to proceed to the next Phase or not
- The decisions, the rationale behind them, and any uncertainties all being captured in the Decision Support Package (DSP) presented to the Client's Gatekeeper / Approval Body
- The activities planned within each Phase being those necessary to develop the information for the DSP
- The use of nine focus elements, consistent across each phase, to categorize the activities necessary to develop the DSP

The phased project approach is underpinned by the requirement to optimize the level of Front End Loading (FEL), and thereby maximize project value.

A more detailed indication of typical activities performed in each Phase is provided in Fig. 1.1 below.

Section E — WorleyParsons Proposed Management Approach

	Phases			
1	2	3	4	5
IDENTIFY ➔	EVALUATE ➔	DEFINE ➔	EXECUTE ➔	OPERATE
Project Feasibility Business Strategy	Evaluate Development Options Execution Strategy	Finalize Scope Sanction Project	Produce Asset	Operate Asset
Identify resource Field/Resource Exploration Asset performance assessments Identify concepts/development options Preliminary analysis Preliminary budgets – Produce Class 1 Cost Estimate (+/- 50% accuracy) Preliminary planning Market Studies Build initial business case Test for Strategic fit	Field Resource Appraisal Confirm Concept Options Conceptual engineering Concept evaluation & selection Technology selection Concept Cost estimating – Produce Class 2 Cost Estimates (+/- 30% Accuracy) Prelim. Development strategies and plans Address environmental/ regulatory requirements Refine Business Case	Front-End Engineering Design (FEED) Key/long lead procurement Tender preparation for major contracts Bid evaluation Develop Key Execution Plans Asset development plan Field development plans Sanction Cost Estimate. Produce Class 3 Cost Estimate (+/- 10% to 15% accuracy) Finalise Business case	Detailed engineering Control Estimate (optional) on Completion Detailed Engineering. Produce Class 4 Cost Estimate (+/- 5% to 10% accuracy) Procurement Construction Commissioning Performance Testing/ Acceptance	Evaluate Asset's Performance against Specification and Business Case Operations & maintenance Asset management Shutdowns/Turnarounds Regulatory Compliance Farm-in opportunities Infills & tiebacks Optimize asset plan Decommissioning Rehabilitation

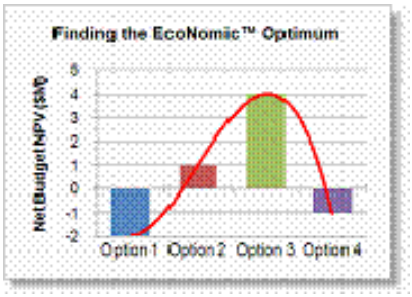
Figure 1.1
Typical Activities in Phases

Section E **WorleyParsons Proposed Management Approach**

3. Value Added Services

WorleyParsons can assist the The Port Authority of NY & NJ through this Program/Project Management contract with alternative/options evaluation on projects by using our EcoNomics process and the Delta financial modeling tool.

The EcoNomics™ Assessment (ENA) methodology and Delta financial modeling, developed by WorleyParsons, have the ability to help port clients better manage environmental and social risk. Fundamentally, the methodology quantifies sustainability through a process of monetization and thereby realizes triple bottom line accounting. This allows for the objective incorporation of sustainability into the decision making process and greatly assists stake-holder communication on high profile issues. This tool has been used around the globe to identify the "optimum" alternative for capital projects where risks to and from the environment and society are recognized. Recently, WorleyParsons was awarded a contract with the Port Metro Vancouver to use the process on various aspects of a 10-year terminal construction project. Specifically, Port Metro Vancouver will be using EcoNomics™ to better integrate the engineering work with sustainability challenges and to assess options for pre-build habitat compensation banks to offset the future environmental impacts associated with the project.



The advantage of this methodology over other cost benefit approaches are that sustainability is built into the process in an objective and non subjective way and that the results of the analysis can therefore have greater stakeholder (community and regulatory) acceptance.

4. Communication Approach to Ensure Quality

As one of the world's leading program management firms, WorleyParsons understands the importance of managing all the component parts of a complex program equally. We pay close attention to the small tasks that, if overlooked, can create a chain reaction affecting major schedule milestones or costs. This is a cornerstone of our approach to project management.

WorleyParsons is committed to responsive service and on-time, on-budget project delivery. To achieve this, our project team will apply the following directives to everything we do over the course of this contract:

- Clear and frequent communication with the Port Authority
- Prompt response to requests from Port Authority Project Managers
- Attention to the long-term goals and objectives of the Port Authority

The procedures above have been developed over many decades and thousands of WorleyParsons projects. They are adaptable to projects and tasks of all scopes and sizes. They ensure that goals are achieved, budgets and schedules are met, progress is reported, and deliverables meet the needs of the client. To keep the Port Authority

up-to-date, the Program Manager will meet regularly with the project team to discuss progress, risks, technical issues, contractor performance, schedule, and budget. Generally these project team meetings occur at least monthly either in person or via conference call.

Quality Assurance of Work Products

Overall guidance for the quality of the work is derived from the requirements of the WorleyParsons Enterprise Management System. This Management System includes a formal documented Quality Manual, the development of Project Specific Execution Plans, the effective implementation of Project Management, and the application of appropriate procedures for each project. The Quality Manual, based on ISO 9001-2008 requirements, describes the activities that assure quality and establishes a system for verification and assessment of activities associated with project execution. The requirements of the Quality Manual are implemented by established and controlled WorleyParsons Enterprise Management System that includes policies, procedures, and instructions that govern all project activities. These activities include, but are not limited to: Project Management, Engineering, Materials Management, Quality Assurance, Construction Management, and Project Completions activities. This program is applicable to all work performed by WorleyParsons.

Project Execution Plan (PEP)

Each Project executed by WorleyParsons has a Project Execution Plan that combines client, contractual, and WorleyParsons Program requirements into a document to describe and control the work. The Project Execution Plan (PEP) prescribes the Division of Responsibility, the Project Organization, the project deliverables, identifies project risks and the risk mitigation plans, and details the procedures both WorleyParsons and the client that will be applied to the performance of work on the Project.

The PEP sets forth project requirements in distinct phases and is implemented as required by the contracted service:

- Design phase – assures that adequate controls in engineering and design and development of contracts for the project to ensure that they reflect the client's and WorleyParsons standards.
- Procurement phase – assures that material and equipment purchased and fabricated be performed as specified.
- Construction phase – includes monitoring the work so that the facilities are constructed in accordance with the contracts.
- Completions phase – verifying that the facilities are commissioned and started in accordance with the contracts and will perform as anticipated.
-

The PEP also includes the methods to monitor, verify, and document the achievement of the above noted project requirements.

Quality Organization

A Project Quality Manager (PQM) will be assigned to the project and will be responsible for monitoring the effective implementation of the PEP requirements. The PQM is independent of any line responsibilities for the project and

reports to a sufficient level of management that quality problems can be reported to the appropriate level of management.
The PQM is responsible for verifying that the PEP requirements are effectively implemented by WorleyParsons personnel, vendors, contractors, and subcontractors. This includes the monitoring and review of project related quality activities and conducting quality audits. The PQM is supported by WorleyParsons Domestic and International Source Inspection Group, who provide global procurement inspection services to the project.

A Site Quality Control Manager will be assigned prior to the commencement of construction activities. The Site Quality Control Manager reports to the Construction Manager on a day-by-day basis and to the PQM on quality matters.

Quality Oversight Responsibilities

The WorleyParsons project assigned quality personnel activities include as a minimum:

- Quality monitoring and oversight of major functions (engineering, procurement, construction, and start-up)
- Maintaining the project corrective action program
- Monitoring the lessons learned program
- Providing and coordinating shop surveillance services to monitor contractor and vendor fabrication and procurement output documents.
- Scheduling and performing quality audits for the project at appropriate project milestones. These audits will be performed by qualified personnel and the results provided to project management
- Assisting in vendor surveys/qualifications reviews
- Reviewing and approving contractor quality manuals and quality plans
- Reviewing contractor inspection and test plans (ITPs) and identifying appropriate inspection points
- Monitoring the implementation and effectiveness of the contractor quality plans for maintaining a level of quality consistent with the project-specified standards
- Assisting project personnel/contractors/subcontractors by recommending and interpreting quality standards and specifications
- Assisting project personnel/contractors/subcontractors in the interpretation of contract documents for quality requirements
- Monitoring contractor/subcontractor quality performance
- Monitoring the contractor/subcontractor non-conformance process
- Monitoring the process for receiving, inspecting, storing, warehousing, and maintaining incoming materials and equipment
- Providing quality support of start-up, testing, and turnover

Section F
Names, Titles, and Hourly Rates for Engineering and Technical Personnel

Section F — Names, Titles, and Hourly Rates for Personnel

WorleyParsons Names, Titles, and Hourly Rates for Personnel is shown below.

Name	Position	Billing Rate
John Pauling	Project Director / Executive Sponsor	$220.50
Steve Cisek	Engineering Manager	$200.00
Rick Gorski	Quality Assurance	$220.50
Name	**Position**	**Hourly Rate**
James Kukucka	Program Manager	$80.00
Ted Daly	Program Manager	$80.00
John Mott	Program Manager	$71.27
Marty Donegan	Project Controls	$66.78
John Belkicki	Procurement & Contracts	$53.12
Walt MacFarland	Construction Management	$103.85
Lora Pinkerton	Estimating Lead/Manager	$78.09
Steve Ericke	Estimating	$58.96
Andy Donaldson	Project Management	$91.29
Greg Nadeau	Project Manager	$81.33
Jim Linenberger	Health & Safety	$76.37
Stan Krumsky	Risk Management	$80.82
Lowell Leaman	Civil	$41.34
Richard Wells, P.E.	Structural Engineer	$53.98
Mike Borden	Mechanical Engineer	$64.30
Wayne Bloch	Electrical Engineer	$60.00
Ayode Adeyefa	Geotechnical	$46.72
Jay White	Process Engineer	$66.78
Patrick Adams	Safety & Fire Protection	$57.13
Graig Cilluffo, E.I.T.	Corrosion Engineer	$48.10
Michael DeLallo	EcoNomics Manager	$120.70

Other Direct Costs (ODCs)

An allowance equal to $6.50 per home office man-hour, invoiced to cover general reproduction services including photocopying, bindery, reprographics, photography, and technical publications; word processing; communications services such as long distance telephone calls and fax (excluding international calls); computer services, such as 2D and 3D CAD; and domestic postage (excluding courier and special delivery services).

Section G
Minority/Women-owned Business Enterprise

Section G Minority/Women-Owned Enterprise Requirements

Minority/Women Owned Enterprise Firm Compliance

Consistent with the PANYNJ "Draft" Agreement, Paragraph 20, sub-section D, WorleyParsons acknowledges and understands the PANYNJ requirements to contract with Minority/Women-Owned Enterprise firms. To meet these requirements across a large array of business, WorleyParsons maintains working relationships with subcontractors, many of which are Disadvantaged Business Enterprises (DBE). These DBEs include Disabled Veteran Business Enterprises (DVBE), Minority Business Enterprises (MBE), Small Business Enterprises (SBE), and Woman-Owned Business Enterprises (WBE). WorleyParsons has methods for choosing the most qualified subcontractors in order to offer The Port Authority of New York & New Jersey the most comprehensive, technically proficient, and best-suited team. Additionally, WorleyParsons frequently uses firms local to the client because of their area knowledge.

Areas that might be advantageous to be subcontracted include:

- Health and Safety
- Civil Engineering (survey work if required)
- Corrosion Protection
- Fire Protection

Although WorleyParsons has the technical skills and staff qualifications to complete all the works for this project, we feel it is necessary to develop and nurture those relationships while ensuring compliance to all aspects of the RFP. We also feel it is good business practice to contract with firms who specialize in certain areas whereby adding strength to the delivery team. In doing so it is our intention to exceed the PANYNJ requirements per section 20, sub section D, of the agreement.

Section H
Complete List of Affiliates

Section H Complete List of Affiliates

WorleyParsons Group Inc. has one affiliate company:

WorleyParsons of New York, Inc.
2675 Morgantown Road
Reading, Pennsylvania 19607

Section I
Conflicts of Interest

Section I Conflicts of Interest

Item I from the RFP states:

If the Proposer or any employee, agent or subcontractor of the Proposer may have, or may give the appearance of a possible conflict of interest, the Proposer shall include in its proposal a statement indicating the nature of the conflict. The Authority reserves the right to disqualify the Proposer if, in its sole discretion, any interest disclosed from any source could create, or give the appearance of, a conflict of interest. The Authority's determination regarding any question(s) of conflict of interest shall be final.

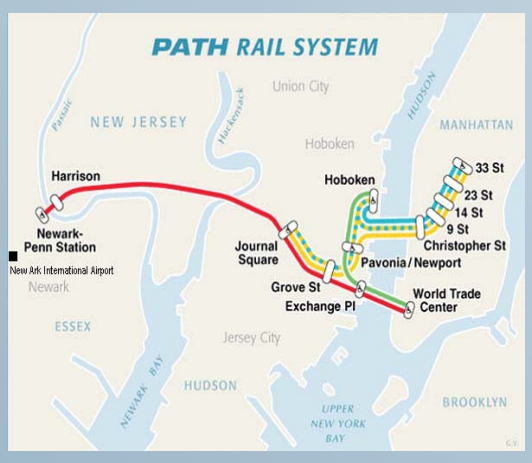
Response: WorleyParsons has no conflicts of interest.

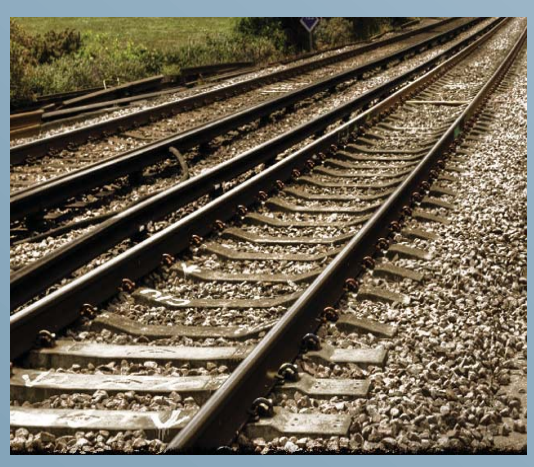
Section J
Standard Agreement, Terms, and Conditions

Section J Standard Agreement, Terms, and Conditions

Please see suggested additions and edits to The Port Authority of New York and New Jersey's "Standard Agreements" and its related terms and conditions under separate cover.

THE PORT AUTHORITY
OF NY & NJ





Hatch Mott
MacDonald

Request For Proposals For Performance Of Expert Professional Project Management Services As Requested On A "Call-In" Basis During 2011, 2012, 2013, and 2014

RFP Number 22388

October 21, 2010

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M/WBE Participation	Section G.
List of Firm's Affiliates	Section H.
Conflict of Interest Disclaimer	Section I.
No Exceptions Statement	Section J.

Hatch Mott MacDonald

Hatch Mott MacDonald

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T 212.532.4111 F 212.532.3907
www.hatchmott.com

October 21, 2010

RFP Custodian
The Port Authority of New York & New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

SUBJECT: REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014. RFP Number 22388

Dear RFP Custodian:

Hatch Mott MacDonald (HMM) is pleased to submit our proposal for Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis to the Port Authority of New York & NJ (PANYNJ) on key elements of the existing PANYNJ infrastructure.

HMM understands the current economic conditions and how project funding has become a challenge for many agencies. We also understand the Authorities revenue projections have been changing due to reduced activity at the revenue generating authority facilities, higher debt service, and lower financial income. The good news is that the construction costs with the current competitive market are favorable. Based on the current climate, the quicker a team can deliver the budgeted projects and programs, the more likely they'll receive a favorable bid. **Success is dependent on the continued ability to plan, execute, anticipate, manage and mitigate risks, and capitalize on opportunities timely.**

HMM is an employee owned multi-disciplinary A/E and PM/CM firm with a North American staff of more than 1,900 in 60 offices nationwide. The roots of HMM date back more than 107 years and currently provide a worldwide pool of over 20,000 employees to draw upon. HMM is a leading North American consulting engineering firm with a century of worldwide experience. HMM has designed and managed some of the world's most prominent projects. Proud of our role in major ventures across North America, we provide comprehensive engineering services in all areas of rail, transportation, tunnels, water, wastewater, airport, environmental, parks and recreation, pipeline, and utility markets. HMM has performed, or is currently performing, Project/Program Management Service agreements on a national, regional, and a local basis for clients across North America. **Projects/Programs under its United States umbrella, to name a few, include projects and programs at BART (SF Transbay Terminal), MTA LIRR East Side Access, JFK, LAX (midfield A380 terminal), Toronto-Pierson, Buffalo, and Washington International Airports.** Under its employee owned parent companies of Hatch from Canada and Mott MacDonald (MM) Group from the United Kingdom, HMM has performed or currently performing **Project/Program Management Service agreements on an international level for clients such as Sydney International Authority, British Airport Authority (Heathrow), London Underground, London Cross Rail, Taiwan High Speed Rail, Hong Kong Check Lap Kok, Athens Airport, and Dubai UAE.**

We feel we have assembled a best in class team to address the RFP requirements and to meet the defined goals of this RFP. Hatch Mott MacDonald is joined by Hill International, TranSystems, McLaren Engineering Group, McKissack & McKissack (W/MBE), and Envision Consultants, Ltd. (W/DBE) for this proposal. HMM is fully committed to both the spirit and to the detail of using Women and Minority Businesses on our projects. HMM has successfully met contract-required WBE and MBE goals on previous contracts with state and local agencies by maintaining flexibility in assigning work tasks to suitably qualified (W/MBE) subcontractors.

Hatch Mott MacDonald

Our proposed **Program Manager, Bradford Townsend, PE**, has over 34 years of construction and engineering design experience with projects and programs in North America and internationally. Currently, Mr. Townsend is leading HMM efforts for a multi-billion dollar program on the west coast that will be phasing out for him in the near future. He is supported by an experienced team of airport, bridge, rail, marine, tunnel, and transportation professionals, many of whom also have the valuable practical experience of working locally but also have an international perspective to bring new ideas to the challenges.

We are proud of our ISO 9001 Quality Environment and Safety (QES) System. Our many "Call-In" assignments attest to our ability to deliver high quality projects that fulfill the client's objectives. HMM's QES-manual is identical to the company's Project Management manual.

We have a proven track record in the metro NY area and understand that a successful project will take a responsive firm and deliver a high-quality product, on schedule, and within budget. On behalf of our more than 20,000 employees worldwide, please consider this proposal our corporate commitment to delivering such services to the Port Authority of New York & New Jersey.

Sincerely,

Roland A. Ericsson
Vice President - Area Manager

Attachment B – Agreement on Terms of Discussion

Section A.

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

Hatch Mott MacDonald New York, Inc.
(Company)

(Signature)

Vice President
(Title)

October 20, 2010
(Date)

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DO NOT RETYPE.

Attachment C – Company Profile

Section B.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):
   Hatch Mott MacDonald New York, Inc.
2. Business Address (to receive mail for this RFP):
   475 Park Avenue South, 10th Floor
   New York, NY 10016-6901
3. Business Telephone Number: 212-532-4111
4. Business Fax Number: 212-532-3973
5. Firm website: hatchmott.com
6. Federal Employer Identification Number (EIN): _ [redacted]
7. Date (MM/DD/YYYY) Firm was Established: 04 / 19 / 1910
8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):
   See attached.
9. Officer or Principal of Firm and Title:
   See attached.
10. Name, telephone number, and email address of contact for questions:
    Roland Ericsson, 212-589-1111, roland.ericsson@hatchmott.com
11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

Attachment

Hatch Mott MacDonald NY Inc.

Officers

Nicholas M. DeNichilo	President	16 Marion Lane Scotch Plains, NJ 07076 USA
Albert N. Beninato	Vice President	124 Palisade Drive Freehold, NJ 07728 USA
David P. White	Secretary	29 Lariat Court Walnut Creek, CA 94596-6633 USA
Jeffrey T. Hilla	Treasurer	22 Windham Way Englishtown, NJ 07726 USA

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   Envision Consultants, Ltd.

2. Business Address (to receive mail for this RFP):

   P.O. Box 536

   Mullica Hill, NJ 08062

3. Business Telephone Number: 856-223-0800

4. Business Fax Number: 856-223-8884

5. Firm website: www.eclimited.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 12/4/94

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   N/A

9. Officer or Principal of Firm and Title:

   Victoria Malaszecki, President

10. Name, telephone number, and email address of contact for questions:

    Victoria Malaszecki vicki@ecclimited.com

    Envision Consultants, Ltd. P.O. Box 536 Mullica Hill, NJ 08062

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☒ Yes ☐ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

ATTACHMENT C

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REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   Hill International, Inc.

2. Business Address (to receive mail for this RFP):

   One Penn Plaza, 34th Floor, Suite 3415

   New York, NY 10119

3. Business Telephone Number: 212-244-3700

4. Business Fax Number: 212-244-2740

5. Firm website: www.hillintl.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 02 / 13 / 1976

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See Attached

9. Officer or Principal of Firm and Title:

   D. Clarke Pile, PE, Senior Vice President

10. Name, telephone number, and email address of contact for questions:

    James W. Palmer, PE

    215-356-2223 / jimpalmer@hillintl.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

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REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   McKissack & McKissack

2. Business Address (to receive mail for this RFP):

   150 West 30th Street, Suite 1200

   New York, NY 10001

3. Business Telephone Number: (212) 349-6500

4. Business Fax Number: (212) 760-4259

5. Firm website: www.McKissack.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 5 / 13 / 1991

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See attached.

9. Officer or Principal of Firm and Title:

   Cheryl McKissack, President & CEO

10. Name, telephone number, and email address of contact for questions:

    Michael Tolliver, Vice President

    (212) 349-6500, MTolliver@McKissack.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☒ Yes ☐ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):

   M.G. McLaren, P.C. d/b/a McLaren Engineering Group

2. Business Address (to receive mail for this RFP):

   100 Snake Hill Road

   West Nyack, NY 10994

3. Business Telephone Number: 845-353-6400

4. Business Fax Number: 845-353-6509

5. Firm website: http://www.mgmclaren.com/

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 02/ 01/ /1977

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

9. Officer or Principal of Firm and Title:

   Malcolm G. McLaren/President and CEO

10. Name, telephone number, and email address of contact for questions:
    William J. McCarthy III/845-353-6400/wmccarthy@mgmclaren.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No **N/A**

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

ATTACHMENT C
COMPANY PROFILE
REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL PROJECT MANAGEMENT SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011, 2012, 2013 AND 2014 (RFP #22388)

1. Company Name (print or type):
TranSystems Architect & Engineer, P.C.

2. Business Address (to receive mail for this RFP):
Empire State Building, 350 Fifth Avenue, Suite 924
New York, NY 10018

3. Business Telephone Number:
(646) 346-1874

4. Business Fax Number:
(212) 244-4488

5. Firm website:
www.transystems.com

6. Federal Employer Identification Number (EIN):
[redacted]

7. Date (MM/DD/YYYY) Firm was Established: 10 / 15 /1964

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):
See a complete section of the firm's affiliates attached

9. Officer or Principal of Firm and Title:
John C, Deerkoski, P.E., Senior Vice President

10. Name, telephone number, and email address of contact for questions:
John C, Deerkoski, P.E, (646) 346-1874, jcdeerkoski@transystems.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes X No

If yes, please attach **Port Authority** certification as a part of this profile.
If your firm is an M/WBE not currently certified by the Authority, see the Authority'web site –http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

Qualifications & Experience of Staff

Section C.

The Port Authority of New York & New Jersey

Hatch Mott MacDonald Organization Chart

Expert Professional Project Management Services On A "Call-In" Basis

Program Manager

Bradford Townsend, PE (HMM)

Executive Committee

Roland Ericsson (HMM)
Malcolm McLaren, PE (MEG)
James Palmer, PE (HI)
Steven M. Tafuro, ASID (TS)

Quality Assurance/ Quality Control

Nishant Nayan, PhD (HMM)

Aviation Project/Program Managers

Andrew Linder, PE (HMM)
Curtis F. Wright, PE (HMM)
Kin Chow, PE (HMM)
John Recco III, PE (HMM)
James Armstrong, PE (HMM)
Michael J. Brothers (HI)
Karen Mohlenbrok, PE, PMP, LEED® AP(HI)

Tunnels, Bridges, Terminals Project/Program Managers

Andrew Thompson (HMM)
Zhengi Cai, PhD, PE (HMM)
Amber Rose France, LEED AP (HI)
Marco V. Levoyer, PE (HMM)
Ron Klinczar, PE, LEED® AP(HMM)
Mark Cosmedy, PE (MK)
George Brosius, PE (TS)
Michael Chelednik, AIA (TS)

Port Commerce Project/Program Managers

Erik Stromberg (HMM)
James V. Green, PE (MEG)
Brian C. Moody, PE (MEG)
Matthew J. Daniels, PE (MEG)
Christopher Mase, PE (MEG)
Todd Manson (MEG)

Path Project/Program Managers

Frank Facciolo, PE (HMM)
John Lehman, PE (HI)
Frank Colucci, PMP (HI)
Mike Loehr, PE (HMM)
Darryl Brogan, PE (HMM)
Richard Buck, PE (HMM)
George Duda, PE (HI)
Robert McDermott (MK)
Edward Nicholson, PE (HI)
Frank Miller, PE (TS)
Gary Matz, PE (TS)

WTC Project/Program Managers

James Mortimer, Jr., PE (HI)
Jose Diaz, PE (HI)
Gurcharan Chopra (HI)
Edward Fox (HI)

Support Services

Project Controls (Estimating & Scheduling)

- Harry Jarnagan, PE, CCE (HMM)
- Bob Nosal (HMM)
- Glenn Knapp (MK)
- John C. Campbell (EC)
- Anthony Duca, PMP (EC)
- Keith Skilling, PE, PMP, PSP (MK)
- Paul Giangreco, PE (HI)

Environmental/LEED/Sustainability/Value Engineering

David Coffield, PE, LEED® AP (HI)

LEGEND

HMM – Hatch Mott MacDonald
HI – Hill International, Inc.
TS – TranSystems
MEG – McLaren Engineering Group
MK – McKissack & McKissack (W/MBE)
EC – Envision Consultants, Ltd. (W/DBE)

Hatch Mott MacDonald

Bradford F. Townsend, PE

Education

BS, Natural / Environmental Science, Johnson State College, 1979

MS, Civil Engineering, University of New Hampshire, 1985

Mechanical Excavation Short Course, Society of Mining Engineers (SME), Seattle, WA. 2002

Grouting for Underground Construction, Master Builders Technology (MBT), Taipei, Taiwan 2001

Asphalt Pavement Design and Production, Shell Petrochemical, HaNoi Vietnam 2000

New England Seismic Design Lecture Series, ASCE, Structural Group/Boston Society of Civil Engineers Section, Fall 1991.

Basic Surface Blasting Applications, by Explosives Technology International (ETT), Denver, CO 1991

Registration

Professional Engineer
NH, [redacted] 1990
VT, [redacted] 1999
CA, [redacted], 2007

Years in Practice – 34

Memberships

American Society of Civil Engineers

International Society of Soil Mechanics and Foundation Engineering

Society of Professional Engineers Thailand

American Underground-Construction Association

International Tunneling Association

Experience Summary

Mr. Townsend has 34 years of construction and engineering design experience involving tunnels, heavy civil and commercial building experience that includes design, cost estimating and construction services. He is experienced with both hard and soft ground tunneling, mined tunnels (SES and NATM), using traditional excavation techniques, mechanical, drill/blast and TBM as well as cut & cover. Significant experience with deep excavation bracing (diaphragm walls, tie-back, struts, rakers, sheet pile, soldier pile & lagging), groundwater control (deep well, vacuum well points), micro-tunneling, pipe jacking, grouting (jet grouting, permeation grouting, compaction grouting), underpinning, up-down construction techniques, surface & marine blasting, geotechnical instrumentation, and utility relocation. He has designed and managed the construction of tunnels for highways, subways, railways, pipe transmission lines and water/wastewater conveyance, and treatment projects, including coordination with public agencies and project stakeholders. In addition, Mr. Townsend is a recognized author of numerous tunneling papers and articles and serves on committees and working groups for both the UCA of SME North American Tunnelling Conference and ITA-AITES Working Group Nr. 19 Conventional Tunneling which is focused on "Contractual Practices" and "Monitoring" of mined excavations and stability.

Selected Project Experienc

Transbay Transit Center, Transbay Joint Powers Authority, San Francisco, CA

Project Manager for the Transbay Transit Center Downtown Extension (DTX) Project. The Transbay Transit Center Development Program is a landmark project for the San Francisco Bay Area. The multi-modal program will enhance transit service to the region by improving the bus and rail connectivity of six Bay Area transit providers at one facility in downtown San Francisco. The approximately $4.2 billion program, which will be the largest transit-integrating, inter-modal center west of New York City, will replace the existing terminal and provide public access to all local bus and rail services. As a critical element within the Transit Center Program, the principal objectives of the DTX Project are to enhance access to downtown San Francisco through provision of improved commuter rail service, and provide access for future high-speed rail service to the new Transbay Transit Center. The DTX Project incorporates the design, construction and operation of the following infrastructure; a 1.5-mile tunneled extension of Caltrain rail service along Townsend and Second Streets to the new Transit Center building, a new subsurface station in the vicinity of Fourth and Townsend Streets, improvements to the existing Fourth and King surface station, reconfiguration and improved functional layout of the existing Caltrain yard.

Taiwan High Speed Rail Project, Taiwan High Speed Rail Corporation, Taipei, Taiwan

Deputy Chief Director Engineering/ESC for the approximately 220 mile Taiwan High Speed Rail project consisting of 56 tunnels, embankments, bridges and viaducts. Responsible for management of preliminary, detailed and as-built design and construction of an approximately 30 miles of tunnel works with associated adits and shafts in this $5.3 billion project. Responsible for review of all technical works and design submissions for the 12 Design-Build contracts for all viaducts, bridges, embankments tunnels and ancillary structures. Tunnels works focused on confirming regional geology, site investigations, method statements, tunnel geometry for up to approximately 50-ft. span and safety requirements, tunnel support requirements, final lining designs, excavation sequencing, progress and resolution of technical issues. The underground works consisted of 42 mined tunnels with up to more than 40 of the planned 80 excavation faces open at any given time.

Hai Van Pass Tunnel Construction Project, Ministry of Transportation, Da Nang, Vietnam
Project Team Leader responsible for all the engineering of approximately 4.32 miles of highway, four miles of tunnel and 1.12 miles of bridge work, for this $350 million project. Project requirements as the Project Team Leader required developing design schedule and budgeting of man-hour tasks for work to be completed for detail design and contract tender. The 36 feet wide by 26-ft. high hard rock tunnel design/construction was based on drill and blast excavation and advanced using the head and bench method. A pilot bore was constructed along a secondary alignment approximately 2,625 feet in advance of the main bore, positioned and sized to an aspect ratio to assist in structural rock mass assessment as required to determine expected main bore tunnel excavation and support requirements. Developed Contracts with local and international subcontractors for both engineering design and exploration related work, inclusive of coordination with the military to conduct work within designated military sensitive areas.

Silicon Valley Rapid Transit, Santa Clara Valley Transportation Authority, San Jose, CA
Tunnel Engineer. Responsible for evaluation of use of permanent station walls for support of excavation and development of permeation grouting requirements and excavation sequencing for cross-passage ways between tunnel drives. Work included review of preliminary design drawings, tunnel methodology reports and assistance in management of station and tunnel work integration.

IBM Building 973 Pedestrian Tunnels, IBM, Essex Junction, VT
Project Engineer, responsible for construction of five soft ground tunnels below an existing manufacturing operation of which three tunnels were mined below existing clean room facilities and sensitive computer manufacturing operations which had to remain operative 24 hours a day. Innovative tunneling system integrated jet grout underpinning, grouted drilled-in pre-support elements in an arch configuration, steel rib sets supported on pre-cast concrete footings with cast-in-place and shotcrete lining.

Marine Blasting Program Immersed Tube Tunnel Central Artery Tunnel Contract 4A, Boston, MA
Resident Project Engineer, responsible for submarine excavation for the Third Harbor Immersed Tube Tunnel. Requirements included management of blasting company personnel, scheduling, design of blast rounds, training and management of other support personnel, coordination with harbor patrols and instrumentation crews aboard a US Naval missile frigate located in the adjacent dry dock under routine repairs for each blast. Design of 350 ton explosive charge for tunnel portal construction.

MBTA Blue Line Station Modernization and Platform Lengthening Project, Metropolitan Boston Transit Authority (MBTA), Boston, MA
Project Manager/Engineer. Project involved schematic and final design for the extension of two subway station railway platforms, State Street Station and Aquarium Station, in downtown Boston. Design required evaluation of existing tunnel and station structures and previous methods of construction, local geology, groundwater conditions, and sequencing of construction for proposed additions to facilitate surface traffic management requirements and structural interaction with proposed depression of I-93 at Aquarium Station. Evaluation of both cut-and-cover tunneling and soft ground mined tunneling techniques were conducted. Final recommendation for cut-and-cover tunneling using concrete diaphragm wall method in conjunction with soldier pile and lagging. The associated contract documents were provided to the lead design team architect.

B&A Clearance Project – Bridge Rehabilitation, Consolidated Rail Corporation (CONRAIL), MA
Project Manager/Engineer, responsible for design and construction of bridge abutment stabilization program at 17 locations across the state of Massachusetts for increase in bridge clearance along the Boston-Albany rail alignment. Conduct stability analyses, develop design recommendations, develop contract drawings and specifications, and provide staff for monitoring contractor's compliance with contract documents. Bridge abutment stabilization typically consisted of permanent tieback installation and one case of ground modification/stabilization by permeation grouting.

Roland A. Ericsson

Education
BS, Marine Engineering, Royal Marine Academy, Malmö, Sweden, 1975

Certifications and Registration
40-hour training on NYC Building Code, subchapter 19, Site Safety Manager.

40-hour OSHA site safety certification.

80-hour fire and life safety training, The Royal Naval Academy, Stockholm, Sweden.

60-hour tanker safety training, Southampton School of Navigation, UK.

Years in Practice – 34

Professional Affiliations
-Co-Chair, Nation's Port, a regional coalition for sustainable goods movement

-INCOSE – International Council of Systems Engineering

-Action Long Island, Transportation Task Force

-American Society of Highway Engineers (ASHE), Past President and co-founder, NY Metro Chapter

-Construction Management Association of America (CMAA)

-New York Building Congress (NYBC), Past Chair of Brownfields Committee

-Society of American Military Engineers (SAME)

-American Council of Engineering Companies (ACEC)

Experience Summary

Mr. Ericsson is a Vice President and the Area Manager of Hatch Mott MacDonald's New York City operations. He is responsible for the day-to-day management of the 50-person office as well as for a planned expansion and growth into other business areas. The NYC office is a full service location, providing design, engineering and construction management services for national and international transportation and infrastructure clients. Specialties include tunneling design and construction, rail/transit and tunneling ventilation and fire/life safety. Mr. Ericsson has until recently also led the implementation of environmental sustainability in all of HMM's 59 offices in North America. This work included internal procedures as well as assisting clients in realizing opportunities for sustainability within their own organizations,

Mr. Ericsson is a dynamic leader with in-depth knowledge of many industries and operations, including rail/transit, bridge and highway, marine transport, facilities (commercial and specialty), and manufacturing/process industry.

Select Project Experience

Rehabilitation of the Queensboro Bridge, New York City Department of Transportation (NYCDOT), New York, NY
Principal-in-Charge for this $45 million contract (No. 6 of 6) The project involves major repairs on the bridge, including concrete placement, installation of new lighting system at lower bridge deck, installation of a new concrete barrier and cleaning of the towers, etc. The project also includes the repair of steel arches and anchor piers; placement of micro-surfacing overlay on the upper roadways; replacement of columns on inner and outer roadways on the Queens side of bridge; improvements to NYCDOT parking facility; rehabilitation of 2nd Avenue Plaza kiosk; replacement of retaining wall along York Avenue; installation of new overhead signs, electrical system upgrades, aviation warning lights and street lighting; replacement of promenade floors above upper roadways at all four piers; and installation of fencing and site improvements.

Grand Central Terminal Steam System Study and Design, MTA-Metro North Rail Road, New York, NY
Design Manager for this project that will serve to survey, document and upgrade the high-pressure steam system under Grand Central Terminal in New York City. The project makes extensive use of laser scanning technology to document current conditions and the collected information will provide the basis for a redesign of the system, eliminating unnecessary redundancies while upgrading and modernizing the system.

The New Croton Aqueduct Rehabilitation, New York City Department of Environmental Protection, New York, NY
Principal-in-Charge and the coordinator of all field services for this project. The New Croton Aqueduct is a horse-shoe shaped brick lined tunnel constructed 100 years ago to provide drinking water from the Croton Watershed in Upstate New York to New York City. Groundwater intrusion is causing the brick liner to fail and HMM is performing construction inspection services for the repair work in a two mile section of the tunnel.

Public-Private Partnership (PPP) Tunnel Design, Port of Miami Tunnel, State of Florida DOT, Miami, FL
Mr. Ericsson was the Program Executive for this $1.3B highway tunnel project in Miami, FL. The project is a design/build Public Private Partnership (3P) and was at the time in a bid development stage where design drawings and calculations are developed in order to provide a proposal for Florida DOT. The 3,900 feet long, 36 feet diameter Port of Miami Tunnel will have two tubes, each with two lanes for traffic and is intended to provide direct access between the harbor and the Interstate roadway system. In addition to the tunnels, work includes widening and improvements to the McArthur Causeway Bridge, ramp connections to and from McArthur Causeway on Watson Island, ramp connections, and roadway improvements on Dodge Island, relocation of FEC railroad track and associated facilities as well as reconstruction of the Seaman's Center on Dodge Island. Surface traffic flow, right-of-way, and existing land use constraints are additional major issues included in the project. When built, the tunnel will connect directly to the Interstate system and thus remove most port related traffic, including heavy trucks and buses from downtown Miami.

I-84 Platform Underpass Illumination System, Connecticut Department of Transportation, Hartford, CT
Project Manager for engineering design services for the replacement illumination system for the underpass along I-84, near its intersection with I-91 in downtown Hartford. The previous lighting system had been deemed inadequate, and needed to be replaced by one that meets all current codes and standards. HMM provided an evaluation of the existing system and platform underpass conditions and made recommendations for proposed lighting levels and surface treatments of the tunnel and approaches. After approval of the study recommendations, HMM proceeded through preliminary and final design, followed by preparation of bid documents. HMM also provided MPT drawings for this congested and complex intersection, which was then included in the specifications. Finally, HMM provided contract packaging and bidding support services. Based on a recently performed life-cycle cost analysis, the project will undergo a review to determine if a redesign including LED-light fixtures is warranted

Program Management Oversight Consultant, New York City Department of Transportation, New York, NY
Program Management Oversight Consultant (PMOC) for the three newly acquired passenger ferries for New York City Department of Transportation's (NYCDOT) Staten Island ferry service. The program was federally funded and the work was performed on behalf of the Federal Transit Administration (FTA), Region 1. The ships were being built in Marinette, Wisconsin, and each is capable of transporting 3,500 passengers per trip. The assignment expanded to provide review and comments on the overall preventive maintenance system in preparation for database handling for all ships in the entire service.

Construction Management, Dormitory Authority of the State of New York (DASNY), Chief Medical Examiner's Office- Kings County, NY
Project Manager for all mechanical installations during the construction of this new $15 million morgue on the grounds of Kings County Hospital, Brooklyn. The work included tie-ins to the hospital's steam and condensate systems during planned and coordinated shut-downs; installation of refrigerators, fully automatic dissection tables with related waste handling systems, and HVAC systems; and tie-ins to electrical service (ConEd).

Employment History
Managing Director, Disab International Deutschland GmbH, Hamburg, Germany
Full responsibility for the establishment of this subsidiary for vacuum truck manufacturer. Achieved 18% market share in Germany in less than two years. Continue successful development of the German and European markets while managing day-to-day operations (1990-1992)

International Sales Manager, Disab International AB, Lund, Sweden

Purchasing Manager, STC Recylcing (Volvo subsidiary), Malmoe, Sweden

James W. Palmer, PE

Hill International, Inc. Principal-in-Charge

James W. Palmer is Senior Vice President and Director of Hill's Transportation Group. Mr. Palmer's broad-based experience in rail transportation translates into nationally recognized, award-winning projects. He possesses a unique ability to develop solutions and transform difficult situations using strong analytical skills and control systems. Mr. Palmer's background includes the integration of design, construction, maintenance and operations, as well as aggressive and efficient team building. His work with state transportation and planning departments, as well as top-level positions with major transportation corporations, exemplify his commitment to efficiency and results-oriented performance.

Port Authority of New York, New Jersey (PANYNJ), Downtown Restoration Program of Service, New York City, NY

The PANYNJ initiated a program ($3.1 billion) to restore service from North Jersey into Lower Manhattan. Destroyed by the collapse of the World Trade Center and the subsequent recovery, rebuilding the Port Authority Trans-Hudson (PATH) train service was deemed critical for economic recovery of the World Trade Center area and the Financial District from the terrorist attack and devastation that followed. The Program involved converting an underground station, Exchange Place, into a Terminal so trains could be turned back there within a year and a half, as well as the reconstruction of the train station and the two miles of connecting tunnels at the World Trade Center Station itself in two years. This $540 million program has not been designed at that time so Mr. Palmer worked with the Authority to develop a strategy to get this done. The strategy included a phased design and construction approach that broke the program into design packages that would be released and built as each package was completed. As the lead technical and constructability advisor, Mr. Palmer developed the initial design and construction packaging and staging plan that included long-lead procurements, technical approaches and sequences of construction. He presented to, and received validation from, a Peer Review Group that included local and international experts in design and construction.

Washington Metropolitan Transit Authority, General Engineering Consultant, Washington, DC

Mr. Palmer was Program Director responsible for the development of project scopes, negotiation of task and program management of the work product, and adherence to schedule and budget. The Washington Metro used the GEC contracts to implement their full capital program which included: **Infrastructure Renewal Program**; **Largo Extension Design Build**; **New York Avenue Infill Station**; and **Core Capacity Analysis**.

Education:
B.C.E., Civil Engineering, Queens University, Ontario, Canada, 1974

Registrations:
Professional Engineer, Maryland, New Jersey, Pennsylvania, New York

Professional Memberships:
Transportation Research Board

American Society of Civil Engineers

American Public Transportation Association

American Railway Engineering and Maintenance-of-Way Association

Awards/Honors:
James G. Hellmuth Unit Citation, PANY&NJ 9/11 World Trade Center Loss Recovery Project

Employment History:
Delaware and Hudson Railway Company, 1974-1976

National Railroad Passenger Corporation, (Amtrak), 1976-1978

Booz, Allen & Hamilton, 1978-1980

SEPTA, 1980-1984

Baker Engineers, 1986-1988

SEPTA, 1988-1996

Edwards and Kelcey, 1996-1998

DMJM, 1998-2001

Hill International, Inc., 2001-Present

New Jersey Department of Transportation Merger (NJ DOT), Trenton, NJ

Mr. Palmer was responsible for supporting NJ DOT in its negotiations with the railroads and filings before the Surface Transportation Board (STB) with respect to the proposed Conrail-CSX, Norfolk Southern Merger. His role included strategy development, participation in negotiations, evaluation of the railroads' filings, and the development of the State's case before the STB.

North Jersey Transportation Planning Authority, Rail Freight infrastructure and Improvements Study, NJ

Mr. Palmer was project manager responsible for developing an issues and early action plan for the State of New Jersey in response to the proposed Contrail/CSX/Norfolk Southern merger. This report (one of the first public sector reports developed in response to the proposed merger) has been widely used by officials within the state, as well as federal officials of other Northeastern states. The study made effective use of geographical information systems as a tool in defining the various options and their impacts on freight and passenger movements within the state.

Secaucus Transfer Project, New Jersey Transit Project Oversight

The project was to construct a multi-modal transportation facility that tied Amtrak's Northeast Corridor, NJ Transit's North Jersey commuter rail lines and the New Jersey Turnpike together with on-site economic development. In addition to performing a general review of this $450 million program, Mr. Palmer focused specifically on construction risk mitigation and contract cost reduction in response to excessively high bids for caisson work.

Southeastern Pennsylvania Transportation Authority (SEPTA), Philadelphia, PA

As the Assistant General Manager of Railroad Division, Mr. Palmer was directly responsible for 1,500 employees, including 250 managers and 1,250 agreement employees represented by nine different contracts. Mr. Palmer managed a $250 million annual budget, consisting of a $175 million operating budget and a $75 million capital budget.

Vine Street Expressway, Philadelphia, PA

Mr. Palmer was senior project manager for the project which tied two major highways, I-95 and I-76 together, as well as providing access for both to Center City Philadelphia. It included extensive staging to construct the six-lane highway in cut and cover while maintaining main cross-town street traffic. Let as multiple contracts, strict management of contractor interfaces was key to the project's success.

Schuylkill Expressway, Philadelphia, PA

Mr. Palmer was Manager, Civil and Structural Engineering for an extensive reconstruction of the existing roadway, I-76, built in the 1930's. A major intersection was added that required the use of proprietary retaining walls and complicated staging to maintain traffic and not adversely impact the adjacent Schuylkill River. He also oversaw the design preparation of contract documents.

Southeastern Pennsylvania Transportation Authority (SEPTA), Philadelphia, PA

As general superintendent for track, Mr. Palmer managed the design, construction and maintenance of Philadelphia's track systems including a 160-mile trolley system; 60 miles of rapid transit lines; and a 240-mile commuter rail system. He was responsible for a $40 million budget and 340 employees.

Steven Tafuro, ASID
Senior Vice President

Mr. Tafuro has more 30 years of experience providing aviation design services throughout North America and Europe. He has been responsible for many of TranSystems' airport terminal, airport retail, and airline branding projects, including the American Airlines Terminal 8 project at JFK International Airport, along with San Jose Car Rental Facility. Mr. Tafuro has worked on aviation, retail, and corporate facilities as large as two million-square-feet and more than $1.2 billion in construction costs.

Registrations
Interior Designer: CT, 1990

Education
B.I.D., Industrial Design
Pratt Institute, New York, 1974

Affiliations & Memberships
American Society of Interior Designers, Member
Connecticut Interior Design Society, Member
Transportation Research Board,

Years of Experience
35

Years with TranSystems

American Airlines Terminal 8 Redevelopment JFK International Airport, Jamaica, NY
Project Principal and Design Director for the Interior Architecture for the project. Mr. Tafuro directed TranSystems' effort in planning, programming, interior design of all public and support areas, concessions master planning of 60,000 square-feet, FIS planning, all millwork and FF&E as well as FIDS design, signage, lighting and all airline clubs, lounges and VIP areas for the $1.2 billion project.

The Hudson Group Retail Store Design Various Airports Worldwide
Project Principal and Account Manager for all Hudson Group Projects. Mr. Tafuro oversees the design effort for over 400 news and specialty retail stores including National Brand names and propriety brands to Hudson in more than 50 airports, amounting to over $200 Million in construction costs. Sales have increased from $35 Million to over $500 Million during the timeframe of TranSystems' involvement.

British Airports Authority (BAA) Concession Program Boston Logan International Airport, Boston , MA
Project Principal and Client Liaison to BAA, overseeing the design of the Concession Program. The project consisted of the overall planning, design and demising documents including two food courts and multiple individual tenant units at a construction cost of $10.8 million.

Terminal One Management Inc, Signage and Wayfinding Modifications JFK International Airport, Jamaica, NY
Project Principal and Design Director overseeing the signage design and implementation. Assignment was to analyze the 400,000-square-foot terminal and redesign the signage and wayfinding system to add enhancements, additional gate, directional signs and directories and Brand Integration to improve passenger flow and decision making.

American Eagle Commuter Gates JFK International Airport, Jamaica, NY
Project Principal, responsible for the overseeing and management of the architectural design services for the 18,200-square-foot, five-gate regional jet facility attached to the existing concourse.

American Airlines, Inc. Terminal 8 Redevelopment, Phase Three JFK International Airport, Jamaica, NY
Project Principal overseeing the management of architectural design services for revisions to the concourse, main building, and baggage handling spaces.

American Airlines, Inc., Terminal 8 Concourse C Admirals Club
JFK International Airport, Jamaica, NY
Project Principal overseeing the architectural and interior design efforts for 12,500-square-feet of a new club lounge, which includes a business center, bar, shower complex, media lounge, and children's room.

American Airlines, Inc., Satellite Expansion Newark Liberty International Airport, Newark, NJ
Project principal and Design Director, managing renovations to 20,000-square-feet, providing interior designs for a two-level building addition, club lounges, a baggage handling facility, and administrative offices at the 600,000-square-foot American Airlines facility.

Southwest Airlines, Central Terminal Building
LaGuardia Airport, New York, NY
Project Principal. TranSystems performed interior renovation where tentative spaces are not currently occupied. This renovation included the development of floor and ceiling plans for the gate hold room, check-in facilities and operation offices, etc. The project scope included schematic design phases and plan submissions to PANYNJ.

Employment History
Silvester & Tafuro (now TranSystems) 1985-2004

Nishant Nayan, PhD, AIChemE

Education
BEng (Hons.) Chemical Engineering, 1999

PhD, Computational and Experimental Fluid Dynamics, 2003

Years in Practice 6

Memberships
Associate Member of Institution of Chemical Engineers (AMIChemE)

Experience Summary

Dr. Nayan has several years of multidisciplinary experience in the application of Computational Fluid Dynamics (CFD) to solve a variety of chemical and mechanical engineering applications, including airflow analysis, HVAC, and fluid mixing applications. He has successfully completed projects involving warehouse ventilation, pharmaceutical packaging and mixing vessel design. Dr. Nayan also has expertise in the design of mechanical ventilation systems. He is knowledgeable in experimental velocity analysis and electrochemical concentration measurement. In addition to his role as a consultant engineer, Dr. Nayan has also previously held the position of Quality, Environmental and Safety (QES) Management System Representative and lead the NYC office for ISO-9001 recertification.

Select Project Experience

Grand Central Terminal Complex –Project No. 65900, MTA Metro North Railroad (MNR), New York, NY

Mechanical Engineer participating in the visual assessment of the Steam Tunnels. The assessment will complement production of the existing conditions drawings. Final deliverables include a report identifying remedial repairs and design recommendations for traps, expansion joints, anchors, pipes, valves, and other system elements.

Grand Central Terminal Complex –Task Order 12, MTA Metro North Railroad (MNR), New York, NY

Mechanical Engineer participating in the design of emergency ventilation and cooling for the control room at Grand Central Station. Involved in the development of the design drawings and assisted in the preparation of the 60% design package for MNR.

Cortlandt Street Ventilation CFD Study, Metropolitan Transportation Authority, New York, NY

As the Project Manager and Lead Engineer for the Cortlandt Street ventilation upgrade Computational Fluid Dynamics (CFD) analysis, responsible for performing the computation analysis to study the effect of mechanical ventilation for control of smoke in the station. The station's retrofit includes the design of an over-ceiling duct in order to exhaust smoke and links with the ventilation system of the PATH station underneath. Also participated in the design activities and discussions on the construction of the station ventilation.

Vancouver RAV (Richmond-Airport-Vancouver Rapid Transit Line), Lavalin, Vancouver, Canada

The Vancouver RAV is a subway line under construction in Vancouver, Canada. CFD analysis was conducted on this line to confirm the effectiveness of the ventilation system for smoke removal and its ability to maintain a tenable environment at the Broadway underground station. This was accomplished in accordance with the requirement and methodology set out in the 2003 edition of NFPA 130, "Standard for Fixed Guideway Transit and Passenger Rail Systems".

George Washington Bridge Redevelopment, Port Authority of New York & New Jersey, New York, NY

Lead Engineer responsible for ventilation design. As part of the redevelopment of the

Port Authority Bus Garage on the Manhattan side of the George Washington Bridge, tunnel ventilation design and analysis was performed in the due diligence phase. A feasibility study was performed to examine the proposed design covering the roadway ceiling. As there was no dedicated mechanical ventilation, conceptual longitudinal and semi-traverse ventilation schemes were investigated using CFD.

LA Eastside LRT, Los Angeles County Metropolitan Transportation Authority, Los Angeles, CA
Project Engineer responsible for constructing and simulating the 3D CFD models for Mariachi and Soto underground stations. The scope of work was to review information and prior simulations from other clients and construct new models for ventilation analysis. The simulations demonstrated the effectiveness of the proposed ventilation in the tunnel and stations. The study also encompassed Subway Environmental Simulation (SES) 1-D analysis for development of the CFD boundary conditions. August 2006-July 2007

Empire Line Overbuild Ventilation, AMTRAK, New York, NY
The scope of this analysis included five kilometers of track from Penn Station to the west side of Manhattan. The roadway is a depressed Guideway, which at several locations has been covered by roadway developers with high-rise building of varying size. These overbuilds have created short sections of tunnels for which a comprehensive airflow and fire scenario ventilation analysis was performed. Mott MacDonald's proprietary 'Hotflow' software was used for modeling purposes. The study developed a report which provided recommendations to Amtrak for ventilation system operation in accordance with NFPA guidelines, and set minimum ventilation requirements and plant sizes for any future overbuild work. As a part of the project, several site surveys were also performed.

Dulles Airport Tunnels, Metropolitan Washington Airports Authority, VA
Lead Engineer responsible for ventilation and safety analysis of a 460 foot compartment of graded pedestrian tunnel linking Tier 1 and Tier 2, using Computational Fluid Dynamics (CFD). The ventilation system design includes the ventilation of the tunnel during emergency operations of the ventilation system. The tunnel was integrated with the primary water suppression systems and compartmentalized to contain the incident section for reduction in the spread of smoke and fire. The results from the CFD analysis demonstrated the effectiveness of the smoke extraction system and provided data for visualization of smoke and prediction of visibility.

CFD Models, Eli Lilly & Co. with Purdue School of Engineering and Technology, Indianapolis, IN
Research Associate responsible for developing CFD models of 'isolators' and providing input for improvement in design. Isolators are being phased in as a replacement for cleanrooms in the pharmaceutical industry. The isolator is a smaller environment than the cleanroom and decontamination is achieved using chemical vapor. The major aspect of this project was to coordinate activities between industry and academic environments for design modifications, keeping FDA guidelines in consideration. A six-member team was directed for developing three-dimensional models to predict the temperature, chemical concentration, and velocity. The data from CFD analysis was compared to field experiments and locations with poor vapor distributions were successfully identified. The analysis led to a reduction in turnaround time of an isolator by 50 to 60 percent and procurement of new isolators with improved design.

Employment History

Eli Lilly & Co (2004 - 2006)

Jet Environmental Techniques (2003 - 2004)

University of Birmingham, UK (1999 - 2003)

Andrew Linder, PE

Education
BS, Civil Engineering, State University of New York at Buffalo, 1982

Registration
Professional Engineer
PA, [redacted] 002
NY, [redacted] 1988

Years in Practice – 28

Memberships
American Society of Civil Engineers

Experience Summary

Mr. Linder has over 28 years of diverse experience in aviation, site development, surface transportation, and security projects in the public and private sector. He has been involved with both domestic and international projects. His experience involves various aspects of program and project management, as well as the planning, design, and construction of multi-discipline transportation and infrastructure projects. In addition, he has been involved with several business and organizational development initiatives.

Mr. Linder's management responsibilities include serving as client liaison, agency coordination, the preparation of contract agreements, budgets, and invoices and development of program schedules. He has managed multi-disciplinary teams of engineers, architects, planners, environmentalists and technicians. He has provided technical input to engineering reports, participated in public hearings, performed constructability reviews, developed conceptual and preliminary designs, prepared final construction documents, and provided construction support services.

Select Project Experience

Los Angeles International Airport (LAX), Los Angeles World Airports, Los Angeles, CA

Deputy Project Manager for engineering design and planning services for the new Midfield Satellite Concourse (MSC) and the Tom Bradley International Terminal (TBIT) expansion program. This $5 billion modernization program includes infrastructure improvements, tunnels, central utility plant, and other related projects. With HMM as the prime consultant of LAWA's Engineering Services team, responsible for managing the development of all airfield elements associated with the MSC and TBIT programs. Program airfield elements include construction phasing, enabling facility demolition, taxiway and apron pavements, passenger boarding bridges and associated ramp services, airfield lighting and signage, hydrant fueling, storm water drainage, sanitary sewers, power and communications, and roadway design. The overall program is schedule driven and implemented through the award of multiple fast track construction packages using Design-Bid-Build, Design-Build, and Construction Manager at Risk contract delivery methods.

LaGuardia Airport (LGA), American Airlines, Queens, NY

Project Manager for civil site engineering for the airport's Central Terminal Building C/D Connecting Corridor project. Serving as a subconsultant to Corgan Associates Architect's, HMM's role consists of airfield paving and utility design directly impacted by terminal building construction between Concourses "C" and "D," as well as the building modifications along the two concourses. HMM is also providing layouts associated with the proposed relocation of Passenger Boarding Bridges (PBB) and assistance in validating aircraft layout and maneuvering scenarios for the relocated passenger gates.

Program Management Services for Security Capital Program, Port Authority of New York & New Jersey, NY & NJ
Project Manager in a program management team responsible for the implementation of a $485 million security capital program. Responsible for the management of various security projects for the agency's port commerce and railroad (PATH) divisions. Project scopes consisted of blast and vulnerability studies in the PATH system and the construction of security infrastructure, including fences, gates, guide rails, guard booths, and CCTV surveillance cameras throughout the marine port facilities. Project contract values ranged from $100,000 to $5,000,000.

I-287 Cross Westchester Expressway (CWE) Viaducts, NYSDOT, Westchester, NY
Civil Project Engineer for the design of approach roadways and entrance ramps for a 1,000-foot (305-meter) long viaduct over the Saw Mill River Parkway. The design involved raising the approach roadway vertical profile over five feet (1.5 meters), widening the roadway section to accommodate a future high occupancy vehicle (HOV) lane and introducing a 50-year pavement section for the expressway mainline and three entrance ramps. Responsibilities included supervising horizontal and vertical highway design for 60-mile-per-hour (mph) design speed, developing maintenance and protection of traffic (MPT) and construction staging plans, and preparing final contract documents.

Shore Parkway Bridge over Fresh Creek Basin, NYSDOT, Brooklyn, NY
Design Engineer responsible for the study of highway alignment elements and the preparation of contract plans on a rehabilitated bridge. The study involved evaluating the impacts of implementing a 65 mph design speed as it related to stopping distance, super elevation transitions, and acceleration and deceleration lane lengths. In addition, as a result of proposed changes to the bridge's profile and roadway cross slope, prepared contract plans for a revised drainage system on approach roadways. The design included inlet spacing analysis and closed drainage system hydraulics.

Delaware Memorial Bridge, Delaware River and Bay Authority, DE
Project Engineer for the widening of the Delaware River and Bay Authority's toll plazas. Prepared final construction plans, specifications, and cost estimates. Tasks included pavement design, construction sequence plans, and utility relocations.

Meadowbrook Parkway Bridge over Sloop Channel, NYSDOT, Nassau County, NY
Project Civil Engineer for the design of approach roadways for NYSDOT's rehabilitated Meadowbrook Parkway Bridge. Prepared final contract plans, specifications and estimates, and developed maintenance and protection of traffic (MPT) plans.

Route 9A, Miller Highway Viaduct, 42nd Street to 59th Street, New York State Department of Transportation (NYSDOT), New York, NY
Design Engineer for preliminary design of viaduct, entrance/exit ramps, and at-grade roadways for NYSDOT. Tasks included development of alternative highway and ramp alignments and intersection layouts. Assisted in the preparation of the draft design report.

Employment History
Hatch Mott MacDonald (2006 - Present)
Parsons Brinckerhoff (2001 - 2006)
TAMS Consultants (1995 - 2001)
Frederic R. Harris (1991 - 1994)
HNTB (1988 - 1991)
Goodkind & O'Dea (1986 - 1988)
Andrews & Clark (1982 - 1986)

Education
BS, Civil Engineering Technology, Old Dominion University, 1984

Registration
Professional Engineer
VA [redacted] 1989
CA, [redacted] 1992
MT, [redacted] 1998
NC, [redacted], 2008
NY, [redacted], 2008
MD, [redacted] 008
FL, [redacted] 2009
NJ, Pending

Years in Practice – 26

Memberships
The Aviation Council of Alabama, Inc.

Florida Airport Council (FAC)

American Association of Airport Executives, Southeast Chapter (SEC-AAAE)

Mississippi Airports Association (MAA)

Airports Consultants Council (ACC)

Experience Summary

Mr. Wright has over 26 years of diversified civil engineering experience with public, military and private clients. He has personally planned, managed, and designed projects with construction budgets ranging from small $5,000 projects up to over $12 billion. He has completed hundreds of projects in his engineering career. Several of his projects have been award winners. He has nationwide aviation experience, and his airport planning, design, and construction experience includes airport landside and airside improvements at civilian (air carrier, cargo and general aviation) and military airfields (fixed and rotary wing), runways, taxiways, aprons, helicopter facilities, hangars, terminal site civil, terminal roadways, parking, revenue control, airport master planning, airport site selection, air traffic control towers, automated people movers, mechanical systems, baggage handling systems, and airfield electrical. His overall civil engineering experience includes highways, freeway interchanges, grade separations, traffic signals, railroads, storm drains, telecommunications, sewage pumping stations, water distribution systems, sanitary force mains, commercial, industrial, and subdivision developments. Mr. Wright has been involved as a Project Manager or task manager in the following projects:

Selected Project Experience

Runway 17-35 Emergency Pavement Repairs at Pensacola Gulf Coast Regional Airport (PNS), City of Pensacola, Pensacola, FL

Under an as-needed engineering services contract, Mr. Wright served as the Task Manager for the emergency repairs to a group of failed PCC joints. Runway 17-35 is the primary ILS runway. Partial-depth concrete joint repairs were specified. Mr. Wright's role included providing design, and construction phase support services. Cost = $5,000

Runway 16L-34R Pavement Assessment, Design, and Construction Administration at Jackson-Evers International Airport (JAN) for the Jackson Municipal Airport Authority, Jackson, MS

Project Manager for the rehabilitation of the surface asphalt pavements on Runway 16L-34R (east runway). The runway is 8,500 feet in length, and the asphalt surface had experienced various forms of deterioration including weathering, raveling, block and alligator cracking, and rutting. The Airport is founded on subgrades that include expansive Yazoo Clays. Runway 16L-34R has experienced differential heave at a few locations resulting in "bumps". Hatch Mott MacDonald prepared the PS&E for the surface rehabilitation and the complete reconstruction of the "bump" area, approximately 500 ft of the runway. HMM also performed a pavement assessment (including non-destructive testing – NDT) to determine the optimal long-term solution to the repairs. Additionally, HMM provided construction phase support services including inspections, materials testing and resident engineer services. The project also included the re-alignment of runway centerline, and touch down zone (TDZ) lights.

Utilities Relocation and McCain Road Preliminary Engineering in Support of the Implementation of Master Plan Improvements at San Diego International Airport (SAN), for the San Diego County Regional Airport Authority (SDCRAA), San Diego, CA

As part of an on-call, as-need contract with SDCRAA (3.5 years, $5million) and while employed by another firm, Mr. Wright served as the Project Manager for the preliminary engineering and concepts planning for the relocation and protection of dry (10-inch high pressure gas, communications/data, and 12kV electrical) and wet utilities (114-inch and 96-

inch sanitary gravity sewers, local sewer laterals, and drainage), and the design of a new access roadway at SAN. Expansion of Terminal 2, West requires the relocation of the utilities and the new access roadway. The study included a traffic impact analysis, coordination with SDGE, the US Navy and the City of San Diego. The project also was coordinated with the clean-closure of an inactive landfill located on former US Navy land.

State Route 60/71 Four-Level Interchange PS&E in Caltrans District 7, City of Pomona, CA
While employed by another firm, Mr. Wright served as the Project Engineer responsible for the design and production of the PS&E including: Title Sheet, Typical Sections, Layouts, Profiles, Superelevation Diagrams, Contour Grading Plans, Construction Details, Retaining Walls, Drainage Plans/Profiles, Chino Creek (double 14 feet by 14 feet reinforced box culvert – Los Angeles County DPW standards) relocation, Edge Drains, Roadwork Quantities/Cost Estimate and Special Provisions. The project included 11.5 miles of freeway, connectors, ramps and local streets, fourteen (14) bridges, two (2) bridge widenings, right-of-way acquisitions, and major drainage improvements. The design effort won the 1993 Caltrans' *Excellence in Transportation (Category Xc , Project Delivery)* award in statewide competition. Construction support services were also provided including, pre-construction conference attendance, resolution of field changes, shop drawing review, and general design clarifications. Cost = $76 million

Repair Railroad Trackage Curves, Yermo Annex, Marine Corps Logistics Base (MCLB), in Barstow, California for the Naval Facilities Engineering Command, Southwest Division
As part of an indefinite quantity (IQ) contract, and while employed by another firm, Mr. Wright served as the Project Engineer supervising the preparation of the trackage PS&E. Using the American Railway Engineers Association (A.R.E.A.) standards, NAVFAC specifications and the MCLB desires to accommodate a 90 foot long car. The project was designed to include two new rail spurs, several No. 8 turnouts, No. 8 double slip switches, demolitions, repairs of existing turnouts, and the upgrading of + 25 ladder tracks located within the yard. The horizontal curve radii of the existing ladder tracks were too small to accommodate the 90-foot rail car. The design included the relocation and rehabilitation of the existing 100# RE rail stock. The No. 8 double slip switch was designed to be electronically-thrown using switch machines with remote controls. Construction support services were also provided. Cost = $1.8 million

At-Grade Railroad Crossings and "Quad-Gates" Along Alameda Corridor-East for the Alameda Corridor-East Construction Authority, Pomona, CA
While employed by another firm, Mr. Wright served as the Civil Task Leader for the preparation of the PS&E for the installation of medians, curbs, minor geometric modifications, video detection systems, and "quad-gates" at the five (5) at-grade railroad crossings on the Alameda Corridor East. The project objective is to create a safer crossing. The quad-gates and medians prevent vehicles from crossing the tracks while the gates are down. The video detection system is employed to sense if a vehicle is "trapped" within the quad-gate area. If a vehicle is detected, the downstream gate will immediately rise to prevent entrapment, thus allowing the vehicle to safely exit the crossing. The designs were coordinated with the City of Pomona, Alameda Corridor-East Construction Authority, and BNSF.

Tongue River Railroad, Design / Build Project in Southeast Montana for WESCO Resources, Inc.
While employed by URS Corporation, Mr. Wright served as the Project Engineer for the preparation of the preliminary (15%) design plans, specifications and quantities estimates for over 116 miles of new, heavy-freight rail to access coal reserves in the Ashland, Montana and Wyoming state line regions. The firm Mr. Wright was employed with, was part of a joint venture with a heavy construction firm. The project is located in the very remote, Tongue River valley region of southeastern Montana. Coal harvested from the Spring Creek, East Decker, and West Decker mines located along the Wyoming state line will be transported to Midwestern coal markets via this new railroad. The Tongue River Railroad (TRR) offers a direct, downhill route from Sheridan, WY to Miles City, MT, and provides access to the future Cook Mountain and Montco mining projects located near Ashland. The TRR traverses across Big Horn, Rosebud and Custer counties. Although the alignment does not encroach on to reservation lands, a 39-mile segment of the TRR alignment is adjacent to the Northern Cheyenne Indian Reservation.

Hatch Mott MacDonald

Kin Chow, PE

Education
BS, Civil Engineering, Polytechnic University of New York, 1979

Registration
NCEES Certification #[redacted] 2000

Professional Engineer
NY-[redacted], 1985
NJ-[redacted] 1986
PA[redacted], 2001
CT[redacted],2002
SC-[redacted] 2006
FL[redacted] 2001
MI-[redacted] 003

Years of Practice – 30

Memberships
National Council of Examiners for Engineering & Surveying
American Association of Airport Executives
American Petroleum Institute
National Petroleum Management Association
Society of American Military Engineers

Experience Summary

With over 30 years in the profession, Mr. Chow has been responsible for project administration and negotiations and managing the firm's multi-disciplinary projects. These have included new construction, renovation and rehabilitation of administrative, educational, institutional, residential, commercial, municipal, industrial and operations, vehicle and aircraft maintenance facilities; site planning, site utilities, pavement design, parking facilities, fire protection, water supply and storage systems, drainage systems and flood control and aviation systems.

Mr. Chow has been directly in charge of the firm's vast petroleum systems capability including fuel delivery and storage facilities, aviation fuel systems, aircraft hydrant fueling systems, underground fuel storage tank systems, aboveground bulk fuel facilities and fueling systems master planning. He possesses comprehensive design of industrial, aviation and petroleum fuel facilities for numerous International Airports and Military installations throughout the country. He has extensive knowledge and working experience with the Federal Aviation Administration using the latest petroleum system equipment industry standards. Over the years, Mr. Chow has been involved in the design and construction of fuel farms for storage, pumping and distribution of fueling systems for numerous projects. Mr. Chow has been Program Manager, Project Manager or Lead Designer on over 500 projects for numerous municipal, public, private and governmental clients.

Select Project Experience

Repair Aerospace Ground Equipment (AGE) Facility, New York Air National Guard, Stewart Air National Guard Base, Newburgh, NY

Program Director for design services to modify the existing AGE facility, including the addition of a wet pipe sprinkler system, renovation of toilet rooms, inclusion of a bridge crane in the maintenance bay and improvements to the mechanical systems.

Conditions Assessment Surveys, New York Air National Guard at Stewart International Airport, Newburgh, NY

Program Director responsible for technical inspections of the current conditions of the Airport's mechanical, fire protection and aircraft fuel storage and dispensing systems in support of the PANY&NJ'S negotiations to acquire the existing airport operations lease from the existing lease holder. Inspections were performed on the Main Passenger Terminal, Hangars A and B and Fuel Storage and Dispensing Facilities.

Repair Water Distribution Systems, New York Air National Guard Base at Stewart International Airport, Newburgh, NY

Program Director responsible to analyze the existing water distribution system and to determine the type and extent of repairs needed to improve the quality of the potable water delivered to each building at the Base.

Relocation of Base Entry Road, New York Air National Guard at Francis O. Gabreski Airport, Westhampton Beach, NY

Program Director/Project Manager responsible for the development of three different alternatives to solve the problems with the vehicular traffic circulating through the Main Gate and the South Gate that communicate the National Guard Facility with the main public road.

Renovate Munitions Maintenance Trailer Shop, New Jersey Air National Guard at Atlantic City International Airport, Atlantic City, NJ
Program Director responsible for design and construction services to repair the 177th Fighter Wing's trailer shop.

Upgrade, Repair Hydrant and Isolation Valve Pits/Repairs to POL Product Reclaim Systems
New Jersey Air National Guard at McGuire Air Force Base, NJ
Program Director for the evaluation and design services to develop the construction documents necessary to address deficiencies in the POL and hydrant fueling systems serving the Air National Guard at McGuire Air Force Base.

Repair Building 3327, New Jersey Air National Guard, McGuire Air National Guard Base, Wrightstown, NJ
Program Director responsible for design for the renovation of an existing Building (26,000 square feet) to house facilities for Wing Headquarters, Comptroller, Inspector General, Public Affairs, Support Group, Support Services, JAG, Chaplain and Honor Guard for the 108th Air Refueling Wing.

C-17 Alter General Maintenance Hangars, US Army Corps of Engineers, March Air Reserve Base, Riverside, CA
Program Director responsible for design of alterations to the existing fuel cell hangar and existing multi-purpose maintenance hangar to accommodate KC-135 aircraft maintenance hangar and C-17 aircraft; modified lighting, reconfigured tool cribs and administrative offices, electrical/fuel fume ventilation system and hangar doors.

Construct Power Source Virtual Testing Facility, US Army Corps of Engineers, US Army Garrison, Fort Monmouth, NJ
Program Director for the preliminary design of a one-story facility with approximately 21,000 square feet in floor area that houses a Research Development and Engineering Center and a Logistics Readiness Center.

HVAC Repairs, Buildings 300, 301 & 302, US Navy, Naval Marine Corps Reserve Center, Stewart International Airport, Newburgh, NY
Program Director for design of modification of the existing air handlers, fans, pumps, dampers, valves etc. and connection to the Building Automation System. Included complete installation of a Building Automation System; replacement of exhaust fans, actuators for motorized dampers associated with exhaust fans and repair/replacement of hot water heating system pumps; test and balance heating, ventilation and air conditioning systems.

Repair Building C-39 for MSNAP Training, US Navy, Naval Weapons Station Earle, Colts Neck, NJ
Program Director for design and construction services to convert an existing barracks building (Building C-39) into a training facility complete with offices and other ancillary spaces including training areas, toilet facilities and kitchenette and lounge areas for the Merchant Ship Naval Augmentation Program (MSNAP). The program, developed by MSNAP with Public Works Engineering included renovations to the interior and exterior of the barracks building, modifications to the existing parking lot and landscaping adjacent to the building.

Field Maintenance Shop, NYS Office of General Services, Queensbury Industrial Park, Queensbury, NY
Program Director for the design and construction of a new 16,400 square foot Field Maintenance Shop. The new state-of-the-art facility accommodates the administration, storage and maintenance of military vehicles assigned to the Army National Guard unit. The new building includes administrative and office areas, classrooms, personnel area (bathroom, lockers, etc.), work bays for tractor trailers and other vehicles, battery room and flammable material storage, instrumentation repairs, small arms repairs and vault, bulk Petroleum Oils Lubricants (POL) storage and controlled waste facility and an enclosed unheated storage area. Special mechanical systems include separate lube oil systems, compressed air and tail-pipe exhaust systems.

Hatch Mott MacDonald

John Recco III, PE

Education
BS, Civil Engineering, Polytechnic Institute of New York, 1991

Registration
Professional Engineer:
NY- [redacted] 2001
OSHA Confined Space Entry, 2004

Years in Practice - 19

Memberships
American Society of Civil Engineers

American Petroleum Institute

Experience Summary

Mr. Recco is one of the Lead Engineers for the firm's petroleum fueling systems projects. He has over 19 years of extensive experience in the design and construction management of petroleum systems, utility systems, and drainage plan preparation. Responsibilities include project design, project administration, feasibility studies, consultant coordination, and construction documentation. Mr. Recco possesses the capability to handle multiple task orders simultaneously. His experience also includes performing field investigations, design review, coordination, permitting, and construction inspection services. He is knowledgeable of the latest petroleum system equipment industry standards, safety, and environmental regulations.

Mr. Recco has also been involved in the planning, design, construction, maintenance, and upgrade of civil/sitework projects including site planning and development, pavement systems, site utilities, grading and drainage systems, and storm water management systems.

Most recently, Mr. Recco has mainly been involved in the project management of fueling systems projects for an On-Call Contract with the Port Authority of New York & New Jersey for the design of USTs and Aviation Fueling Systems and for a Military Fuel Design/Build IDIQ Contract with the US Army Corps of Engineers Omaha District's POL Center of Expertise for petroleum, oil, and lubricants, fuel storage complexes with associated fuel distribution systems for Army and Air Force Bases and installations Nationwide.

Selected Project Experience

Camp Edwards CACTF Homeland Security Feasibility Study for the Massachusetts Army National Guard, Camp Edward, MA

Project Manager responsible for a feasibility study of the HVAC, electrical, and telecommunications systems for the construction of a new Combined Arms Collective Training Facility (CACTF). Work involved identifying requirements, developing project documentation, proposing project sites, identifying and outlining site development processes for proposed projects. The CACTF simulates an urban warfare environment complete with roads, alleyways, underground infrastructure, parks, and 17 buildings.

Temporary Fueling Facilities (Design/Build), US Army Corps of Engineers, Fort Drum, Watertown, NY

Project Manager/Engineer responsible for design documents for temporary fueling station facilities for a design/build project. The design included the installation of aboveground fuel storage tanks, fuel dispensers, fuel off-loading equipment, fuel gauging/hi-level alarm/overfill prevention equipment, oil/water separators, site grading and drainage, pavements, electrical power, and controls.

Installation of Bottom Loading System, US Army Corps of Engineers, Fort Irwin, CA
Project Manager/Engineer-of-Record for this design/build project which involved design documents to convert three existing top loading fill stands to bottom loading.

Underground Storage Tank Upgrades for Regulatory Compliance, The Port Authority of New York & New Jersey, Various Port Authority Bridge and Tunnel Facilities
Project Manager/Engineer responsible for the inventory and assessment and design documents to remove/replace underground storage tanks at various Port Authority Bridge and Tunnel facilities. The project involved the evaluation of all underground storage tanks at the TB&T Facilities against all applicable underground storage tank (UST) Federal, State and local codes and regulations. Also responsible for development of UST monitoring program information binders containing pertinent testing, design drawings, system pictures, and record documents for each UST.

Storage Tank Inventory and Survey, The Port Authority of New York & New Jersey,
Various Port Authority PATH Facilities
Project Manager/Engineer responsible for inventory and assessment of underground storage tanks at various Port Authority PATH facilities.

PATH – Engineering Support Services for Inclusion of RPZ Units into Database Management System, The Port Authority of New York & New Jersey, Port Authority PATH Facility
Project Manager responsible for database management services (configuration and input) for RPZ units identified and itemized by the Port Authority.

Meadowlands Maintenance Complex Facility Expansion, NJ Transit, Kearny, NJ
As Project Engineer, responsible for preliminary and final design to relocate system structures to accommodate the expansion of lift stations, underground tanks, waste compactors, and oil/water separators for the expansion of the Meadows Maintenance Complex. The expansion included the construction of a new 7,500 square foot train washer and 2,400 square foot support building, the expansion of the service and inspection building, the expansion of the car hoist building, the addition of a wheel boring, parts cleaner, wheel press, and hot lube oil tank, and the construction of a new 6,560 linear foot Switching/ Layover Yard and related components.

Southern New Jersey Light Rail Transit System, NJ Transit, Camden, NJ
Project Engineer responsible for providing contract documents for the construction of a new diesel fueling system including aboveground storage tanks, truck unloading station, and fuel dispensing systems.

Fueling Facility for NYCDEP Pike Street Garage and Yard Facility, New York, NY
As Project Engineer, designed the upgrade to the existing fueling facility to accommodate the DEP's needs and requirements for additional program space and utility upgrades. The design included fuel storage tanks, fuel delivery system, fuel dispensing system, fuel inventory and monitoring system, fuel leak detection and alarm system, and Types I & II vapor recovery system.

Hatch Mott MacDonald

James Armstrong, PE

Education
BS, Mechanical Engineering, SUNY at Buffalo, 1976
AAS, Mechanical Engineer, SUNY at Farmingdale, 1967

Registration
Professional Engineer:
NY- [redacted] 1978
Costa Rica –TEMP- [redacted] 2009

Years of Practice – 39

Memberships
American Society of Mechanical Engineers

Experience Summary

Mr. Armstrong has over 39 years experience in project management, facility planning and engineering for aircraft fueling equipment and systems, design of airport fuel storage and dispensing facilities, specialty aircraft refueling vehicles for NASA's 747 Shuttle Carrier, army water transport trucks, fire trucks, military specialty fire fighting trucks, fuel and water metering and pumping systems, facility design including civil, mechanical, and electrical systems, quality control, and all research and development. He has expertise in the design and application of various ground service pits, stationary fueling equipment, mobile fueling equipment, power generation systems, large and small tank farm configuration and design, and aboveground and submarine pipelines.

Mr. Armstrong has performed master planning, facility planning, technical studies, and analyses for various facilities in the marine environment. He has provided technical assistance during construction for all aspects of mechanical engineering for projects such as airport terminals, schools, large postal facilities, munitions testing facilities, correctional facilities, parking garages, tank farms, industrial buildings, medical buildings, and site utilities. He is responsible for United States Patent 4,669,625 "Easy Open Lid" for large aircraft ground service pit covers.

As an Associate with Han-Padron Associates, Mr. Armstrong performed Project Management, master planning, facility planning using the visioning methodology, technical studies, and analyses for various facilities in the marine environment. Projects included the preparation of the Norfolk Naval Ship Yard Waterfront Development Plan; preparation of permit application documentation for an offshore scientific monitoring station and a electric power station for the Cape Wind 440 MW wind turbine generation station in Nantucket Sound, MA; technical consultant for the installation of a Kinetic Hydro Power Generation project (hydro turbines) in New York City's East River; marine terminal feasibility studies; design of floodgates for shore protection; final design of a major port extension for container ships in Port Raysut, Oman; tanker terminal feasibility study for coastal tankers in Oman; ferry terminal marine works design; and tanker/barge berth modernization and upgrade.

In addition, Mr. Armstrong was the Director of Technical Support for the Facility Services Division of Ogden Corporation providing technical as well as project sales and implementation support including site surveys, staffing analysis, staffing requirements, organizational configurations, staffing and materials / subcontracting costs, budget analysis and determinations, proposal preparation, technical assistance for project start-up, development of site operation plans, development of maintenance procedures and frequencies, development of standard procedures, pre-qualification of Architects and Engineers for capital improvement projects at client's sites, pre-qualification of Ogden for NY City agency Program Management work, trouble shooting and on-site and off-site correction of "problem" contracts, development of project and site management procedures, and participation in client presentations and interviews.

Select Project Experience

Repair Fuel Pits, Restore Fuel Storage, Construct Fuel Point, Construct Containment and Install Stairways, (Design/Build), US Army Corps of Engineers, Fort Hood Army Airfield, TX
Project Manager/Engineer responsible for engineering design services and minor construction support services related to the upgrade of the existing fuel farm facilities for five

separate projects including: Repair Fuel Pits at Fort Hood Army Airfield; Restore Diesel Fuel Storage and Issue Capability; Construct E-85 Fuel Point at West Fort Hood Tank Farm; Construct Spill Containment at Robert Gray Rapid Refuel Area; and Install Stairways at Robert Gray Army Alert Tank Farm.

Upgrade J3 Pump House (Design/Build), US Army Corps of Engineers, Davis Monthan AFB, Tucson, AZ
Project Manager/Engineer responsible for design and construction support services to renovate the pump house located at the Air Force Base. Work involved modifying existing underground piping systems from the pump house to hydrant and meter pits; providing aboveground and underground piping with leak detection; concrete pavements, and modifications to pump control panel and instrumentation panels.

Repair Water Distribution System, New York Air National Guard at Stewart International Airport, Newburgh, NY
Project Manager responsible for developing a study report complete with a budget construction cost estimate to reduce the potable water turn-over rate to improve water quality and to establish the basis of the final detailed design and construction bid documents. Work included a preliminary piping system configuration and preliminary pipe sizes for a new potable water distribution system to service all buildings, performing a hydrant flow test to determine the available water flow rate; calculating the potable water demand for each plumbing system; determining the fire water and non-potable water demand; determining the fire water/non-potable water storage requirement; analyzing the water distribution system configuration to determine the best location to isolate the fire demand system from the potable water demand system using the water supply.

New York City Transit Authority, Inspection of the first 837 Transit Buses for New York, NY
Project Manager for the inspection of the first 837 General Motors Corporation transit buses to be delivered to the City of New York as replacements of the Grumman Flexible transit buses. The inspection was conducted in Pontiac, Michigan and successfully managed from New York. Bus structural components and bodies, drivelines, suspensions, steering, electrical, air conditioning, control systems, interiors and exteriors were inspected, reports of deficiencies issued and repairs inspected, and vehicle data and shipment data were recorded and forwarded to the New York City Transit Authority for payment and logistics considerations.

New York City Transit Authority, Rehabilitation of Eight (8) Bus Depots
Project Manager for the construction services phase of the rehabilitation of eight New York Transit Authority bus garages built in the early 1900s. The rehabilitation work included the upgrading of the HVAC systems, boiler replacements, plumbing system modifications related to the installation of new bus washing equipment, structural modifications for the mechanical equipment, roofing system replacement and replacement of the defective underlying structural components of roofs, new vehicle exhaust systems, new vehicle maintenance pit ventilation systems, and electrical work in association with the mechanical rehabilitations. The work included conducting periodic construction meetings with contractors, issuing directives as required, processing contractor's requests for payment, issuing of change notices, estimating the value of the change notices, negotiating the change notice price with contractors, managing the resident inspectors at each of the eight sites, filing monthly progress reports, reviewing the resident inspectors daily log books and their individual and collective performance, and providing additional design services to remedy latent conditions that developed during construction such as designing a repair of the roof structure where a small piece of construction equipment fell through the roof of the 146th street bus depot into an electrical duct bank.

Employment History
Han Padron Associates (1996 - 2004)
Ogden Facility Services (1994 - 1996)
Ammann & Whitney Consulting Engineers (1989 - 1994)
Garsite Products, Inc. (1984 - 1989)
Frederic R. Harris Consulting Engineers (1981 - 1984)
Burns & Roe Consulting Engineers (1976 - 1981)
Dravo VanHouten Consulting Engineers (1975 - 1976)

Michael J. Brothers

Project Manager / Construction Manager

Michael J. Brothers has 21 years of experience in project and construction management, project administration, and budgeting for various projects. He has created scopes of work and provided plans for project implementation; coordinated subcontractors, consultants, architects, engineers, and vendors; worked on project budgets, schedules, bid negotiations, bid packages, change orders, and site logistics; and managed requests for proposals and potential change orders. Mr. Brothers has also overseen the design and construction of retail, hotel, and restaurant projects ranging from a 1.5 million square feet retail outlet to a 60-room boutique hotel. His specialized computer software skills include AutoCAD 2000, and he has a working knowledge of French.

Recent and Relevant Experience

Jet Blue Terminal 5, JFK International Airport, OTG at JFK T5 Venture, LLC, New York, New York.

Hill International provided Owner's Representative services for the interior fit-out of 22 individual food concession spaces located inside Jet Blue Terminal 5 at JFK International Airport. The development consists of various concessions located throughout the 635,000-square-foot terminal. Hill was responsible for contract administration, project controls, coordination of design issues with the design team, and liaison between the owner and contractor.

Various Projects, Cultural Institutions Unit, New York City Department of Design and Construction (NYCDDC), New York, Project Manager.

Hill International is providing program management and oversight for several projects for the NYCDDC for renovations, alterations and expansions to museum, libraries and zoos. Hill holds the contracts with each contractor in compliance with the City's procurement regulations for design and engineering services by architects under contract with the NYCDDC. Mr. Brothers is Hill's Resident Engineer and is responsible for the New Plaza and Auditorium for the Brooklyn Public Library project. Prior Experience:

Jazz at Lincoln Center, New York City Department of Design and Construction, New York, Project Manager.

Working for a major national general contracting and construction management firm, Mr. Brothers served for three years as Project Manager for this 101,000 square foot, $120 million theater project. His responsibilities included overall project coordination, acting as a liaison to the client. He was responsible for insuring the project's success, including quality, financial performance and delivery to the client. He also oversaw all budget issues, contract negotiations, engineering, safety, daily performance, and adherence to project schedules. He also was responsible for OSHA requirements and

Education:

B.A., Architecture, Temple University, Pennsylvania, 1995

Professional Memberships:

Project Management Institute

Awards / Honors:

Project Manager of the Year, Hill International, Inc. (2008)

Employment History:

Self-Employed General Contractor, 1986-1990

Ray King Studio's, 1990-1995

Rockwell Group, 1996-1999

Theo Kalomirakis Theaters, 1999-2001

Turner/Santa Fe, 2001-2004

Turner Construction Company, 2004-2005

Hill International, Inc., 2005-Present

City of New York Building Department, Construction, Life & Safety Code compliance. Working for an institutional client on this project, required maintaining up-to-date, impeccable records and meticulous bookkeeping at all times.

Various Ultra High-End Residential Entertainment Projects, Theo Kalomirakis Theaters, New York, Director of Design and Production.

The company specialized in high-end residential entertainment design. Mr. Brothers served as the primary contact for an exclusive residential client base. He was involved in each project from creation of the initial contract to the final turnkey and sign-off by the client. Project construction costs started at $800 per square foot, and sizes could range from a small one-room conversion to a 25,000 square foot, multi-level subterranean addition. All projects employed the latest cutting edge technology in all disciplines from architectural and structural to HVAC and MEP. Mr. Brothers' responsibilities included preparing all contracts, reviewing and cataloging all documentation, establishing schedules and budgets, and coordinating the progress of each project during all phases of design and construction. Working with high profile, multi-national clientele demanded a high level of quality and professionalism, strict confidentiality, a high level of tact, and advanced understanding of confidential project management. Projects, both residential and commercial, included:

- Tuscan Thunder, Sea Island, Georgia
- Davis Theater, Pleasant Valley, Arizona
- Winchell Theater, Las Vegas, Nevada
- Tsubota Complex, Newport Beach, California
- Iola Theater, Dallas, Texas
- Bronfien Theater, Baltimore, Maryland
- Yellman Theater, San Ramon, California
- Sussman Theater, Pleasant Valley, Arizona
- Kinsey Complex, Pebble Beach, California
- Kelleher Theater, Kalispell, Montana
- Klimik Complex, Newport Beach, California
- Laube Engel Theater, Big Sur, California
- Zahid Complex, Al Khobar, Saudi Arabia
- Silver Screen, Pacific Design Center, Los Angeles, California
- Design Center, Magnolia Hi-Fi, Seattle, Washington

Various Retail, Hotel, and Restaurant Projects, Hospitality and Entertainment Design Firm, New York, Project Architect.

Mr. Brothers was responsible for overseeing the design and construction of hospitality and entertainment projects. He created and monitored project schedules, prepared code analysis, established project files and notebooks, and coordinated and managed the progress of the project team. He also acted as liaison between principals and team members, made all design decisions, coordinated all phases of documentation, and reviewed all documentation. He assisted in bidding negotiations, and ensured that proper contract administration and construction administration were carried out. At the end of the project he completed project closeout activities. Mr. Brothers also served as Construction Administrator, Job Captain and Designer.

Karen Mohlenbrok, PE, PMP, LEED AP

Project Manager / Construction Manager / Project Engineer

Karen Mohlenbrok, a Project Management Professional, is a civil/construction engineer with more than 20 years of experience in the management, design and construction of a wide range of large scale civil engineering projects. Ms. Mohlenbrok's experience involves design and construction of waterfront structures, including capacity analysis of piers, bulkhead and pile repairs, wind, wave and current analysis, materials handling systems and utilities. Her experience also encompasses design and planning studies for mass transit, highway and bridge structures.

Recent and Relevant Experience

CM Build for NYC Schools, Various Locations, New York City Department of Design and Construction (DDC).

Ms. Mohlenbrok was Assistant Project Manager of Hill's $100 million school construction and rehabilitation project for the DDC. Hill International was retained to provide a DDC-type of construction management service called CM-Build for the New York City Department of Design and Construction's (NYC DDC) capital program to rehabilitate the City's schools. In this service, Hill International acted as an agent of the owner, but held the contracts. Hill also provided professional staff to the DDC for various assignments such as design review, building condition surveys, estimating, scheduling and special studies and assignments.

PM Support for Program Management Division--NJ Airports, Port Authority of New York and New Jersey.

Ms. Mohlenbrok was a Project Manager working on Hill's program management services contract for the Port Authority. Projects included:

- North Area Drainage - Western Section of Brewster Road: Directed the development of contract documents for the installation of a 5'h x 7'w concrete culvert and concrete chambers to direct large scale drainage flow to the on-site "Peddie Ditch." The project also included the excavation, on-site treatment and disposal of hazardous soil materials encountered during excavation operations.
- North Side High Pressure Water Line: Directed the development of a study to evaluate the high pressure fire protection system at the north side of Newark Liberty International Airport. The objective of the study was to determine if the operation of the fire pumps could have any influence on the reported sprinkler piping failures within tenant developed facilities.
- Backflow Prevention Devices for Buildings (Phases I, II, and III): Project Manager for a program to meet New Jersey Department of

Education:

M.S., Civil Engineering, Columbia University, 1996

B.S., Cum Laude, Civil Engineering, Syracuse University, 1985

Coursework, Civil Engineering, City University of London, 1983-1984, 0

Certificate, 4 Hour User/Erector Supported Frame Scaffold Safety Training, Total Safety Consulting, New York, 2006

Registrations:

Professional Engineer, New York

Project Management Professional

LEED Accredited Professional

Professional Memberships

Whos Who in Science and Engineering Among Young American Professionals and of Emerging Leaders in America.

Tau Beta Pi (Engineering Honor Society)

Chi Epsilon (Civil Engineering Honor Society)

Project Management Institute

American Society of Civil Engineers

Awards / Honors

Valentine Prize (City University of London)

George M. Berry Award for Technical Distinction

Team Spirit Award (The Port Authority of NY & NJ)

Employment History:

Sverdrup Corp., 1986-1990

Han-Padron Assoc., 1990-1993

DMJM & Harris, 1993-2001

Hill International, Inc., 2001-Present

Environmental Protection's Safe Drinking Water Act Regulations by installing backflow prevention devices and also requiring tenants to install backflow prevention devices at all water service lines within all existing buildings at the Newark Liberty International Airport.

- Building 42 - Install Landing Platforms for Ejector Pumps: Project Manager for the development of design documents for the installation of two landing platforms to improve the safety of ejector pump hoisting operations during servicing.
- Newark Airport General Sitework Work Order Contract: As Project Manager, developed and assembled a specification booklet, advertised project and received bids from contractors in terms of overhead and profit percent of mark-up for this "requirements type" contract used for performing various types of work at the Airport.
- Bay Water Pump Station - Cleaning of Intake Flume: Developed contract documents for the general removal and disposal of sediment in the intake flume, sediment chambers and pump station at Newark International Airport's Bay Water Pump Station located at Port Newark.
- Relocation of North Area Fire Alarm Cable and Installation of New Fire Alarm Pedestals: Supervised the design of new underground fire alarm communication and power cable, and the installation of new fire alarm boxes as manufactured by Gamewell Worldwide to tie-in to the City of Newark's Fire Department system.
- Terminal A-Replace Concrete Fascia Panel Clip Angles: Supervised the development of details for replacing steel clip angles connecting the pre-cast fascia panels to the concrete box girders along a bridge at the arrivals level at Terminal A. Allowance was made for thermal expansion with slotted holes drilled into the bent plate to accommodate movement in two directions.

Prior Experience:

Metro-North Commuter Railroad, Rehabilitation and Upgrade of Grand Central Terminal Sanitary Sewer System.

As Project Engineer, Ms. Mohlenbrok prepared monthly progress reports and schedules, supervised subconsultants, performed field inspections and testing, developed conceptual design alternatives report, and developed contract documents for new sewage ejector stations, drainage pump stations, piping, electrical controls and electrical power for accommodation of retail expansion and north end access improvement projects at Grand Central Terminal.

Old Colony Commuter Rail Line, Massachusetts, Massachusetts Bay Transportation Authority.

Ms. Mohlenbrok was Engineer responsible for the development of horizontal and vertical track alignment for the Old Colony commuter rail line.

Stony Brook Station Improvements, Stony Brook, New York, Long Island Rail Road.

Ms. Mohlenbrok was Assistant Project Engineer for detailed design for a new railroad station platform, track realignment, a handicapped access ramp, and at-grade crossing.

JFK 2000 Program, Queens, New York, Port Authority of New York & New Jersey.

As Project Engineer, Ms. Mohlenbrok performed detailed structural inspection and preparation of condition survey report and repair recommendations for JFK Airport Hangars 15 and 16.

Hatch Mott MacDonald

Andrew J. Thompson

Education
BEng (Hons) Mining Engineering, University of Newcastle-upon-Tyne, 1986

MSc Construction Management, University of Bath, 2006.

Registration
Chartered Engineer

Years in Practice - 23

Memberships
Institute of Materials, Minerals and Mining

British Tunnelling Society

Construction Management Association of America

Experience Summary

Mr. Thompson has extensive experience in the program/construction management, design management and contract administration of underground facilities for water, wastewater and transportation projects. He has project experience in a range of tunnelling and shaft-sinking methods, including TBMs (hard rock, EPB and slurry), raise boring, drill and blast and roadheader/mechanical excavation.

Select Project Experience

East Side Access Project, Metropolitan Transportation Authority Capital Construction, New York, NY

Program Manager - Construction. Reporting to the MTA-CC Project Executive and responsible for leading the Construction Management team on the FTA's largest (as of 2009) infrastructure project in the USA. The Project involves the construction of a new rail link to connect Long Island Railroad in Queens to a new terminal constructed beneath the existing Metro North Railroad Grand Central Terminal (GCT) in Manhattan. Includes the construction of seven miles of tunnels in Manhattan and Queens together with creation of two 1,200 foot long 60 foot high and 60 foot wide station caverns beneath GCT, as well as shafts, escalator shafts and associated caverns and tunnels for interlocking and crossovers, etc. Excavation of the Manhattan portion is undertaken using hard rock TBM's, roadheaders, drill/blast and raise bore techniques. Final lining of the tunnel elements includes the innovative use of permanent shotcrete lining, as well as pre-cast concrete linings, incorporating both systems elements and architectural finishes of the main station caverns which were procured using an Early Contractor Involvement approach, a first for MTACC. Construction in Queens includes excavation of tunnels using Slurry TBM's and pre-cast concrete segmental lining beneath active railyards and the LIRR and Amtrak main lines out of New York Penn Station. Sequential Excavation Methods in conjunction with ground freezing and jet grouting will be used to cross beneath NYCT Elevated tracks, as well as installation of over 25 new track switches and associated railroad systems.

East Side Access Project, Metropolitan Transportation Authority Capital Construction, New York, NY

Design Package Manager within the MTA Program Management Team with responsibility for managing the preparation of Construction Contracts. Responsibilities included: Management of the General Engineering Contractor's design activities, liaison with railroad force account and liaison with other Government Agencies. Also included preparation and review of specifications, Supplemental Conditions of Contract, establishment of milestones, contract packaging, risk analysis etc. Also responsible for implementation of Data Management system for all shift report data for underground contracts.

Seymour-Capilano Project, Metro Vancouver, BC, Canada

Provided advice and assistance concerning Target Cost Contracts for the preparation of the RFP for the completion contracts following default of the original Contractor. RFP was structured to include a Target Cost in addition to Unit Rate Proposal.

Edison Force Main Tunnel, Middlesex County Utilities Authority, Middlesex, NJ
Preparation of contract specifications, GBR, construction quantities, review of constructability issues for 3,900-foot tunnel to be constructed beneath the Raritan River using Pressurized face TBM and precast concrete segments. Review of procurement alternatives and preparation of contractor prequalification criteria and documents, which included liaison with owners counsel and NJ Department of consumer affairs to ensure no challenge could be initiated by contractors deemed to be non-qualified.

Western Regional Conveyance Tunnel, Northern Kentucky Sanitation District No.1, Northwestern Kentucky
Assisted in preparation and review of alignment alternatives, procurement options and selection of TBM and lining technology together with preparation of specifications, drawings and contract documents.

West Area Combined Sewer Overflow (CSO) Storage Tunnel and Pumping Station Facilities, City of Atlanta, Atlanta, GA
Resident Engineer responsible for construction management and supervision of the tunnels, shafts, associated intake facilities and pump station. The project included 8.5 miles of 27-foot diameter hard rock TBM tunnels, 1,600 feet of drill and blast connecting tunnels and deaeration chambers, four construction shafts of 45-foot diameter varying in depth from 150 to 300 feet, five auxiliary ventilation shafts and drop shafts up to 20 feet in diameter and constructed by raise boring, an overflow shaft and associated intake structures. The tunnels had to be partially lined with cast-in-place concrete final liner. The system will provide more than 150 MG of CSO storage for peak inflows in excess of 10,000 cfs with the largest vortex intake shaft capable of handling inflows in excess of 5,000 cfs.

Elizabethtown 72-inch Eastern Transmission Reinforcements, Phase 2, Elizabethtown Water Company, Somerset County, NJ
Resident Engineer responsible for the construction management and supervision on this 1,200-foot tunnel constructed beneath the Raritan River and D+R Canal. The tunnel was driven between two shafts in water bearing and contaminated ground using a Lovat TBM. Primary support of the tunnels was by full circle steel arch ribs and lagging and the final lining is a 72-inch grouted steel pipe. Shafts were constructed by liner plate and sheet pile methods in the soft overburden and then by mechanical and drill and blast methods in the rock sections. This contract utilized a two-stage target cost contract to manage the client's risk by incorporating the contractor's comments on constructability issues prior to completion of the final design to prepare a negotiated target cost.

Mersey Kingsway Tunnels Upgrading, Merseytravel, Liverpool, England
Project Manager responsible for the construction management of a two stage negotiated target cost contract utilizing NEC Option C for three new 50-foot long road level cross passages, together with two sub road level escape tunnels, between the existing operational twin tubes of the Kingsway Road Tunnels beneath the River Mersey. Following completion of comprehensive ground treatment and the installation of remote monitoring systems to check for lining deformations, the tunnels were driven by hand and track mounted hydraulic breaker in water bearing sandstone. The primary support utilized pre-cast concrete segments and a secondary cast-in place lining provided the final internal lining.

Employment History
Hatch Mott MacDonald (1988 - Present)
Anglo American Corporation (1986 - 1988)

Zhenqi (Jenchi) Cai, PhD, P.Eng.

Education
Ph.D., Geotechnical Engineering, Queen's University, Canada, 1992
M.Sc., Geotechnical Engineering, Queen's University, Canada 1987
B.Eng., Hydro Power Engineering, Hohai University, China, 1983

Registration
Professional Engineers of Ontario, [redacted], 1997

Years in Practice – 18
Memberships
Underground Construction Association of SME
American Society of Civil Engineers

Experience Summary

Dr. Cai is currently Tunnel Design Manager of HMM's New York City office. He has 18 years of engineering experience in heavy civil projects, including tunnel engineering for rail transportation, highways, and water/wastewater conveyance. His broad area of expertise encompasses site investigation, geotechnical and rock mechanics analysis, structural design, project management and construction supervision. Specific skills include the use of state-of-the-practice methods of analysis and design principles for underground structures excavated using either TBM, drill and blast, or sequential excavation methods. He is experienced in the design of deep shafts, slurry walls, underpinning, and support of deep excavations. Dr. Cai also has extensive site supervision experience of civil works and associated system installation interfaces for transit/rail projects.

Select Project Experience

Trans Hudson Express (THE) Tunnel Project, New Jersey Transit, Hoboken, NJ

Lead Tunnel Engineer and Proposal Manager for prebid design for the Palisades Tunnels Design Build Contract. THE Tunnel Project will provide two new tracks just south of Amtrak's existing Northeast Corridor (NEC) between the west side of the Frank R. Lautenberg Station and the west side of the Palisades in New Jersey. The proposed tunnels will then descend and turn under the Palisades through Union City, North Bergen, and Hoboken. The new tunnels will cross under the Hudson River from Hoboken and under the east shore bulkhead in New York City near West 28th Street, then continue east and pass under West 34th Street to the site of the new NY Penn Station Expansion (NYPSE).

THE Project's Palisades Tunnels design-build package starts east of Tonnelle Avenue and ends at the Hoboken Shaft on the eastern edge of the Palisades ridge. The design-build package includes the following:

- Construction of the 126-foot diameter Hoboken Shaft
- Construction of an approximately 300-foot long open cut and tunnel portal
- Construction of two 5,100-foot long parallel bored tunnels by tunnel boring machine (TBM)
- Construction of six emergency cross-passages at intervals of not more than 800 feet

The bid has been successful and the project is currently underway.

Elm Road Generating Station Water Intake Tunnel below Lake Michigan, Wisconsin Electric, Oak Creek, WI

Lead Tunnel Engineer responsible for tunnel design and shaft design for this design/build hard rock tunnel project. Project includes approximately 9,200 LF of 27.5 foot diameter tunnel in dolomitic limestone below Lake Michigan. Shaft sizes included 18-foot, 26-foot, and 30-foot through both soil and rock up to depths of 300 feet. Other responsibilities included development of Geotechnical Baseline Report as part of the successful contractor's bid, preparation of the tunnel/shaft-related method statements and specifications for the contractor. Completion of the new Elm Road Generating Station is anticipated for 2010, at which time both units will have an estimated 1,230 MW combined total output.

Kentucky East End Approach Tunnel, Kentucky Transportation Cabinet (KYTC), Louisville, KY

Deputy Project Manager and Lead Tunnel Engineer responsible for the preliminary design and geotechnical data and baseline reports for the $260 million, twin-bore 2,000 LF large

span cavern/tunnels (75 feet wide) in hard rock (limestone and shale). Scope of project included studies to determine optimal tunnel cross-sections and alignments; geotechnical and structural analysis and design of rock excavation and initial support including rock bolts, shotcrete, steel arches, lattice girders, and canopy tubing. Tasks also included the design of pilot bore explorations and pre-construction roadheader performance studies and testing programs. Tunnel design had to also consider homeland security issues, emergency response and egress, tunnel operational support systems, risk management studies, and public involvement.

Cross Sound Link Tunnel, Polimeni International, New York, NY
Lead Project Engineer for the conceptual design of this estimated $10 billion tunneled highway crossing of the Long Island Sound between Syosset and Rye, New York. Project involves construction of 18 miles of triple bore tunnel consisting of two 55-foot diameter running tunnels, each containing three traffic lanes in each direction and one central service tunnel of 38 feet in diameter. Expected ground conditions include rock, soil, and mixed face under the Long Island Sound. Excavation will be by pressurized face TBMs being driven to a mid-point sub-aqueous junction under the Long Island Sound. On completion, this will be the world's longest highway tunnel.

Atlanta CSO Re-Design of Construction Shafts, Drop Shafts, and Deaeration Chambers, City of Atlanta, Atlanta, GA
Design Manager responsible for the revised design and analysis of construction shafts, drop shafts, associated intake facilities and ventilation pipes for this $250 million project. The project includes 8.5 miles of 27 foot diameter hard rock TBM tunnels, 1,600 feet of drill and blast connecting tunnels and deaeration chambers, four construction shafts of 45-foot diameter varying in depth from 150 to 300 feet, five auxiliary ventilation shafts and drop shafts up to 20 feet in diameter and constructed by raise boring, an overflow shaft and associated intake structures. The tunnels will be partially lined with cast-in-place concrete final liner. The system will provide more than 150 MG of CSO storage for peak inflows in excess of 10,000 cfs with the largest vortex intake shaft capable of handling inflows in excess of 5,000 cfs.

Tunnel Option Study of the Brooklyn-Queens Expressway from Atlantic Avenue to Sands Street, Kings County, Brooklyn, NY
Lead Project Engineer for development and analysis of two three-mile rock tunnel scoping alternatives for the Scoping Phase of the BQE Feasibility Study. Two tunnel conceptual alternatives will be developed, a below grade tunnel under Brooklyn Heights within the existing expressway alignment and project limits and an at-grade tunnel enclosure of the existing triple cantilever section.

Heartland Corridor Clearance Improvements, Norfolk-Southern Railroad, Roanoke, VA
Tunnel Design Reviewer responsible for detailed design and constructability review of the underground tunnel modifications to enable double stack container trains a direct route from the Port of Norfolk through Virginia, West Virginia and into Central Ohio and Northern Kentucky. There are 28 tunnels that require sectional clearance improvements for the double stack trains with one tunnel "day-lighted" using sloped cut.

Employment History
Hatch Mott MacDonald Inc. (2005 - Present)
DMJM + Harris (2002 - 2005)
Bombardier Transportation (1996 - 2002)
Dept. of Civil Engineering, Royal Military College of Canada, Kingston (1992 - 1996)
Canadian Institute of Guided Ground Transport, Queen's University, Kingston, Ontario, Canada (1990 - 1992)

Amber Rose France, LEED AP

Project Manager / Construction Manager

Amber R. France has over nine years of experience in project management and scheduling for museums, stock exchange facilities, office buildings, community centers, and transportation projects, including airport terminals and highways. Ms. France has defined the scope of work for and managed various trades working on these projects. She has also created and updated progress schedules on a recurring basis in accordance with the various project requirements. Ms. France has also performed traffic surveys and translated them into models using the HCM program. Her specialized computer skills include MS Project, Primavera, Suretrak, HCM Traffic Modeling, AutoCAD and Prolog Manager.

Recent and Relevant Experience

Jet Blue Terminal 5, JFK International Airport, OTG at JFK T5 Venture, LLC, New York, New York.

Hill International provided Owner's Representative services for the interior fit-out of 22 individual food concession spaces located inside Jet Blue Terminal 5 at JFK International Airport. The development consists of various concessions located throughout the 635,000-square-foot terminal. Hill was responsible for contract administration, project controls, coordination of design issues with the design team, and liaison between the owner and contractor. As Resident Engineer Ms. France worked hand-in-hand with the architect, owner, governing agencies and contractor in coordinating and managing this very fast-paced project.

Bronx County Hall of Justice, Dormitory Authority of the State of New York (DASNY), Project Manager.

Hill International is providing change order services, punch list inspection, allowances, schedule delay analysis, parking garage and pre-cast inspection, and claims support services as part of DASNY's team. Hill also represents DASNY in dealing with subcontractors and other matters as required. Ms. France serves as Project Manager responsible for managing contractors' coordination issues and field conditions. Ms. France also reviews the work in place to verify quality assurance and to ensure that the necessary items are suitable for acceptance.

Schomburg Center for Research in Black Culture, New York City Department of Design and Construction (DDC), New York, New York, Resident Engineer.

The $10 million project was the renovation of the interior staff offices, galleries, reading rooms, and other public areas. Ms. France served as

Education:

B.S., Civil Engineering, Polytechnic University, New York, 1998

Certificate, 4 Hour User/Erector Supported Frame Scaffold Safety Training, Total Safety Consulting, New York, 2006

Registrations:

LEED Accredited Professional

Awards / Honors

2000 Interior Design/Fit-Out Project of the Year, for the NYSE Trading Floor Expansion Project

Employment History:

New York State Department of Transportation, 1996

Parsons de Leuw Cather, 1997-1998

AMEC/Morse Diesel International, Inc., 1998-1999

AMEC Construction, 1999-2004

Hill International, Inc., 2004-Present

Resident Engineer responsible for managing the general contractor, and the mechanical, electrical, and plumbing contractors' work. The project scope also included the demolition of the old mechanical units and the installation of a new chiller, cooling tower, air handling units, boilers, and associated equipment. The scope also included the installation of a curtain wall system that added floor space to the Schomburg. Ms. France prepared estimates and change orders for the client's information and action. She also took part in resolving conflicts by meeting with the client, the design team, and the contractor to determine feasible solutions to the coordination conflicts. She also revised and updated the overall project schedule on a regular basis and generated specific schedules as required by the client.

Weeksville Heritage Center, New York City Department of Design and Construction (NYCDDC), Brooklyn, New York, Resident Engineer.

The $15 million project is the construction of a new 23,172 square foot building, which will include a multi-purpose room, black box theatre, exhibition space, educational workshops, a gift shop, resource center and library, administrative offices and conference room, and facility support system spaces. The building will accommodate the current program operated by the Society for the Preservation of Weeksville and Bedford- Stuyvesant History. The project is currently in pre-construction phase, and Ms. France is responsible for review of construction documents for constructability and creation of the project schedule. She will serve as Resident Engineer during the construction phase and will monitor and manage the day-to-day activities of the project, ensuring that the project is governed by NYCDDC standards. Prior Experience:

Museum of Modern Art Expansion, New York, New York, Project Manager/Assistant Project Manager.

As Project Manager/Assistant Project Manager on this $265 million project to renovate the galleries, offices and back of house spaces, as well as the construction of new gallery floors, a 16-story office tower and machine rooms, Ms. France defined the scope of work for and managed the miscellaneous metals, elevators, escalators, millwork, and window washing equipment trades.

New York Stock Exchange Trading Floor Expansion, New York, New York, Project Manager/Assistant Project Manager.

The $30 million expansion of the trading floor included the installation of state-of-the-art trading booths and kiosks. Ms. France helped to define the scope of work for and managed various trades, including the millwork, ornamental, and glass work. The work involved the coordination of the trades' work with the data device interface.

New York Stock Exchange (NYSE) Supply and Exhaust Fan Replacement, New York, New York, Project Manager/Assistant Project Manager.

Ms. France managed the mechanical and electrical work which involved the installation of new supply and exhaust fans and air handling units for the NYSE maintenance areas and cafeteria. The new fans and units were constructed and tied into the existing systems with minimal schedule shutdowns. The project scope also included the demolition of the old mechanical units upon the testing and operation of the new fans and units.

Marco V. Levoyer, PE

Education
BEng, Civil, Stevens Institute of Technology, 1986

Registrations
Professional Engineer
NJ, [redacted], 1991
FL, [redacted] 2009

Years in Practice – 23+

Memberships
American Society of Civil Engineers

American Concrete Institute

Training
Load & Resistance Factor Design Seminar – 2000

NHI Value Engineering Workshop – 2001

AECOM Project Management Training - 2001

Strengthening Structural Steel Beams - 2009

Innovative Designs for Intersection Capacity - 2009

Skyline Applications for Foundation Steel – 2009

Experience Summary

Mr. Levoyer has over 23 years of experience in design, construction, inspection, and management of transportation engineering projects. His experience consists of scoping, conceptual, preliminary, and final design for highway and railroad projects, including the development of plans, specifications, and estimates. In addition, his professional background includes construction inspection, inspection and evaluation of existing structures, construction support services, and temporary structures engineering.

Select Project Experience

Rehabilitation of Parsonage Hill Road Bridges, Essex County, NJ

Project Manager for design and construction inspection services for the rehabilitation of bridges carrying Parsonage Hill Road over Canoe Brook and JFK Parkway. The Canoe Brook Bridge is a steel three girder-floorbeam span which required concrete deck replacement and floorbeam concrete encasement removal to improve the load carrying capacity. The JFK Parkway Bridge is a two-span precast, prestressed concrete voided slab beam structure which required a complete span replacement over southbound JFK Parkway and a partial span replacement over the northbound roadway.

Scoping Study for Bridges W7, W8 and W9, Monmouth County, NJ

Chief Bridge Engineer for a scoping study addressing three structures that connect two municipalities and serving as primary access for the area. Bridge W-7 (Green Avenue over Debbie's Creek), is a fixed, seven-span timber bridge supported by pile bents. Bridge W-9 (Brielle Road over the Glimmer Glass), consists of an historic, single-leaf, cable lift bascule bridge with rolling counterweights and 16 fixed timber trestle approach spans. The bascule bridge is believed to be the last of its type in the United States. Alternative studies for the structures were performed addressing regulatory, navigation, and cultural resources issues. Also involved oversight of life cycle cost analyses and support for environmental assessment phase of the project.

Replacement of the Sakonnet River Bridge, Rhode Island Department of Transportation, Tiverton, and Portsmouth, RI

Deputy Project Manager for peer review services for the design of the precast concrete segmental alternative of this 3,160-foot long bridge. The central 1,950-foot long main spans will be bid as segmental concrete and steel box girder alternatives. Peer reviews were developed at the 30% and 90% levels. Specific elements of work included contractor type cost estimating, construction methodology for foundations, piers and superstructure, design criteria review and a detailed superstructure design check.

Atlantic City Expressway, South Jersey Transportation Authority, Atlantic, and Camden Counties, NJ

Deputy Project Manager for the widening of the Atlantic City Expressway from milepost eight to 31. The widening provided an additional lane for a total of three travel lanes in the westbound direction. The project entailed extensive environmental/permitting tasks, hydraulics/drainage work, along with bridge widenings, new retaining walls and sign support structures, roadway lighting, and ITS facilities.

Driscoll Bridge Rehabilitation, New Jersey Turnpike Authority, Middlesex County, NJ
Project Manager for the rehabilitation of the approximately 4,400-foot long, high-level Garden State Parkway Bridge over the Raritan River and construction of a new parallel structure. The existing 129-foot wide bridge will be reconfigured to carry eight northbound lanes and shoulders. The rehabilitation will consist of deck replacement, structural steel replacement, and seismic retrofitting. Alternative bid designs were provided for the new 96-foot wide, seven lane, southbound bridge: post-tensioned segmental concrete and steel plate girder superstructures.

Route 29, New Jersey Department of Transportation, Mercer County, NJ
Principal Engineer for the final design of the Route 29 project in Trenton. This $70 million, design/build project included a twin-cell tunnel structure, a scour/retaining wall along the Delaware River, a 150-meter long multi-span vehicular bridge, two multi-span pedestrian bridge structures, seven retaining walls, and a sign structure.

Route 514 / Raritan Center Parkway Interchange, Middlesex County Improvement Authority, NJ
Principal Engineer for the replacement of the existing intersection with a grade-separated interchange carrying Route 514 over Raritan Center Parkway. Supervised structural design for this fast track project, which included a 100-foot long single span, steel plate girder bridge with pile supported substructures, three sign support structures, and two temporary retaining walls.

Ramp from Middlesex-Essex Turnpike to SB Garden State Parkway, New Jersey Highway Authority, Middlesex County, NJ
Project Manager for construction of a ramp adjacent to NJ Transit's MetroPark station to the SB GSP at Interchange 131B in Woodbridge Township. The project included substantial environmental coordination, an underground protective structure for a 48-inch water main, bridge widening, and retaining walls.

Yankee Stadium Station Pedestrian Bridge Piers, Metro-North Railroad, Bronx, NY
Project Manager for structural engineering services for the piers of the pedestrian bridge at the new Yankee Stadium Station on Metro-North's Hudson line. The station will provide service for the Harlem and New Haven lines on game days. The preliminary substructure design called for cast-in-place concrete piers; however, precast-concrete segmental piers with vertical post-tensioning were selected to expedite construction on this design/build project.

Route 27 & Evergreen Road, New Jersey Department of Transportation, Middlesex County, NJ
Project Manager for the construction of a replacement structure for the Evergreen Road Underpass carrying Amtrak's Northeast Corridor Line in Edison Township. The project was undertaken to alleviate substandard vertical clearance and roadway geometry at the underpass and improve traffic operations. The existing arch bridge was replaced with a roll-in structure.

McClellan Street Underpass, City of Newark, Essex County, NJ
Project Manager for a scoping study to repair, widen or replace the existing McClellan Street Underpass carrying Amtrak's Northeast Corridor (NEC) Line in the City of Newark. The project required engineering and environmental work to develop alternatives addressing the substandard vertical clearance at the underpass, alleviate existing flooding problems, and improve traffic operations and safety in the project area. One of the alternatives consisted of tunneling under the NEC embankment for a separate eastbound crossing.

Employment History
Hatch Mott MacDonald (2008 - Present
Weidlinger Associates (2006 - 2008)
DMJM Harris (1996 - 2006)
Bettigole Andrews & Clark (1986 - 1996)

Ronald J. Klinczar, PE, LEED® AP

Education
MBA Studies
BS Civil Engineering, SUNY at Buffalo, New York, 1986, M.C.L

AAS Civil Technology, Erie Community College, Buffalo, New York, 1979

Registrations
Professional Engineer
NY, # [redacted] 1990
OH, # [redacted], 1994
Leadership in Energy and Environmental Design (LEED®) Accredited Professional, The Green Building Certification Institute, 2009

Years in Practice – 31

Memberships
WNY Southtowns Scenic Byway Committee, 2008-present

Association of Bridge Construction and Design, WNY Chapter Historian and Past President

Engineering Society of Buffalo, Board of Directors, 2003-2005

Buffalo-Niagara Partnership, Transportation Committee

NYSDOT Statewide Conference on Local Bridges, Past Member, Steering Committee

Guest Lecturer, SUNY at Buffalo, Civil, Structural, and Environmental Engineering, Topic: Sustainable Design and the Environment

Workshop Director and Presenter, Managing Effective Public Meetings, Canisius College

Experience Summary

Mr. Klinczar has over 31 years of experience in the design and management of various transportation projects. He has managed several large highway, airport, water resource, and structural design projects from their initiation through public participation and document preparation, under both NEPA and State requirements. His background also includes transportation planning, traffic engineering, toll facility design, ITS design, and CSO facilities design. As Principal Project Manager, Mr. Klinczar is responsible for the overall design team and client coordination to ensure efficiency in work produced for clients. He also serves in a Senior Engineering capacity where he directs the design of larger and significant projects in the transportation field. Mr. Klinczar has undertaken many assignments of various size and complexity where he has been responsible for agency coordination, public participation, and serving as the client liaison.

Select Project Experience

Goodrich Road Drainage Study, Erie Co. Department of Public Works, NY
Project Manager for Hydrology and Hydraulic Study for assessment of closed drainage system alternatives. The study assessed flood conditions on adjacent streams, including backflow into Black Creek and to the surrounding communities. These conditions were evaluated to establish alternative closed drainage configurations and to estimate the flood flow at which any closed drainage system would be rendered inoperative. Soils types and sedimentation potential were also evaluated.

Design of Prospect Street Truss Replacement, NYSDOT, Niagara County, NY
(*Association for Bridge Construction and Design, WNY Chapter, 2005 Bridge of the Year*)
Senior Project Manager for the design of an 83m (268 ft) truss bridge over the Erie Canal, Lockport, New York. The new truss was required to be historically correct to satisfy the requirements of the SHPO. Adjacent to the truss foundation is a portion of the old Erie Canal wall, which consists of unmortared stone. Developed a concept to support the proposed retaining wall foundation while maintaining the integrity of the stone wall. Due to restrictions on sediment disturbance within the canal the truss was erected on a barge downstream of the final placement location, floated into place, and the barge sunk with water ballast to drop the truss on its bearings.

Design of Borden Street Bridge Replacement, NYSDOT, Erie County, NY
Project Manager for design Phases I-VI for preparation of design report, preliminary and detailed engineering, structural design, highway design and traffic signal modification for the existing two-span Borden Road Bridge over the Buffalo River for NYSDOT, West Seneca, New York. The structure consists of high piers and abutments founded on shallow bedrock at stream level. The design incorporated sheet pile wall retaining system, and improved the backwater flood channel by eliminating a pier restriction while not changing the hydraulic discharges downstream along the Buffalo River.

Emergency Rehabilitation of CR 27 Bridge, NYSTA, Montgomery County, NY
Senior Project Manager for the emergency inspection and rehabilitation of the County Route 27 Bridge (Moveable Dam 8) over the Erie Barge Canal/Mohawk River,

Montgomery County for New York State Thruway Authority (NYSTA). This five-span structure consists of three approach spans and two truss spans that support 16 moveable dam gates. The project involved the emergency inspection of the flood-damaged structure in conjunction with the completion of complete contract documents within six weeks. Design components included bottom lateral replacement, gate rehabilitation, inner bottom chord replacement, truss member rehabilitation, and a lightweight exodermic deck system design. Responsible for quality assurance and quality control management of the contract documents.

Rehabilitation of NY 103 Bridge/Moveable Dam, NYSTA & NYSDOT, Schenectady County, NY
Project Manager for a $14 million rehabilitation of the six-span, 750-ft long Route 103 bridge/moveable dam structure over Erie Barge Canal/Mohawk River, Rotterdam, New York, for NYSDOT and NYSTA. Responsible for all facets of the rehabilitation, including project scoping, preparation of a Canal Rehabilitation Project Report (CRPR), short-term mitigative measures, and preparation of contract documents. Scoping included an in-depth inspection and evaluation of all foundation, superstructure, gate/mechanical, electrical, and safety and access elements. A recommendation was made to completely replace the truss span decks, deck floor system, and north and south approach spans. The recommendations also included refacing truss piers, repairing scoured foundation areas, rehabilitating gates and mechanical systems, improving safety and access elements, and upgrading electrical system components.

Rehabilitation Study of Nine Moveable Dams on the Mohawk River, NYSTA, Montgomery, and Schenectady Counties, NY
Project Manager responsible for development and implementation of an evaluative program for the NYSTA involving determination of scope, concept and cost for rehabilitation of nine Mohawk Dam type truss structures. The evaluation included investigation of scour conditions and recommendation, and detailed design of scour countermeasures for truss foundations. Foundations consisted of piers, abutments and aprons founded on soft scourable rock. The third project included redecking and approach span replacement of a six-span bridge utilizing the moveable dam truss superstructure.

Design of Hulberton Road Lift Bridge Rehabilitation, NYSDOT, Orleans County, NY
Preparation of a Multidisciplined Canal Rehabilitation Project Report documenting deterioration and substandard features for a three-span truss lift bridge over Erie Barge Canal in Hulberton, New York, for NYSDOT. The report included results of in-depth inspection and level one load rating for the structure. Coordination of mechanical, electrical, and architectural inspections and recommendations.

Design of NY 98 Bridge Replacement, NYSDOT, Orleans County, NY
Preparation of a design report and preliminary studies for replacement of the Route 98 pony truss bridge over Marsh Creek in Carlton, New York. Alternative alignments were prepared and studied to determine least cost/benefit design. Potential impacts included removal of residential buildings and/or commercial structures, wetland acquisition and filling, involvement with SHPO deemed historic structures, erosion control and bank stabilization, and sequencing of construction to minimize negative impacts to commercial businesses.

Employment History
Hatch Mott MacDonald (2004 - Present)
Acres International Corporation, Amherst, NY (2001 - 2004)
TVGA Engineering, Elma, NY (1991 - 2001)
Acres International Corporation, Buffalo/Amherst, NY (1986 - 1991)
C&S Engineers, Buffalo, NY (1982 - 1986)
Soderholm Engineering, Depew, NY (1969 - 1982)

Mark A. Cosmedy, PE, Project Manager

Career Profile

Mr. Cosmedy has 30 years of experience in the construction industry, particularly in bridge design and inspection. He has managed projects for most NY agencies requiring bridge and transit expertise. In positions ranging from Project Engineer to Project Manager, Mr. Cosmedy has successfully completed projects while building valuable relationships with clients and fellow staff alike.

Project Experience

- **Port Authority of New York and New Jersey, Repaving of Hudson Terrace, Fort Lee, NJ**
  Served as Project Manager providing bridge design services for a widening of an existing bridge to improve turning radius from Hudson Terrace onto the upper level of the George Washington Bridge. A conceptual report with recommendations was prepared and final design services were performed.
- **Port Authority of New York and New Jersey, JFK Airport Bridge Repair, Queens, NY**
  Served as Project Manager responsible for the preparation of a concept report and preliminary through final plans for the design of repairs to 27 bridges located at JFK International Airport. Also provided support during construction including shop drawing review.
- **Port Authority of New York and New Jersey, LaGuardia Taxiway Strengthening, Queens, NY**
  Served as Project Manager providing construction inspection services for several projects on the structural deck at LaGuardia Airport including strengthening of the deck to support heavier loads from newer aircraft.
- **Port Authority of New York and New Jersey, LaGuardia Airport Taxiway Alignment, Queens, NY**

  Served as Project Manager for the preparation of preliminary through final plans for the installation of taxiway centerline lights on the structural deck at LaGuardia Airport. The lights had to be located away from the structurally-sensitive post-tensioning steel in the deck.
- **Metropolitan Transportation Authority Independent Engineering Consultant, New York, NY**
  Served as Project Manager providing independent engineering services on several large projects for the TBTA, Long Island Rail Road, Metro North Railroad and New York City Transit, including the Fulton Street Transit Center and the South Ferry Terminal Station.
- **NYS Department of Transportation, Van Wyck Expressway Rehabilitation, Queens, NY**
  Served as Assistant Project Manager responsible for three of the five monolithic Bridge Deck Rehabilitation Design stages. A 326-span viaduct was

Education

BS, Civil Engineering, Rensselaer Polytechnic Institute

inspected and contract drawings prepared for its rehabilitation. The work entailed overlay installation, slab repair /replacement, deck joint replacement, rehabilitation of drainage systems, and miscellaneous superstructure and substructure repairs.

- **NYS Department of Transportation, Preventative Maintenance of Bridges, Van Wyck Expressway/Grand Central Parkway Interchange, NY**
  Served as Project Manager responsible for the preventative maintenance design of five bridges on the Van Wyck Expressway/Grand Central Parkway Interchange complex. Work included development of new overlays, new bearings, and joint replacements.
- **NYS Department of Transportation, Nassau Expressway/John F. Kennedy Expressway, Nassau and Queens County, NY**
  Served as Structural Engineer responsible for various bridge and wall designs as part of the Nassau Expressway project in Queens, NY. Project tasks included several continuous and simple span steel bridges, as well as concrete retaining walls.
- **NYS Department of Transportation, Bridge Vulnerability Assessment, New York, NY**
  Served as Project Manager and Quality Control Engineer for the preparation of reports assessing the vulnerability of concrete details to failure for over 90 NYSDOT – owned bridges. Structural integrity Evaluations were performed for three of the bridges.
- **NYS Department of Transportation, Biennial Inspections, New York County, NY**
  Served as Quality Control Engineer for the 1998 portion of the inspection bridges in Manhattan.
- **NYS Department of Transportation, Biennial Inspection of the Outerbridge Crossing and the Bayonne Bridge, Staten Island, NY**
  Served as Quality Control Engineer for the approach viaducts and main spans of the facilities.
- **NYS Department of Transportation, Biennial Inspection of the Henry Hudson Bridge, New York, NY**
  Served as Project Manager and Quality Control Engineer for the biennial inspection of the approach and main spans of the Henry Hudson Bridge. The project also included deck evaluation reports for the four bridges including the lower level of the Henry Hudson.
- **NYS Department of Transportation, Biennial Inspection of Arterial Bridges, NY**
  Served as Team Leader for the inspections of 75 spans on arterial bridges in Manhattan and Bronx, as well as 150 inspections in Brooklyn and Queens.
- **NYS Department of Transportation, Biennial Inspection, Queens, NY**
  Served as Quality Control Engineer for 1993-1994 inspection of all bridges in Queens and Technical Adviser for review of same bridges in 1995-1996.

George Brosius, PE
Project Manager

Mr. Brosius has 40 years of experience in structural engineering and project management, primarily with bridges and buildings in the New York City metropolitan area. His experience includes familiarity with the criteria and standards of many New York agencies, including NYCDOT, NYSDOT, and the NYSTA.

Registrations
Professional Engineer (General): NY, 2005
Professional Engineer (General): PA, 1975

Education
B.S.C.E., Civil Engineering
Pennsylvania State University, 1970

Years of Experience
40

Years with Firm

PANYNJ Design of Five Bridges, Depressed Roadway and Retaining Walls for the Palisades Interstate Parkway Connector Ramp to the George Washington Bridge Lower Level Fort Lee, NJ
Principal Structural Design Team Leader for the design of the new, 2,700-foot long 2-lane ramp from the PIP to the lower level of the GWB, consisting of the following structures: a 200-foot long, 3-span composite concrete deck, curved, steel plate girder bridge carrying the ramp over Hudson Terrace in Fort Lee; three, 50-foot long concrete rigid frame bridges carrying local streets over the ramp; 200 feet of cantilevered concrete frame and retaining walls with concrete deck carrying the Service Street roadway over the ramp; and rock face tie backs at the toe of 180-feet of existing concrete retaining walls supporting Service Street. All ramp structures were designed in accordance with the AASHTO Load Resistance Factor Design Specifications except for the 3-span, curved, plate-girder bridge which was designed in accordance with AASHTO Load Factor Design Specifications including seismic design.

PANYNJ International Arrivals Terminal 4 at JFK International Airport Queens, NY
Structural Design Project Manager for the superstructure and substructure design of the landside arrivals and departures ramp bridges. The work included the structural design and preparation of drawings, specifications and quantity estimates for a total of 4,000-linear feet of multilane viaduct bridges carrying the terminal's arrival and departure levels traffic. The ramp bridge superstructures consisted of bifurcated, curved, continuous multi beam, steel plate girders with integral steel piers and concrete decks. The substructures consisted of pile-supported concrete piers and abutments and approximately 1,400-linear feet of retaining walls. The bridges were designed for AASHTO and the New York State Department of

Transportation Load Factor and Seismic Design Specifications, including soil liquefaction. The construction was staged to maintain traffic access to the terminal and 300-linear feet of temporary bridges were constructed to maintain terminal access throughout construction.

NYSDOT Bridge Design Phases I-IV for Rehabilitation of 8 Bridges at or near Grand Central Parkway/Clearview Expressway Interchange, Queens, NY

Senior Project Manager for Phases I-IV preliminary design for the rehabilitation and deck replacement of five, multi-level interchange bridges carrying the mainline Grand Central Parkway (GCP) and ramps over the mainline Clearview Expressway (CVE). The interchange bridges and ramps will be investigated to determine work for their restoration and safety upgrading. All existing environmental, operational and safety conditions will be documented, evaluated and incorporated, if feasible, in the final design phases. The two bridges on the 3rd level of the interchange consist of 4 simple supported spans, with multiple steel stringers, each carrying one lane of traffic from the GCP to the CVE. The two bridges on the 2nd level of the interchange consist of 2 simple supported spans, with multiple steel stringers, each carrying one lane of traffic from the CVE to the GCP. The bridges on the 2nd level cross northbound and southbound lanes of the CVE. All interchange bridges are supported by a common steel pier bent at the center of the interchange. The evaluations for rehabilitation of three, additional multi-span grade separation bridges crossing or conveying the GCP and CVE, are also included in this project.

NYSDOT Design Phases V-VI for Deck Replacement and Rehabilitation of Nassau Expressway/Southern Parkway Ramp Interchange

Senior Project Manager for Phases V-VI final design services for the rehabilitation of two, multi-level, bridges. The upper level of the interchange carries two lanes of traffic from Southern Parkway eastbound to Nassau Expressway eastbound. The middle level of the interchange carries two lanes of Nassau Expressway eastbound traffic over South Conduit Avenue. Both the upper and middle level bridges are three-span continuous superstructures with multiple steel girders. Phases V-VI design includes bridge live load ratings, fatigue analysis, seismic analysis and retrofit, preliminary design plans and PS&E contract documents for bridge rehabilitation, including deck replacement.

Michael Chelednik, AIA, CxA
Senior Architect

Mr. Chelednik has worked on multiple airline and transportation projects around the country in planning, design, security and management and has served as Architect of Record on numerous airline projects. He's been responsible for the design team, construction administration, and client relations, and understands that maintenance and operations people are responsible for the facility and is therefore an advocate of building commissioning and a firm believer in team work and collaboration. He has a passion to provide the best process to deliver a facility that is ideally suited for the Owner's requirements with sustainable operability.

Registrations
Registered Architect: AZ, CT, IL, MD, NY, TX, VA

Education
B.S., Architecture
Temple University, 1983
A.A., Architectural Engineering
Norwalk State Technical College, 1979

Affiliations & Memberships
American Institute of Architects, (AIA)
Building Commissioning Association (BCA),
AABC Commissioning Group (ACG)
United States Green Build (USGBC)

American Airlines JFK New Terminal 8 Project
JFK International Airport, NY
Architect of Record for several temporary facilities, including the Old Terminal Eagle Hold Room. When construction began Mr. Chelednik was asked by American Airlines to be on the Commissioning Team. As construction progressed, American asked Mr. Chelednik to be their Owner's Representative responsible for Commissioning and PANYNJ inspections for the new Terminal. In 2005, American Airlines asked TranSystems to take the design lead and Mr. Chelednik became the Architect of Record. His responsibilities included the design team, all of the design consultants, commissioning team, closing the PANYNJ punch list comments, construction administration and opening the remaining phases of the Terminal. The new Terminal was built between two existing Terminals; 8 & 9. The project had to be completed in phases while the existing Terminals were being operated.

American Airlines Partial Main Terminal, Concourse C and Tunnel, Terminal 8
JFK International Airport, NY
Owner's Representative, responsible for commissioning the Concourse and Tunnel, coordinating the concessions program, and Architect of Record for the Premium Services Lounge and five concessions. The Premium Services Lounge is for special waiting area for VIP guests flying on American Airlines.

American Airlines Remaining Main Terminal & Concourse B, Terminal 8 JFK International Airport, NY
Design Lead/Architect of Record, responsible for the Commissioning Team, construction administration and PANYNJ Inspection to attain permission for occupancy. When the new Terminal opened, existing Terminal 9 was demolished for the completion of the West Phase of the Main Terminal and Concourse B.

American Airlines Gates 14 / 16, Terminal 8 JFK International Airport, New York
Design Lead / Architect of Record, responsible for the Commissioning Team, construction administration and PANYNJ Inspection to attain permission for occupancy. With the completion of the West Phase, it was time to demolish old Terminal 8 and complete the final two gates on Concourse B East, Gates 14 /1 6.

American Airlines JFK Old Terminal 9 Eagle Hold Room JFK International Airport, Jamaica, NY
Architect of Record, responsible for consultant coordination, construction documents, construction administration and commissioning of the system for a new 7,500-square-foot addition with 6 gates, new elevator, escalators and stairs connecting to the existing AA Terminal. The program included Offices for American Eagle, rooftop HV/AC units, power distribution, toilets and fire alarm systems.

American Airlines JFK Terminal 9 Renovations JFK International Airport, Jamaica, NY
Project Manager, responsible for consultant coordination, construction documents, construction administration and commissioning of the systems for Terminal 9 expansion. An analysis of the mechanical, electrical and fire alarm systems was performed. Entire Terminal was renovated, including new mechanical equipment, provided redundancy for the 5kv power, and designed a new digital fire alarm system. New finishes, the infrastructure was upgraded, including toilets, communication closets and the electrical closets. A new Concessions program, new Admirals Club and offices were implemented.

American Airlines JFK New Terminal 8 Admirals Clubs at Concourse C JFK International Airport, Jamaica, NY
Architect of Record, responsible for consultant coordination, construction documents, construction administration and commissioning of the systems for AA's new 10,000 square foot Admirals Club

Employment History

John Snyder Architect	1984-1985
James Walden Architect	1985-1986
Charles Flayhan Associates	1986-1988
Silvester & Tafuro (now TranSystems)	1988-2004

Hatch Mott MacDonald

Erik Stromberg

Education

BS, Political Science, University of Washington

Masters of Marine Affairs, University of Washington, Seattle, Washington

Memberships

American Association of Port Authorities: Honorary Member, and member of Harbors, Navigation and Environment, Facilities Engineering and Maritime Economic Development committees

Transportation Research Board: Chairman, Asset Management and Enterprise Risk Management Subcommittee, Ports and Channels Committee

Coalition for America's Gateways and Trade Corridors: Member, Executive and Policy committees.

Experience Summary

Port industry executive with proven abilities in port authority and port industry leadership and management, program management, strategic and business planning, organizational development and communication.

Experience

Port strategic, business and transportation planning, government and public relations, risk and asset management strategies, project/program management, public/private financing strategies, and organizational development/governance assessments.

- Competitive Analysis of South Atlantic Ports—Commercial and environmental feasibility assessment for North Carolina State Ports Authority.
- North Carolina Statewide Logistics Plan, in conjunction with NC State University Institute for Transportation Research and Education, for North Carolina General Assembly.
- Seaport asset management program development for Transportation Research Board.
- Annual Marine Terminal Management Training Program development and on-site leadership for the American Association of Port Authorities.

Hatch Mott MacDonald

Ports and Harbors Practice Leader; Responsible for the development of HMM's ports practice; cultivating, managing and leveraging HMM's existing capabilities in multimodal transportation facility design and engineering, program and construction management, and alternative delivery strategies.

- Developed strategic teaming relationships with major and regional port planning and engineering firms to bid and win port projects.
- Actively engaged with port and maritime trade associations, government and academic organizations through presentations, papers and articles. Increased HMM's visibility throughout US and Canada.
- Introduced HMM's alternative delivery capabilities to port industry. Advised US ports on public/private partnership (PPP) strategies for landside access and facility development. Assessed PPP trends in US port industry for major international port client.
- Led HMM program development in areas of asset management and environmental sustainability for port and related freight transportation industries.
- Identified, assessed and solicited strategic hires and acquisitions.
- Won port and related freight transportation projects throughout the US and Canada with HMM cumulative revenues over $5 million.

Booz Allen Hamilton, Wilmington, NC, 2005

Port Practice Leader; Developed and led the maritime/port division within the firm's transportation strategic management consulting sector.

- Conducted feasibility analysis of a new port and industrial zone in the Middle East.
- Provided independent market and feasibility review of port expansion plans for major Gulf coast port.
- Assessed and recommended investment in ocean carrier service for a major international investment firm.
- Developed port security training programs for the US Transportation Security Administration.

North Carolina State Ports Authority, Wilmington, NC, 1995-2004

Chief Executive Officer. Responsible for all facets of NCSPA management, including

strategic and business planning, facility development, public and governmental relations, operations and security.

- Initiated and managed the largest capital development program in the State Ports' history, including the $440 million, 42-foot Cape Fear River channel improvement project and $130 million in marine terminal improvements and new construction.
- Led strategic, master facility and business planning efforts that provided the necessary credibility and basis for the revitalized capital support by the State of North Carolina.
- Grew revenues from $25 million to $30 million, flattened the organization and reduced employee headcount from 330 to 290.
- Partnered with regional economic development agencies and State Department of Commerce to bring port related business opportunities to North Carolina; created economic development team within port organization.
- Reactivated and teamed with the Ports Advisory Council—a statewide organization comprised of major importers and exporters.
- Diversified North Carolina Ports' customer base and strengthened all lines of business, including inaugural passenger cruise service.
- Transformed corporate culture at the Ports Authority to business-like objectives, management and operations, including the creation of the first NC Ports performance review and employee development program.
- Led organization in development of port security initiatives resulting from 9/11; established industry leading emergency planning protocols for hurricanes and security incidents.
- Extensive and successful relationships developed with local, state and federal government officials and agencies; testified before US Congress and NC General Assembly on port security, water resources, capital funding and environmental programs.

American Association of Port Authorities, Alexandria VA, 1985-1995
President and Chief Executive Officer, 1987-1995.
Spokesman and principal advocate for public ports throughout the western hemisphere, responsible for the development and conduct of all AAPA activities.

- Led port advocacy initiatives for US ports at national and international levels, expanding the influence of the AAPA and achieving success in critical port policy initiatives affecting US ports, including landmark water resources, tax, trade and intermodal surface transportation (ISTEA) legislation.Developed first-ever industry wide port public awareness campaign.
- Led the Association's inaugural strategic planning initiative.
- Expanded Association education and training programs to address port industry's changing business and public stakeholder requirements; fostered the development of the first-ever professional port management certification (PPM).
- Enhanced AAPA's presence and services among Latin and Caribbean ports, increasing membership and participation.
- Facilitated process changes in key policy committees to assure transparent and equitable decision making processes.

Federal Maritime Commission, Washington, DC, 1983-1985
Analyst, Office of Policy and Planning. Responsible for review and development of port industry regulatory policy, including implementation of the 1984 Shipping Act.

Office of Representative Glenn M. Anderson, Washington, DC, 1982-1983
Sea Grant Fellow and professional staffer assigned to Chairman's Anderson's subcommittee on Merchant Marine.

James V. Green, P.E.
Senior Engineer/P.E. Diver
Project Role: Senior Project Manager

Education:
M.S. Candidate, Structural Engineering, Manhattan College
B.S., Civil Engineering, Manhattan College, 1992
A.S., Engineering Science, Rockland Community College, 1988

Registration:
Professional Engineer: New York, New Jersey, Connecticut, Pennsylvania, Maryland, Delaware, Virginia, California

Certifications:
National Bridge Inspection Standards (NBIS), 2005 – Course [redacted]
American Red Cross – Adult CPR and Standard First Aid
Association of Diving Contractors, Commercial Diver Certification, [redacted]
Open Water Diver Certification, 1994
OSHA Confined Space Entry and Fall Protection, 2006

Work History:
1996-Present – McLaren Engineering Group
1995-1996 – The RBA Group
1993-1995 – NYC Department for the Aging
1991-1993 – New York State Thruway Authority
1985-1991 – 2x2 Development, Stony Point

Experience:
Mr. Green is a structural engineer and diver with over 19 years of experience. His background encompasses resident engineering, field investigation, and construction inspection services, as well as review of shop drawings, subaqueous investigation, and extensive structural design. He has worked on underwater inspection and assessment programs and construction inspection programs for the PANYNJ, NYCDOT, NYSDOT, ConnDOT, NHDOT, NJDOT, and the NYSTA. His background includes experience in all facets of structural and civil engineering design on the waterfront, including ferry terminals, shipping facilities, piers and wharves, and foundation engineering. He is involved in the preparation of permit applications, EIS documentations, and consistency review documents, and coordination with and between agencies on permitting issues to include the Army Corps of Engineers, the Department of Environmental Conservation, the Department of State, National Marine Fisheries Service, the Fish and Wildlife Service, and other local agencies.

- Design of an Oceanfront Pier, Ferry Terminal and Waterfront Destination; City of Long Branch, New Jersey; Lead Marine Engineer/ P.E. Diver for the full marine and structural engineering services needed for design and construction of a new oceanfront pier in Long Branch, New Jersey. The pier will include a multi-functional retail and entertainment facilities, a ferry terminal providing commuter access to New York City, renewable energy resources, and a learning center. The pier is a critical aspect of the City's redevelopment plan, enhancing its identity as a premier United States destination.
- New Jersey Marine Terminal Priority Marine Rehabilitation; for PANYNJ; Team Leader/P.E. Diver for the performance of expert professional engineering services for PANYNJ Contract 415-09-065. Mr. Green provided the necessary waterfront structural engineering services associated with the inspection, evaluation, design and preparation of contract drawings, construction cost estimates and construction phase services for the priority repair work orders.
- Port Elizabeth Berths 88-98 & Turntable; Newark/Elizabeth; for PANYNJ; P.E. Diver for a condition survey of Berths 88, 90, 92, 94, 96, 98, and Turntable located at Elizabeth – Port Authority Marine Terminal. Involved with underwater inspection of timber and steel piles, pile caps and extensions and assessment of the concrete

edge beam, wharf topside, and steel sheet pile bulkhead. Mr. Green assisted in the preparation of a report indicating inspection findings, presenting pertinent photographs, and making priority repair recommendations.

- Waterfront Structural Engineering Services for the New Jersey Marine Terminal; Elizabeth, NJ; for PANYNJ; Structural Engineer/Inspection Team Leader responsible for providing waterfront structural engineering services for the inspection, evaluation, and rehabilitation design for the New Jersey Marine Terminal structures. Mr. Green prepared contract drawings and construction cost estimates for priority repairs for the structures, which included berths, a turntable, mooring dolphins, and timber walkways.
- Underwater Condition Inspection of Bulkheads at Piers 2, 3, 4 & 5 at the New York Marine Terminal; Brooklyn, NY; for PANYNJ; P.E. Diver for this high and low-level inspection of the relieving platforms and bulkheads. The project involved visual inspection of all above water elements including the deck underside, edge beams, reinforced concrete pile extensions, and stay lathing/bracing, as well as detailed underwater inspection services for the bulkheads between Piers 2 and 3 and Piers 4 and 5.
- Underwater Inspection at JFK Airport; Queens, NY; for PANYNJ; Team Leader/P.E. Diver for the underwater inspection of a 3,000-foot-long timber pile system pier at Runway 4R. Included report preparation, underwater photos, and repair recommendations.
- Underwater Inspection of Piers 6, 7, 8, 9, 9A & 12 at the New York Marine Terminal; Brooklyn NY; for the PANYNJ; Team Leader/P.E. Diver for underwater inspection of more than 10,000 timber piles and bulkhead, including a 10 percent in-depth inspection to determine marine borer infestation. A comprehensive report was prepared including condition assessment, repair recommendations, and cost estimates.
- Engineering & Inspection Services for Marine Structures; Manhattan, NY; Battery Park City Authority; Inspection Team Leader/Structural Engineer for the repair of the esplanade including piles, precast concrete seawall skirt, and the riprap slope protection that surrounds the perimeter of the Battery Park City Authority parcel in lower Manhattan. Mr. Green was responsible for the assessment of and design of repairs for approximately 3,500 precast concrete piles that support the relieving platforms at the esplanade. He also helped perform a testing program to investigate "hot spots" (areas of significant deterioration), statistical analysis of inspection data, and development of repair alternatives with cost estimates.
- SUNY Maritime Rehabilitation and Expansion; Kings Point, NY; for SUCF; Senior Engineer responsible for design and construction services in a project involving the 200-foot extension of the college pier, an addition to the approach pier, and an expansion of the working pier. Mr. Green is also involved with the management of NYSDEC and Army Corp permitting processes. The project includes rehabilitation of floating docks, pile repair and bulkhead remediation.
- Williamsburg, The Edge Waterfront Development; Brooklyn, NY; for Douglaston Development; Senior Engineer for the physical inspection, preliminary pier design and management of permitting issues for this waterfront development project along the East River. Project responsibilities included inspection of piers and bulkheads, evaluation of soil conditions, site/civil inspection, feasibility studies for water related activities, and design drawings.
- Rehabilitation of the Astoria Site Waterfront Dock and Bulkhead; Queens, NY; Con Edison; Structural Engineer/Inspection Team Leader responsible for performing professional engineering, design and construction support services associated with the rehabilitation of the Astoria Site Waterfront Dock and Bulkhead. Mr. Green was responsible for developing repair and replacement designs for these structures. Structures included: sheet piles, rip-rap revetment, existing steel pile hardware, fender systems and pump station intakes.

Brian C. Moody, P.E.
Senior Engineer/P.E. Diver
Project Role: Senior Project Manager

Education:
1999, Manhattan College, MSCE, Structural and Geotechnical Engineering
1997, Manhattan College, BSCE, Structural Engineering

Registrations & Certifications:
Professional Engineer - New York
National Bridge Inspection Standards (NBIS), 2005 -- Course #[redacted]
Association of Diving Contractors, Commercial Diver Certification #[redacted]

Work History:
2004-Present - McLaren Engineering Group
1997-2004 – Thornton Tomasetti / LZA
9/95 – 12/95 – Eschbacher & Associates
6/95 – 9/95 – NYS Thruway Authority

Experience:
Mr. Moody has over 13 years experience with underwater condition assessment, inspection, and structural design projects. He has worked on all types of structures, including bridges, marine structures, canal structures, roadways, buildings, and foundations. His responsibilities have included inspection, design and analysis, report preparation, and construction inspection. He has worked on projects for the NJDOT, NJT, NYCDOT, NYSDOT, NYSTA, New York Canal Corporation, Port Authority of NY and NJ, EDC, NHDOT and for various NJ Counties. As a Team Leader and P.E. Diver, Mr. Moody has performed the above and below water inspection of many bridges, piers, bulkheads, dams, and culverts. Representative projects for include:

- Condition Survey Inspection of Berths 51-63, at Port Elizabeth Marine Terminal; PANYNJ; Team Leader/PE Diver responsible for the cyclical condition survey of the New Jersey Marine Terminal, Port Elizabeth Berths 51, 53, 55, 57, 59, 61, and 63. The condition survey included an underwater inspection of the treated timber piles, steel H-piles, steel pipe piles, timber bulkheads, and an above water inspection of the concrete pile extensions, deck soffit, and top of deck. A Conditions survey report was also provided.
- Condition Survey Inspection of Brooklyn Pier 12 and Bulkhead – New York Marine Terminal; PANYNJ; Team Leader/PE Diver responsible for the field survey of Pier 12. Services included visual inspection and a ten percent hands-on inspection of all timber, and steel piles; all pile cap beams and pile extensions; all exposed and accessible surfaces along the entire length of the timber and steel sheet pile bulkhead, including ultrasonic thickness measurements of steel sheet pile bulkhead and soundings were taken along the bulkhead; a twenty percent hands-on inspection of the deteriorated portions of the deck soffit; and a visual inspection of the concrete edge beam and wharf topside. A Conditions survey report was also provided.
- New York Marine Terminal Inspection of Piers 2, 3, 4, 5, & 11; Brooklyn, NY; for PANYNJ; Team Leader/Marine Engineer for underwater inspection and assessment of bulkheads (timber piles, steel H-piles, pile cap beams, pile extensions, steel sheet piles) between Piers 2 and 3, Piers 4 and 5 and along Pier 11. A topside inspection of the concrete seawall and wharf was performed to determine its general condition.
- Staten Island Homeport Bulkhead/Seawall Rehabilitation; Staten Island, NY; for NYCEDC; Engineer for the design and construction support services for long-term rehabilitation of a collapsed portion of steel sheet pile bulkhead located at Staten Island Homeport. Services provided include engineering analysis and design for a replacement tied back bulkhead. A full set of construction drawings and technical specifications were prepared, as well as construction cost estimates and assistance with bidding.
- Underwater Condition Inspection of Bulkheads at Piers 4, 5, & 11 at the NY Marine Terminal; Brooklyn, NY; for PANYNJ; Team Leader/Marine Engineer for the Underwater Inspection and Assessment of the bulkhead between Piers 4 & 5 and along Pier 11.

Brian C. Moody, P.E.
Senior Engineer/P.E. Diver
Project Role: Senior Project Manager

- Greenpoint Openspace Improvements; Brooklyn, NY; Team Leader/Marine Engineer for open space improvements that include a pier, waterfront esplanade, and a waterfront park with the objective of giving the community much needed recreational space, connecting residents to the waterfront and accommodating future ferry service. Services performed included underwater inspection of timber low-level relieving platform and concrete seawall, schematic design, and consultation for the proposed park.
- Condition Survey of the Hoboken Ferry Terminal - PANYNJ; Team Leader/PE Diver responsible for the condition survey which consisted of an above water and underwater inspection of all structural elements comprising the Hoboken Ferry Terminal including pile caps, beams, bulkheads, piles, deck surface, and underside. Specifically, the structures include the following: the Pullman Immigrant Building and Cordoned-off Pier, the Rail Pier, two barges (Floating Terminals), and associated ramps, passageways, and gangways. The purpose of the inspection was to determine the overall condition of the structures and to identify structural and non-structural deficiencies. A report of findings and repair recommendations was also provided.
- Civil Engineering Waterfront Structures Inspection Program – Former Kent Avenue Generating Station; Consolidated Edison Company; Team Leader/PE Diver responsible for the inspection of a 600 ft. bulkhead for the overall condition and structural integrity; the concrete intake and discharge tunnels; and the Ash Pit Wall along the Wallabout Channel. Soundings were also taken of the river bottom along Wallabout Channel. A final report of findings was prepared.
- Waterfront Revitalization 4th & 5th Street Piers, Kent Avenue; Brooklyn, NY; RD Management Corp; Team Leader/Marine Engineer during the design phase of this redevelopment project along Williamsburg's waterfront in Brooklyn. The 4th & 5th Street Piers are being revitalized in two phases: demolition phase and construction phase. McLaren is performing detail design, construction inspection and construction administration services during these phases. McLaren performed an investigation of the waterfront structures including existing pile fields and bulkheads, and a hydographic survey of the project site area. McLaren provided a boring plan, waterfront site investigation and permitting services, and conceptual designs in addition to supervising the taking of geotechnical boring samplings.
- Green Street Pier Inspection; Brooklyn, NY; for Park Tower Group; Assistant Project Manager for the inspection of the existing Greet Street Pier. Responsible for marine engineering services, including a condition survey of the existing pier and adjacent bulkhead, a condition report of the pier and bulkhead, an alternatives study of at least three repair options for the pier, designs for the pier and for the new bulkhead, design of a water taxi landing and marina, and construction support services.
- Assessment of the Water Club Marginal Wharf and Pier 11 Fender System; Manhattan, NY; for New York City Economic Development Corporation; Team Leader/Marine Engineer for the Underwater Inspection and Assessment of the Water Club Marginal Wharf and the Pier 11 Fender System in Manhattan, NY for the New York City Economic Development Corporation.
- Gowanus Substation Waterfront Structures Inspection; Con Edison; Team Leader/PE Diver responsible for the routine inspection of the Gowanus waterfront. The 600 linear foot bulkhead is comprised of a wood bulkhead constructed of wood piles tied back into the supported large stone riprap and a small steel sheet pile bulkhead. A report of findings and repair recommendations was provided.
- Engineering Services in Support of the Rehabilitation of the Bulkhead at Con Edison 74th St. Station; Consolidated Edison Company; Team Leader/PE Diver responsible for the engineering and construction inspection services in support of the rehabilitation of the bulkhead at the Con Edison 74th Street Station. Field reports noting the construction progress, quality, adherence to detail, as well as any deficiencies requiring correction were provided.

Matthew J. Daniels, P.E.
Senior Engineer/P.E. Diver
Project Role: Project Manager

Education:
B.S., Civil Engineering, Manhattan College, 2000

Active Registration:
Professional Engineer: New York ([redacted], Delaware (Reciprocity Pending)

Certifications:
National Bridge Inspection Standards (NBIS) -- Course [redacted]
Bridge Inspection Workshop (2005), NYSDOT
Annual Bridge Inspector's Training (2005), NYSDOT
NICET Level I
NAUI Certified Open Water Diver
ADCI Entry-Level Tender/Diver

Work History:
2008-Present - McLaren Engineering Group 2000-2008 – Boswell Engineering

Experience:
Mr. Daniels has over nine years of experience as a Team Leader on above and underwater condition surveys, Project Manager, Resident Engineer, fathometric surveyor, and design engineer. He has participated in structural integrity inspection and evaluation projects for various bridges, culverts, and marine structures, including assignments for the Port Authority of New York & New Jersey, NYSDOT, NYCDOT, DELDOT, and various private clients. In addition, he has performed over 300 fathometric surveys associated with bridge scour assessments and is proficient in preparing reports and drawings utilizing Autodesk Land Desktop 2006. Mr. Daniels also has experience in preparing fathometer survey contour drawings based on hydrographic positioning techniques. His expertise includes design of marine structures, including rehabilitation designs and cost estimates. Representative projects include:

- Waterfront Structural Engineering Services for the New Jersey Marine Terminal; Elizabeth, NJ; for PANYNJ; Senior Engineer/Inspection Team Leader for the above and underwater inspection of New Jersey Marine Terminal structures, which includes berths, a turntable, mooring dolphins, and timber walkways. Mr. Daniels led an inspection team in performing detailed inspections to determine needed repairs and is supporting the design process and construction cost estimating.
- Port Newark Marine Terminal, Berths 2 through 36; for PANYNJ; Resident Engineer/Team Leader for the diving inspection and construction quality assurance of the substructural rehabilitation repairs throughout the 16,500 LF of active shipping terminals located in Port Elizabeth, NJ.
- Port Elizabeth Marine Terminal, Berths 50 through 62 and 76 through 86; for PANYNJ; Functioned as Team Leader for the diving inspection and construction quality assurance of the sub-structural rehabilitation repairs throughout the 8,500 LF of active shipping terminals located in Port Elizabeth, NJ.
- Ferry Shore Facilities – Miscellaneous Engineering Services (On-Call); for New York City Department of Transportation; Senior Engineer/Diver for structural reconstruction of ferry facilities and other miscellaneous work when and where directed by the NYCDOT. Mr. Daniels is managing the replacement of elevated slabs at Slips 4, 5 and 6, an effort that involves slab design – from demolition through construction documents – construction cost estimates, and bid phase support. In a separate task, he was involved with the inspection and damage assessment at St. George Ferry Terminal Slip 5.

Matthew J. Daniels, P.E.
Senior Engineer/P.E. Diver
Project Role: Project Manager

- Engineering and Inspection Services for Marine Structures; Manhattan, NY; for Battery Park City Authority; Senior Engineer/Diver for the performance of construction administration and inspection services associated with marine structure repairs at the Battery Park City Authority parcel in lower Manhattan. Mr. Daniels performed above and underwater inspection of pile repairs under the Battery Park City Esplanade (Phase 1) and will perform additional inspections for similar repairs, scheduled to begin in Spring 2010 (Phase 2). The project involves the assessment of and repair recommendations for approximately 3,500 precast concrete piles that support the relieving platforms at esplanade, as well as timber piles that support a platform at the north end.
- Repair of Floating "Trim Tank" System at Peter Jay Sharp Boathouse; New York, NY; Project Manager/Diver for inspection and design services needed for repairs at Peter Jay Sharp Boathouse. Mr. Daniels was involved with review of existing construction documents as well as a dive inspection of the Boathouse and its external flotation "trim" tanks. He directed preparation of a letter report of inspection findings, recommendations for repairs, and repair design. Construction documents were prepared and bid phase support was provided. Construction administration and inspection are ongoing.
- Survey and Inspection of Coney Island Outfall; Brooklyn, NY; for Malcolm Pirnie/Baker Engineering; Senior Engineer/Diver for the condition inspection of the Coney Island Outfall. Mr. Daniels was involved with underwater inspection/reconnaissance of the damaged section of the Outfall. Project also included topographic and hydrographic survey, including location of surrounding structures; and side-scan sonar for entire length of Outfall pipe.
- Inspection of Ellis Island Seawall; for HDR Engineering; Senior Engineer/Diver for the underwater and topside inspection of the Ellis Island Seawall and preparation of Class C, Class B and Class A Construction Cost Estimates. Mr. Daniels performed a "hands-on" inspection on 5,333 LF of existing seawall and has prepared a condition survey report. His effort also included preparation of construction cost estimates for schematic and preferred alternatives as well as the final design.
- Construction Inspection of FDR Drive Sinkhole Repair; for New York City Department of Transportation; Senior Engineer who provided topside support for the underwater construction inspection of emergency repairs to the platform structure below the FDR Drive near 15th Street in Manhattan.
- Investigation of Piers C & D; Weehawken, NJ; for Hartz Mountain; Senior Engineer/Diver for construction administration and inspection services for repairs at Piers C and D.
- Pier 61 Damage Assessment; New York, NY; Senior Engineer/Diver for investigating pile failures at the two locations of Pier 61, Chelsea Piers. Mr. Daniels was involved with the field inspection, dive inspection, document research, structural analysis/modeling, meetings, and a report of observations and assessment for each failure location.
- Village of Dobbs Ferry Waterfront Park; Dobbs Ferry, NY; Senior Engineer for the evaluation of existing riprap condition along the Village's Hudson River shoreline. Project also includes design of shoreline stabilization improvements, which may include new riprap, and/or sheet piling; preparation of cost analysis for construction; meetings with Village Officials; and environmental permitting. Construction documents will be prepared and construction administration will be provided.
- Military Ocean Terminal Bayonne; Project Engineer for the underwater structural inspection of all submerged structural components of Berths N1, N4 and N5 including in-depth condition surveys of the timber and steel bulkheads and mudline profiles beneath the wharf.

Christopher M. Mase, P.E.
Marine Engineer
Project Role: Project Manager

Education:
B.S., Civil Engineering, University of Delaware, 2005

Registration:
Engineer In Training, 2004, Delaware

Work History:
2006-Present – McLaren Engineering Group

Experience:

Mr. Mase is an engineer with extensive construction management and construction inspection experience, coupled with expertise in design of marine structures and components, such as piers, piles, pile caps, and bulkheads. He has provided these services in projects for several private clients, as well as for public agencies like the PANYNJ, NYCDOC, and NYSDOT. His construction management experience includes bid phase support, coordination with contractors, shop drawing review, responding to RFIs, and site visits. Mr. Mase is also well versed in permit preparation for the NYCDEC, Army Corp, and Department of State. Representative projects include:

- Battery Park City Ferry Terminal; Battery Park City, NY; for PANYNJ; Project Engineer responsible for providing construction administration services for the 32,000sf floating ferry terminal valued at $70 million in construction cost. Responded to all RFIs, provided shop drawing review, and made minor design recommendations during construction phase. Also was involved with design of below-deck supports. The terminal consists of a mono-hull main terminal with five ferry slips with variable height landing systems.
- Beach Channel High School Seawall Remediation and Upgrades; Far Rockaway, NY; Project Engineer for the design of a new revetment at the Beach Channel High School Seawall. Optimized shoreline protection by altering the position of the seawall and using the existing seawall to provide support. Produced design drawings for the new revetment and then prepared joint permit application for the NYCDEC, Army Corp, and Department of State. The Seawall's deterioration had caused subsidence and sinkholes in an access path above it.
- Piermont Seawall Repair Design; Piermont, NY; Engineer preparing contract documents and providing bid phase support in the repair of upland sinkholes. Issued bid set and provided review support.
- Newport Bulkhead Study and Rehabilitation; Jersey City, NJ; Project Engineer for the modification and upgrade of the Newport Bulkhead. Designs were to prepare the bulkhead for extension of the Hudson River Walkway, which runs along the bulkhead. Performed calculations and structural analysis of the existing bulkhead in order to identify and design the necessary support, such as concrete cut-off walls. Also was involved with the design of low-level decking repairs to eliminate sinkholes at the Newport Tennis Pier.
- Waterfront Revitalization – 4th and 5th Street Piers at Kent Avenue; Brooklyn, NY; for RD Management Corp; Project Engineer for the revitalization of the 4th and 5th Street Piers at Williamsburg, Brooklyn. Involved with both design and construction management of the project. During construction, was responsible for site visits, preparing progress reports, and acting as a point-of-contact for the contractor and client. On the design side, assisted in the design of the pre-cast piers, pre-cast piles and a cantilevered sheetpile bulkhead wall. The project has included detailed underwater inspection,

hydrographic survey, geotechnical services, design services, construction inspection services, and construction administration services.

- Williamsburg, The Edge Waterfront Development; for Douglaston Development; Project Engineer for the design of pile caps, a concrete cut-off wall, and an irrigation room at this widespread waterfront development project along the East River. Overcame significant challenges in the pile cap design caused by variable elevations at the site, due to various stairs, pathways and structures, and differing construction materials. McLaren performed an in-depth physical inspection of piers and bulkheads, evaluated soil conditions, produced feasibility studies for waterborne activities, and provided design drawings.
- Vernon C. Baim Center Dry Docking Inspection and Repair Design; New York, NY; for NYCDOC; Project Engineer involved with the inspection and design of repairs for the Vernon C. Baim Center barge and upland facilities. Coordinated above and underwater inspection of the barge, which involved a non-destructive testing program, with field team. Based on inspection findings, then provided design recommendations for the sheetpile bulkhead repair and replacement of the barge fendering system. Recommended use of plastic lumber for the new fendering system.
- Columbia (Little Pea) Island Pier Boat Landing Dock; New Rochelle, NY; Engineer for the preparation of permit applications and construction documents, and construction management services for a boat landing dock at the existing pier on the west side of Columbia Island. Construction documents included ferry landing plans and technical specifications for piles, gangways, operating equipment, fendering, and navigational lighting. Construction administration included shop drawing review and site visits.
- Raritan Yacht Club Condition Assessment; Perth Amboy, NJ; Junior Engineer for a condition survey of the above water and underwater elements which comprise the various structures of the Raritan Yacht Club. Prepared necessary permits for the repairs. McLaren inspected the structures for possible deterioration, damage, and marine borer activity and prepared construction documents of the repairs.
- Design of NYCDOC Passenger Ferry Ramp Landing; Astoria, Queens; Project Engineer for the design of an emergency ferry landing positioned off Con Edison's A-11 dock. The landing was proposed to accommodate transport to and from Riker's Island, and its design needed to incorporate an ability to disconnect from the Con Edison bulkhead. Design thus included a cantilevered platform and a guide beam connection system, which was set to circumvent the dock's timber fendering system and attach to the bulkhead. The guide beam's rollers were to provide ample support for the docked vessel and facilitate easy disconnect of the landing.
- Design of Crew Access Structures at Hoboken Ferry Terminal; Hoboken, NJ; for NY Waterway; Engineer responsible for the design of a 30X90 barge and eight 12X50 Kentucky floats at Hoboken Ferry Terminal. Designed the appropriate gangways and platform off existing bulkhead. Also was involved with pile design, which involved careful consideration and analysis of the soil quality at the site. The structures were intended to provide storage for NY Waterway's vessels and were essentially platforms off the existing bulkhead at the Terminal.
- U.S. Gypsum Pier Extension; Stony Point, NY; Engineer for structural and marine engineering support, pier rehabilitation, and construction inspection. Produced a feasibility study and designed mooring dolphins, similar to an offshore oilrig, to accommodate a 20,000-ton cargo vessel. Also prepared construction documents for the project, which included structural analysis, environmental evaluation and geotechnical investigation.

Todd Manson
Marine Engineer
Project Role: Project Manager

Education:
B.S., Ocean Engineering, University of Rhode Island, 2007

Computer Software & Languages:
Matlab, Maple, Microsoft Office

Work History:
2007-Present – McLaren Engineering Group

Experience:
Mr. Manson is a Marine Engineer with a wide array of design, structural evaluation and inspection experience. He is an active participant in the inspection, design and assessment of bridges, piers, wharves, terminals and other associated waterfront structures. Representative projects include:

- Design of an Oceanfront Pier, Ferry Terminal and Waterfront Destination; City of Long Branch, New Jersey; Engineer for the marine and structural engineering services needed to design and construct a new, $89 million oceanfront pier in Long Branch, New Jersey. Mr. Manson has been involved with the environmental forces study and initial planning for ferry operations at the proposed pier. The pier will include multi-functional retail and entertainment space, a learning center, a ferry terminal providing commuter access to New York City and incorporating renewable energy resources.
- Battery Park City Ferry Terminal; Battery Park City, NY; for Port Authority of New York & New Jersey; Marine Engineer provided design and construction administration services for the construction of a 32,000sf floating terminal valued at $40 million in construction cost, consisting of a mono-hull main terminal with five ferry slips with variable height landing systems.
- Mariner's Cove & The Landing; Edgewater, NJ; for SSR Realty; Engineer provided marine engineering and design services for the repairs to the Riverwalk walkway at Mariner's Landing in Edgewater, NJ which was damaged during the storms of March, 2010. Mr. Manson was involved in all phases of the project which included inspection/investigation, preparation of repair design documents, permitting and construction administration.
- NYPD Marinas; Randall's Island/ College Point, NY; for Skanska/NYCEDC; Marine Engineer for the professional engineering and design services associated with two marinas owned by the NYPD. Responsibilities include condition inspection and design of upgrades, analysis of geotechnical borings for the structural design, as well as replacement of the marinas and other coastal structures. Mr. Manson is also providing Construction Administration Services for this contract.
- Design of Crew Access Structures at Hoboken Ferry Terminal; Hoboken, NJ; for NY Waterway; Marine Engineer for the design of a 30X90 barge and eight 12X50 Kentucky floats at Hoboken Ferry Terminal. The design included appropriate gangways and platform off existing bulkhead. Mr. Manson also participated in the pile design, which involved careful consideration and analysis of the soil quality at the site. The structures were intended to provide storage for NY Waterway's vessels and were essentially platforms off the existing bulkhead at the Terminal.
- Point Street Landing, Yonkers Waterfront, Underwater and Underdeck Preliminary Investigation; One Point Street, Inc./Homes for America Holdings, Inc.; Marine Engineer for the underwater and underdeck preliminary investigation of waterfront structures at One Point Street in Yonkers, NY (Point

Street Landing). The purpose of the inspection was to determine the basic structural configurations of the waterfront structures, and conceptualize repair methodologies. A letter report of conditions and recommendations were provided.

- Vessel Siting Study – Pier Planning and Design; Beacon, NY; City of Beacon; Marine Engineer for the planning and marine design services required at Beacon Harbor. The City of Beacon's Harbor Management Plan defines how the Harbor could accommodate research vessels, vessel facilities, and a docking pier associated with the addition of a state-of-the art research center. Mr. Manson assisted in the assessment of potential locations for the research vessels and their facilities, the performance of site and environmental studies, selection of a preferred location, obtaining regulatory permits and approvals, and design of the associated vessel facilities, pier, and fendering.
- Vernon C. Baim Center Dry Docking Inspection and Repair Design; New York, NY; for NYCDOC; Marine Engineer for the inspection and design of repairs for the Vernon C. Baim Center barge and upland facilities. Coordinated above and underwater inspection of the barge, which involved a non-destructive testing program, with field team. Based on inspection findings, then provided design recommendations for the sheetpile bulkhead repair and replacement of the barge fendering system. Recommended use of plastic lumber for the new fendering system.
- River Barge Park Shoreline Stabilization and Marina Design; Carlstadt, NJ; for NJ Meadowlands Commission; Marine Engineer for the provision of structural engineering and marine design services in developing a sheet pile design along the boundary between River Barge Park and the Hackensack River as well as design of a full service marina. The main design challenge was to properly incorporate architectural elements into the new designs, while considering geotechnical and environmental conditions around the area. Mr. Manson also provided permitting support.
- Engineering Inspection of Blenheim-Gilboa Power Plant; Gilboa, NY; for New York Power Authority; Marine Engineer for the assessment of the dewatered vertical shaft and transition elbow at the Blenheim-Gilboa Power Plant, which consisted of a visual examination of the upper reservoir intake structure, the shaft and elbow. Mr. Manson helped categorize new or previously identified deficiencies; and assisted in providing repair recommendations and cost estimates for remediation.
- Reconstruction of Atlantic Marine Pier; Jacksonville, FL; for Atlantic Marine Property Holding Company; Marine Engineer for the replacement design of Atlantic Marine Pier. Mr. Manson assisted with the preparation of demolition plans for the existing Pier and the development of design plans for construction of a new pier using the existing piles, bents and integral berthing dolphins. Mooring designs were also performed. The new pier was designed to moor a CG-47 class Navy warship.
- Long Dock Park, Hotel & Conference Center; Beacon, New York; Marine Engineer for the design of marine structures for waterfront improvements at Long Dock Park in Beacon. Mr. Manson assisted in the design process, which included shoreline stabilization, retaining walls, and other structures, and culminated in construction documents. He was also involved with the development of a wetlands remediation plan, as well as the permitting process. He is now providing assistance with the bid phase support and will provide construction administrative services.
- Public Place Shoreline; Brooklyn, NY; for Hudson Companies; Marine Engineer for the provision of engineering and inspection services for the remediation of the shoreline and adjacent structures at "Public Place" on the Gowanus Canal, Brooklyn, NY.

Frank Facciolo, PE

Education
BS, Physics, Syracuse University (UC), 1988

Registrations
Professional Engineer
CA, [redacted] 1997
NY, [redacted], 1999

Years in Practice - 21

Memberships
Construction Management Association of America (CMAA)

American Society of Military Engineers (SAME)

American Society of Civil Engineers (ASCE)

National Society of Professional Engineers (NSPE)

Experience Summary

Mr. Facciolo has been project executive, project sponsor, senior manager, and engineer for traditional designs, design-build (fast track projects), construction management, and on-call service contracts. He brings over 21 years of experience in infrastructure, transportation and design-build related projects in the New York Metropolitan Area and the State of California. Mr. Facciolo's experience ranges from planning through final design phases to construction support services and construction management projects.

Select Project Experience

Yankee Stadium Station, MTA Metro-North, Bronx, NY

Manager for a design-build contract with an overall value at $91 million for the Design and Construction of the Yankee Stadium Station in Bronx, NY. As Engineer of Record, managed the design completion of the project which finalized all engineering plans and specifications, and provided construction support services (shop drawing reviews, engineering field support) for the new passenger rail station which included the following major elements: overhead mezzanine structure, 270' long truss bridge, track bridge, substation, utility relocations, and passenger platforms. Accomplishments: Expedited design schedule. Directed the design team in performing Value Engineering, specifically: changing from micro-piles to H-piles, changing bridge bearings to isolation bearings to reduce seismic loads, changing bridge and track bridge design and construction approach to Prefabricated Bridge Units (PBU), changing cast-in-place bridge piers to post-tensioned pre-cast piers, changing location of electrical duct run from under RR tracks, modified WST to address Con-Ed transformer redundancy requirement. The Project was featured in Design Build Institute of America (DBIA) magazine. 2008 Design Build Project of the Year Award - New York Metro Chapter.

Conceptual to Final Design for Hudson Line Station Rehabilitation, Metro-North Railroad, Westchester County, NY

Project Manager responsible for the conceptual, preliminary, and detailed design of the rehabilitation of eight Metro-North train stations along the Hudson Line, in Westchester County and the Bronx. As part of this project, a condition survey was performed at all stations. Involved replacement of structural elements such as pedestrian overpasses, high-level platforms and canopies, while introducing new elements to certain stations to make them ADA compliant, such as elevators. At the same time, the appearances of certain stations were required to reflect the historic nature in which they were originally built. Supervised and managed the development of design alternatives, attended periodic client meetings and interfaced with the client, prepared structural calculations, structural quantities, specifications, and construction plans. Also supervised the coordination with architectural and electrical subconsultants. Awards: 2006 Tappan Zee Award - ASCE Lower Hudson Valley Branch. Construction Value $98 million.

Design-Build of Eight Hudson Line Stations, Metro North Railroad, Westchester County, NY
Served as the Project Manager for the design-build of eight commuter rail stations. The project included the following major design elements: pile supported platforms, pedestrian overpasses, stairways, elevators, and utility upgrades. The project was designed to a 60 percent design level for the client and then let out for a design-build award. The project involved architectural, civil, structural, mechanical, and electrical disciplines. During the construction phase, provided construction support services and also supervised the shop drawing reviews / approvals, responding to Requests for Information. Attended site visits to resolve any issues that may have occurred during construction. Construction Value $48 million.

Project Management Oversight Program, Region No. 9, Federal Transit Administration, San Jose, CA
Part of a project management team that provided management oversight for the federal government on Full Funding Grant Agreement (FFGA) projects. Individual project tasks included assisting in oversight on an intermodal passenger facility (Cahill Station), the Valley Transportation Authority (VTA) - a $400 million dollar "Tasman West" Light Rail Project and the "Pullman Way Facility" a new joint central maintenance facility for CalTrain Commuter Rail and Amtrak Inter-city rail services.

LRT System: NC-2 Section, Dallas Area Rapid Transit, Dallas, TX
Project Engineer responsible for developing the vertical and horizontal alignment from the 10% level to the 100% design stage for a new light rail transit system. All design adjustments were computed using Intergraph MicroStation's InRoads computer design program.

Intermodal Railroad Yard Upgrade Project, Southern Pacific Transportation Company, Industry, CA
Project Engineer/Construction Manager responsible for providing construction management, specification review, permitting services, design services, and cost monitoring for the Intermodal/Automobile SFRR Yard's upgrade in the Los Angeles area. Developed drainage plans for the final design of this project. As Project Engineer responsible for the calculations and recommendations for a large storm drainage system to service a 68 acre site. Unique characteristics included addressing environmental concerns, on-site as well as off-site flows, construction staging during a fully operational railroad facility. The design included a hydrology report, hydraulic analysis, flow rate calculations, pipe size requirements, and environmental mitigation of off site liabilities. The project involved heavy coordination with local authorities and was designed to meet state and federal regulations. The following codes or design guidelines were used or referenced during the design task: American Railroad Engineering Association Standards, City of Industry /Los Angeles County Standards and specifications.

Trailer on Flat Car Facility (TOFC), Atchison, Topeka & Santa Fe Railroad, San Diego, CA
Civil Engineer/Construction Manager responsible for providing engineering and field services for the railroad's Trailer on Flat Car Facility (38-acre site). Responsibilities included the preparation of final design drawings including drainage, paving for straddle car loading/unloading of containers, comfort station, maintenance of equipment facilities, oil/water separators and utility and track geometric design for a freight railroad yard. Helped support construction management services, including permitting, environmental remediation of soil/groundwater with soil/cement application, technical reviews, and client representation with applicable authorities.

Employment History
Hatch Mott MacDonald (2010 - Present)
Shaw Environmental & Infrastructure, Inc. (2002 - 2010)
Stone & Webster (1998 - 2002)
Gannett Fleming, Inc. (1989 - 1998)

John H. Lehman, PE

Project Manager

John H. Lehman has over 35 years of experience in the transportation sector. Mr. Lehman has directed multi-disciplinary, multi-national engineering design teams on rail car manufacturing and large construction projects. He specializes in heavy equipment design, maintenance and operation, construction, and operations analysis for rail car procurement, rail car manufacturing facilities and car repair and locomotive servicing facilities. Mr. Lehman has prepared engineering and economic studies on equipment selection and maintenance, transportation operations, and plant location.

Port Authority of New York and New Jersey, World Trade Center Transportation Hub, New York, NY

Mr. Lehman is providing support to Port Authority Engineering in the areas of train operations, project phasing, and program cost estimation for the restoration of PATH train service and the rebuilding of the World Trade Center. Mr. Lehman also prepared operating plans and participated in the peer review activity, which determined the preferred location, track layout, and construction phasing scheme for the replacement of the World Trade Center PATH station.

State of Connecticut, Office of Policy and Management, New Haven Rail Maintenance Facility Expansion, Hartford, CT

Hill International was retained to provide a review and analysis of the New Haven Rail Maintenance Facility Expansion Project. As part of the review of the Connecticut Department of Transportation's proposed expansion and modernization of the facilities, Mr. Lehman was asked to review the scope of the proposed storage yard and rail vehicle maintenance facilities with respect to the maintenance needs of the new technology M-8 Series cars and the existing New Haven Line fleet operated by Metro-North Railroad.

New York State Metropolitan Transportation Authority (MTA), MTA Independent Engineer's Certification Program, New York, NY

Mr. Lehman is responsible for evaluating the adequacy of the maintenance budgets and the efficacy of the maintenance programs for the rolling stock and track departments of MTA's operating agencies. The reviews include: New York City Transit - Car Equipment and Track and Right-of-Way; Long Island Rail Road - Maintenance of Equipment and Maintenance of Way-Track; Metro North Railroad - Engineering Department-Track.

Washington Metropolitan Area Transit Authority (WMATA), Washington, DC

Mr. Lehman is providing Project Management Oversight (PMOC) for the Federal Transit Administration (FTA) for the WMATA rail car procurement.

Education:

Master of Management, Transportation, JL Kellogg School of Mgmt, Northwestern University, 1980

B.S., Mechanical Engineering, University of Illinois, Urbana-Champaign, 1972

Registrations:

Professional Engineer, Illinois

Professional Engineer, New Jersey

Employment History:

Illinois Central Gulf Railroad, 1972-1984

Cole, Sherman & Associates, 1984-1987

STV/Seelye, Stevenson Value & Knecht, 1987-1990

Kawasaki Rail Car Inc., 1991-2000

Transportation Construction Services, Inc., 2000-2001

Hill International, Inc., 2001-Present

Oversight includes evaluation of budgeting, rail fleet acquisition and maintenance planning, and issues related to manufacturing, testing and acceptance. His projects include: 5000 Series new cars, 192 cars, $383 million; BREDA Rehabilitation Project (2000/3000 Series), 364 cars, $400 million; and the 6000 Series new cars, 184 cars, including options, $378 million.

Metropolitan Washington Airports Authority, Dulles Corridor Metrorail Extension, Vienna, VA

Mr. Lehman is providing Project Management Oversight for the FTA for the Dulles Corridor Metrorail Extension project that was begun by the Virginia Department of Rail and Public Transit. Services include monitoring; risk analysis; and evaluation of scope, cost, and schedule. The project cost is in excess of $2 billion.

Various Projects, Federal Transit Administration (FTA), Washington, DC.

Mr. Lehman provides a variety of Project Management Oversight services to the Federal Transit Administration. Projects include:

- Central Florida Commuter Rail (Orlando) – Scope Review, Monitoring.
- Utah Transit Authority Draper Rail Transit Extension – Risk Analysis.
- Utah Transit Authority Weber County Commuter Rail Project – Risk Analysis, Monitoring.
- Utah Transit Authority Mid-Jordan Light Rail Transit Project – Risk Analysis, Monitoring.
- Tren Urbano, Puerto Rico – Change Order Review.South Florida RTA (Tri-Rail Commuter Service) – Monitoring.
- Nashville Regional Transportation Authority Commuter Rail Project – Monitoring.
- SEPTA Silverliner V Commuter Car Procurement – Monitoring.
- Delaware Transit Corporation Wilmington to Newark Commuter Rail Improvements – Monitoring.
- Programmatic Task Order – Documentation Quality Control Review Procedures.

New York State Metropolitan Transportation Authority (MTA), Independent Engineering Consultant, New York, NY

Mr. Lehman served as an independent engineering consultant to the MTA with oversight responsibility for $5 billion of vehicle procurement and new construction. His projects included: New York City Transit Authority (NYCTA) new subway cars program, 1,762 cars, $2.7 billion; Long Island Rail Road (LIRR) electric cars, 326 cars, $785 million; and the LIRR Jamaica Station Improvements. He also contributed to a special study on proposed shop layout revisions to NYCTA's 207th Street Overhaul Shop.

MetroLink, St. Louis, MO

Mr. Lehman participated in an evaluation of design completion and extra work for the Cross County MetroLink Extension light rail transit project.

Frank A. Colucci, PMP

Project Manager / Construction Manager

Frank A. Colucci has over 30 years of diversified experience on a variety of projects covering the transportation, industrial, institutional and utility business sectors. He has established a track record demonstrating his ability to manage, motivate, direct and lead project teams to achieve aggressive milestones within tight budgets and compressed time frames while effectively utilizing company resources to meet or exceed all project goals. Mr. Colucci also has a broad range of knowledge and expertise in cost engineering, estimating and project controls; contract administration; change order preparation and negotiation; quality assurance; total quality management; claims management; and pressure vessel and piping stress analysis.

Recent and Relevant Experience

Downtown PATH Restoration Project, Port Authority of New York and New Jersey.

Mr. Colucci was assigned as a Project Manager on Hill International's project for the Port Authority to restore rail transit service between New Jersey and lower Manhattan. He had overall responsibility for the preparation of replacement-in-kind estimates to support the FEMA/Insurance reconciliation process pertaining to the World Trade Center disaster losses, as well as for the preparation and reconciliation of check estimates for work packages associated with the temporary World Trade Center PATH Station, Hudson River Tunnels E&F and the PATH Exchange Place Station. Mr. Colucci also provided overall program management and technical support services and was responsible for facilitating completion of various technical reports and review of design work order packages, managing and meeting schedule commitments, monitoring project expenditures and deliverables, and tracking and maintaining internal budgets.

Long Island Rail Road (LIRR) Estimating Services, Capital Project Management Department, Metropolitan Transportation Agency (MTA) and Long Island Rail Road, New York, Project Manager.

Mr. Colucci is serving as Project Manager on this task order contract, which is currently providing estimating services for the LIRR's 2005-2009 Capital Program Infrastructure Improvements Program.

New York City MTA Capital Projects.

Mr. Colucci performed five years of project management/construction oversight on New York City MTA capital projects exceeding $2 billion. He quickly became recognized for rendering qualified, innovative recommendations and solutions which enabled those agencies to effectively manage and facilitate construction completion on various projects in their capital program. Under

Education:

M.B.A., Business Administration, Wagner College, 1988

M.E., Mechanical Engineering, City College of New York, 1977

B.E., Mechanical Engineering, City College of New York, 1972

Registrations:

Project Management Professional

Professional Memberships

Project Management Institute

American Society of Mechanical Engineers

Employment History:

Curtiss Wright Corporation, 1972-1975

Stone and Webster Engineering Corporation, 1975-1977

Curtiss Wright Corporation, 1977-1979

Gibbs & Hill, Inc., 1979-1987

Stone and Webster Engineering Corporation, 1987-1997

Transportation Construction Services, 1997-2001

Hill International, Inc., 2001-Present

Hill International's Independent Engineering Consultant (IEC) contract with the MTA, Mr. Colucci provided oversight on the programs and projects.

- Major Station Reconstruction Program, New York City Transit Authority. Major reconstruction of the subway stations at the Times Square Complex, 72nd Street Broadway/7th Avenue Line; Atlantic Terminal Complex, and Lexington Avenue/53rd Street Queens Boulevard Line. The total project cost was $434 million.
- Atlantic Terminal Improvements Project Long Island Rail Road (LIRR). The reconstruction of the LIRR Terminal at Flatbush Avenue in downtown Brooklyn. The total project cost was $93 million.
- Station Reconstruction Program, Metro-North Railroad. The reconstruction of stations along the Hudson, Harlem and New Haven Lines. The total project cost was $185 million.
- Yards and Maintenance Facilities, Metro-North Railroad Shops and Yards. Construction of several yard maintenance facilities at Woodbine Yard, Croton-Harmon Maintenance Facility and Highbridge Yard. The total cost of all projects was $207 million.
- Elevator and Escalator Rehabilitation Program, New York City Transit Authority. The rehabilitation of 32 elevators at 17 locations and 66 escalators at 28 locations for a total cost of $298 million.
- Public Address/Customer Information (Phase I) Rehabilitation Program, New York City Transit Authority. The rehabilitation of these systems at 139 locations for a total cost of $50 million.
- Public Address/Customer Information (Phase II) Rehabilitation Program, New York City Transit Authority. The rehabilitation of these systems at 71 locations for a total cost of $147 million. Another 106 additional locations were added for a cost of $112 million.
- M-7 Electric Multiple Unit Procurement, Long Island Rail Road and Metro-North Railroad. Procurement of 226 cars with a value of $599 million.

5th Avenue Residential Renovation, New York, New York, Owner's Representative.

The project is an $8 million renovation of an 8,000 square foot duplex cooperative apartment. As Owner's Representative, Mr. Colucci was in charge of monitoring and reporting to the Owner on the progress of the work. He reviewed the project scope, change orders, and payments; expedited the schedule; and resolved any issues that arose.

New York City Public Library, New York City Department of Design and Construction, Project Manager.

Serving as Project Manager, Mr. Colucci was responsible for this emergency investigation and repair project involving the various balusters, cornices, keystones, column capitals, and pediments comprising the façade of the building.

Queens Theatre in the Park, New York City Department of Design and Construction, Contract Administrator.

Mr. Colucci served as contract administrator on this project, which involved the renovation and addition of a new maintenance and multi-level use 3-story wing. The new wing will include the installation of a freight elevator, kitchen, pantry, dressing rooms, and mechanical and electrical rooms. The project also includes the renovation of the building exterior and roofing, modifications to the existing loading dock, re-grading, and paving.

Michael J.W. Loehr, PE

Education
BS, Civil Engineering, Rensselaer Polytechnic Institute, NY, 1978

Registration
Professional Engineer
NY # [redacted] 1986
PA # [redacted] 1992
NJ # [redacted], 2002
VA # [redacted] 2009
GA # [redacted] 2009
NC # [redacted] 2010
MD # [redacted], 2010
IL # [redacted]

Years in Practice –31

Memberships
American Railway Engineering & Maintenance of Way Association
National Society Professional Engineers
American Society of Civil Engineers
American Society of Highway Engineers
Transportation Research Board

Experience Summary

Mr. Loehr has more than 31 years of extensive engineering design and construction expertise on a wide variety of projects in the railroad industry. This includes ten years with Consolidated Rail Corporation (Conrail) and over 20 years of consulting. His experience and knowledge have been gained on commuter rail transit facilities, freight rail installations, railway bridges, parking lots and highways. He has been trained as an FRA Roadway Worker Protection Trainer for CSX, an FRA qualified Track inspector, and has been qualified on NORAC Operating Rules.

Select Project Experience

Program Management

Program and Project Management Consultant Services, Virginia Department of Rail and Public Transportation, Richmond, VA

Director of Programs / Project Manager for the Program and Project Management Consultant (PPMC) Services contract with the Virginia Department of Rail and Public Transportation (DRPT). PPMC staff was embedded as full time employees of DRPT. As staff, the PPMC staff developed procedures, reviewed agreements, performed construction monitoring, assisted DRPT with the development of the Resource Allocation Plan, and interfaced with grantees and regulators about projects funded by DRPT.

The PPMC Team also performed specific large scale projects to support DRPT. The PPMC Team developed the Statewide Rail Plan, Alternative Specifications, Designs, and Estimates to support the selection of a preferred alternate route between Richmond and Doswell, VA as part of the Richmond to Washington High Speed Corridor.

The PPMC Team developed the Corridor Development Plan and Service Development Plan for the Virginia I-95 High Speed Rail Corridor that forms part of the Southeast High Speed Rail Corridor. The report was developed and synthesized data from previous reports and sources to meet the requirements of the FRA's stimulus (ARRA) funding applications

Transit

Transbay Terminal Center, Caltrain Downtown Extension Project, Transbay Joint Power Authority, San Francisco, CA

Part of an engineering team that reviewed the design criteria for a 1.5 mile tunnel to extend Caltrain and Amtrak service to a proposed new multimodal transportation center in San Francisco. The design criteria combined the requirements of four major potential users and encompassed a wide range of equipment and operational criteria.

Sound Transit Section D770, Airport Link, Seattle, Washington

Senior Rail Engineer for the alignment and trackwork design on section D770, the 1.7 mile extension of Central Link to Sea-Tac International Airport. The project included an elevated guideway section of approximately .9 miles, .8 miles at grade guideway and a signature elevated station a the southern terminus of the alignment.

SEPTA, Broad St. Subway, Philadelphia, PA

Regional Engineer responsible for the investigation of alternate fastening systems and installation methods to provide increased stray current protection. The existing direct track

fixation system was allowing excessive amounts of traction return current to enter the tunnel slab reinforcement resulting in excessive corrosion and damage to buried utilities.

WMATA, Washington, DC
Regional Engineer responsible for the investigation of alternate repair and installation methods to provide increased production for the direct track fixation system repairs performed by WMATA's forces.

Beijing Airport Planning Study, William Nicholas Bodouva & Associates, Beijing
Senior Railroad Engineer on the conceptual design of a new automated people mover for the expansion of the Beijing Airport.

Orange County Transportation Authority, Centerline Project Value Engineering, Orange County, FL
Senior Project Manager on the Value Engineering team evaluating the Centerline Project. The project involved dual mode electric LRV's, elevated guideway and stations, street running segments, and a tunnel section.

CyberTran International Inc., APM, Albany, NY
Senior Railroad Engineer on the project to determine the feasibility of connecting the Capitol Plaza with the new CDTA intermodal center at Rensselaer. The study included Line and grade studies using the median of the existing Dunn Memorial Bridge.

Yards & Facilities/Sidings

Program and Project Management Consultant Services, Virginia Department of Rail and Public Transportation, Richmond, VA
Director of Programs for layover and terminal yard locations for the Crescent Corridor.

National Steel Car, Car Manufacturing Facility Barton, AL
Project Manager for the design of a new industrial support yard at the new railcar manufacturing facility in Barton, AL. The yard encompasses over 58,000 feet of tracks on both the industry's property and Norfolk Southern's right of way.

US Pipe, Plant track, Birmingham, AL
Project Manager for the design of new in-plant tracks to support the expansion of the facility. The design included two new crossing diamonds.

Woodbine Yard Rehabilitation Project, Metro-North Railroad, Spring Valley, NY
Senior Rail Engineer responsible for the design of a new end-of-the-line storage yard on New Jersey Transit's Pascack Valley line in Spring Valley, NY. The construction-phasing plan allowed construction of the tracks and utilities while maintaining yard operations.

Employment History
Hatch Mott MacDonald (2003 - Present)
Clough Harbour & Associates (1995 - 2003)
Hilti (1993 - 1995)
GSGSB (1989 - 1993)
Consolidated Rail Corporation (1978 - 1988)

Education
BS, Civil Engineering, Carnegie Mellon University, 1971

MS, Civil Engineering, Carnegie Mellon University, 1973

MBA, General Management, Robert Morris College, 1994

Certified Project Management Professional, 1993

Registration
Professional Engineer
CA, [redacted] 1977
PA, [redacted] 1972
NY, [redacted] 1995
NJ, [redacted] 1995
OH, [redacted] 1996
TX, [redacted] 992
WV, [redacted], 1996
CT, [redacted] 2005
FL [redacted] 2006
VA, [redacted], 2008

Years in Practice – 41

Memberships
Peters Township Planning Commission, Past Member

CEC/PA Western Chapter, Past President

American Society of Civil Engineers, Fellow

Engineering Society of Western Pennsylvania

Pennsylvania Society of Professional Engineers, Past President, Pittsburgh Chapter

American Society of Highway Engineers, Past Board Member, Pittsburgh Chapter

Experience Summary

Mr. Brogan has over 40 years of structural design, development, and management experience for transportation, heavy industry, and commercial building clients. Mr. Brogan has served as a project manager for the rehabilitation of transit tunnels, rail maintenance facilities, and light rail projects. He also specializes in creating innovative approaches to solving civil and structural engineering problems.

Select Project Experience

Transportation - Tunnels/Bridges/Stations

Program and Project Management Consultant Services, Virginia Department of Rail and Public Transportation, Richmond, VA

Deputy Program Director for the Program and Project Management Consultant (PPMC) Services contract with the Virginia Department of Rail and Public Transportation (DRPT). PPMC staff is embedded as full time employees of DRPT. The PPMC staff developed procedures, reviewed agreements, performed construction monitoring, assisted DRPT with the development of the Resource Allocation Plan, and interfaced with grantees and regulators about projects funded by DRPT. The PPMC staff developed the FRA ARRA Funds applications for Track 1 and 2 for Virginia I-95 High-Speed Rail Corridor improvements which is part of the Southeast High-Speed rail Corridor.

The PPMC Team also performed specific large scale projects to support DRPT. The PPMC Team developed the Statewide Rail Plan, Alternative Specifications, Designs, and Estimates to support the selection of a preferred alternate route between Richmond and Doswell, VA as part of the Richmond to Washington High Speed Corridor.

A/E Services for Final Design E-55th Rapid Transit Station, GCRTA, Cleveland, OH

Project Manager and Engineer-of-Record for the design of the rehabilitation for the East 55th Street Rapid Transit Station. HMM is the prime contractor with a team that includes an architectural firm and several DBE subcontractors. The project includes the final design of an ADA compliant station for the Light Rail and Heavy lines. The scope primarily includes track realignment, catenary design, drainage, lighting, station architecture, signage, Park 'n Ride lot, traffic signals, surveying, and public involvement. The station is adjacent to the rail storage and maintenance facility with all rail vehicles passing through this station. The final deliverable is a set of stamped contract drawings and contract specifications for this project.

North Shore Connector, Port Authority of Allegheny County, Pittsburgh, PA

HMM Project Manager for preliminary design of twin subaqueous 2,200 LF TBM-bored rail tunnels linking the downtown central business district and the North Shore under the Allegheny River. Portals involved cut and cover construction. Scope also included a new rail link to the Convention Center constructed partly in bored tunnel and partly cut and cover. HMM served as specialty tunnel subconsultant for the DEIS and Preliminary Engineering Phases of the project. HMM's scope included twin bore structural tunnel design, tunnel fire life safety, tunnel emergency ventilation, tunnel lighting and electrical,

fire protection, drainage and station ancillary space HVAC. Developed the 30% engineering package for above systems including fire life safety analysis, drawings, draft specifications, SES modeling, design calculations, design criteria, construction cost estimates and QA.

Brookpark Tower to Airport Trackwork Phase I, GCRTA, Cleveland, OH

Project manager and engineer-of-record for the design of the new crossovers in the GCRTA Red Line Airport Tunnel. The project included the study of two proposed alternates and the final design of a diamond crossover in the tunnel similar to the original configuration. The existing tunnel track did not include the crossovers but a survey was conducted to locate the existing conditions. The final deliverable was a set of stamped contract drawings and contract specifications for this project.

Wabash HOV Highway Tunnel, Port Authority of Allegheny County, Pittsburgh, PA

Project Manager and Civil/Structural Engineer of Record for the structural and MEP systems rehabilitation of two-lane, 3,600 LF Wabash HOV highway tunnel. The initial task was the inspection and assessment report of the tunnel to determine the repairs necessary for the next phase. The design scope included removal and replacement of tunnel drainage, roadway slab, ventilation, lighting, PLC's and all tunnel life safety systems. This project then moved into the bid support and construction services phase with shop drawing reviews, RFIs witnessing Emergency Jet Fan Tests, taking luminance measurements, acceptance testing the PLC logic, repairing that logic, and acceptance of the tunnel for the owner. The tunnel was then placed into a maintenance period for 18 months so that the other project elements could be finished.

Berry Street Tunnel, Port Authority of Allegheny County, Pittsburgh, PA

Project Manager and Civil/Structural Engineer-of-Record for the sequenced demolition, enlargement, waterproofing, and relining of the $28 million 2,900-foot two-lane highway tunnel. The initial task was the inspection and assessment report of the tunnel to determine the repairs necessary for the next phase. The design scope included widening the tunnel from 25 feet to 30.5 feet to accommodate two bus lanes; extending the north end of the tunnel approximately 520 feet with a 850 foot cut and cover section; installing tunnel lighting, ventilation, fire protection, and drainage; and constructing two portal buildings that house the electrical and mechanical controls for the tunnel ventilation and emergency systems.

Subway Ventilation Improvement Project, Chicago CTA, Chicago, IL

Project Manager for replacing fans on the State and Milwaukee/Dearborn Subways with new, NFPA 130-compliant equipment, capable of controlling the smoke and hot gases which may result from a below-ground incident. The initial scope of work was a MEP inspection and assessment report of the tunnels to determine the repairs needed for the next phase. This design phase provided the additional ventilation capacity required to control these flows, additional fans were installed in existing blast shafts and in a totally new ventilation facility. Control of the fans and related equipment are via the new SCADA system (procured and installed by others).

Employment History

Hatch Mott MacDonald (2001 - Present)
Earth Tech (2000 - 2001)
ICF Kaiser Engineers (1989 - 2000)
EPIC Metals (1987 - 1988)
Roll Form Products (1986 - 1987)
H.H. Robertson (1975 - 1986)
Chester Engineers (1974 - 1975)
U.S. Bureau of Mines Pittsburgh Technical Center (1971 - 1974)
Carnegie Mellon University (1968 – 1971)

Hatch Mott MacDonald

Richard H. Buck, PE

Education
BS, Civil Engineering, State University of New York at Buffalo, 1986

Registration
Professional Engineer
NY, #[redacted] 001

Years in Practice – 23

Memberships
Institute of Transportation Engineers

American Railway Engineering Association

Specialized Training
FHWA – Design & Operation of Work Zone Traffic Control

NYSDOT – Guiderail III Seminar

NYSDOT Traffic Signal Testing Training

ASCE – Hydraulic Design of Culverts

The Railway Educational Bureau – Track Foreman Training Course

The GWU – Railway Signaling and Control

AppliCAD – Civil Design Basics (Integraph Inroads)

Northwestern University Traffic Signal Workshop

Erie County Soil and Water Conservation - Urban Hydrology for Small Watersheds

SSPC QP-1 Training in Coatings Application and Inspection Procedures

SSPC QP-2 Training in Hazardous Paint

Removal Operations of Steel Structures

Primavera – P3, CPM Scheduling

Experience Summary

Mr. Buck has over 22 years of experience in the design and management of various transportation projects. He has managed large highway and bridge construction inspection projects, design of highway and railroad projects from their initiation through public participation to final document preparation. As Principal Project Manager, Mr. Buck is responsible for the project team and client coordination to ensure efficiency in work produced for clients. Mr. Buck has undertaken many assignments of various size and complexity.

Selected Project Experience

Virginia State Rail Plan/Shortline Railroad Program, DRPT, Richmond, VA

Project Manager for the development of a Statewide Shortline Improvement Program and Shortline Rail Plan. The work included interviews with the managers of the shortlines to determine needs of the railroad; a field verification of the track charts to validate the conditions at a representative number of locations, and of differing infrastructure components for each shortline railroad; a conceptual level needs estimate of the shortline railroads; identifying Public Funding Sources and Private Funding Levels; and developing a single document encompassing the Statewide Shortline Improvement Program and Shortline Rail Plan.

Heartland Corridor Clearance Improvements, Norfolk-Southern Railroad, Roanoke, VA

Deputy Project Manager, preliminary engineering and Project Manager for final design on the Heartland Corridor Project that is part of a regional Public-Private initiative to allow double stack container trains a direct route from the Port of Norfolk through Virginia, West Virginia and into Central Ohio and Northern Kentucky. In the Preliminary Engineering stage, we performed geometric and condition investigations of the 42 existing tunnels and 33 tunnels will require clearance improvements for the double stack trains. Alternative methods were then developed to achieve the desired clearance improvements that will be implemented; maintaining structural integrity without disrupting scheduled train traffic. To date, five construction contracts have been awarded and the project is on schedule to be completed in 2010.

Plattsburgh Rail Yard Relocation, CP Railway, Plattsburgh, NY

Project Manager for this NYSDOT funded project. Three separate bid packages were designed and let to increase the rail storage at the existing Bluff Point Rail Yard, three new yard tracks were added giving 10,000 feet of additional storage. The project also included the installation of a trans-loading facility on the former Air Base. The project required constant coordination with the various railroad departments to secure materials, schedule work between B&B, MOW, and provide railroad protection. During the design phase, a detailed design report was prepared for NYSDOT, including SEQR (long form), SHPO, and permitting. The project went through the Town of Plattsburgh's Planning Board review process for the P.A.R.C. site and a public crossing hearing was required for the temporary rail crossing needed for construction access, because Amtrak operated on the Main Line.

Northwest Yard and Maintenance Facility Improvements Phase 1, Amtrak, Seattle, WA
Performed design reviews for the development of a phasing plan that allowed the construction of the new tracks and buildings without disrupting Amtrak's maintenance operations. The project also required the design of shoo-fly tracks, road crossings, permanent track alignments and profiles, tie-in of new tracks to existing, site drainage, protection of utilities, design of a new 20" diameter street main and service connections, fire main layout and analysis, and the demolition of the existing locomotive shed and yard tracks.

Design-Build: MCA Deployment Facilities, Fort Lewis, Seattle, WA
Rail designer for the development of a new deployment yard at Fort Lewis. The rail yard was designed to deploy a battalion of 640 vehicles every 24 hours. Required phasing plans that allowed the construction of the new tracks without disrupting the Fort's ability to deploy forces as required. The project also included the rehabilitation of the lead tracks from BNSF and the installation of two crossovers to improve switching operations.

General Mills Track Improvements, Erie County Industrial Development Agency, Buffalo, NY
Project Manager for design and construction inspection services for the removal of existing tracks and No. 6 turnouts at the General Mills cereal docks. New track and No. 10 turnouts were installed in conjunction with a "Premier" modular concrete crossing. This work was successfully completed during the 2002 Easter shutdown.

Dunlop Tire Corporation Rail Rehabilitation, Erie County Industrial Development Agency, Tonawanda, NY
Project Engineer for the survey and development of contract plans, specifications and estimates for upgrading 5,000 feet of trackage, four new turnouts, drainage improvements and two Nelson Chair crossings. Mr. Buck was Resident Engineer on this project and his duties included field layout, assuring compliance with plans and specifications, field measurements and calculating quantities, preparing monthly estimates and checking shop drawings. Due to 24 hour plant operation, Mr. Buck was also in charge of coordinating construction operations to not interfere with Dunlop's rail shipments. This project was also funded by NYSDOT; therefore, all record keeping was in accordance with MURK.

Center Road Bridge over CONRAIL, Erie County Department of Public Works, Buffalo, NY
Resident Engineer for the demolition of a 172 foot three span structure and construction of a 70' single span steel girder bridge. The project also included the construction of reinforced earth retaining walls and gas line relocation. Duties included the daily review of the contractor's operations, quantity calculations, review of certified payrolls and EEO reports, checking material certifications and preparing monthly estimates. All records were kept in accordance with NYSDOT and Erie County MURK procedures.

Utica R.R. Bridge Over the Mohawk River, Mohawk Adirondack and Northern Railroad, Utica, NY
Engineer in Charge for the repairs to the Mohawk Adirondack & Northern Railroad's bridge over the Mohawk River. Duties included the review of inspector's reports, site visits to inspect the contractor's operations, and preparing monthly estimates. All records were kept in accordance with NYSDOT MURK procedures.

Rail Freight Terminal Improvements Erie and Niagara Counties, NYSDOT, Buffalo, NY
Design and Project Engineer for the design and development of plans, specifications and estimates for the removal of abandoned railroad bridges over roads, streams and other railroads. Mr. Buck was directly involved with eight P.S. & E's with approximately 40 bridge and 10 track removals. Projects consisted of field surveys, grading plans, drainage analysis, geometric design (horizontal and vertical) and demolition plans for steel and concrete structures.

Employment History
Hatch Mott MacDonald (1986 - Present)
Hatch Mott MacDonald (1985 Part Time)
Millard & MacKay (1984)

George E. Duda, PE

Project Manager / Construction Manager

George E. Duda is a Hill Project Manager with over 30 years experience in areas of project and construction management, engineering analysis and design, construction, resolution of construction claims, and litigation support. Projects have included high rise commercial buildings, educational facilities, bridges, highways, airports, railroad facilities, rail transit car procurement, electrical generating stations, landfills, and various smaller projects.

Recent and Relevant Experience

New Jersey Turnpike Authority Statewide Traffic Management Center (NJTA STMC), Woodbridge, New Jersey, Project Executive.

Mr. Duda is presently serving as the Project Executive for construction of management of the new $24 million, 3-story, NJTA STMC project. The project is a steel frame and concrete structure adjacent to the existing Administrative Building. The site is very constrained and the adjacent Administrative Building with State Police functions must be kept operational 24/7. His responsibilities include Project Administration functions, as well as technical responsibility for design reviews for structural steel, concrete and site utilities; resolution of design related construction issues; and claims avoidance.

Capital Improvement Program, Atlantic City International Airport, South Jersey Transportation Authority (SJTA).

Mr. Duda served as Hill's Project Manager for the SJTA $77 million Capital Improvement Program at the Atlantic City International Airport. Hill provided project management and construction management services for 31 projects which included airfield improvements, extension of the existing terminal and parking areas, roadway improvements and additional signage. Services include conceptual engineering to implement projects contained in the Airport Master Plan, design consultant monitoring, grant preparation and construction management.

Bunker Hill Middle School, Washington Township, New Jersey.

Mr. Duda served as Construction Manager for the new Bunker Hill Middle School and technology upgrades to four existing middle and elementary schools. The schools were part of a $54 million referendum program, which included six elementary schools, four existing middle schools and two high schools. Mr. Duda's responsibilities included construction management, inspection, review and approval of payment applications, document control, change order administration, and project closeout.

Education:

M.S., Civil Engineering, Drexel University, 1977

M.S., Engineering Geology, Drexel University, 1997

B.S., Civil Engineering, Drexel University, 1975

Registrations:

Professional Engineer, Pennsylvania

Professional Engineer, New Jersey

Professional Memberships

American Society of Civil Engineers (ASCE)

The Metropolitan Railway Club of New York

Construction Management Association of America (CMAA)

Employment History:

Bechtel Power Corporation, 1972-1975

Consolidated Rail Corporation, 1977-1979

Stone & Webster Engineering Corporation, 1979-1985

Hill International, Inc., 1985-Present

Engineering Building, Rowan College of New Jersey, Glassboro, New Jersey.

Mr. Duda completed an assignment as the Construction Manager for the foundation and site preparation phase of the new $27 million Engineering Building at Rowan College of New Jersey. Pre-construction responsibilities included design reviews, preparation of contract documents, and acquisition of the NJDEP Water Allocation Permit. Construction responsibilities included field construction administration for the pile supported foundations, site utilities; and structural steel erection.

Harrah's Horseshoe Hammond Casino, Hammond, Indiana, Harrah's Entertainment, Construction Consultant.

The Architect, Friedmutter Group, retained Hill International to provide project management support services for the construction of a new $500 million, 350,000 square foot casino barge. When Hill was retained, the structural steel fabrication and erection schedule was falling behind a very demanding schedule. As a structural steel consultant, Mr. Duda provided coordination and management services. He participated in the shop drawing review process; coordinated the structural steel with contractor submittals, RFI responses, and land-based facilities; participated in the final building design; and provided construction assistance on site during steel erection. The efforts resulted in the structural steel erection being completed on schedule.

Vista Cana Golf Resort and Country Club, Punta Cana, Dominican Republic, Groupo Angulo Abierto Internacional, S.A. (AAI), Senior Construction Manager.

Mr. Duda served as Senior Construction Manager for Grupo Angulo Abierto Internacional, S.A. to oversee the construction of the $125 million site infrastructure program and the $135 million planned Phase One with 502 housing units, a country club, spa, clinic, and 27-hole golf course.

Newark Housing Authority Hope VI Program, Newark, New Jersey.

Mr. Duda was the Project/Program Manager for the Newark Housing Authority Hope VI Program. This $55 million program includes the demolition of 498 units in 13 multi-floor complexes and the replacement with 498 townhouses on three sites. His responsibilities include the preparation of Developer Requests for Proposal for construction of the new townhouses, design reviews, resolution of design and construction issues, and overseeing Hill's inspection role for quality assurance. He also prepared separate contract documents for the demolition and phasing of six high-rise structures, while maintaining operations in the existing buildings and the Community Center.

U.S. Embassy Building, Lead Project Engineer.

Hill International provided estimating and quantity surveying services to a general contractor, for construction of a U.S. Embassy building. Mr. Duda was Lead Project Engineer and provided quantity survey for material to complete construction.

Newark Housing Authority

Prepared construction contract documents for multiple building demolition and utility phasing while maintaining existing operations.

Guam Housing Project

Evaluated the proposed structural changes to the foundations.

Robert A. McDermott, Senior Director, Rail & Transit

Career Profile

Mr. McDermott has more than 30 years experience in the rail industry serving in senior management positions with both the Long Island Railroad and the New York Metropolitan Transportation Authority. During the course of his career, he has been involved in rewriting regulations relative to railroad communications, authoring more than 300 operational edicts, and publishing the first complete revision to the original SOP written in 1994. Examples of Mr. McDermott's achievements include developing and chairing a company wide tabletop drill in 1997 which was attended by more than 200 operational employees and the completion of a two-year writing project for the Federal Railroad Administration which resulted in the promulgation of 49CFR Part 220 in 1998.

Education

AA, Management and Communications, Adelphi University

Continuing Studies:

Graduate of School Management Studies, Cornell University

Teaching Occupational Education, New York Institute of Technology

Achieving Breakthrough Customer Service, Harvard University

Applied Engineering Program, George Washington University

Project Experience

- **Atlantic Yards/Nets Arena, Long Island Rail Road (LIRR) Vanderbilt Yard Relocation, Brooklyn, NY**
  The scope of the project includes new track, switches, traction power and substation, upgraded signal system, toilet servicing and structures as well as the demolition and replacement of the Carlton Avenue bridge, replacement of retaining walls, installation of foundations to support a future overbuild, site and street utility relocations, and a cut and cover tunnel under Atlantic Avenue. The work is phased to allow continued LIRR operations in the yard.

  As Senior Project Manager/LIRR Operation Liaison, Mr. McDermott's responsibilities included the supervision of project staff and the oversight of force account planning, negotiating with the LIRR on behalf of the developer on all design, construction and railroad operation aspects of this $300 million infrastructure project.

- **Jamaica Station Interlocking Improvement Project, New York, NY**
  McKissack was retained to provide engineering services for Survey work, Operational Analysis, Conceptual Design and estimating to study the benefits and engineering feasibility of various Jamaica Station and Interlocking improvements located in Queens, New York. The project entails the upgrade of Jamaica Station and the interlocking complex around it for maximum peak capacity in a way that will serve the system and the region's needs well into the next century. Given the new need to serve the future East Side Access (ESA), LIRR's operations will require a heavier reliance on interlocking routes feeding/receiving trains to/from four (4) line-haul tracks of the Main Line between Jamaica and Harold interlocking. As Senior Project Manager, Mr. McDermott directed the formation of a recommendation package of improvements that will support reliably the LIRR future operating needs of two Manhattan terminals, establish with reasonable confidence the constructability and operability of the improvements, provide cost estimates and preliminary construction staging plans.

Robert A. McDermott, Senior Director, Rail & Transit

- **Parson's Brinckerhoff Transit and Rail Systems, Newark, NJ**
  As Senior Principal/ Technical Specialist, Mr. McDermott performed operational analyses on various rail projects including Penn Station Access, Calif. High Speed Rail, Mid-Atlantic Rail Study, 2012 Olympics, Access to the Regions Core (ARC), Florida Tri-Rail, and San Francisco TransBay. He prepared Technical Papers, spreadsheets and associated documents for various clients and served as Project Manager for the Forest City Atlantic Yards Project, a $4.3M development project to redesign LIRR's Brooklyn VD yard.
- **East Side Access Project (MTA), New York, NY**
  Mr. McDermott was selected to serve as the first Director of Rail Operations for the New York City MTA East Side Project. He was responsible for coordinating the efforts of outside consultants relative to construction of rail link between LIRR in Queens, New York and Grand Central Station in Manhattan. He ensured all railroad operational aspects were addressed and included in design, construction and ultimate operation to provide a safe and efficient transportation facility. He ensured compliance with applicable Federal Railroad Administration regulations and LIRR operating rules.
- **Long Island Rail Road, New York, NY**
  As Superintendent in charge of the LIRR's Movement Bureau, Control Towers and Energy and Equipment Department, Mr. McDermott was responsible for the safe and efficient movement of all trains over the entire Long Island Railroad. He oversaw a workforce of approximately 160 employees that coordinated train movements through major storms, service disruptions as well as major LIRR construction projects including Harold Interlocking Reconstruction, Herrick's Road Grade Elimination, and Main Line Concrete Tie installations.

  As Training Specialist, he was responsible for teaching LIRR Operating Rules and Physical Characteristics to all employees. He prepared lesson plans, assessed student progress, implemented training sessions and made departmental presentations to various groups, as well as developed the first classroom-based training program on signal hut (CK) operation.

Career Experience

Long Island Railroad	1974 - 1998
Metropolitan Transportation Authority	1998 - 2000
Parsons Brinkerhoff	2000 - 2006
McKissack & McKissack	2006 - Present

Edward F. Nicholson, PE

Project Engineer / Inspector

Edward F. Nicholson, a Professional Engineer, has over 30 years of experience in all phases of rail rapid transit systems. Mr. Nicholson provided project management oversight to major transit authorities, and has overseen the planning, design and construction of capital projects for several major city transit agencies, including New York City Transit Authority and the Port Authority of New York and New Jersey. He has overseen the design and construction of rail control centers, rehabilitation of major stations, shops and yards, as well as bridge and tunnel rehabilitation projects. Mr. Nicholson managed the Port Authority Trans-Hudson's (PATH) Transportation Division, as well as their Signals and Communications Division, and was named as Port Authority Transportation Person of the Year in 1996.

Recent and Relevant Experience

PATH Station Reconstructing, World Trade Center, Port Authority of New York and New Jersey.

Mr. Nicholson provided technical support for the restoration of PATH rail service between New Jersey and lower Manhattan. On this project, Mr. Nicholson was part of the program management team overseeing the design and construction of a new rail transit terminal on the site of the former World Trade Center PATH station. In addition, he supported the design and installation of new power, signal and communications systems to replace those destroyed in the attack on September 11, 2001. Mr. Nicholson also provided technical support in the negotiation of insurance and FEMA claims.

MTA-Independent Review, Metropolitan Transportation Authority, New York, New York, Independent Engineering Consultant.

As the Program Manager, Mr. Nicholson oversaw the planning, design and construction of capital projects for the NYMTA's three major transit systems: the New York City Transit Authority (NYCTA), the Long Island Railroad (LIRR) and Metro-North Railroad (MNR), as well as its Bridges and Tunnels Agency. Examples of the programs that he oversaw include the rehabilitation of major stations, shops, and yards, as well as bridge and tunnel rehabilitation projects; the design and construction of a new rail control center with a new centralized train control system and new Communication Based Train Control System; and the design and implementation of direct LIRR train service into Grand Central Station. He also periodically reported the progress of these projects to the MTA's Board of Commissioners.

Tennessee Major Capital Projects, United States General Services Administration, Office of Accounting, Technical Review.

Hill provided contracting services for the FTA Region IV with Project

Education:

M.S., Transportation, Polytechnic University of New York, 1973

M.S., Electrical Engineering, New York University, 1969

B.E., Electrical Engineering, Manhattan College, 1965

Registrations:

Professional Engineer, Connecticut

Professional Memberships

APTA Rail Transit Steering Committee

APTA Computer Applications Subcommittee

Awards / Honors

Transportation Person of the Year (Port Authority,1996)

Employment History:

Port Authority Trans-Hudson Corp, 1965-1996

NY Metropolitan Transportation Authority, 1997-2001

Hill International, Inc., 2001-Present

Management Oversight services for its Tennessee Major Capital Projects, including but not limited to the Memphis and Nashville Projects. Mr. Nicholson performed technical review, oversight and support of systems aspects for the Music City Star East Corridor Commuter Rail Project. He reviewed the signal system and grade crossing design and construction activities.

Washington Metropolitan Area Transit Authority (WMATA) Phase II, Washington, DC, Federal Transit Administration (FTA).

Hill was retained to provide project management oversight services to FTA for the Washington Area Transit Authority and the Virginia Department of Rail and Public Transportation Major Capital projects. Mr. Nicholson performs oversight and technical review of systems for WMATA's "Metro Matters" Program.

South Florida Regional Transportation Authority, Phase II, Federal Transit Administration (FTA), Miami, Florida, Project Manager.

Hill was retained to provide project management oversight (PMO) services to FTA. Mr. Nicholson performs oversight and technical review for the double tracking of 43 miles of tri-rail commuter rail line in Palm Beach, and Broward and Dade Counties.

Various Projects, US DOT Programmatic Task Order, Federal Transit Administration (FTA), Washington, DC.

Mr. Nicholson is part of the team providing a variety of project management oversight services to the Federal Transit Administration.

Prior Experience:

Port Authority Trans-Hudson Corporation PATH, Superintendent of Transportation.

As Superintendent of Transportation, Mr. Nicholson managed a staff of 460 people, and was responsible for all train operations on PATH, a rail rapid transit system operating between New Jersey and New York City, with a ridership of over 60 million passengers a year. His responsibilities included train operations, fare revenue collection, passenger information and assistance, budget development of $40 million annually, staffing, coordination and emergency response activities. A number of major capital projects were also completed successfully, including a new rail car maintenance facility, a new emergency ventilation system, a railcar overhaul program, and a new centralized fare collection system.

Port Authority Trans-Hudson Corporation PATH, Superintendent of Signals and Communication.

Mr. Nicholson managed a staff of 100 people and was responsible for all design, construction and maintenance activities relating to signal and communications systems. He was also directly responsible for developing and integrating sophisticated technological improvements into PATH's operations. Mr. Nicholson also provided oversight and direction during the design and successful completion of several major projects.

Various Projects, Port Authority Trans-Hudson Corporation PATH, Senior Rail Planning Engineer.

As Senior Rail Planning Engineer, Mr. Nicholson served as Assistant Project Manager for the PATH control center project and was responsible for development of electrical and communications systems integration, including radio, CCTV, emergency and passenger assistance telephones and remote control systems.

Frank Miller, PE
Project Manager

Frank Miller is a senior track engineer/manager with more than 26 years of experience in the planning, design, construction, inspection and project management of major railway transportation, track and facility engineering projects. Specializing in transit/railway engineering, Mr. Miller's assignments have included major rehabilitation, design-build, and new start projects for mass transit systems throughout the United States, including light-rail and heavy-rail transit systems and commuter, high-speed, and freight railroads. Mr. Miller has had managerial responsibility for all aspects of his projects including cost control, managing staff and quality control; working with clients to estimate project/contract fees; determining scope of work, preparing project proposals and contracts on large or multiple projects; and serving on the Transit and Freight Market Sector teams to successfully grow TranSystems' rail practice.

Registrations
Professional Engineer: PA, NC

Education
BST, Civil Engineering, Spring Garden College, 1994
AST, Construction Engineering, Spring Garden College, 1984

Affiliations
American Railway Engineering and Maintenance-of-Way Association, Vice-Chair, Committee 17, High Speed Rail
Committee 11, Commuter and Inner-City Rail Systems - Chairman
Sub-committee D-2 Corridor Planning

Years of Experience
26

PANYNJ Civil/Rail GEC Contract, Harrison Yard Maintenance Facility, Harrison, NJ
Project Manager responsible for contract administration and managing of task assignments including providing a new rail transfer yard in the North area and storage tracks in the South Loop area. Trackwork design includes horizontal and vertical alignment alignments, contact rail design, modifications to existing tracks as necessary and development of design documents to procure trackwork materials through the Port Authority Procurement office.

NYCT Capital Planning IDQ Contract Task Order No. 4 Route 1 & 9 Alternatives Analysis, New York, NY
Track Task Manager responsible for developing alternative trackwork alignments to restore subway service to the financial district in lower Manhattan. Options include rebuilding the existing route below the World Trade Center or relocating the alignment to the west and terminating in Battery Park.

SEPTA General Engineering Services, GEC Contract 99-01, Philadelphia, PA
Project Manager responsible for contract administration and managing of task assignments including the Schuylkill Valley Metro Technical Review for the Norfolk Southern. Work included identifying impacts to the NS physical plant based upon the MIS/DEIS preferred MetroRail alignment. Other tasks included performing Track Construction Cost Estimates and comparisons for Force Account work.

SEPTA General Engineering Services (1996-A1) for Light, Heavy, and Commuter Rail Infrastructure Projects, Philadelphia, PA
Deputy Project Manager responsible for the managing of engineering projects for SEPTA's Regional High Speed Lines, Market-Frankford Line, Subway-Surface Lines, and Trolley Lines including track, civil, signal, power engineering and surveying services; engineering inspections; feasibility studies; construction management services and other services on an as-needed basis.

Cuyahoga Valley Railway Indefinite Services Contract, Brecksville, OH
Track Project Engineer for open-end project for the National Park Service to provide engineering services for 26 miles of scenic railroad within the Cuyahoga Valley National Recreation Area. Assignments include track inspection and design; construction services and needs assessment for future track improvement programs.

AMTRAK Northeast Corridor Improvements Project between New York and Boston
Project manager/ engineer responsible for high speed curve modifications along the Metro North Commuter Railroad portion of the NEC between New Rochelle, New York, and New Haven, Connecticut. Frank performed analyses to determine the required realignment to achieve target speeds up to 150 miles per hour. The analysis included implementation of current European active tilt-train system criteria without compromising current timetable speed of both Metro-North and local freight service. His responsibilities also included the development of spreadsheet-based software for the analysis and design of these curves; civil engineering design, including track undercutting to provide vertical clearance for double stack freight; and the design of proposed passing sidings and upgrading of freight sidetracks at several Connecticut and Rhode Island locations for Conrail and the Providence & Worcester (P&W) Railroads.

Employment History
HNTB
DMJM Harris
Gannett Fleming
Railroad Construction Company
NYCT
SEPTA

Gary Matz, PE
Civil (Rail) Task Leader

Registrations
Professional Engineer: NY, NJ

Education
B.S., Civil Engineering; Virginia Polytechnic Institute and State University

Years of Experience
25

Years with Firm
<1

Affiliations
American Society of Civil Engineers

Mr. Matz brings 25 years of experience in the successful leadership of design and construction services for complex civil, structural, architectural and rail transit projects. He has served in a variety of organizational roles such as project manager, technical lead on mega projects and has managed staff levels of up to 80 individuals. Mr. Matz has also served as an advisor to senior client managers, providing technical support of high level third party coordination and negotiations.

PANYNJ PATH Capital Program Planning (2008-2016), Jersey City, NJ
Project Manager. Logistics Planning Support Services under this task order assignment. This task includes developing and implementing new management processes and procedures focused on long range planning and master scheduling of all PATH facility forces and equipment needs as well as track rights to support to the capital program through year 2016, on-going system repair and maintenance work and other various construction activities. The logistics planning group coordinates with PATH's Transportation, Way and Structures, and Power, Signal and Communications Divisions, as well as project managers from the Port Authority's Construction Management Division and the World Trade Center, preparing master monthly and weekly track usage plans, identifying and mitigating potential conflicts, and monitoring the day to day implementation of scheduled field activities. Responsible for technical support staffing, task budgets and invoices. Participated in Port Authority senior management and Chief of Capital Planning briefings.

NJ Transit/PANYNJ Trans-Hudson-Express (THE) Project, Secaucus, NJ and New York, NY
Third Party Coordinator (Final Design) (November 2009 to June 2010) Chief Civil Engineer/Technical Support Manager (Preliminary Engineering) (August 2006 to April 2008). Preliminary Engineering and Final Design for this $8 billion project. The project is 9.2 miles in length and includes the addition of new double track from Secaucus Transfer Station leading to the two new single track tunnels under the Hudson River. In Manhattan, the tunnels will lead to a new deep cavern; six-track passenger station built 150 feet below 34th Street in and between 6th and 8th Avenues, adjacent and connected to existing Pennsylvania Station. The project

also includes new train storage facilities at the new Kearny Rail Yard in New Jersey. Responsible for the concept and preliminary design effort including design and investigation reports, alternative alignment studies, civil plans (including track alignments, general sitework, grading and drainage, staging/MPT, ROW, street utilities, wetlands delineation and impacts), specifications, and cost estimates. Produced and monitored design task scopes, deliverables, schedules and budgets. Managed 25 full time staff and 5 major subconsultants. Coordinated with and reviewed design drawings and reports produced by all design disciplines.

MTA Capital Construction/NYCT Fulton Transit Center Dey Street Concourse Design/Build, New York, NY

Chief Civil Engineer for this $160 million design/build project. The project includes a 400 foot long cut-and-cover tunnel under a busy city street and operating subway lines that links the Fulton Street Transit Center with the World Trade Center Transportation Hub. Responsible for final design of all civil related work, including street utility relocations and new services, roadway restoration, traffic signals, and under-slab drainage. Produced and monitored design task scopes, deliverables, schedules, and budgets.

MTA Capital Construction/NYCT Second Avenue Subway Project, New York, NY

Chief Utility Engineer. Preliminary design of this $16.3 billion project; Final Design of the first operating phase. The project is a new 8.5 mile long subway line with 16 stations on the east side of Manhattan. The subway will connect to the existing subway system at three locations and to the existing bus system at almost every station. Tunneling will involve use of various techniques, including tunnel boring, cut-and-cover, and mined sections. The train control system will be an advanced communications-based system. Responsible for the concept, preliminary and final design for all utility relocation work, including design and investigation reports, studies, plans, specifications, and cost estimates. Produced and monitored design task scopes, deliverables, schedules, and budgets.

Employment History

AECOM	2002 - 2010
Gannett Fleming, Inc.	1999 - 2002
STV Group Inc.	1996 - 1999
Cashin Associates, P.C.	1990 - 1996
Hawkins Webb, Jaeger and Associates	1985 - 1990

James J. Mortimer, Jr., PE

Project Manager / Construction Manager

James J. Mortimer, a Professional Engineer, has over 30 years of experience in the construction industry. Mr. Mortimer has served as vice president, project manager, program manager, and resident engineer managing projects, which have included correctional, educational, transportation, museums and zoos, theaters, healthcare, housing, and industrial facilities. He has extensive experience as a construction supervisor and is knowledgeable in the area of contract administration. He also served as an Adjunct Professor at the New Jersey Institute of Technology.

Recent and Relevant Experience

World Trade Center Path Station Reconstruction, Port Authority of New York and New Jersey (PA/NY&NJ), New York, New York, Vice President.

Hill International was asked to provide consulting services to the PA/NY&NJ regarding the method proposed by the insurance company, Alliance/Axia, and their construction manager, The Gilbane Company, to decontaminate and deconstruct the Deutsche Bank Building. Mr. Mortimer reviewed documents, attended meetings, and evaluated Alliance/Axia's proposal, which was part of the process for acquiring the property by the Lower Manhattan Development Corporation.

Traffic Management Center, New Jersey Turnpike Authority (NJTA), Woodbridge, New Jersey, Project Manager .

As part of the consolidation between the New Jersey Turnpike Authority and the Garden State Parkway, the NJTA is expanding the existing Parkway building in Woodbridge to include a mission critical traffic management center. This new $21.5 million center will be the nexus for Turnpike and Parkway control. Mr. Mortimer was Hill's Project Manager for this fast-track building project, from the starting early in the pre-construction phase in April 2006 until completion in November 2008. His duties included definition of fast-track bidding packages, schedule and budget control, and overall responsibility for directing the consultant team and maintaining the project schedule.

Insurance and FEMA Claims – WTC Facilities, Port Authority of New York and New Jersey, New York, New York.

Mr. Mortimer organized and oversaw the initial effort to estimate the damages sustained by the Port Authority in the attack on the World Trade Center. Hill's estimates formed the basis of the Port Authority's settlement of claims with their insurance carriers and the Federal Emergency Management Agency (FEMA).

Education:

M.S., Civil Engineering, New Jersey Institute of Technology, 1980

B.E., Civil Engineering, Manhattan College, 1968

Registrations:

Professional Engineer, New Jersey

Professional Memberships

National Society of Professional Engineers

Construction Management Association of America

Awards / Honors

Project Manager of the Year (Hill International, Inc., 2002)

Employment History:

Conforti and Eisele, Inc., 1968

US Marine Corp, 1968-1971

Mobil Oil Corporation, 1971-1972

Tishman Construction Corporation, 1972-1975

800 Constructors, Inc., 1977-1978

Gambal and Associates, Inc., 1979-1988

Hill International, Inc., 1988-Present

New Jersey Schools Construction and Renovation Program, New Jersey Schools Construction Corporation, Project Manager.

The New Jersey Schools Construction Corporation (NJSCC) is undertaking a $12 billion program to rebuild schools throughout the State of New Jersey. Mr. Mortimer served as Senior Project Manager for $28 million in additions and renovations to Burlington City High School, the new $24 million Wilbur Watts Intermediate School, the new $22 million Joyce Kilmer Elementary School, the adaptive reuse and renovation of the Roebling Steel Factory into a new $70 million K-8 Elementary School, and the construction of a new $16 million Early Childhood Center in Pemberton. Mr. Mortimer managed a staff of 12 people taking projects from design development to project closeout.

CM-Build for New York City Schools, New York City Department of Design and Construction, New York, New York.

Mr. Mortimer was Hill's Project Manager for a construction management/build contract. Hill was assigned 14 construction projects at schools in Queens and Brooklyn. Hill's contracts required $44 million in construction to be put into place over four summers. The work included wood window repair, aluminum sash replacement and aluminum window replacement, exterior masonry repair, terracotta repair and replacement roofing, asbestos abatement, and lead-based paint abatement. Hill's team participated in the initial job kickoff and review of construction documents, bid all the work out to pre-qualified subcontractors, and administered and supervised the project from contract award to project closeout.

New York City School Construction Authority, 5 Boroughs, PLA Study, New York, New York.

Mr. Mortimer performed an economic analysis for the Capital Improvement Program work being performed under the proposed PLA. The projected savings was $500 million on the $6 billion worth of work being performed. The bulk of the savings came from working on a shift differential under the PLA in lieu of overtime, since most of the work had to be performed on off hours after school was over.

New York City Department of Design and Construction, School Construction Task Force, New York, New York.

Mr. Mortimer was Hill's Project Manager for a construction management/build contract. Hill was assigned 18 construction projects at schools in Manhattan and Brooklyn. Hill's contracts required $29 million of construction to be put in place over two summers. The work included wood window repair, aluminum sash replacement, and aluminum window replacement, exterior masonry repair, terracotta repair and replacement, roofing, asbestos abatement, lead-base paint abatement and some specialty items such as structural repairs to a pool, replacement of a cafeteria slab, and a synthetic gym floor. Hill's team participated in the initial job kickoff and review of construction documents, bid all the work out to pre-qualified subcontractors, and administered and supervised the project from contract award to closeout.

Museum of the City of New York, Slate Roof Replacement, New York City Department of Design and Construction, Cultural Affairs Unit, New York, New York.

Serving as Project Manager under a CM/Build Task Order Contract, Mr. Mortimer negotiated the task order to replace the slate roof. The work was done while the museum was in operation. He pre-selected a list of qualified bidders, received bids, and awarded a $1.7 million subcontract for the work.

Jose A. Diaz, PE

Project Manager / Construction Manager

Jose A. Diaz, a Hill Vice President, is a Civil Engineer with over 30 years of engineering and project management experience. Mr. Diaz has expertise in construction and project management, civil and environmental engineering, and construction claims analysis. He also has extensive experience in cost engineering, including the development of complex cost models relating to commercial interactions between stakeholders, including private developers and public agencies. His experience encompasses a wide variety of projects throughout the United States and overseas. Projects have included educational, retail, and commercial buildings; transportation facilities, such as highways and rail yards; major industrial facilities, such as pharmaceutical processing plants, fossil and nuclear power plants; sanitary and industrial waste landfills; superfund remediation sites; and chemical handling and recycling facilities.

Recent and Relevant Experience

World Trade Center (WTC) Downtown Restoration Program, Port Authority of New York & New Jersey (PANYNJ).

Hill is providing program management services in connection with the planning, design, and construction of the new facilities at the World Trade Center, including the new permanent PATH Terminal (Transportation Hub). On assignment at the WTC site, Mr. Diaz headed up a Hill International team responsible for providing program management services to PANYNJ related to the redevelopment of the project site. Services include scheduling, cost modeling, budgeting, and cost controls for all the capital programs planned for the WTC site valued in excess of $12 billion. Redevelopment programs include the WTC Transportation Hub, the WTC Memorial, site infrastructure, and retail and commercial facilities.

Insurance & FEMA Claims – World Trade Center & PATH, Port Authority of New York and New Jersey (PANYNJ).

Mr. Diaz served as project manager, on an assignment with the PANYNJ and working for the Assistant Chief Engineer, for the 9/11-related World Trade Center loss recovery effort. He was a member of the Loss Recovery Team and was responsible for managing the estimating efforts for the capital losses sustained by the PANYNJ and for presenting the estimated loss claims to the insurers and FEMA. The project involved over $1 billion in losses related to the World Trade Center buildings and the PATH system. Losses included the US Customs House and the tenant areas located throughout the complex which were formerly occupied by the Authority's staff.

Education:

M.S., Civil Engineering, Rensselaer Polytechnic Institute, 1979

B.S., Civil Engineering, Rensselaer Polytechnic Institute, 1976

Registrations:

Professional Engineer, New York

Professional Engineer, New Jersey

Professional Engineer, Pennsylvania

Professional Engineer, Puerto Rico

Professional Memberships

American Society of Civil Engineers

Chi Epsilon - Civil Engineering Honor Society

Awards / Honors

James G. Hellmuth Unit Citation, PANY&NJ, 9/11 World Trade Center Loss Recovery Project

Employment History:

American Electric Power Service Corp, 1977-1981

Public Service Electric & Gas Company, 1981-1988

Soils Engineering Services, Inc., 1988-1990

Clayton Environmental Consultants, Inc., 1990-1993

Hill International, Inc., 1993-Present

Hillsborough Board of Education, Hillsborough, New Jersey.

Mr. Diaz was assigned to oversee the completion of multiple construction contracts on a troubled school addition and renovation project. The project had experienced significant delays and cost overruns. Mr. Diaz coordinated the completion of remaining construction work, including coordination of multiple design and building code enforcement issues, negotiation and processing of change orders, and the procurement of additional services necessary for the completion of remaining work.

New Haven Rail Maintenance Facility, State of Connecticut, Office of Policy & Management, CN

Hill was retained by the Office of Governor M. Jodi Rell to review and analyze the scope, cost and budget of a proposed major expansion of the New Haven Rail Maintenance Facility, including the construction of new office, training, and employee wellness facilities. As Project Manager, Mr. Diaz was responsible for the analysis, development of recommendations and presentation of reports directly to the Governor and the Legislature. Our analysis and recommendations reduced estimated costs from $1.7 billion to approximately $850 million. Hill critically evaluated the adequacy of the original work scope and construction cost estimates; determined factors that were driving increases in estimated costs; performed independent cost estimates; reviewed scope to recommend ways to reduce project costs; provided budgeting options; reviewed DOT capital project budgeting and cost estimating procedures and protocols, including configuration management controls and conducted a project risk assessment.

Merck & Co., Inc., Somerset, New Jersey.

On assignment from Hill International at Merck's facility in Somerset, and functioning under the direction of a Merck Procurement Manager, Mr. Diaz served as a Senior Contract Administrator providing contract administration, commercial oversight, procurement coordination, and expediting for engineering and construction services in conjunction with Merck's capital projects. Projects include office, manufacturing, and warehousing facilities.

Capital Center II and Plaza Real, Turner Caribe, Hato Rey and Guaynabo, Puerto Rico

Hill International, Inc. was retained by Turner Caribe Construction Company to assist it in resolving disputes over the completion of two large multi-story building complexes. As Project Manager, Mr. Diaz prepared a claim against the owner for a multitude of issues related to changes in design which restricted site access and other issues that caused extensive delays to the project for Capital Center II (a 16-story office tower and associated multi-story parking facility). For Plaza Real (a high-rise condominium complex), Mr. Diaz prepared a claim against the owner for delays principally caused by constructability issues associated with a newly developed composite wall system design. Hill conducted a thorough analysis of project events, including a detailed schedule analysis and an analysis of the costs incurred by Turner Caribe.

American Electric Power Service Corporation (NY) and PSE&G (NJ).

As a corporate engineer for two large power companies, Mr. Diaz reviewed, studied, designed and managed a wide variety of civil engineering projects in six states. Projects involved warehouses, office buildings, and training facilities, as well as structures for the power companies' production facilities involving heavy equipment, such as electrostatic precipitators, turbines, and electrical transformers for power plants as large as 1300MW, and transmission and distribution facilities as large as 765KV. For many of the projects, Mr. Diaz faced complex design and constructability issues related to maintaining service during construction.

Gurcharan Chopra

Construction Manager / Project Engineer/ Inspector / Estimator

Gurcharan S. Chopra has over 40 years of extensive experience in electrical engineering in the management of design and construction of industrial and commercial projects. These include: power distribution, including standby generation, programmable controllers and control systems; lighting; and fire alarm and electronic security systems. Mr. Chopra's project experience includes office buildings and commercial facilities, hotels, industrial and manufacturing facilities, wastewater treatment, transportation, power plants, and petrochemical facilities. He has also provided construction management and project management oversight for various NYC Agencies' projects.

Recent and Relevant Experience

Downtown Restoration Program and Insurance and FEMA Claims-WTC Facilities and PATH, Port Authority of New York and New Jersey, New York, New York.

Mr. Chopra performed design review of the new electrical systems being installed and estimating for selected work packages for a fast-track project to restore the rail access to the World Trade Center after the September 11, 2001 damage. He also estimated the Traction Power System replacement costs for Insurance and FEMA claims after the 9/11 damage.

Bronx County Hall of Justice, Dormitory Authority of the State of New York (DASNY), New York, New York, Electrical Inspector.

The Bronx Criminal Courthouse Complex is a new facility to house the Supreme Court Criminal Team, which will include 47 courtrooms. The 744,000 square foot, $390 million complex will occupy a 2.5 block site near Grand Concourse and stand 11 stories tall. This facility is one of the largest court complexes in North America. Hill provided full spectrum construction management services to support DASNY. Mr. Chopra served as Electrical Inspector responsible for all electrical work. He researched old electrical change orders, issued rejection letters, and negotiated unfinished change orders. He was also responsible for preparing new estimates for the complete range of electrical work and estimating complex change orders for all electrical systems, including the Security and Antenna Systems, Telecom and Data Fiber and Copper Networks, and the Audio Video System.

Peter Rodino Federal Building, U.S. General Services Administration (GSA) IDIQ Contract, Newark, New Jersey, Project Engineer.

The project involved the waterproofing of the outdoor plaza deck, which covers the underground garage basement. Serving as Project Engineer, Mr. Chopra reviewed the design documents and assisted in finalizing the bidding documents for the Fire Alarm System.

Education:

B.S., Electrical Engineering, Banaras Hindu University, India, 1953

Publications:

"Programmable Controllers at New Pellet Terminal", International Journal of Storing and Handling Bulk, Vol. 1, No. 1, p. 119, (Published in West Germany, 1981)

Seminars:

"Bulk Handling With Programmable Controllers," Detroit Engineering Society, Detroit, MI, (1981)

Employment History:

General Electrical Co. of England, 1953-1968

Crompton Greaves Ltd., 1965-1975

Hewitt Robins Inc., 1968-1969

Orba Corporation, 1975-1988

P.L.C. Engineering Services Inc., 1988-1990

Transportation Construction Service Inc., 1990-2001

Hill International, Inc., 2001-Present

Martin Luther King Federal Court House, U. S. General Services Administration (GSA), Newark, New Jersey.

Hill was retained to review the work of GSA's fire alarm consultant and prepare bidding documents and specifications for a fast-track upgrade of the existing fire alarm system. Mr. Chopra was responsible for the preparation of the bidding documents. Later, when Hill was awarded the Construction Quality management contract, he served as manager. The renovation of the fire alarm system in a fully occupied Federal Courthouse was executed at night and was completed on time and within the contracted price.

Emanuel Celler United States Courthouse, U. S. General Services Administration (GSA), Brooklyn, New York.

Hill is a member of a team led by Volmar Construction, Inc., providing CM-at-risk services during the modernization of this federal courthouse building. Hill's services include project management, project controls estimating and contract administration. Mr. Chopra provided design and constructability review of power, lighting, fire alarm, electronic security, and audio visual systems for this $100 million courthouse renovation project.

LaGuardia Community College Capital Improvement Project, Dormitory Authority of the State of New York, Long Island, New York.

Hill International is providing construction management services for the installation of a new fire alarm system for a 250,000 square foot building at LaGuardia Community College. Mr. Chopra served as Project Manager for the $3 million renovation of the fire alarm (150,000 devices) and smoke purge control systems (750 fire and smoke dampers) at the College. GSA Region 2 "PES,"

U. S. General Services Administration (GSA), New York, New York.

Hill was retained to provide construction management for the renovation and build out of 15 floors of the Peter Rodino Federal Building, Newark, New Jersey. Mr. Chopra supervised the installation and test of the electrical, security and communication systems for the Immigration and Naturalization space.

GSA, United States Secret Service (USSS) Headquarters Plaza, U.S. General Services Administration, Newark, New Jersey.

Hill was retained to provide construction management services for the renovation and build out of the 8th and 9th floors of the Headquarters Plaza for the Secret Service. Mr. Chopra provided oversight of the installation of the electrical, fire alarm, electronic security, and communication systems of the leased space for the USSS.

Rehabilitation of the United Nations Complex, Construction Management Services for the Preliminary Design Phase, United Nations, New York, New York.

Mr. Chopra performed design review of the preliminary concepts prepared by the Architect/Engineer for a billion dollar project for the renovation of the United Nations Campus in New York. He reviewed the electrical, lighting, fire alarm, electronic security, building management system, audio-visual system and the UN radio and television broach cast system.

Edward J. Fox

Project Manager

Edward J. Fox has over 35 years of progressive experience in planning, engineering, construction and management on a broad cross section of capital improvement programs, much of it in the public sector. Mr. Fox's assignments have included land development, educational buildings, housing and commercial projects. These assignments required the application of engineering, managerial and financial skills, as well as coordination and liaison with client and team members to solve complex problems.

Port Authority of New York and New Jersey, World Trade Center Station Reconstruction, New York, NY

Hill is providing program management services in connection with the planning, design and construction of the new World Trade Center Transportation Hub, including the temporary PATH Terminal, the new permanent PATH Terminal, and four major interrelated office towers. Mr. Fox is responsible for management procedures and manuals, monthly progress reports, scheduling, and financial planning.

New York Metropolitan Transportation Authority (MTA), Project Management Oversight, New York, NY

Mr. Fox was a member of the Hill independent consultant oversight team for the MTA, which has reviewed and prepared reports on the progress of bus depots and maintenance facilities, including several design-build facilities. He was responsible for oversight of design and construction of three bus maintenance and garage facilities and a major subway terminal. In addition, he oversaw various structural projects for the New York City Transit Authority subway system, including the design of a new multi-modal facility at Coney Island, New York. In this capacity, Mr. Fox also performed a number of continuing reviews of contractor developed Primavera CPM schedules.

Prior Experience:

Dallas Area Rapid Transit System, (DART),Light Rail System, Dallas, TX

Mr. Fox compiled and prepared the project closeout documentation packages for DART's Light Rail System, including the Fare Collection, Signals and the Communications and Central Control contracts.

U.S. General Services Administration, United States Federal Courthouse, Brooklyn, NY

Mr. Fox was the Document Controls Engineer for this $200+ million project. The project included the separation of an existing courthouse and the asbestos abatement and demolition of a Federal Office Building on the site

Education:
M.S., City and Regional Planning, Rutgers University, 1970

B.S., Civil Engineering, New Jersey Institute of Technology, 1964

Professional Memberships:
Chi Epsilon - Civil Engineering Honor Society

Awards/Honors:
James G. Hellmuth Unit Citation, PANYNJ 9/11 World Trade Center Loss Recovery Project

Publications:

Seminars:
"Project Management & CPM Seminars"

Employment History:
US Air Force, 1964-1968

Candeub, Flessig & Assoc. (Former Hill subsidiary), 1968-1988

High-Point Schaer, 1988-1992

Transportation Construction Service, Inc., 1992-2001

Hill International, Inc., 2001-Present

of the new construction. Also completed were a new, temporary entrance, a total change over to new electrical transformers, and construction of temporary parking in a city park to ensure the uninterrupted operation of the existing Brooklyn Federal Courthouse. He participated in the review of the project through the design and bidding phase. Mr. Fox also prepared the field office facilities and procedures for the start of the construction phase.

U.S. General Services Administration, Region 2, Indefinite Quantity Contract

Mr. Fox assisted with Contract Executive duties for the conclusion of the ongoing three year indefinite quantity contract. This work included contract administration during the construction phase of the latter task orders.

Housing Authority of the City of Newark, Multiple Projects, NJ

Mr. Fox was the Project Manager for five projects for the Newark Housing Authority. The five projects totaled 659 units constructed at 38 different scattered sites with a total construction program cost that exceeded $64 million. His responsibilities included constant coordination with five different general contractors, HUD, various departments of Newark Housing Authority; local utility authorities; state and federal labor boards; and a number of tenant groups. During Design Phase, Mr. Fox supervised the design review team which included SDB subconsultants. During the Construction Phase, he conducted all field and office construction management services, including utilizing SDB subconsultants. Construction types included prefabricated modular units, prefabricated panels and conventional construction. Services provided included developer selection evaluations, design and constructability reviews, and construction phase services

Multiple City Agencies, Residential Housing, High-rise Office Buildings and Hotels, Nationwide.

Mr. Fox has over 20 years of experience in urban and regional planning. Serving as Project Director, he worked with a number of clients to acquire and develop land for the construction of projects including residential housing, high-rise office buildings and hotels. He also served as Project Director for a major Master Plan for Washington, DC. Other clients included the City of Columbus Georgia; Fort Myers, Florida; and Lake Charles, Louisiana. He was responsible for a staff of engineers and subconsultants that provided general design, working drawings, specifications, constructability reviews, and construction consulting services for these projects totaling approximately $75 million.

Approximately 15 City Development Programs, Various Locations, Nationwide.

Mr. Fox served as a staff engineer responsible for the preparation and implementation of budgets and PERT/CPM schedules for all development programs in over 15 cities including Pittsburgh, Tulsa, Oklahoma City, San Antonio, Dade County, Florida, and Washington, DC.

U.S. Army Corps of Engineers, Multiple Projects, Various Locations

As Project Manager, Mr. Fox provided design reviews on numerous Corps of Engineers projects at Fort Monmouth, New Jersey; Fort Benning, Georgia; and Aubrey Lake, Texas. The work included the evaluations of buildings and facilities, cost-cycle analysis, environmental reviews, utility system analysis, and the development of training programs.

Hatch Mott MacDonald

Harry Jarnagan, PE, CCE

Education
BS, Applied Science and Engineering, U.S. Military Academy, West Point, 1975

Master of Engineering, Civil Engineering, Texas A & M University, 1984

Registration
Professional Engineer TX, [redacted]

Years in Practice – 30

Memberships
Member AACE International (program / project delivery and project controls professional association); Past President (2001 – 2002);

Member of the AACE Education Board. Certified as a Certified Cost Engineer (CCE) with AACE International since 1991.

Named as a Fellow of AACE International in 2005

Experience Summary

Mr. Jarnagan has extensive project controls and project management experience on a wide variety of projects including complex mega-projects. He is familiar with all of the project controls disciplines that support robust project management including estimating, planning and scheduling, risk management, budgeting and cost control, program change control and configuration management, earned value, project reporting, document management, the development of contract special conditions, contract change control, claims evaluations, and contract close-outs. He experienced with Primavera applications, is an expert user of Excel in performing cost and schedule analyses, and has experience in a number of Mainframe Management Information Systems such as JD Edwards, Oracle, and SAP.

Mr. Jarnagan has supervised and trained project controls staff, worked within integrated teams, and managed all elements of project controls on numerous projects including a $1.7-billion advanced technology design-build project, and a number of multi-billion-dollar rail and highway transportation improvement programs. He has worked closely with management in matrixed organizations providing analysis and recommendations for timely, cost-effective decision making. His management experience includes staffing, training, and supervising 50 project control staff located throughout the western U.S. and the Pacific, and he has been recognized by clients and employers for superior performance. Mr. Jarnagan previously served as the President of AACE International, a professional association of estimators, schedulers, and project controls engineers.

Selected Project Experience

Alaskan Way Viaduct & Seawall Replacement Project, Washington State Department of Transportation (WSDOT), Seattle, WA

Deputy Program Manager for WSDOT, reporting to the WSDOT Director of Operations and the WSDOT Director of Program Management. Directly oversees various program management functions in an integrated team environment, including Business Management, Project Controls and Reporting, Document Management, Change Control and Configuration Management, and Local Agreements. Supports the WSDOT Program Administrator in regularly scheduled Quarterly Progress Report preparation and reporting to senior WSDOT headquarters personnel. As the HMM project manager for the Project Management Assistance Contract to WSDOT (where HMM is an extension of WSDOT staff), is responsible to WSDOT for all contract-provided Program Management, Design Management, and Construction Management support. This 6.75km (4.2 mile) long, $3.1-billion program will replace the aging viaduct with what will be one of the largest boring machine-driven tunnels in the world that meets current safety and seismic design standards as well as providing long-term mobility in the corridor. Project challenges include completing the 54-foot-diameter soft-ground bored tunnel within an aggressive schedule in an urban environment, performing complex funding management, excavating through poor-quality backfill materials ranging from soft soil to large rock riprap to aged timbers, relocating a complex network of utilities, coordinating with a variety of third-party program stakeholders, and maintaining existing roadway traffic during construction of the tunnel.

Toll Bridge Seismic Retrofit and Regional Measure 1 Programs (TBSRP / RM1), Bay Area Toll Authority, Oakland, CA
Deputy Project Manager. Performed program management duties for the Bay Area Management Consultants (BAMC) and assisted BATA in its role of monitoring and overseeing the RM1 and TBSR projects. BAMC has developed a comprehensive baseline program cost forecast for both the RM1 and TBSR projects, and a database management system to track project costs and schedule performance. Produce weekly reports for BATA and Caltrans, monthly reports for the BATA Policy Board, and quarterly reports for the California State Legislature.

Measure B Transportation Improvement Program, Santa Clara Valley Transportation Authority, San Jose, CA
Program Controls Manager. Program was $1.4-billion, seven-year transportation improvement program consisting of light rail transit, heavy rail, highway, and highway interchange projects.
Provided all estimating, cost control, planning /scheduling, reporting, and management information systems support. Developed program cost estimates and schedules of work, which were adopted as cost and schedule performance baselines by Santa Clara County. Supervised the Program Controls organization as it measured budget and schedule performance, detected deviations from the program baseline that jeopardized budget and schedule goals, assisted management in the conduct of "what-if" studies and determined courses of action to eliminate/mitigate cost overruns or schedule delays. Developed and maintained a Revenue and Expenditure model used by VTA and the County to manage the financial aspects of the program. Developed and provided a variety of program reports to VTA management, the County executive, the VTA Board of Directors, and the County Board of Supervisors. Took a leading role in the implementation of an improved project management and control system using a variety of off-the-shelf software packages that was adopted by VTA as the project management system standard. Developed project controls and reporting procedures that are now being used at the VTA.

Various Environmental Remediation Programs, The IT Group, Pleasanton, CA
Project Controls Manager, Western Region. Projects consisted of environmental remediation programs of up to $250 million for the Department of Defense (Air Force Center for Environmental Excellence, Southwest and Pacific Divisions of the Navy, and Army Corps of Engineers), Department of Energy, the Federal Aviation Administration, and other governmental agencies.

Provided for and coordinated all scheduling and cost control support for all projects in the 11 western states, Alaska, Hawaii, and the Pacific. Developed and implemented a program to merge the project accounting and cost/schedule engineering organizations into one Project Controls Group consisting of 50 personnel. The group was designed along four major district lines and ensured that all projects were properly staffed with trained cost and schedule engineers. Provided project controls training to all project controls personnel, plus estimators and project managers within the region.

Underground Storage Tank Environmental Program, Eastman Kodak Co., Rochester, NY
Sr. Project Control Engineer. Construction and construction management of a $250 million project to inspect, and repair or replace more than 1,100 leaking underground industrial storage tanks and the supporting infrastructure. The scope of this high priority environmental project dealt with 50 percent of the total number of industrial storage tanks in the state of New York.

Used the Artemis project management system to perform cost and schedule control and reporting for this program. Provided forecasts and reports of cash flows using a resource-loaded schedule database. Assisted in establishing a system of cost rollup reporting from individual projects to the program level. Provided direct project control support to the two largest projects in the program. This included the development of project budgets and funding documentation, cost forecasting and control, variance identification, and earned value reporting. Worked with engineering, procurement, construction and startup personnel in the development and updating of CPM schedules. Reported deviations from the schedule baseline to management and assisted in developing recovery plans.

Hatch Mott MacDonald

Robert Nosal

Education
BS, Civil Tech, UMass Dartmouth, 1980

Years in Practice - 28

Experience Summary

Mr. Nosal has 28 years of experience in project controls for office and field administration, including a blend of project monitoring, planning, scheduling and cost estimating for both design and heavy construction management firms. His background includes interfacing with Federal, State and private sector clients in the areas of design, engineering, procurement, and construction. Projects have included multi-disciplined engineering and design for transportation, tunneling, commercial, industrial, and institutional facilities, as well as hydropower, cogeneration, power generation units and micro tunneling. His background also includes preparation of yearly strategic financial plans and providing project controls oversight.

Mr. Nosal also serves as the Coordinator for regional Project Controls for the Northeast offices. Core Clients have included, but are not limited to MBTA (now MassDOT-Transit Division), MTA, MHD, MASSPORT, MWRA, MDOT, NDOT, NBC, RIDOT, RIAC, and WASA. Responsibilities include monitoring, tracking, analyzing, forecasting and reporting on project budgets, estimates to complete (ETC), commitments and expenditures, project progress and productivity, work plans and schedules, estimate costs at completion (EAC), WBS cost coding, subcontracts, earned value performance measurement systems, and change management. This includes the initial set- up and monthly updating of multiple project controls systems, developing and loading Excel spreadsheets and special analysis and reports, as required. Mr. Nosal provides support for project pricing, analyzes data at the organization level, works closely with project and operations managers, accountants, and participates in monthly project reviews.

Select Project Experience

Old Colony Railroad Rehabilitation, Massachusetts Bay Transportation Authority, (now MassDOT-Transit Division), Southeastern Massachusetts

As Estimator/Scheduler, assisted in cost estimating and scheduling for this $500 million project that included the rehabilitation and construction of 40 bridges, 24 stations in compliance with ADA requirements, and over 80 miles of track work. Project successfully met financial and schedule milestones.

New Bedford/ Fall River Extension Preliminary Study, Massachusetts Bay Transportation Authority, (now MassDOT-Transit Division), New Bedford, MA

Estimator responsible for preparation of a feasibility estimate for a 43-mile $600 million commuter rail extension and rehabilitation project.

Freight Rail Extension, Value Engineering Study, Rhode Island Department of Transportation, RI

Estimator responsible for assisting the project team with the evaluation of a $140 million 22-mile freight rail extension, including alternative approaches to the complete project within the parameters of the proposed budget.

Maverick Station Rehabilitation, Massachusetts Bay Transportation Authority, (now MassDOT-Transit Division), East Boston, MA

Project Controls / Estimating Supervisor responsible for oversight of Mechanical & Electrical work on the project and Estimate & Schedule.

Toronto-York Spadina Subway Extension, Toronto Transit Commission -– Schulich Building Grouting, Toronto, Ontario
As Scheduler/Estimator responsible for preparation of a $13 million construction grouting estimate along with a three year schedule.

District of Columbia Water and Sewer Authority, Washington, DC
As Scheduler, reworked the 15 year construction schedule to achieve the client requested contract realignment packaging. Program valued at $1 billion.

MetroWest Water Supply Tunnel, Massachusetts Water Resources Authority, Metropolitan Boston, MA
Estimator (along with tunnel subconsultant), responsible for planning and scheduling. Served as Project Controls Engineer, providing staff supervision of the planning, scheduling, and cost (project tracking) estimates coordination for the final design of a 17-mile long underground redundant water supply tunnel system. The project included shafts, tunneling, surface facilities, and tie-ins with the adjacent aqueduct system. The construction was scheduled for seven years at an estimated total construction cost of $600 million. Project successfully met financial and schedule milestones.

Pressure Testing and Disinfections of MetroWest Water Supply Tunnel, Massachusetts Water Resources Authority, Various Communities, MA
Estimator & Scheduler/Project Controls. Provided oversight for this $3 million effort of the MetroWest Tunnel.

Central Artery/Ted Williams Tunnel Project, Massachusetts Highway Department (now MassDOT-Highway Division), Section Design Consultant (20A/B), Boston, MA
Project Controls Engineer including estimating oversight relating to the program-wide mechanical and electrical systems during the design and construction phases. Also provided estimating oversight for this project with a design fee valued at $85 million and a construction phase valued at $250 million.

Central Artery/Ted Williams Tunnel Project for the Section Design Consultant for System Controls (22A), Massachusetts Highway Department (now MassDOT-Highway Division), Boston, MA
Scheduler/Project Administrator responsible for integration of project controls, project administration, and financial operations. Accountable for all facets of administration, including client liaison, project review, monthly project reporting, project change notices, resource allocations, deliverable and correspondence control logs, and project library. Provided coordination for monthly labor and direct expense invoicing, project roster, and travel authorization. Also assisted with quality assurance. Project participants consisted of international, interstate, and local design teams. $15 million design fee.

Central Artery/Tunnel Contract 15A9, Massachusetts Highway Department, Boston (now MassDOT-Highway Division), MA
As Estimator, assisted the Project Engineer with a quantity estimate for a $50 million highway structure and final surface restoration project.

Employment History
Hatch Mott MacDonald (2009 - Present)
Jacobs Engineering Corporation (1993 - 2008)
Parsons Transportation/Main (1988 - 1993)
Battelle Memorial Institue (1985 - 1988)
Shaw/Stone & Webster Engineering (1980 - 1985)

Glenn Knapp, Chief Estimator

Career Profile

Mr. Knapp has more than 30 years experience in the design and construction industry, several of which have been spent in Senior Management roles. He is experienced in all facets of Estimating and Cost/Value Engineering and has lent his expertise to a variety of project types, particularly in the areas of Residential and Healthcare related projects.

Project Experience

- **Atlantic Yards/Relocation of LIRR VD Yard, Brooklyn, NY**
  Mr. Knapp served as Chief Estimator for the $200 million rail yard relocation and the construction of a temporary yard to allow for early construction of foundations for the New Jersey Nets new multi-purpose sports arena. The scope of work included new tracks, switches, traction power, signals and toilet servicing system. The work also entails the demolition and replacement of the Carlton Avenue Bridge to allow for necessary track realignments. Mr. Knapp prepared the estimates for various phases of the project, including the creation of temporary and permanent LIRR yards.
- **MTA Independent Engineering Consulting, New York, NY**
  Serving as Chief Estimator, Mr. Knapp applied his knowledge of Value Engineering and Comparative Cost Estimating to multiple projects for New York's Metropolitan Transportation Authority (MTA). He developed estimates for the Metro-North's Croton-Harmon Station, the interior refacing of four subway stations along Manhattan's East side, and the Long Island Railroad's Jamaica Station Interlocking and Improvement Project.
- **Dormitory Authority of the State of New York, Medgar Evers College, Brooklyn, NY**
  Mr. Knapp served as Chief Estimator for the new construction and renovation of student areas, cafeterias, libraries, student labs, lecture halls, site lighting and security, among their necessary MEP systems. He was tasked with the application of his experience and expertise to work closely with various construction professionals to develop accurate cost estimates for different aspects and phases of the project.
- **Alexandria Bay US/Canadian Border Crossing, Alexandria, NY**
  As Project Executive/ Chief Estimator, Mr. Knapp directed the designing and estimating of MEP systems upgrades. Contracted through the New York Office of General Services (OGS), this $200 million project called for Mr. Knapp's expert involvement in the oversight of the project's monies, coordination of invoices and maintaining communication with the client.
- **New York City Housing Authority, New York, NY**
  As Senior Estimator, Mr. Knapp worked under Mayor Guilliani performing

Education

AA, Business Management, Scranton University

Glenn Knapp, Chief Estimator

quality takeoffs of selected site structural, mechanical, and architectural blueprints. He met weekly with contractors to negotiate city expenditures and change orders on projects resulting in additional revenue for further city development.

- **United Nations Building, New York, NY**
  As Chief Estimator Mr. Knapp estimated drywall, rough carpentry and acoustical ceilings ranging from $1 million to $5 million to various offices in the United Nations.
- **Columbia Presbyterian Hospital, New York, NY**
  Serving as Chief Estimator, Mr. Knapp developed accurate cost budgets for the interior renovations to hospital rooms to include all the architectural, civil and MEP estimating, valued at $18 million.
- **Westchester County Airport, White Plains, NY**
  As Chief Estimator, Mr. Knapp set up cost budgets for the interior hanger and office renovations for Jet Blue to include all civil, architectural and MEP cost estimating for a total value of $15 million.
- **Jacobi Medical Center, Bronx, NY**
  As Chief Estimator and Project Manager, Mr. Knapp oversaw the implementation of the Hospital's rehabilitation project by providing on-target estimates and overseeing phase movements of the $100 million project.
- **Rikers Island, Rickers Island, NY**
  As Chief Estimator, Mr. Knapp set up all the cost budgets for the new $15 million dollar kitchen addition at Rikers Island. He negotiated all change orders to the satisfaction of the client and worked closely with the client to establish any cost changes and savings.
- **Newark International Airport, Newark, NY**
  As Chief Estimator, Mr. Knapp estimated various terminals and upgrades to include structural, civil, and architectural estimating in a timely manner. The total value of the project was $210 million.

Career Experience

Roy C. Knapp and Sons	11/1977 - 10/1989
V.B. Cross	10/1989 - 09/1994
H&P Building Company	09/1994 - 12/1995
New York City Housing Department	12/1995 - 01/1996
Savin Engineering	01/1996 - 10/1998
URS Corporation	10/1998 - 02/2001
Hazen and Sawyer Engineers PC	02/2001 - 03/2002
Fast Track Interiors	03/2002 - 02/2005
George A. Fuller Company	02/2005 - 06/2008
McKissack & McKissack	06/2008 - Present

John (Jake) C. Campbell

Vice President, Director of IT and Training
Senior Project Controls / Scheduling Manager

Mr. Campbell has over twenty years of diversified experience in the management and control of sophisticated construction projects. He has worked for Envision Consultants, Ltd. (Envision) for twelve years. His experience encompasses: Transportation – transit, highways, bridges and airports; Education - K-12, colleges and universities, and technical institutes; and General Building construction. His exceptional IT expertise is a valuable asset to clients when there is a project requirement to install, set-up, and implement state-of-the-art construction management software, networks, client interfaces, and web servers for multiple projects. He is also Certified Primavera Trainer (CPT) and consultant for all Oracle-Primavera project management software products and systems.

Jake's responsibilities include developing master schedules, detailed project schedules, cost and resource loaded schedules, and the review and approval of contractor schedules and monthly updates. In addition he reviews and approves budget cost estimates, progress payments, and cost at completion estimates. He also oversees cost control, change control, and document control activities, and participates in dispute resolution and claims analysis.

Project Experience

Envision Consultants Ltd., Mullica Hill, NJ

August 1997 - Present

Project Control and Scheduling Manager

Credentials

Education:

B.S., Construction Management
Drexel University, 1998
A.S., Business Administration
Bucks Co. Community College, 1994

Professional Registrations:

Certified Primavera Trainer (CPT) P3, P6, Contract Management

Computer Skills:

Primavera Project Planner (P3, P6, Web, Contractor); SureTrak; Expedition (Contract Management); MS Office; MS Project

Professional Affiliations:

Construction Management Association of America (CMAA)

John (Jake) C. Campbell

(Continued)

Jake utilizes his extensive information technology and construction management experience to assist Owners, Government Agencies, Municipalities, Construction Managers, General Contractors, and Subcontractors to plan, schedule, manage and control their construction projects. He is an expert in the implementation and use of Oracle-Primavera's scheduling software (P3 and P6), and document control software (Contract Management - formerly Expedition). Using his knowledge and expertise he effectively installs, implements, trains, develops, reviews, approves, and analyzes CPM schedules, and manages processes and methodologies for cost control and document control on construction projects. The following representative listing of *Transportation Industry Projects – Transit, Highways and Bridges, and Airports*:

- Charlotte Area Transit System (CATS) – South Corridor Light Rail System (Charlotte, NC)
- New Jersey Transit (NJTransit) – Portal Bridge Implementation
- New Jersey Turnpike Authority (NJTA) – Interchange 8
- New Jersey Turnpike Authority (NJTA) – Steel Gusset Plate Repairs
- Southeastern Pennsylvania Transportation Authority (SEPTA) – 69th Street Multi-Modal Substation
- Southeastern Pennsylvania Transportation Authority (SEPTA) – Automatic Train Control Project
- Southeastern Pennsylvania Transportation Authority (SEPTA) – Gwynedd Station
- Southeastern Pennsylvania Transportation Authority (SEPTA) – Railroad Operations Control Center
- Southeastern Pennsylvania Transportation Authority (SEPTA) – Stimulus Projects

SEPTA, Philadelphia, PA

June 1988 – July 1997

Resource Controller / Force Account Analyst

Organized and analyzed all data for Operating and Capital grant expenditures relevant to all projects. Reviewed and evaluated annual budget requests for Operating and Capital Budgets. Served as Line Maintenance back-up LAN Administrator. Supported the implementation of a new remote Citrix server during fiscal year 95. Provided Project Management support for Line Maintenance Operating and Capital project, including project supervision, equipment support, research and surveying project work zones, and documentation. Purchased all stock material for each Fiscal Year. Mr. Campbell worked on the Frankford Elevated Reconstruction Project for the Engineering/Construction Department.

Anthony L. Duca, PMP

(Continued)

Mr. Duca is a Senior Consultant and provides expert training, project controls and CPM scheduling services to clients for Envision Consultants, Ltd. (Envision). He has over eight years of specialized experience in the design, development, and delivery of advanced Primavera Project Management Software training services. Mr. Duca previously was a Training Consultant for Primavera Systems, Inc., the actual developer of the project management software.

Mr. Duca is also a certified Project Management Professional (PMP) and he applies his diverse skills to develop concise CPM Schedules that are tailored to meet the specific needs of each project. Mr. Duca's unique advanced level of expertise in working with the software abundantly qualifies him to perform detailed schedule, cost, resources and risk assessments and analyses.

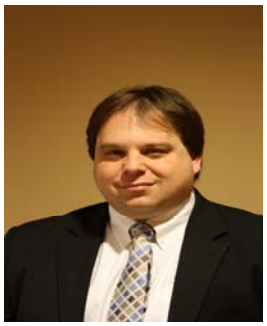
Mr. Duca's proficiencies in training, information technology, technical support, customer service, and project management, allows him the ability to install, implement, teach, and actually develop CPM schedules for complex construction projects.

Project Experience

Envision Consultants Ltd., Mullica Hill, NJ (2008 – Present)

Senior Consultant / Training and Project Controls

Mr. Duca's duties include the development of detailed project and construction CPM schedules, along with expert consulting and training services relative to the implementation and use of Primavera Project Management Software. His additional responsibilities include creating and delivering customized training courses according to the needs of each client, developing and delivering project management seminars, along with the implementing and administrating detailed construction schedules.



Credentials

Education:

Construction Management Certificate
NJIT, 2009
B.S., Education
West Chester University, 1994

Professional Registrations:

Project Management Professional (PMP)
Oracle Primavera Certified Trainer/Consultant

Computer Skills:

Primavera Project Planner (P3, P6, Web, Contractor);
SureTrak; Expedition (Contract Management);
MS Office; MS Project

Professional Affiliations:

Project Management Institute

Anthony L. Duca, PMP

(Continued)

Primavera Systems, Inc., Bala Cynwyd, PA (July 2002 – February 2008)

March 2004 – February 2008

Training Consultant

Mr. Duca provided training to customers and company personnel in the use of project management software including SureTrak, P3, P3e, P3e/c, TeamPlay, MyPrimavera, and Primavera Contractor both on-site and at customer sites. He consulted with customers to resolve specific issues or assist with the creation of project plans. Collaborated as a subject matter expert on the creation of new training manuals and web based training (WBT's). He negotiated with clients to identify training requirements and create custom courses to fit customer's desired specifications. He conducted Primavera Authorized 'Train the Trainer' boot camps, proctored Primavera Authorized Tests, provided support to Primavera Authorized Trainers and presented training seminars at the Primavera Annual Conference.

July 2002 – March 2004

Technical Support Representative

Mr. Duca accepted incoming calls from customers and Primavera Authorized Resellers, verified customer data and entitlement information in Onyx, and added and updated new or existing records according to system business rules. He created support incidents for all incoming technical support calls, including, but not limited to serial number, product, version of the product and brief description of each customer's issue.

Yoh Support Services, AstraZeneca Pharmaceuticals, King of Prussia, PA (February 1999 – July 2002)

Help Desk Analyst to Installation Developer

CompUSA, Mount Laurel, NJ (September 1997 – February 1999)

Lead Computer Instructor / Computer Instructor

Keith Skilling, PE, PMP, PSP, Scheduler

Career Profile

Mr. Skilling has more than 28 years experience in the control of project cost and schedules on the design, construction and management of civil, infrastructure, transportation, and commercial projects valued between $35 million and $1.2 billion. He is skilled in developing and implementing project control systems and supervising cost/schedule engineers. His experience includes project and field cost reporting, trend analysis, change control, engineering and construction progress measurement, planning and scheduling, and resource optimization. He is experienced in one-on-one management of contractor claims, negotiation of dispute resolutions, and audits of field progress. He is competent in the creation and use of various spreadsheet and database programs, with particular emphasis on creating simple, user-friendly methods to effect the seamless transfer of data between project participants.

Project Experience

- **New York State Metropolitan Transportation Authority (MTA), New York, NY**
  Senior Project Controls Manager for the Program/Project Oversight for various MTA Agencies: Metro North Railroad, Long Island Railroad and Capital Construction. Responsibilities include: periodic site visits, attendance at project meetings; interviews with key agency personnel, consultants and contractors; review of project budgets and schedules; review of project documents; and preparation of various project monitoring reports for the MTA Capital Program Oversight Committee. Highlighted projects include: Centralized Train Control, Power Substations (MNR), Traction Power Supervisory Control and Data Acquisition (SCADA), Fiber Optic Communication Network, Audio Visual Paging System, Power Substations (LIRR).
- **Times Square Subway Station Renovation, New York, NY**
  Provided cost and schedule controls during design management phase of renovation of the subway station as part of the 42nd Street Development Project in New York City. Set up budgets and cost accounts which showed clearly the financial responsibilities of the different public and private sector participants to the project.
- **New Jersey Transit, Montclair Connection, Montclair, NJ**
  Project Controls Engineer for the upgrade and rerouting of an existing 6-mile commuter rail line. Established a method of incorporating the contractor's construction progress into the project master schedule in such a way that the contractor's data was not compromised. Reported on delays, possible problems arising from subsidiary critical paths, and budgets. Verified contractor's progress payments using earned value analysis. Prepared monthly project controls reports.

Education

BS, Civil Engineering, University of Edinburgh

Diploma in Construction Management , New York University

Keith Skilling, PE, PMP, PSP, Scheduler

- **Newark Airport Monorail, Newark, NJ**
  Project Controls Engineer for new inter-modal connection between the airport and the Northeast corridor of Amtrak/New Jersey Transit. A second part of the project was the upgrade and retrofit of the existing airport terminal monorail system. Provided field review of progress for multi-contractor operation and prepared weekly schedule updates to each showing the production rates required to meet an imposed client deadline.
- **Norfolk Light Rail, Norfolk, VA**
  Senior Project Controls Manager for 7.4 mile light rail project which extends from the Eastern Virginia Medical Center through downtown Norfolk along the I-264 corridor to Newtown Road within the city of Norfolk. The project includes the construction of eleven stations along the alignment with four park and ride locations that provide access to the system in major areas such as Norfolk State University, Harbor Park, City Hall, MacArthur Center, Tidewater Community College and the Sentara Norfolk General Hospital. When completed in 2010, the systems is expected to carry approximately 11,500 people per day.

Additional Qualifications

- Professional Engineer (PE), New York
- Project Management Professional (PMP), Project Management Institute
- Certificate in Construction Site Safety, New York Bldg. & Construction Industry
- Founder, Project Management division, New York P.C. Users Group
- Member, Project Management Institute
- Contributor to 2000 edition of the Project Management Book of Knowledge and WBS standard

Career Experience

Taylor Woodrow Intl.	1976 - 1978
Hani Vontracting Company	1978 - 1981
The Galbreth Company	1981 - 1987
AMEC Inc.	1987 - 1990
Urban Development Corporation	1991 - 1992
PriceWaterhouseCoopers	1993 - 1996
Park Terrace GDNS, Inc.	1996 - 1997
Hill International Inc.	1997 - 1998
Skanska Construction Company	1998
URS Corp.	1999 - 2003
New York University	2000
PACO Group	2003 - 2008
McKissack & McKissack	2008 - Present

Paul T. Giangreco, PE

Project Manager

Paul T. Giangreco has more than 30 years of project management and civil engineering experience, including expertise in contract dispute and claims resolution. Mr. Giangreco's project experience includes light rail transit, subways, and nuclear power plants. He is adept at communicating issues and ideas to senior management, funding and oversight agencies, and to other outside parties, including appearances at public hearings. He has presented seminars in automatic train supervision. Mr. Giangreco's specialized computer software skills include Primavera Expedition and Primavera P3.

The Port Authority of New York and New Jersey, Downtown Restoration Program, World Trace Center Reconstruction, New York, New York

Hill International is providing cost and scheduling support to the World Trade Center Reconstruction project. Serving as Cost Engineer in the Cost Management and Controls Unit, Mr. Giangreco is responsible for all cost-related issues on several major elements of the overall $8.5 billion construction. The elements of the overall program assigned to him include the Vehicular Security Center, Central Chiller Plant, Tour Bus Parking Facility (Phase II), West Basement Vehicle Access Facility, and selected sub-packages of the Transit Hub. His responsibilities include development, review, and reconciliation of in-house and external cost estimates; construction change order negotiation and review; budget and procurement tracking; and reporting of cost data to the funding agencies, including the Federal Transportation Administration.

Prior Experience:

Newark City Subway Accessibility Improvement Project, Newark Penn Station, New Jersey

Mr. Giangreco provided overall management of all aspects of the execution of this $8 million capital project which is restoring various historic elements of this 70 year old station while simultaneously adding four elevators and two escalators and while the station is in use. His responsibilities included project execution, pricing, scheduling, contract administration, quality assurance and safety. He also served as primary contact with the station owner, New Jersey Transit.

New Jersey Transit (NJT), Southern New Jersey Light Rail Transit System Project, Riverside, New Jersey

Serving as Construction Manager on a $440 million line connecting Camden to Trenton, Mr. Giangreco supervised project estimators and schedulers and drafted scopes of work for additional work orders initiated by the owners. He participated in weekly strategy sessions with NJT managers in advance of

Education:

M.S., Civil Engineering, Polytechnic University, New York, 1977

B.E., Civil Engineering, Cooper Union, New York, 1974

Registrations:
Professional Engineer, NY

Awards/Honors:
Heroism and Bravery in the Face of Extreme Danger. Received an award from the New York City Transit Authority for intervening in a robbery attempt of an ATM user in the World Trade Center Concourse. Apprehended the robber for arrest by police.

Seminars:
Automatic Train Supervision to New York City Transit's System, New York City Transit Authority, November 3, 1995, New York, New York, Chaired and Led Discussion of the project.

Employment History:
American Electric Power, 1974-1977

Stone and Webster Engineering Corporation, 1977-1985

Gibbs and Hill Inc., 1986-1987

NYC Transit Authority, 1987-2001

Burns and Roe Enterprises, 2001-2002

DMJM and Harris, 2002-2004

Volmar Construction Co., 2004-2006

Hill International, Inc., 2006-Present

change order negotiations with design/build firm, as well as biweekly project management team meetings among the major project stakeholders.

Engineering and Construction Firm, Various Projects, Oradell, New Jersey

Working in the firm's Infrastructure Division, Mr. Giangreco managed multi-discipline design efforts on client projects and task orders, including the ongoing Engineering Services Contract with New Jersey Transit. Mr. Giangreco was responsible for all aspects of project execution and profitability, including schedule adherence, man-hour expenditure rates, progress payments, and change order negotiation and execution. He also managed business development efforts to secure additional client design contracts and task orders and prepared responses to Request for Proposals on design/build efforts, specializing in builders of mass transit facilities.

New York City Transit Authority, Department of Capital Program Management, Various Projects, New York

Mr. Giangreco was responsible for the execution of major capital improvement projects with individual values up to $150 million. He managed a staff of 25 construction inspection professionals covering every aspect of contractor field activities through project execution. Projects supervised by Mr. Giangreco included structural rehabilitation of entire transit lines, station and signal modernization, bus depot construction and environmental projects, including underground storage tank projects and asbestos abatement. He was responsible for all aspects of project performance, supervised quality of construction, schedule maintenance and monitoring, budgetary control, safety, contractor and consultant progress and payments, field conditions and change orders, regulatory compliance, and coordination with in-house operations.

Pennsylvania Power and Light, Susquehanna Nuclear Station

Mr. Giangreco managed a multi-discipline site staff of 40 engineers and designers performing field design for the addition of an emergency diesel generator facility at Pennsylvania Power and Light's Susquehanna Nuclear Station.

Engineering Firm, Various Nuclear Power Plant Projects, Cherry Hill, New Jersey

Mr. Giangreco performed a variety of project management, contract administration and technical functions for two turnkey nuclear power plants. He developed a commodity-based method of tracking and reporting project percent complete and investigated and responded to client audit findings, including the development of corrective actions.

David H. Coffield, PE

Project Manager / Construction Manager / Project Engineer

David H. Coffield, a Professional Engineer, has more than 30 years of experience providing project oversight, program management, value engineering, construction management, claims resolution, and arbitration services on complex projects for public agencies, private owners, architect-engineers, design-builders and contractors. His experience includes convention center, performing arts, hotels and casino facilities; prison, school, hospital, laboratory and pharmaceutical facilities; airport, rail, bus highway and turnpike, parking garage and firehouse facilities; rolling stock manufacturing, nuclear and fossil fuel power plants, synthetic fuel, and lock and dam facilities; water/wastewater treatment; secure communications; light manufacturing; high-rise building renovation; and deep exploration drilling for geothermal energy, oil, and gas.

Recent and Relevant Experience

Various Project Assignments, Port Authority of New York and New Jersey.
Mr. Coffield provided project management consulting services for the Authority's 300-person Engineering Department, including:

- He developed a Department-wide upgrading of Value Engineering (VE) and cost estimating procedures, as well as other related technology initiatives to address the multiple stages of project design development. He led Hill's team which also performed cost estimating, VE workshops, and constructability and bidability reviews for several major projects, including a $90 million parking facility and monorail station expansion at Newark International Airport; and the $25 million Battery Park City Ferry Terminal. He was also the VE facilitator for a 50-person multi-agency peer review to reduce the schedule and budget for the $150 million AirTrain Terminal at Jamaica Station project linking the station with JFK International Airport.
- He supervised several Hill project managers providing services to upgrade the Port Authority's major bridge and aviation facilities, electronic toll collection operations, and its corporate maintenance management system.
- Following the September 11, 2001 attack on the World Trade Center, Mr. Coffield helped the Port Authority manage technical reviews to facilitate restoration of Port Authority Trans-Hudson (PATH) rail service to Lower Manhattan. He also helped facilitate multi-divisional feasibility reviews of alternative locations and designs for a new permanent PATH station and multi-modal transit hub in the World Trade Center area.

Education:

M.S., Civil Engineering - Construction Engineering Mgmt., Oregon State University, 1978

B.S., General Engineering, Oregon State University, 1974

B.S., Geology, Oregon State University, 1974

Registrations:

LEED Accredited Professional

Professional Memberships

American Arbitration Association

Publications

"Value Engineering - A Guaranteed Investment," (American Society of Civil Engineers, 1989)

Employment History:

Exploration Logging, Inc., 1974-1975

Oregon State Board of Higher Education, 1975-1977

Bechtel Power Corporation, 1977-1979

MDC Systems Corporation, 1979-1983

Contract Management Corporation, 1983-1984

Hill International, Inc., 1984-Present

U.S. Supreme Court (USSC) Modernization Project, Architect of the Capitol (AOC), Senior Consultant .

Hill International was selected as the Construction Manager. Mr. Coffield was brought into this project at approximately 25% complete to implement necessary improvements in the quality assurance and claims mitigation process, as the project had been impacted by extensive undisclosed abatement requirements, scope changes, and other existing conditions, which had delayed the project and challenged the project team. His involvement improved the QA/QC process, enhanced cooperation between the contractor and owner's representatives, and helped to get the project back on track.

Thomas Dudley School, Camden, New Jersey, New Jersey Schools Development Authority (NJSDA), (formerly NJSCC), Construction Manager.

Mr. Coffield serves as Construction Manager for this $21.6 million project for an 88,280 square foot, new 2-story elementary school with a full size gymnasium, cafeteria, and auditorium.

H.B. Wilson Elementary School, Camden, New Jersey, New Jersey School Development Authority (NJSDA), Project Manager.

Hill International was retained by the NJSDA to provide construction phase construction management services for this new $22 million school. Mr. Coffield provided site construction management consulting services to help the NJSDA resolve a number of environmental and differing site conditions challenges that were impacting the construction process.

Woodbridge Township Schools Program, Woodbridge Township School District, Woodbridge, New Jersey, Project Manager.

Hill International was retained as the construction manager for the 25 school construction projects under the Woodbridge Township Schools Program, which included 6 new additions and 19 renovation projects. Mr. Coffield implemented a quality assurance program in advance of inspection by the Township code officials. The quality assurance program also included five renovation projects, which included 2 middle schools and 3 elementary schools.

Frederick P. Rose Hall, Jazz at Lincoln Center, New York City Department of Design and Construction, Cultural Institutions Unit.

Mr. Coffield was Hill's Senior Project Manager for a multi-discipline team of consultants providing management oversight of scope/design, budget, costs and quality, and grant administration services as the Project Representative. The jazz facility is built within a specially isolated structural shell within the new $1.6 billion, 2.5 million square foot Time Warner twin tower complex of corporate offices, retail, restaurant, hotel, and condominium facilities at Columbus Circle.

New York State Psychiatric Institute, Dormitory Authority of the State of New York (DASNY), New York City, New York.

The Institute is engaged in research programs including submolecular research, and the effects of drugs on living cells, genetics, and mental illness. Hill provided construction management services during the design and construction of the new 342,000-SF facility in Upper Manhattan which houses extensive research, patient care and student residency. During the construction phase, Mr. Coffield performed analyses of merit and costs associated with numerous design changes affecting the trade contractors, in order to maintain project momentum.

Key Staff

The HMM Team has assembled a project team that is composed of highly-qualified professionals who possess extensive project and program experience, strong leadership, and sound technical expertise. All of the proposed key staff have extensive program management, design, and/or construction-related experience for aviation, tunnels, bridges, terminals, marine, rail, and transit projects; managed large-scale transit projects encompassing multi-disciplinary engineering elements; and managed work similar in nature. In addition to the PANYNJ, this Team of key program management professionals has performed similar services to many of the nation's transit agencies. Each individual has a strong understanding of the various technical aspects of designing and constructing efficiently, while meeting the clients' project-specific requirements. The project staff will be managed from our Manhattan office located in Midtown. Additional resources are available from our vast resources of over 60 offices across North America, including Jersey City and Milburn, NJ. Our Project Principal, Roland Ericsson is committed to providing corporate support to the HMM Team. Roland will ensure that adequate resources are made available to meet technical and schedule requirements for the assignments. As Project Principal, Roland is responsible for overall quality assurance and contract compliance.

The HMM Team's key staff are individuals who are experienced in all aspects of planning, designing, and construction of transportation systems. Their significant experience of transit projects ensures the PANYNJ superior quality throughout all phases of the program. Additionally, our key staff is available immediately to work on any assignment, and have the technical expertise to quickly implement the necessary tracking systems to control the budget and schedule. The organizational chart shows the key staff and the following paragraph provides a brief synopsis of our key staff experience.

Program Manager, Mr. Bradford Townsend, PE, will ensure that all aspects of the project are smoothly integrated, that the project is on track in terms of budget, schedule, and quality deliverables, and that the team has the resources to get the job done. Mr. Townsend has led projects and programs that have exceeded the $100 million construction value, a few examples are highlighted below and the details are provided in his resume.

- Transbay Transit Center, Transbay Joint Powers Authority, San Francisco, CA, $4.2B
- Taiwan High Speed Rail Project, Taiwan High Speed Rail Corporation, Taipei, Taiwan, $5.3B
- Hai Van Pass Tunnel Construction Project, Ministry of Transportation, Da Nang, Vietnam, $133M

Project/Program Manager of Tunnels, Mr. Andy Thompson, PE. Mr. Thompson has extensive experience in the program/construction management, design management, and contract administration of underground facilities for water, wastewater, and transportation projects. He has project experience in a range of tunneling and shaft-sinking methods, including TBMs (hard rock, EPB and slurry), raise boring, drill, and blast and roadheader/mechanical excavation such as:

- East Side Access Project, Metropolitan Transportation Authority Capital Construction, New York, NY, $7.3B

Project/Program Manager of Rail Facilities, Mr. Frank Facciolo, PE. Mr. Facciolo has been senior manager and engineer for traditional designs, design-build (fast track projects), construction management, and on-call service contracts. He brings over 22 years of experience in infrastructure, transportation, and design-build related projects. Frank's experience ranges from planning through final design phases to construction support services and construction management projects. A few examples of projects in the $100 million area are:

- Conceptual to Final Design for Hudson Line Station Rehabilitation, Metro-North Railroad, Westchester County, NY, $100M
- Yankee Stadium Station, MTA Metro-North, Bronx, NY, $100M
- Design-Build of Mother Clara Hale Bus Depot, Metropolitan Transportation Authority, New York City Transit, New York, NY, $220M

Project/Program Manager of Marine, Mr. Erik Stromberg, PE. Mr. Stromberg is a Port industry leader with proven abilities in port authority and port industry leadership and management, program management, strategic and business planning, organizational development, and communication. His experiences with projects over $100M include:

- Marine Terminal Capital Development Program for North Carolina State Ports Authority, Wilmington, NC $130M
- Cape Fear River Channel Capital Development Program for North Carolina State Ports Authority, Wilmington, NC, $440M

Project/Program Manager of Terminals and Vertical Construction, Mr. James Mortimer, PE. James J. Mortimer, a Professional Engineer, has over 30 years of experience in the construction industry. Mr. Mortimer has served as vice president, project manager, program manager, and resident engineer managing projects, which have included correctional, educational, transportation, museums and zoos, theaters, healthcare, housing, and industrial facilities. He has extensive experience as a construction supervisor and is knowledgeable in the area of contract administration. His experiences with projects over $100M include;

- World Trade Center Path Station Reconstruction, PA/NY&NJ, New York, New York, $12B
- Insurance and FEMA Claims – WTC Facilities, PANYNJ, New York, New York, $1B

Project/Program Manager of Aviation, Mr. Andrew Linder, PE. Mr. Linder has over 28 years of diverse experience in aviation, site development, surface transportation, and security projects in the public and private sector. He has been involved with both domestic and international projects. His experience involves various aspects of program and project management, as well as the planning, design, and construction of multi-discipline transportation and infrastructure projects with construction values well above $100M.

- Los Angeles International Airport (LAX), Los Angeles World Airports, Los Angeles, CA, $5.3B
- John F. Kennedy International Airport (JFK), JFKIAT LLC, Queens, NY, $800M

SUPPORT STAFF

To complement our key staff extensive technical capabilities, HMM has a cadre of highly-skilled support professionals with a variety of experience to include programming, planning, design, pre-construction, construction, and post-construction services. Their impeccable credentials, previous transit-related expertise, and demonstrated technical ability to complete any task-specific requirement will further ensure PANYNJ a successful program. Additionally, our support staff either meets and/or exceeds the requirements of their assigned position. HMM's plan is to exceed all the expectations of quality, safety, cost, and schedule with our depth of support resources

We will bring this experience to the PANYNJ in support of the Project/Program Management Consultant Services contract. Thus, the composition of our team will guarantee the PANYNJ:

- Clear lines of communication and a single point-of-contact
- A unified team with clear defined roles operating under the direction of one key manager
- Appointment of skilled program management professionals assuring strong and consistent project direction
- A structure that permits flexibility in team responses to changing project demands, without losing sight of the overall goals
- Exceeding the M/DBE subcontracting goals

Additional engineering staff is identified on the organization chart, to fulfill Task Orders for studies, drafting and design, inspection services, cost estimating, scheduling, and construction support services. The HMM Team has also identified key staff to cover project controls, scheduling, and quality control.

Table C.3

Name	Title	Programs/Projects > $100M Construction Value
Bradford Townsend, PE	Program Manager	Transbay Transit Center, Transbay Joint Powers Authority, San Francisco, CA, $4.2B Taiwan High Speed Rail Project, Taiwan High Speed Rail Corporation, Taipei, Taiwan, $5.3B Hai Van Pass Tunnel Construction Project, Ministry of Transportation, Da Nang, Vietnam, $133M
Andrew Linder, PE	Project/Program Manager Aviation	Los Angeles International Airport (LAX), Los Angeles World Airports, Los Angeles, CA, $5.3B John F. Kennedy International Airport (JFK), JFKIAT LLC, Queens, NY, $800M
Andrew Thompson, PE	Project/Program Manager Tunnels, Bridges,	East Side Access Project, Metropolitan Transportation Authority Capital Construction, New York, NY, $7.3B
Erik Stromberg	Project/Program Manager Port Commerce	Marine Terminal Capital Development Program for North Carolina State Ports Authority, Wilmington, NC $130M Cape Fear River Channel Capital Development Program for North Carolina State Ports Authority, Wilmington, NC, $440M
Frank Facciolo, PE	Project/Program Manager Path	Conceptual to Final Design for Hudson Line Station Rehabilitation, Metro-North Railroad, Westchester County, NY, $100M Design-Build of Mother Clara Hale Bus Depot, Metropolitan Transportation Authority, New York City Transit, New York, NY, $220M Yankee Stadium Station, MTA Metro-North, Bronx, NY, $100M
James Mortimer, PE	Project/Program Manager WTC	World Trade Center Path Station Reconstruction, PA/NY&NJ, New York, New York, $12B Insurance and FEMA Claims – WTC Facilities, PANYNJ, New York, New York, $1B

Relevant Experience

Section D.

LAX Modernization Program

Location
Los Angeles, CA

Client
Los Angeles World Airports (LAWA)

Project Type
Airport Design

Services
Tunnel Engineering, Utility and Utility Relocation Design, hydrant fueling, Utility Plant Design, Taxiway, Taxilane, Apron Engineering, Airfield Lighting, Signage, PBB's

Duration
2008 – 2014

Construction Cost
$5 billion

Reference
Jake Adams
Airfield Element Manager
Los Angeles World Airports
[redacted]

Project Description

Los Angeles World Airports (LAWA) is reshaping LAX to meet the needs of the future. To meet this goal, the $5 billion LAX Modernization Program will increase passenger comfort, travel efficiency, safety and security for the current and projected flight capacity levels at the airport, and includes the design of the new Midfield Satellite Concourse (MSC) and the expansion of the international terminal (TBIT). The program aims to provide for unrestricted operations of future large aircraft to maximize the economic and environmental benefits of these technologies through reduced fuel consumption and decreased emissions. Key components of this expansion are providing contact gates for international carriers in time for the scheduled implementation of Group VI aircraft that include the A380, B787, and B747-8, as well as passenger, baggage and utility connector tunnel(s) between MSC and TBIT.

HMM Role

Hatch Mott MacDonald is the lead civil engineer for the Bradley West Development Program, and one of the prime consultants on LAWA's Engineering Services Team providing engineering design and planning services for taxiways, taxiway bridges, tunnels, aprons, and utility improvements for the new Midfield Satellite Concourse (MSC), the existing Tom Bradley International Terminal (TBIT) expansion, underground utilities and the central utility plant, and other related projects. As the prime consultant of LAWA's Engineering Services team, we are providing airfield and tunnel engineering, structural design of taxiway and service road bridges, utility and utility relocation design, hydrant fueling, utility plant design, people mover systems, and other specialty engineering services including civil, structural, mechanical, electrical, communications, security and other engineering-related design services, assistance during construction procurement, design assistance during construction, and other services including site surveys, environmental, geotechnical, archeological and other related services. All work is carefully integrated with all stakeholders through design partnering and configuration management. The overall project is schedule-driven and implemented by awarding a series of separate construction packages.

Highlights

- Four Group VI aircraft parking aprons totaling 330,000 sq. yards
- Connector pavements, bridges and extensions to tie into existing Taxiways D, E, and C
- Two 2,500 ft. taxiways connecting the north and south airfields
- Two 2,500 ft. taxi lanes servicing International Terminal and Mid Field Concourse
- Utility and Baggage Tunnel(s) between TBIT, and the new terminal processor
- Replacement of Central Terminal Area utility lines from the CUP to eight terminals
- Design of a new central utility plant (CUP) with connections to existing and new utilities
- Decommissioning, relocation of hangars, ARFF, Passenger Bus Terminal
- New apron fueling system for TBIT
- Design for eight bay Aircraft Rescue and Fire Fighting Facility

LAX Modernization Program – Tunnels

Location
Los Angeles, CA

Client
Los Angeles World Airports (LAWA)

Project Type
Airport Design - Tunnels

Services
Tunnels and Retaining Structures Engineering; Utility & Utility Relocation Design

Duration
2008 – 2014

Construction Cost
$5 billion

Reference
Jake Adams
Airfield Element Manager
Los Angeles World Airports
[redacted]

Project Description

Los Angeles International Airport (LAX) is being redeveloped to accommodate a greater number of larger aircraft, such as the A380 and B747-8. Los Angeles World Airports (LAWA) is investing $5 billion in a modernization program that will increase passenger comfort, travel efficiency, safety, and security for the current and projected flight capacity levels at the airport. Under an FAA-approved Airport Layout Plan, utilities are being rerouted by means of trenchless excavation ahead of a series of phased airfield infrastructure improvement projects: the Crossfield Taxiway Project (CFTP); the Tom Bradley International Terminal (TBIT) Reconfiguration Project; and the new Midfield Satellite Concourse (MSC).

Construction of the utility crossings includes steel casings installed through excavation methods such as guided auger boring, auger boring, and open-shield pipe jacking. Carrier pipes for power, communications, jet fuel, storm drains, fire water, and domestic water are subsequently installed into the various casings and grouted into place if required.

HMM Role

As one of the prime consultants on LAWA's engineering, planning and design services contract, Hatch Mott MacDonald is providing airside civil engineering design and construction support services which include tunnel engineering design and field inspection, surveying and subsurface investigations; airfield pavement engineering; structural design of taxiway and vehicle service road bridges, and utility plant and relocation design. Additional services include civil, structural, mechanical, electrical, communications, security, environmental, life safety considerations, and other engineering-related design services; bid phase services; design services during construction; and sustainability guidelines documentation.

Highlights

- Planning and preliminary design of tunnels ranging from 18 inches to 78 inches in diameter under the airfield for future baggage handling system and for utility distribution
- Four tunnels installed underneath the active TBIT building with foundation clearances as small as seven feet
- Six tunnels installed underneath active taxiways
- Guided auger boring, auger boring, and open-shield pipe jacking
- Shafts constructed by a variety of methods including soldier piles and steel sheets, wood lagging, and trench shields
- Phased construction to minimize impacts on airport operations, while maintaining tenant access along World Way West
- Design of all structures to the strictest California Code Seismic Criteria
- Obtaining permits from numerous governmental agencies

Transbay Transit Center Program

Location
San Francisco, CA

Client
Transbay Joint Powers Authority (TJPA)

Project Type
Rail Tunnel, Underground Station, Rail Yard Expansion

Services
Program Management
Project Controls

Duration
2004 – 2018

Construction Cost
$4.2 billion

Reference
Maria Ayerdi-Kaplan
Executive Director
Transbay Joint Power Authority
[redacted]

Project Description

The $4.2 billion Transbay Transit Center Program is a landmark transportation project for the San Francisco Bay Area. Housing nine bus and rail systems in one facility in downtown San Francisco, the new Transit Center will be the largest transit-integrating, intermodal center west of New York City.

The program includes the design, construction and operation of a new 1 million-square-ft building composed of five interior levels and a 5.4-acre rooftop park. The design will reflect the program's sustainability goals of reducing energy consumption and carbon emissions and conserving water, making maximum use of passive measures such as daylighting and natural ventilation. The park atop the building will be designed as a recreational amenity that will also absorb pollutants, filter grey water, and provide habitat for local plants and wildlife. The Transit Center is expected to achieve a minimum LEED rating of Silver.

Dedicated bus ramps from the bus level of the Transit Center will connect to the San Francisco-Oakland Bay Bridge and an off-site bus storage facility. A pedestrian tunnel under city streets will provide direct access to the Bay Area Rapid Transit (BART) and Muni Metro systems. A temporary bus terminal will be built to serve commuters during construction of the Transit Center. The project is located within San Francisco's Transbay redevelopment area, which when complete will include 3,400 units of new housing, 1.2 million square ft of new office space, a hotel, and retail outlets. A critical component of the program is the Caltrain Downtown Extension (DTX)-a 1.3-mile below-grade rail extension that will bring Caltrain service into the lower level of the Transit Center. Comprising a combination of mined and cut-and-cover tunnels and open-cut construction, the DTX project includes a new subsurface station near Fourth and Townsend streets, modifications to the existing Fourth and King surface station, and improvements to the Caltrain yard. The DTX is being designed to accommodate the trains that will run on California's future high-speed rail system, which will connect San Francisco to Los Angeles in just over two and a half hours.

HMM Role

Hatch Mott MacDonald is a sub-consultant and the program manager for the design, construction, testing and start-up of the DTX. Specific duties include monitoring design consultant progress in terms of budget and schedule; overseeing design development; reviewing design deliverables; analyzing contract procurement methods; and developing deliverables including the project cost estimate, contract packaging strategy, and design criteria. HMM is also providing review of design submittals to ensure the structure, rail and systems interfaces between the two projects are properly coordinated.

Project Highlights

- Led a value management effort early during conceptual design that resulted in a $600 million reduction in cost from the developed locally preferred alternative estimate.
- Developed a contract packaging strategy that will maximize the number of potential bidders, provide the most efficient use of funds, and achieve the earliest completion date to begin revenue service.
- Validated that the DTX design concept meets the standards set by high-speed train networks worldwide.
- Obtained the California Public Utilities Commission's concurrence on the proposed vehicle clearance requirements, saving the program millions of dollars in project costs.

SMF Terminal Modernization Program, Phase III

Location
Sacramento, CA

Client
County of Sacramento

Project Type
Airport Landside Services

Services
Preliminary and Final Design for Airside and Landside Services including Civil, Structural, Electrical, and Mechanical Engineering; and construction support services

Duration
2006 – 2009

Construction Cost
$1.2 billion

Reference
Brent Kelley
Project Principal
Corgan Associates
[redacted]

Graphic courtesy of Corgan Associates

Project Description

Sacramento International Airport (SMF) is one of the busiest hubs in the Central Valley. The SMF Master Plan was the first phase of the future vision of the airport and the final draft was approved by the Sacramento County Board of Supervisors in February 2004.

The Terminal Modernization Program was the second phase of this planning effort. It was developed to identify preliminary facilities requirements, terminal complex alternatives, evaluation of those alternatives, and the selection of a preferred terminal development concept. The preferred design concept for the new Central Terminal B was approved by the Board of Supervisors in September 2006. The third phase was final design, which was completed in 2009.

Construction is currently underway and includes a new terminal, a bi-level road serving arrivals, departures and airport services, an Automated People Mover to carry passengers from the new terminal to a 23-gate concourse, and airside Ground Services Equipment with new Passenger Boarding Bridges. Selected construction began in 2008 with an initial estimated cost of $1.1 billion, and roadway and viaduct construction began in 2009.

Phasing/Staging: The new terminal complex will be constructed between existing Terminals A and B. During construction, access to existing terminals needs to be maintained. The access road to Terminal B is within the limits of construction, so a staged approach will be required. There will be a period where three terminals are open while airlines are transferring operations between terminals.

HMM Role

As civil consultant, HMM has executed the Design Development and Final Design Phases of the SMF Terminal Modernization Plan in the following role:

- APM structures and interface with APM procurement consultant
- Ancillary roadways (access and circulation roads)
- Terminal roadways - arrivals level and upper level departure structure, one half mile long
- Passenger boarding bridges and ramp services; HVAC, fuel, and water

Project Highlights

- HMM's portion of the project was on schedule and within design budget
- Extensive construction phasing to assure the airport functionality during construction
- Fast track design integrating cost reduction techniques to meet construction target dates
- Significant elevation differential between new terminal origination and new concourse destination for the APM guideway
- Airside requirements to integrate fully with existing facilities using new technologies
- System designed to highlight glass enclosed three level terminal facility

Sheppard Subway

Location
Toronto, Ontario, Canada

Client
Toronto Transit Commission (TTC)

Project Type
Rail Transit

Services
Overall project management, design, construction mgmt.

Duration
Sept 1991 – Mar 2009
Revenue Service – 2002

Construction Cost
$934 million

Reference
John Sepulis
General Manager
Toronta Transit Commission
[redacted]

Project Description

Part of the original $5 billion rapid transit expansion program involving seven new lines plus the expansion of the existing Wilson Yard, the Sheppard Subway was the only line approved for implementation. The new 6.4km subway line, located in a high density urban environment, runs from the existing Sheppard Station on the Yonge subway line to Don Mills Road. It consists of 3.9km of 5.2m internal diameter bored twin tunnels, 1.5km of cut-and-cover tunnels, five new cut-and-cover stations, complex traffic staging and associated utility relocations, and rail systems.

HMM Role

HMM, as a principal joint venture partner, was responsible for overall program management including funding, project controls, procurement and contract administration. HMM provided direction and guidance of the Environmental Assessment approvals; community consultation, liaison and outreach programs, design and construction management; third party, stakeholder and utility coordination; property and right-of-way; development of design standards and manuals as well as system standards; commissioning, start-up, safety certification and training; and design of systems elements (signaling, communication, power, track, fire/life safety systems). Scope of the finishing contract, post-opening involved developing as-built drawings and addressing any deficiencies.

Project Highlights

- Management, from environmental assessment through to construction, of in excess of 60 contract packages ranging up to $100m in construction value.
- Five cut-and-cover stations, 10 to 25 m deep, including an interchange station built over the existing operating subway.
- Enclosed subway bridge structure over a river valley.
- All construction had to be completed in existing built-up areas, requiring unique designs and construction methods to minimize the impacts on existing structures, infrastructure, traffic and local businesses.
- Structures designed to minimize impacts on existing utilities and traffic.
- Multi phase traffic diversions, maintaining existing six lanes of Yonge Street
- Major utility relocations
- Specifications and procurement for owner-purchased TBM's for the tunnels.
- Construction management of tunneling achieving on schedule on budget, on alignment tunnels with acceptable settlements.
- Stations included interfaces with commercial facilities and, in one case, a new multi story parking structure for a retail mall.
- Management of electrical, mechanical, trackwork, signaling, communication, traction power and other rail systems.
- Schedule, cost and construction management for all procurement and construction packages.

Spadina Subway Extension – Program Management

Location
Toronto/Vaughan, Ontario, Canada

Client
Toronto Transit Commission

Project Type
Rail Transit

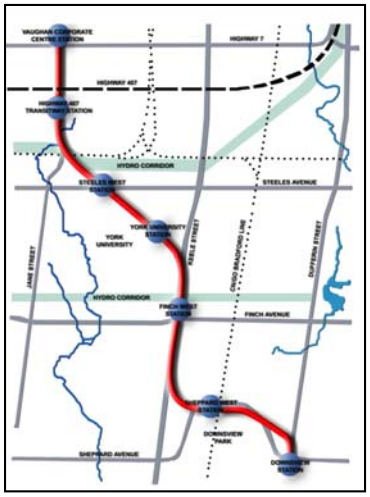
Services
Program Management

Duration
2008 - 2015

Construction Cost
$2.63 billion

Reference
Andy Bertolo
TTC Chief Project Manager
[redacted]

Project Description



The Spadina Subway Extension is the largest transit expansion project to be undertaken by the TTC. Sponsored by three levels of government - Government of Canada, Province of Ontario and City of Toronto/York Region, the project is unique in that the TTC subway network will go beyond the City of Toronto limits for the first time and reach out to the neighbouring community in the Regional Municipality of York.

The existing Spadina Subway line will be extended by 8.6 km, including 6.7km of bored twin tunnels, and add six more stations, of which 2.4 km and two stations will be entirely in the Region of York. Another station will straddle the boundary between the two municipalities. Starting at the current Downsview terminal, the subway will progress north west through the York University campus, across Hwy 407 and end at Vaughan City Centre north of Hwy 7. The alignment crosses beneath several buildings, railway tracks, provincial highway and city arterial roads, major utilities, conservation areas and water courses.

HMM Role

HMM is working in an integrated team staffed by personnel from the Toronto Transit Commission, and is lead partner of the *Spadina Link Project Managers* (a joint venture of HMM, Delcan and MMM), and Stantec (Project Controls consultant). Reporting to the TTC's Chief Project Manager, the JV Team is managing the delivery of the design and construction of the project.

The Team is also performing the preliminary design of track and signals, traction power supply, communications and SCADA and the detailed design of the tunnel under separate contract.

Project Highlights

- Project funded by three levels of government.
- Very demanding design and construction schedule.
- Project to be delivered in six major construction contracts in the traditional design bid build delivery method:
  - Two tunnel contracts each incorporating a subway station
  - Four contracts for construction of the remaining four subway stations
- Several advance contracts for enabling works such as utilities relocations and road and creek diversions.
- Pre-purchase of concrete tunnel liner segments.
- Seven large design assignments for the tunnels and stations. Preliminary design and procurement for systems design , supply and installation of track, signals, electrification, communications and SCADA. Extensive consultation and liaison with internal and external stakeholders and approvals authorities.
- Permits and approvals from three levels of government, utility companies and public property owners.
- Property acquisition from public and private owners.

DRPT Program and Project Management

Location
Virginia

Client
Department of Rail and Public Transportation

Project Type
Program Management

Services
Conceptual and Preliminary Design, Planning, Program Management, Signal Design

Duration
Start date: 2007
End date: Unknown

Construction Cost
$N/A

Construction Completion Date
Ongoing

Project Description

Virginia's Department of Rail and Public Transportation (DRPT) reorganized itself to transition from a pure granting agency to a multi-disciplined program delivery organization. To provide the full range of services required, DRPT sought the expertise of a transportation consultant to supplement DRPT's in-house staff's capabilities.

HMM Role

As part of the Virginia Department of Rail and Public Transportation (DRPT) Program and Project Management Consultant Services, Hatch Mott MacDonald (HMM) has led the preliminary design efforts for the Lynchburg Virginia Kemper Street Station improvements and the Richmond Virginia Staples Mill Station improvements. These improvements include additional track for train storage, power, compressed air, potable water, sanity sewer connections, platforms, lighting, and crew facilities. We are overseeing the final design of these facilities as well as working with DRPT planning efforts for additional Amtrak improvements or new stations for several Virginia Cities as part of the comprehensive Virginia Rail Plan. This comprehensive Virginia Rail Plan includes intrastate Amtrak trains funded by the State of Virginia.

Highlights

Under the PPMC contract HMM has performed the following activities:

- Develop a Statewide Rail Plan
- Performed an evaluation of all the Shortline Railroads in Virginia
- Performed Preliminary Engineering for the Urban Crescent Corridor
- Updated the three major Grant program processes.
- Performed an EA to select the preferred High Speed Rail in Richmond area.
- Coordinated the activities of local governments with Amtrak and FRA
- Developed the program costs for a $757M inter-city passenger rail enhancement program
- Modeled operations on the I-95/I-64 Rail Corridor
- Project readiness review of the Dulles Metro Rail Extension Project
- Signal Design for 22 miles of branchline railroad
- Performed Preliminary Engineering for the Kemper Street (Lynchburg) and Staples Mill (Richmond) Amtrak Station Improvements
- Working with Amtrak for additional stations and improvements contained in the State Rail Plan

GO Transit Rail Improvement Program

Location
Toronto, ON

Client
GO Transit

Project Type
Rail / Transit

Services
Program Management

Duration
2003 - 2010

Construction Cost
$700 million

Project Description

GO Transit Rail Improvement Program (GO TRIP) is based on a tri-party agreement between the Federal and Provincial governments and GO Transit with the purpose of meeting GO Transit's current and future demand from the GTA communities along six of its seven rail corridors. GO TRIP involves track improvements, replacement and addition; rail / rail grade separations, rail / road crossing improvements; and associated signal and control work. The program is funded by three levels of government through the Canada Strategic Infrastructure Fund (CSIF) and is made up of:

- Lakeshore East expansion
- Lakeshore West expansion
- Bradford rail corridor extension to Barrie including grade separation at Snider
- Georgetown corridor improvements including West Toronto diamond
- Milton corridor improvements.
- Stouffville rail corridor improvement including Hagerman grade separation

HMM Role

Acres (now part of HMM) in joint a venture with two Toronto-based consulting firms were awarded this contract. The staff assigned to the project are now part of HMM. For this long-term contract, HMM is specifically responsible for overall program management services and working closely with GO Transit's staff. The JV team is responsible for developing an overall service implementation program based on identified needs, technical services including the development of alternative schemes and phasing to achieve program objectives, and overall project management and contract administration of consultant assignments for design of specific program components. Specific services include:

- Work and implementation plan and general program administration
- Development of program policies, procedures and standards
- Communication, information distribution and retrieval
- Program reporting, document control / retrieval, estimating, budgeting and cost control
- Program scope and change control; program scheduling
- Design and construction monitoring and oversight
- Risk assessment, value engineering and quality management
- Evaluation, negotiation and award of consulting and construction contracts
- Reporting detail to support ongoing financial commitments
- Close coordination with CN and / or CP Rail, owners of most of the corridors being improved

Project Highlights

"Project started by Acres staff prior to joining Hatch Mott MacDonald group of companies."

- Introduction of major design-build contracts to GO Transit procurement
- Managing interests of four levels of government: federal, provincial, municipal & regional
- Coordination of construction activities between railways (CN and CP Rail)
- Coordination of project funding among CSIF, Province and GO Transit
- Review of designs and construction methodologies to identification construction cost savings

Project Profiles

On the following pages we have provided in-depth project profiles that best exemplify our expertise and qualifications to meet the comprehensive challenges of the Authority's Project Management Services On-Call contract. In addition, for your convenience, we have tabulated the contact information below.

Project Name	Client Name	Contact	Phone Number
World Trade Center PATH Reconstruction (Phase I)	PANYNJ Engineering Department	Achille Niro Former Assistant Chief Engineer	[redacted] (Now with AECOM)
World Trade Center Reconstruction (Phase II)	PANYNJ WTC Construction	Carla Bonacci Deputy Director	212.435.5532
No. 7 Subway Line Extension	MTA	Paul Matthews, PE Construction Manager	[redacted]
Philadelphia International Airport Program Management	City of Philadelphia, Department of Commerce, Division of Aviation	Edward Anastasi Deputy Director of Business and Finance	[redacted]
MTA Capital Improvement Program	MTA	Michael Jew-Geralds Assistant Director Office of Construction Oversight	[redacted]
Project Management Oversight Services	U.S. Federal Transit Administration	Steve Asatoorian FTA Contracting Officer's Technical Representative	[redacted]
City Hall Renovations	New York City Department of Design and Construction	Sergio Silveira, RA Assistant Commissioner	[redacted]
Jet Blue Terminal, JFK Airport	JFK Airport PANYNJ Engineering Department	Emanuel A. Ciminiello Assistant Resident Engineer	7[redacted]
	OTG at JFK T5 Venture, LLC	Christopher Reed Vice President	[redacted]
Schomburg Center for Research in Black Culture	New York City Department of Design and Construction	Michael Nastasi Program Director	[redacted]
El Museo del Barrio	New York City Department of Design and Construction	Ieva Vanags Project Director	[redacted]
Bronx County Hall of Justice	Dormitory Authority of the State of New York	James Hall Project Manager	[redacted]
Museum of the City of New York	New York City Department of Design and Construction	Patricia Zedalis Coordinator/Project Manager	[redacted]
Alexander Hamilton U.S. Custom House	United States General Services Administration	Dorothy DaLoia	[redacted]
Weeksville Heritage Center	New York City Department of Design and Construction	Michael Nastasi Program Director	[redacted]

Design of Priority Repairs to the NJ Approach Ramps to the GWB (NY Office Project)

We developed repair plans for Priority and Routine items that were identified in the 2005 Biennial inspection report for three bridge structures that are located on the New Jersey side of the GWB. Work involved 100% hands-on inspection of the superstructure and substructure at Lemoine and Center Avenues, and the PIP Bridge to verify all priority and routine repair items noted on the previous inspection report. We prepared design details for concrete deck and pier spall repairs as well as steel repairs for deteriorated stringers. Design details and specifications were based on current AASHTO and PA standards. We prepared contract drawings, specifications, and cost estimates.

Location
New York & New Jersey

Client
Port Authority of NY & NJ

Client Contact
Dave Taliahani
(973) 792-4755

Construction Cost
N/A

Completion Date
2006

Goethals Bridge Seismic Assessment (NY Office Project)

Location
Staten Island, NY

Client
Port Authority of NY and NJ

Client Contact
Bernard Yostpille
(973) 792-4545

Construction Cost
N/A

Completion Date
2004

TranSystems was retained to perform a comprehensive seismic assessment of the main truss spans of the Goethals Bridge. The assessment evaluated and exposed inherent seismic vulnerabilities in the truss span superstructure and substructure/foundation components based on the two level seismic hazard approach adopted by the NYCDOT. Detailed 3-D finite element models were constructed. Dynamic modal updating was used to tune the models based on bridge vibration measurements obtained as a part of the project. State-of-the-art analytical methods will use the calibrated 3-D models and calculated local geotechnical parameters to provide valid structural response information to the simulated earthquake loadings. Both elastic (response spectrum) and inelastic (push-over) analysis was performed. Different seismic retrofit strategies were compared based on cost, effectiveness, and constructibility Thirty percent conceptual plans were developed for the preferred retrofit scheme.

Waterfront Structural Engineering Services
New Jersey Marine Terminal–Elizabeth, New Jersey

Location

Elizabeth, New Jersey

Client / Owner

The Port Authority of New York and New Jersey

Services

Waterfront Engineering
Structural Engineering

Contract Period

2009-2010

Construction Cost

N/A

Reference

The Port Authority of New York & New Jersey
3 Gateway Center, 3rd Floor
Newark, New Jersey 07102
Mr. Yu Shing Wong
(973) 972-4541

Project Description

McLaren provided the waterfront structural engineering services necessary to inspect, evaluate, design and prepare contract drawings and construction cost estimates for priority repairs for the following:

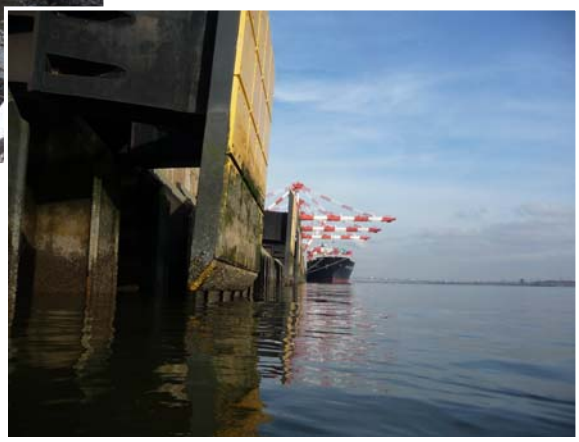
- NJMT Port Newark Berths 3 to 25 (Odd)
- NJMT Port Newark Berths 2 to 36 (Even)
- Elizabeth PAMT Berths 50 to 86 (Even)
- Elizabeth PAMT Berths 88 to 98 (Even) & Turntable
- NJMT AMT Berths 1 &2, Conc. Mooring Dolphins & Timber Walkways

McLaren is intimately familiar with all of these sites from previous successful work, streamlining our inspection and design effort on this project.

McLaren's Role

Work included the inspection, design, preparation of construction documents and specifications, preparation of construction cost estimates, and construction administration services for the rehabilitation of the project sites. Inspections performed by McLaren were planned to accommodate the port's berthing schedule.

The project objective was to restore each of the berths to a level of quality, safety, durability, and reliability that meet the PANYNJ needs, requirements, and preferences. Developing cost effective solutions was key to this objective.



Management Approach

Section E.

Introduction

Hatch Mott MacDonald (HMM) is an employee owned multi-disciplinary A/E and PM/CM firm with a North American staff of more than 1,900 in 60 offices nationwide. The roots of HMM date back more than 107 years and currently provide a worldwide pool of over 22,000 employees to draw upon. HMM is a leading North American consulting engineering firm with a century of worldwide experience. HMM has designed and managed some of the world's most prominent projects. Proud of our role in major ventures across North America, we provide comprehensive engineering services in all areas of aviation, rail, transportation, tunnels, water, wastewater, environmental, parks and recreation, pipeline, and utility markets. HMM has performed, or is currently performing Project/Program Management Service agreements on a national, regional, and a local basis for clients across North America. Projects/Programs under its United States umbrella include projects and programs at JFK, LGA, LAX, EWR, SWF, Pittsburgh, Buffalo, and Washington International Airports. Under its employee owned parent companies of Hatch from Canada and Mott MacDonald (MM) Group from the United Kingdom, HMM has performed, or is currently, performing Project/Program Management Service agreements on an international level for clients such as Sydney International Authority, British Airport Authority, Hong Kong Check Lap Kok, Athens Airport, and Dubai UAE.

Our project/program management approach consistently delivers sound, simple, and practical solutions involving high-level coordination, design and construction expertise, and sensitivity to all important issues through effective utilization of materials and resources. When implementing a program or project, we apply a proactive approach to planning and risk management, including coordinating numerous interfaces, anticipating potential delays, and finding cost-effective, flexible, and timely solutions from programming, planning, and costing through operations and systems commissioning and start-up.

We view effective partnering as an important element of project success. Establishing an effective relationship at the outset with all parties, to maximize their participation and cooperation for each project is important. Everyone's thorough understanding of a project plan and its challenges will greatly assist project implementation. Successful working relationships developed in the early project phases will lay the groundwork for efficient issue resolution and improved community support in subsequent phases of the project.

Team

The HMM Team brings to the PANYNJ:

- Successful performance on similar contracts with transit authorities for project/program on-call contracts
- Demonstrated ability to offer innovative project management concepts for value analysis
- Specialized experience and technical expertise in program, project management, and design to oversee design and construction

Hill International, Inc.

Hill International, Inc. (Hill) is a leading international construction consulting firm that provides program and project management, construction management, cost engineering and estimating, quality assurance, inspection, scheduling, claims analysis, innovative dispute resolution, and staff augmentation services to clients involved in major construction projects worldwide. They have successfully managed more than 5,000 projects with a total construction value over $250 billion, and they are the largest pure construction management firm in the country. Hill is also an international leader in construction claims management, considered to be the largest

construction claims firm in the world. Founded in 1976 as a multi-disciplined management consulting firm that helps construction participants minimize risks, Hill has developed a reputation for their innovative approaches to preventing and resolving construction schedule and cost overruns. Hill has helped their clients resolve more than 25,000 claims and disputes valued at more than $100 billion.

TranSystems

TranSystems is an ENR top 15 Transportation firm with over 1,350 personnel in 45 offices. They have a strong local presence with over 50 structural engineers and have been working with the PANY&NJ for over 25 years. Their bridge experience and expertise places them as one of the top 15 bridge design firms nationwide. Their NY office performs work for both local clients and for other offices around the country on bridge design projects. They are currently working with their Chicago Office on the $50 Million UPRR Bypass Relocation checking design drawings and calculations and the Texas office designing 6 braided ramp bridges and a 2 mile long viaduct as part of the $900 million North Tarrant Expressway Corridor Design/Build project.

Locally, their NY and NJ offices are working on, or have recently completed several notable bridge replacement and sign structure design projects including:

- PANY&NJ GWB NJ Bridges Joint Replacement & Concrete Repairs (In construction)
- NYSDOT Design of 8 Bridges (in Final Design)
- NYSDOT Design of 48 Sign Structures (in construction)
- NYSDOT Rehabilitation of Seven Nassau Expressway Bridges (in Construction)
- TBTA Verrazano Narrows Bridge Steel Repairs (in Construction)
- TBTA Verrazano Narrows Bridge Ramp H Bearing and Concrete Repairs (in Final Design)
- NYCDOT / Kiewit Design Build Replacement of Mill Basin Bridge (Completed 2006)
- NJ Passaic County Osborn Terrace Bridge Replacement (Completed 2004)
- NJ Centre Bridge Stockton Toll Bridge (Completed 2006)

McLaren Engineering Group

Founded in 1977, McLaren Engineering Group has a 33-year history of providing multidiscipline consulting engineering services to clients worldwide. McLaren Engineering Group is a respected and renowned firm that features multiple engineering divisions, staffed with over 120 employees in five offices nationwide. They have successfully completed over 8,000 projects, a figure that encompasses inspection, design, and management for many different project types. Their efforts have taken them to hundreds of locations across the United States, as well as around the globe, from Cancun to Macau.

As its legacy builds, McLaren has grown into a company that offers a set of engineering services that few other firms provide. With experts in numerous engineering disciplines, they blend staff resources to address a project's specific range of design requirements. This ability leads to better management, cost efficiencies, and a more elegant, technically sound solution.

McKissack & McKissack

McKissack is the oldest minority-owned professional design and construction firm in the United States. A family-owned business for more than 100 years, McKissack has been a leader in planning, design, and construction of more than 6,000 projects, proudly upholding the standards of excellence established by its forefathers. McKissack

provides a wide range of construction related services for a variety of government agencies, municipalities and private institutions, and attributes its longevity and success to the talented, service-oriented professionals that comprise the McKissack organization. McKissack's business strategy has always been to build long-term client relationships. And, over the past 100 years, the firm has attracted and retained hundreds of clients by providing them with superior service and value. McKissack takes pride in the thousands of projects they have successfully completed over the years, and enjoys undertaking new challenges within the construction industry that require innovative, yet practical, cost effective solutions. Their values of teamwork, quality, and commitment have, and will always be, the key to their continued growth and success.

Envision Consultants, Ltd.

Envision Consultants, Ltd. is an established woman owned business headquartered in New Jersey. The firm provides professional project and construction management services to parties engaged in the construction industry encompassing owners, government agencies, municipalities, developers, design professionals (architects and engineers), construction managers, contractors, subcontractors, manufacturers, and suppliers. With close to two decades of dedicated service to the construction industry, our commitment to client satisfaction has resulted in the successful completion of diversified construction projects on highways and bridges, transit systems, educational institutions, as well as commercial and industrial facilities throughout the United States. Envision's corporate philosophy is to focus on their clients' specific needs and objectives with tailored project and construction management support services required to manage complex projects. This is accomplished with expert knowledge and experience, and technical expertise in the implementation of state-of-the-art project management and control systems. Envision has been engaged on projects throughout the nation and oversees the implementation of effective project management and control systems.

PROJECT/PROGRAM MANAGEMENT CONSULTANT CORE DUTIES THROUGHOUT ALL PHASES OF A TASK

Project Management Approach

Objectives

Call-In Project Management or Program Management assignments according to Tasks A, B, C, and D identified in the description of consultant tasks will be initiated by PANYNJ through a request for proposal directed to the HMM's Program Manager. The HMM Team will then respond with input from the appropriate team members and will provide a proposal with fee that will be submitted to PANYNJ. A Project/Program Leader and Lead Engineers with support from other team members will be identified for each Project or Program based on the technical requirements, project or program assignments, and schedule commitments.

To assure a fast response to PANYNJ, we propose to develop a two-staged approach for individual call-in project or program assignments. The first stage will be to prepare a generic Project Plan of Work (PPW) that acts as an umbrella work plan. As follow up specific call-in assignments are received, HMM will prepare the second stage project-specific PPW document.

The PPW is an internal HMM project management document that outlines general procedures, CAD standards according to client requirements, software requirements, and communication channels to be used for typical call-in assignments. The document will also identify the proposed project management elements detailed later. The PPW will serve as a reference for all team members and will allow HMM responding swiftly to specific call-in assignments. This document will be submitted to PANYNJ for concurrence prior to implementation. The PPW will be updated and customized with specific requirements for each task as they are identified.

Project Management Process

Identification of Goals

Prior to the start of any awarded call-in task assignment, the designated HMM Program Manager, together with the relevant Project Manager and PANYNJ representatives, will determine the goals of the assignment by verifying the scope, deliverables, critical success factors, and quality control procedures. We find that this is beneficial to our clients, in order to provide the services expected and to avoid any misunderstandings of approach and deliverables later in the process.

HMM will prepare a detailed task proposal of which includes the schedule outlined below and resources to be assigned. Work on the assignment will commence once PANYNJ has reviewed and approved the task proposal. The agreed upon proposal will become part of the PPW.

HMM Quality Policy

- To meet or exceed our clients expectations
- Innovation
- Scope, schedule, and cost
- Communication
- Accuracy
- Environment, Health, and Safety
- Continuous improvement

Project Team Coordination

A critical component of a successful project is to ensure that all project participants' work to the same plan. Once the Task assignment goals have been identified and agreed to, an integrated preliminary work schedule will be prepared taking into account any specific requirements and milestones identified by PANYNJ.

Assignments may be broken down into a number of discrete areas allowing prioritization or work effort and ensuring the right personnel are assigned the correct roles. The schedule will include periods for PANYNJ's review and approval process. Regular meetings will monitor progress and corrective action will be taken when necessary to maintain the schedule. HMM utilizes a "no surprises" philosophy, including continuous registration of risk, and will keep PANYNJ informed of the status of any assignment given to us to enable PANYNJ to maintain ultimate control of the decision making process.

Coordination of Project activities with the Authority

PANYNJ's active involvement is a key element to successful completion of the inspection tasks, and their participation in task forces, over-the-shoulder reviews, and regular quality meetings will allow HMM immediately responding to PANYNJ requests and meeting their expectations the first time.

Environmental Health & Safety

Safety is an integral part of HMM's corporate culture. We have integrated safety into our project management and quality program. The Quality, Environment, and Safety program guides our management of every project. Our frequency and severity rates are among the lowest in the country, attesting to the quality of our safety program and the attitude of our top management in placing safety as the first priority on every project. All HMM personnel that are planned to be assigned to this project will receive appropriate PANYNJ safety training as may be required and necessary. HMM employees will attend safety certification courses to comply with

HMM Safety Culture

- Zero safety incidents expected
- Incidents prevented by good planning
- Environment, Health, and Safety Plan developed up front
- Utilize existing HMM safety systems for site working
- Continuously monitor safety and make improvements.

PANYNJ safety training requirements prior to the start of the field activities.

The management of Environment Health and Safety (EHS) issues within HMM and for our clients is a key management concern. HMM aspires to be a leader in achieving the highest attainable standards in both the occupational and natural environments. We will prepare a project Environmental Health & Safety Plan for the contract. HMM already has in-place a safety system of works for site working. This existing system addresses the safety issues and provides instructions for workers to follow if and when they are presented with hazardous site conditions. The existing systems of works will include a risk assessment for each of the hazards likely to be encountered and make recommendations for the appropriate risk reduction measures needed to work in a safe environment.

Quality Assurance/Control

Project management and quality management are synonymous terms to HMM. Our project management approach will follow our corporate policies and procedures developed under our ISO 9001:2008 certified Quality Environment and Safety (QES) System. This enhances the project team's performance by establishing guidelines for project management that will assure a quality product is delivered on time and within budget. Through a PPW HMM will tailor its existing ISO 9001:2008 compliant procedures to incorporate applicable PANYNJ standards. Any subconsultants used will be required to adhere to these procedures so that the overall project quality will not be compromised.

Deliverables will be reviewed at intervals identified in the PPW and prior to each submission to assure quality, accuracy, and completeness. Deliverables will be signed by the Project Manager and 'checked' copy records will be maintained in our project's QA/AC files. Independent QA project auditors will audit the project assignments for compliance with HMM's internal quality system and the project specific standards. Non-conformances are highlighted for corrective action and appropriate "next steps" identified and implemented to address any performance issues resulting from a trend analysis. This provides internal verification of compliance with our QES System and will assure the quality and integrity of the inspection process.

Project Plan of Work (PPW)

For each assignment, HMM will produce a specific PPW that is a key part of HMM's project control and quality management system. The PPW, which is a project level procedure and quality plan, will assist in assuring quality by providing the baseline to track for scope, cost, schedule, and procedural elements. This document will be updated during the course of the project to incorporate any scope, budget, and schedule changes.

Once the scope of the assignment has been identified and HMM's task proposal approved, a detailed PPW that reflects the assignment's size and complexity will be prepared by the project team. The aim of the PPW is to ensure that all project participants have a clear understanding of the assignment goals. It will include a detailed, deliverable-based breakdown of the scope of

The Project Plan of Work (PPW) will:

- Describe the roles and responsibilities of all project staff
- Define lines of communications within the project organization and with the client
- Outline the working relationship between project staff and the client
- Reference the standards and procedures to be utilized in performing the project
- Describe budget and schedule limitations, deliverables, and all other information necessary in the performance of the project
- Address the distribution of documents to ensure that staff receive information essential to the work performed
- Include our QA/QC Program Manual delineating our quality assurance/quality control procedures

work (including any assumptions, user requirements, agencies, and other pertinent criteria), the task schedule, and the resource schedule.

Establishing this clear definition of the project will enable HMM to best utilize the skills of its staff and identify if any additional resources external to HMM may be required.

The PPW will function as the assignment specific quality control document and will identify the quality control procedures to be performed as well as the schedule for quality reviews.

In addition, the PPW will define procedures for project preparation, software requirements, communication channels, engineering deliverables, monthly invoices, contract documents, cost estimates, incorporation of review comments, scope of work, standard drawing templates, and CAD standards. In general, these will comply with PANYNJ "Guidelines for Implementing Call-in Consultant Contracts" and will become a part of our PPW to assure compliance with the Authority's requirements. The PPW can be updated and customized with specific requirements as they are identified.

HMM Project Controls

HMM's standard internal Project Management and Project Cost accounting systems, used on all HMM projects, will be utilized to monitor and control overall contract and individual assignment costs as well as project schedules. Rigorous oversight of cost, schedules, and scope objectives for an assignment will be undertaken throughout the duration of each project.

HMM Document Controls

Document control is an integral part of management control process. It involves the storage, retrieval, reproduction, and distribution of those documents that reflect the current approved configuration of the system. Also included are correspondence controls tasks. To ensure consistency and in support of total quality management the HMM Team will implement standard file indexing in accordance with PANYNJ requirements to help reduce the cost effort and delays associated with logging and filing.

Schedule Control

HMM will use Oracle-Primavera project management software to prepare and monitor the approved assignment schedule. Regular updates as required by PANYNJ will be issued to indicate adherence to assignment targets and also provide early warning of activities that may not meet their due date thereby enabling resource, budget, and scope decisions to be made. The master project schedule will serve as the primary management tool for planning, scheduling, coordinating and controlling of the PANYNJ projects. The master project schedule consists of numerous activities that will be summarized using the Work Breakdown Schedule (WBS).The master project schedule changes in complexity over the typical basic phases of a PANYNJ Project. These phases include planning; preliminary engineering; final design; right-of-way acquisition; bid and award process; construction; commissioning and testing; and start-up. Each phase will present different project management challenges and is typically controlled by the work of different staff members.

Cost Control

HMM controls project budgets using Project Management Desktop (PMD) and Financial Systems (FiFi) software. PMD and FiFi software are used to track and control each project's staff hours and costs on a weekly basis. This tracking of time and expenses forms the basis for our project engineering control system as well as our project accounting/invoice system. Time and expense costs charged to a project are updated weekly and are available to our project managers the Monday after the previous week's close. Our QES System requires budget and cost

reviews between the project manager and senior management on a monthly basis at a minimum (more frequently if necessary), as required by the nature of an individual assignment.

Project Coordination

Project Coordination will be led by our Program Manager, Bradford Townsend, PE and will include: A kick-off meeting to be held with all project team members, including any subconsultants and representatives from PANYNJ; day-to-day coordination with PANYNJ representative; project control meetings will be held with PANYNJ representatives as needed to review schedules, budgets, needs, inspection, and reporting activities; list of all action items for the next meeting will be prepared and distributed in a timely fashion; periodic internal HMM working meetings will be held to discuss technical issues, work progress, coordination, progress of subconsultants, anticipated problems; subconsultant control will be accomplished on a day-to-day basis, as necessary, with periodical review meetings; and the schedule of progress will depend on the specific area of involvement of each subconsultant.

Project Reports will be submitted on a monthly basis the first week of each month, outlining the status of key issues as well as our performance relative to our contract. Meetings and reports will monitor our team's performance and emphasize proactive measures to address any issues.

The HMM Team will be required to report its costs to date, percentage completed, and estimated hours to complete by task. This approach will allow continuous monitoring of the budget for each task and provide adequate time if corrective action is required.

Communication

Clear, concise, and documented communications are critical to the successful completion of any project. Internal communications, including subconsultants, will be the responsibility of our Project Manager or the project engineers of the specific disciplines in the project. External communications with PANYNJ will be the responsibility of our project manager who will serve as the central focal point of all communications and coordination between the client and our QA/QC panel.

Risk

All construction work whether new-build or remediation and repair carries a certain level of risk. HMM's experience has proven that procedures must be in place to identify and manage risks and hazards. PANYNJ identifies the facility to be inspected to the remediation phase, assuming that the advice to PANYNJ is appropriate and based on documented management. HMM uses the process of a risk register. Within any part of the process, risk is identified, assigned a qualitative impact in terms of likelihood, effects of impact, mitigation measures, and final level of risk if mitigation is taken. Other factors such as cost, schedule, or if action was taken to change a level of risk, can also be added. The purpose of the register is to make people aware of the risk associated with a given solution. Once identified, it can be addressed.

Rates

Section F.

Name	Title	Hourly Rate*
Hatch Mott MacDonald		
Bradford Townsend, PE	Program Manager	$95.48
Roland Ericsson	Principal-In-Charge	$88.21
Andrew Linder, PE	Project/Program Manager – Aviation	$78.47
Andy Thompson, CEng	Project/Program Manager – Tunnels, Bridges, Terminals	$82.82
Erik Stromberg	Project/Program Manager – Port Commerce	$72.50
Frank Facciolo, PE	Project/Program Manager – PATH	$84.33
Nishant Nayan, PhD	Quality Assurance	$46.32
Curtis Wright, PE	Project Manager – Aviation	$92.39
Kin Chow, PE	Project Manager – Aviation	$89.41
John Recco III, PE	Project Manager – Aviation	$65.64
James Armstrong, PE	Project Manager – Aviation	$67.99
Zhengi Cai, PE	Project Manager – Tunnels, Bridges, Terminals	$80.81
Ron Klinczar, PE	Project Manager – Tunnels, Bridges, Terminals	$66.90
Marco Levoyer, PE	Project Manager – Tunnels, Bridges, Terminals	$79.42
Michael Loehr, PE	Project Manager – PATH	$83.90
Darryl Brogan, PE	Project Manager – PATH	$84.92
Richard Buck, PE	Project Manager – PATH	$68.53
Harry Jarnagan, PE	Scheduling & Estimating	$93.99
Robert Nosal	Estimating	$54.03
Hill International		
James Palmer, PE	Executive Committee	$135.58
Amber Rose France, PE	Project/Program Manager – Tunnels, Bridges, Terminals	$55.29
John Lehman, PE	Project Manager – Path	$76.44
Frank Colucci	Project Manager – Path	$82.69
George Duda	Project Manager – Path	$72.60
James Mortimer, PE	Project Manager – WTC	$86.54
Jose Diaz, PE	Project Manager – WTC	$84.62
Gurcharan Chopra	Project Manager – WTC	$66.36
Edward Fox	Project Manager – WTC	$65.87
David Coffield, PE	Support Services – Environmental/LEED/Sustainability/ Value Engineering	$77.72
Edward F. Nicholson, PE	Project Manager – Path	$85.00
Michael J. Brothers	Project Manager – Aviation	$80.77
Karen Mohlenbrok, PE, PMP, LEED AP	Project Manager – Aviation	$69.71
Paul T. Giangreco, PE	Support Services – Project Controls	$64.42
TranSystems		
Steven M. Tafuro	Executive Committee	$114.70
George Brosius, PE	Project/Program Manager – Tunnels, Bridges, Terminals	$59.59
Michael Chelednik, AIA	Project/Program Manager – Tunnels, Bridges, Terminals	$96.16

Gary Matz, PE	Project Manager – Path	$100.97
Frank Miller, PE	Project Manager – Path	$105.77
McLaren Engineering Group		
Malcolm McLaren, PE	Executive Committee	$165.00
Jim Green, PE	Project/Program Manager – Port Commerce	$43.41
Brian Moody, PE	Project/Program Manager – Port Commerce	$42.57
Matt Daniels, PE	Project/Program Manager – Port Commerce	$40.00
Chris Mase, PE	Project/Program Manager – Port Commerce	$34.00
Todd Manson	Project/Program Manager – Port Commerce	$28.92
McKissack & McKissack		
Mark Cosmedy, PE	Project/Program Manager – Tunnels, Bridges, Terminals	$71.31
Robert McDermott	Project Manager – Path	$84.87
Keith Skilling, PE	Support Services – Project Controls	$66.50
Glenn Knapp	Support Services – Project Controls	$59.42
Envision Consultants, Ltd.		
John Campbell	Support Services – Project Controls	$65.00
Anthony Duca, PMP	Support Services – Project Controls	$47.95

*Rates have been escalated to midpoint of contract

M/WBE Participation

Section G.

Section G: M/WBE Participation

We feel we have assembled a best in class team to address the RFP requirements and to meet the defined goals of this RFP. Hatch Mott MacDonald is joined by Hill International, TranSystems, McLaren Engineering Group, McKissack & McKissack (W/MBE), and Envision Consultants, Ltd. (W/DBE) for this proposal. HMM is fully committed to both the spirit and to the detail of using Women and Minority Businesses on our projects. HMM has successfully met contract-required WBE and MBE goals on previous contracts with state and local agencies by maintaining flexibility in assigning work tasks to suitably qualified (W/MBE) subcontractors.

List of Firm’s Affiliates

Section H.

Name, Address, and EIN of Affilates or Subsidiaries:

Hatch Mott MacDonald Group, Inc. (DE 2001)
27 Bleeker Street, Millburn, NJ 07041
EIN: 22-378761

Hatch Mott MacDonald NY, Inc.
f/k/a BAC Killam Inc. (NY 1910)
27 Bleeker Street
Millburn, NJ 07041
EIN: [redacted]
SIC Code: 8117

Hatch Mott MacDonald Ltd.
(Ontario, Canada 1996)
2800 Speakman Drive
Mississauga, Ontario L5K 2RZ

Hatch Mott MacDonald T&T, Inc.
f/k/a Hatch Mott MacDonald, Inc. (DE 1972)
21 Bleeker Street
Millburn, NJ 07041-1008
EIN: [redacted]

Hatch Mott MacDonald Massachusetts, LLC
f/k/a Mott MacDonald Inc. (MA 1988)
27 Bleeker Street
Millburn, NJ 07041
EIN: [redacted]

Hatch Mott MacDonald Michigan, LLC
27 Bleeker Street
Millburn, NJ 07041

Hatch Mott MacDonald Holdings
f/k/a Hatch Mott MacDonald Group Inc.
(DE 2001)
27 Bleeker Street
Millburn, NJ 07041
EIN: [redacted]

Killam Group Inc.
f/k/a Randers Killam Group Inc. (DE 1997)
27 Bleeker Street
Millburn, NJ 07041
EIN: [redacted]

Hatch Mott MacDonald Florida, LLC
f/k/a CarlanKillam Consulting Group, Inc.
(FL 1970)
5111 North 12th Avenue
Pensacola, FL 32513
EIN: [redacted]

Hatch Mott MacDonald Alabama, LLC
f/k/a/ CarlanKillam Consulting Group of Alabama,
Inc. (AL 1986)
5111 North 12th Avenue
Pensacola, FL 32513
EIN: [redacted]

Hatch Mott MacDonald I&E, LLC
f/k/a Elson T. Killam Associates, Inc.
(NJ 1957)
27 Bleeker St.
Millburn, NJ 07041
EIN: [redacted]

Duncan, Lagnese and Associates, LLC
(PA 1962)
d/d/a Hatch Mott MacDonald I&E, Inc.
Gateway View Plaza
1600 West Carson Street
Pittsburgh, PA 15219
EIN: [redacted]

Hatch Mott MacDonald Operating Svcs, LLC
f/k/a Killam Management and Operational
Services, Inc. (NJ 1990)
27 Bleeker Street
Millburn, NJ 07041
EIN: [redacted]

Hatch Mott MacDonald I&E, LLC (A Delaware
Corporation)
f/k/a Killam Associates, New England Inc.
(DE 1988)
27 Bleeker St.
Millburn, NJ 07041
EIN: [redacted]

Firm's Affiliates

Business Name	EIN	Principal Office Address
Hill International, Inc.	[redacted]	**303 Lippincott Centre, Marlton, NJ 08053**
Abu Dhabi Branch (registered in Abu Dhabi)	N/A	Suite 1601, 16th Floor, Butti Al Otaiba Building, Sheikh Khalifa Street, Abu Dhabi, UAE
Qatar Branch (registered in Qatar)	N/A	Al Jaber Tower, 4th Floor, Unit 4, Museum Road, Old Salata, PO Box 21835 Doha, Qatar
Trinidad Branch (registered in Trinidad)		Abercromby Court, 86 Abercromby Street, Port of Spain, Trinidad W.I.
6204902 Canada Inc.	[redacted]	3660 Hurontario Street 6th Floor, Mississauga, Ontario, L5B3C4, Canada
Asia/Pacific Hill International Holding PTE Ltd.	[redacted]	33 West Coast Rise, Singapore 127476 -- Tel: 856-810-6200 -- Fax: 856-810-0404
Philippines Branch	N/A	
Beijing Hill International Construction Consulting Company Limited		Unit 17, 17F PingAn International Financial Center Tower B, No. 1-3, XinYuan South Road, Chaoyang District, Beijing 100027, China Tel: +86-10-5829 1808 Fax: +86-10-5829 1999
Berger Hill Limited (JV Company)		Palazzo Pietro Stiges', 90, Strait Street, Valletta VLT 1436, Malta
Qatar Branch	N/A	
Egypt Branch	N/A	
Boyken International, Inc.		400 Northridge Road, Suite 1200, Atlanta, Georgia 30350
Gerencia International de Proyectos, SA de C.V.		Avenida Nichupte, 19, Supermanzana 19, Manzana 2, Plaza Galerias Infinity 1a, of. 107, Cancun, Quintana Roo, Mexico, Cp. 775500
Gerens Hill International, SA	[redacted]	8 Jose Echegaray Street, Building 3, 1a, Las Rozas (Madrid)
Hill Construction Management Ltd.	[redacted]	Bulevar Mihajla Pupina str No. 1OV/423, 11070 Novi Beograd-- Tel:
Hill Fenton Development, Ltd. (JV Company)		30 DeCastro Street, Road Town, Tortola, British Virgin Islands
Hill International (Algeria)		
Hill International (Anatolia) Ltd.	[redacted]	closed 5/15/09 Documents must be kept 5 years
Hill International (Australia) Pty Limited *(p/k/a Knowles Australia Pty Limited)*	[redacted]	Suite 101 Level 1, 2 Bligh Street, Sydney NSW 2000 Australia -- Tel: +00 612-9222-1799 -- Fax: +00 612-9222-1788
Hill International (Azerbaijan) Limited	[redacted]	Baker & McKenzie - CIS Limited, 96, Nizami Street, The Landmark Building, Baku AZ1010, Azerbaijan (Job site): 78 Parliament Ave, Baku, Azebaijan
Hill International (Belarus) Ltd (on hold)		
Hill International (Bucharest) SRL	[redacted]	Bucharest, district 1, 17-19 Dr. Iacob Felix, 3rd Floor, Romania -- Tel: +40-21-319-5248 -- Fax: +40-21-319-5268 Contact: Costas Gravanis
Hill International (Deutschland) GmbH *(p/k/a James R Knowles (Deutschland) GmbH)*	[redacted]	Prinzregentenstr. 20-22, D-80538 Munich, Germany
Dusseldorf Branch	N/A	Zweigniederlassung,, Dusseldorf 40213, Geschaftsanschrift Graf Adof Platz 15, D 40213, Dusseldorf Contact: Thomas Hans-Hofbauer
Hill International (Egypt)		39 Beirut Street, Heliopolis 11341, Cairo, Egypt -- Tel: 856-810-6200 -- Fax: 856-810-0404
Hill International (Egypt) Ltd.	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Hill International (Georgia) Ltd.	[redacted]	Bucharest, district 1, 17-19 Dr. Iacob Felix, 3rd Floor, Romania -- Tel: +40-21-319-5259 -- Fax: +40-21-319-5279 Contact: Costas Gravanis
Hill International (Hellas), S.A.	[redacted]	62 Kifissias Avenue, 151 25 Maroussi, Athens, Greece -- Tel: +30-210-610-5171 -- Fax: +30-210-610-5172
Hill International (Hong Kong) Ltd. *(p/k/a Hill International (HK) Limited* *p/k/a Pickavance Consulting Limited)*	[redacted]	2401 Wing on Centre, 111 Connaught Road, Central, Hong Kong -- Tel: +852-2542-2818 -- Fax: +852-2541-4648
Japan Branch	N/A	2401 Wing on Centre, 111 Connaught Road, Central, Hong Kong -- Tel: +852-2542-2818 -- Fax: +852-2541-4648
Hill International (Kazakhstan) (on hold)		
Hill International (Kuwait) Ltd.	[redacted]	Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT 1463, Malta
Hill International (Libya) Ltd.	[redacted]	Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT1463, Malta -- Tel: 856-810-6200 -- Fax: 856-810-0404
Registration in Libya	[redacted]	Ben Ghazi, Garyounis District, Building No. 126, Flat No. 7
Hill International (Middle East) Ltd.	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Malta : Mind and Management moved to Malta eff 12/5/2008 and the company registered as an Overseas Company in Malta		Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT 1463, Malta
Bahrain Branch	N/A	Al-Rossais Tower, 9th Floor, Bldg 283, Road No. 1704, Area 317, Office 93, Diplomatic Area, PO Box 21034, Manama, Kingdom of Bahrain
Dubai Branch	N/A	Sultan Business Centre, Offices 501, Plot number 11 , Oud Metha Road Dubai (Sec Cert. 7 Mar 08) Contact: Rick Brown and Samantha Sogolo
Kuwait Branch	N/A	c/o System Development and Project Management, PO Box 13385 Kifan, 71954, Kuwait Contact: Rick Brown and Samantha Sogolo
Morocco Branch	N/A	Contact: Rick Brown and Samantha Sogolo
Saudi Arabia Branch	N/A	Bin Homran Centre, Tahliya Street, Suite 410-A, Medina Road, Jeddah, Kingdom of Saudi Arabia Contact: Rick Brown and Samantha Sogolo
Hill International (Morocco) s.a.r.l.	[redacted]	219, BD. Zerktouni, Residence El Bardai, Casablanca, Morocco

Business Name	EIN	Principal Office Address
Hill International (North Africa) Ltd.	[redacted]	City Stars, Star Capital 8, 6th floor, Office No. 62, El Forsan St Nasr City, Cairo, Egypt -- Tel:+202 24801900 Fax: +202 24801903
Hill International (Puerto Rico), Inc.	[redacted]	303 Lippincott Centre, Marlton, NJ 08053 -- Tel: 856-810-6200 -- Fax: 856-810-0404
Hill International (Syria) LLC		establishing
Hill International (Syria) Ltd.	[redacted]	"Palazzo Pietro Stiges", 90 Strait Street, Valletta VLT1463, Malta
Hill International (UK) Ltd.	[redacted]	1 London Bridge, London, SE1 9BG -- Tel: +44-20-7089-7020 -- Fax: +44-20-7089-7030
Romania Branch	N/A	Municipiul Bucuresti, Sector 1, B-DUL Nicolae Titulescu, Nr. 1, Bl.A7, Sc.4, Et.1, Ap.96
Hill International Development (II) Ltd.		303 Lippincott Centre, Marlton, NJ 08053
Hill International Development Ltd.		303 Lippincott Centre, Marlton, NJ 08053
Hill International Holdings Ltd	[redacted]	Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT 1463, Malta
Hill International Hospitality (Americas) Ltd.		303 Lippincott Center, Marlton, NJ 08053
Hill International Malaysia Sdn Bhd (p/k/a James R. Knowles (M) Sdn Bhd)	[redacted]	Level 7, Unit 7, Block 3B, Plaza Sentral, Jalan Stesen Sentral 5, Kuala Lumpur Sentral, 50470 Kuala Lumpur -- Tel: +603-2274-0917 -- Fax: +603-2274-0918
Hill International Petrol (Egypt) Ltd. (JV Company)		39 Beirut Street, Floor 10, Heliopolis, Cairo Contact: Sarah Hussenein
Hill International Project Management (India) Private Limited		
Hill International Real Estate, LLC	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Hill International Real Estate Partners, LP	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Hill International Rijeka d.o.o.	[redacted]	Rijeka, Nikole, Tesle 9, Croatia -- Tel: 856-810-6200 -- Fax: 856-810-0404
Hill International S.A.	N/A	41 Boulevard Prince Henri L 1724 Luxembourg -- Tel: 011-352-46-83-83 -- Fax: 011-352-46-84-84
Greek Branch (registered in Greece)	N/A	62 Kifissias Avenue, Maroussi,Athens 151 25, Greece
Latvia Branch (registered in Latvia)	N/A	13-36 Dzirnavu Street, Riga, LV-1010
Romania Branch	N/A	Municipiul Bucuresti, Sector 1, B-DUL Nicolae Titulescu, Nr. 1, Bl.A7, Sc.4, Et.1, Ap.96
Hill International Sp.zo.o(p/k/a Euromost Polska)	[redacted]	Atrium Plaza, Jana Pawla II 29, 00-867 Warsaw, Poland Tel: +48 22 58 13 777 Fax: +48 22 58 13 778
Hill International Services Ltd.	[redacted]	30 DeCastro Street, Road Town, Tortola, BVI -- Tel: 856-810-6200 -- Fax: 856-810-0404
Hill International Vietnam Co. Limited		Temporary: 7th Floor, Building B2, Vinh Trung Plaza, Bing Trung Ward, Danang City, SR of Vietnam
Hill Jianke Project Management (Shanghai) Co. Ltd. (JV Company)		Room No. 208, Unit F, Building 5, No. 7 Xiushan Road, Chongming Industrial Park, Chongming County, Shanghai, Ching
Hill Redwood Development Corp.	[redacted]	303 Lippincott Centre, Marlton, NJ 08053 also c/o ZAC Management Group LLC, 101 West Avenue, Suite 300, Jenkintown, PA 19046
Hill Redwood Development, Ltd (JV Company)	[redacted]	30 de Castro Street, Road Town, Tortola, British Virgin Islands
Hill TMG International (JV Company)		36 Mosadak Street, Al-Doki, Giza
I M Petroleum Services Ltd.		30 de Castro Street, Road Town, Tortola, British Virgin Islands
James R. Knowles (Australian Holdings) Pty Limited	[redacted]	Suite 101 Level 1, 2 Bligh Street, Sydney NSW 2000 Australia -- Tel: +00 613 9699 5124 -- Fax: +00 61 3 9699 5104 Contact: Anna Empy
James R. Knowles (Egypt) Limited	[redacted]	119 Misr Helwan Agricultural Road, Maadi, Cairo, Flat 42, Egypt -- Tel: +20-2-525-4115 -- Fax: +20-2-525-4118
James R. Knowles (Holdings) Limited	[redacted]	Vistorm House, 3200 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4BU -- Tel: +44-1928-756500 -- Fax: +44-1928-756501
James R. Knowles (Hong Kong) Limited	[redacted]	2401 Wing on Centre, 111 Connaught Road, Central, Hong Kong -- Tel: +852-2542-2818 -- Fax: +852-2541-4648
James R. Knowles (Middle East) Limited	[redacted]	
James R. Knowles (NSW) Pty Limited	[redacted]	Suite 101 Level 1, 2 Blligh Street, Sydney NSW 2000 Australia -- Tel: +00 613 9699 5124 -- Fax: +00 61 3 9699 5104
James R. Knowles (Overseas) Limited	[redacted]	
James R. Knowles (Thailand) Ltd.	[redacted]	
James R. Knowles (Worldwide) Limited	[redacted]	Vistorm House, 3200 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4BU -- Tel: +44-1928-756500 -- Fax: +44-1928-756501
James R. Knowles Global Limited	[redacted]	Vistorm House, 3200 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4BU -- Tel: +44-1928-756500 -- Fax: +44-1928-756501
John Shreeves and Partners Limited		1 London Bridge, SE 1, 9BG, London EC1M 5RR -- Tel: +44-20-7596-0000 -- Fax: +44-20-7596-0100
John Shreeves Holdings Limited		1 London Bridge, SE 1, 9BG, London EC1M 5RR -- Tel: +44-20-7596-0000 -- Fax: +44-20-7596-0100
KJM & Associates, Ltd.	[redacted]	500 108th Avenue NW, Suite 1000, Bellevue, WA 98004 -- Tel: 425-451-3881 -- Fax: 425-454-8965
Knowles Consultancy Services Inc.	[redacted]	15999 Hurontario Street, Suite 106, Mississauga, Ontario L5G451 Canada -- Tel: 905-804-1958 -- Fax: 905-804-9327
Knowles Director Inc.		Ajeltake Road, Ajeltak Island, Majuro, Marshall Islands MH96960 -- Tel: 856-810-6200 -- Fax: 856-810-0404
Knowles Hill Pty Limited *(p/k/a Knowles Lawyers Pty Limited)*	[redacted]	

Business Name	EIN	Principal Office Address
Knowles Limited	[redacted]	
Knowles North America Holdings Inc.	[redacted]	3660 Hurontario Street, 6th Floor, Mississauga, Ontario L5B3C4
Knowles Secretary Inc.		Ajeltake Road, Ajeltak Island, Majuro, Marshall Islands MH96960 -- Tel: 856-810-6200 -- Fax: 856-810-0404
KRJ Consulting Limited *(p/k/a James R Knowles Limited)*	[redacted]	Vistorm House, 3200 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4BU -- Tel: +44-1928-756500 -- Fax: +44-1928-756501
Makan Hill International Ltd. (JV Company)		Pending: Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands
Mediterranean Leisure (Egypt) Ltd.		30 de Castro Street, Wickhams Cay 1, Road Town, Tortola, British Virgin Islands
PCI Group, LLC	[redacted]	10801 West Charleston, Suite 650, Las Vegas, NV 89135 Tel: 702-515-7490 Fax: 702-515-7491
SIA Hill International Baltic	[redacted]	Elizabetes str.15-1 Riga, Latvia LV-1010 -- Tel: 856-810-6200 -- Fax: 856-810-0404
Singapore Hill International Pte Limited *(p/k/a James R. Knowles (Singapore) Pte Ltd)*	[redacted]	331 North Bridge Road, #12 01/02, Odeon Towers, Singapore 188720 -- Tel: +00 65 6338 2455 -- Fax: +00 65 6339 8568
Stanley Baker Hill (Iraq), Inc. (JV Company)		303 Lippincott Centre, Marlton, NJ 08053 -- Tel: 856-810-6200 -- Fax: 856-810-0404
Stanley Baker Hill, LLC (JV Company)	[redacted]	225 Iowa Avenue, Muscatine, IA -- Tel: 563-264-6204 -- Fax: 563-264-6658
Transportation Construction Services, Inc.	[redacted]	303 Lippincott Centre, Marlton, NJ 08053 -- Tel: 856-810-6200 -- Fax: 856-810-0404
Yeil Hill International CM Ltd. (JV Company)		Lotte Kwanak Tower, room 402, 395-67 Shindaebang-dong, Dongjak-gu, Seoul, Korea 156-711 Tel: 82-2-849-5660 Fax: 82-2-849-5661

Complete List of Firm's Affiliates

McKissack & McKissack is affiliated as a Joint Venture partner with the following firms:

Robins & Morton/McKissack
Federal ID No. [redacted]

Hunter Roberts/McKissack
Federal ID No. [redacted]

Turner/McKissack
Federal ID No. [redacted]

Skanska/McKissack
Federal ID No. [redacted]

Driscoll/McKissack ll
Federal ID No. [redacted]

McKissack + Delcan Joint Venture
Federal ID No. [redacted]

M.G. McLaren, P.C. doing business as **McLaren Engineering Group** presents the following affiliates:

- ***Highland Equipment.*** Certain equipment that we use in the performance of our services is rented from this affiliate. Their full name and address is as follows:

  Highland Equipment Rental
  P.O. Box 60
  West Nyack, NY 10994

- ***LandMetrics Engineering and Surveying PC,*** a subsidiary specializing in land surveys and related consulting. LandMetrics provides specialized surveys and design support that few surveyors can offer because it also has the full support of a large engineering firm.

  LandMetrics Engineering and Surveying PC
  100 Snake Hill Road
  West Nyack, NY 10994

The following are affiliates of TranSystems Corporation:

TranSystems Corporation of Alabama
TranSystems Corporation of Arkansas
TranSystems Corporation of Colorado
TranSystems Corporation of Connecticut
TranSystems Corporation Consultants of Florida
TranSystems Corporation of Idaho, P.A.
TranSystems Corporation of Illinois
TranSystems Corporation of Iowa
TranSystems Corporation of Maine
TranSystems Corporation of Maryland
TranSystems Corporation of Massachusetts
TranSystems Corporation of Michigan
TranSystems Corporation of Mississippi, P. A.
TranSystems Corporation Consultants of Montana
TranSystems Corporation of Nevada
TranSystems Corporation Architect of New Jersey
TranSystems Architect & Engineer, P.C. (New York)
Lichtenstein Consulting Engineers, P.C. (New York)
TranSystems Corporation of North Carolina, P. C.
TranSystems Corporation Consultants of North Dakota, P.C.
TranSystems Corporation of Ohio
TranSystems Corporation of Oklahoma
TranSystems Corporation Architects of Oregon
dba TranSystems Corporation Architecture of Oregon
TranSystems Corporation Consultants of Pennsylvania
TranSystems Corporation of Rhode Island
TranSystems Corporation of the District of Columbia, P.C.
TranSystems Corporation Environmental Services Group, Inc. (No Stock Issued)
TranSystems Acquisition Corporation No. 1 (No Stock Issued)
TranSystems Acquisition Corporation No. 2 (No Stock Issued)

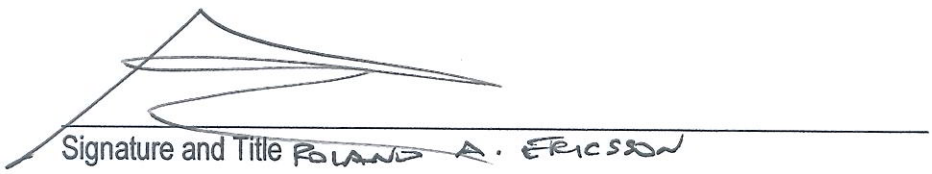
Conflict of Interest Disclaimer

Section I.

Conflict of Interest

Hatch Mott MacDonald or any employee of Hatch Mott MacDonald does not have any financial relationships that might create a conflict of interest or the appearance of a conflict of interest in contracting with or representing the Port Authority of New York & New Jersey.

Hatch Mott MacDonald does not anticipate any present or future conflicts of interest.



Signature and Title ROLAND A. ERICSSON
VICE PRESIDENT

Conflict of Interest

Envision Consultants, Ltd. or any employee of Envision Consultants, Ltd. does not have any financial relationships that might create a conflict of interest or the appearance of a conflict of interest in contracting with or representing the Port Authority of New York & New Jersey.

Envision Consultants, Ltd. does not anticipate any present or future conflicts of interest.

Victoria Makrogiannis, President

Signature and Title

Conflict of Interest

Hill International, Inc. project personnel do not have any conflict of interest that would preclude us from performing the services required under this contract without the appearance of any impropriety.

Statement of Conflict of Interest

McKissack & McKissack hereby certifies that neither the firm nor its employees have any material, personal, financial, or fiduciary interest with The Port Authority of New York & New Jersey (The Authority) or to any offer under consideration by this Request for Proposal (RFP). McKissack & McKissack further certifies that it has no relationship with or bias toward any offer or that would prevent The Authority from evaluating any other proposal solely on its merits. Furthermore, McKissack & McKissack agrees to notify the procurement official in charge of RFP No. 22388, if at any time during the evaluation process it's financial or fiduciary relationship to The Authority changes.

McLaren ENGINEERING GROUP

bridge, highway & rail engineering
entertainment engineering
subaqueous investigation
civil & site engineering
structural design
marine facilities
geotechnics
surveying
forensics

October 14, 2010

Port Authority of New York & New Jersey
One Madison Avenue
New York, NY 10010

Attn: Tim Volonakis/Manager-Procurement Department

Re: RFP for Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014; RFP #22388; MEG File No. 110480

No Conflict of Interest Statement

Dear Mr. Volonakis:

McLaren Engineering Group is not aware of any Conflicts of Interest nor do we foresee any potential Conflicts of Interest should we be awarded this contract.

Very truly yours,

The Office of
McLaren Engineering Group
M. G. McLAREN, P.C.

William J. McCarthy, III
Director of Business Development

WJM/jmh
P:\Proj110\110480\1. Prop Tech Info\RFP Response\Proposal\Info Prepared for Hatch Mott MacDonald\No Conflict of Interest Statement.doc

Offices: New York, Maryland, Florida, Connecticut, California

Licensed in:
Arizona • Alabama • Arkansas • California • Colorado • Connecticut • Delaware • District of Columbia • Florida • Georgia • Hawaii
Idaho • Illinois • Indiana • Kansas • Kentucky • Louisiana • Maryland • Massachusetts • Michigan • Minnesota • Mississippi• Missouri
Nebraska • Nevada • New Hampshire • New Jersey• New York • North Carolina • Ohio • Oklahoma • Oregon • Pennsylvania
Rhode Island• South Carolina• Tennessee•Texas•Trinidad & Tobago• Utah • Vermont • Virginia • Washington •West Virginia • Wisconsin

M. G. McLAREN, P.C.
100 Snake Hill Road
West Nyack, New York 10994
Phone (845) 353-6400
Fax (845) 353-6509
e-mail: mgmclaren@mgmclaren.com
On the web: www.mgmclaren.com

Neither TranSystems, nor any employee, agent, or subcontractor proposed to provide services related to the performance of PANYNJ RFP 212388 are aware of any conflicts of interest with the Authority for providing such services.

No Exceptions Statement

Section J.

Standard Agreement

Hatch Mott MacDonald does not have any exceptions to the Standard Agreement.

Standard Agreement

Envision Consultants, Ltd. does not have any exceptions to the Standard Agreement.

Standard Agreement

Hill International, Inc. agrees with the form of contract and all its terms and conditions.

Exceptions to the Standard Agreement

McKissack & McKissack agrees with The Port Authority of New York and New Jersey's Standard Agreement and its terms and conditions as outlined in RFP No. 22388.

McLaren ENGINEERING GROUP

bridge, highway & rail engineering
entertainment engineering
subaqueous investigation
civil & site engineering
structural design
marine facilities
geotechnics
surveying
forensics

October 14, 2010

Port Authority of New York & New Jersey
One Madison Avenue
New York, NY 10010

Attn: Tim Volonakis/Manager-Procurement Department

Re: RFP for Performance of Expert Professional Project Management Services as Requested on a "Call-In" Basis During 2011, 2012, 2013, and 2014; RFP #22388; MEG File No. 110480

Specific Exceptions Letter

Dear Mr. Volonakis:

McLaren Engineering Group has performed a cursory review of the contract terms and conditions and at this time have no exceptions based on the said review.

Very truly yours,

The Office of
McLaren Engineering Group
M. G. McLAREN, P.C.

William J. McCarthy, III
Director of Business Development

WJM/sms
P:\Proj110\110480\1. Prop Tech Info\RFP Response\Proposal\Info Prepared for Hatch Mott MacDonald\NO EXCEPTIONS letter.doc

Offices: New York, Maryland, Florida, Connecticut, California

Licensed in:
Arizona • Alabama • Arkansas • California • Colorado • Connecticut • Delaware • District of Columbia • Florida • Georgia • Hawaii
Idaho • Illinois • Indiana • Kansas • Kentucky • Louisiana • Maryland • Massachusetts • Michigan • Minnesota • Mississippi• Missouri
Nebraska • Nevada • New Hampshire • New Jersey• New York • North Carolina • Ohio • Oklahoma • Oregon • Pennsylvania
Rhode Island• South Carolina• Tennessee•Texas•Trinidad & Tobago• Utah • Vermont • Virginia • Washington •West Virginia • Wisconsin

M. G. McLAREN, P.C.
100 Snake Hill Road
West Nyack, New York 10994
Phone (845) 353-6400
Fax (845) 353-6509
e-mail: mgmclaren@mgmclaren.com
On the web: www.mgmclaren.com

TranSystems agrees to provide services related to the performance of RFP 22388 in agreement with the form of the contract and its terms and conditions.

Hatch Mott MacDonald

475 Park Avenue South ~ 10th Floor ~ New York, NY 10016

AECOM Transportation

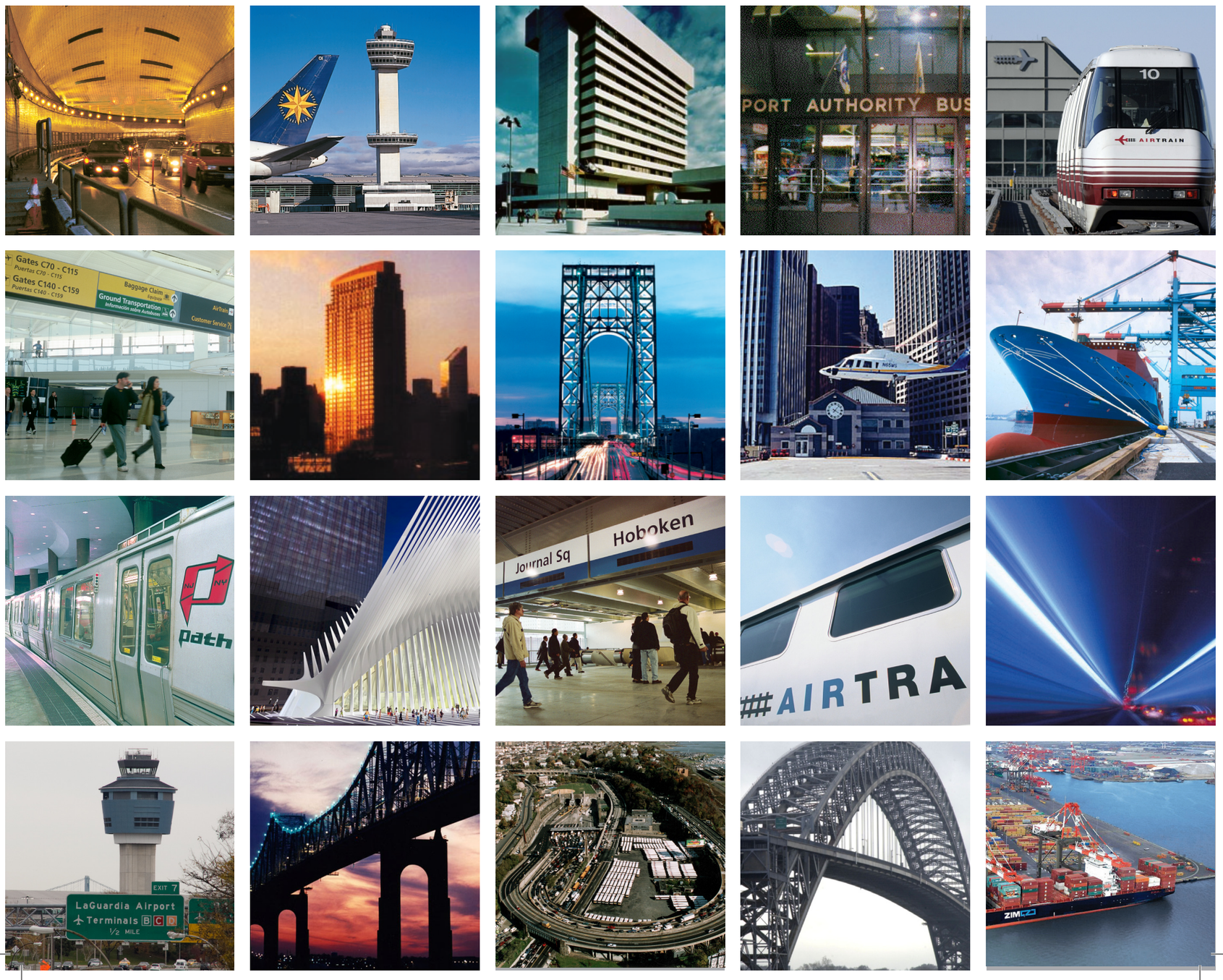
Proposal **May 24, 2011**

Submitted to
The Port Authority of
New York and New Jersey

Submitted by
AECOM USA, Inc.
In association with
Tishman Construction Corporation

Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011 – 2014

RFP Number 24440



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CERTIFICATION STATEMENT ..... *under separate cover*

AECOM
605 Third Avenue
New York, NY 10158
www.aecom.com

(212) 973-2900 tel
(212) 972-0682 fax

May 24, 2011

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attention: RFP Custodian

Re: **RFP Number 24440 – Proposal for the Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014**

Attention RFP Custodian:

As a major transportation and construction management consultant in the New York Region and nationally, **AECOM USA, Inc.** is pleased to submit this proposal to The Port Authority of New York and New Jersey (the Authority) for Expert Professional Construction Management and Related Technical Services on a "Call-In" Basis during 2011-2014. AECOM has been supporting the Authority and all the major transportation agencies in the region with professional engineering and construction management services for over 75 years. Because of our strong commitment to provide the highest quality construction management services to our clients AECOM recently acquired **Tishman Construction Corporation**, one of the most prestigious construction organizations in the region. As such, this proposal is being submitted by **AECOM in association with Tishman** as our prime subconsultant to provide access to the highest quality staff from both organizations for any construction needs the Authority may have in the future. Our team is organized to respond to a wide variety of construction management assignments and has the resources, expertise, and most importantly, the experience working with the Authority to support and advance the capital programs at the Authority's facilities. The AECOM team has such an extensive cadre of staffing that we can provide any skill set necessary to execute a construction project. Our team also has valuable expertise in project controls such as scheduling, estimating, risk management and claims analysis, that may be required on any specific project.

Under the current Construction Management Services Call-In contract from 2006 to 2010, AECOM has successfully provided services on an extension of staff basis for high profile projects such as the JFK Bay Runway Reconstruction Project and many others. With this procurement model, AECOM has assisted the Authority in staffing projects and programs at its various facilities quickly and cost effectively. AECOM staff selected for assignments has been easily integrated into project teams made up of Authority and consultant staff under the leadership of an Authority Resident Engineer and Engineer of Construction. To date AECOM has provided 14 staff, including staff from our subconsultants, on projects for all of the Authority's Line Departments.

AECOM

In addition, to support the Authority's M/WBE Set Aside Program policy goals, AECOM has created a team with **SCI Engineering, P.C., IH Engineers, P.C., LPE Enterprises, Ltd and Industria, Inc.** . These subconsultants have been carefully chosen based on prior successful working relationships with the Authority and AECOM and the quality of their proposed staffing.

Mr. Nicholas DiGregorio will be the Project Manager, point of contact, and primary liaison with the Authority. He will manage this assignment from AECOM's offices at One World Financial Center in lower Manhattan. Nick has 38 years of diverse construction management experience and presently is manager of AECOM's Program and Construction Management Services, consisting of over 200 construction management professionals. Nick is also serving as the Project Manager on the current Construction Management Services Call-In contract from 2006 to 2010 for the Authority. Achille Niro, PE will be the Principal in Charge for AECOM. In this role, Mr. Niro will ensure that the AECOM team has all of the right resources available to respond to the Authority's needs. He has over 39 years experience in planning, design and project/construction management on hundreds of public transportation projects. Prior to joining AECOM, Achille completed a 34-year career with the Authority. His expertise and knowledge of the Authority's policies, practices and needs will be invaluable during the execution of this assignment. In addition, as Senior Vice President of AECOM, I will provide AECOM's corporate commitment to excellence and ensure the successful delivery of our services to meet the Authority's construction management goals.

We appreciate the opportunity to submit our proposal and look forward to continuing our relationship with the Authority. We take pride in our success in having established a long professional relationship on many significant Authority projects and programs. The Port Authority has always been and will continue to be AECOM's top priority.

If you have any questions or require additional information, please do not hesitate to call me at (212) 973-3014.

Very truly yours,
AECOM USA, Inc.

Gary Morris, PE
Senior Vice President

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

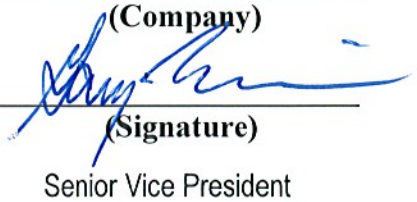
AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

AECOM USA, Inc.

(Company)



(Signature)

Senior Vice President

(Title)

May 23, 2011

(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #24440)

1. Company Name (print or type):
   AECOM USA, Inc.

2. Business Address (to receive mail for this RFP):
   605 Third Avenue, New York, NY 10158

3. Business Telephone Number: 212-973-2900

4. Business Fax Number: 212-972-0682

5. Firm website: www.aecom.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 5/ 3 /1930

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):
   See Section I: Affiliates

9. Officer or Principal of Firm and Title:
   Gary Morris, PE, Senior Vice President

10. Name, telephone number, and email address of contact for questions:
    Achille Niro, PE, Vice President
    212-973-3077 Achille.Niro@aecom.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

Section C
Compliance with Prequalification Requirements

The AECOM team has the required qualifications to comply with the requirements established by the Authority to provide professional construction managementservices on this call-in contract.

A. Office in NY/NJ Area and Number of CM personnel

AECOM USA, Inc. is headquartered in New York City, at 605 Third Avenue, and has several other offices in the Metropolitan area including other locations in the City as well as Piscataway, Newark and Trenton in New Jersey. **The number of construction personnel in those offices, is over 200** (**New York: 151; New Jersey: 50).** In addition, our primary subconsultant **Tishman Construction has resources more than 450 CM personnel in the metropolitan area, with an additional 100+ available from our M/WBE team members, IH, Industria, LPE and SCI.**

B. Certificate of Authorization to Practice Professional Engineering in NY and/or NJ

AECOM's certificates of authorization to practice engineering in New York and New Jersey are provided at the end of this section. We also include the certificates of our proposed subconsultants, IH Engineers, P.C., and SCI Engineering, P.C. For Tishman Construction, we provide their NJ business license only, since no license is necessary in NY to perform construction management services. Industria, Inc. and LPE Enterprises practice construction management and therefore do not require a license to practice.

C. Construction Inspection Staff Qualifications

The AECOM team offers available staff with all the required qualifications for performing construction inspections services, including engineers experienced in civil, structural, electrical and mechanical engineering. Resumes are included in Section E of representative personnel available to be assigned as needed who have the required qualifications as indicated below. Their certifications are included at the end of this section.

Name	Resume Page
1. At least 10 Engineers/Architects Licensed in NY or NJ	
Hasan Abdallah, PE	R6
Christopher Curtis, PE	R23
John Daza, PE	R25
George Greenberg, PE	R36
Vincent Kinlan, PE	R41
John Kovac, PE	R45
Paul Menzel, PE	R53
Paul Mortenson, PE	R58
Steve O'Malley, PE	R60
Munaf Patel, PE	R63
Richard Rohr, PE	R67
Antonio Rosciglione, AIA	R69
Nurul Sadat, PE	R71
Henry Shen, PE	R74
Teddy Yime, PE	R79
Khalid Algende, PE (SCI)	R126
Thiru Srinivasan, PE (IH)	R107
2. At least 10 ACI Concrete Construction Special Inspectors	
Michele Farruggia	R28
Ron MacPherson	R49
Khalid Algende, PE (SCI)	R126
Jose Amador (SCI)	R127
Samuel Bautista (SCI)	R129
Kwame Clouden (SCI)	R130
Illard Johnson (SCI)	R131
Rochelle Lancey (SCI)	R132
Omont McBride (SCI)	R133
Orville McPherson (SCI)	R134
Mike Mowla (SCI)	R135
John Sterlace (SCI)	R136
Michael Suazo (SCI)	R137
Maksudur Rahman (IH)	R103
Mohammad Shaikhji (IH)	R105
Saber Ghazaly (LPE)	R123
Leonardo Nunez (LPE)	R124
3. At least 3 ICC Certified as Structural Steel and Bolting Inspectors	
Christopher Curtis, PE	R23
John Daza, PE	R25
Michele Farruggia	R28
Samuel Bautista (SCI)	R129
4. At least 1 NACE Level 1 Coatings Certified	
Oscar Gonzalez	R34
Kervin Ramos	R66

These and other AECOM team inspection resources include qualified personnel from our team member firms. Their qualifications are provided in their respective resumes in Section E.

Certificates of Authorization

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

AECOM USA INC
605 THIRD AVENUE
31ST FLOOR
ATTN ADWOA FAAKYE
NEW YORK, NY 10158-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0006342

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
1784

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

License Information

Return to Search Results

Name: AECOM USA, INC.

Address: NYC,NY

Profession/License Type: Engineers & Land Surveyors,Certificate of Authorization

License No: [redacted]

License Status: Active

Issue Date: 7/22/2002

Expiration Date: 8/31/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

James J. Fruscione
Director
New Jersey Division of Revenue

STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE

DEPARTMENT OF TREASURY/
DIVISION OF REVENUE
PO BOX 252
TRENTON, N J 08646-0252

TAXPAYER NAME:
TISHMAN CONSTRUCTION CORPORATION OF NEW

TRADE NAME:

ADDRESS:
1 RIVERFRONT PLAZA
NEWARK NJ 07012

SEQUENCE NUMBER:
[redacted]

EFFECTIVE DATE:
12/10/79

ISSUANCE DATE:
06/28/10

James J. Fruscione
Director
New Jersey Division of Revenue

FORM BRC
(04-08), D205846V

This certificate is not assignable or transferable. It must be conspicuously displayed at above address.

CERT-1

06/28/10

Taxpayer Identification# [redacted]

Dear Business Representative:

Congratulations! You are now registered with the New Jersey Division of Revenue.

Use the Taxpayer Identification Number listed above on all correspondence with the Divisions of Revenue and Taxation, as well as with the Department of Labor (if the business is subject to unemployment withholdings). Your tax returns and payments will be filed under this number, and you will be able to access information about your account by referencing it.

Additionally, please note that State law requires all contractors and subcontractors with Public agencies to provide proof of their registration with the Division of Revenue. The law also amended Section 92 of the Casino Control Act, which deals with the casino service industry.

We have attached a Proof of Registration Certificate for your use. To comply with the law, if you are currently under contract or entering into a contract with a State agency, you must provide a copy of the certificate to the contracting agency.

If you have any questions or require more information, feel free to call our Registration Hotline at (609)292-9292.

I[illegible]ntinued success in your business endeavors.

NYS Professions - Online Verifications

NYSED.gov

OP Office of the Professions

Office of the Professions

Verification Searches

The information furnished at this web site is from the Office of Professions' official database and is updated daily, Monday through Friday. The Office of Professions considers this information to be a secure, primary source for license verification.

Business Entity Information *

05/11/2011

Name : IH ENGINEERS PC
Street Address :
103 COLLEGE ROAD EAST
PRINCETON, NJ 085400000

Business Entity : Professional Service Corporation
PSC # : [redacted]
Initial Filing Date : 12/31/03
Current through : 06/30/11

Certificate of Authorization to provide Professional Engineering Services in New York State :
YES CERT# [redacted] EXPIRES 01/13

Officers, Directors, Shareholders : Click on license number link to the left of professional's name for detailed information.
[redacted] HOSSAIN IFTEKHAR -

* Use of this online verification service signifies that you have read and agree to the terms and conditions of use. See HELP glossary for further explanations of terms used on this page.

- Use your browser's back key to return to establishment list.
- You may search to see if there has been recent disciplinary action against this registered establishment.

THE UNIVERSITY OF THE STATE OF NEW YORK

12/30/04

Taxpayer Identification# [redacted]

Dear Business Representative:

Congratulations! You are now registered with the New Jersey Division of Revenue.

Use the Taxpayer Identification Number listed above on all correspondence with the Divisions of Revenue and Taxation, as well as with the Department of Labor (if the business is subject to unemployment withholdings). Your tax returns and payments will be filed under this number, and you will be able to access information about your account by referencing it.

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We have attached a Proof of Registration Certificate for your use. To comply with the law, if you are currently under contract or entering into a contract with a State agency, you must provide a copy of the certificate to the contracting agency.

If you have any questions or require more information, feel free to call our Registration Hotline at (609)292-1730.

I wish you continued success in your business endeavors.

Sincerely,

John E. Tully, CPA
Director

STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE

DEPARTMENT OF TREASURY/
DIVISION OF REVENUE
PO BOX 252
TRENTON, N J 08646-0252

TAXPAYER NAME:
IH ENGINEERS, P.C.

TRADE NAME:

ADDRESS:
103 COLLEGE RD EAST 1ST FLOOR
PRINCETON NJ 08540

SEQUENCE NUMBER:
[redacted]

EFFECTIVE DATE:
03/29/03

ISSUANCE DATE:
12/30/04

Director

FORM-BRC(08-01)

This Certificate is NOT assignable or transferable. It must be conspicuously displayed at above address.

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

SCI ENGINEERING PC
241 W 30 ST 5 FLOOR
NEW YORK, NY 10001-2823

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 02/01/2009 TO 01/31/2012.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER [redacted]

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

Certifications

Engineers/Architects licensed in NY or NJ

The University of the State of New York
Education Department
Office of the Professions

REGISTRATION CERTIFICATE

Do not accept a copy of this certificate

License Number: [redacted] Certificate Number [redacted]

ABDALLAH HASAN YOUSEF
[redacted]
RIDGEWOOD NJ 07450-0000

is registered to practice in New York State through 12/31/2012 as a(n)
PROFESSIONAL ENGINEER

LICENSEE/REGISTRANT

EXECUTIVE SECRETARY

COMMISSIONER OF EDUCATION

ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

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License Information *

05/16/2011

Name : CURTIS CHRISTOPHER RAY
Address : NEW YORK NY
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 05/08/07
Additional Qualification :
Status : REGISTERED
Registered through last day of : 06/12

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- Note: The Board of Regents does not discipline *physicians(medicine), physician assistants,* or *specialist assistants.* The status of individuals in these professions may be impacted by information provided by the NYS Department of Health. To search for the latest discipline actions against individuals in these professions, please check the New York State Department of Health's Office of Professional Medical Conduct homepage.

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Verification Searches

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License Information *

05/16/2011

Name : DAZA JOHN NICHOLAS
Address : BROOKLYN NY
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 07/02/02
Additional Qualification :
Status : REGISTERED
Registered through last day of : 12/13

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License Information

Return to Search Results

Name: VINCENT P KINLAN

Address: SUFFERN,NY

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 1/1/1970

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

Details

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License Information

Return to Search Results

Name: John C Kovac

Address: Flemington,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 8/3/2004

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors
(973)504-6460

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License Information

Return to Search Results

Name: PAUL J MENZEL

Address: ORADELL,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 8/19/1997

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

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License Information *

05/23/2011

Name : MORTENSON PAUL DOUGLAS
Address : STATEN ISLAND NY
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 01/08/04
Additional Qualification :
Status : REGISTERED
Registered through last day of : 04/12

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- Note: The Board of Regents does not discipline *physicians(medicine), physician assistants,* or *specialist assistants.* The status of individuals in these professions may be impacted by information provided by the NYS Department of Health. To search for the latest discipline actions against individuals in these professions, please check the New York State Department of Health's Office of Professional Medical Conduct homepage.

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License Information *

05/11/2011

Name : O'MALLEY STEPHEN EDWARD
Address : BRONX NY
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 07/22/09
Additional Qualification :
Status : REGISTERED
Registered through last day of : 06/12

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License Information *

05/11/2011

Name : PATEL MUNAF ISMAIL
Address : FLUSHING NY
Profession : PROFESSIONAL ENGINEERING
License No [redacted]
Date of Licensure : 06/24/08
Additional Qualification :
Status : REGISTERED
Registered through last day of : 05/11

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License Information

Return to Search Results

Name: Richard James Rohr

Address: Darien,CT

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 9/21/2004

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

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License Information *

05/17/2011

Name : ROSCIGLIONE ANTONIO
Address : BALDWIN NY
Profession : ARCHITECTURE
License No: [redacted]
Date of Licensure : 07/25/05
Additional Qualification : Not applicable in this profession
Status : REGISTERED
Registered through last day of : 05/14

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License Information *

05/11/2011

Name : SADAT NURUL EHSAN
Address : BRONX NY
Profession : PROFESSIONAL ENGINEERING
License No [redacted]
Date of Licensure : 06/18/10
Additional Qualification :
Status : REGISTERED
Registered through last day of : 05/13

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License Information *

05/11/2011

Name : SHEN HENRY ZENGHAI
Address : DIX HILLS NY
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 02/16/00
Additional Qualification :
Status : REGISTERED
Registered through last day of : 06/11

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License Information

Return to Search Results

Name: Teddy Yime

Address: Kearny,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 8/12/2008

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-6460

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License Information *

05/23/2011

Name : ALGENDE KHALID SAAD
Address : BROOKLYN NY
Profession : PROFESSIONAL ENGINEERING
License No: [redacted]
Date of Licensure : 01/23/02
Additional Qualification :
Status : REGISTERED
Registered through last day of : 10/12

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License Information

Return to Search Results

Name: THIRUVENKATACHARI SRINIVASAN

Address: EDISON,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: [redacted]

License Status: Active

Issue Date: 4/8/1997

Expiration Date: 4/30/2012

For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors
(973)504-6460

Certifications

ACI Concrete Construction Special Inspectors

AMERICAN CONCRETE INSTITUTE

This is to certify that

MICHELE FARRUGGIA

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 12/08/2009 **Expires: 12/08/2014**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

MR RONALD MACPHERSON

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 01/21/2010 **Expires: 01/21/2015**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

JOSE R AMADOR

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 01/26/2009 **Expires: 01/26/2014**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

MR SAMUEL R BAUTISTA

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 12/09/2008 **Expires: 12/09/2013**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

Feb. 8. 2011 8:04AM No. 0843 P. 1/3

Report Print Date:5/18/10

ACI Certification Results Report

ACI Concrete Construction Special Inspector

Testing Session Information:

Session: Exam Date: Exam Location: ,
ACI Sponsoring Group: **Phone:**
Examiner of Record:

Examinee Information

Mr Kwame I Clouden
[redacted]
Brooklyn, NY 11212-5350

Certification ID
[redacted]

Status Information

Certification Status: ***CERTIFIED*** **ACI Concrete Construction Special Inspector**

Certification Issue Date: 09/11/2008 Thru 09/11/2013

ACI Comments:

Congratulations! You are now Certified. This is an accomplishment you can be very proud of and we will be happy to confirm this credential to anyone upon request. Enclosed is your wallet card and certificate attesting this accomplishment. In addition, a directory of all ACI Certified individuals can be found at www.ACICertification.org.

Report Print Date:8/13/10

ACI Certification Results Report

ACI Concrete Construction Special Inspector

Testing Session Information:

Session [redacted] Exam Date: **08/04/2010** Exam Location: **Jersey City, NJ**
ACI Sponsoring Group: **The Concrete Industry Board** **Phone:(212)213-0410**
Examiner of Record: **Mr Casimir Bognacki**

Examinee Information

Illard R Johnson
[redacted]
Hempstead, NY 11550-3341

Certification ID
[redacted]

Status Information

Certification Status: ***CERTIFIED*** **ACI Associate Concrete Construction Special Inspector**

Certification Issue Date: 08/04/2010 Thru 08/04/2015

ACI Comments:

Congratulations! You are now Certified. This is an accomplishment you can be very proud of and we will be happy to confirm this credential to anyone upon request. Enclosed is your wallet card and certificate attesting this accomplishment. In addition, a directory of all ACI Certified individuals can be found at www.ACICertification.org. Note: If you wish to upgrade your certification to the full Inspector desination, you must submit the required education / work experience documentation

AMERICAN CONCRETE INSTITUTE

This is to certify that

ROCHELLE A LANCEY

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 06/01/2009 **Expires: 06/01/2014**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

OMONT C MCBRIDE

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 04/16/2008 **Expires: 04/16/2013**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

ORVILLE S MCPHERSON

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 05/27/2009 **Expires: 05/27/2014**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

MR MAHFUZUR R MOWLA

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 09/17/2009 **Expires: 09/17/2014**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

JOHN W STERLACE

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 09/18/2010 **Expires: 09/18/2015**

Examiner of Record: Jeffrey T Stoicescu

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

MICHAEL SUAZO

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 08/04/2010 **Expires: 08/04/2015**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

MOHAMMAD M RAHMAN

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 04/07/2011 **Expires: 04/07/2016**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

MOHAMMAD A SHAIKHJI

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 04/07/2009 **Expires:** 04/07/2014

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

Certifications

ICC Certified as Structural Steel and Bolting Inspectors

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ICC
INTERNATIONAL CODE COUNCIL

Structural Steel and Bolting Special Inspector

[redacted]

Candidate ID: [redacted]

Name: CHRISTOPHER CURTIS

Date: 12/22/2010

Address: [redacted]

Birth Date: [redacted]

NEW YORK NY 10009

EXAMINATION RESULT: **Pass**

Congratulations! You have passed the Structural Steel and Bolting Special Inspector examination. Your wallet card will be forwarded to you by ICC within six weeks from the last day of the month in which you tested. This certification is current for three years.

You may request a wall certificate from ICC as well. Throughout 2010, this certificate will be provided at no cost to you, if you request it within 90 days of your exam. Only one wall certificate per exam passed will be provided to you at no charge. For more information on requesting a wall certificate, go to www.iccsafe.org/inspector.

It is extremely important that you notify Pearson VUE and ICC of any changes in name and/or address to avoid the possibility of your wallet card and/or certificate not being received. Please contact Pearson VUE at 800-275-8301 and ICC at certexam@iccsafe.org with changes to your name and address (name changes may require additional documentation). There may be an additional fee if a certification is re-issued due to a misspelled name or incorrect address.

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ICC
INTERNATIONAL CODE COUNCIL

Structural Steel and Bolting Special Inspector

[redacted]

Candidate ID: [redacted]

Name: JOHN DAZA

Date: 12/23/2010

Address: [redacted]

Birth Date: [redacted]

BROOKLYN NY 11217

EXAMINATION RESULT: **Pass**

Congratulations! You have passed the Structural Steel and Bolting Special Inspector examination. Your wallet card will be forwarded to you by ICC within six weeks from the last day of the month in which you tested. This certification is current for three years.

You may request a wall certificate from ICC as well. Throughout 2010, this certificate will be provided at no cost to you, if you request it within 90 days of your exam. Only one wall certificate per exam passed will be provided to you at no charge. For more information on requesting a wall certificate, go to www.iccsafe.org/inspector.

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INTERNATIONAL CODE COUNCIL

MICHELE FARRUGGIA

The International Code Council attests that the individual named on this certificate has satisfactorily demonstrated knowledge as required by the International Code Council by successfully completing the prescribed written examination based on codes and standards then in effect, and is hereby issued this certification as:

Structural Steel and Bolting Special Inspector

Given this day of December 22, 2010

Certificate No. 8032109

James L Brothers
President, Board of Directors

Richard P. Weiland
Chief Executive Officer

ICC INTERNATIONAL CODE COUNCIL®

INTERNATIONAL CODE COUNCIL, INC. CERTIFIED WASHINGTON, D.C.

This certificate is the property of ICC and must be returned to ICC in the event of suspension or revocation of the certificate.

INTERNATIONAL CODE COUNCIL

SAMUEL BAUTISTA

The International Code Council attests that the individual named on this certificate has satisfactorily demonstrated knowledge as required by the International Code Council by successfully completing the prescribed written examination based on codes and standards then in effect, and is hereby issued this certification as:

Structural Steel and Bolting Special Inspector

Given this day of June 16, 2010

Certificate No. 8027382

Ronald L Lynn
President, Board of Directors

Richard P. Weiland
Chief Executive Officer

INTERNATIONAL CODE COUNCIL, INC. CERTIFIED WASHINGTON, D.C.

ICC INTERNATIONAL CODE COUNCIL®

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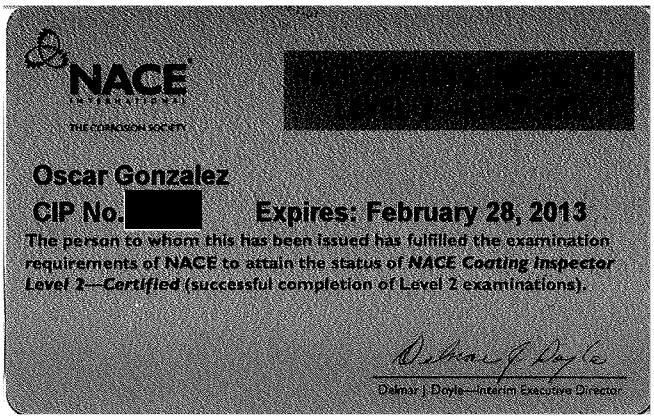
Certifications

NACE Level 1 Coatings Certified


NACE
INTERNATIONAL
THE CORROSION SOCIETY
[redacted]
Oscar Gonzalez
CIP No. [redacted] Expires: February 28, 2013
The person to whom this has been issued has fulfilled the examination requirements of NACE to attain the status of NACE Coating Inspector Level 2—Certified (successful completion of Level 2 examinations).
Delmar J. Doyle—Interim Executive Director

NACE
INTERNATIONAL
THE CORROSION SOCIETY
NACE CERTIFIED COATING INSPECTOR—LEVEL 3
Kervin Raul Ramos
Cert No [redacted] Expires: March 31, 2013
The person to whom this has been issued has fulfilled the examination and experience requirements of NACE in order to attain the status of NACE Certified Coating Inspector—Level 3 certification.
Tony Kearne—Executive Director

Section D
Multiplier

Firm	Home Office				Field Office			
	Direct labor	Overhead	Profit	Multiplier*	Direct labor	Overhead	Profit	Multiplier*
AECOM†	1.00	1.58	-1.55%	2.54	1.00	1.226	-8.36%	2.04
Tishman	1.00	1.49	5%	2.61	1.00	1.15**	5%	2.26
IH	1.00	1.31	7.5%	2.48	1.00	1.12	7.5%	2.28
Industria	1.00	1.25	5.75%	2.38	1.00	1.14	5.75%	2.26
LPE	-	-	-	-	1.00	0.91	7%	2.04
SCI	1.00	0.86	9%	1.95	1.00	0.86	9%	1.95

*Multiplier includes vacation, holiday, sick pay, worker's compensation, office rent and insurance.

**Field office multiplier discounted from FAR of 130% (1.30)

†AECOM is committed to maintaining its long term relationship with the Authority by providing the highest quality staff and service at the lowest possible cost during this challenging economic period. As such, AECOM is offering Home Office and Field Office multipliers below our breakeven multipliers of 2.58 and 2.226, respectively, for this contract.

Section E
Resumes

Key Personnel

AECOM has assembled a team of dedicated professionals that are highly proficient in the construction management of rehabilitation and new construction of all types of transportation facilities and infrastructure.

Project Management

Our team is led by project manager **Nicholas DiGregorio**. Nick is a vice president with AECOM with 38 years of construction management experience. He leads AECOM's program and construction management services for the Metro Transportation Section, which consists of over 200 employees working in varied market sectors within AECOM. He also manages probably the largest Project Controls Group in the Metro area, consisting of estimators, schedulers and risk management specialists. In addition, Nick is presently the project manager on the Authority's P.A. Agreement #410-06-013 (Performance of Expert Professional Construction Management services on a "Call-in" Basis During 2006 – 2010). Over the past 10 years with AECOM, Nick has been project manager for the Dormitory Authority State of New York on projects such as the Bellevue Hospital Garage Demolition and the Queens Hospital – OCME Facility. He recently served as the project principal on our MTA Bridges and Tunnels Construction Inspection On-Call Contract, GFM-454, with 25 tasks to date on various facilities, including the Queens-Midtown Tunnel and the Triborough, Verrazano Narrows, Throgs Neck and Bronx-Whitestone bridges. Nick has always worked closely with clients to ensure that their needs are met throughout the construction of their projects and will bring the same level of dedication to ensure that the

Port Authority's program is completed on time, within budget, and with minimal impact to their facility operations.

Our principal in charge, **Achille Niro, PE**, is a highly accomplished engineer, having extensive experience in design and construction with an emphasis on project/program management. He was formerly the assistant chief engineer for program management at the Port Authority of New York and New Jersey, where he was responsible for the delivery of the agency's capital and operating programs from preliminary design through construction completion. In this capacity he implemented a number of key programs to efficiently manage the cost and organization of the agency's programs.

Staff Resources

The resident engineers and the quality assurance inspection personnel led by Nick, who form the bulk of our staff, have successfully overseen construction work across the New York/New Jersey metropolitan area. We have also augmented our team with seasoned design professionals to serve as experts in issues relating to constructibility. Several of them have personally overseen and/or performed design services at many of your facilities, a highly valuable perspective that can be applied if necessary during the constructibility/bidability and general engineering review phases.

The resumes that follow represent key personnel only; our team has a resource pool of more than 700 construction personnel, any of whom can be called on as conditions warrant.

This gives us the depth of resources and flexibility to respond to any assignment and undertake any task.

AECOM's subconsultants for this contract—**Tishman Construction, IH Engineers, Industria, LPE Enterprises and SCI Engineering**—represent some of the best firms that we work with locally, all of which continue to support current AECOM projects and can be called upon to support this program. Many of their key staff also have experience working at Port Authority facilities.

Finally, many of the individuals on the following pages have worked on assignments that have been performed on a call-in, as-needed, task order basis. As such, they are accustomed to assignments that require quick mobilization and response to a diverse range of tasks at various types of facilities.

Detailed resumes of our key personnel follow in alphabetical order, by firm, after the resumes of our project manager, Nick DiGregorio, and our principal in charge, Achille Niro, PE.

Resumes	Page
Nicholas DiGregorio	R1
Achille Niro PE	R3
AECOM Key Personnel	R5
Tishman Key Personnel	R81
IH Engineers Key Personnel	R102
Industria Key Personnel	R108
LPE Enterprises Key Personnel	R121
SCI Engineering Key Personnel	R125

Nicholas V. DiGregorio

Project Manager

Firm: AECOM

Education
BS/1982/Construction Management, Pratt Institute

Mr. DiGregorio has been involved in an extensive number of transportation, infrastructure, replacement and rehabilitation projects. He presently serves as Vice-President and Manager of Program and Construction Management Services for AECOM's Metro Transportation Section. In this role, Mr. DiGregorio oversees a staff of more than 200 field employees involved in all aspects of construction support services, including resident engineers, inspectors, office engineers, project control engineers, document control specialists and administrative assistants. He provides the talent needed to support projects in various market sectors such as aviation, marine, transit/rail and highway/bridge, which currently represent about 70 projects in and around the NY Metro area. Additionally, he oversights the Project Controls Group consisting of estimators, schedulers and risk managers who provide support to both design and construction throughout the country.

Performance of Expert Professional Construction Management Services on a "Call-In" Basis during 2006 – 2010 (P.A. Agreement #410-06-013), Port Authority of NY & NJ (PANYNJ): Project manager for PA Agreement #410-06-013. On this project AECOM and its team of MBE/WBE subconsultants have successfully placed a total of 14 individuals in varied locations, including JFK Airport, Newark Airport, Journal Square, LaGuardia Airport, Stewart Airport, G.W. Bridge and Port Newark and Gateway Q&A Division.

Construction Services on an As-Needed Basis (GFM-417), MTA Bridges and Tunnels, New York, NY: Project principal for resident engineering services on an as-needed basis for various bridge and tunnel projects totaling 18 tasks to date included the Throgs Neck Bridge such as sealing cracks with crack injections and concrete sealant at the bridge's Bronx and Queens tower pedestals, construction of a new retaining wall as part of the site preparation for the salt dome, concrete repairs at the Queens pier, construction of new bridge ladders, walkways and railings and performing an interior power-wash of both anchorages and installation of new bracings for the Substation D platform. Additional tasks include work at the Triborough Bridge such as the construction of a new salt storage facility, repairs to the roofs of the Bronx and Manhattan services buildings and installing lighting for the pipe gallery at the Queens Midtown Tunnel, and replacement of the suspender ropes at the Verrazano Narrows Bridge.

Queens Hospital - OCME Facility, Dormitory Authority State of New York (DASNY): Project manager responsible for the new Office of the Chief Medical Examiner (OCME) fa-

Nicholas V. DiGregorio continued

cility consisting of a 41,000-square foot state-of-the-art facility at Queens Hospital. Project responsibility included the coordination of six prime contracts governed under Wicks law. Was also responsible for reviewing and negotiating all change order work and contractors claim for extension of time.

Bellevue Hospital Garage Demolition, DASNY: Project manager responsible for the demolition and asbestos abatement of the parking garage at Bellevue Hospital Center. This project was successfully finished on time and within budget.

New York Power Authority (NYPA): Project controls manager for the Installation of eleven (11) 45 Mw gas turbine generators, valued at $175 million, to be installed in seven sites in the NYC metropolitan area. Responsibilities include extensive negotiations to determine the successful contractor, evaluating and negotiating contractors' unit price breakdown and administering all necessary field documentation.

Queens-Midtown Tunnel, MTA Bridges and Tunnels, Queens, NY: Principal cost engineer responsible for the preparation and negotiation of a $3.5 million delayed access change order and a $12 million ceiling replacement change order for the renovation of the TBTA's $100 million Queens-Midtown Tunnel.

Randalls Island Auto Shop, MTA Bridges and Tunnels, NY: Principal cost estimator responsible for the preparation and negotiation of a $1.7 million credit change order for the renovation of the TBTA's $15 million maintenance facility.

Sludge Dewatering Facilities, New York City Department of Environmental Protection (NYCDEP): Principal cost estimator responsible for the preparation of capital cost estimates and change orders for the construction of the Sludge Dewatering Facilities for NYCDEP on eight separate facilities throughout the New York City area.

CNG Addition, Howell Bus Garage, Howell Township, NJ: Principal estimating engineer and core team member responsible for contractors review and preparation of capital cost estimates for the design and construction of this project.

Stone & Webster, Engineer/Procure/Construct Contract Proposals, Nationwide: As principal estimating engineer, responsible for Contractors review and preparation of capital cost estimates for the design and construction of various projects including, Tampa Bay Diesel Plant, Tampa, FL; Dublin Bay Project, Interim Sludge Treatment, Dublin, Ireland; CNG Addition, Howell Bus Garage, Howell Township, NJ; and Nantucket Composting Facility, Nantucket, MA.

MTA New York City Transit (NYCT), CM1039: Administered and supervised a $2 million cost estimating and cost control services contract that provided professionals who perform as extensions of the NYC Transit's in-house staff.

AT&T Quality Improvement Program (QIP), Nationwide: As an HVAC Quality Improvement core team member, responsible for preparing cost estimating documentation and spreadsheet templates for use by 30 local consultants for 45 buildings across the country. He was responsible for the review selection of local consultants definitive cost estimates for construction and engineering, representing $250 million of total construction, finalizing all costs for client.

Achille A. Niro, PE

Principal in Charge

Firm: AECOM

Education
BS/1971/Civil Engineering, New Jersey Institute of Technology

Registrations
PE/New Jersey, Registration No: [redacted]
PE/1976/New York, Registration No: [redacted]

Professional Associations
Project Management Institute (PMI)
National Society of Professional Engineers (NSPE)
New Jersey Society of Professional Engineers (NJSPE)
Society of American Military Engineers (SAME)
Construction Institute (CI) of ASCE

Mr. Niro is a highly accomplished engineer, having extensive experience in planning, design, project management and construction management. He was formerly the assistant chief engineer for program management at the Port Authority of New York and New Jersey, where he was responsible for the delivery of the agency's capital and operating programs from preliminary design through construction completion. In this capacity he implemented a number of key programs to efficiently manage the cost, schedule and organization of the agency's programs and delivered over $5 billion in capital projects.

Delta JFK IAT Redevelopment Program, Delta Air Lines, NY: As a senior program manager supported Delta Air Lines in the development of a procurement strategy for the $1.2 billion expansion project of Terminal 4 at JFK International Airport including the development of the prequalification process for short listing general contractors' and construction managers' for the multiple construction contract bid packages. Performed evaluation of contractors and construction managers' qualifications' submission packages including bidder experience, management capabilities, staffing plan, financial strength and set aside goals to establish final bidder's lists. Evaluated bidders cost proposals and recommended contract award to lowest responsible bidder for general contractors and highest qualified proposer for construction managers.

Expert Professional Project Management Services and Construction Management Services on a Call-In Basis, Port Authority of New York and New Jersey (PANYNJ): Project director for these two as-needed contracts to provide supplemental staffing to the agency for assignments in their offices at multiple facility locations. These contracts are used by the client to augment their internal staff resources to address shortages in meeting workload, special expertise, and maintain mandated headcount limitations for budgetary needs. Project and construction management staff with multiple levels of experience and expertise has been provided under these contracts for 13 and 6 years respectively. Responsibilities include the identification of potential candidates that meet the requirements of the client for specific project/construction assignments, maintaining client quality service expectations, providing guidance and strategies for problem solving, ensuring the successful integration of selected staff into the clients work environment and monitoring the performance of selected staff in the successful delivery of the work assignments.

Lincoln Center Development Program, Lincoln Center Development Project, Inc., New York, NY:

Achille A. Niro, PE continued

Developed construction phasing and logistics plans for the expansion and modernization program of the multiple cultural venues at Lincoln Center for the Performing Arts complex to ensure continuous performances and limited impacts to rehearsals and patrons from construction activities. Construction planning and scheduling was developed in conjunction with the many scheduled events at the Metropolitan Opera, Julliard School, Avery Fisher Hall and the New York State Theater.

O'Hare Modernization Program, City of Chicago, IL: As the transition program manager for the O'Hare Modernization Program (OMP), maintained continuous program and project management services for the city, while restructuring the program management team. Responsibilities included managing the client relationship with senior executives from the city; providing guidance and oversight to a team of 40 professional and technical staff; and ensuring coordination and advancement of program activities with the construction management and multiple engineering design firms. Created and implemented a reorganization strategy to enhance the program management team structure, thereby improving work relationships with the construction management and engineering consultants, as well as reducing program costs for the client.

Tappan Zee Bridge/I-287 Corridor Environmental Review Project, New York State Thruway Authority (NYSTA), Orange, Rockland, and Westchester: As the program manager for the project sponsors, which includes the New York State Department of Transportation, NYSTA, and MTA Metro-North Railroad, served in the lead role for the management and oversight of the consultant team performing the public outreach, the environmental planning and analysis, and the preliminary engineering.

World Trade Center/PATH Insurance Claim Support, PANYNJ, NY: Project executive for the development of a comprehensive Master Project Schedule for the reconstruction of the complete WTC site and PATH Tunnels E&F on a Replacement in Kind basis. The theoretical schedule was used as part of the insurance claim settlement between the Port Authority and their insurance companies to establish the earliest possible revenue service date for the reconstructed PATH Station, if the complex were restored to its pre-9/11 condition. The schedule included all requirements for the proposed reconstruction including planning, design, construction and station/train systems commissioning, from the date the site became available to the Port Authority, to opening day of the reconstructed PATH Station for full revenue service.

John F. Kennedy International Airport (JFK) and Newark International Airport (EWR) Access Programs: Engineering program manager for the planning and preliminary design of the JFK Airport Access Program (AirTrain) and the extension of the EWR AirTrain extension to the Northeast Corridor (NJ Transit and Amtrak). Responsibilities included ridership analysis, environmental planning, alignment design, geotechnical/environmental investigations, preliminary design, oversight of the community and airline outreach program, contract negotiations, and construction phase oversight.

JFK Redevelopment Program: Program manager of design and engineering involved in key elements of the redevelopment program including the air traffic control tower, roadway and utilities, baggage handling system, pedestrian distribution system, Terminal 4, and the JFK cogeneration facility. Responsibilities included preliminary and final design, environmental mitigation, procurement of construction, and construction phase support and oversight.

Goethals Bridge Twinning Program: Manager of design for the planning, environmental impact assessment, and preliminary design for the construction of an additional span parallel to the Goethals Bridge as well as the rehabilitation of the existing bridge.

AECOM
Key Personnel Resumes

Hasan Abdallah, PE Resident Engineer

Firm: AECOM

Education
BS/1989/Civil Engineering, Jordan University of Science and Technology
OSHA 8-Hour site safety Manager Course

Registrations
PE/2006/New York No. 084017
NACE Coatings Inspector Level I, II
Traffic Control Coordinator (Rutgers CAIT-LTAP), 2007

Professional Associations
New Jersey Society of Asphalt Technologists

Mr. Abdallah has more than 20 years of field experiences, including serving in various capacities on transportation and building projects. He has served as resident engineer and inspector for infrastructure projects in the NY/NJ Metropolitan area.

New Jersey Turnpike Building 15E Renovation, New Jersey Turnpike Authority (NJTA): Resident engineer for this rehabilitation construction project, under AECOM on-call contract with the Authority. Work includes selective demolition of interior walls, repair of building facades and roofs and a site plan for the areas adjacent to the structure. This area will be a new terrace environment on the west side of the structure. ADA accessibility will be provided from North and South parking lots including a full and shallow depth pavement of the two parking lots.

Construction Supervision of Miscellaneous Structural Steel Repairs for T3160 and P3158, NJTA, Monmouth, Middlesex, Union, Essex and Bergen Counties: Inspector for bridges from Mile 0 to Mile 172 on the Garden State Parkway. The work involved repairs to substructure concrete spalls, structural steel and concrete beams and substructure waterproofing. Thirteen structures are included mainline Parkway bridges over streets and railroads, as well as ramps and bridges over the Parkway, other roads and railroads. Maintenance and protection of traffic (MPT) was critical throughout construction. Coordination with railroads was important at particular bridges and Conrail and NJ Transit needed to be notified of upcoming work.

Structural Stabilization of School Building over the Metro-North Morris Heights train Station, IS 229/PS 230, Bronx NY: Resident engineer for stabilization of the school building; the work involved Overall rehabilitation of the building, construction of new columns and girders; new curtain wall system cladding to stabilize the school building since the school building has experienced a recurring problem indicative of inadequate lateral supports as evidence by cracking and displacement of interior and exterior walls. Coordinated with Metro-North rail road engineering department to ensure the safety of work and workers while constructing the new girders and columns underneath the school.

Broadway Bridge over Harlem River, New York City Department of Transportation (NYCDOT), Manhattan: Coating inspector, reviewed containment drawings, safety plan, and other submittals; supervised the erection of temporary work platform under the bridge; erection of scaffold system at the towers, and building containments. He also enforced contract plans and specification for the abrasive, blasting/ protective coating

Hasan Abdallah, PE continued

of steel structure and coordinated scheduling with Metro North, NYC Transit and the contractor. He was also responsible for safety on the site and safety of workers in accordance of HUD guideline, OSHA/ EPA regulations. He prepared all required documents and reports in accordance with NYC DOT specifications. Client: NYC Dept of Transportation. 2002 - 2003

Riker's Island Bridge Rehabilitation, NYCDOT, Borough of Queens: Resident engineer for the rehabilitation of the bridge deck including under deck, surface repairs and removal and replacement of protective coating. Work elements include removal of failed under deck concrete through mechanical and hand removal, reinforcement of exposed and deteriorated rebar, removal and replacement of defective railings and replacement of concrete with shot Crete. Additional project components include resurfacing of deck and sealing.

During construction, the project scope was expanded to include complete replacement of the protective coating, through the use of Class 1 Containment; the existing paint has been removed. Upon completion of the removal, steel repairs are being made as needed. In the final phase, new protective coating is being applied; pier repairs, additional pedestal repairs, crack repairs and reconstruction of Riker's island bridge approach were performed.

The Riker's Island Bridge provides the only access to and from the Riker's Island Detention complex which is under jurisdiction of the NYC Dept of Corrections. The project requires multi-staged construction, supervision of a complex, multi-phase Maintenance and Protection of Traffic scheme which are constantly coordinated with the Department of Corrections officials to provide access to facility employees, inmates, professional staff and vendors. This bridge is also within the immediate vicinity of LaGuardia airport and is in the flight path of aircraft landings. The FAA has lighting facilities on the bridge structure and specific accommodations are required to provide access to the FAA to maintain their facilities while maintaining the highest level of security for the Dept of Corrections.

New York Housing Authority: Construction project manager responsible for supervision of repair of high-rise residential buildings. Supervised the repair of retaining walls, slabs and masonry structures; reviewed site safety plans for compliance to New York City Department of Building codes (NYCDOB) with regard to the safety and functionality; ensured that motorized hung scaffolding and rigging frames were installed as per NYCDOB codes; performed daily structural survey and directed contractors to perform repair as needed. Also performed daily structural survey and directed perform repairs as needed. Provided all necessary data and recommendations for design changes to accommodate field conditions, site safety and constructability. Reviewed material submissions for compatibility, including field sample mock-up for approval; prepared daily reports; reviewed contractor's monthly payment requisitions' issued field memos and maintained project records.

Roland Abi Nader

Resident Engineer

Firm: AECOM

Education

MEng/2004/ Project & Construction Management, Cornell University, College of Engineering

MS/Engineering Management, American University of Beirut, Lebanon

BS/2002/Civil and Environmental Engineering, American University of Beirut, Lebanon

Mr. Abi Nader is a highly motivated professional ith exceptional analytical and management skills in developing and implementing financial and scheduling reports and construction management responsibilities. Mr. Abi Nader gained construction management experience while working on several projects. He supervised and monitored all phases of the construction lifecycle including constructability reviews, accuracy of cost estimates, project alternatives, structuring of bid packages, and monitoring and coordinationg daily construction activities.

Long Island City Public Library Project, Omni Contracting, NY: Project manager and superintendent on the Long Island City Public Library Project, a $6 million building project. Responsible for the planning and coordination of construction trades. Tasks included trade buyouts, negotiating contracts, evaluating drawings, developing schedules, processing contract change orders, and coordinating material fabrication and delivery. Responsible for onsite supervision and continuous monitoring of subcontractors' work activities.

Whitestone Bridge Deck Replacement, Perini Corporation, Peekskill, NY: Field engineer on a $170 million steel project comprised of replacing the steel deck of the Whitestone Bridge by an orthotropic deck. Responsibilities included generating schedule updates, and progress and cost reports. Monitored shop drawing approvals and document control, oversaw the steel fabrication process, and generated RFIs. Also responsible for subcontractor contract administration and claim preparation.

Fiber-Optic Network, Cornell Information Technologies, Ithaca, NY: As assistant project manager, monitored a $1 million telecommunication campus project comprised of setting an all fiber network to deliver fiber to the desktop. Monitored progress; handled communication between various stakeholders; and issued progress reports, closeout documents, and the lessons-learned document.

Second Avenue Subway, MTA New York City Transit (NYCT): Budget control engineer, part of the project control team responsible for developing the expenses of the project, allocating resources to tackle engineering tasks, and preparing reports to management on the performance of the project.

Residential Building Complex, Est. Joseph Abi Nader, Beirut, Lebanon: Assistant Project Manager. Planned and monitored a residential building complex project consisting of three 12-story buildings, valued at approximately U.S. $4 million. Revised the design details, conducted cost estimation for bidding, participated in contract negotiation, and managed claims and change orders.

Sergey Abramov Inspector

Firm: AECOM

Education
MS/1993/Mechanical Engineering, Polytechnic University, Dagestan, Russia
AutoCAD for Engineering Professionals, 1999
Concrete Field Testing, 1999

Certifications
NICET III
Asphalt Pavement Construction Certificate, 2006
ACI Concrete Field Testing Technician Grade I, 2004
Lead Based Paint Inspector and Lead Based Risk Assessor, Big Apple Occupational Safety Corp, NY, 2001

Professional Associations
New Jersey Society of Asphalt Technologists
American Concrete Institute

Mr. Abramov has considerable experience in civil engineering. His work has included field inspection for highway and roadway reconstruction, water main and sewer installation, and research and development for product design, site inspection and project management. He is NICET III certified and has extensive experience in night time operations in high traffic volume work locations.

School Safety Improvements Phase 1, NYCDDC: Senior inspector for improvements in the vicinity of 13 schools located in all 5 boroughs. Work at these locations includes: curb and sidewalk reconfiguration for the creation of "neck-downs" to improve pedestrian safety; installation of high visibility crosswalks and improved local signage, the installation of upgraded street lighting and traffic signals. The scope of work also includes relocation of water mains, catch basins, fire hydrants, bus stop shelters and other street furniture for the improvement of pedestrian safety. Oversees the installation of all project components at each site as per project plans, provides oversight of site specific MPT and housekeeping, prepares field sketches of completed work, calculates quantities for payment and assists in the coordination of work with utility relocation.

Installation of Catch Basins at various locations, NYCDDC: Inspector on this contract for the installation of catch basins at various locations in the borough of Manhattan. Futies include supervision of complex MPT at contract locations in Manhattan, inspection of contract work including, excavation, installation of sheeting, relocation of various utilities, installation of catch basins, construction of chute connections to combined sewers, modification of utility structures, field sketches of completed work locations, backfill, trench restoration and final site restoration including asphalt placement and pavement markings. As inspector also verifies quantities of pay items and assures contractor's compliance with permits and stipulations.

Brooklyn & Staten Island Millling, NYCDDC: Inspector for field inspection and administration of the contract for the grinding of asphaltic concrete wearing course at various New York City locations on a Task Order basis. Duties included field inspection for complaince with NYCDOT Task Order specifications, insuring conformance with NYCDOT permits, site specific traffic stipulations and supervision of site safety and housekeeping. Oversaw the coordination of a vehicle relocation program and interfaced with the public and agency representatives for access to residences and businesses and complaint resolution.

Izu N. Aigbogun

Inspector

Firm: AECOM

Education

ME/2004/Civil Engineering, CUNY - City College of New York

BS/2001/Civil Engineering, Ibadan Nigeria

Certifications

EIT April 2007

DDC Concrete Field Testing Technician

OSHA 10-Hour Construction Safety Program

Professional Associations

ASCE: Institute of Transportation Engineers

Mr. Aigbogun is a seasoned office engineer with more than seven years of experience in construction and transportation engineering in New York City. He has served on field construction projects for a wide variety of agencies including NYSDOT, NYCDOT, NYCDDC and MTA NYCT. His project experience includes extensive work on the construction of sidewalks, curbs, pedestrian ramps and roadway pavement. He is also experienced in the installation of sewers, water mains, catch basins and utility structures.

Hamilton Avenue Bridge Reconstruction, Brooklyn, NY: Office engineer for the reconstruction of the Hamilton Avenue Bridge over Gowanus Canal in the Red Hook section of Brooklyn. The project consists of total replacement of the two skew bascule spans of the bridge carrying Hamilton Avenue, a heavily trafficked roadway, over Gowanus Canal. The project also includes replacement of the mechanical and electrical equipment, renovation of the control house and gate tender house together with work incidental thereto. Duties include coordinating, reviewing and record keeping, entering of daily inspection quantities, monthly estimates, and preparing monthly progress reports.

SEN 2145 - Combined Sewers & Water Mains in E.108th Street, Manhattan: Office engineer for this $4.4M project for the installation of combined sewers and water mains. The scope of work includes the relocation of catch basins, small water mains and fire hydrants, roadway reconstruction, the installation of traffic signals & street lighting and a tree planting program. Responsibilities include tracking quantities and computations for the preparation of partial payments, change orders and time extensions, the preparation of minutes of meetings, progress reports and project correspondence and field inspection as needed. All documents are maintained in accordance with MURK and NYCDDC protocols.

NYCDDC Installation of When & Where Sidewalks – Bronx Fordham University Improvement of Roads & Sidewalk: Office engineer for this borough wide contract for the improvement of sidewalks in the Bronx. Responsibilities included review of the contractor's construction schedule to track contract production targets, technical review of contractor's material submittals, verifying daily quantities and review of inspector's IRs for preparation of Partial Payments. Prepared construction task orders, minutes of meetings, contract correspondence and progress reports. He coordinated projected work sites with NYCDDC capital project review, the NYCDOT Sidewalk Office and all local utilities.

Kayad Altuwal Field Engineer

Firm: AECOM

Education

MEE/1987/Electrical Engineering, Manhattan College

MS/1991/Computer Engineering, Manhattan College, Manhattan College

BS/1983/Electrical Engineering, Illinois Institute of Technology

OSHA class on construction safety, health & lead abatement

Primavera Expedition/ Construction Contract Manager (Expedition V-10) training class-2007

NYCT track safety training class (2005) and Amtrak safety training classes (1998,1999 & 2007)

Certifications

Certified Concrete field testing Grade I / American Concrete Institute-2004

Certified Concrete construction Technology -ACI / Rutgers University-2002

Certified Asphalt paving technologist / New Jersey society of asphalt technologies-2004

Certified Traffic control coordinator/Rutgers University 2002

Professional Associations

Institute of Electrical Electronics Engineers (IEEE)

Mr. Altuwal has over 25 years of diversified experience in electrical engineering and construction management related to design, engineering construction and rehabilitation of multi-discipline projects, including substations (11KV-230KV), wind farm power generation, railroads facilities & tracks (MTA & Amtrak), communication based train control, DC traction power systems, transportation & public facilities, CCTV/security systems, intelligent transportation systems (I.T.S.), buildings electric power distribution systems, airport, and general civil engineering work.

World Trade Center Transportation Hub, Port Authority of New York and New Jersey (PANYNJ): Senior electrical engineer/field electrical engineer. Provided electrical and general engineering for construction supervision/inspection for the newly built NYCT (1/9) Station at Cortland Street (center of WTC), including third rail relocation, reposition of overhead signal cables, negative cable equalizers, impedance bonds, electrical power distribution system for the tunnel and station.

RFK (Triborough) Bridge Construction Management of Structural Retrofit, New York, NY: Inspector for this MTA security project, which includes installation of physical hardening components at the anchorages, towers, main cables, suspender ropes, tower pedestals, and stand pipe system.

Randall's Island Sport Project and NYC Park & Recreation development: Senior electrical engineer, provided construction management/ Inspection and engineering support of the day to day electrical construction operations of a new Con-Edison electrical substation (15KV) providing power through distribution transformers and controls to Icahn stadium, new tennis center, high mast lighting system (3 Phase-480V), ball fields, walkway lighting and distribution, sanitary comfort stations. Coordinated and worked closely with NYCDEP engineers at Wards Island water pollution control plant during the installation of additional 15KV feeder into DEP primary substation for improvement (contract W1-5F).

Reconstruction of First Ave. (East River Tunnels) Ventilation Shafts over AMTRAK/LIRR, Manhattan, NY: Lead electrical engineer/senior electrical field engineer, provided construction management, engineering support, problem resolution and verified contractor's compliance with plans, specifications, applicable codes, contractual requirements and safety related to all work at Amtrak/ LIRR tunnel ventilation. Rehabilitation project includes installation of four new substations in North and South ventilation buildings, complete electrical distribution system, emergency tunnel ventilation, fire protection, communications and security systems.

Shakeel Amray

Inspector

Firm: AECOM

Education
BS/Civil Engineering, Karachi University, Pakistan

Mr. Amry has more than five years of combined construction experience. His experience includes the installation of water and sewer facilities, concrete roadways with asphaltic overlay, sidewalks, curbs and pedestrian ramps. He has also supervised the installation of street lights, thermoplastic markings and tree planting. In addition he has served as assistant office engineer reconciling inspector's IRs for calculation of quantities and pay items, assisting in the preparation of change orders and overruns and project close out.

NYC Department of Design and Construction, Sands Street Reconstruction, Navy Street to Jay Street, Brooklyn: Inspector for the reconstruction of Sand Street in Brooklyn. The scope of work for this $4 million project includes the reconstruction/replacement of existing storm sewers; the installation of new catch basins, manholes/chambers; the installation of new curbs and sidewalk; the installation of new pedestrian ramps; the installation of new traffic signals and street lights and the reconstruction of the roadway. In addition a new Class 1 bicycle path on a raised and fenced median will be installed linking cyclists to the Manhattan Bridge bicycle path. Responsible for the supervision of all aspects of this project including inspection of the concrete roadway base with asphalt wearing course, sidewalks, curbs, handicapped ramps and all maintenance and protection of traffic including the coordination with the DOT traffic enforcement agents.

NYC Department of Design and Construction, Installation of When & Where Curbs – Citywide: Inspector for this contract for the installation of curbs at When & Where locations in all 5 boroughs. This is the first "curb-only" installation contract initiated by NYCDDC and NYCDOT to address defective curbs throughout NYC. Responsibilities included supervision of contractor for performance in accordance with plans, specifications and site mark-out; coordination of work locations with Community Boards and elected officials, NYC Transit and local property owners; resolution of homeowner disputes.

NYC Department of Design and Construction , HD-153B Edgemere Phase B, Queens: Inspector for the reconstruction of streets in the Far Rockaway community of Queens. This contract involves the installation of sanitary and storm sewers, trunk and distribution water mains and construction of roadways for the urban development of new homes in coordination with the NYC Housing Preservation & Development agency. The project scope of work includes the installation of distribution water mains up to 20-inches, hydrants and house services.

Marlon Belfor Inspector

Firm: AECOM

Education
Traffic Control, NYSDOT Region 11 Construction Division, (NYSDOT)
Field Testing Technician, ACI, 1998
4-hr Lead Awareness Course, 1998

Professional Associations
American Concrete Institute (ACI)

Mr. Belfor has significant experience in a variety of highly-visible construction inspection projects throughout New York City, including many projects for MTA Bridges and Tunnels, and the New York City and State Departments of Transportation. He has worked as a construction inspector on several major roadway construction projects involving the inspection of all substructure, superstructure, reinforcement, concrete deck pours, HMA paving (subbase/base/asphalt), utilities, traffic control (including night work), and regulated waste generated from excavation. Mr. Belfor was responsible for inspecting structural concrete demolition, and concrete mass placements for a structural roadway deck, bituminous concrete removal and placement, maintenance and protection of traffic, multi-phased traffic control, and temporary detours on the roadway during construction.

Hutchinson River Parkway Vehicle Height Sensor System Installation, New York City Department of Transportation, (NYCDOT): Senior inspector for the installation of height sensors on the parkway to detect vehicles that exceed the clearance of the upcoming Westchester Avenue bridge underpass. When the sensors pickup a vehicle that exceeds a certain height, two message signs on the parkway will light up and instruct it to take the next exit before the bridge. If the vehicle continues nevertheless and impacts the bridge, an array of video cameras and flood lights will visually record the impact and the nameplate of the vehicle. The information is then relayed via telephone lines to a website that stores the information for further action by New York City agencies. Responsible for the concrete placement for caissons, gantry installation, sign support structures, and the installation of electronic sensing devices and conduit electrical work.

Brooklyn-Queens Expressway (BQE) Advanced Traffic Management Systems (ATMS) Installation, New York State Department of Transportation (NYSDOT): Construction inspector for the $38 million installation and implementation of an ATMS on the Brooklyn-Queens Expressway from the Brooklyn Battery Tunnel to the Grand Central Parkway. The project scope of work involves installation and connection of the BQE fiber optic communications cable to form a continuous cable system between the BQE field devices and the joint traffic management center, including preparing all required tests and following appropriate test procedures.

Williamsburg Bridge Main Span Rehabilitation, NYCDOT: Construction inspector for the $175 million Williamsburg Bridge (contract #8) rehabilitation of the main span. Project

Marlon Belfor continued

work included abrasive blasting of lead paint and painting of the north and south trusses, steel repairs to the top and bottom chords, and steel replacement at the intermediate and main towers. Reinforcing steel was installed on the main towers, with additional plates to be done.

Williamsburg Bridge South Roadways Reconstruction, NYCDOT: Construction inspector for the $350 million reconstruction of the Brooklyn and Manhattan south approaches in the existing bridge footprint, bracing the remaining portions of the approach viaducts, chemical lead paint removal, full containment blast cleaning, installation of VMS and interim NYCT signals. Responsibilities involved pile installation including foundation excavation and test pile program. The project encompassed the installation of 1,600 high capacity mini-piles under varying soil and rock conditions.

Triborough Bridge Bronx Approach Rehabilitation, MTA Bridges and Tunnels, NY: Construction inspector for the $140 million replacement and rehabilitation of the Bronx approach and Queens-to-Bronx portion of the junction structure at the Triborough Bridge. Project work performed included demolition and replacement of the Randall's Island Junction structure, deck, lighting and drainage; removal and replacement of the substructure, superstructure, decks, and barriers at the Bronx Truss Spans and Bronx Approach; electrical, lighting, ventilation, fire alarm, and public address systems. Responsibilities include the installation and maintenance of temporary/permanent lane closures/detours on ramps/mainlines and adjacent streets in or about the job limits. Furnished, relocated, maintained, and removed all traffic control devices required to maintain and protect traffic during periods of construction: VMS boards, Flashing Arrow Boards, tubular markers, half and full section concrete barriers, plastic barriers, and inertial sand barrels. Also ensured all maintenance and protection of work and control devices conformed to applicable sections of the NYS MUTCD and NYSDOT standard specifications. Also coordinated scheduled work with MTA B&T's contractor quality department to ensure no delays and avoid claims issues.

Queens Midtown Tunnel Rehabilitation, MTA Bridges and Tunnels, NY: Senior inspector for the rehabilitation of exhaust shafts, repair of portions of concrete floors, reprofile of portions of concrete floors, installation of new floor drains, rehabilitation of deteriorated concrete column and beam encasement, removal and replacement of face brick at localized interior locations, repointing and cleaning of masonry, repair of localized defects in the Manhattan vent building retaining wall, removal and resetting of floor grates, and performance of chemical grouting of localized areas of the foundation walls to eliminate ground water leaks. Extensive structural repairs were performed to the Queens Toll Plaza retaining wall, including removal and replacement of spalling concrete and rebar, reconstruction of control joints, cleaning of the wall, repair to the adjacent sidewalk, and installation of El-Beams to monitor possible future wall movement. Structural steel and miscellaneous items were painted, and lead-based paint abatement in stairwells and drain piping in both vent buildings was performed, including abatement in exhaust shafts by power washing.

Williamsburg Bridge South Roadways Reconstruction, NYCDOT: Electrical inspector for the $310 million reconstruction of the approach viaducts to the Williamsburg Bridge South Roadways. Project work included complete replacement of the south roadways for the Brooklyn and Manhattan approach viaducts in the existing bridge footprint, bracing of remaining portions of the approaches, installation of VMS system, and interim New York City Transit signals. Responsibilities involved the installation of closed-circuit TV to the traffic management center by means of fiber optic cable.

Yury Benyaminov Inspector

Firm: AECOM

Education
MS/1977/Civil Engineering, Polytechnic College of Engineering, Tashkent, Uzbekistan

Training and Certifications
NICET Level IV Transportation Engineering Technology/ Highway Construction, 2000
Bramson ORT Technical Institute, 1991 - 1992
Cooper Union Engineering School, 1993

In-house Health & Safety Training
01 - Safety Orientation 08/28/2006
03 - Defensive Driving Awareness Training 09/18/2006
23 - OSHA 10-Hour Construction Safety 01/10/2007
30 - Respiratory Protection Training 10/25/2006
31 - Hearing Protection Training 10/25/2006
33 - Scaffolding Training 10/25/2006
Respirator Fit Test 10/25/2006

Professional Associations
American Society of Certified Engineering Technicians

Mr. Benyaminov is a field engineer with more than 30 years of experience with structural erection and repairs of new and rehabilitated facilities.

Security Capital Program, Port Authority of NY & NJ (PANYNJ): Field superintendent/senior inspector. Responsibilities include the field management and inspection of large civil projects at John F. Kennedy International Airport for the Port Authority. Additional responsibilities include scheduling of work with contractors and Port Authority resident engineer office representatives, coordination for site access and Port Authority services review and approval of payment applications and coordination with PA engineering and consultants for design changes. Established working relationships with Port Authority facility personnel ensuring smooth work flow and completion of the projects under my jurisdiction. Recently completed a large perimeter hardening project in JFK International Airport overseeing and managing installation contractors as well as payment review and approval quality assurance, etc. With field management experience as well as experience and knowledge of the Port Authority (in particular airport work) it makes a valuable asset to any project with the Port Authority or any other client/government agency.

LaGuardia Airport Security Capital Program, Communication System, PANYNJ, NY: Provided construction management and general contracting service for the Simulcast Site Base Station 800 MHz trunked radio communication system. Supervised two subcontractor crews (civil and electrical) during excavation for concrete footing at Hangar 7 for new microwave antenna, installation of epoxy rebars for footing and pedestals, placement of concrete (4000 psi) for the footing, and installation of galvanized conduits (diameters 1, 1.25, 2 and 3 inches) for fiber optic and power cables.

LaGuardia Airport Security Capital Program, Razor Ribbon and Fiber Fencing, PANYNJ, NY: Provided construction management and general contracting service for installation of 30-inch-diameter razor ribbon concertina below the top of the dike wall, installation of fiberglass Unistrut channels on existing fence, welding WTx20 galv. to the existing steel piles, and placement of concrete for footing for new razor ribbon Type 3 installation.

JFK International Airport - Phase I, Perimeter Strengthening, PANYNJ, Queens, NY: Project superintendent for construction activities of removing and replacing approximately 19,000 feet of the airport perimeter chain link fence with cast-in-place

Yury Benyaminov continued

concrete barriers and new 8-foot-high chain link fence on top of the barrier. Coordinated all construction activities according to Port Authority regulations and requirements, escorting the contractor's crew on airside of airport, working with different PA departments, including Security and Airport Operations. Responsible for all field operations and MPT.

Asphalt Grinding (Milling), NYC Department of Design and Construction, Borough of Queens, NY: Resident Engineer for the milling of roadways in Queens, NY. This contract totaling close to $10M is providing for the preparation of roadways for asphaltic resurfacing by in-house forces of the NYC Dept of Transportation. Working days and hours vary per DOT permits and range from regular daytime to nighttime to overnights and weekends. As Resident Engineer, Mr. Banyaminov is overseeing daily assignments of inspectors, ensures the contractor's compliance with OCMC permits and stipulations, enforces safety and MPT requirements, and coordinates the towing operation with the contractor's towing sub and local Police precincts in the borough. Additional responsibilities also include pre-milling survey of locations for low overhead wires, required tree pruning and possible interferences with bus routes or local schools, while post-milling responsibilities include maintenance of site with temporary asphalt, housekeeping and removal of MPT.

Belt Parkway Bridge over Mill Basin, New York City Department of Transportation (NYCDOT), Brooklyn: Chief inspector for resident engineering and inspection services for design-build of an 863-meter-long lift bridge with a clearance of 35 feet that carries a major four-lane parkway over a navigable waterway. Managing inspection of interim repairs to the bridge to extend the service life until a permanent solution is ready for construction. Overseeing installation of protective shielding, removal of existing channels, and grating and replacement with new grating panels and purlins, replacement of the timber sidewalk, curb and asphalt replacement, and flag repairs. Ensuring maintenance and protection of both vehicular and vessel traffic.

Pitkin Avenue Bridge Reconstruction over LIRR, NYCDOT, Brooklyn: Coordinated and inspected all contract activities, including full demolition of the superstructure (concrete deck and steel framing) and partial demolition of the substructure (two piers and the top portion of the abutment stem walls), rebuilding of the abutment stem walls and wingwalls, erection of new structural steel (multiple-span stringers) with installation of new elastomeric expansion and fixed bearings, reinforcement installation and concrete placement for new superstructure deck slab, bridge parapets, fencing, steel-faced curb, sidewalks, street lighting, asphalt paving, and new water main installation.

Route 9A Vesey Street Pedestrian Bridge, New York State Department of Transportation (NYSDOT), New York City: Senior inspector for installation of drilled shaft cast-in-place piles (mini-piles), underground utilities relocation, static axial compressive load tests, load test report, concrete footings, west and east touchdown steel structures installation, escalators and elevators installation, and repair of WTC slurry wall tiebacks.

West Fingerboard and Clove Road Bridges over SIRTOA, NYSDOT, Staten Island: Senior inspector and office engineer responsible for inspection of concrete placement and curing, concrete sampling and testing, concrete deck removal and replacement, and steel repairs.

Clearview Expressway - Long Island Expressway Interchange Improvements, NYSDOT, Queens: Senior inspector supervising all field operations, including rehabilitation of five bridges and eight ramps, concrete bridge deck demolition and reconstruction, structural concrete placement, structural steel repairs, roadway excavation and construction, cguide railing installation, and new landscaping, among other components.

Frank J. Cienski, PE Construction Safety Engineer

Firm: AECOM

Education
BS/1991/Civil Engineering, The State University Of New York at Stonybrook

Registrations
PE/2004/New York, Registration [redacted] (Civil)

Professional Associations
American Society of Civil Engineers (ASCE), New York Chapters
Construction Management Association of America (CMAA), New York Chapter

Mr. Cienski has more than 30 years of experience in operational planning and scheduling in the railroad industry. He has been involved in all types of railroad-related construction projects. His experiences and knowledge of the railroad industry have allowed him to participate in a wide range of projects from track installation to safety inspections to estimating and planning services. He has served as a construction manager for the Farley/Moynihan Station project and the $6.3 billion East Side Access project for the MTA in Grand Central Station, and project superintendent for the Nets/Brooklyn Arena project in the LIRR V.D. Yard.

Brooklyn Battery Tunnel, MTA Bridges and Tunnels, NY: Construction manager and inspector with the highway and bridge department for concrete repairs at the Battery Tunnel Facility.

Bronx Whitestone Bridge, MTA Bridges and Tunnels, NY: Construction manager and inspector for joint and full deck repairs.

Nets/Brooklyn Arena, MTA Long Island Rail Road (LIRR) VD Yard, Brooklyn, NY: Project superintendent for the initial construction for this project. Responsibilities included planning, estimating, and scheduling; and the coordination and supervision of the tasks involved for the environmental impact study, geotechnical investigation, and track construction and relocation. Coordinate, monitor, review and approve the associated invoicing for the force account services that were provided for these tasks and participate in the cost control processes.

East Side Access, LIRR, NY: For this $6.3 billion, 7-mile tunnel extension to Grand Central Terminal, responsible for the oversight, reporting, and coordination efforts to provide personnel and equipment access, and protection to perform tasks onto the following operating railroads and systems: Metro-North Railroad, LIRR New York & Atlantic Railway, Amtrak, and New York City Transit.

Various Projects, Amtrak, NY: Safety liaison officer responsible for all safety and security related issues and concerns between labor and management, crossing all crafts and all levels of management throughout the northeast corridor. These items included site-specific project planning, hazard assessments, job safety analyses, site security review, force account and scope requirements, training design and instruction, and accident investigation. Organized and facilitated group and committee activities. Projects included the Secaucus Transfer, Newark Airport, and Westside Development, as well as various bridge and track rehabilitation projects in the northeast region.

Geoffrey Cohen

Inspector

Firm: AECOM

Education

AAS/Construction Engineering Management, College of Arts, Science and Technology

4 Hour Lead Awareness Course/1998

Certifications

NICET IV

NYSDOT Region 11 Traffic Control

ACI Concrete and Field Testing Technician - Grade I/1996

Mr. Cohen has over 28 years of experience providing construction inspection services throughout New York, including a number of New York City Department of Transportation projects. He was a senior inspector on several contracts for the $90 million reconstruction of the Williamsburg Bridge, and many other projects in the NY Metropolitan area.

Williamsburg Bridge Main Roadway Rehabilitation, New York City Department of Transportation (NYCDOT): Safety/MPT inspector for the $175 million rehabilitation of the Williamsburg Bridge main roadway. The project work involved truss painting, rehabilitation and strengthening, bearing replacements, installation and maintenance of inspection platforms, tower rehabilitation and strengthening, and cable suspender replacement and adjustment. Responsibilities included coordinating lane closures on the bridge and surrounding streets; providing look ahead schedule to all involved agencies; overseeing the implementation of lane closures and reversals; monitoring the content and specifications of construction signage, and coordinating their placement and positioning; providing notifications to marine agencies during the use of work barges; inspecting safety devices, performing all around inspection and daily reporting; and chairing safety meetings.

Williamsburg Bridge Northern Roadways Reconstruction, NYCDOT: Inspector for the $230 million reconstruction of the northern roadways. Project work consisted of the demolition and reconstruction of four northern roadway lanes on the bridge approaches and main span. Responsibilities included coordination of all bridge lanes, local street closures (both daily and long term) with contractor, NYCDOT, traffic, and other agencies. Duties also included implementation and maintenance of construction signs in Brooklyn and Manhattan; daily inspection of variable message boards, arrow boards, and permanent and temporary traffic signals leading into the bridge approaches; inspection of the installation of junction/splice boxes under deck and in the service buildings for running and training wires for the approach road and main bridge lighting, and signs for the guidance of traffic, and the installation of fiber optic cables and cameras for the closed circuit television and video detection system. Also responsible for monitoring the cameras in the TMC building to ensure the safe operation of traffic and for coordination with the traffic management center, and towing service to remove disabled vehicles from bridge lanes as needed. Responsibilities included performing daily safety inspection for contractor's personnel and inspection team, and coordinat-

Geoffrey Cohen continued

ing and implementing monthly safety meetings with the inspection team. Inspected and prepared the daily inspection report, MPT contract work as per contract drawing and specifications for contractor's monthly payment estimates.

Williamsburg Bridge South Roadways Reconstruction, NYCDOT: Chief inspector for the $350 million reconstruction work that included complete replacement of the south roadway, four lanes for the Brooklyn and Manhattan approach viaducts (including erection of structural steel interim bracing for existing MTA New York City Transit structures and north roadways), installation of main bridge and approach viaduct flexible shielding systems, and removal of lead-based paint from existing structural steel members prior to demolition. Project work also included the reconstruction of new concrete piers, abutments, and retaining walls; installation of multi-rotational bearings; erection of steel girder/diaphragms; installation of open steel grid deck; placement of class DP concrete deck slab with a 2-inch overfill; slip form half section concrete safety barrier; installation of roadway lighting and sign structure; installation of fiber-optic cable for the traffic management system and coordination of lane closures on the main bridge, approaches, and local streets; and maintenance and protection of traffic.

Rehabilitation of the Approach Viaducts to the Throgs Neck Bridge, MTA Bridges and Tunnels, Queens, NY: Chief inspector for construction inspection services for the $7 million rehabilitation of the approach viaducts from the Cross Island Parkway to the Throgs Neck Bridge. Project work included the removal and replacement of the roadways, including the concrete deck slabs, armored joints, bearings (upgraded to seismic bearings), abatement of lead-based paint and repainting of structural steel members, removal of bridge lighting system on ramps, modification of sections of the main line lighting system (which included installation of new stainless steel pull boxes), polyvinyl coated steel conduits with expansion couplings, new cable installation along the outside of the safety walk steel barrier wall, modification of the bridge lighting system on ramps and underdeck, replacement of on-grade subbase and asphalt pavement, and modification of approach roadway catch basins. Project work also included cleaning and removal of hazardous lead debris. Abatement of lead-based paint was required to remove existing steel members. The work also included miscellaneous repairs to structural steel members (which involved heat straightening of braces, girder flanges, and heat crayons), installation of gusset plates for cracked girder flanges, maintenance and protection of traffic (vehicular and pedestrian), and community relations. VMS and advanced warning signs were used extensively to alert the public to upcoming changes in traffic patterns. Inspection reporting was prepared according to MURK. This project received the Construction Management Association of America's 1995 Project of the Year Award, and the Concrete Industry Board's Award of Merit.

Melrose Avenue Bridge and East 165th Street Bridge Repairs, NYCDOT, Bronx: Chief inspector for resident engineering and inspection services for the replacement/repair of the Melrose Avenue Bridge over Conrail and the East 165th Street Bridge over Metro-North Railroad. Project work included removal and replacement of deteriorated concrete with approved patching material from the underside of the 165th Street Bridge over Metro-North tracks. Supervised the removal and replacement of deteriorated deck slab concrete; repair and replacement of structural steel; scarification and rehabilitation of the entire deck slab; and the mass placement of concrete on the rehabilitated deck to meet surrounding elevations. Supervised the installation of new armored joints, drainage systems, street lighting, land striping, signs, conduit runs, foundations, bases, poles, mast arms, signals, controllers, luminaries, and vehicle loop detectors.

Hanif Contractor Inspector

Firm: AECOM

Education
MS/1975/Civil Engineering, Baroda, India

Certifications
NICET III, 1991
Certification in Highway Construction
American Society of Certified Engineering Technicians
ACI-I Certification from American Concrete Institute
Quality Assurance Certification from NYCDOT
Certification in Maintenance and Protection of Traffic from NYSDOT
Lead Awareness Program Certification
Asbestos Awareness Programs Certification

Mr. Contractor has 30 years of experience as a construction inspector for major transportation agencies, including MTA Bridges and Tunnels where he provided construction inspection services for several bridge, highway and tunnel reconstruction/ rehabilitation projects. These projects included the rehabilitation of the approach roads of the Henry Hudson Parkway Bridge, the restoration of the Triborough Bridge substructure and the rehabilitation of the Queens Midtown Tunnel.

Northern Roadways at the Williamsburg Bridge (Contract #7), New York City Department of Transportation (NYCDOT): Senior inspector for the $230 million reconstruction project, including of the demolition and complete replacement of the Brooklyn and Manhattan north approaches and mainspan in the existing bridge footprint, installation of new concrete piers, barriers, roadway lighting, a VMS (variable message system), interim New York City Transit signals, drainage systems along with new curbs, sidewalk and street repaving, and construction of new pedestrian walkway/bikeway. Responsibilities include Class A containment installation, blasting and painting of existing structural steel, structural steel repairs and installation of new structural steel, fabrication of truss/orthotropic deck for the approach roads and for the footwalk/bikeway, installation of reinforcement and concrete placement for foundation and pile driving for bridge foundation.

Rehabilitation of Seagirt Boulevard Bridge over Nassau Expressway, New York State Department of Transportation (NYSDOT): Senior inspector for the inspection of partial deck replacement, new median barriers, guard rail, bridge railing, structural steel, bearings, brickwork, stonework repair of the concrete with special material. Work also involved resurfacing of the roadway with asphalt concrete, inspection during the day and night, maintenance and protection of traffic, preparing estimates, attending monthly progress meetings and preparing daily inspection reports.

Approach roads of the Henry Hudson Parkway Bridge, MTA Bridges and Tunnels: Chief inspector for the $4.5 million rehabilitation project that involved the inspection of the removal of existing pavement, drainage, guardrail and the curb and replacing it with new concrete pavement, new drainage guardrail and curb. Responsibilities included detailed inspections include excavation of structural concrete, pavement concrete, drainage structure, drainage pipes and overseeing of junior inspectors.

Restoration of the Triborough Bridge substructure, MTA Bridges

Hanif Contractor continued

and Tunnels: Construction inspector for the project that involved detailed inspection of repairing of spaulled concrete with shotcrete as shown in concrete drawings. Also inspected the improvement of drainage system in the vicinity of Rikers Island and replacement of storm drainage system.

Estimation of 17 Bridges on the Staten Island Expressway, NYSDOT: Prepared estimates for the protection and maintenance of traffic for bridges on the Staten Island Expressway.

Verazzano Narrows Bridge, MTA Bridges and Tunnels, NY: Inspector for the detailed inspection of the Verazzano Narrows Bridge upper and lower levels. Project work involved a visual and hands-on inspection for concrete surfaces on top of the deck and underside spans. Prepared notes and sketches of inspection finding.

Parkview Road Bridge and Palmer Road Bridge, Westchester County, NY: Inspector and office engineer for the rehabilitation of these two bridges. Responsible for detailed inspection of structural steel work, bituminous pavement, structural concrete, steel bridge railing, repointing of mortar joints, removal and placement of arch fill, cleanup and restoration, setting up detour, replacing sidewalks, waterproofing, and maintenance and protection of traffic.

Long Island Expressway Reconstruction, NYSDOT, Nassau County: Inspector for the $63.4 million reconstruction of the Long Island Expressway for capacity improvement (HOV lanes) of exits 40 to 43. Involved in inspection of asphalt concrete paving, bridge widening and drainage, sign structures, electrical and inform work, noise barriers, guiderails, and base cement concrete.

Construction Inspection of Various Projects, NYSDOT, Various Locations: Permit work within the state highway ROW. Construction inspector responsible for assuring that the coordination of daily traffic maintenance activities complied with NYS MUTCD; oversaw the trench excavation, sheeting, and backfill compliance with NYS specifications; record-keeping; site work inspection; any damage, and temporary repair within state highway ROW; inspected all permanent, restoration, and material for AC paving; concrete sidewalk ,curb, and commercial driveway; utilities and landscaping with state ROW.

Queens Boulevard and 67th Avenue Reconstruction, NYSDOT: Chief inspector for the $1.5 million reconstruction of 67th Avenue and Queens Boulevard. Involved in the inspection of concrete sub-base, binder, and top course of the road, stripping and sign structures, sidewalks, curb, driveways, street lighting, landscaping, and sewer and storm drains.

Queens Midtown Tunnel Rehabilitation, MTA Bridges and Tunnels, NY: Construction inspector for the $10 million rehabilitation of the Queens Midtown Tunnel. Work elements included repair of reinforced concrete roadway slab and fresh air duct walls; underside slab concrete spalling and shotcrete repairs; removal and restoration of existing asphalt concrete and/or brick pavement; full-depth concrete roadway slab replacement; furnishing and installing membrane removal of asbestos containing (transite) flue blank-off plates; sprayed molten zinc corrosion protection; shotcreting; steel curb and gutter repair; replacement of fireline branch pipes under the roadway; maintenance and protection of traffic; and cleaning and removal of hazardous lead debris from the invert of the fresh air ducts.

Hunters Point buildings Survey, Port Authority of New York and New Jerse (PANYNJ), NY: Team engineer conducting survey for Hunters Point buildings. Survey included the Daily News office buildings, four storage buildings, eight concrete silos, and a pump house. Prepared inspection notes and sketches of existing condition and maintained a photo log.

Joseph Cossentino Field Engineer

Firm: AECOM

Education
BSME/1999/Mechanical Engineering, SUNY, Stony Brook

Registrations
Engineering in Training (EIT): NY, 1999

Professional Associations
American Society of Mechanical Engineers
Tau Beta Pi National Engineering Honor Society

Mr. Cossentino has extensive experience in the project management and as an equipment specialist for elevator and escalator designs for a variety of infrastructure projects and project delivery methods. Work experience includes all aspects of mechanical engineering design and inter-discipline design coordination including interface of equipment with mechanical and electrical systems. Responsible for vertical transportation design criteria, master equipment and furnish and install specifications, vendor bidding lists, and bid evaluations.

World Trade Center Transportation Hub, Port Authority of NY & NJ (PANYNJ), New York, NY: MEP package manager responsible for MEP and Vertical Transportation Design Packages and deliverables for the PATH Station and the World Trade Center Transportation Hub.

World Trade Center Vehicular Security Center, PANYNJ, New York, NY: MEP project engineer responsible for MEP and Vertical Transportation coordination including 50 roped hydraulic elevators. Responsible for the overall coordinated design of the HVAC system, building management system, vertical transportation, fire alarm, and plumbing and fire protection.

American Airlines Terminal Redevelopment Project, JFK International Airport, Jamaica, NY: MEP project manager responsible for QA/QC and conformance of MEP installation with NYC Building Code, Specifications, and Tenant Review Manual of the Port Authority of New York and New Jersey. Building management system, vertical and horizontal transportation, HVAC installation, fire alarm, and supervision of testing and commissioning.

Empire State Plaza Garage Ventilation Retrofit, New York Power Authority (NYPA), Albany: Mechanical engineer responsible for design and drawings for upgrade of the three level parking garage at the Empire State Plaza. Machine design of differential holdback device for Buffalo Forge Supply and exhaust fans, variable frequency drives, ductwork, heat tracing, and piping.

SUNY Morrisville Distributed Generation, NYPA: Mechanical engineer responsible for design and drawings for installation of three - 1 MW Waukesha engine generators, silencers, York air handling units, heat recovery boiler system.

Colonie Landfill Power Cogeneration Project, NYPA: Mechanical engineer responsible for design and drawings for installation of three Jenbacher engine generators fueled by landfill gas on location at the landfill.

Christopher Curtis, PE

Structural Engineer

Firm: AECOM

Education
BS/1997/Civil Engineering,
Pennsylvania State University
College of Engineering

Registrations
PE/2007/NY No. [redacted]
ICC Structural Steel and Bolting
Special Inspector

Christopher Curtis has more than twelve years of experience on a variety of structural engineering projects involving bridge, roadway, and rail facilities. Mr. Curtis is fluent in finite element programs such as SAP2000, STAAD Pro and GTStrudl, and has expertise in MDX and Descus, which are used in the design of curved girders, as well as SEISAB, a seismic analysis program. He has used several codes and manuals in design work, including AASHTO, AREMA, ACI, AISC Steel Construction Manual (ASD and LRFD), and NYS Blue Pages, as well as various seismic guidelines.

Major Deegan Expressway Scoping and Final Design, New York State Department of Transportation (NYSDOT), Bronx: Senior structural engineer for the scoping and final design of the rehabilitation of the 149th Street Mainline Viaduct, as well as replacement of the Exterior Street Ramp and six other ramp structures to and from the Major Deegan Expressway. Work included design of all components for the replacement of Exterior Street Bridge over Metro North Railroad and coordination with NYSDOT and Metro North Railroad for concurrent projects.

World Trade Center Transportation Hub, Port Authority of New York and New Jersey (PANYNJ), New York, NY: As senior structural engineer performed progressive collapse analysis of Transit Hall structures.

Second Avenue Subway, MTA New York City Transit (NYCT): Performed quality assurance review for 72nd Street Station structural contract drawings.

Roosevelt Avenue over Van Wyck Expressway, Flushing, New York City Department of Transportation (NYCDOT): As senior structural engineer, led conceptual design of both an independently supported MTA structure over Roosevelt Avenue roadway and an entirely new Roosevelt Avenue Roadway Bridge on a new alignment. He performed preliminary cost estimate, and load rating for existing bascule span. All work was done for the Bridge Reconstruction Project Report.

Steinway Street over Grand Central Parkway, NYCDOT, Astoria: As senior structural engineer, preformed monthly inspection of temporary bridge over the Grand Central Parkway. Duties included inspecting all connections of the truss bridge, writing inspection finding reports and coordinating all necessary maintenance work with contractor.

Rehabilitation of NYS Thruway from MP 24.6 to MP 29.5, NYS Thruway Authority, Suffern: As structural engineer, developed rehabilitation schemes, including full-depth deck repair and complete deck replacement, for the five mainline

Christopher Curtis, PE continued

bridges within the project limits.

Broadway Bridge over Harlem River, NYCDOT: As Structural engineer, established rehabilitation/ reconstruction schemes for three-span lift bridge truss carrying six lanes of Broadway and three tracks of IRT. Mr. Curtis performed assessment of seismic adequacy of existing structure and Level 1 load rating of all truss members and flooring system.

Glen Cove Road Extension, Glen Cove, NY: As structural engineer, created and efficiently managed engineer's estimates, which included prefabricated arches and walls, for the new bridge spanning Glen Cove Creek. Mr. Curtis determined the extent of usage of light weight fill in the approaches due to poor soil conditions.

Robert Moses Causeway Southbound Bridge over the Great South Bay, NYSDOT, Islip: As structural engineer, evaluated the replacement of the girder and stringer spans, as well as the replacement of the deck of the main truss span. Prepared cost estimates for various replacement alternatives, including precast AASHTO girders, precast box girders and precast quadbearns. Mr. Curtis analyzed and assigned risk to the probability of finishing in one construction season due to the high volume of summer traffic on the bridge. He also served as Team Leader on inspection of substructure including half cell potential testing.

Gunhill Road over Metro-North Railroad, NYSDOT, Bronx: As structural engineer, designed complete replacement of superstructure consisting of plate girders, reinforced concrete deck and abutment modifications. Performed load ratings, completed the engineer's estimate and prepared bid documents.

East 8th Street Access Ramp over Belt Parkway and Replacement of Five span Ramps to Belt Parkway, NYCDOT, Brooklyn: As structural engineer, designed substructure to meet NYCDOT seismic criteria, proposed new interior columns and piles due to the inadequacy of the existing exterior columns and piles.

U.S. Army West Point Bridge Inspection, USACE, West Point, NY: As structural engineer, performed inspection of 36 bridges on the campus and surrounding areas of West Point Military Academy. Responsible for field investigations and the structural analysis report incorporating photographs and field notes. He also updated the registry of the bridges using the CEBIS program.

Biennial Inspection, NYSDOT, Queens County: As structural engineer, performed inspection of 489 state highway bridges over various railroads and waterways in Queens County. He supported the team leader by assessing load ratings and scheduling lane closures and railroad flagging for track inspections. Mr. Curtis was responsible for computerized collection of data and inspection results.

Seeley Street over Prospect Avenue, NYCDOT, Queens: As structural engineer, prepared contact drawings for precast arch and abutment modifications in conjunction with the lowering of Prospect Avenue, and was responsible for continuous client interaction due to concerns of the community in the lowering of Prospect Avenue.

Lincoln Road Bridge over New York City Transit, NYCDOT, Queens: As structural engineer, proposed new superstructure of steel rolled beams and reinforced concrete deck. Prepared and managed all bid documents including estimates, special provisions and special specifications.

John Daza, PE Structural Engineer

Firm: AECOM

Education
BS/1997/Civil Engineering, State University of New York, Buffalo

Registrations
PE/2002/NY No. [redacted]
ICC Structural Steel and Bolting Special Inspector

Professional Associations
American Society of Civil Engineers, Associate Member

Mr. Daza is a project manager and project engineer with and emphasis in structural and highway engineering. Mr. Daza's structural engineering experience includes various highway and railroad bridges, earth retaining systems, and facilities design. His highway design experience includes the development of typical sections, pavement, alignments and profiles, and drainage.

Engineering Services Agreement - Bridge Database System Enhancements, New York City Department of Transportation (NYCDOT): Project manager and software developer. Developed bridge asset management software to analyze bridge preventive maintenance funding versus life expectancies of NYCDOT maintained bridges.

Rehabilitation of Conner Street Bulkhead along the Hutchinson River, New York City Department of Design and Construction (NYCDDC), Bronx: Project engineer for preliminary and final design for the reconstruction of 125LF of a gravity type concrete bulkhead. Approximately 50 LF of the bulkhead has collapsed and 50 LF of the wall is severely undermined. The bulkhead supports a NYCDOT storage and maintenance facility. Work elements include in-depth inspection, preparation of inspection report and design report with rehabilitation alternatives, geotechnical program, HAZ-MAT assessments, permitting, and environmental assessments.

Edgecombe Avenue Wall Rehabilitation, NYCDDC, Manhattan: Project engineer for preliminary and final design for restoration of the 150-foot concrete structure with brick facing and stone copings. The sidewalk at the top of the wall is a structural slab that spans 10 feet from the concrete wall to a parallel stone masonry wall. Design elements include details for replacing the brick facing with a decorative brick arch facing, resetting of coping stones and picket fence, structural concrete repairs to the concrete wall and structural slab. Landscaping and urban design features along the wall will be enhanced as part of the NYCDDC's high performance design initiative.

Biennial Inspection of Pedestrian Bridges, NYCDOT: Project manager for biennial inspections of NYCDOT-owned pedestrian bridges throughout the five boroughs. Work includes inspecting and recording findings, as per NYSDOT bridge inspection manual, photographic records, scour documentation as per NYSDOT bridge inspection manual Chapter 4 Section B, and reporting of flag conditions (red, yellow, and safety).

Engineering Services Agreement, NYCDOT: Contract manager for various projects under the agreement, including the Queensboro Bridge coin

John Daza, PE continued

facility, peer review of the East 153rd Street Bridge, ULURP application for 10 bridges, emergency repairs for the Paerdegat Bridge, inspection of NYC DOT-owned retaining walls, and Mill Basin Bridge CI services.

Engineering Services Agreement - Bridge Database System, NYCDOT: Project manager for the expansion of the existing NYCDOT Bridge Inspection System (BIS) to a more comprehensive division wide bridge data system (BDS) composed of three modules: a field system, an office system, and the upload-download module, with a database management tool to handle replication. The field system was a Visual Basic 5.0 application that processed data in a Microsoft Access 97 database using Data Access Objects (DAO) to achieve data manipulation. The office system and upload-download module were developed as Microsoft Access 97 VBA applications operating against a replicated Access database. The BDS replaced BIS with a new application and consolidated the state and city database files into one comprehensive system. The new system has enhanced functionality and includes all in-depth inspections performed under Bridges Capital Program.

Seismic Vulnerability Assessment for Various Bridges, NYSDOT - Region 11: Project engineer involved is providing assessment of 300 to 400 bridges for vulnerability to seismic events. These bridges are located on and over an emergency access corridor extending from the Goethals Bridge in Staten Island to the George Washington Bridge in upper Manhattan. Each structure was screened to establish its seismic risk classification and an empirical assessment to determine overall vulnerability to seismic events. Field verification of existing conditions was required for each structure. For a limited number of structures, a hands-on inspection and soil sampling was required, as well as an analytical assessment involving capacity/demand ratios and "push-over" analyses. Earth Tech recommended a course of action for seismic retrofit in relation to the vulnerability and importance on a structure-by-structure basis.

Cross Bronx Expressway Bridge Rehabilitation, NYSDOT - Region 11, Bronx: Project engineer for the preliminary and final design (Phases I-VI), including a corridor study to evaluate the feasibility of increasing capacity and safety, which included studies considering HOV alternatives for the Cross Bronx Expressway. Work includes in-depth condition inspection, load ratings, seismic analysis, deck evaluation, design approval documents, and preliminary and final design of 14 bridges on or spanning the expressway from Morris Avenue to the Sheridan Expressway including redesign of the Sheridan Expressway (I-895) interchange. Participated in a special study for replacement of 16 concrete bridges along the corridor, which involved investigating the feasibility of using precast and prefabricated substructures, superstructures, and other innovative construction methods to minimize construction impacts and duration. The structures include four steel rigid frames, two 2-span concrete rigid frames, a closed spandrel, two concrete rigid frames with integral box type superstructure, a concrete arch, an 18-span viaduct with continuous girders, a 9-span multi-girder bridge, and three multi-girder grade separations, one of which supports an elevated subway line. A seismic analysis is performed for each structure and steel detail vulnerability assessments are performed for the 9 steel bridges. Other elements of the contract include traffic studies for the development of construction staging and maintenance and protection of traffic plans, accident study, utility study, and environmental study (hazardous material mitigation).

John Dineen Contract Administrator

Firm: AECOM

Education
MBA/1982/Finance, Iona College, New Rochelle
BBA/1966/Accounting, Iona College, New Rochelle

Training
01 - Safety Orientation 10/14/2008
02 - Hazard Communication (US) /WHMIS (Canada) 01/24/2007
14 - Office Ergonomics Training 01/24/2007
Employee Substance Abuse Training 05/19/2008
Institute of Certified Fraud Examiners, 40 hour seminar on Fraud Detection, 1994
OSHA – 40 hour safety course, 1993

Professional Associations
Institute of Internal Auditors

Mr. Dineen is experienced in review and verification of construction time and material work, net cost, emergency delay, and related billings from contractors, subcontractors, and vendors. He has performed complete financial and operational audits on Fischbach Corporation corporate, subsidiary, regional, district, local, and field/job site locations.

Security Capital Program, Port Authority of New York & New Jersey (PANYNJ): Project accountant and cost engineer for 15 work orders and billings of $15 million. Involved in PRCER purchasing system as the initiator and purchasing agent for the project. Prepares billing of payroll and other direct costs to PANYNJ. Process subcontractor and vendor payments for payment using the Oracle accounting system. Verifies all allowable costs are billed to client PANYNJ. Coordinates with PANYNJ auditors with the final audit of the project allowable costs.

LaGuardia and JFK Airports, PANYNJ, NY: Construction auditor responsible for reviewing and verifying construction time and material work, net cost, emergency delay and related billings from contractors/ subcontractors and vendors on Port Authority contracts for compliance with agency criteria and applicable specification requirements. Conducted a complete review of contract administration.

PANYNJ Contracts and Operations Auditing: Performed resident construction and maintenance auditor duties at JFK Airport, LaGuardia Airport, Newark Airport, Port Elizabeth and Port Newark Seaports, the World Trade Center, Hudson River Crossings, Brooklyn piers, and the NY Consolidated Passenger Ship Terminals.

New York Power Authority, Internal Auditing: Set up and headed a new internal audit section. Supervised the audit of numerous plant sites; trained personnel in proper audit, accounting methods and procedures; audited outage costs at the Indian Point Unit #3 Nuclear facility; performed and supervised audits of construction and A/E firms and shared costs with Con Edison and Niagara Mohawk Power; reviewed internal control systems at numerous plant sites; and supervised audits in many other areas including inventories, equipment, fuel oil, nuclear fuels, and other balance sheet items.

Fischbach Corporation, Multiple Subsidiaries and District Offices: Supervised wide range of financial and operational analyses and audits on projects valued at up to $100 million. Designed audit programs specifically tailored to business lines and system characteristics; instituted policies and procedures to improve accuracy of financial reporting.

Michael Farruggia

Inspector

Firm: AECOM

Education

BS/1977/Civil Engineering, New Jersey Institute of Technology

Roadbed and Rails – Subgrade, Ballast and Rail Problems, Track Maintenance and Inspection – (Certificate of Completion) Institute for Railroad Engineering, 2002

Railroad Tracks – Evolution of Tracks, Design Analysis, Track Buckling and Maintenance – (Certificate of Completion) Institute for Railroad Engineering, 2004

Registrations

ICC Structural Steel and Bolting Special Inspector (Cert. No. [redacted]

ICC Structural Masonry Special Inspector

ACI Concrete Construction Special inspector

ACI Concrete Field Technician – Grade I

OSHA Certified – Occupational Health and Safety 10-hr course

Mr. Farruggia has worked for over 26 years as a design and field engineer on several major construction projects, bringing with him extensive experience in construction monitoring and inspection of railroads, intermodal facilities, marine facilities, building (including high rise) and bridge construction, as well as asphalt paving, highway design and construction. He is familiar with PA office administration procedures, PA Standards and applicable Building Code requirements having worked for the past nine years as a construction inspector at NJMT on both PA contracts and TAA projects, and for the past year as a lead inspector at PATH.

PANYNJ Port Ivory and Teleport facilities in Staten Island, NY: Senior inspector responsible for all active Tenant Alteration projects at the facilities, as well as all TAA projects at Brooklyn Piers.

PATH Automatic Signal Modernization project: Senior inspector responsible for the coordination of surveys.

PATH Train Operations Building Construction" in "C" Yard, Jersey City, NJ: Assistant resident engineer/ chief inspector responsible for construction of the $11M project.

Tenant Alteration Projects at New Jersey Marine Terminals and Hoboken: Senior inspector responsible for over 80 active tenant alteration projects. Duties consisted of conducting pre-construction and progress meetings, preparing and maintaining monthly project construction cost reports for the EOC, auditing controlled inspections, assuring that A/E of record, the contractor and tenant constructed the improvement projects in accordance with PA standards and approved plans. Assured that all controlled inspections were performed as required by the applicable Building Codes and PA Standards and verified that all life safety systems were constructed/ installed as per applicable codes. Coordinated, arranged and conducted partial/final inspections and prepared Audit Conformance Reports for the EOC. From 2008 to 2009 he was assigned to the "W Hotel" project in Hoboken, where he was instrumental in successfully bringing to conclusion this major $110M project.

New Jersey Marine Terminals: Construction inspector responsible for the inspection of several major projects including: design and construction of intermodal transfer facility; Expressrail lead track relocation over McLester Street depressed roadway; North Avenue East improvements – eastbound bridge widening; portside yard storage tracks; building demolition and construction of Expressrail tracks 9 and 10; removals and paving and utilities at former Expressrail facility; Curves and Signage Improvements & Upgrades of Traffic Signal System.

Edward Fortyz Inspector

Firm: AECOM

Education
Electrical Engineering, City College of New York
Hour Lead Awareness Course/1998

Registrations
NICET IV
A.C.I. Level 1/1994
VDOT Concrete Certification
VDOT Asphalt Certification

Mr. Fortyz has 30 years of experience in the construction inspection of bridges and roadways. His recent projects include coordination with Amtrak and MTA New York City Transit. He has served as an office engineer on a number of highly visible construction projects in the New York metropolitan area.

Route 9A North Promenade at World Trade Center, Lower Manhattan, NY: Office Engineer for the $188 million reconstruction of the West Side Highway in the area of the World Trade Center construction. Work includes complete replacement of drainage, water, gas, electric and telephone systems. Reconstruction of West Thames Street Park including dog run, water play area, lawn area and community gardens. Office Engineering duties include bimonthly payments to Contractor, Order-on-Contract preparation, Inspector report review and EEO record monitoring. Co-ordination with NYSDOT, FTA, Port Authority for changed condition payments. Training and supervision of office staff.

Secaucus Interchange, New Jersey Turnpike Authority: Office engineer for the $165 million project that involved the widening of bridge E110.85 including structural steel, structural concrete, HPC deck concrete, Pile installation and assorted structural improvements. Project SIP-201 involved installation of a cantilevered sheeting system, Much excavation and installation of a mechanically stabilized earth retaining wall system for future construction of new ramps and "fly-overs" to accommodate traffic exiting the turnpike at interchange 15X. SIP-301 and SDE 401 were the continuation of exiting traffic onto local streets leading to the newly constructed NJ Transit Allied Junction Train Station. Work included concrete placement, asphalt placement, traffic signalization installation and various landscaping improvements. Duties included document handling, Monthly payment preparation, and field assignments as necessary. Please note that Mr. Fortyz was the office engineer on all the aforementioned projects as well as Utility orders that were completed in conjunction with them.

Miller Highway Viaduct (West Side Highway), New York State Department of Transportation (NYSDOT): Office engineer for the $70 million rehabilitation of the Project work involved viaduct and roadway rehabilitation. Specific construction operations of this project included structural concrete placement, sidewalk, curbs, concrete road base, asphalt wearing course, electrical, traffic signalization, structural steel, water services and drainage installation and other related work. Duties included assurance that documentation complied with MURK, entering quantities from inspectors reports into CEES program for monthly estimates, preparation of partial payments, preparation of change orders, entering material certifications and

Edward Fortyz continued

other pertinent document handling.

Time Square Station complex, MTA New York City Transit: Office engineer for Phase I of the $160 million rehabilitation. The project consists of substantial civil, structural and utility improvements, new platforms/mezzanine and historic preservation throughout this multi-station facility, including relocation of utilities; installation of threw elevators; full architectural treatments of station floors, walls, stairs and ceilings in the rehabilitated and reconstructed areas; modifications of the Con Edison service; installation of new lighting in the rehabilitated and reconstructed areas; consolidation of communications services, and installation of a new public address system. Responsibilities include attending meetings, routing of shop drawings, RFI's and samples, QA/QC program monitoring and coordination with the contractor and architect, field inspections. Extensive use of Primavera's Expedition Program.

Long Island Expressway improvement project from Maurice Avenue to 69th Street, NYSDOT, Queens: Office engineer for the project that consisted of roadway widening and replacement of three bridges. Specific construction operations of this project included structural concrete placement, sidewalk, curbs, concrete road base, asphalt wearing course, electrical traffic signalization, water services and drainage installation and structural steel. Duties included assurance that documentation complied with MURK, entering quantities from inspectors reports into CEES program for monthly estimates, preparation of partial payments, preparation of change orders, entering material certifications and other pertinent document handling.

Williamsburg Bridge South Roadways, New York City Department of Transportation (NYCDOT): Chief inspector for the $310 million reconstruction. Project work included complete replacement of the south roadways for the Brooklyn and Manhattan approach viaducts, including erection of structural steel interim bracing; installation of main bridge and approach viaduct flexible shielding systems; removal of lead-based paint from existing structural steel members prior to demolition; installation of fiber-optic cable for the Traffic Management System; coordination of lane closures on the main bridge, approaches and local streets, and maintenance and protection of traffic. Responsibilities included coordination of work with MTA New York City Transit, as well as with other agencies, and supervision of field inspectors.

Route 9A, Segment 5, NYSDOT, Manhattan: Chief inspector for the $80 million reconstruction. Project work entailed traffic signals, signs and street lighting. Two parks were completely constructed which entailed structural concrete placement, a new drainage system, granite stone curbs and pavement and landscaping. Project responsibilities included the maintenance and protection of both vehicular and pedestrian traffic through all stages of construction, reconstruction of drainage, water mains and other utilities prior to reconstruction of sidewalks, walkway/bikeway, and new European pavement, including joint layout system.

Long Island Expressway, from Woodhaven to Junction Boulevards, NYSDOT, Queens: Senior inspector/office engineer for improvements. Project work consisted of structural steel installation, placement of structural concrete, asphalt wearing surface and concrete deck placement. This was the state plan for alleviating traffic through the highly congested portion of Queens. This project was known as the Collector Distributor Expressway.

Manuel Galarza

Inspector

Firm: AECOM

Education
BS/1983/Civil Engineering, West Virginia University, Morgantown

Registrations
NICET, Level II
ACI Concrete and Field Testing Technician, Grade I
Lead Awareness Program Certification

Mr. Galarza has 24 years of experience working on highway, bridge, and viaduct construction projects on major transportation links, as well as recreational facilities in New York City. His relevant project experience includes the inspection of roadway deck removal and replacement demolition and installation of structural steel and structural steel repairs and drainage pipes and structures, water main installation with work performed according to specifications and compliance with the New York State Department of Transportation, DEP and Steel Construction, as well as inspections of lead-based paint removal, utility relocation, monitoring of maintenance and protection of traffic of both vehicular and pedestrian traffic through all stages of construction.

Randall's Island Field Development Project Construction Phase-Icahn Stadium: Senior inspector for the $100 million reconstruction project that involves the installation and inspection of the water mains, drainage structure and pipes and installation of chute connections and cleaning of structures. Excavation and roadway base reconstruction, temporary and permanent asphalt concrete and gas main pipes with backfilling of all trenches. Inspection of sod, synthetic turf and hydro-seed for baseball and soccer fields.

Reconstruction of Route 9A, New York State Dept of Transportation (NYSDOT): Construction inspector for the construction of a promenade from Battery Place to West Thames Street and the reconstruction of Battery Place to Washington Street. In addition, the project also includes the rehabilitation of the West Street Underpass and the Battery Park Underpass. It involves extensive maintenance and protection traffic and ITS installation and significant landscaping.

Reconstruction of I-87/I-287, from the Tappan Zee Bridge Toll Plaza to the Saw Mill River Parkway crossing on I-287, NY State Thruway Authority: Construction inspector for 3.4 lane miles of new and widened roadway including subbase, base course, curbing, milling, and paving requiring 225,000 tons of HMA. Complex traffic control includes 3 multiphase stages requiring 14 traffic shifts over the 30 months affecting a traffic flow of 140,000 vehicles per day. New overhead sign structures include 5 cantilever and 22 spans. Utilities include electrical, fiber optic, video, and communication ducts serving street lighting and ITS systems and relocation of 12" and 18" high pressure gas mains. Complete new drainage system including manholes, junction structures, inlets, and 13,000 LF of piping. Bridge structures include 3 rehabs, 4 reconstructed, and 4 new. Miscellaneous work includes 250,000 sq. ft. of retaining wall, 85,000 sq. ft.

Manuel Galarza continued

of noise barrier, and 350,000 CY of rock blasting. Responsible for fiber optic relocation and roadway reconstruction.

$80 million reconstruction of Route 9A, from Horatio to West 26 Streets, NYSDOT, Manhattan : Chief inspector for project, which is approximately 1.5 kilometers long and involves the demolition and widening of the existing highway with a European Design, 50-year life, reinforced concrete pavement. Inspection duties included demolition and widening from 4 existing lanes to seven lanes (subbase, DGABC, concrete pavement), landscaped median, curbs (sloped and barrier), median barrier, ped/bike path, sidewalks; installation of temporary and permanent traffic signals and street lighting; extensive public and private utility relocation work (gas, water, sewer, elec, and comm.); maintenance and reconstruction of driveway access; new and reconstructed drainage systems; four stages of traffic control shifting vehicles to temporary and permanent lanes as construction progressed; and overhead sign structures.

Williamsburg Bridge South Roadways, New York City Department of Transportation (NYCDOT): Construction inspector $310 million reconstruction project that included the complete replacement of the south roadways for Brooklyn and Manhattan approach viaducts, including erection of structural steel, interim bracing, installation of main bridge and approaches, flexible shielding system and removal of lead based paint from existing structural steel members prior to demolition. Project work also included the inspection of the removal of rivets and steel members, installation of the structural steel flag repairs performed on the approach viaducts, installation of the structural steel interim bracing required to remove the existing south roadways and reviewed all installations for conformance with the plans and specifications as well as the New York State Department of Transportation Steel Construction Manual. Performed inspection of lead based paint removal. Lead paint removal is a particularly sensitive issue on this project since much of the initial concerns regarding lead abatement projects were first raised on earlier paint projects on this facility. Performed inspection of electrical conduit, cables and lighting fixture installations. Work at the bus depot included notification to riders of the temporary location of their bus stops. Prepared daily inspection reports, quantity measurements and calculations and force account summary sheets.

$72 million rehabilitation of the Miller Highway Viaduct (West Side Highway) from West 57th Street to West 72nd Street, NYSDOT, Manhattan: Construction inspector for the rehabilitation of this 3,500-foot, six-lane viaduct, which included the removal and replacement of the roadway deck, superstructure repair, new concrete barriers, new lighting and changes in superelevation and horizontal and vertical alignment. Superstructure repair included stringer replacements, steel extensions to existing floorbeams, replacement of floorbeam coverplates under live load and miscellaneous steel repairs to existing members ranging from replacement of deteriorated rivets to full replacement of existing deteriorated girders and floorbeams. Construction staging was absolutely critical to the project's success, since four lanes of traffic needed to be maintained at all times. Special attention was paid to minimizing the impact on the riding public and the local community. Through the use of movable barriers, which were the first concrete movable barriers to be used in New York State, three travel lanes in the peak direction of commuter traffic were always maintained. Thus, local road impacts were minimized.

Warren Gaskill Construction Safety Engineer

Firm: AECOM

Education
Bachelors Building Construction (BBC)/1974, University of Florida
OSHA Certified Safety Manager

Registrations
Licensed, General Contractor - Class A, State of Florida

Professional Associations
American Society of Safety Engineers (ASSE)
New Freedom Borough Planning Commission
New Freedom Jaycees

Mr. Gaskill has significant experience in the delivery of construction management and general contraction services. His assignments have been both domestic and overseas involving commercial facilities of various types including airports, railroad, hospital and manufacturing facilities.

East River Tunnel Ventilation Rehabilitation Shaft Project, AMTRAK, NY: Resident safety engineer responsible for overall site safety compliance under the rules and regulations of FRA, OSHA, OCIP and contract documents. Provide safety analysis of Contractor's Project Safety, Health, Environmental, Control Plan (SHECP), and Site Specific Work Plans (SSWP) and the overall administration of safety per the construction contract, including Hi-Rail and/or heavy equipment inspections for equipment utilized under current contract. Acting as the safety liaison while coordinating with AMTRAK, NY City Transit, NYUMC and the contractors' safety personnel for maximizing on-site safety awareness in the mitigation of jobsite personal injury and/or property damage incidents. Intimately involved in the hazardous abatement processes utilized for lead, asbestos, and other environmental sensitive abatement processes required on the jobsite as a pre-requisite for the continued construction activities.

North River Tunnel Ventilation Rehabilitation Shaft Project, AMTRAK, Weehawken, NJ: Resident safety engineer responsible for overall site safety compliance under the rules and regulations of FRA, OSHA, OCIP and contract documents. Provided safety analysis of contractor's SSWP and the overall administration of safety per the construction contract. Acted as the safety liaison while coordinating with AMTRAK, NJ Transit and the contractors' safety personnel for maximizing on-site safety awareness in the mitigation of jobsite personal injury and/or property damage incidents.

Northeast Corridor Modifications, Secaucus Transfer, New Jersey Transit: Resident engineer/safety manager for this $600 million, nine-year construction management project responsible for site safety compliance of the prime contractors under contract to NJ Transit. Performed functions for project involving extensive civil work, track work, stations and electrical systems with the coordination of many contracts including the neighboring New Jersey Turnpike Authority, Secaucus turnpike expansion project. Acted as safety liaison between/with NJ Transit, AMTRAK and Conrail and Contractors for the numerous prime contracts issued by NJ Transit.

Oscar Gonzalez

Coating Inspector

Firm: AECOM

Education

BS/Aircraft Systems & Business Management, Dowling College, Oakdale, NY

Courses: Aerospace Engineering, Polytechnic University, Brooklyn, NY

Associate Degree/Aviation Spartan (Phillips), Tulsa, OK

Registrations

NACE I & II CIP [redacted] Exp. 2/28/2013

SSPC C-5/C-3 New York and New Jersey

OSHA 10 & 30 Hour – Construction Health & Safety

ASSE ASP & CSP Preparation

ATSSA Traffic Control Supervisor

American Heart Association Adult CPR

MTA LIRR Roadway Worker Protection Training Issued 3/18/08

Amtrak On-Track safety Issued: 2/15/2008

NYCDOT Supervisor Training

Certified Flight Instructor / Commercial Pilot

SSI – Scuba Certified

Professional Associations

National Association of Corrosion Engineers (NACE);

Society of Protective Coatings

American Society of Safety Engineers (ASSE)

American Traffic Safety Services Association (ATSSA)

Mr. Gonzalez has 8 years of experience in the protective coatings and corrosion control field on some of the world's largest most high profile projects. This experience includes inspection, failure analysis, condition surveys, and coation related work in numerous industries. He has been responsible for oversight of quality control and quality assurance of lead paint removal, industrial paint application, and has assured to schedule proper training to staff. His work has involved a wide range of facilities, including bridges, high rise buildings, and steel fabrication shop facilities. He is certified as a NACE Level II, SSPC Supervisor/Competent Person for Deleading of Industrial Structures, OSHA 10 & 30 Hour, and ATSSA Traffic Control Supervisor.

Brooklyn Bridge, New York City Department of Transportation (NYCDOT): Senior environmental inspector. High profile project costing $508 million overall for deck replacement, steel repairs, lead abatement, and expansion. Responsible for the inspection activities during containment building, Integrity, and dismantling, VOC monitoring noise monitoring, passive real time emissions verification, vissable emissions, and safety compliance. Work also includes testing and monitoring of hazardous waste evaluation, and disposal procedures. Set up TSP Monitors and Collected TSP Filters and sent to Lab with chain of custodies.

Painting of 13 Bridges, New York State Thruway Authority (NYSTA): Senior inspector on the NYSTA project, the blasting and repainting of 13 Bridges along the Thruway from the Bronx to Sullivan County, a $3 million construction project. Responsible for the inspection activities during all construction operations associated with the project including surface preparation, coating application, maintenance and protection of traffic (MPT), containment and safety compliance. Work also includes testing and monitoring of hazardous waste evaluation, containment, and disposal procedures Other related agencies involved with this project included Metro-North, and DEP.

World Trade Center Transportation Project Haul Area 1 & 2, Port Authority of New York and New Jersey (PANYNJ): Senior inspector of quality control and quality assurance of the World Trade Center Hub Project. This painting project is likely one of the highest profile project of its kind in the world estimating a cost aprroximately $3.2 billion overall. Work includes review and monitoring of contractor operations, verification of all welding approvals, surface preparation, including cleaning and application of protective coating and Intumescent for fire proofing purposes, and all related inspection services to complex pieces which were

Oscar Gonzalez continued

prepared and shipped from Spain to New York.

World Trade Center Tower 1, PANYNJ, Various Shops in New York/New Jersey: Senior inspector of quality control and quality assurance. Work includes review and monitoring of contractor operations, verification of all welding approvals, surface preparation, including cleaning and application of protective coating, and all related inspection services on support steel structures, elevator beams, cooling pipes.

La Guardia Airport and Lincoln Tunnel, PANYNJ, NY: Senior inspector of quality control and quality assurance storage tanks at La Guargia Airport and steel replacement of specific areas of overpass bridges at the ramps of the Lincoln Tunnel. Work includes review and monitoring of contractor operations, surface preparation, including cleaning and application of protective 3 coat system, and all related inspection services to areas of confined space and limited access areas with high traffic involvement.

Protective Coating of the Queensboro Bridge, NYCDOT: Assistant project manager and quality control supervisor for general contrator and sub contractors management and quality controlof the Queensboro Bridge Project. This bridge painting project likely the largest of its kind in the Country at $168 Million. Work includes review and monitoring of contractor operations, douments, record keeping via databases created, training, audits, Medical Servailence, schedules, MPT, milestones and work progress including cleaning, surface preparation, and application of protective coating. Work also includes testing and monitoring of hazardous waste evaluation, containment, and disposal procedures. Other related agencies involved with this project included Amtrak, LIRR, NYPD, Coast Guard and DEP.

Tappan Zee Bridge, NYSTA: Quality control supervisor and assistant project manager on the NYSTA project, the blasting and repainting of the Tappan Zee Bridge, a $24 million construction project. Work includes review and monitoring of contractor and subcontractor operations, douments, record keeping via databases created, training, audits, medical surveillance, schedules, MPT, milestones and work progress including cleaning, surface preparation, and application of protective coating. Work also includes testing and monitoring of hazardous waste evaluation, containment, and disposal procedures Other related agencies involved with this project included Amtrak, Metro-North, Coast Guard, and DEP.

Broadway Bridge, NYCDOT: Quality control officer and health and safety officer on the NYCDOT project, the blasting and repainting of the Broadway Bridge, a $10 million construction project. Work includes review and monitoring of contractor and subcontractor operations, douments, record keeping, training, audits, medical surveillance, schedules, MPT, milestones and work progress including cleaning, surface preparation, and application of protective coating. Work also includes testing and monitoring of hazardous waste evaluation, containment, and disposal procedures.

Williamsburg Bridge, NYCDOT: Quality control officer and health and safety officer on the blasting and repainting of portion of the Williamsburg Bridge, a $1 billion construction project. Work includes review and monitoring of contractor operations, douments, record keeping, training, audits, medical surveillance, schedules, MPT, milestones and work progress including cleaning, surface preparation, and application of protective coating. Work also includes testing and monitoring of hazardous waste evaluation, containment, and disposal procedures.

George Greenberg, PE

Scheduler

Firm: AECOM

Education
MBA/1982/Finance, Iona College, New Rochelle
BBA/1966/Accounting, Iona College, New Rochelle

Professional Registrations
PE/1973/New Jersey No. 049150
PE/1978/New York No. [redacted]
(registrations expired currently re-applying, will reinstate in July)

Training
01 - Safety Orientation 10/14/2008
02 - Hazard Communication (US) /WHMIS (Canada) 01/24/2007
14 - Office Ergonomics Training 01/24/2007
Employee Substance Abuse Training 05/19/2008
Institute of Certified Fraud Examiners, 40 hour seminar on Fraud Detection, 1994
OSHA – 40 hour safety course, 1993

Professional Associations
Institute of Internal Auditors

Mr. Greenberg has extensive experience in preparing, maintaining, upgrading and analyzing engineering, procurement, construction, installation and start-up CPM schedules and developing detailed cost reports for major projects involving airport terminals, subway/commuter railroads, and power plants.

Project Management Call-in Services, Port Authority of NY & NJ (PANYNJ) (2007-2011): As part of the PMD division provided planning and scheduling support which included the preparation and updating of Master Program schedules for all work by the Airport. Schedules were prepared for projects in the conceptual design phase through detailed engineering and contract award, as well as projects in construction. In addition, construction feasibility schedules were prepared ranging from $150M Runway Rehabilitation to fast-tracking the installation of two (2) transformers. The schedules provided the PANYNJ the means to facilitate the design, procurement and construction efforts and provide for the PANYNJ Board Approval process. Examples of the most recent schedules prepared for JFK Airport were: Master Schedule for JFK airside projects; replacement of Bay Runway, the longest runway at JFK Airport, to accommodate the A380 Airbus (14,000 feet long, 250 feet across); construction schedules for poured-in-place concrete, slip form concrete, asphalt, runway lighting and electric duct and the program schedule for the New Delta Terminal Complex.

Terminal B, Newark Airport, PA-NYNJ: Prepared integrated Level 1 and Level 2 schedules for Terminal B upgrade. The Level 2 schedules were prepared with the engineering Project Managers and integration of schedules provided by others. Schedules were for engineering, procurement, and construction, through acceptance and encompassed the entire scope of work including tenant relocations. Schedules were developed and updated, working closely with the operations staff and other key members. Site visits to Terminal B were frequent to maintain communications. Extensive interaction with PA staff was involved in gathering data, assessing progress, and mitigating problems.

World Trade Center Station PATH Permanent Station and Terminal, PANYNJ: Project scheduler, prepared initial Level 1 and Level 2 schedules. Schedules were for Engineering, procurement, construction, thru acceptance and encompassed the entire scope of the project.

Atlantic Avenue Terminal, MTA New York City Transit (NYCT): Complex rebuilding, enlarging and finishing of underground passageways and renovating three

George Greenberg, PE continued

subway stations. Responsibilities as project controls engineer/project scheduler/cost engineer included schedule management, cost control and document control: Scheduling work included CPM schedule review and reporting and development of delay mitigation recommendations. Reviewed and accepted the Primavera Project Planner (P3) CPM prepared by the contractor, with approximately 5000 activities (man-hour and cost-loaded). Schedule activities included procurement, shop drawings, construction, installation, testing and acceptance by New York City Transit. Developed and proposed recovery plans for problematic areas. Also monitored manufacturing and delivery of materials/steel and elevator testing work. Ran weekly schedule meetings with contractor and New York City Transit including preparation of agenda and minutes. Ran monthly presentation of progress to representatives of MTA Board. Reviewed and processed contractor monthly payment requisitions. Developed monthly cash flow and earned value curves to monitor progress. Prepare monthly cost analysis reports. Reviewed and processed contractor change orders, and participated in all negotiation sessions. Responsible for creating and maintaining a comprehensive document control system for the project. Set up initial Expedition system in 1999, which was continuously utilized to track shop drawings, submittals, correspondence, RFIs, change orders, and field observations. Meeting minutes and inspector daily reports were prepared on the Expedition system. Prepared and submitted complete monthly project status reports to New York City Transit and MTA.

72nd Street Station Rehabilitation, MTA New York City Transit (NYCT): Project included realigning trackway, renovating subway station, constructing new entrance building, renovating existing historic entrance building and constructing a new park. Two elevators were added to facilitate access. Electrical work included new power systems, lighting, communications, CCTV, and token booths. Cost of project: approximately $36,000,000. Responsibilities as Project Controls Engineer were very similar to those on Atlantic Avenue Project (above).

Tappan Zee Bridge/I-287 Corridor Project: Senior scheduler for the supervision of project control services for this $3 Billion Project for the New York State Thruway Authority and MTA Metro-North. This Project is for the study for major improvements to 30 miles of interstate highway on I-287 including the Tappan Zee Toll Bridge in New York State. The primary study area for the analysis of transportation issues is the 30-mile I-287 corridor between the I-287/I-87 interchange at Suffern, New York and the I-28/I-95 interchange in Port Chester, New York, including the Tappan Zee Bridge. The study evaluates service and potential linkage to existing commuter rail lines in three counties. Scope of responsibilities includes the development of a cost loaded master schedule in coordination with all project participants. Perform schedule maintenance and report progress on a monthly basis including Earned Value Analysis & Budget Trend Analysis.

Planning and Scheduling for U.S. subsidiary of International Chemical Company: Principal engineer responsible for CPM scheduling and cost reporting for 22 Plants. Primavera CPM scheduling utilized on all projects. Microsoft Excel and Word used for Management Summary Reports. Expedition reporting system utilized for all document tracking. Set up Expedition system to track shop drawings, submittals, correspondence, RFIs, change orders, and field conditions.

Kenneth F. Greenfield, PE Inspector

Firm: AECOM

Education

MS, Civil Engineering (Soils and Foundations), 1978, New Jersey Institute of Technology, Newark, NJ

BS, Civil Engineering, 1974, Newark College of Engineering, Newark, NJ

Registrations

PE/1980/New York, Registration No: [redacted]

Professional Associations

American Society of Civil Engineers (ASCE)

Mr. Greenfield has extensive experience in project management, demolition and reconstruction of major highways and bridges, marine piers, and power generation plants. His experience includes phasing and scheduling, quality assurance, and construction management.

AMTRAK Fire & Life Safety: Resident engineer for the demolition and reconstruction of two separate vent shaft buildings over the four railroad tracks leading from Penn Station in NYC to the Long Island section of the LIRR. The project included the scheduling of railroad Force Account units as well as an exhaustive review of contractors for the work. Included in the phasing of the construction was maintaining these services at vent buildings originally built in 1906 and surrounded by the New York University Medical Center. The survey of existing facilities and the abatement of hazardous [asbestos, lead, PCBs, etc.] wastes. Providing temporary power through 13.2 KV lines up 88 foot deep e'vase stacks and the reconstruction of two above ground three story ventilation, power transfer, communications and fire /safety buildings in Manhattan. This involved extensive phasing and scheduling due to the extremely limited access, some during night hours only, as well as the incorporation of special security measures. The noted work was to be performed without the interruption of an ongoing hospital and underground railroad.

New York Power Authority 23rd St. Substation: Construction manager for the extension of an existing brick arch sewer as a 350 ft. long with 36" RCP from 3rd Ave. into the Gowanus Bay. Work involved the removal of almost 2,000 CY of oil filled soils, driving temporary steel sheeting and permanent timber piling to support the storm sewer, its manholes and catch basins. Placement of 36" RCP with a concrete cradle, dewatering and filtering oil contaminated soils, relocating existing utilities, placing asphalt pavement and a Heavy Post Guide Rail along the Gowanus Bay's bulkhead.

Hudson River Park Battery Park City and West 59th Street: Resident engineer responsible for the demolition of over 18 existing piers along the west side of Manhattan. Additionally, managing the reconstruction of 3 piers into park facilities, the construction of a Bow Notch and high-level platform opposite Christopher St. The park work included the construction of 3 park buildings, high power electric, telephone, potable water, irrigation, drainage, fountains and granite Esplanade. Water play equipment, specialized free draining horticultural soils and the everyday monitoring and phasing of 8 different ongoing contracts.

Kenneth F. Greenfield, PE continued

New England Thruway over Midland Avenue, Rye, NY: Resident engineer for the phased demolition and complete fast track reconstruction of the I–95 bridge over local roadways. Responsible for the quality assurance of the project along with the comprehensive monitoring of the phasing and scheduling of work. The project was completed ahead of schedule.

Rehabilitation of the Triborough Bridge Bronx Approach and the Queens to Bronx Portion of the Junction Structure: Assistant resident engineer for the replacement and demolition of the Randall's Island Junction Structure (sub/superstructure).

Rehabilitation and Reactivation of the Arthur Kill Railroad Lift Span (556 ft) & Rehabilitation of 10 timber trestles, 8 Miles of Rail and 14 Switches in Staten Island, NYC Economic Development Corporation: Resident engineer responsible for the supervision and coordination of two general contractors, the electrical/mechanical rehabilitation of a lift bridge, the structural reconstruction of 10 timber trestles, the alignment and construction of trackwork, and the installation of 3 at-grade railroad crossings with warning signals. Coordinated with the US Coast Guard, Con Edison, NYNEX, NYSDEC, Howland Hook Marine Terminal and private property owners.

Reconstruction of Exhaust Fans at Brooklyn–Battery Tunnel, MTA Bridges and Tunnels: Construction manager for the project which included the soot and lead abatement of exhaust fan chambers at fan buildings located under Battery Park in Manhattan, on Governor's Island and in Brooklyn. The cleaning and replacing of the 18 Manhattan exhaust fans, with the lead and chromium abatement in all three structures. The work involved extensive phasing and scheduling due to the extremely limited access, some during night hours only, as well as the isolated location of the fan buildings and special security measures.

Rehabilitation of the Miller Highway Viaduct from 59th to 72nd Streets, New York State Department of Transportation, Manhattan: Resident engineer for construction inspection project which included the use of over 25 inspectors to assist the installation of drilled in place pin piles, which were socketed into sound rock for the construction of two new approach ramps, and doweling new concrete columns into existing caissons. Contract work involved structural repairs to the elevated steel viaduct, complete deck replacement to improve safety and sight distances, on site drainage (above and at grade), and NYC Traffic Signalization. In order to facilitate necessary steel repairs lead abatement was performed as needed. In addition, the work was performed over an operating railroad next to a vocal Manhattan neighborhood. This involved coordination with two New York City Community Boards who eventually changed to approving and supporting parties. During the course of the work a movable barrier was used for the first time in the State of New York to maintain a constant unrestricted flow of morning and evening rush hour traffic. The phasing of material deliveries and construction work was a key part of opening the highway to traffic on time and within budget.

Park Avenue Railroad Tunnel and Structural Roadway Deck Restoration Program, Metro–North Railroad, New York, NY: Resident engineer for the $146 million project which included the demolition and restoration of a jack arch tunnel, concrete pumping, the installation of new ceiling I–beams, replacement of existing rail with new continuously welded heavy rail; installation of signal communications and power equipment; injecting concrete grout in a brick arch tunnel, ties, roadbed, drainage in rock trenches made by Vermeer Wheels, the protection of turn of the century timber piles; flash butt welding of new rail and the installation of contact rail. A meticulous coordination was accomplished with the Metro-North Force Account as well as commuter rail operations.

David Karpis

Office Engineer

Firm: AECOM

Education

NYC DDC Division of Technical Support – Quality Assurance Bureau, 2003

NYC DDC Construction Inspector Certificate, QA Concrete Certified

The Chubb Institute, Jersey City, New Jersey, 1996 - 1997

Degree in Mainframe Computer Programming, with Honors

City University of New York, Queens College, New York, New York, 1992 - 1994

Mr. Karpis has over ten years of experience in the construction industry, including several assignments as office engineer for NY Metro area infrastructure projects.

ITS Improvements in Van Wyck Expressway Project D260306, New York State Department of Transportation (NYSDOT), Queens: As office engineer, used CEES to prepare estimates, field change payments, and orders on contract. Processed and organized all field office paperwork according to MURK standards. Verified daily inspector reports and bid item quantities. Verified conformance of materials to specifications and acceptance criteria. Reviewed the contractor's schedule and tracked work progress. Coordinated field activity with inspection team and contractor. Analyzed and fact checked contractor's time and materials submissions. Implemented environmental controls as per SPDES regulations.

Reconstruction of 202nd Street Project SEQ200388, New York City Department of Design and Construction (NYCDDC), Queens: As office engineer, processed and organized field office paperwork and records. Prepared partial payments, overruns, and change orders. Verified daily inspector reports and bid item quantities. Verified conformance of materials to specifications and acceptance criteria. Reviewed the contractor's schedule and tracked work progress. Maintained computer files and established a computer network for office use. Coordinated all field activity with the inspection team and the contractor, as well as analyzed and fact-checked the contractor's time and materials submissions.

Reconstruction of Little Neck Parkway Project SEQ200433, NYCDDC, Queens: As office engineer, processed and organized field office paperwork and records. Prepared partial payments, overruns, and change orders. Verified daily inspector reports and bid item quantities. Verified conformance of materials to specifications and acceptance criteria. Reviewed the contractor's schedule and tracked work progress. Maintained computer files and established a computer network for office use. Coordinated all field activity with the inspection team and the contractor, as well as analyzed and fact-checked the contractor's time and materials submissions.

Reconstruction of 122nd Avenue Project SEQ002567, NYCDDC, Queens: As office engineer, processed and organized field office paperwork and records. Prepared partial payments, overruns, and change orders. Verified daily inspector reports and bid item quantities. Verified conformance of materials to specifications and acceptance criteria. Reviewed the contractor's schedule and tracked work progress.

Vincent Kinlan, PE

Inspector

Firm: AECOM

Education
Coursework in Civil Engineering, 1963, Manhattan College, City College of New York

Registrations
PE/1970/New Jersey, Registration No: [redacted]

Professional Associations
American Society of Civil Engineers (ASCE)
Municipal Engineers of the City of New York
National Society of Professional Engineers (NSPE)

Vincent Kinlan is a resident engineer with more than 30 years of experience. He has a unique insight to the construction of major transportation projects from three viewpoints: the owner, the contractor and the consultant. He has served as a resident engineer, construction project manager, field quality assurance manager and a claims manager for a transportation agency owner and for a contractor. His extensive construction inspection experience includes turnpikes, Interstates and local roads, large complex bridges, moveable bridges, transit facilities, airport terminals, ports, and high-rise office buildings.

Reconstruction of East 78th Street Pedestrian Bridge over FDR Drive, NYCDOT: This is a high profile project in a politically sensitive and political neighborhood. Demolition of the existing bridge in staged sequence. Fabrication of new center span over the FDR drive with extended ADA compliant ramps on east and west sides. East ramps are founded on drilled-in shafts with pier caps at grade topped by steel columns and piers. West ramp founded on bedrock with columns and piers. Due to limited access, all deliveries, material, and spoil must be transported on the East River by barges. Rehabilitation of the esplanade along the waterfront and E.78th St. adjacent to the west ramp. Decorative stone on ramp walls. Maintenance and protection of traffic includes partial and total closures of the FDR. Use of experienced community liaisons resulted in a rapid response to complaints and a low number of complaints. ($12M)

Closeout of Hamilton Avenue Bridge, City of New York, New York: Testing and acceptance of a moveable bridge over the Gowanus Canal, and the resolution of the contractor's claims.

Miscellaneous Structural Steel Repairs for T3160 and P3158, New Jersey Turnpike Authority (NJTA), Monmouth, Middlesex, Union, Essex, and Bergen Counties: Resident engineer providing construction supervision for bridges from mile 0 to mile 122 on the Turnpike and mile 0 to mile 172 on the Garden State Parkway. The work involves repairs to substructure concrete spalls, structural steel and concrete beams, and substructure waterproofing. Thirteen structures are included in the contract. They include mainline Parkway bridges over streets and railroads, as well as ramps and bridges over the Parkway, other roads, and railroads. Several bridges need to be jacked. Maintenance and protection of traffic is critical throughout construction. Parkway or local lanes must be closed utilizing traffic cones and barrels with repair work carried out within the closed-off lanes. Coordination with railroads is important at particular bridges. Conrail and NJ Transit need

Vincent Kinlan, PE continued

to be notified of upcoming work. As resident engineer, responsible for review of shop drawings, coordinating the construction activities with neighboring agencies, local communities, utility owners, and other contractors working concurrently in the same or adjacent work zones, as well as maintenance and protection of traffic. Prepare progress reports, and attend progress meetings.

Reconstruction of Old Mountain Road and Retaining Wall, Rockland County, NY: Resident engineer for this reconstruction project that includes over 4,000 feet of linear wall – precast concrete crib-type retaining wall sections (T-wall), and replacement/relocation of gas mains, new drainage pipes, and structures to improve surface runoff. The scope of work also included the relocation of overhead utility lines, roadway widening, and reconstruction and improvements to the horizontal and vertical roadway alignment, and a soil stabilization program. The program was built according to NYSDOT specifications. MPT and community outreach are also important aspects of this project.

Secaucus Junction, NJ Transit, Secaucus: Over a nine year period, served in three major positions on this major transportation facility – most recently as a consultant, and previously as a field quality assurance manager and resident engineer for the construction inspection team. The scope of work for the project included the construction of a new two-level transit station to serve as a transfer station for northern New Jersey railroad commuters to transfer for direct access to Penn Station in New York City. Work elements included tracks, ballast, electrification, station platforms, signage, utilities, buildings, wetland mitigation (NJ Meadowlands), and deep complex foundations. As a consultant to NJ Transit for the review of contractor claims and additional work proposals, prepared various annual reports to NJ Transit, and the special inspection of completed portions of the project. Previously, served as the quality assurance manager for GCO3 for deep complex foundations – included pile foundations and caissons embedded in rock. Also served as resident engineer for GCO4 – structures; GCO5 – wetland mitigation; GCO6 – buildings; GC07– access roads and station parking lots. Throughout the construction operations daily train service had to be maintained, resulting in detailed planning and scheduling of day/nighttime construction operations due to the restrictive work hours.

Noise Walls Construction, I-78 and Garden State Parkway, NJ: Project manager responsible for the preparation of claims for additional work items to assist in the close-out of the project.

Oak Island Viaduct, NJTA: Resident engineer and field project manager for the Oak Island Viaduct. Supervised the inspection staff, offsite plant inspectors, and testing laboratories to maintain the contractor's accelerated schedule to complete the first phase of the work in approximately 14 months for a contract value of $20 million.

Washington Bridge, New York City Department of Transportation (NYCDOT): Project manager. Value $32.7 million.

Bridge Inspections, NYCDOT: In-depth inspections of every moveable bridge of the city.

Pierpont Office Building, Brooklyn, NY: Structural Steel Erection of a 22 story building in Brooklyn.

Pelham Parkway Bridge, NYCDOT: Project manager. Value $10 million.

Newburgh Beacon Bridge Toll Plaza and Route 207 Rehabilitation, NYSDOT

Second Avenue Subway Sections C5 and C7, MTA New York City Transit: Inspection of bridges on the N.E. rail corridor.

Route 9 Highway Project, NYSDOT, Fishkil: Resident engineer.

I-684 Construction, NYSDOT: 5.3 miles of new Interstate 684 from Route 22 in Armonk to route 172.

Vyacheslav A. Kogan

Office Engineer

Firm: AECOM

Education
BS/1978/Electronic and Electrician Engineering, Engineering Institute, Russia

Mr. Kogan has experience in fiber-optic technology for monitoring and recording data, testing electronic and electromechanical systems, and conducted operational and performance tests on electrical, electromechanical products. Since his joining, he has been providing document control and management on the project. Since 2004, Mr. Kogan has been providing structural health monitoring services using internet based remote monitoring systems on various projects.

New York City Department of Transportation (NYCDOT), 3rd Ave Bridge: Performed monitoring on the 3rd Avenue Bridge, which is a movable bridge that spans over the Harlem River between Manhattan and the Bronx. It was completely fabricated in Alabama and shipped to New York City by barge in June of 2004. In New York, the bridge was lifted into its permanent position. The remote monitoring system continued to monitor the bridge and record its behavior until it was opened to traffic. He was responsible for the management, planning and execution of the project including documentation and reporting.

NYCDOT Paerdegat Basin Bridge: Paerdegat Basin Bridge is a bridge located on the belt parkway in Brooklyn, NY. Because of its structural deterioration, the bridge is posted for a reduced load and is slated for reconstruction. Due to the immediate unavailability of reconstruction funds, it was decided to monitor the bridge using a fiber optic system to ensure its continued safe operation while awaiting reconstruction. Oversaw a total of 11 fiber optic sensors installation, in conjunction with temperature sensor and a wind gage to monitor the safe operation of the bridge. Responsible for documentation and reporting.

MTA New York City Transit, 119 Fulton Street: Responsible for the management and execution of the project, a proposed development on Fulton Street in Manhattan that is in close proximity to the NYCT tunnels servicing the A and C lines, and the 2 and 3 lines. As part of NYCT's permit for the proposed work, a monitoring system was required to be put in place to observe the impact of construction on strains and deformations at the subway tunnel level. Oversaw a total of six sensors placed at two distinct locations in the subway tunnel with three sensors at each location. These were remotely monitored for the duration of construction.

NJ Transit - Newark Elizabeth Rail Link: esponsible for the management of the project, including documentation and reporting, for monitoring for noise and vibration of a construction site for the Newark Elizabeth Rail Link.

John Kovac, PE Cost Estimator

Firm: AECOM

Education
BS/1995/Construction Engineering Technology, Newark College of Engineering, NJIT

Registrations
PE/2004/New Jersey No. [redacted]
Primavera Project Planner 3.1 Training Certificate

Professional Associations
ASCE, American Society of Civil Engineers

Mr. Kovac is a Civil Engineer with over 14 years experience in all types of heavy construction. His experience includes the costing, engineering, inspection and management of heavy/highway projects and underground utility construction. Prior to joining AECOM, Mr. Kovac obtained extensive field experience working for a leading contractor and engineering firm for the types of work mentioned. Since joining AECOM, Mr. Kovac is responsible for the development and preparation of comprehensive cost estimates from project conception through final design for all disciplines including architectural, civil, mechanical/plumbing, electrical and marine as well as claims analysis and negotiations.

Amtrak, Fire & Life Safety, Rehabilitation of Ventilation Shafts in New York, NY and Queens NY: Provide independent estimates for change order work prepared for Amtrak at the 1st Avenue and Long Island City ventilation shafts. Evaluate contractors' claim estimates to negotiate fair and reasonable settlements.

Replacement of (6) Belt Parkway bridges, NYCDOT, Brooklyn: Projects involve complex foundations within sheeted cofferdams, pile foundations, soil improvement, sub-aqueous pipeline construction, complex staging to maintain traffic, all structures and pavements. Providing constructability review, quantity calculations and detailed cost estimate. Estimated costs for individual bridges range from $30 - $140 million.

Route 139 Viaduct Reconstruction, NJDOT, Jersey City: Project involves the rehabilitation and replacement of 70 year old concrete encased steel structures with complex traffic patterns to maintain traffic, extensive night work, small and large steel replacement, foundation construction in heavily contaminated soil, and roadway surface replacement. Provided detailed estimate analysis for non-standard items and review of standard item unit prices.

Route 52 Causeway, NJDOT, Somers Point: Project involves the staged construction of (2) high level structures over navigable waters as well as the demolition of the existing Route 52 bascule bridge and trestle structure. Provided constructability review and detailed cost estimate for comparison to Engineer of Record estimate.

New York Container Terminal, Staten Island, NY: Created comprehensive preliminary design estimate for marine wharf expansion project. Work includes dredging, wharf construction and uplands civil/site improvements.

John Kovac, PE continued

Global Terminal, Bayonne, NJ: Prepared full design build estimate from 30% design drawings for marine wharf expansion project. Work includes dredging, wharf construction and uplands civil/site improvements. Analyzed and compared contractor proposals for contract selection process.

Bush Terminal Landfill Piers 1-4, NYCEDC, Brooklyn: Project involves the remediation of existing landfill and infrastructure construction for the future construction of a parks & recreation facility. Prepared detailed cost estimate for 100% bid documents.

Lincoln Center Development Project, New York, NY: Prepared 100% design development cost estimate for Lincoln Center Public Spaces – Concourse/Garage Phase 1. Architectural, structural, mechanical, electrical, plumbing, fire protection and traffic control items were all part of this phase of work.

Oxford Storage Facility, Waterbury/Oxford Airport, ConnDOT: Prepared 30/60/100 design cost estimates for a new maintenance building at Waterbury/Oxford airport. Project involved site construction pre-fabricated structure installation and building fit out.

CUNY School of Law, DASNY, Queens: Project involved the expansion of classrooms and facilities including new and remodeled spaces. Complete quantity takeoff and detailed cost estimate for comparison and reconciliation to the architect estimate.

Fashion Institute of Technology, NYPA: Complete quantity takeoff and construction cost estimate for replacement of HVAC system including electrical systems, mechanical piping, heavy rigging, cooling tower and chiller replacement.

Lehman College, NYPA, Bronx: Complete quantity takeoff and estimate for new chilled water, steam and electric systems. Work involves replacement of boiler plant and chiller system along with upgrade of electrical system including high voltage substation construction with switchgear, transformer and distribution equipment.

Bronx Community College, NYPA: Complete quantity takeoff and feasibility cost estimate for LEED certification project. Work includes alternative modifications to mechanical, electrical and plumbing systems along with architectural and building code related items.

Central Corridor Light Rail Transit, Metropolitan Council, Minneapolis, MN: Project involves (9) miles of at grade and elevated twin light rail system including the modification to and reconstruction of existing infrastructure. Prepared detailed cost estimates for preliminary design of new structures, utility systems and streetscape design.

University Corridor, Metropolitan Transit Authority, Houston, TX: Project involves (11) miles of at grade and elevated twin light rail system including (19) stations. Prepared cost estimates for preliminary design following FTA estimate format.

Erik R. Lange

Scheduler

Firm: AECOM

Education
BS/1994/Civil Engineering, Bucknell University

Professional Registrations
EIT Certified, 1994

Training
VDOT/VRTBA Scheduling Workshop from Virginia Polytechnic Institute and State University
Construction Claims in New York Seminar
4-Hour Lead Awareness Course, 1998
Nuclear Moisture/Density Gauge Certified, 1995
NYS Asbestos Air Sampling License, 1996
MTA NYC Transit Track Safety Certified, 1996

Mr. Lange has a total of 14 years experience in the engineering and construction field. For the past ten years Mr. Lange has been involved in scheduling and claims issues and is part of the AECOM Project Controls Division, which handles claims avoidance and management, and provides scheduling support services. He has been responsible for producing and analyzing schedules and claims for several of the firm's ongoing large design and construction projects, and recently served as the senior scheduler for the $200 million construction of the Northbound Whitestone Expressway and $350+ million Harmon Yards Shop Replacement Phase III.

Croton Harmon Shop Replacement – Phase III, MTA Metro-North Railroad: Senior scheduler/claims analyst for $280 million Harmon Shop Replacement project, which involves the construction of multiple new facilities in the Metro-North Harmon Yard. Responsibilities included reviewing and analyzing the contractor's CPM baseline schedule and subsequent updates for the project using Primavera Project Planner software.

Gowanus Expressway Project, New York State Department of Transportation (NYSDOT): Senior scheduler/claims analyst for $55 million for a $55 million project in Brooklyn which reconstructed the BQE/ Gowanus Expressway Interchange. The work includes demolition of an existing bridge and replacement with a three-lane multi-span composite girder viaduct one-half mile in length, as well as a 450 foot long three span bridge.Responsibilities included reviewing and analyzing the contractor's CPM baseline schedule and subsequent updates for the project using Primavera Project Planner (P5) software.

Northbound Whitestone Expressway (I-678) over the Flushing River, NYSDOT: Senior scheduler / claims analyst for $180million rehabilitation project. The project contains two milestones for pavement rehabilitation work and replacement of the Flushing River Bridge. An incentive/ disincentive assessment is tied to each milestone. Responsibilities include schedule review and maintenance to the State for this project from baseline development through progress updating and reporting. Duties include CPM scheduling, review, and analysis utilizing Primavera P3 software.

Reconstruction of the Williamsburg Bridge - NYCDOT: Senior scheduler for $179 million Contract #8. Responsibilities included reviewing and analyzing the contractor's CPM baseline schedule and subsequent updates for the project using Primavera Project Planner software.

Boris Lenderman Cost Estimator

Firm: AECOM

Education

MS/1979/Industrial & Civil Engineering, College of Railroad Engineers, Belarus

HCSS Estimating software training course - 2009 and 1999

Winest Estimating software training course - 2001

Primavera P3 training course – 1999

Mr. Lenderman has more than 30 years of practical experience in the construction industry as a civil engineer with extensive skills in cost estimating, project controls and project management. His knowledge encompasses all stages of the construction process in transportation, industrial, and residential projects. He served for 19 years as an estimator/scheduler and project manager with the Department of Railroads in the Ukraine. During the last twelve years, Mr. Lenderman has specialized in major transportation and heavy construction projects in New York City, including the MTACC and NYC Transit as an estimator and project controls engineer. He is a knowledgeable civil, structural and architectural estimator within the transit and transportation industry with experience that includes tunneling, train stations and ancillary facilities. He has working knowledge of HCSS and Winest Estimating software, Primavera P3, in addition to Microsoft Office applications.

NYCDEP Contracts: Senior estimator responsible for estimating support on additional work orders for Croton Water Treatment Plant and Jamaica Water Pollution Control Plant.

Deep Rock Tunnel Connector, Indianapolis: Senior estimator involved in developing Engineering Estimate. Cost range of $200M.

Second Avenue Subway Project, New York City: Senior supervising estimator responsible for developing and updating cost estimates for all stations of the Phase #1 Project for different stages of design, starting from the conceptual stage to 100% design. Phase #1 includes 4 stations with the total cost of $4.5 billion. Throughout the last year, with the absence of a full-time chief estimator for the 2nd Ave Subway Phase #1 Project, essentially performed this duty on a daily basis: worked with the client (MTACC) and the Construction Consultant Management for the Project.

MTA NYC Transit Department of Capital Program Management Project: Senior Cost Estimator. Provided cost estimating for new and rehabilitation construction projects, conceptual estimates for future capital program projects, additional work orders for projects in progress.

Judlau Contracting Inc., New York: Cost Estimator. Prepared cost estimates documents for bids held by various New York City agencies including MTA NYCT, DOT, and DEP. Developed and updated projects schedules, and prepared monthly schedule status report for management using Primavera P3; prepared additional work orders.

Johan J.W. Leurdijk Scheduler

Firm: AECOM

Education
MBA/1974/Finance, St. John's University, NY
BS/1965/Civil Engineering H.T.S., Utrecht, Netherlands

Professional Associations
Association for the advancement of Cost Engineering International (AACEI)

Mr. Leurdijk has 35 years of experience in all phases of project control, including cost control, scheduling, procurement, budgeting, estimating, and subcontract administration in a variety of projects ranging from large petrochemical plants to small public works projects. He is experienced with various computerized control systems (such as Primavera, MS Project, and Artemis, as well as PC-based relational database management systems).

Airports Integrated Project Control System, Port Authority of New York and New Jersey (PANYNJ), NJ: Responsible for maintaining the NJ Airports web-based integrated project control system in the project management department of PANYNJ using the Primavera Enterprise System. The system provides comprehensive cost and scheduling data for all capital construction projects, and provides a basis for its annual budgeting review process. Activities include monthly progress reviews with the project managers and monthly review sessions with facility management, as well as assisting in preparing monthly progress reports. Responsibilities also include the preparation of numerous periodic and incidental management performance reports, budget preparations, and development of new project reporting formats.

Monorail Extension, Newark International Airport, NJ Transit: Assigned to develop and monitor a program schedule for a portion of a monorail extension at Newark Airport. Coordinated both civil construction and rail work involving Amtrak and Conrail, including procurement of all railroad equipment and materials. Developed a database system in MS Access to monitor change orders and cost performance of subcontractors, facilitating monthly cost comparisons. Responsible for monthly review of detailed contractor and vendor progress schedules prior to their inclusion in the overall master schedule. Prepared a critical analysis of all schedules in preparation for management review, and made recommendations for corrective course of action.

Tunnel Ventilation Project, Amtrak, New York City, NY: Project controls manager providing project control services to a construction management team responsible for the supervision of this $165 million tunnel ventilation project. Responsible for the coordination and preparation of a monthly project controls report that highlights both schedule and cost status of engineering and construction activities. Steps are being taken to revamp the layout and contents of this report to generate a more meaningful product.

Ron MacPherson Inspector

Firm: AECOM

Education
BS/2010/Civil Engineering, Wentworth Institute of Technology – Boston, MA
BS/1996/Construction Management, Wentworth Institute of Technology – Boston, MA
BS/2010/Computer Aided Drafting, ITT Institute of Technology – Norwood, MA

Licenses
Licensed Construction Supervisor
NETTCP Concrete/Asphalt Licensed
ACI Concrete Licensed

Special Training
Tunnel Inspector Safety Trained
Confined Space Trained
CA/T & MHD Safety & Construction Project Trained
BOCA Building Code 1996
Amtrak Trained
First Aid/CPR Trained

Certifications
10-Hour OSHA Certified

Mr. MacPherson is a highly accomplished civil construction inspector/ management professional with 15 years of experience in construction inspection for transportation, bridge, highway, heavy/civil infrastructure and government projects.

Reconstruction of Belt Parkway, New York City Department of Transportation (NYCDOT), Paerdegat Basin: The project consist of the Replacement of the Paerdegat Basin, Rockaway Parkway and Fresh Creek bridges and 2.2 miles of new concrete roadway Maintain daily inspection reports, perform concrete and asphalt tests, monitor laboratory soil testing, monitor structural and drainage pile installation, prepare documentation for payments for work items. Collaborate with all levels of management. Make accurate construction and safety inspections to mitigate hazards and control construction quality. Verify that construction materials, methods and practices are incorporated correctly and in compliance with contract documents.

Rehabilitation of Taxiways 'S,' 'SB,' 'SC,' 'SD'and Taxiway 'NB' with Approach Apron Ramps leading into the Terminals, Port Authority of NY and NJ: The project consists of a new drainage system, new taxiway lighting, new underground electrical and communication ductbanks with new manholes and communication vaults, new asphalt pavement on the taxiway and service roads, new runway and taxiway stripping and markings. Maintain daily reports, concrete, asphalt and soil payments with daily logs. Inform lab associate with daily testing in the field. Collaborate with all levels of Management. Make accurate construction and safety inspections to mitigate hazards and control construction activities. Maintain quality control, Inspect and verify that construction materials, methods and practices are incorporated correctly and in compliance with plans and spec's. Manage all essential tasks, identify and resolve problems and issues encountered in the field.

Dulles International Airport, VA: Senior civil inspector for $1billion improvement projects at Dulles International Airport. Verified and ensured all materials, means, methods and practices are incorporated correctly. Collaborated with all levels of management, maintained client relationships with MWAA officials and ensured client satisfaction and FAA regulations are achieved. Managed all essential tasks, identified and resolved problems in initial stages, verify and ensure all construction development was in compliance with project plans, specifications. Inspected steel erection, concrete, drilled caissons, mini piles, bridge abutments, reinforcement, mass excavation, shoring, waterproofing, under-drainage, asphalt paving and traffic management control.

Ron MacPherson continued

Massachusetts Highway Department, Boston: Civil Construction engineerfor state authority specializing in heavy/civil infrastructure, bridges, highway/roadway reconstruction, general, building and government projects throughout Massachusetts. Inspected $5-$50 million projects. Verified that all materials, methods and practices were incorporated correctly. Ensured that all phases of construction met project requirements, along with state and federal Regulations. Collaborated with all levels of management, contractors and clients. Identified and resolved problems and field issues.

Modern Continental Construction - Boston, MA: Civil construction engineer for one of nation's largest multi-discipline construction companies specializing in heavy/civil infrastructure, transportation, airports, tunnels, general building and commercial projects. Collaborated with all levels of management, managed and prioritized all essential tasks. Explored new ideas and excelled at new challenges. Inspected $50 - $500 million projects verify and ensure construction practices and methods are implemented correctly and in compliance with project plans, specifications and all FAA regulations.

- Inspected construction development on $350 million projects at Logan International Airport Terminal E. Maintained client satisfaction with Massport officials and ensure compliance with all FAA regulations.
- Implemented, conducted and prepared QA/QC checklists for construction, engineering, procurement, and testing operations for project compliance. Verified, recorded, and reported that punch list items and issues were resolved. Identified and resolved construction problems and safety hazards in there initial stages. Ensure company policies, goals and objectives are achieved.
- Oversaw terminal improvements to allow for handicap access per ADA requirements.

Bechtel Construction Group - Boston, MA: Civil/tunnel engineer for global engineering and construction management company specializing in civil, tunneling, airports, transportation, mining, power, pipeline, and telecommunications projects. Inspected $50 million to $2 billion construction projects including steel erection, slurry walls, SPTC walls, drilled shafts, mini piles, reinforcement, concrete, form work, mass excavation and waterproofing. Inspected, verified and ensure that all major utility relocation is in compliance, underpinning of existing MBTA green line steel structure. Resolved construction related problems, safety hazards and other concerns. Evaluated and implemented alternative solutions to field related issues.

- Successfully constructed an $800 million CA/T projects at Leverett Circle and Storrow Dr. Connector that included slurry walls, cut and cover tunnels, waterproofing, structural welding, bolt installation, jet grouting. Constructed 2-$150 million vent buildings inspected all aspects of construction development.
- Ensured all CA/T objectives, goals, and company policies are achieved and in compliance with project specifications and plans. Prepared and conducted QA/QC checklists for construction.
- Identified problems, resolved issues encountered in the field, developed and implemented alternative solutions. Maintain client relationships, collaborate with all levels of management and pay attention to details.

Oscar Maya

Inspector

Firm: AECOM

Education
BBA/1978/Business Administration, Baruch College, City University of NY

Mr. Maya is a senior structural technician with extensive experience in the design and construction inspection of ports and harbors, marine facilities, pier rehabilitation, waterfront development, and heavy civil construction work (roadway reconstruction and utility placement). His experience includes preliminary design, condition surveys, studies and reports, and construction activities. As an inspector working directly under the supervision of a professional engineer has recently completed work assignments on a waterfront structure rehabilitation (New York Cruise Terminal) and construction of a new waterfront park facility in West Harlem. These assignments included extensive roadway, utility and marine construction work.

NYC Economic Development Corporation (NYCEDC), West Harlem – Waterfront/Riverwalk Development (Marine, Roadway & Utility), NY: Inspector serving as assistant to the resident engineer/construction manager was responsible for assisting with coordination, inspection and execution of contract documents including plans, specifications, shop drawings, and estimates for the development of the waterfront park. Inspection responsibilities included construction of 5 new pile-supported pier structures, pile clusters, floating structures (ferry float), gangways, ramps, bulkhead reconstruction, bulkhead rehabilitation, shoreline modifications (gabions and rip rap slope features), fish mitigation features (reef balls), pier electrical features (lighting and grounding systems). Roadway construction work consists of realigning and constructing the existing Marginal Street (roughly 1,100 lf), the creation of a drop off lane for park and ferry uses, associated sidewalks, striping, signing & signalization. Utility relocation work consists of roadway drainage, water main installation, and miscellaneous utility relocation abandonment.

NYCEDC, New York City Passenger Ship Terminal, Piers 88, 90 & 92 Manhattan – Phase 3: Inspector serving under resident/structural engineer responsible for the daily inspection requirements associated with pile driving, epoxy encapsulation of degraded timber piles, replacement and posting of timber piles, lightweight concrete encasements of footing piles, shotcrete work, and bracing replacement.

Route U.S. 46, Section 12H, Borough of Totowa, Passaic County, NJ: Prepared grades and plans for the widening of River View Road and the new ramps that connect it to US 46.

New Jersey Turnpike Authority, Southern Mixing Bowl 10.49 to Mile 107.1: New nine-span, 1,500-foot tangent alignment fly-over bridge.

Aharon McIver

Inspector

Firm: AECOM

Education
BS/2002/Civil Engineering,
West Virginia University

Mr. McIver is a construction professional, with experience in resident engineering and inspection as well as project controls for infrastructure projects.

New York City Economic Development Corporation (NYCEDC), Cruise Terminal Redevelopment – Marine Rehabilitation: Resident engineer responsible for preparing daily field reports and weekly logs of work completed, providing photograph documentation of work, and reviewing job progress. Responsibilities also include scheduling and conducting weekly job progress meetings, including preparation and distribution of meeting minutes, reviewing contractor change orders and applications for payment.

Confidential Utility Company – Newark, NJ: Project control specialist for remediation of Former Manufactured Gas Plant Sites. Job responsibilities include working under the direction of four project managers and with environmental consultants and remediation contractors on behalf of the client to help manage budgets ranging from approximately $1 million to $30 million per construction site. Responsibilities also include project cost and schedule tracking, invoice management and tracking, budget projections, risk analysis, bid analysis/bidder selection for multiple projects, requests for proposals, compile bid packages and prepare meeting minutes.

Forest City Ratner - Atlantic Yards Project, LIRR Vanderbilt Yard Relocation: Assistant project manager responsible for assisting the project manager and superintendents with their duties, managing all project management documents using Prolog Manager, reviewing and processing contractor Application for Payments and construction change orders. Reviewing and processing all LIRR and NYCT Force Account invoices.

Hudson River Park Segment 6, Pier 66 Project: Lead project engineer responsible for assisting the project manager and superintendent with their duties, managing product submittals, writing RFI's, reviewing and processing contractor Application for Payments, preparing and issuing construction change orders, providing training sessions to all new project personnel/contractors on the project-wide management software, updating and maintaining contract documents and record keeping.

Hudson River Park Segment 6, Pier 84 Project: Lead project engineer responsible for assisting the project manager and superintendent with their duties, managing product submittals, writing RFI's, reviewing and processing contractor Application for Payments, preparing and issuing construction change orders, providing training sessions and record keeping.

Paul J. Menzel, PE

Resident Engineer

Firm: AECOM

Education

MS/2002/Ocean Engineering
Stevens Institute of Technology at Hoboken

BS/1992/Civil Engineering,
Rutgers University at New Brunswick

BA/1990/German, Rutgers University at New Brunswick

Registrations

PE/1998/New York,
Registration No: 076015

PE/1998/New Jersey,
Registration No: [redacted]

Open Water Diver Certificate, 1997

Professional Associations

American Society of Civil Engineers (ASCE)

Mr. Menzel has significant experience serving in various capacities in mass transit, railroad design, highway design, and bridge inspection. He has served as resident engineer and construction manager for major infrastructure projects in the NY/NJ Metropolitan area.

Bush Terminal Landfill Piers 1-4 Shoreline Stabilization and Remediation, NYC Economic Development Corporation (NYCEDC), Brooklyn: Resident engineer and construction manager currently responsible for the program management including coordination and development of construction documents, including final design and bid package development (plans, specifications, estimates, and bid form development). Serve as program manager on behalf of the client, responsible for coordination between remediation designers, utility engineers, and future park designs. Serve as construction manager responsible for the inspection and execution of the shoreline stabilization and landfill remediation work. The $20.4 million construction work is to be completed over a period of 24 months and includes general site work, cap and landscape shoreline protection, site landfill gas venting systems, groundwater monitoring wells, storm and sanitary drainage, gas and telephone, potable water distribution, site electrical, and structural items.

West Harlem Piers Park – Upland Work, NYCEDC: Resident engineer and construction manager responsible for the coordination, inspection, and execution of Upland Park finishing work. The waterfront park includes a variety of soft and hardscape features (such as the extension of the shore bikeway and the reintroduction of the vacant lot as public piers for fishing and transportation). The work included the installation of various pavements (pavers, colored and exposed aggregate concrete, cobblestone and stone screenings), steel railings for the piers and bulkhead, and extensive landscaping features served by a comprehensive sprinkler system. Additional details include timber decking, corten steel planters, granite steps, lighting, signing, a push-button playground water feature, various park furnishings (benches, bike racks, water fountains, receptacles, bollards, etc.), and custom stainless steel art works. A utility shed enclosure and retaining walls constructed with architectural concrete were also installed. This project required extensive coordination between the project architects, city and state agencies (NYCEDC, NYSDOT, NYCDEP and NYCDPR), private utility representatives (Con Edison and Williams Gas), and the local community board. The project also involves the ongoing study of an offshore underwater artificial reef

Paul J. Menzel, PE continued

system, and the installation of a fish cleaning station on the fishing pier. NYCEDC expects to operate the floating ferry barge as a new terminal hub with daily water tours operated at the excursion pier. The excursion pier is also equipped to accommodate a science barge.

West Harlem – Waterfront/Riverwalk Development (Marine, Roadway and Utility), NYCEDC: Resident engineer and construction manager responsible for the coordination, inspection, and execution of contract documents for the development of the waterfront park, including the installation of five new pier structures and roadway infrastructure improvements. The work consists of various pile-supported pier structures, pile clusters, floating structures (ferry float), gangways, ramps, bulkhead reconstruction, bulkhead rehabilitation, shoreline modifications (gabions and rip rap slope features), fish mitigation features, pier electrical features (lighting and grounding systems). Roadway work consists of realigning and constructing the existing Marginal Street, the creation of a drop-off lane for park & ferry uses, associated sidewalks, striping, signing, and signalization. Utility work included roadway drainage and 12-inch water main installation, and miscellaneous utility abandonment.

Passenger Ship Terminal, Piers 88, 90, and 92, Phases 1, 2A, 2B and 3, NYCEDC/Turner Construction, Manhattan: Resident and structural engineer responsible for the preparation and execution of contract documents for repairs to the substructure. Repairs include pile driving, epoxy encapsulation of piles, replacement and posting of timber piles, lightweight concrete encasements of footing piles, shotcrete work, and bracing replacement. The project includes multiple phasing to be accomplished as funding and scheduling of repairs permit. This assignment also included the development, coordination, and eventual publication of a detailed epoxy encapsulation test program that examines various encapsulation systems and construction methods for timber pile repairs. The testing included participation from various organizations.

Passenger Ship Terminal, Berth 5 Priority Repairs, Pier 92, NYCEDC/Turner Construction, ent Corporation, Manhattan: Resident engineer responsible for the inspection of repairs necessary to accommodate berthing the newly commissioned Queen Mary 2. Inspection of all required repairs included the driving, springing, and bolting of fender piles; installation of pier structure and pier wall bollards; replacement of diagonal, low-water, and side cap timber bracing; and camel repairs.

23rd Street Skyport Pier, Marina, Bulkhead and Seaplane Dock – East River, NYCEDC, Manhattan: Resident engineer responsible for construction inspection for the rehabilitation of the substructure of the Skyport Pier and the demolition of the adjacent concrete pier supported by timber piles at the foot of East 23rd Street on the East River. Primary emphasis of work included concrete encasement of steel piles, soffit repairs, and beam and girder shotcrete repairs.

Facility Condition Survey Program – New Jersey Marine Terminal, Port Authority of New York and New Jersey (PANYNJ), ort Elizabeth, NJ: Lead field engineer responsible for the inspections required for cyclical condition surveys of various buildings and structures located at Port Elizabeth. Responsibilities included reporting, documenting, and determination of the overall condition of the structures and the identification of all non-structural deficiencies surveyed.

H&M Powerhouse (Washington Street), PANYNJ Jersey City, NJ: Structural engineer serving as assistant team leader responsible for inspection of the four-story facility abandoned for 50 years and in a state of disrepair. Inspection procedures required the use of extensive scaffolding, and usage of a 125-foot man-lift. Items included steel, and concrete and masonry members.

Ralph Montoya Inspector

Firm: AECOM

Education

BS/2003/Civil Engineering, Universidad Ricardo Palma, Lima, Peru

Certifications

ACI - concrete field technician grade 1

OSHA 10 hour ¨construction safety and health¨ course completed

MTA Roadway Protection Training

Professional Associations

ASCE Member

ACI Past President of Ricardo Palma University Student Chapter 2003

Mr. Montoya is an experienced construction inspector and ACI-certified field technician.

Gowanus Expressway Emergency Repair of I-278 Viaduct, New York State Department of Transportation (NYSDOT), Brooklyn: Inspector for the $151 million emergency repair & concrete deck replacement (500,000 sf) on the Gowanus Expressway. Project work also included: structural steel repairs; pavement rehabilitation along the on-grade portion of the Gowanus Expressway; adding to the eastbound BQE Connector Ramp superstructure and substructure to accommodate a 12 foot wide shoulder; operating the HOV lane on both the Gowanus & Prospect Expressways; and Maintenance & Protection of Traffic. Pile driving activities, drainage and electrical systems, class A containment and steel protective coating. Paperless Daily reports and spreadsheets elaborated electronically through FACS. Duties included: field inspection, quantity calculation, payment processing, Item review and order on contract analysis.

Erma Realty, LLC/AM&G Waterproffing, Brooklyn, NY: Field site supervisor for commercial and warehouse building / Park Avenue building supplies. 1st floor warehouse building 32,500sf, 20,000sf parking lot. 1 basement, 2 floor building 20,000sf. Supervised field activities, personnel coordination and distribution. Scheduling of controlled inspections and field testing for sign off. Excavation, soil sub grade, Soil density, pile driving, rebar, reinforced concrete, underpinning, structural steel, reinforced masonry, fireproofing and firestopping. Administrative office/ Project documentation and expediting/project filing. Multiple Contractor field coordination. Material supply for company activities. Field foreman activities performed.

Contratistas Asociaos Mesala S.A.C., Ocacaje, Ica, Peru: Assistant resident engineer/field supervisor for stage III Irrigation project SAMCA, which took place in a remote location in the desert of Ica, Peru. Exploitation of superficial and underground river water for farm crops. Concrete and fine stone filled geocell reservoirs. Hydraulic structures such as Dams, Earth Levees, soil and concrete canals, canal water falls, canal exits to farms, interconnection between farms by 24" pvc pipes. Underground drainage pipe lead to reservoirs. Construction of an arch bridge and access routes for seedling, fertilization and product recollection of far crops. Set up and activate an administrative office on site. Allocated man power, machinery, equipment usage, calculated raw material quantities, creation of estimates and blueprints when not provided by consultant. Schedule of values submitted every two weeks, with detailed drawings. Responsible for work site in absence of resident engineer.

Angel L. Morales Inspector

Firm: AECOM

Education
AAS/1984/Aeronautical Design, Academy of Aeronautics, Queens, NY

Certifications
ACI Concrete Field Testing Technician, ACI-1
Maintenance and Protection of Traffic, NYSDOT
Safety Course, NYCTA
4-hr Lead Awareness Course
NICET IV Certification

Mr. Morales has extensive construction inspection experience on a variety of highway, bridge, and viaduct projects. He also has formal training in maintenance and protection of traffic.

Gowanus Expressway Emergency Repair, New York State Department of Transportation (NYSDOT), Brooklyn: Senior inspector for a $151 million project in Brooklyn that reconstructed the BQE/Gowanus Expressway Interchange. The work includes demolition of an existing bridge and replacement with a three-lane multi-span composite girder viaduct 0.5 mile in length, as well as a 450–foot long three-span bridge. Local utility relocations, ongoing work by the TBTA at the Brooklyn Battery Tunnel Toll Plaza, and construction of a new water tunnel by NYCDE also had to be coordinated.

Bridge Replacement over the Northbound Whitestone Expressway over the Flushing River, NYSDOT: Senior inspector for the replacement of a bridge over the northbound Whitestone Expressway over the Flushing River. Currently, the bridge's concrete deck and superstructures are badly deteriorated and the bascule girders are approaching the end of their fatigue life. The existing lanes (10 feet wide with 2-inch shoulders on both sides) are non-standard; and there are sight restrictions that hamper drivers' ability to see the road ahead. Also, a weaving condition exists at Astoria Boulevard where the approach traffic exits to the northbound service road. AECOM provided inspection personnel to oversee the correction of these structural and geometric deficiencies. The lanes were increased to 12 feet, with a 6-inch left shoulder and a 10-inch right shoulder. The bridge's vertical curb was modified to correct the inadequate sight distance. In addition, new lighting and drainage systems were installed. Finally, the weaving condition at Astoria Boulevard was eliminated.

Variable Message Signs on the Staten Island Expressway, NYSDOT: Chief inspector for the $2 million installation of variable message signs. Project work involved installation of variable message signs, overhead gantry sign structures and foundations, installation of a system computer, and removal and re-installation of existing guide signs.

Route 9A Reconstruction, NYSDOT, Manhattan: Senior inspector for the $80 million reconstruction of Route 9A from Horatio Street to West 26th Street. Project work entailed traffic signals, signs, and street lighting. Two parks were completely constructed, which entailed structural concrete placement, new drainage systems, granite stone curbs and pavement in addition to landscaping. Project responsibilities included the maintenance and protection of both vehicular and pedestrian traffic through all stages of construction, as

Angel L. Morales continued

well as reconstruction of drainage, water mains, and other utilities prior to reconstruction of sidewalks, walkway/bikeway, and new European pavement, including a joint layout system.

Williamsburg Bridge South Roadways Reconstruction, New York City Department of Transportation (NYCDOT): Senior inspector for the $350 million reconstruction of the Williamsburg Bridge south roadways (Contract #5). Project work included the complete replacement of the south roadways for the Brooklyn and Manhattan approach viaducts, including erection of structural steel, interim bracing, installation of main bridge and approaches, flexible shielding system, and removal of lead-based paint from structural steel members prior to demolition. Inspected the removal of rivets and steel members, and the installation of the structural steel flag repairs performed on the approach viaducts. Work also included new steel curb facing and sign installations. Inspected electrical conduit, cables and lighting fixture installations. Reviewed all installations for conformance with the plans and specifications as well as the New York State Department of Transportation Steel Construction Manual. Reconstruction of the Brooklyn Plaza bus depot included concrete placement and new asphalt overlay while bus operations were maintained, requiring maintenance and protection of traffic and pedestrians, and daily coordination with New York City Transit. Work at the bus depot also included interaction with the traveling public, by notifying riders of the temporary location of their bus stops. Prepare daily inspection reports, quantity measurements and calculations, and force account summary sheets.

Sidewalk and Deck Repairs to the Triborough Bridge, MTA Bridges and Tunnels, NY: Senior inspector for sidewalk repairs and specific deck repairs on the Triborough Bridge. Responsible for structural steel inspection. Major elements included the demolition and replacement of approximately 153,800 square feet of reinforced concrete sidewalk deck at various locations on the bridge. All drainage systems in these areas were removed and replaced; evaluation of existing structural steel supporting the sidewalk, and removal and replacement of approximately 142,000 pounds; removal of lead paint from approximately 94,000 square feet of structural steel supporting the sidewalk, and disposal of the hazardous lead debris. The structural steel was prepared and painted. Replaced approximately 87,900 pounds of structural steel stringers and cap beams; removed and replaced four sets of suspender ropes; and inspected miscellaneous repairs to bearings, concrete piers, and the replacement of rivets with high strength bolts.

Cromwell Avenue and 151st Street Reconstruction, New York City Economic Development Corporation (NYCEDC): Senior inspector for the reconstruction of Cromwell Avenue and 151st Street at the Bronx Terminal Market. The terminal is the hub of significant truck traffic to the Major Deegan Expressway, the Hunts Point Market, and other commercial areas in the Bronx. Responsibilities included performing a detailed field inspection and the design of temporary repairs to the roadway ramps that lead to the facility. These repairs were required after recent inspections by the New York State Department of Transportation revealed numerous red and yellow flag conditions on the roadway structure. Also performed construction supervision services to ensure that the repairs were done properly. Project work included structural steel removal, concrete placement and new pavement.

Rehabilitation of the Approach Viaducts from the Cross Island Parkway to the Throgs Neck Bridge, MTA Bridges and Tunnels, Queens, NY: Senior inspector for the fast-track construction inspection services for the rehabilitation of the approach viaducts between the Cross Island Parkway and the Throgs Neck Bridge. Project work involved the removal and replacement of the structural decks.

Paul D. Mortenson, PE

Resident Engineer

Firm: AECOM

Education

ME/1996/Civil Engineering, Cooper Union for the Advancement of Science and Art

BE/1993/Civil Engineering, Cooper Union for the Advancement of Science and Art

NYCDOT Supervisor Course – Lead Paint Removal on NYCDOT Bridges, 2001

OSHA 30 Hr. Construction Safety, 2009

Certifications

Traffic Control Coordinator Certification, 2006, FHWA & NJDOT

Asphalt Field Technician Certification, 2007, NJDOT

Concrete Field Testing Technician Grade I, 2007, ACI

Registrations

PE/2004/New York, Registration No. [redacted] (Civil)

Professional Associations

American Society of Civil Engineers (ASCE)

American Concrete Institute (ACI)

NJ Society of Asphalt Technology

As a professional engineer Mr. Mortenson has accumulated experience in a broad range of field work. The projects he has been involved with include work from different technical disciplines, including civil, architectural, environmental, mechanical, and electrical. He has worked on municipal projects under the jurisdiction of various agencies and utilities, including NYSDOT, DEC, NYCDOT, NYC DDC, EDC, DEP, DPR, Con Edison, and Verizon. This has provided Mr. Mortenson with a strong knowledge base in the procedures, specifications, codes, and practices applicable to a number of agencies.

Replacement of the Shore (Belt) Parkway Bridges over Paerdegat Basin, Rockaway Parkway and Fresh Creek Basin, New York City Department of Transportation (NYCDOT), Brooklyn: Assistant resident engineer for two contracts (HBK1024, HBK1091) included in this 2.6 mile, $364.5 million dollar project. Scope of work includes demolition of existing 13 span bridge over Paerdegat Basin to be replaced by two new bridges and new approach roadways on split alignments. New bridges to consist of a Class HP reinforced concrete superstructure slab supported by high performance steel box girders and substructures including reinforced concrete abutments, wing walls and multi column piers on new pile foundations. New widened approach roadways including pedestrian/bike access road path to be constructed east and west of new bridges. Construction to be completed in 5 stages to allow for concurrent demolition of existing and erection of new bridges to maintain vehicular traffic throughout duration. Project includes extensive landscaping and erosion controls including tree removals, tree protection, soil stabilization and materials containment in addition to upland and wetland mitigation items. duties include supervision of inspection staff, coordination with Contractor field personnel, assessment of field conditions, verification of all work in conformance with contract specifications, approved materials and work zone traffic control requirements, monitoring of evening operations and field testing.

Van Wyck Expressway Corridor, ITS Improvements, New York State Department of Transportation (NYSDOT), Jamaica: Resident engineer for this 6.5 kilometer, $16.28 million dollar project which involved installation of a new Intelligent Traffic System (ITS) on the Van Wyck Corridor between the Belt Parkway and the Grand Central Parkway connecting to existing system at the NYC Joint Traffic Maintenance Center (JTMC). Scope of work included installation of new devices and hardware including CCTV cameras, radar detectors, vehicle classification detectors, VMS, Digital H.A.R. transmitter, electrical metering equipment, control server

Paul D. Mortenson, PE continued

equipment and Communications Shelter. Communication established through 72 and 144 FO cable run in rigid galvanized conduit and pull boxes installed in the mainline roadways, service roads, earth embankments elevated structures. Contract included extensive landscaping items including planting of trees and ivy as well as soil erosion control items implemented in accordance with NY State Pollutant Discharge Elimination System (SPDES). Responsibilities include supervision of inspection staff, coordination with Contractor and other agencies and utilities including NYCDOT, PANYNJ, NYC DPR, JTMC, Con Edison and other concurrent projects, review contractor schedule and partial payments, review material certification, shop drawing submittals and proposed layout changes in field. Duties also include witness and inspection of all test procedures required for both stand alone field testing and system acceptance, mark up of as-built drawings, review and assessment of change orders, Contractor Time Extension Requests and project final closeout.

Reconstruction of Brookville Blvd from Sunrise Highway to Merrick Blvd., City of New York Department of Design and Construction (NYCDDC), Rosedale: Resident engineer for this $12 million project which included installation of new water mains, sewers, street lighting and traffic signals, new curbs, sidewalks and roadways . Other contract items included installation of manholes and chambers, Microtunneling and Direct Jacking of 54" R.C.P. Class V Storm Sewer below Laurelton Parkway, implementation of Storm Water Pollution Prevention Plan (SWPPP) in accordance with NY DEC SPDES provisions, site dewatering and wetlands mitigation, playground reconstruction, tree removal and planting per NYC DPR specifications, As Resident Engineer, Responsibilities included supervision of inspection staff, coordination with Contractor and City Agencies including NYC DEP, DPR, Traffic Enforcement and local community board, monitoring of Contractor work activities, schedule review and ensuring proper implementation of M.P.T. scheme.

Three Tunnels Rehabilitation Project, NYCDOT Moveable Bridges Division: Resident engineer for this $22 million contract, which consisted of the rehabilitation of the ventilation, electrical, and mechanical systems for the First Avenue Tunnel, Park Avenue Tunnel and Battery Park Underpass. Additional items included architectural enhancement and some structural reconstruction of the maintenance facilities and access ways. As Resident Engineer, principal duties included on-site engineering and management of inspection staff, coordination with other agencies, verification of methods and materials compliance with prevailing codes and standards, assessment of contractor performance, responding to contractor inquiries, and identification of changes to contract work based upon field conditions. Also provided analysis and recommendations for contract scheduling and time extension requests. During the closeout phase, duties included resolution of contractor claims, final delay analysis, liquidated damages assessment, auditing of all materials installed, review and markup of as-built drawings, preparation of punchlist, and final payment package.

As office engineer, duties included records maintenance and inspection of contract work. Monitored the submission of contractor shop drawings and as-built drawings, and reviewed the drawings for conformance and accuracy. Prepared reports and progress estimates for submittal to NYCDOT summarizing contract payment quantities completed. Performed cost analysis, operation scheduling, and engineering feasibility studies of construction operations. Reviewed and processed all change orders. Re-designed the maintenance and protection of traffic scheme for the Battery Park Underpass Roadway Closures. Submitted recommendations for the redesign of fire standpipe based on actual tunnel geometry and NFPA standards. Reviewed contractor's CPM schedule and updates utilizing Primavera software.

Stephen O'Malley, PE

Resident Engineer

Firm: AECOM

Education
BE/1993/Civil Engineering
Manhattan College

Registrations
PE/2009/New York No. [redacted]

Professional Affiliations
American Society of Civil Engineers (ASCE)

Stephen O'Malley is a civil engineer primarily specialized in office engineering and inspection of civil and structural projects. His experience has included the inspection of marine projects including trestle structures, cofferdams, caissons, piles, sheeting and pre-cast and cast-in-place concrete units. He is also familiar with concrete sampling and testing (both destructive and non-destructive) procedures.

Phase III of the Harmon Maintenance Facility Replacement, Metro North Commuter Railroad (MNR), – Croton-on- Hudson, NY: Resident engineer for construction management team responsible for overseeing the design and construction of this $280 Million Project. Project included the construction of two new maintenance facilities along with all associated site work and electrical upgrades. Project also included the extension of an existing employee overpass intended to provide employees with direct access into the new shops from the station. Industrial and Electrical equipment integral to Metro-North's maintenance operations were also procured, installed tested and commissioned as part this project. Equipment included car hoists, drop tables, turntables, truck hoists, split rail systems and AC and DC power systems.

New York State Department of Transportation Region 11 – D259739, Cross Bronx Expressway ITS Improvements. (June 2005 – May 2007). Assistant Resident Engineer/Office Engineer for this $18 Million installation of ITS equipment in Bronx and New York Counties. Project included the installation of Variable Message Signs, Cameras, Radar Detectors, Vehicle Classification Detectors and associated fiber optic network. Project also included a significant amount of trenching, pavement restoration, new pavement, landscaping and maintenance and protection of traffic.

Croton – Phase II of the Harmon Maintenance Facility Replacement, MNR, Croton-on-Hudson, NY: Office engineer for Phase II of the Harmon Maintenance Facility Replacement Project (Design-Build). Work included the design and construction of a new Maintenance of Way Facility, Material Distribution Center, Communications Building and Security Building as well as new roadway and parking facilities. Project included significant amounts of piles, concrete, asphalt and structural steel work.

Stephen O'Malley, PE continued

Croton–Harmon Maintenance Facility Replacement, MNR, Croton-on-Hudson, NY: Office engineer for construction management team responsible for overseeing Phase I of the maintenance facility replacement project. Work included the reconstruction of the entire lower storage yard including yard water, sewer and drainage upgrades, track reconstruction, construction of four new locomotive service stations, installation of new diesel and lube oil pumps and fire protection pump house, new 200,000 gallon fuel oil storage tank, two new SCADA controlled AC substations, two new wayside substations, driving piles, and erecting a steel employee overpass spanning the entire yard.

Cleaning and Painting of the Miller Highway Viaduct, New York State Department of Transportation (NYSDOT): Office engineer for the cleaning and painting of the viaduct. Project involved lead abatement via Class "A" Containment and the application of three coats of moisture-curing urethane paint to the structural steel supporting the roadway. Included air monitoring to assure full compliance with NYSDOH and OSHA air quality standards. Responsibilities included implementation of all MURK guidelines, including daily inspection review, preparation of contractor estimates, change order preparation and assuring Contractor compliance with NYSDOT EEO goals, and daily monitoring of all aspects of Lead Health & Safety Plan.

South Street Viaduct, FDR Drive Cleaning and Painting, NYSDOT: Office engineer for the cleaning and painting of the 96-span viaduct. Project involves lead abatement via Class "A" Containment and the application of three coats of epoxy paint to the structural steel supporting the roadway. Project includes air monitoring to assure full compliance with NYSDOH and OSHA air quality standards. Responsibilities include implementation of all MURK guidelines, including daily inspection review, preparation of contractor estimates, change order preparation and assuring Contractor compliance with NYSDOT EEO goals. Additional responsibilities include daily monitoring of all aspects of Lead Health & Safety Plan including blood sampling and analysis as well as respirator fit testing.

Ion Panaitescu-Neata

Inspector

Firm: AECOM

Education

MS/1984/Geological Engineering and Geophysics, University of Bucharest

BS/1984/Soil Mechanics, University of Bucharest

Certifications

NICET III Certification, 2001; ACI

Mr. Panaitescu-Neata has more than 19 years of construction inspection and geological engineering experience involving bridge rehabilitation, roadway reconstruction and soil mechanics. His work experience includes protective coating of structural steel and emergency structural repairs, bridge deck repairs, retaining wall construction, utility coordination, sewer and water main installation and calculating slope stability.

NYC Department of Design and Construction, SEQ002513, Construction of Storm and Sanitary Sewers in 110th Street in Forest Hills, Borough of Queens: Senior inspector for the construction of storm and Sanitary Sewers in 110th Street in Forest Hills. Work involves the installation of (3) 7'-6" x 6' – 0" Single Barrel FRTC sewers in parallel, 7' – 6" x 6' – 0" Single Barrel FTRC sewers; 42", 30" and 24" R.C.P. Storm Sewers, Modification Of Existing Culvert Chamber, construction of three (3) new chambers, construction of 10", 15" and 18" ESVP Sanitary Sewer (some on Piles), reconstruction of various diameter DIP water mains, construction of NYCHA temporary pedestrian bridge and reconstruction of existing pedestrian bridge.

New York City Department of Transportation (NYCDOT), Construction Cost $170M; July 200Protective Coating of the Queensboro Bridge: Senior inspector for the the installation of temporary platforms which hold the 1A containment systems for the removal of the existing lead paint by blasting to a near white condition, coating the structure with a 4 part paint system, and maintenance and protection of vehicular and pedestrian traffic. Responsible for coating inspection tasks, and MPT including lane closures.

NYCDOT Rikers Island Bridge Rehabilitation; Borough of Queens: Senior inspector for the rehabilitation of the bridge deck including underdeck and surface repairs and painting. Work elements include removal of failed underdeck concrete through mechanical and hand removal, reinforcement of exposed and deteriorated rebar, removal and replacement of defective railings and replacement of concrete with shotcrete. Final project components include resurfacing of deck and sealing. During construction, the project scope was expanded to include complete replacement of the protective coating. Responsible for the inspection of structural concrete in all phases of work, miscellaneous steel repairs and the SSPA SP-15 surface preparation and application of three coat system. He supervised MPT including lane closures and maintenance of bridge operation for NYC Dept of Correction.

Munaf Patel, PE

Resident Engineer

Firm: AECOM

Education
BE/1996/Civil Engineering
City University of New York

Registrations
PE/2008/New York No. [redacted]

Mr. Patel has over 14 years of senior construction inspection experience in water main construction, highway/ roadway and street reconstruction. He is familiar with NYCDOT, NYCDDC and NYCDEP specifications and procedures.

Construction of Storm and Sanitary Sewers in 110th Street in Forest Hills, New York City Department of Design and Construction (NYCDDC), Borough of Queens: Resident engineer for the construction of storm and sanitary sewers in 110th Street in Forest Hills, NY (Queens). Work involves the installation of (3) 7'-6" x 6' – 0" Single Barrel FRTC sewers in parallel, 7' – 6" x 6' – 0" Single Barrel FTRC sewers; 42", 30" and 24" R.C.P. Storm Sewers, modification of existing culvert chamber, construction of three (3) new chambers, construction of 10", 15" and 18" ESVP Sanitary Sewer (some on Piles), reconstruction of various diameter DIP water mains, construction of NYCHA temporary pedestrian bridge and reconstruction of existing pedestrian bridge. Project limits: 110th Street between 62nd Drive and 64th Road, 62nd Drive between 112th Street and 108th Street, 108th Street between 62nd Drive and 62nd Road, 112th Street between Horace Harding Expressway and 63rd Ave and Colonial Ave between Horace Harding Expressway and 62nd Drive. Mr. Patel was instrumental in minimizing field issues that were raised by the contractor because he is a proactive problem-solver, skills he has utilized on several of his previous projects.

Fulton Street Water Main Project, NYCDDC: Office engineer/assistant resident engineer for replacement of old 16" CI water main with a new 20" DI water main, install a new 24" water main, install CBs, replace sewers, mass excavate for utilities to upgrade their system, remove dead ducts, install new conduits, lower utilities to prepare for the new roadway under the future roadway project, rebuild CE & ECS manholes, construct new TA manholes, install TA ducts for new transit center.

As assistant resident engineer, duties include coordination of inspection staff, overseeing daily contract activities, review of Daily Reports, recording and suggesting alternate solutions for utility interferences by interfacing with agency representatives based on field experience, ensuring quality-of-life disruptions are minimized, ensuring the contractor performs all work in accordance with the standard specifications.

As office engineer, duties include preparing monthly payments for contractor, tracking and logging TA force account work, preparing change orders, checking inspector's daily reports for accuracy, logging payment quantities, use of visio software for preparing

Munaf Patel, PE continued

field cards, and in-service sheets. Also prepared tap cards and fixed asset summaries, maintained material acceptance record book, created and used spreadsheets for payment purposes and budget code controls and analysis, prepared change orders, acted as liaison between contractor and utility representatives for payment and field related issues, reconciliation of quantities on a weekly basis.

REI for the Replacement of Water Mains and Abandonment of High Pressure Water Mains, Wall Street Area, NYCDDC: Office engineer for replacement of 30,000lf of 20", 12" and 8" water main DIP and all related work. Use of computer to track daily quantities, prepare monthly partial payments; initiated, reviewed and prepared change orders; performed budget code analysis. Reviewed Daily Reports, prepared material acceptance records, maintained paperwork in accordance with MURK and as per NYCDDC requirements. Liaison between field office and NYCDEP distribution yards for daily shutdowns; kept records of water main shutdowns; prepared daily water shut off notice to buildings. Coordinated work with city engineers, local agencies, the public and the contractor. Systemized and maintained computerized files of the project, checked contract quantities, recorded and updated quantities in contract books and in the computer using DEASE software. Prepared all water main related documents such as field cards, tap cards, in service sheets and fixed asset summaries.

Acting resident engineer during day shifts as required. Work scope changed as a result of 9/11 and incorporated complete street reconstruction, including sewer replacement, relining and guniting; catch basins and connections; curb (granite, steel faced and concrete); 4" and 7" sidewalk (historic/pigmented and concrete); replacement of roadway and concrete and asphalt; bus pads; traffic and street lights; traffic and street signs; pavement markings; landscaping and tree pruning, removal and planting. Also coordinated relocation of utilities (such as Con Edison and Empire City Subway) that interfered with water main installation. Familiar with NYCDOT, NYCDDC and NYCDEP specifications and procedures. Prepared and sent item summary to payment department for reimbursement from NYSDOT for federally funded part of contract work in accordance with NYSDOT and federal guidelines.

Reconstruction of Prior Notification Sidewalks, Manhattan, Bronx, Richmond and City Wide Housing, NYCDDC: Office engineer on this $ 10.7 million project with 5,000 properties locations and 4000000 SF of sidewalk. Scope of work includes marking out of flags to be replaced, establishment of work areas with signs and barricades, removal of existing concrete pavement and curbs, corrective pruning and fertilizing of trees, resetting of basement accesses, installation of temporary asphalt for access ramps, installation of structures necessary to protect the public, installation of curbs, sidewalks and pedestrian ramps, modification and adjustment of catch basins and manholes, and installation of 4" and 7" concrete and granite curb.

Kantilal K. Patel

Inspector

Firm: AECOM

Education

BS/1974/Civil Engineering, Sardar Patel University

Certificate, Computer Aided Drafting, Plaza School of Technology, 1991

Earth Tech Health and Safety Training

01 - Safety Orientation 05/10/2006

02 - Hazard Communication (US) /WHMIS (Canada) 05/22/2006

03 - Defensive Driving Awareness Training 05/10/2006

13 - Field Safety 4-Hour 05/22/2006

14 - Office Ergonomics Training 05/22/2006

23 - OSHA 10-Hour Construction Safety 03/31/2003

36 - Fire Extinguisher Training 05/22/2007

Mr. Patel has over 35 years of construction management experience managing public and private projects in the USA and oversees ranging between $10M-$ 200M with emphasis on security, transportation, communications, infrastructure, and electrical for facilities and commercial buildings.

Port Authority of New York and New Jersey, Capital Security Program: Project manager for a Security Capital Program Contract as Construction Managers & General Contractor to manage and perform numerous security projects for the PANYNJ at various facilities in NY & NJ (Airports, Bridges, and PATH Stations). Individual projects range in cost from $250,000 to $5,500,000 and vary in scope from fencing, security cameras system at various airports and PATH train stations and installation of 800 MHz trunk radio systems for the airport and path operations.

- Managing office and field personnel, coordination with Port Authority Construction Management Division, PA Project Management Division and the Design Team.
- Held Project coordination meetings with subcontractors and the client.
- Constructability review and analysis, bid process and manage construction from start of the project to final closeouts including quality assurance acceptance safety management by implementing and monitoring PANYNJ and internal Earth Tech requirements at field and supervision level.
- Develop and monitor program operation procedures.
- Administer the post award contract change orders with subcontractors including preparing cost estimates, negotiation and final execution.
- Monitor project cost and schedule.
- Review and approve subcontractor's monthly invoices, review of contract submissions, and coordinate with the Engineer of record.

Key projects include:

- Installation of CCTV Video Surveillance and Access Control System at various locations
- LGA and EWR 800MHz Trunked Radio Communication Systems
- PATH Perimeter strengthening at various locations
- Work includes chain link fence of approximately 20,000 LF including guide rails
- Bayonne Bridge NY Arch Abutment Fender System
- Steel caisson foundation for protection of Bayonne bridge abutment.
- Newark international Airport - Perimeter strengthening

Kervin Ramos Inspector

Firm: AECOM

Education
AA/ 1993/Electrical Engineering Technology, NEC Bauder College, Miami, FL

Certifications
NACE Certified Coating Inspector # [redacted]
OSHA 10 Hour Construction Safety and Health Training

Professional Associations
NACE National Association of Corrosion Engineers
SSPC – The Society of Protective Coatings

Mr. Ramos has over 17 years of experience in the coatings industry. This experience includes surface preparation and application of high performance and conventional coatings in commercial and industrial environments. He has also supervised painting crews for contracting companies. He is a NACE certified coating inspector and has received his OSHA 10 Hour Training.

Brooklyn Bridge Coating Inspection, New York City Department of Transportation (NYCDOT): Project engineer and senior inspector technician IV: Provided chief coating inspection services of Underside steel structures and trusses on the Brooklyn Bridge. Performed blast, chloride and coating application inspection and verification. Verified shop prime operations at times for steel replacement operations on the bridge.

RFK Bridge Coating Inspection, MTA Bridges and Tunnels, NY: Project engineer and senior inspector technician IV. Provided resident engineer services and coating inspection of elevated steel structures inside the Ward's and Queens Anchorages of the RFK Bridge. Managed the scheduling, payment verification, change order review and approval, and provided engineer cost estimates and closeout reports on this project.

New York State Thruway Authority Overpass Bridges: Project engineer and senior inspector technician IV. Provided project resident engineer services by overseeing project's scheduling, operation, and processing of the contract documents for the abrasive blasting and coating applications of six (6) overpass bridges in the Albany Division.

George Washington Bridge, Port Authority of NY and NJ: Senior inspector during lead paint removal and repainting on this well known suspension bridge. This $40 million project included removal of existing lead paint, followed by application of the zinc, epoxy, urethane, coating system.

Protective Coating of the Queensboro Bridge, NYCDOT: Senior inspector on the $170 million project. Responsible for coating inspection, certification of Class 1A containment installation and operation, and workers' health and safety practices in relation to lead abatement activities.

Richmond San-Rafael Bridge Retro fit Project, California Department of Transportation, San Rafael, CA: While working as a crew leader for Certified Coatings, served as a part of the contractor's QC team. Supervised and performed QC inspection of the existing lead paint removal by abrasive blasting, and power tool cleaning. Inspection included observations during the application of the zinc, epoxy, urethane, coating system. This truss type bridge structure underwent a total seismic structural rehabilitation.

Richard Rohr, PE Construction Manager

Firm: AECOM

Education
BS/1974/Civil Engineering, University of Pittsburgh, PA

Registrations
PE/2004/New Jersey, Registration No: [redacted]
PE/1986/New York, Registration No: [redacted]
PE/2004/Colorado, Registration No: [redacted]
PE/1987/Connecticut, Registration No: [redacted]
PE/1979/South Carolina, Registration No [redacted]
PE/2005/Tennessee, Registration No: [redacted]
NACE II Certified, 2003
Certified Associate Welding Inspector, American Welding Society (AWS), 2001

Professional Associations
American Society of Civil Engineers (ASCE)
Deep Foundations Institute (DFI)
National Association of Corrosion Engineers (NACE)

Mr. Rohr has extensive construction, inspection, and design experience on a wide variety of projects, including major East River bridges and high-volume, New York highways. He served as the project manager and assistant resident engineer for the Williamsburg Bridge and was part of the reconstruction effort at the Williamsburg Bridge for seven years. He has been the resident engineer at several other major bridge and highway construction programs for clients such as NYCDOT, NYSDOT, NYCEDC and the New York State Thruway Authority. Mr. Rohr is also involved in numerous professional organizations and has had specialized training, including his certification as an associate welding inspector and coating inspector.

Paerdegat Basin Bridge Replacement, New York City Department of Transportation (NYCDOT), Brooklyn: Resident engineer for the $200 million bridge replacement of the Paerdegat Basin Bridge on the Belt Parkway in Brooklyn, NY. The project is two replacement spans north and south of the existing structure spanning over Paerdegat Basin waterway. The structure will be steel tub girders with pile supported piers. New approach roadways, drainage structures and roadway lighting are included in the scope of the project. Coordination with adjacent ongoing bridge replacement projects is required to coordinate MPT patterns.

Randall's Island Sports Field Development Project, New York City Economic Development Corporation (NYCEDC): Full time project manager for the $130 million redevelopment initiative being constructed by Tully Construction that will create a new electric substation and more than 60 new state-of-the-art sports fields accommodating a wide range of sports, including soccer, softball, baseball, as well as lacrosse, rugby, and cricket. The project is being administrated by NYCEDC for NYCDPR and the Randall's Island Sports Foundation (RISF). Coordination with NYCDPR, RISF, Con Edison, TBTA, NYCDEP, NYCDOT, Verizon, NYSDMH and Koch Skanska is required for the island wide reconstruction activities taking place under various ongoing contracts. Services include resident engineering and inspection services; project administration; Primavera scheduling, recommendations for testing; and verification of compliance to plans and specifications. Responsible for managing large-scale construction inspection in such diverse areas as roadway construction and realignment, sanitary and storm sewers and outfalls, landscaping and plantings, lighting and electrical supply.

Yankee Stadium Train Station Design and Construction Services, the Bronx, NY: Resident engineer for Metro-North's new Yankee Stadium train station, located on the Hudson

Richard Rohr, PE continued

Line near Yankee Stadium. The station is designed to accommodate Metro-North's customers with direct access to the new Yankee Stadium, and will also serve as a public access gateway for various transportation modes serving the area, including cars and ferries. The final design and construction of the station and access is being performed under this contract. This design-build contract began in May 2007 with completion required within 27 months to allow the station to be in service by June 2009. The following major project elements constitute the project: relocation of tracks 2, 4, and 6; utility relocations; new electric service; two 10-car-length island platforms; new pedestrian overpass (including staircases and elevators), and an overhead mezzanine connecting the new pedestrian overpass to the new platforms.

Brooklyn Queens Expressway (BQE) Advanced Traffic Management System, New York State Department of Transportation (NYSDOT): Resident engineer for an advanced traffic management system (ATMS) on the Brooklyn Queens Expressway from the Brooklyn Battery Tunnel to the Grand Central Parkway. Responsible for implementation of an ATMS with an ITS component, which will yield a system capable of full-scale traffic and incident management. The system is being equipped with closed circuit television cameras, providing video surveillance on the BQE corridor. Traffic sensors are being placed at mainline and ramp locations to provide real-time traffic information and to detect the occurrence of incidents. In addition, VMS and highway advisory radio will provide motorist information and route diversions. The system will include vehicle classification and weather sensing equipment, where feasible. Fiber-optic and leased telephone lines are being considered for the ATMS communications network. The main control console for the ATMS will be housed at the joint traffic management center in Long Island City. Responsible for overseeing the implementation of construction phasing, lane closure restrictions, and night and weekend work during installation.

Reconstruction of the Williamsburg Bridge, NYCDOT: Project manager and assistant resident engineer for the $230 million reconstruction of the Williamsburg Bridge (contract #8). The project involved the miscellaneous rehabilitation of the main bridge, including extensive rehabilitation of the two main and six intermediate towers, strengthening of the main towers, replacement and rehabilitation of truss bearings at the anchorages and panel points, painting the truss and structural steel repairs and replacements, adjustment and/or replacement of cable suspenders, installation of an intelligent transportation system (ITS) and VMS, and maintenance and protection of traffic.

Williamsburg Bridge Reconstruction, NYCDOT: Assistant resident engineer for the $230 million reconstruction of the northern roadways on the Williamsburg Bridge (contract #7). The project work consisted of the demolition and reconstruction of four northern roadway lanes on the bridge approaches and main span. Responsible for quality control, test pile programs, submittal reviews, change order preparation, and schedule. Responsible for installation oversight of 843 mini-piles utilizing post grouting pressures to obtain capacities of 150 and 60 tons in varying soil and road conditions. Responsible for overseeing the reconstruction of the Brooklyn and Manhattan approach spans, including concrete placement, steel erection, grid deck installation, and roadway finishing. Other operations included relocation of site utilities (gas and water mains), offsite assembly of the Manhattan approach footwalk, and extensive welding. The pre-assembled footwalk was transported via barge up the East River and then lifted to the bridge level through the East River Park, across the FDR Drive. It was then erected over active subway tracks.

Antonio J. Rosciglione, AIA

Construction Manager

Firm: AECOM

Education

BA/1992/Architecture, New Jersey Institute of Technology - School of Architecture

Hazardous Waste/Title III Liaison and Asbestos Management Trained

30-Hour OSHA Certificate

Registrations

RA/2005/New York, Registration No: [redacted]

NCARB

Professional Associations

American Institute of Architects (AIA)

Mr. Rosciglione has 19 years experience in the construction, architectural/engineering and construction management industries. This includes experience in project/construction management, quality assurance (QA) inspection, contract and code compliance, problem resolution, contract document interpretation, cost estimation, schedule and cost control, contract administration and agency/designer coordination. Mr. Rosciglione holds confined space certification and is OSHA certified.

American Airlines Terminal Redevelopment, JFK International Airport, Jamaica, NY: Project architect for $1 billion program to construct and commission the new American Airlines terminal at John F. Kennedy International Airport. Oversaw every facet of new construction and associated life safety systems with review by Port Authority of New York and New Jersey. Working closely with the lead architect, was responsible for architectural design and construction and building commissioning at JFK International Airport. Coordinated site-related architectural/engineering coordination with other disciplines and American Airlines; architectural design of changes due to site conditions and client requests; architectural and engineering site inspection services, including responding to contractor requests for information; and life-safety and building code interpretation. Responsibilities included extensive interaction with contractor and subcontractor for on-site resolution/clarification of design.

World Trade Center PATH Station Reconstruction, Port Authority of NY and NJ (PANYNJ), NY: Deputy project controls manager for $2.4 billion project to reconstruct and commission transportation hub at the World Trade Center site. Coordinate various design disciplines for timely delivery of design packages to Port Authority of New York and New Jersey for issuance to contractor for phased construction of new transportation hub as designed by Santiago Calatrava. Establish and monitor milestones for deliverables. Coordinate interdisciplinary responses to submittals and request for information. Review phasing and constructability of designs with Port Authority and contractor. Perform services during construction for submittal and request for information coordination amongst client, designers and contractor.

8 Escalators at Bowling Green Station, MTA New York City Transit (NYCT): Construction manager for $13 million New York City Transit construction project to remove and replace eight escalators with associate upgrades to the communication, fire suppression and detection.

Antonio J. Rosciglione, AIA continued

Ronkonkoma Automated Train Wash Facility, MTA Long Island Rail Road (LIRR), NY: Assistant project manager for $8 million project to construct a new train wash facility. Monitored schedule, budget, safety and quality for LIRR.

Atlantic Terminal, NYCT, Brooklyn: Construction coordinator for NYCT. Acted as liaison and facilitator between design consultant and various MTA, NYCT, and LIRR departments to aid in the design process, conformance with scope, constructibility, value engineering and packaging of the Reconstruction of Atlantic Terminal. Performed General Order forecasting, value engineering and proposed materials evaluation. Monitored design consultant's progress and expenditures.

Canal Street Station Complex Rehabilitation, NYCT: As resident engineer/architect, served as the owners' representative responsible for project management, quality assurance, cost and schedule control, and contract administration on this $31 million rehabilitation of the Canal Street Station Complex. Rehabilitiation involved architectural, structural, electrical, mechanical and communications. Responsibilities included management and supervision of field personnel, constructibility reviews and the development of site-specific solutions to construction/coordination issues; coordination with in-house departments including design group, MTA/Arts for Transit, station programs and R.T.O.; coordination with city agencies; preparation of estimates for both base contract work and proposed contract modifications; change order evaluation, preparation, negotiation and implementation; review, approval and processing of contractor's payment requisitions; and contractor evaluation. Mr. Rosciglione is knowledgeable in all aspects of Transit Authority contract specifications, procedures and requirements.

Pfizer Peapack Campus Garage Investigation, Peapack, NJ: As project manager, performed survey of two multistory garages and one below grade multilevel garage for condition survey assessment. Produced design documents and assisted in bid analysis and award of contract.

North Maple Inn, Pfizer, Inc., Basking Ridge, NJ: Project manager for envelope survey of corporate hospitality and learning center. Produced design documents, and assisted in bid analysis and award of contract.

American Express Tower Facade Restoration, Trammel Crow: Project manager for $3.5 million exterior rehabilitation. Coordinated bid documents, process, and award. Performed construction administration services. Coordinated between owner and general contractor. Approved payment requests and review schedule for conformance.

Pfizer World Headquarters, Pfizer, Inc.: Project manager for facade failure investigation and restoration. Analyzed and investigated localized curtain wall failure. Documented findings, created investigation program, and monitored contractor's progress. Coordinated and created design for reconstruction of failure area of curtain wall.

PS 36, New York City School Construction Authority (NYCSCA), Bronx: Project manager for $3.6 million SCA exterior rehabilitation and window replacement for turn-of-the-century public school. Developed scope report, submitted SHPO report, and produced bid documents.

PS 108K, NYCSCA, Brooklyn: Construction manager for $2.4 million SCA exterior rehabilitation of 1800s National Historical Register School with a construction schedule of 12 months.

Baruch College and Hunter College, Dormitory Authority of the State of New York: Project architect for $3.5 million DASNY exterior facade rehabilitation. Analyzed scope and created construction documents. Performed construction administration duties, including site inspections, shop drawing review, and submittal review, and conducted progress meetings.

Nurul Sadat, PE

Inspector

Firm: AECOM

Education

BS/1998/Civil Engineering, Manhattan College

ME/2005/Environmental Engineering, Manhattan College

Registrations

PE/2008/Ohio No. [redacted]

Mr. Sadat has broad civil engineering experience and currently has an assignment as the resident engineer for the Penn Station Perimeter Protection. He has just completed an assignment as a resident engineer on $1 billion Yankee Stadium redevelopment program. Previously, Mr. Sadat served as the project coordinator for the $60-million Yankees-E. 153rd Street Station for Metro-North Railroad, and prior to that, he served in an identical role for the $220-million Phase II rehabilitation of the Times Square Station complex for MTA New York City Transit. He also served on the reconstruction of the West 37th Street Bridge over the Amtrak Empire Line for the New York City Department of Transportation.

Penn Station Perimeter Protection, NY: Resident engineer for the biggest Homeland Security ARRA (American Recovery and Reinvestment Act of 2009) funded project in the country. This Contract is 100% funded by the Federal Transit Administration. This project involves installation of security bollards on the perimeter of Penn Station and Federal building on 9th Avenue. It took nearly 6 years to complete the design and coordination among different parties to start this project due to the complexity of this project. The unknown subsurface condition has resulted in 60% of design changes in the base scope since the project started in May, 2010.

Program Management Services, Yankee Stadium Redevelopment, NY: Resident engineer for the new Yankee Stadium Redevelopment program. This $1-billion open-air facility with a capacity for 50,000 spectators will replace the old outdated stadium. The project includes the construction of four new parking garages containing approximately 4,735 spaces, a new MTA Metro-North Railroad transportation center, development of new and replacement recreational park facilities within the vicinity of the proposed stadium, deconstruction of the old Yankee Stadium, and major road/utility improvements.

Construction Services for Yankees E. 153rd Street Station, MTA Metro-North Railroad (MNR), Bronx, NY: As project coordinator, coordinated between the City of New York and MTA Metro-North Railroad for the new Yankees E. 153rd Street Station, located on the Hudson Line near Yankee Stadium. The station was designed to accommodate Metro-North's customers, with direct access to the new Yankee Stadium, and serves as a public access gateway for various forms of transportation modes serving the area, including cars and ferries. The final design and construction of the station and access to it was performed under this contract. This design-build contract began in May 2007 with completion required within 27 months to allow the station

Nurul Sadat, PE continued

to be in service by June 2009. The following major project elements constitute the project: relocation of tracks 2, 4, and 6; utility relocations; new electric service; two 10-car-length island platforms; new pedestrian overpass (including staircases and elevators); and an overhead mezzanine connecting the new pedestrian overpass to the new platforms.

Times Square Station complex, MTA New York City Transit (NYCT): Office engineer for the $180 million, multi-phase improvement project for the rehabilitation of the complex in the heart of midtown Manhattan that includes substantial civil, structural and utility improvements, new platforms/mezzanine and historic preservation throughout this multi-station facility.

West End Project, NYCT: Office/field engineer responsible for coordinating updating all incoming and outgoing submittals through Expedition submittal tracking software, maintaining engineering logs/files, performing in-quantity checks and testing/field inspections.

Reconstruction of the West 37th Street Bridge over the Amtrak 30th Avenue branch, New York CIty Department of Transportation (NYCDOT): Office engineer/inspector for project that involved installation of a new reinforced concrete deck and approach slabs, reconstruction of approach roadways, replacement of three wingwalls, repair of abutments, one wing wall and pier crash walls, lighting improvements above the bridge, a new grounding system connected to the bridge from the existing catenary, replacement of the watermain and electrical conduits. Responsibilities included coordinating work with other NYC agencies (NYCDEP, Con Edison, Amtrak).

Tunnel/Field Engineer for the NYC Water Tunnel #3, Stage2 project, New York City Department of Environmental Protection: Responsibilities included ordering and maintaining quality control of 100,000 CY of concrete poured in the tunnel. Supervised two Commando 300 drills that drilled holes for grout and one jumbo that grouted high/low pressure grout.

Denis Shatokhin Inspector

Firm: AECOM

Education

BS/2008/Construction Management, Polytechnic Institute of NY

MS/Construction Management, Polytechnic Institute of NY (in process)

Training

40 Hours NYC, DOB, Site Safety Management Course, 2008

16 Hours NYC, Suspended Scaffold Training, 2009

10 Hour NYC, OSHA Training 2009

CPM Scheduling software including Primavera P3 and Microsoft Project.

Contract Management System including Primavera Contract Manager (Formerly Expedition)

Microsoft Office Applications including Word, Excel, PowerPoint, and Access.

BIM, 3D Modeling and 4D scheduling while utilizing Revit Architecture, Sketch-up, and NavisWorks Modeling Systems

Professional Associations

Construction Management Association of America (CMAA)

U.S. Green Building Council (USGBC)

Mr. Shatokhin is a construction field professional with experience in dealing with clients, field Inspections, CPM scheduling, document controls, proposal analyses, project financial analysis and management of all trades and consultants on behalf of the client. He is experienced with full construction processes including pre-construction, construction and post construction management in service.

2nd Avenue Subway Line, NY,: Worked in cost estimating department. Fully managed estimating database which included modification of estimated quantities and materials, implementation of new estimates and generation of reports for the client. Performed minor quantity take-offs on the train platforms.

GREYHAWK Construction Managers and Consultants, NY: Assisted consultants in performing series of analyses for litigation and mediation disputes using industry adopted techniques such as Window Analysis, as well as a various other examinations on schedule, drawings, RFIs, Change Orders and Sketches using Primavera Project Planner 3.1 and Microsoft Excel software.

Projects With GREYHAWK:

- Florida Resort Five Star Hotel Litigation Claim: Assisted consultants in performing industry adopted Window Analysis for litigation. Looked over daily reports in order to determine elements of As-Built critical path. Compared As-Built schedule to As-Planned schedule to establish potential delays and changes in critical activities. Helped consultants to map out As-Built schedule with several critical paths. Worked on Contractor/ Architect/ Engineer sketch analysis involving delay comparison of provided documents to delays in the schedule. Prepared series of graphical breakdowns and charts. Performed RFI/ CO analyses using Microsoft Excel software.
- New York City Hospital Mediation: Looked over contractor documents to determine potential delays of the work. Looked over Time Impact Schedule Analysis to determine the persuasiveness as well as accuracy of the claim. Looked over construction schedule from General Contractor to find possible work interruptions. Assisted in preparation of the narrative of discovered evidence and recommendations to be used for negotiation.
- Ridge Hill Project (Senior Project): Created Building Information Model (BIM) as well as 4D Modeling of the Ridge Hill Building B. Performed quantity take-off and cost estimate for the Ridge Hill Mall Project's glass tower curtain wall system as well as storefronts and overall glazing. Created baseline schedule to perform the work.

Henry Shen, PE

Inspector

Firm: AECOM

Education
MS/1988/Civil Engineering, City College of New York
BS/1984/Civil Engineering, Tong-Ji University

Registrations
PE/2000/New York No. [redacted]

Professional Affiliations
CWI Concrete Field Welding Society

Certifications
ACI Concrete Field Testing Technician
Certified NYSDOT Bridge Inspection
OSHA 29 CFR.1910.146 (Concrete Space)

Mr. Shen has more than 20 years of experience in project management, construction inspection and supervision of major bridge rehabilitation and construction projects.

Replacement of the Shore (Belt) Parkway Bridge over Rockaway Parkway Bridge, New York City Department of Transportation (NYCDOT): Assistant resident engineer for this 60 million replacement project. The project involved new substructure and superstructure, demolition of the existing bridge, replacement of existing roadway. Responsibilities included verifying that the work performed by the contractor is in accordance with the contract documents; monitoring the contractor's performance of MPT schemes; providing "look ahead" report for the notification and coordination of the contractor's construction schedule; conducting daily construction management. The new bridge was built in five stages.

Brooklyn-Queens Expressway Corridor, New York State Department of Transportation (NYSDOT): Resident engineer for Intelligent Transportation System Improvements for this $25 million project. The project consists of installing intelligent transportation system improvement along the project highway including variable message sign, CCTV cameras, HAR beacon sign assemblies, vehicle detectors and other associated system components. The project includes a few fiber optic cables interconnect between the field equipment and communications shelter, min. HUBS. Communications from the communications shelter and min. HUBS to the joint traffic management center over fiber optic cables.

Cross Bronx Expressway Corridor, NYSDOT, Bronx and New York Counties: Resident engineer for Intelligent Transportation System Improvements for this 20 million project. The project consists of installing intelligent transportation system improvement along the project highway including variable message sign, CCTV cameras, HAR beacon sign assemblies, vehicle detectors and other associated system components. The project includes a fiber optic interconnect between the field equipment and HUBS. Communications from the HUBS to the joint traffic management center over T-1 lines.

Queensboro Bridge Painting Project, NYCDOT: Resident engineer for this 167 million painting project. The project involved entire bridge lead paint removal with Class A containment and application of new coating system at no single lane closure on the bridge. Responsible for platform installation, monitoring the contractor's performance of MPT schemes and recommending suggestion to NYCDOT for improved traffic flows. Nighttime work as well as coordination with client.

Henry Shen, PE continued

Rehabilitation of Grand Ave. Bridge over Conrail, NYCDOT: Resident engineer for this $4 million rehabilitation project. The project involved new superstructure, repair and replacement of existing abutments, new water main, gas main, electrical and telephone as well as demolition of the existing bridge. Responsibilities included verifying that the work performed by the contractor is in accordance with the contract documents; monitoring the contractor's performance of MPT schemes; providing "look ahead" report for the notification and coordination of the contractor's construction schedule; conducting monthly progress meeting to address contract CPM scheduling meeting to ensure adherence to the construction schedule. The new bridge was built in three stages.

Willis Avenue Bridge Painting Project, NYCDOT: Resident engineer for this $4 million swing bridge painting project. Duties included scheduling, pay estimates, inspection, MPT, Administration of contract, estimates, submitting and generation of change order. Worker and public safety, environmental, OSHA, DEC, and EPA compliance and coordination of outside agencies, included U.S. Coast Guard.

Bearing Replacement for Williamsburg Bridge, NYCDOT: Assistance resident engineer for this $6 million bearing replacement project that includes removal of existing pin and hanger bearings and installation of new roller bearings. Directed and maintained complete control of project schedules and budget, field verification, drawing modification and field supervision was included.

Reconstruction of BMT Structures for Williamsburg Bridge, NYCDOT: Assistance resident engineer for this project that included erection of NYCT track girders on Brooklyn and Manhattan Approaches, coordination construction methods between the Contractor and NYCT, performed detailed field inspection and tests of all materials with NYCT's inspectors in accordance with AREA and NYCT's track safety requirements, problems solve were included. Responsible for truss bottom chord and wind chord repair on Main Bridge, include repair details change as per field conditions. Responsible for structural steel repair for floorbeams and stringers under North-Inner-Roadway, include modification of repair details.

Rehabilitation of Atlantic Beach Bridge, Nassau County Bridge Authority: Assistant resident engineer responsible for Entire bridge concrete deck removal and replacement as well as steel stringer repairs. Responsible for sandblast lead paints in stringers with Class A Containment. Responsible for substructure repairs and new coffdems. Involving double-leaf bascule bridge electrical work.

Construction Support Service for Williamsburg Bridge, NYCDOT: Senior engineer for a $200 million reconstruction of two south roadways and replacement of approach pier foundation and concrete shafts. Responsible for resolving Engineering Clarification Memo(ECM) and Exception Report, reviewing and commenting on Contractor's requests due to changes of field conditions, responsible for modification of original design and specifications and made recommendations to NYCDOT, field inspection were included.

Rehabilitation of the Pulaski Bridge Over Newtown Creek, NYSDOT: Senior inspector for a $ 30 million rehabilitation of a double-leaf bascule bridge. Responsibilities included field inspection of removal and replacement of structural steel and concrete deck, structural steel repairs, coordination of additional steel repair details with Designer and Contractor, installation of new open grid deck, removal & installation and of expansion and fixed bearings, driving of steel sheet piles and concrete piles, concrete placement for foundation, stem and pile cap, installation of prestress concrete slabs.

John J. Sidorowicz Jr., PSP, EVP

Scheduler

Firm: AECOM

Education

BS/2008/Information Technology, University of Phoenix

AAS/1978/Civil Engineering Technology, Pennsylvania State University

Registrations/Certifications

Planning and Scheduling Professional (PSP-AACE)

Earned Value Professional (EVP-AACE)

Professional Associations

Association for the Advancement of Cost Engineers International (AACEi)

Mr. Sidorowicz has experience in the design, construction and construction management industry. He has extensive experience in contract administration and contract controls on infrastructure projects with an emphasis on rail transportation projects. His capital cost estimating experience includes the preparation of both conceptual and construction estimates. His scheduling experience includes multi-agency, multi-discipline coordination on fast-track projects.

Delta Airlines-JFK_IAT Expansion, Delta Airlines, JFK International, NY: Applications administrator responsible for procurement, configuration, training and maintenance of a program-wide, web-based, project controls platform. A remote hosting solution deployed containing project controls and scheduling software applications.

Tappan Zee Bridge/I-287 Environmental Impact Study, New York State Department of Transportation (NYSDOT): Project controls engineer responsible for CPM schedule development and maintenance along with the administration of the Electronic Document Maintenance System (EDMS). As an IT professional, project controls software development and administration are performed; as well as the project controls processes and personnel supervision.

Second Avenue Subway, Phase 1, Preliminary and Final Design, MTA Capital Construction, NY: Project controls engineer responsible for the design, administration and maintenance of the project estimate database containing nearly six thousand work activity line items. Included are roll-up and drill-down reports, both standardized for inter-agency applications, and customized "on the fly" reporting as necessary.

AirTrain Terminal at Jamaica Station, MTA Long Island Rail Road, Jamaica, NY: Project controls specialist operating as the office engineer for the LIRR Capital Management Department, overseeing the design and construction of the project. Described in New York Construction News (March 2000) as "the most critical piece of the AirTrain Project," this intermodal transportation center integrates the AirTrain, the LIRR, NYCT subway lines, and NYCT bus lines in Jamaica.

AirTrain, JFK International Airport, Port Authority of New York / New Jersey (PANYNJ): As the office engineer, researched, designed, and implemented a custom document control system for the construction management operations facility at JFK. The developed system utilized "off the shelf" products customized using the software's internal preference options without the need for specialized customer support.

Michael Slavin Inspector

Firm: AECOM

Education

AS/1987/Marketing, Queensborough Community College, NY

Training

40 Hours NYC, DOB, Site Safety Management Course, 2008

16 Hours NYC, Suspended Scaffold Training, 2009

10 Hour NYC, OSHA Training 2009

CPM Scheduling software including Primavera P3 and Microsoft Project.

Contract Management System including Primavera Contract Manager (Formerly Expedition)

Microsoft Office Applications including Word, Excel, PowerPoint, and Access.

BIM, 3D Modeling and 4D scheduling while utilizing Revit Architecture, Sketch-up, and NavisWorks Modeling Systems

Professional Associations

Construction Management Association of America (CMAA)

U.S. Green Building Council (USGBC)

Mr. Slavin is a construction field professional with experience in MEP inspection for transportation projects throughout the NY/NJ Metropolitan area.

NYCDEP Croton Water Treatment Plant, WM-11: Electrical estimator responsible for performing independent take-offs and producing engineer's estimates for various contract change orders. Review contractor's change order proposals to verify that their costs are based on proper scope and are fair and reasonable. Issue memos indicating problems when large variances are found between engineer's estimate and contractor's change order proposal.

MTA NYC Transit, 2nd Avenue Subway Phase 1 Design Services: MEP Estimator. Performed material and equipment take-offs for all M.E.P. trades for the 63rd, 72nd, 86th and 92nd Street Stations. Estimated labor hours based on quantities and job complexity. Worked with other estimators to produce and release engineer's estimates to the client.

MTA Metro-North Railroad, Design and Construction Services for the Yankee Stadium Station, Contract No. 30836: Resident engineer responsible for daily inspections of work performed by electrical, mechanical and plumbing contractors to ensure compliance with appropriate codes, contract plans, specifications and approved shop drawings. Coordinated and took lead in performance of final inspection and acceptance testing of fire alarm/fire suppression systems and elevators. Coordinated work between contractors and client forces. Reviewed contractor submitted as-built drawings and O&M manuals for accuracy and approval. Worked directly with client to resolve construction related issues.

New York State Department of Transportation, Brooklyn Queens Expressway Corridor ITS Improvements: Responsible for all day-to-day operations on $25 million contract. Worked with client on daily basis to ensure contract was completed as per specifications. Issued and updated monthly progress schedule. Processed all monthly payment requisitions. Prepared and negotiated orders-on-contract. Performed all steps of material submittal process. Coordinated with other contractors working in common areas. Coordinated work with utility companies such as Con Edison and Buckeye Pipeline. Coordinated work with other agencies such as New York City DOT. Scheduled manpower, as project required. Shopped out all equipment and material packages, and issued purchase orders to various vendors. Reviewed and approved all vendor invoices. Tested all equipment with vendor, client and design engineer. Directly tested and commissioned fiber optic system on project.

Isaac Stokes

Inspector

Firm: AECOM

Education

NY Institute of Technology, Computer Science, 1982-1983

NYS School for Construction Inspection 1985

Certifications

NICET III

NYSDOT Maintenance & Protection of Traffic Certificate

Mr. Stokes is a senior inspector with 21 years of construction inspection experience on roadways, bridges, water mains and sewers. His bridge rehabilitation experience includes abutments, floor beams, girders, bearings, joints, columns and pedestals, as well as painting structural steel using the three-coat epoxy system. Mr. Stokes also has extensive highway experience including the installation of highway drainage, concrete base, asphalt overlay, shoulders, curbs, sidewalks and handicapped ramps.

Reconstruction of Flushing Avenue, Flatbush Avenue to Cypress Avenue, Brooklyn, NY: Senior inspector for the reconstruction of Flushing Avenue in Brooklyn. The scope of work for this $44 million federally-financed project includes the installation of distribution water mains from 8" to 20", 60-inch trunk water mains with butterfly valves and valve chambers, combined sewers with catch basins and manholes and reconstruction of the 3.5 mile roadway with concrete base, new curbs and sidewalks. Mr. Stokes is responsible for the supervision of the installation of over 200 street lights, 70 upgraded traffic signals, 2 new traffic signals, concrete roadway base with asphalt wearing course, sidewalks, curbs, handicapped ramps and all MPT in a 4-phase program including the coordination of 10 Traffic Control Agents.

Reconstruction of Hillside Avenue, 256th St to Brush Hollow Road, Queens & Nassau, NY: Senior inspector for the reconstruction of Hillside Avenue in eastern Queens and western Nassau Counties. Responsible for the installation of sanitary and storm sewers, distribution water mains, street lighting, traffic signals, sidewalks, curbs, pedestrian ramps, concrete road base with asphaltic wearing course and MPT. This project included extensive night work

Reconstruction of 9 Bridges, Westchester, NY: Chief Inspector for the reconstruction of 9 Bridges on I-95 and I-87 in Yonkers. Project components included replacement of bridge bearings, pedestals, concrete columns, expansion joints, diaphragms and girders. This contract also included removal of paint under Class A containment using three coat epoxy paint system. This project included extensive night work.

Route 27 - Sunrise Highway, Great Neck Road to Rt.109, Nassau County, NY: Chief/senior inspector on this project for the removal and replacement of drainage structures, catch basins and storm sewers. The contract also included box culvert and recharge basin reconstruction and roadway reconstruction with concrete base and installation of wearing course using SuperPave. This contract was undertaken exclusively at night.

Teddy Yime, PE Scheduler

Firm: AECOM

Education
MS/2001/Civil Engineering, Stevens Institute of Technology
BS/1989/Civil Engineering, La Corporacion Unicosta, Barranquilla, Colombia

Registrations
PE/2008/New Jersey No. [redacted]

Certifications
Certificate in Construction Project Management, Dec. 2004, New York University School of Continuing and Professional Studies, New York
Certificate in Primavera P3, Primavera Systems, Inc. Philadelphia. PA

Professional Affiliations
National Society of Professional Engineers, New Jersey, Chapter 7

Mr. Yime has more than 18 years of overall civil engineering, and construction management experience, ten of them within the New York City area. He has served in a wide variety of project roles including project controls engineer, site superintendent, assistant project manager, field geotechnical engineer, geotechnical design engineer and construction supervisor on heavy infrastructure projects, including the redevelopment of the American Airlines terminal at JFK, the New York Power Authority's In-City Generation Project, the realignment of the Times Square Shuttle Subway train, and the rehabilitation of Amtrak's tunnel ventilation shaft in Long island city, New York.

Redevelopment of the American Airline Terminal, JFK International Airport, Jamaica, NY: Field geotechnical engineer responsible for the review contractor's submittals in connection with the project's foundation and timber pile driving which consisted of about 10,000 – 30 tons capacity timber piles. The review process included a thorough analysis of the driving criteria and subsequent pile cap installation following the guidelines of the New York City Building Code. Recommendations for approval were made to the resident engineer. Additional duties included: submittal revision of 4000-psi concrete mix design, 75 lb/3ft slurry mix design, reinforcement steel shop drawings and supervision of pile driving analyzer tests, P.D.A., to verify that design parameters were met and production piles were not overstressed during driving. Field supervision responsibilities included: Inspection of pile driving operations to approve or deny production pile, inspected installation of steel sheet piles AZ-60, 80ft deep into slurry trench, supervised installation of jet grout columns, 3.5 ft diameter and 60 ft deep to minimize underground water flow during excavation, inspected placement of structural reinforcing steel and poring of structural concrete floor, walls and roof for open tunnel construction.

Widening of New Jersey Route 139 Approaching the Holland Tunnel, New Jersey Department of Transportation, Jersey City: The project consisted of the widening of route 139 at the intersection with the New Jersey Turnpike approaching the Holland Tunnel. Geotechnical Engineer in charge of supervising and monitoring the drilling and construction of twelve, 6 ft diameter 90 ft long telescopic steel shafts, drilled to bed rock each with 11.5 ft long, 5.0 ft diameter rock socket drilled to ensure suitable bearing on rock as required by design specs. Additional duties included field supervision during the installation of 180, 7 inches diameter, (+-) 90 ft long, steel mini-piles used to improved capacity and earthquake resistance to the existing pier foundations. The complexity of the project required coordination between trades to en-

Teddy Yime, PE continued

sure work progresses according to scheduled milestones and following NJDOT traffic guidelines.

Reconstruction of the Tunnel Ventilation Shafts Serving Amtrak's East Corridor, AMTRAK and LIRR, Manhattan and Long Island City, NY: Project controls engineer for the reconstruction of the LIC and the Manhattan 1st Avenue tunnel ventilation shafts serving AMTRAK's east corredor, with a total program cost of $330MM dollars. Responsible for managing, preparing, distributing and maintaining accurate project contract files using Primavera Contract Management. Performed preliminary review and assessment of the value earned at the close of each month, based upon submission of the project schedule update and verification of the percentage complete for manager review in preparation for progress payment meetings. Identified and reported cost trends, cost forecasting and informed the Construction Manager of any critical issues. Performed project schedule analysis and earned value using Primavera Project Management. Conduct cost price analysis for change orders and assisted project manager during negotiation with general contractor. Provided comprehensive financial and progress reporting of the work done in order to reflect project status and schedule trends for client's review. Gathered information and coordinated with the Construction Manager, Resident Engineer and other team members to ensure the submission of weekly updates and monthly progress reports for the client's review.

In City Gas Turbine Generation Project – Wrap up Contract, New York Power Authority (NYPA): Project engineer/field engineer responsible for the management and performance of project controls duties, prepared bid documents and adjudicated subcontract agreements for the construction management program wrap up phase of a $500MM project which consisted in the installation of eleven LM6000 gas turbine generators on seven locations throughout New York City and Long Island. Duties included coordination of design tasks with different design disciplines, analysis of work progress, cost forecasting, cash flow and change management, acting as a liaison between client and design task managers to ensure client requirements were met, evaluate contractor's progress and schedule updates, performed preliminary review of contractor's payment requisition for manager's approval, informed project manager of critical issues, managed and maintained all project logs using primavera Expedition 8.5, prepared requests for testing services. Additional duties consisted of overall supervision of civil, mechanical and electrical work to ensure task progresses occured according to the baseline schedule. Other tasks included the design of a 350 LF CMU block wall supported on drilled shaft at 23rd & 3rd NYPA approved site, relocation of the CO2 fire suppression system at all In-City generation NYPA sites, construction of turbine removal device according to guidelines provided by GE for all turbine LM6000 NYPA In-City sites, construction of 450 LF of Bulkhead supported on 18" diameter battered steel pipe piles on the Guwanus bay for the in-city NYPA approved site at 23rd & 3rd Avenue in Brooklyn.

New, O.C.M.E., Building at the Queens Hospital Center, Queensborough, NY: Field geotechnical engineer responsible for reviewing and tracking contractor's submittals, request for information, and change orders due to unforeseen field conditions in connection with geotechnical issues of foundations.

Tishman Construction
Key Personnel Resumes

Khurram Ahmad

Scheduler

Firm: Tishman Construction

Education

MS/Construction Engineering and Management, University of Michigan

BS/Civil Engineering, Lahore, Pakistan

Mr. Ahmad joined Tishman in 2007, bringing with him more than 23 years' of experience in the construction industry. As senior scheduler, he is responsible for the development and updating of various types of project schedules, site staging and logistic plans, preliminary cash flows and presentation graphics for use by both corporate departments and project sites. Prior to joining Tishman, Mr. Ahmad served as an engineer, project administrator and scheduler for engineering and construction companies both in the US and Pakistan for a variety of projects, including gaming, transportation, infrastructure, environmental and educational.

Access to the Region's Core (ARC), Trans-Hudson Express Tunnel, NY/NJ: Senior scheduler for this mega-rail project that will transverse the Hudson River and provide an alternate tunnel link between eastern New Jersey and New York's midtown area. The rail tunnel is a component of a larger, rail expansion project known as ARC. Responsible for schedule controls during the final design phase, including the development and maintenance of the Program Master Schedule that will be used to develop schedule variance analysis, trends analysis, three-, six- and nine-month look-ahead, and percentage complete. He is part of a team that reviews and analyzes baseline and monthly updates of the design and construction schedules received from design consultant and construction contractors for conformance with their respective requirements; conducts reviews with the design team and contractors, and makes recommendations for corrections and/or work-around solutions; develops and maintains property acquisition schedule, vehicle procurement schedule, and any other third party schedules required to interface with the Master Schedule; and performs special schedule studies, including schedule exceptions analysis, and prepare recommendations for schedule workarounds as directed by NJT.

Revel Hotel and Casino, Atlantic City, NJ: Senior scheduler for construction of a new beachfront resort with a 53-story, 2,000-room hotel tower. Two concrete mat foundations with approximately 35,000 cubic yards of concrete will be installed as a base for the new tower and a second future tower. Phase one of the project also includes a five-story structural steel podium that will house a 200,000-square-foot gaming area, event and conference space, entertainment areas, restaurants, a full service spa with indoor and outdoor pools, and a large three-story nightclub with additional lounges and a coffee shop.

Robert Baptiste

Field Engineer

Firm: Tishman Construction

Education

MS/Civil Engineering and Construction Management, Polytechnic University

BS/Civil Engineering, Polytechnic University

Professional Affiliations

American Society of Civil Engineers (ASCE)

Structural Engineers Associations of New York (SEAoNY)

Mr. Baptiste has more than ten years of construction experience, six of which have been with Tishman. As a project engineer/assistant project manager, Mr. Baptiste is responsible for the coordination of subcontractors of varying disciplines (civil, structural, electrical, architectural, etc). Mr. Baptiste is also very skilled in the job safety aspect of the construction site and ensures that proper safety precautions are being implemented during the pre-construction and construction process.

Port Authority of New York and New Jersey (PANYNJ): Assistant project manager for Tishman as Construction Manager/General Contractor for their Security Capital Program, responsible for conducting pre-construction reviews, preparing bid packages, and the coordination of sub-contractors throughout the duration of the projects. This program incorporates more than 30 projects at multiple PANYNJ facilities, including all three metropolitan airports, PATH tunnels and stations, several of the areas bridges and tunnels and the PANYNJ bus terminal. Also assists the senior project manager with the daily activities relating to the scope of work. Manages the shop drawing and the RFI flow as well as tracking cost impacts.

Verizon Midtown Garage, New York, NY: Assistant project manager for the construction this new, four-story garage for Verizon. Before construction began Tishman was involved with demolition of the existing structure and site remediation. The garage is used to utilize fuel efficient gas burning equipment. Responsible for the coordination of the foundation and structural steel trades. He served as the trade manager for curtain wall contractor and managed shop drawings. While on the project he ensured that contractors maintained the project schedule and provided updates to the schedule.He issued/tracked RFI's and ensured a timely response.

East River Plaza, New York, NY: Assistant project manager for pre-construction and construction management services for a new four-story, 900,000-square-foot, big-box retail facility with a multi-story garage. Responsible for the coordination of the structural steel erection and pre-erection activities, as well as the superstructure concrete. Also assisted the Senior Project Manager with the daily activities relating to the foundation scope of work. Managed the steel shop drawing flow; tracked cost impacts based of the trade he follows; and coordinated and reviewed the flow of RFI's.

Ed Bubias

Estimator

Firm: Tishman Construction

Education
BS/Civil Engineering, Feati University

Licenses
Structural Inspector – MA
Concrete Field Inspector – MA

Mr. Bubias has been with Tishman for more than 21 years, and has 30 years of industry experience. He has been assigned as Senior Estimator for a number of projects, including commercial and industrial buildings, hospitals, and residences. In this capacity, he is responsible for takeoffs of major projects, pricing, and value engineering of component parts. He is responsible for estimating quantities from excavation, structural concrete foundation, reinforced concrete structure, carpentry, hardware, and their corresponding utilities. He prepares comparative and detailed cost studies of construction, systems, and methods for special conditions; analyzes construction bids; and computes the value of change orders through the preparation of detailed estimates.

One Bryant Park, Bank of America, NY: Senior estimator for Tishman Construction as Construction Manager for One Bryant Park, a 55-story, 2.1-million-square-foot office tower in New York City, jointly developed by The Durst Organization and Bank of America. It is the first skyscraper in the world to achieve LEED Platinum Certification and includes a 4.6-mega-watt cogeneration plant, ice storage plant, extensive gray water retention and recycling system, green roof areas and water free urinals.

One World Trade Center, New York, NY: Senior estimator for Tishman Construction as Construction Manager for 1 World Trade Center, the 70-story, 2.6-million-square-foot tower that will reclaim the downtown skyline and enhance Lower Manhattan's standing as a preeminent business district. Reaching a height of 1,776 feet, the building will incorporate the latest innovations in life safety systems, structural engineering and environmental responsibility. The project is striving to achieve LEED Gold certification through the use of renewable energy sources, low energy HVAC solutions, high performance facades, non-ozone-depleting chemicals, sustainable materials and rainwater collection and recycling systems.

150 Greenwich Street – Tower 4, New York, NY: Provided plumbing and fire protection budget estimates Tishman Construction as Construction Manager at Risk for this 2.3-million-square-foot, 64-story tower that will be the fourth tallest skyscraper at the World Trade Center site at 975 feet from street level. With offices beginning at 139 feet above street level, the building will include 56 office floors, one-third of which will be occupied by the Port Authority of New York and New Jersey.

175 Greenwich Street – Tower 3, New York, NY: Tishman Construction is serving as Construction

Ed Bubias continued

Manager at Risk for this 2.5-million-square-foot, 71-story tower. It will rise to 1,140 feet above street level, making it the third tallest building at the World Trade Center site. Designed by Rogers Stirk Harbour + Partners, the tower will consist of a central concrete core - steel encased in reinforced concrete - and be clad in an external structural steel frame. Building life safety systems are planned to exceed New York City building codes and Port Authority of New York and New Jersey requirements. 175 Greenwich Street will seek to achieve LEED® Gold certification.

Weill Cornell Medical College, East 61st Street, New York, NY: Tishman provided Construction Management services to Weill Cornell Medical College to renovate a building that houses administrative offices and research labs. This building allows for the demolition of WCMC's current location on East 69th Street, where Tishman is preparing to construct a new 455,000-square-foot research lab. Tishman transformed a building originally designed as a Rolls Royce dealership and that later served as a city parking garage. The building was completely gutted, leaving only the structural steel and the four exterior walls. Tishman poured all new slabs, and also increased the basement size from 500 square feet to 7,500 square feet by digging through bedrock. The basement houses mechanical space to support the labs, a staff lounge and a locker area. The retrofitted facility also houses three floors of research labs and two floors of administration offices. Included in the lab portion are fume hoods, cold rooms and various support spaces.

200 West Street, New York, NY: Architectural estimator for a new 43-story, 740-foot, 2.1-million-square-foot office building. The building is constructed on Site 26 at Battery Park City, the last commercially zoned site in the development, right across the street from "Ground Zero". The tower will earn Leadership in Energy and Environmental Design (LEED) Gold certification by incorporating "green" building technologies, such as water and energy conservation, and use of recycled materials. A landscaped pedestrian area lined with retail space was also built.

Plaza Hotel, New York, NY: Estimator for the renovation and partial conversion of the historic Plaza Hotel. The completed 940,000-square-foot building consists of 150,000 square feet of commercial/retail space and a 150-room hotel with the balance of the building being converted to residential condominiums. Tishman oversaw the enlargement of the building by 70,000 square feet by infilling certain courtyard areas and a partial expansion of the building's upper floors.

Borgata Hotel, Casino and Spa, Atlantic City, NJ: The Borgata, a joint venture development between Boyd Gaming and MGM MIRAGE, was the first new hotel-casino to open in Atlantic City in 13 years. The 40-story, 30-acre complex features 2,002 guest rooms and suites, 122,000 square feet of gaming space, and 6,500 parking spaces. The resort also features a European-style spa, 11 retail stores, 10 restaurants, and modern banquet and special events facilities. The Borgata went from groundbreaking to occupancy in 33 months. Mr. Bubias was responsible for estimating.

Borgata North Expansion, Atlantic City, NJ: Estimator for Tishman Construction as Construction Manager (in a joint venture) for the North Expansion adjacent to the Borgata Hotel, Casino and Spa. The 335,000-square-foot expansion encompasses an expanded casino, entertainment spaces, three fine dining restaurants, six retail stores and one nightclub. The casino has 36 gaming tables, 600 new slot machines, and the largest poker room in Atlantic City.

Joseph Calise Inspector

Firm: Tishman Construction

Certifications
Asbestos Super Certificate for NYC, NYS, NJ & MA

Mr. Calise is a project superintendent with over 25 years of experience in the construction industry. He has an innate ability to coordinate, motivate, and mediate union workers on projects. Learning from the ground up, Mr. Calise started as a labourer and working his way up through the ranks has given him an advantage in many areas. Mr. Calise maximizes efficiency through scheduling, planning and diplomacy while being able to communicate points that will make for a better project.

Port Authority of New York and New Jersey, Hoboken, NJ: Project superintendent at the Bayonne Bridge since 8/07 as part of Tishman's contract with the PANYNJ as Construction Manager/General Contractor for their Security Capital Programs. These programs incorporate more than 40 projects located at multiple PANYNJ facilities, including all three metropolitan airports, PATH tunnels and stations, several of the areas bridges and tunnels, a PANYNJ bus terminal, the Journal Square transportation center and PANYNJ shipping ports in New Jersey. The program, with a value exceeding $230 million, is scheduled for completion in 2010. At the Bayonne Bridge, Tishman has installed steel at the upper arch cords at four locations along the roadway which entailed traffic patterns and removal of coffer dam at the New Jersey abutment. In addition, a pile and fender system is being installed as well as steel at the lower arch cords and wind bracing.

East River Plaza, New York, NY: Project superintendent for the construction of a new 4-story, 900,000 square foot big-box retail facility with a multi-story garage. The project is located on a 5 1/2 acre site. Responsible for the coordination of daily field activities and to ensure compliance with contract documents.

Yonkers Raceway, Yonkers, NY: Project superintendent for the construction of a 120,000 square foot building situated on a 95 acre lot. Responsible for site work and the interior and exterior build out of the expansion building. Day to day responsibilities included management of trades including plumbing, electric, mechanical and architectural. Also responsible for the site work, which included the curbs, sidewalk, lighting, landscaping, roadways, underground piping and parking lots. Managed the build out, which included interior and exterior finishes, planning coordinating and scheduling of all trades.

Carmine N. Castellano Inspector

Firm: Tishman Construction

Certifications
Simpson College, Business Management, Indianola, Iowa
Completed Construction management classes

Certifications
Certificate received 30 hour OSHA class
Certified Associate Welding Inspector

Port Authority of New York and New Jersey, Hoboken, NJ: Tishman is presently serving the PANYNJ as Construction Manager/General Contractor for their Security Capital Programs. These programs incorporate more than 40 projects located at multiple PANYNJ facilities. Serving as the lead superintendent of new security program for the George Washington Bridge and its perimeters. Duties include handling interface with PANYNJ resident engineer's office to manage subcontractor's daily activities to insure proper job standards being met for new civil and structural upgrades. Also responsible for maintaining daily job reports of manpower, equipment and tasks completed and safety regulations being adhered to on a daily basis.

One World Trade Center, New York, NY: One World Trade Center's program calls for 2.6 million square feet of office space as well as tenant amenity spaces, observation decks, world-class restaurants and the Manhattan Television Alliance (MTVA) broadcast and antennae facilities, all supported by both above- and below-grade mechanical infrastructure. Served as a superintendent on the foundation phase and was responsible for supervising and directing all activities to begin foundation of this tower.

World Trade Center Building Six, New York, NY: Responsible for the demolition of existing concrete slabs and structural steel frame that remained of this tower after the 9/11 attack. Monitored the installation of a new tieback system for existing foundation walls, interfaced with PANYNJ engineering team for protection of active Path train system during the demolition process and relocated the existing utilities to tie into the new utilities system.

Path Restoration Project, World Trade Center, New York, NY: Superintendent responsible for contractor compliance with all applicable federal, state and local building codes, disseminating contract documents, monitoring of Quality Control Reports submitted by contractors ensuring all standards and codes were in compliance with American Welding Society - Structural Welding Codes, verification and inspection of all materials and components used and reviewing and approval of all subcontractors payment applications.

Newark Liberty International Airport, Newark, New Jersey: Manager "Airtrain" Automated People Mover. Responsible for entire maintenance of monorail structure 3.0 dual miles, start up and deletion of revenue service of fleet, daily preventive maintenance records ensure standards were being met and preparation of monthly budgets of 38 technicians.

Stephen Chaya

Construction Manager

Firm: Tishman Construction

Education

MS/Civil Engineering and Construction Management, New Jersey Institute of Technology

BS/Civil and Construction Engineering, New Jersey Institute of Technology

AAS/Civil and Construction Engineering, Middlesex County College

Mr. Chaya has more than 17 years of experience in the construction industry. He has extensive experience working at Port Authority facilities throughout the NY/NJ area, including multiple projects for the Security Capital Program.

Security Capital Contracts, Port Authority of New York and New Jersey (PANYNJ): Project manager on various projects for two of the PANYNJ Security Capital Contracts with an approximate value of $230 million with scopes ranging from site hardening, security/surveillance, communication and infrastructure improvements. Responsible for working on multiple work orders simultaneously in various locations. Primary duties consist of managing all aspects including scope development, contract review, schedule and cost control, field supervision of staff, submittal management, negotiating change orders, managing of subcontractors, interface with customer and coordinating construction activities with each facility with associated resident engineer and facilities personnel.

FAA Air Traffic Control Tower, LaGuardia International Airport, Flushing, NY: Project manager for the construction of a 232-foot, 19-story air traffic control tower (ATCT), a two-story administrative base building with a basement and an environmental support building for use as the new LaGuardia ATCT facility by the FAA. His responsibilities included overall management of the project; monitoring and updating cost loaded schedule, analyzing and processing cost changes; overseeing of all engineering functions; coordinating subcontractors and field issues; supervising all staff members; chairing owner and subcontractor meetings; and coordinating site logistics and activities with the FAA and the Port Authority. Held special meetings with the PANYNJ to coordinate sensitive utility relocations and road closings in an active airport.

American Airlines Redevelopment Project, JFK International Airport, Jamaica, NY: Project manager/director of engineering for the redevelopment of existing Terminals 8 and 9. The $960-million project includes a 2.2-million-square-foot, 60-gate terminal with an 800-foot concrete reinforced cut and cover passenger tunnel with civil airside and landside construction. All work took place in operating terminal while maintaining airline operations. Began as director of engineering supervising a staff of thirteen and coordinated all construction engineering duties. Then promoted to project manager and managed a $90-million passenger concourse. His responsibilities included cost control, schedule upgrades, chairing of owner and subcontractor construction meetings, solving field issues, over all responsibilities of project and owner relationships.

Stephen D'Alessandro

Construction Manager

Firm: Tishman Construction

Education

MS/Civil Engineering/ Construction Management, New Jersey Institute of Technology

BS/Engineering Technology and Construction Management, Farleigh Dickinson University

Mr. D'Alessandro has 29 years of experience in the construction industry, 13 of which have been with Tishman. He has worked on a variety of projects in both the private and public sectors including healthcare, residential, commercial, educational, transit and law enforcement facilities. Prior to joining Tishman, he served as assistant project manager and superintendent on a range of projects for the Port Authority of New York and New Jersey at Newark International Airport. He also worked on various projects for New York City Transit and the New Jersey Department of Transportation (Transit Division).

Port Authority of New York and New Jersey, Hoboken, NJ: Project manager on Tishman's contract serving the PANYNJ as Construction Manager/General Contractor for their Security Capital Programs. These programs incorporate more than 40 projects located at multiple PANYNJ facilities, including all three metropolitan airports, PATH tunnels and stations, several of the areas bridges and tunnels, a PANYNJ bus terminal, the Journal Square transportation center and PANYNJ shipping ports in New Jersey. The program, with a value exceeding $230 million, is scheduled for completion in 2010.

Verizon Real Estate Portfolio Rationalization, New York, NY: Senior project manager for projects in New York and New Jersey as part of Tishman Interiors Corporation team that has been actively working as Verizon's Construction Manager on several Verizon's Real Estate Portfolio Rationalization initiatives involving building separation and associated employee restack projects. Currently Tishman Interiors Corporation has been awarded the role as Construction Manager in New York, Boston, and Philadelphia regions. Since December of 2007, our teams have completed more than $85 million in construction, managed and coordinated the separation of two major central offices, and fit-out over 300,000 square feet of office/equipment space. The Tishman approach and proven strategy has allowed Verizon to achieve its separation goals and facilitate the sale and transfer of its properties to the new property owner, generally within a short period of time.

The Michael F. Price Center for Genetic and Translational Medicine, Albert Einstein College of Medicine, Bronx, NY: Served as one of several senior project managers responsible for the core and shell work on The Albert Einstein College of Medicine's building program, where Tishman served as Construction Manager. The program consisted of five "smart projects" that Tishman is managing for the College. The largest of these is the construction of the Price Center, a new home for the

Stephen D'Alessandro continued

Department of Genetic and Translational Medicine. Other components include: exterior renovation to the adjacent Forcheimer Building to create a new entry center, site utility relocations, new steam and communications services projects and master planning feasibility studies for campus expansion options. The Price Center project included new construction of a six-story, 210,000-square-foot research facility including a vivarium, lab space for 45 research teams, medical/research support spaces and a BSL-3 Lab. It also included underground shell space for vivarium expansion to over 40,000 square feet. The Price Center won McGraw-Hill Construction magazine's "Best Healthcare in the Nation" in 2008 and Engineering News Record's "Best of the Best – Healthcare" in 2009.

New Jersey Transit Meadow Maintenance Complex, Kearny, NJ: Resident engineer for a renovation, expansion and additions to the maintenance complex facilities. The project involved managing a design/build contractor and a general contractor on this multiple phase project.

Terminal B International Arrivals Building, Newark International Airport, NJ: Oversaw the construction of this arrivals building that included facilities for U.S. Customs, U.S. Immigrations, and baggage handling. He coordinated field operations for site work including ramp replacement, sidewalks, curbs, footings, foundations, superstructure concrete, interior and exterior masonry work, interior fit out and mechanical/electrical work, escalator and elevator installation, skylight and roof installation, and curtain wall and panel systems. In addition, he supervised the hiring of personnel for selected partition, millwork, and door hardware installation.

Terminal B Control Center, Newark International Airport, NJ: Coordinated field operations for the new operations control center at the new International Arrivals Building. It included radio communications for ramp and building service operations as well as surveillance equipment for Terminal B's interior and exterior.

Terminal B Outbound Baggage Replacement & Modifications, Newark International Airport, NJ: Oversaw the replacement and modification of the outbound baggage system in the B-2 connector. Asbestos removal was required, as was the setting up of temporary ticketing counters.

American Airlines Truck-Wash Facility, Newark International Airport, NJ: Managed the construction of a truck-wash facility at an American Airlines cargo building.

Jimmy Diamantopoulos

Estimator

Firm: Tishman Construction

Education

BS/Construction Technology, Montana State University

Certifications

ASPE, Certified Professional Estimator

Mr. Diamantopoulos has more than 40 years of construction experience, including 22 with Tishman. He is responsible for administration budgeting, cost estimating, and project schedule as each relates to cost control. He is experienced in all aspects of construction management and in providing pre-construction phase services related to budget, cost and life cycle issues. He has enhanced Tishman's computerized estimating system to provide numerous estimate formats, from CSI, building systems and Uniformat, to specific client requirements on all portions of a project. In addition, Mr. Diamantopoulos evaluates alternative systems, materials and construction methods to determine those that offer greatest cost efficiency.

Transportation projects:

- JKF Redevelopment, Central Terminal Complex, Jamaica, NY
- JFK International Arrivals Building, Jamaica, NY
- JFK Terminal 1, Jamaica, NY
- JFK Air Train Terminal at Jamaica Station, Jamaica, NY
- JFK Central Parking Garage, Jamaica, NY
- JFK Redevelopment People Mover Stations & System, Jamaica, NY
- JKF Redevelopment Roadway System, Jamaica, NY
- Newark International Airport, Terminal C-3 Expansion, NJ
- Newark International Airport, North Cargo Area, NJ
- Newark International Airport, Terminal A Modifications and Relifeing, NJ
- Newark International Airport, Terminal B Expansion, Newark, NJ
- Newark International Airport Roadway System, NJ
- LaGuardia Airport, Northwest Airlines Finger 4, Queens, NY
- LaGuardia, Trans World Airlines Finger 3, Queens, NY
- Whitehall Ferry Terminal Reconstruction, New York, NY
- Battery Park City Ferry Terminal, New York, NY
- Logan International Airport, Terminal E, Boston, MA
- Logan International Airport, United Airlines Terminal Connector, Boston, MA
- Logan International Airport, Terminal A Feasibility Study, Delta Air Lines, Boston, MA
- Logan International Airport, FIS Facility, Terminal B, Boston, MA
- Logan International Airport, West Parking Garage, Boston, MA

Francisco Gonzalez Contract Administrator

Firm: Tishman Construction

Certifications
BS/Architecture, New Jersey Institute of Technology

Certifications
OSHA 30-hour certified
MTA/Regional Alliance for Small Contractors: Construction Management Principles and Practice
MTA/Regional Alliance for Small Contractors: Construction Supervisor

Mr. Gonzalez joined Tishman in 2007 and has 10 years of construction experience in the New York City area. His past duties have included monitoring of daily activities undertaken by contractors; field monitoring and supervision; coordination of construction paperwork/activities such as submittals, and RFI's; coordination of construction management services; and compilation of construction progress reports and daily reports. He is trained in AutoCAD, Adobe Photoshop, Microsoft Office Professional, Micro-Station and Primavera Expedition/Contract Manager.

Port Authority of New York and New Jersey, Hoboken, NJ:
Tishman is serving as Construction Manager/General Contractor for two PA Security Capital Contracts. The contracts, comprised of more than 40 projects, with an approximate value of $230 million, consist of a variety of different scopes ranging from site hardening, security/surveillance, communications and infrastructure improvements at multiple PANYNJ facilities, including all three metropolitan airports, PATH tunnels and stations, several of the areas bridges and tunnels, a PANYNJ bus terminal, the Journal Square transportation center and PANYNJ shipping ports in New Jersey. Mr. Gonzalez is currently serving as on-site superintendent. He has provided supervision at all PATH locations, and at the Journal Square Transportation Center. He has also provided spot coverage at the George Washington Bridge. He has been involved on 509 W/O#25 800Mhz, 509 W/O#40 LIDS, W/O#2 800Mhz Trunked, 507 W/O#25 E&F Inf. Improv, and 509 W/O#28 TEDS. Mainly, he is assigned to 509 W/O #25 800Mhz at the Journal Square Transportation Center.

Metropolitan Transit Authority Homeland Security Program:
On-site superintendent/construction inspector for work related to the design and installation of Integrated Electronic Security Systems (IESS) and Command Control Centers (C3) at various locations throughout MTA Property. This project covers work performed at facilities for NYC Transit, Long Island Railroad and Metro North Railroad, as well as MTA Bridges and Tunnels. He worked very closely with Metropolitan Transit Authority Capital Construction (MTACC).

Hugh Leung

Construction Manager

Firm: Tishman Construction

Education
BS/Electrical Engineering, State University of New York at Binghamton

Registrations
PE/New York
LEED Accredited Professional

Mr. Leung joined Tishman in 2007 and has more than six years of experience in the construction management industry. As a project manager, he is responsible for preconstruction and construction phase services, including scheduling, budgeting, value engineering, bidding and contract award, cost control, claims analysis, control administration and close-out. He has experience working in the commercial, residential, retail and residential markets for both core and shell and interior renovations.

Security Capital Program, Port Authority of New York and New Jersey, Hoboken, NJ: Mr. Leung served as Project Manager for the 800MHz Trunked Radio Communication System Project as part of Tishman's contract as Construction Manager/ General Contractor. This program incorporates more than 30 projects at multiple PANYNJ facilities, including all three metropolitan airports, PATH tunnels and stations, several of the area's bridges and tunnels and the PANYNJ bus terminal. The program, with a value exceeding $230 million, is scheduled for completion in 2011. Responsible for the procurement, installation and integration of fiber optic and RF signal processing equipment for all PATH train facilities. Responsible in effectively scheduling work around other construction projects and PATH operations to maintain uninterrupted train service.

3 Columbus Circle, New York, NY: Tishman Interiors is serving as Construction Manager for the renovation and modernization of the 29-story, 625,000-square-foot office tower at 3 Columbus Circle. As MEP project manager, responsible for the installation of two new 750KW generators; new bus ducts from the cellar to the 28th floor; interceptor feeders; new class "E" fire alarm system; exterior LED lighting; future telephone/data conduit risers; HVAC conversion retail banks; and a code-compliant sprinkler system.

Verizon Project X, New York, NY: Since December of 2007, Tishman has managed over $85 million in construction, coordinated the separation of two major central offices, and fit-out over 300,000 square feet of office equipment space. Served as project manager for Verizon's Headquarters at 140 West Street in Manhattan. The project consists of constructing new office space in 14 floors of the building. Responsible for the end-to-end process of a project, from pre-construction to close-out, including preparing cost estimates, reviewing design drawings, creating project schedules and procedures, preparing and reviewing shop drawings, managing daily construction activities, cost control and providing NYC Department of Building "sign-offs."

Abby Martin Contract Administrator

Firm: Tishman Construction

Certifications

BS/Industrial Management, City University of New York

Coursework/Architectural Drafting, Fashion Institute of Technology

Certifications

OSHA 10-Hour Construction Safety Certificate - 2009

Construction Management Certificate, Regional Alliance for Small Contractors

Construction Safety Inspection and Waste Management Certificate, City University of New York

Ms. Martin has over 25 years experience working with design professionals and client representatives in various positions within the construction/construction management field. Her goal is to ensure that the final product meets client expectations and is within budgetary constraints. In addition to construction experience, Ms. Martin has interior design expertise from working at various New York architecture firms on public sector and health care projects.

Port Authority of New York and New Jersey Security Capital Program: As Assistant project manager supports the project manager with coordinating activities and resolving issues quickly in order to deliver the project within scope and schedule parameters while simultaneously protecting the interests of the client, assists with the review/recommendations for all shop drawings, payment requisitions, RFI's, change orders in accordance with the PANYNJ policy and procedures, interacts and coordinates between the PANYNJ and subcontractors.

North Beach Asbury Park, Asbury Park, NJ: Assistant project manager/assistant superintendent on this 157-unit, $58-million, luxury condominium development for Paramount Homes. The project is divided into three oceanfront high-rise buildings. Oversees the management and administration of unit fit-outs with regard to Building Standards and Upgrades/Options. Worked closely with Paramount Homes' Purchasing/Sales Division during the selection process to insure that desired option/upgrades were feasible for this project. Generated scopes of work for the interior finishes contracts for bid and award as well as generated the change orders for the options/upgrades selected by the homebuyer. When all purchasing was complete, performed as an assistant superintendent overseeing the trades to insure that the build-outs are correctly implemented.

Atlantic City Bus Terminal at The Walk, NJ: Superintendent/project manager on on the new 25,000-square-foot New Jersey Transit/Greyhound Bus facility. The first phase involved the oversight of the installation of a new canopy to provide overhead protection for passengers. Phase II consisted of the demolition of the existing canopy to allow for the construction of the new terminal. Specific duties included: coordination and scheduling between subcontractors and terminal personnel; addressing punch list items and warranty issues; scheduling training sessions for NJ Transit Terminal management and maintenance personnel on the various building systems; scheduling DCA inspectors for final inspections; and implementing project close-out procedures.

Peter Pena

Inspector

Firm: Tishman Construction

Certifications
BS/Civil Engineering, Hudson Valley Community College

Certifications
OSHA 30-hour certified

Mr. Pena has more than 17 years of construction industry experience and has been with Tishman for the last 10 years. He has worked on a variety of exterior and interior renovations and new construction projects for both private and public sector clients in the judicial, transportation, educational, cultural and religious markets.

Jamaica Train Station, Queens, NY: Superintendent for Tishman's contract as construction manager for the seven-story, 250,000-square-foot Jamaica Station Transit Hub for the new AirTrain serving JFK. The new station, which serves 35,000 passengers daily, is the most critical piece of the $1.6-billion, 8.4-mile light-rail system. At Jamaica, the AirTrain links up to NYC Transit's subway and bus lines and to the Long Island Rail Road.

Continental Global Gateway Project, Newark International Airport, NJ: Project manager for the massive renovation of Terminal A and the North Cargo Area facilities. Tishman played a vital role in Continental Airlines' massive "Global Gateway" project at Newark International Airport. The Gateway program consists of multiple projects at the airport's Terminals A and C. This project's focus, Terminal A2, handles 25 percent of the airport's 31 million annual passengers. A new outbound baggage system will be built on ramp level. Wider belts will handle the heavier loads typical of international travelers, and will reduce the time required for baggage claim. A 10,000-square-foot, two-story addition will be built, as will a new Presidents Club, four new passenger loading bridges, security checkpoints, additional restrooms, a canopy over the connector, a hold room, back office space, 12 ticketing positions and the build out of an additional seating area.

Centra 1, Iselin, NJ: Superintendent for Tishman's contract as construction manager for the complete renovation of an 112,500-gross-square-foot, four-story, Class-A office building. As part of the project scope, there is a planned 8,500-square-foot addition to the fourth floor, complete MEP systems replacement and a new exterior curtain wall. The build also has a LEED® Gold certification set as its goal.

165 Halsey Street, Newark, NJ: Superintendent for Tishman's contract managing the pre-construction, building planning, scheduling, budgeting, and construction of a new data center, 16,000 square feet, within an existing historic building. The installation of new normal and emergency power, cooling as well as the complete fit-out of the space is part of the scope.

Joe Roque, LEED AP Construction Manager

Firm: Tishman Construction

Education
BS/Mechanical Engineering, Manhattan College

Registrations
LEED Accredited Professional

Mr. Roque has been with Tishman for more than 10 years. As project manager, he is responsible for administering the project from the pre-construction budgeting/schedule stage through procurement, shop drawing/coordination development, construction, space turnover and contract closeout. He has acted as Engineering Representative both on-site and off-site, handling site inspection for MEP/architectural construction and construction management.

Port Authority Bus Terminal Air Rights Project, New York, NY: Project manager to assist in the private development of an office tower over the existing Port Authority Bus Terminal located at 42nd Street and Eighth Avenue. The project included mixed-use retail and various public improvements within the North Wing of the facility. The existing terminal accommodates approximately 200,000 daily commuters and provides access to connecting transportation services, including bus, subway and taxi systems.

The Michael F. Price Center, Albert Einstein College of Medicine, Bronx, NY: MEP project manager for the commissioning phase of this project. This involved activating the buildings systems, testing and adjusting the equipment till it functions properly. Tishman served as Construction Manager for the building program that consists of five "smart projects", the largest of which is the construction of the Price Center, a new 200,000-square-foot home for the Department of Genetic and Translational Medicine. The Price Center was conceived to house 40 principal investigators whose research will bring about new understanding and innovative treatments for a host of diseases. This state-of-the-art facility includes laboratories, conference rooms and a common atrium, all supported by advanced electrical systems. The building incorporates the latest environmentally sensitive "green" technology. Tishman minimized the impact to the campus during construction by tightly coordinating the work to ensure the most efficient and least invasive construction process possible.

Empire City at Yonkers Raceway, Yonkers, NY: MEP project manager for both pre-construction and construction of this $150-million casino. The project included the renovation of the existing 275,000-square-foot clubhouse, construction of an 112,000-square-foot one-story building and 98 acres of site improvements to accommodate a NYS Lottery gaming facility with 5,500 gaming terminals, food service and entertainment venue. This project included NYS SEQRA issues, MEP shop drawing coordination, MEP design issues and detailed critical path scheduling.

Christopher Seliga

Scheduler

Firm: Tishman Construction

Education
BS/Construction Management, Wentworth Institute of Technology

Mr. Seliga is the Scheduling Director for Tishman's eastern region projects. He oversees a seven-person scheduling department, which serves as a core resource for project and regional scheduling staff. The department is responsible for computer support, project scheduling, manpower charts, cash flow projections and all other scheduling materials required for a project. Mr. Seliga started with Tishman in 1991 and has more than two decades of industry experience. In addition to scheduling experience, he has also held positions as project manager, mechanical project manager, close-out manager and field superintendent.

One Bryant Park, Bank of America, NY: Head scheduler for Tishman Construction serving as Construction Manager for One Bryant Park, a 55-story, 2.1-million-square-foot office tower in New York City, jointly developed by The Durst Organization and Bank of America. It is the first skyscraper in the world to achieve LEED Platinum Certification and includes a 4.6-mega-watt cogeneration plant, ice storage plant, extensive gray water retention and recycling system, green roof areas and water free urinals.

Continental Airlines Global Gateway Project, Newark International Airport, NJ: Project manager for this assignment. Over a span of four years, Tishman constructed projects for Continental consisting of renovations at Terminal A, a new baggage facility at Terminal C, and new maintenance facilities including an aircraft hangar at the North Area Expansion. All projects had to be constructed without affecting daily airport operations.

Metro-North Restoration, Grand Central Terminal, NY: Superintendent for this historic restoration of the exterior limestone. Monitored day-to-day construction of the stone masons and was responsible for site safety and traffic coordination. As construction consultant, Tishman was involved in the renovation of this historic beaux-arts terminal.

Coliseum Bus Depot Superstructure, Bronx, NY: Project manager for construction of this state-of-the-art bus maintenance and storage facility for the New York MTA. Tishman was selected after the original general contractor had fallen more than eight months behind schedule. Tishman's role as Construction Manager was to institute a corrective program to ensure that the previously installed substandard and damaged work was completed as originally specified. A concentrated scheduling effort was required to complete the remainder of the project, allowing for three months of commissioning, testing, and training.

William Smith Construction Manager

Firm: Tishman Construction

Education

MBA/ Financial Management/ Operations Science, Pace University

BS/ Mechanical Engineering, Rutgers University

Mr. Smith came to Tishman Technologies Corporation in December 2007 as a MEP project engineer. During his 13 year tenure, Mr. Smith has been a design engineer, project engineer, project manager and account executive for a variety of projects including telecommunication, educational, medical, government and financial institutions.

Port Authority of New York and New Jersey (PANYNJ) Security Capital Program, Various Locations: This program incorporates more than 30 projects at multiple PANYNJ facilities, including all three metropolitan airports, PATH tunnels and stations, several of the area bridges and tunnels and the PANYNJ bus terminal. The program, with a value exceeding $230 million, is scheduled for completion in 2010.

Verizon Communications (VZ) Local Law 26 Program, Various Locations: This program currently incorporates more than 10 projects at 27 difference facilities that are spread throughout the five boroughs of Manhattan, Bronx, Brooklyn, Queens and Staten Island. The program, with a current value exceeding $100 million is scheduled for completion in 2019 and provides for building code upgrades to enhance the life safety systems at each of these buildings. The scope of work for these projects include the procurement and installation of egress path illumination and exit systems, fire suppression systems, and smoke detection and fire alarm systems.

Honeywell International, Inc., North New Jersey Office: As project manager, coordinated, planned and scheduled implementation, technical, and financial plans for projects of various scopes and sizes; managed a portfolio of multiple projects totaling $4 million; developed and executed revenue plans averaging $225,000 per month; managed project receivables to maximize working capital; teamed with supply chain to minimize costs in procurement of subcontracts and outside purchases while maximizing project quality; supervised a team of design engineers and field engineers and was responsible for facilitating training to bridge skill gaps; managed a team with resources located at different international locations; and was Project Leader for retrofit efforts at Paramus Public School District, Somerset County Administration Facilities, Salvation Army Headquarters, Wyeth Pharmaceutical and Saint Peters Hospital.

Johnson Controls, Inc., New York, NY: As project manager, managed projects of various scopes and sizes for construction of building management systems ranging from $100,000 to $2 million.

Philip Taranto Inspector

Firm: Tishman Construction

Certifications
AAS/Construction Technology, State University of New York – Delhi College of Technology

Certifications
OSHA 10-hour certified
OSHA 30-hour certified

Mr. Taranto joined Tishman four years ago and brings with him experience in residential and commercial reinforced concrete footing and foundations, excavations for foundations and MEP, sidewalk construction, rebar installations, bollard installations and concrete sidewalks, steel plate reinforcing, reinforced concrete MEP slabs and structural reinforcement in parking garages. Prior to joining Tishman, Mr. Taranto served as an assistant project manager and assistant project superintendent while working at a family-owned construction firm.

Port Authority of New York and New Jersey, Hoboken, NJ: Assistant superintendent for Tishman's current contract serving the PANYNJ as Construction Manager/ General Contractor for their Security Capital Programs. These programs incorporate more than 40 projects located at multiple PANYNJ facilities, including all three metropolitan airports, PATH tunnels and stations, several of the areas bridges and tunnels, a PANYNJ bus terminal, the Journal Square transportation center and PANYNJ shipping ports in New Jersey. The program, with a value exceeding $230 million, is scheduled for completion in 2011. Worked on the following projects:

- **Journal Square Transportation Center:** Relocation of SOC/NOC office; site hardening and security access
- **PA Bus Depot, NY:** Installation of 800 MHz communications system
- **La Guardia Airport, Queens, NY:** Installation of 800 MHz communications system
- **George Washington Bridge:** Installation of 800 MHz communications system
- **Auto Marine Terminal, Bayonne, NJ:** Installation of CCTV
- **Newark International Airport:** Installation of 800 MHz communications system; wiring for TSA CCTV; AOA barrier/fence upgrade; AOA crash barrier installation; bollard installation (Terminal B)
- **Bayonne Bridge:** Coffer dam upgrade and structural upgrade
- **PATH Tunnels:** Installation of 800 MHz communications system
- **PATH/Exchange Place, NJ:** Flood gate portal construction around outside of PATH tunnel; installation of CCTV and security access
- **PATH/ WTC, NY:** Flood gate portal construction around outside of PATH tunnel
- **PATH/ C Yard, Jersey City, NJ:** C Yard expansion

Alfredo A. Troetsch

Inspector

Firm: Tishman Construction

Certifications
BE/Mechanical Engineering, Stevens Institute of Technology

Certifications
Cisco Certified Network Associate
OSHA 30-hour certified
Site Safety 7-hour certified

Mr. Troetsch has been with Tishman for four years as an MEP superintendent/project superintendent/project manager. He brings strong technical, engineering and project management experience to the team, with experience in mechanical drafting, 3D drafting, mechanical analysis, troubleshooting and design, project scheduling, planning and estimating.

Port Authority of New York & New Jersey, Hoboken, NJ: As part of Tishman's contract as construction manager of all Homeland Security, in charge of daily field coordination as well as various project management duties related to the convergence of the entire 800MHz communication network at Journal Square, Jersey City, NJ. Work fincludes daily work coordination with electrical subcontractors while installing a complex conduit riser for fiber optic cable network connections; inspection of work accordingly, review of routing plans, document reports on a daily basis; tracking work in progress utilizing a percentage of work completed spreadsheet to be synchronized with the monthly issued requisitions; and coordination of work at various PATH stations, substations, and communication rooms working closely with the client and the contractors in an effort to plan a two-week look ahead so that access to spaces, rooms, and personnel that are required are all informed and available in a timely manner. He also attends project meetings, holds coordination meetings, and field plan work on a daily basis; supervises and coordinates architectural work associated with communications equipment room build out, UPS and battery room build out; surveys alongside Port Authority and multi-discipline design professionals.

Verizon Network Separation Project, New York, NY: Project superintendent on Tishman's contract as construction manager. Responsibilities included daily work coordination throughout the interior build-out and reconfiguration and consolidation of 32 floors consolidated down to three floors. Supervised/managed all electrical, mechanical, and architectural subcontractors on a daily basis to obtain a satisfactory installation of all mechanical, electrical, and architectural systems as designed by the engineer; was in charge of coordinating and managing the installation of outdoor scaffolding as it was needed in preparation for generator rigging and installation on to the eighth floor; coordinated and managed installation of all HVAC systems and equipment including sectioned roof top chiller units, air handler units, and all associated equipment; sketched up work plans for electrical panel installation and structural supports.

Patrick Wong

Field Engineer

Firm: Tishman Construction

Education
BSE/Civil Engineering,
University of Michigan

Certifications
OSHA 10-Hour Certified

As field engineer, Mr. Wong assists the project manager in the administration of project cost and scheduling systems. He performs estimating functions for changes and addenda, and supervises the document and shop drawing control systems. He ensures the smooth flow of information between the design team, consultants and contractors; and coordinates the efforts of all other project engineers assigned to the site. He plans and coordinates work on a very large or complicated project or on a major project at which exists unique problems in schedule, construction or design.

Port Authority of NY & NJ: Field Engineer for construction management and inspection services at various Port Authority facilities as necessary. The responsibilities of Tishman include, but are not limited to performing inspection services, constructability reviews, contract administration, and preparing construction estimates and schedules. Worked on the following projects:

- **Installation of perimeter strengthening of the GWB Tower Base:** site excavation, shoring, installation of concrete barrier wall with granite architectural façade, bollards with railings, manual barrier gate, vehicular and pedestrian pathways, fencing, and landscaping.
- **Installation of crash barriers and CCTV systems throughout Journal Square Transportation Center:** site excavation, temporary barrier and MOT installation, shoring installation, installation of anti-ram barricades, sump pump, fencing, and additional CCTV monitoring system.
- **Installation of a CCTV monitoring system at the NJ Marine Terminal at Port Newark/ Elizabeth:** installation of wooden camera poles, steel camera poles mounted on driven piles, installation of CCTV cameras with associated equipment on utility poles, upgrading existing servers and communications equipment, and electrical integration into the existing network.
- **Installation of a back-up 800 MHz Radio System at the GWB, PABT, Todt Hill, LGA Airport, and EWR Airport:** installation of backup antennas at the various work sites and electrical integration with the existing PA network.
- **Installation of a CCTV monitoring system at the Auto-Marine Terminal at Port Newark/ Elizabeth:** installation of fiber optic cabling, installation of CCTV cameras with associated equipment on utility poles, upgrading existing servers, communication equipment and additional video monitors and recording equipment.

IH Engineers
Key Personnel Resumes

Maksudur Rahman

Inspector

Firm: IH Engineers, P.C.

Education
BS/Civil Engineering

Certifications
NICET Level III
Rutgers Traffic Control Coordinator
ACI Certified (Concrete Field Testing)
ACI-CCTC
ACI – Special Inspector
SAT Certified (Asphalt)
Project Management (Primavera)
Construction Safety Outreach (10 Hr)
OSHA HWO & Emergence Response

Mr. Rahman is experienced providing construction inspection services for various projects, including extensive experience working with reinforced concrete and steel, and substructure and superstructure elements such as including footings, piers, abutments, steel framing, bearings, deck and deck joint replacement, and membrane waterproofing. He also has experience working with various pile foundations including drilled shaft, concrete/steel pipe, sheet, concrete, H-piles, etc. His roadway experience includes tasks such as milling, paving, grading, drainage, and utility relocations, among others. Mr. Rahman has also performed project safety inspections on various projects.

Bridge Replacement over NJ Transit Line, NJDOT: Inspector for the demolition and replacement of multiple roadway bridges over NJ Transit rail lines. Inspection responsibilities include demo, excavation, reinforced concrete substructure as well as superstructure, steel framing, bearings, decks, parapets, waterproofing, paving, drainage, traffic control, and various others.

Rancocas Creek Bridge, NJTA: Inspector for the construction of this $16 million project which involved the structural repairs, framing replacement and a new bridge deck for this ten-span, steel framed bridge over water. Inspected girder jacking, removal and replacements of framing members, and concrete encasement. Also inspected lead paint removal, bridge painting, guiderail removal, upgrades and SRTs, sounding bearing pads, new bearings, traffic control, and various related tasks.

Bridge Sound Barrier Removal and Replacement MP 100-101, NJTA: Inspector for the demolition and removal of existing sound barriers, modifications to steel structures, erection of new lightweight pre-cast concrete barriers including Maintenance and Protection of Traffic.

Pavement Resurfacing Project, MP 60.2 to MP 74.9, NJ Highway Authority: Inspector of pavement restoration and miscellaneous improvements at the above locations. Responsibilities included MPT, layout of work area and control thickness and placement of asphalt pavement, core sampling, pavement markings, measurement for payment, and various related tasks.

Rt. 78 Roadway Rehabilitation Contract A, NJDOT: Inspector for this project consisting of roadway reconstruction, major drainage improvements, bridge deck repairs and highway lighting from MP 50.50 to 52.80. This was a high profile project with very heavy traffic, multiple complex stages and intense traffic control. Inspection duties mainly included HMAC paving, roadway excavation,

Maksudur Rahman continued

DGA, utility work, MPT, night work, signs and highway lighting.

Route 21, TSM6 #1, Newark, NJDOT: Inspector for this project which included demolition and reconstruction of a NJ TRANSIT bridge to accommodate the widening of Rt. 21 (McCarter Highway) from Raymond Boulevard to I-280. Included significant substructure and superstructure work including steel H piles for the construction of new piers, steel framing, bearings, HP concrete, concrete slope protection, new concrete deck with membrane waterproofing and sheet piling . Project also included roadway realignment and drainage improvements, MSE retaining walls, extensive utility relocation, multiple stages, concrete barrier curb, subbase and subgrade, milling and paving, line striping, traffic control, roadway lighting, signing. Nighttime work was required.

Inspector - Route 21, Sec. 2N, Cont. B, Newark, NJDOT: Inspector on this project which included demolition and reconstruction of several bridges and associated roadway work. Structural items included bridge demolition over and adjacent to live traffic, drilled shaft piles, MSE walls, reinforced concrete foundations, sheet piling, piers, abutments, slope protection, major drainage work, structural steel framing, jacking of superstructure for bearing replacement, containment of lead paint during demolition, HP Concrete, new concrete decks, deck repairs, parapets, waterproofing , utility relocations. Also included concrete spall repairs, LMC overlay, repair/replace structural steel. Include milling and asphalt paving, electrical conduits, lighting, loop detectors, installation of joints, concrete barrier curb, MPT, capping of hazardous waste, etc.

Southern New Jersey Light Rail Transit, NJ Transit: Inspector that provided construction engineering support for the construction inspection of this 34-mile Light Rail system between Camden and Trenton. Performed the Soil Investigation Program (pre-loading) including investigation of differential settlement of station platforms. Reviewed Compaction Grouting Procedure for Correcting Differential Caisson Settlement. Reviewed Drilling and Load Testing methods.

American Standard Testing and Consulting Laboratories Inc., NYC: Inspector for concrete forms, reinforcing bar and other embedded items prior to pouring concrete, concrete inspection and testing at plant, field and laboratory for slump, air and compressive strength. Also performed soil aggregate testing.

Mohammad A. Shaikhji

Inspector

Firm: IH Engineers, P.C.

Education
BS/Civil Engineering

Certifications
NICET III
ACI Field Testing Grade 1
SAT-Asphalt Certification
TCC-Rutgers Traffic Workshop
ACI Special Inspector

Mr. Shaikhji has over 40 years of diverse construction experience including inspection of bridge and highway projects. His bridge experience includes superstructure and decks and his highway experience extends into milling, paving, curb, subbase, grading, excavation, major embankment, utilities, and drainage. Some of his inspection experience included high speed, high volume roadways for various agencies such as the NJDOT, the Delaware Bridge Commission, and NJTA.

Route 295 Reconstruction: Senior construction inspector for $80 million project. Responsible for supervision of contractor's daily activities to ensure that work is performed in compliance with plans and specifications; reviewing estimation and other details of proposal submitted by contractor for change orders approval; keeping records for work performed on time and material cost basis and providing office with required details about equipment, man power and material used; controlling pavement by inspection and, testing at different stages e.g. taking temperature of mix while laying mix, checking smoothness transversely and longitudinally; keeping eye on Job Mix Formula to see that variations in it are within tolerances in specs; inspecting concrete pavement rubblization process.

Philadelphia Street Reconstruction: Senior construction inspector for work restoring Philadelphia Streets, including Market Street from 34th to 40th Street and Point Breeze Street. Work included inspection of dismantling old curbs and side walk slabs and replacing them with new concrete slabs and special brick pavement. Duties included on site inspection to see that work was done as per plans and specifications, measurement of quantities of work done before monthly pay estimate, quality assurance, and supervision of junior inspectors.

Route 78 Concrete Roadway Reconstruction: Construction inspector for laying 1" thick mix for preventing reflection cracks. Inspection includes but not limited to checking of alignment, laying, compaction, density and mix composition. Inspection of 2" thick intermediate and 2" thick surface (Super pave mix) course including but not limited to checking temperature, thickness, compaction, density tests, extraction test, air void measurements and quantity laid etc. Inspection of grouting work through bore holes to stabilize moving rigid pavements and keeping record of grout volume. Inspection of stitching of cracked slabs and keeping record of quantities. Inspection of dismantling and repouring slabs which has failed specific tests for settlement under load. Updating record for completion of project e.g. "As Built Drawings' and "Extra Quantities" by checking all

Mohammad A. Shaikhji continued

187 items of Contact Documents.

NJDOT Long Life Stripping: Construction inspector for supervision of NJDOT Long Life Road Marking Project of central New Jersey State Roads, including inspection of Thermo Plastic and epoxy road marking as per specifications and plans. Included: traffic control according to Manual on Uniform Traffic Control devices to carry out road marking safely; measuring thickness of thermoplastic, epoxy lines and symbols; measuring retro reflectivity of markings according to specifications; inspection of fixing of one way and two way reflectors; inspection of new road construction work as per NJDOT specification and plan.

NJ Turnpike Resurfacing: Construction inspector for resurfacing of (3.5 miles) resurfacing of NJ Turnpike at Exits 15W & 16W. 3" of binder course and 1.5" of surface course was placed. Included: supervision of contractor's daily activities to ensure that work is performed in compliance with plans and specifications; reviewing estimation and other details of proposal submitted by contractor for change orders approval; keeping records for work performed on time and material cost basis and providing office with required details about equipment, man power and material used; controlling pavement by inspection and, testing at different stages e.g. taking temperature of mix while laying mix, checking smoothness transversely and longitudinally; keeping eye on Job Mix Formula to see that variations in it are within tolerances in specs; supervising samples of hot mix for extraction test to determine percentage of asphalt and gradation of aggregates; checking and controlling proper weights of rollers and their speed for proper compaction; supervising field density tests and thickness tests of laid hot mix to see if it complies with specifications; ensuring that contractor complied with MPT Staging.

NJDOT Route 206 Reconstruction: Senior construction inspector for reconstruction of Route 206 with 3" of binder course and 1.5" of surface course overseeing and guiding five construction Inspectors. Included: location survey of center line and slope stakes; scheduling work in consultation with contractor, according to site conditions; collection of daily reports of inspectors and submitting them to office of resident engineer after necessary checks on quantities, man and equipment hours shown in reports; supervision of contractor's daily activities to ensure that work is performed in compliance with plans and specifications; reviewing estimates and other details of proposal submitted by contractor for change orders approval; controlling pavement by inspection and testing at different stages; keeping eye on Job Mix Formula to see that variations in it are within tolerances in specs.

Route 130, 32, 33 Bridge Repairs and Sound Barrier: Quality control inspector on site on bridge repairs and sound barrier construction projects and performed following duties: collection of representative samples of aggregates, sand, cement and soil, as required by ASTM and submitting to laboratory; casting concrete cylinders for 7 days and 28 days compressive strength; checking slump test of concrete mix at time of pouring; checking air voids for air entrained concrete mix at time of pouring; checking asphalt mix at site with respect to its temperature, its look, its smokes, its flow, etc., and in case variation from specifications, report it to contractor and superiors immediately; helping laboratory staff while they perform tests on site; concrete inspections while construction, to see that specifications and plans are adhered to.

Thiru Srinivasan, PE Construction Manager

Firm: IH Engineers, P.C.

Education
MS/Civil Engineering, Polytechnic Institute
BS/Civil Engineering, University of Jodhpur

Registrations
PE/New Jersey

Certifications
OSHA 10 Hour Safety
Excavation and Trenching
Fall Protection
ACI Field Testing

Mr. Srinivasan has over 35 years of experience as a project manager, civil engineer, quality assurance engineer, program manager, resident engineer, and inspector, specializing in construction management and inspection projects. His experience includes having spent nearly 12 years working for the Port Authority of NY & NJ where his responsibilities included performing resident engineering and construction inspections of roadways, bridges and facilities, preparing detailed inspection reports, and performing technical field audits of construction projects.

Newark Airport, Port Authority of New York and New Jersey (PANYNJ): Construction project manager for the rehabilitation of several bridges at airport terminals. The project included bridge deck construction, deck joints, concrete construction, concrete formwork, reinforcement, and traffic control.

Security Capital Program, PANYNJ, Project Manager: Construction project manager for a radio communication system, airport perimeter strengthening which included installation of 8' high chain link fence over cast-in place reinforced concrete barriers for approximately 12000 LF, paving, guide rails, re-working of parking spaces, installation of light poles, all utilities and fence grounding systems, and completion of a section of airport fiber optics communication loop infrastructure and testing of the system.

Newark Airport, PANYNJ: Construction Engineer on several projects such as moving historic Building 51, construction of a new three-span reinforced concrete bridge and widening of a two-mile long roadway providing turning lanes and wider shoulders and construction of a major operating signalized intersection, and reconstruction of Conrad Road which included several signalized intersections.

Airport Facilities Division, Newark International Airport, PANYNJ: Program manager/project manager supervising construction activities of facility call-in contractors on highway and bridge work. Arranged escorts to restricted airport areas, traffic protection and coordinated with Facility Operations.

Quality Assurance Division, PANYNJ: Engineer. Identified potential emergency structural hazards as an "on call" specialist and advised on the immediate protective measures required to safeguard public/personnel safety. Performed technical field audits of construction projects of the Authority and its tenants, at various locations in the agency's jurisdiction, to ensure compliance with the contract documents, current codes and industry standards.

Industria, Inc.
Key Personnel Resumes

Jim Adam

Cost Estimator

Firm: Industria, Inc.

Education

BE/2011/ Mechanical Engineering, Stevens Institute of Technology

Mr. Adam is a dynamic, respected leader with more than 20 years' experience as an engineer, project manager and estimator. Recognized expertise includes budgeting, contractor oversight, procurement, client liaison and site management for large-scale, long-term projects. He thrives in multi-dimensioned, deadline-driven environments demanding a clear strategic vision to spearhead varied, simultaneous projects. He has a solid record of achievements contributing to success of diverse projects including airports, commercial buildings, power plants and water treatment facilities, among others, for private industry, U.S. and foreign government clients.

World Trade Center Transportation HUB, New York, NY: Senior electrical/ mechanical estimator, for all HVAC/Plumbing, and Law/medium voltage installations and change orders for Tishman, in a Joint Venture with Turner Construction, under contract to the Port Authority of New York and New Jersey to complete the construction of the new World Trade Center PATH Terminal, designed by world-renowned architect Santiago Calatrava. The World Trade Center HUB will include sub grade pedestrian connections that will connect the PATH system with the New York City Transit (NYCT) subway system, surrounding site development, and other transit facilities.

CityCenter, Las Vegas, NV: Senior electrical estimator for Block C and the Mandarin Hotel, for Tishman as Executive Construction Manager on CityCenter, the joint venture between MGM MIRAGE and Dubai World, overseeing the construction of the $8-billion, 18-million-square-foot mega-development situated on 67 acres in the heart of the Las Vegas Strip. This was the largest commercial development in the US, and it included a 61-story, 4,000-room centerpiece hotel and casino as well as six additional buildings that house approximately 2,300 additional hotel rooms, 900 private residences, 500,000 square feet of dining, entertainment and retail shops, as well as a dedicated electrical substation and independent central plant that services the entire center. Prepared the massive electrical/mechanical estimate for the public areas based on the drawings. Worked on the change orders for both the electrical and the mechanical portion as well,. Reviewed other MEP change orders project-wide on an as-needed basis.

Christine Collins Office Engineer

Firm: Industria, Inc.

Education

AAS/2007/Bergen Community College

Gibbs College, Montclair, NJ, Executive Assistant Certificate, 1998

Ms. Collins is a problem-solving administrator able to work with minimal supervision with extensive knowledge of business and office procedures. She has the ability to quickly build strong rapport with clients, vendors, subcontractors, and co-workers to identify and adopt new opportunities, techniques and approaches for positive impact on profitability.

Company Confidential, Lyndhurst, NJ: Accounts payable/receivable for material movement company. Collect data from field and subcontractors in preparation of all project invoicing. Invoice clients utilizing QuickBooks software. Verify work performed by subcontractors for approval and release of payment. Maintain all insurance records. Input of all Accounts Receivables. Compile accounting data and prepare reports for Owner

Candor Construction Group, Inc. Elmwood Park, NJ: Construction administrator for mid-size general construction company. Complete turnkey support of President/CEO, Controller, 3 Senior Project Managers and Field Personnel. Purchase bid, performance and street obstruction bonds. Establish on-site facilities at inception of project. Utilize AIA software for creation of project contracts and invoicing. Submit and track RFI's for seamless progression of project. Coordinate and attend on-site project meetings; write meeting minutes. Prepare and conduct follow-up on all documentation and standard procedures relevant to construction projects. Secure, review and process change orders and accompanying work orders. Facilitate punch list resolutions to obtain architect's approval.

J.A. Jones Construction Group, Newark, NJ & New York, NY: On-site document control/administrative assistant for large construction firm specializing in airport renovations.

- Interacted extensively with Project Managers, Subcontractors, Consultants, Vendors & Owners/Clients on Fourteen (14) projects located at Newark Airport Continental Airlines Global Gateway Project and United Airlines Facility Project. Total Cost exceeded $830 Million.
- Assembled and tracked bid request packages, trade contracts, change orders, RFI's, submittals & shop drawings. Scheduled, coordinated and attended on-site project job meetings.
- Gathered and assembled all back-up documentation for monthly contractor Application for Payments
- Tracked and maintained labor/EEO documentation
- Reconciled project budgets to reflect changes in labor and material quotes.

Sheketa M. Daniels Administrative Assistant

Firm: Industria, Inc.

Education
Taylor Business Institute – Outstanding Student of the Year 1984, GPA 4.0

Certification
Executive Secretarial Science

Ms. Daniels' most recent employment was with Team Support Services, Inc., supporting the Port Authority of NY & NJ as part of the Newark Liberty International Airport Redevelopment Program. In this position, she reported to the Program Director as Senior Administrative Assistant/ Office Manager. She have 20+ years of prior experience assisting high-level executives in a Fortune 500 company.

Team Support Services, Inc., Basking Ridge, NJ, Assigned to The Port Authority of NY & NJ Newark Liberty International Airport Redevelopment Program: Senior administrative assistant/office manager reporting to the program director, assistant program director, and project managers of the $3.7 billion Newark Liberty International Airport Redevelopment Program. Responsible for administrative project management support, project correspondence and records, extensive calendar management, and coordination of content for report publishing. Assisted with presentation preparations. Responsible for the preparation of security clearances for the issuance of airport security ID's and maintaining confidential files. Processed project invoices for submission to Port Authority Accounts Payable. High degree of accountability, accuracy and attention to detail essential in this position. Assisted with special projects and ad hoc requests as needed.

Cadillac Motor Car Division, General Motors Corporation, Parsippany, NJ: Senior administrative assistant to the regional distribution manager. Responsible for the administration of the company vehicle inventory (approximately 1,100 vehicles annually). Responsible for assigning/rotating/disposing of company vehicles for GM executives, GM Board of Directors, GM Field Employees and Celebrity promotional placements. In addition, responsible for coordinating the rotation, plating and maintenance of Cadillac Courtesy Vehicles assigned to Newark Liberty International Airport. Assisted Marketing Director with all Marketing, Special Events and Promotional activities (New York Auto Show, U.S. Open, PGA, NFL Golf, Fashion Week, and other promotional events in the Northeast Region). Responsible for administering the Employee Purchase Program in the Northeast Region. Prepared correspondence, reports and presentations using MS Office software. Responsible for coordinating Regional Distribution activity with the General Motors field staff.

George A. DeCristoforo Inspector

Firm: Industria, Inc.

Education

Fairleigh Dickinson University, New Jersey: Building Construction courses

Newark College of Engineering: Building Construction Technology

Carpenter's Local #6, Apprentice training

Certifications

Local #6, Hudson County, NJ, Carpenters & Joiners of America- 42+ year member, 'in good standing'

New York City Department of Buildings Site Safety Manager's Certificate #1435

Mr. De Cristoforo is a project supervisor with extensive background in contracting and construction of commercial, institutional, and residential buildings. He is experienced in all building trades including carpentry, electric, site preparation, masonry, HVAC, etc., and has strong supervisory and leadership abilities.

45th Street Hotel, Pavarini McGovern Construction Managers, New York City, NY: Lead construction superintendent for excavation for footing/foundation 40 plus feet into solid rock and reinforced concrete superstructure.

Vision/Dynasty General Construction Inc., Fairfield, NJ: General construction superintendent for company specializing in commercial and industrial projects, including alterations to Kohl's Department Store in Long Island, NY.

Nurminen Construction Company, Hawthorne, NJ: General construction superintendent for company specializing in commercial and industrial projects. Projects included:

- Hopewell Junction, NY—57,000 square foot A & P store, adjacent strip mall, and extensive site work
- Clark, NJ—57,000 square foot A & P store and extensive site work

Metcon Construction, Rockaway, NJ/Huntington Beach, CA: General construction superintendent for company specializing in commercial and industrial projects. Projects included:

- Voorhees, NJ—100,000 square foot, $5 million BJs Wholesale Club store
- Fairfield, NJ—office renovation
- South Brunswick, NJ—Town Center, Kendall Park Strip Mall
- Randolph, NJ—Nash Dance Studio
- Burbank, CA—Chezz Burger's Concession at Burbank Airport

C. Raimondo & Sons Construction Co., Fort Lee, NJ: Construction superintendent for company specializing in commercial and industrial projects, including:

- Harlem, NY—10 story building
- New York, NY—90,000 square foot reinforced parking garage
- New York, NY—one city block renovation and addition for Astoria Bank, New York Sports Club, and Eckerd's Drug Store
- Pompton Lake, NJ—tenant fit-out and owner changes in Pompton Lakes satellite store
- Pompton Lakes, NJ—90,000 square foot A & P Food Store with eleven satellite stores
- Queens, NY—90,000 square foot Pathmark Food Store with nine satellite stores

James T. Dergin, LEED AP Superintendent

Firm: Industria, Inc.

Education

City College of New York, School of Engineering, Studies in Civil Engineering (1984-1988)

Nassau Community College, Studies in Civil Engineering Technology (1982-1984)

Certifications

New York City Department of Buildings Licensed Project Superintendent

Occupational Safety and Health Administration (OSHA) 7 Hour, 10 Hour & 30 Hour Certification

Licensed Notary Public in Nassau, Suffolk, Queens and New York Counties

LEED Accredited Professional certified by the USGBC

Mr. Dergin has over 25 years of hands-on and project management experience in the construction of infrastructure projects in the NY/NJ area.

Pavarini McGovern, LLC, $150 Million New York Law School Community Center, Tribeca, NY (2006-2010): Project Superintendent. Supervised every aspect of construction for all trades and sub contractors. This included pre-construction logistics, NYC agency liaison, ground breaking, subsurface utility installations, slurry wall construction, top down concrete foundation construction, steel erection, interior fit out and high end architectural finishes. This is a unique project in its execution due the slurry wall perimeter foundation wall which was installed to the full depth of bedrock. Followed by the "top down" method of constructing the 4 stories of classrooms, auditorium and library space below ground.

VRH/TORCON a joint venture, American Airlines Terminal $1.6 billion Redevelopment Project, JFK Airport, NY (2001-2006): Project Superintendent/Project Manager. Served as direct liason and contact with the managing Port Authority of New York and New Jersey. Supervised every aspect of construction for all trades and sub contractors. This included ground breaking, subsurface utility installations, pile driving and concrete foundation construction, steel erection, building enclosure, mechanical and building management systems and finally high-end architectural finishes for interior fit out. This project actually consists of 7 subprojects. Involved in the following:

- Subterranean Passenger Tunnel
- C Node Tower at Concourse C
- Airside and Landside Civil Redevelopment

National Water Main Cleaning Company, Newark, NJ (2000-2001): Project Manager/General Field Superintendent. Managed and supervised all new construction projects for public and municipal authorities in the New York area.

Outer Limits Contracting Corp., Medford, NY (1995-2000): Owner & Chief of Operations. Owner and manager of a small general contracting firm whose primary business included construction projects for the NYCDEP and other public and municipal authorities. Including building construction from ground breaking to architectural finishes. A short list of the projects completed is as follows:

- Construction of MTA Rail Control Centeron W 54th St.
- Total upgrade and replacement of the sanitary piping system for Grand Central Station
- Exterior façade and egress reconstruction of Oyster Bay Post Office
- P.C. Richards and Sons Store Construction at Bay Plaza Bronx

Scott DiStefano

Jr. Mechanical Engineer

Firm: Industria, Inc.

Education

BE/2011/ Mechanical Engineering, Stevens Institute of Technology

Acoustics & Vibrations Lab, Stevens Institute of Technology, Hoboken, NJ: Researcher

- Studied and applied the theory of sound and vibrations
- Set up and performed experiments to further understand the acoustic field
- Collected and analyzed data recorded during experimental procedures

Metcon Construction, General Contractor, Sparta, NJ: Assistant in Training

- Visited construction projects in/ around NYC
- Viewed negotiations between GC and contractors
- Present during dispute resolution between architect and contractor lawyers

Douglas E. Johansen

Construction Manager

Firm: Industria, Inc.

Education
BS, Civil Engineering, Newark College of Engineering

Mr. Johansen is a seasoned project and operations manager accomplished in leading and executing large-scale and diverse building projects for domestic and international firms in a broad range of areas, including retail, office, shopping malls, healthcare and educational facilities, and all forms of public transportation, including the $1.2 billion Newark Airport Redevelopment 2000 project.

Port Authority of NY & NJ Newark Airport Redevelopment 2000 project: Construction Manager. Successfully managed several components of the $1.2 Billion project that entailed erection of a monorail transportation system serving terminals and parking lots. Managed 3 contracts, 3 terminal stations, a maintenance and control facility and a new federal immigration terminal. Accepted full responsibility to complete work as general contractor when stations and MCF contracts were breached by the state of Pennsylvania

Veterans Administration Medical Center, NY: Project manager for the $85.5 million general contract in New York for a new outpatient/ clinical addition to the existing facility, one of only a few VA projects completed on time with no claims. Included a new 7-story + basement, 350,000 square foot building for outpatient services, ER and 8 operating room suites, radiology suit and administrative offices. Prepared and managed 18,000 activity cost loaded CPM. Negotiated and performed $4 million in change orders.

Connecticut Post Mall Expansion in Milford, CT: Led the unexpected ahead-of-schedule completion and on-time opening of the $115 million expansion, despite hazardous rock and asbestos found in buildings and pressured by an accelerated 18-month schedule caused by design modifications, as budget grew by 50% to $120 million, without a single legal claim incurred. Entailed demolition of existing 2-story retail units and construction of 450,000 square feet of new enclosed mall space, two precast parking garages, a 16,000 square foot out-parcel building, with fit-out of tenant spaces for a 2-story Dick's Sporting Goods store, a premier 14-screen movie theatre, and a Borders Books. Upgraded offsite improvements to US Route 1, a major transportation artery.

Philadelphia Geriatric Center project in North Wales, PA: Assumed leadership and surmounted severe financial trouble and scheduling delays to successfully complete the $52 million project, bringing it back on budget and on schedule, completing all work with no operational disruptions.

Robert Rasmussen Construction Manager

Firm: Industria, Inc.

Education

AA/Science, Architectural Engineering, Union County College, Cranford, NJ

Certifications

NYC Construction Superintendent License

License [redacted] New Jersey Building Inspectors-HHS and Mechanical One, Two Family

Mr. Rasmussen has extensive experience in construction management throughout the NY/NJ metropolitan area.

Robert Stanley Consulting, Owner, NY (2009-2010): Provide construction and design consulting services to individual clients. Services include project management, constructibility review, estimating, scheduling, construction supervision, quality control, resolution of constructibility issues and renovation phasing.

Continental Global Gateway Project at Newark Liberty International Airport, Terminal C, J.A. Jones Construction Group (2000-2002): Coordinated trades for Federal Immigration Facility and baggage handling facility, maintained traffic control on airport service road, worked closely with Port Authority Supervisors.

Arcade Contracting, Inc, Brooklyn, NY (2006-2008): Senior Project Manage. Managed supervision of construction sites, drafted contracts, oversaw job finances, ensured deadlines.

Bluestone Company, Long Island, NY (2008-2009): Project Manager. Scheduled and managed job site construction teams, drafted contracts, tracked files using Prolog, oversaw deadlines, coordinated meetings.

Two Trees Management, Brooklyn, NY (2006): General Construction Superintendent. Coordinated trades, ensured deadlines, managed labor force, corresponded with engineers and architects.

Norway Contracting and Repair, Inc., Owner, NJ (1989-2002): Specialized in all phases of renovation, structural repairs, foundations, custom kitchen and bathroom designs and installations, interior space redesigns for various living needs for high-end applications.

Omer A. Sanchez Cost Estimator

Firm: Industria, Inc.

Education

BS, Accountant, Institute Technology Centro Contable de Venezuela

BS, Business Administrator, Universidad Central de Venezuela, Caracas, Venezuela

Certificate, Project Management / Project Control, Middlesex County Community College

Certificate, HCSS Estimated Program / PeopleSoft ERP, JDE

Mr. Sanchez is a results oriented accounting , financial and engineering leader with broad base of expertise in accounting, budgeting, forecasting, reporting, planning, financial analysis, cash management, project control, costing, and system implementations for multiple world class organizations, with proven ability to control costs, mitigate audit exposures, and drive efficiency in systems and processes. He has diverse cultural and interpersonal skills gained through international expatriate assignments, and the coordination and reporting for sites across the globe.

SADEVEN: Consultant. Provided advisory services to this corporation on a wide range of issues including preparation of financial statements and reports required by different statutory and regulatory authorities as well as internal management, and technical accounting, financial and operational analysis, strategic planning and compliance.

Dragados Gulf Construction Ltd.: Finance controller and site administrator manager in Saudi Arabia responsible for all the control of the Ma'aden Phosphate Project in Ras Al Zawr (K.S.A) totaling 750M. Developed forecast; budgets; scheduling; tracking quantities of production and billing quantities; change orders; control of purchases order control of risk and potential saving; reporting monthly information to headquarter; cash flow; expenses control; analysis account; analysis of variance vs. forecast and budgets; bank reconciliation; inventory control; materials purchase and fixed assets control; and subcontractor control of invoices and quantities. Participated in the development and implementation of goals, objectives, policies, and priorities related to administration. Responsible for budget preparation and purchasing in several areas, including all office supplies; commercially printed materials; furnishings for the offices, common areas, and shift crew quarters; major office equipment; among others.

Conti Enterprises: Senior cost engineer, project controller and business analyst responsible for all of the control the three projects- Route 18 totaling 145M; Driscoll Bridget totaling 102M; and Trenton Morrisville totaling 89M. Developed forecast; budgets; scheduling; tracking quantities of production and billing quantities; change orders; control of purchases order; and control of risk and potential saving. Interface between IT and Accounting for the implementation of J. D. Edwards and Peoplesoft software applications. Provided the reporting of monthly information to headquarters; P & L; A/R; A/P; cash flow; expenses control; analysis account; analysis of variance vs. forecast and budgets; bank reconciliation; inventory control; materials purchase and fixed assets control.

Harry E. Stocker

MEP Inspector

Firm: Industria, Inc.

Education
Union County College: 2 Years (1971-1973)

Certifications
Local 17 – Plumbers Union
Airline Transport Pilot's Certificate No. [redacted]

Mr. Stocker has over 25 years of hands-on and project management experience in the construction industry, specializing in mechanical, electrical, plumbing, and HVAC systems.

Stocker & Associates (2005-2010): Owner, directly responsible for several clients providing HVAC, plumbing and electrical renovations on various commercial and residential buildings. The work includes subcontract work and consulting for larger scale commercial projects. As Owner of small firm, in addition to MEP work scope, responsible for all business operations and marketing; invoicing; client support with other trades and value engineering reviews.

Clairmont Construction, LLC, FBI Headquarters, Newark, NJ (2003-2004): General superintendent/building engineer for fast-track construction of a $100 million 250,000 SF specialty building for the FBI Headquarters in Downtown Newark. Coordinated MEP trades, directly responsible for the specialty building equipment that complied with new anti-terrorist national security requirements. The work included a tamper proof HVAC system and controls, secondary electrical emergency backup, chilled water system, all installed under high level security areas. Responsible for closeout and MEP System turnover to Owner including O&M Manuals, system testing and training for building systems engineering staff.

Intracon, LLC (1999-2007): Construction consultant/operational manager with direct responsibility for the coordination of commercial build-out for a restaurant and three (3) multi-unit commercial buildings in Jersey City, totaling approximately $5 million dollars. The work included interior renovations, with plumbing, HVAC, electrical upgrades and architectural finishes, managing all subcontractors and venders. Responsible for total project costs, construction and project turnover directly interfacing with owner. Coordinated entire building permitting process with state and local inspectors as part of the project delivery to the owner.

Electrical Engineers, Inc., aint Joseph's Church & Recreational Center, Milford, NJ (1995-1998): Project manager for subcontractor on a $3.5 million dollar project for Meyers Church Builders. Responsible for electrical coordination; mechanical control wiring; life safety; HVAC systems and safety of construction crew. Also interfaced with Owner's representative, processing payment application reviews, shop drawing submittals approvals and coordination with other trades. Commissioning and testing for start-up of all electrical systems (power and control wiring) in unison with mechanical/HVAC trades.

Tim Tabor Inspector

Firm: Industria, Inc.

Education
BS/1972, ORU, Tulsa, OK

Certifications
Licensed Asbestos Inspector, Robert Wood Johnson Medical School, 1989
OSHA and GC certification

Mr. Tabor has more than 35 years of experience in the construction industry, including inspection and oversight of construction of Port Authority facilities and facilities throughout the NY/NJ metropolitan area.

Continental Airlines – Terminal C Expansion, Newark Liberty International Airport, JA Jones Construction Group (2000-2002) and Amec Corporation (2002-2004), Newark NJ: Project manager responsible for project scope of one million sq. ft. concourse able to house up to 12 wide-body aircraft, an at-grade Arrivals Hall in front of the existing terminal, a lower level Departures Hall and a satellite Federal Inspections Services facility capable of handling 1,500 passengers per hour. Project also included a new centralized baggage system, a new utility plant, and airside improvements that include a dedicated taxi lane, aircraft hardstands and apron reconstruction. Construction management responsibilities included complex project phasing, project scheduling, bid package strategy, design milestones, development of overall project procedures and the implementation of project management website.

North Shore Long Island Jewish Hospital, Bovis Lend Lease (2007-2010): Field Service Superintendent CM/GC. Directly responsible for the interior renovation project on the existing main building. The $9 million, 18,000-sq ft space consisted of temporary and permanent office space for a dozen different Hospital departments. The scope of work included abatement, demolition, structural steelwork, concrete, masonry, carpeting, drywall, millwork, automatic door installation, ceramic tile work, lockers, toilet partitions, VCT, carpeting, painting, HVAC reconfiguration, electrical, plumbing and fire protection. Project completed over a 12 month period in expectation of the 100 million dollar, 10 story, building housing the new construction of the Women's Hospital to follow.

Brooklyn Tabernacle (2006-2007): Director of operations responsible for management and oversight of the daily building operations, approx. 250,000 sq ft, consisting of multiple facilities. Function as in-house Construction Manager for all special projects and ongoing renovations as well as on-site supervision for other existing buildings in the metro area. Receive daily reports and schedules from department heads including Engineering, Construction, Housekeeping and Security. Responsible for approx. 75 full time employees in various departments. Work closely with the Finance Department on all project budgetary needs and financial schedules.

Kathleen Wittrock

Administrative Assistant

Firm: Industria, Inc.

Education
Taylor Business Institute – Outstanding Student of the Year 1984, GPA 4.0

Certification
Executive Secretarial Science

Ms. Wittrock has strong organizational skills to manage multi-task responsibilities. She is proficient in Microsoft Word, Excel, PowerPoint, Access and File Maker.

Port Authority of NY & NJ, Newark International Airport: EWR Redevelopment Program & Capital Projects:

- Team Support Services - Administrative Assistant to Aviation Department & Project Engineers
- Ebasco/Crow - Administrative Assistant to Engineer of Construction and Resident Engineers

Responsibilities include prioritizing and organizing daily work load, coding and processing a high volume of correspondence, updating weekly and monthly reports, maintaining files, confidential information, calendar management, processing monthly payment applications for airport contracts, coordinating efforts and responsibilities with other airport engineering field offices.

St. John the Apostle School, Clark, NJ: Secretary to Principal. Perform various Secretarial duties for the Principal and teachers. Duties include but are not limited to: student and faculty daily attendance, monthly calendar management for school activities, preparing archdiocese annual reports, maintaining annual and new registration of students, work closely with Parent Faculty Guild, organize and prepare school supply orders, as well as many other clerical duties.

Federal Aviation Association Credit Union (FAA), Clark, NJ: Board Liaison/Secretary - Temporary. Performed various Secretarial duties for the Chief Officer, Board of Directors and Staff. Duties included organization of Board meetings, schedules and correspondence among the different branches.

Hosokawa Micron Powder Systems, Summit, NJ: Administrative Assistant. Handled various administrative functions for nearly four years. Position responsibilities required comprehensive typing assignments in a demanding work environment. Other duties included: assistant to the Manager of Domestic Sales; coordinated and assisted in project activities; maintenance of interdepartmental communications; organization of management meetings and presentation materials; travel arrangements, founder of the Recognition Committee; etc.

LPE Enterprises
Key Personnel Resumes

William Czirjak Construction Inspector

Firm: LPE Enterprises

Education

35 College credits towards a BA in Business Administration in International Trade at Bergen Community College

Training

PATH Electronics School, 1993.
Supervisory Academy (Hotel Thayer), 1995
High Tension Certification, 1996
ENSEC, Administrator Training for ACCESS System, 1998
Nortel - Jungle MUX Training, 2000
HSQ Administrator Training for SCADA System, (over 100 hours). 2002

Mr. Czirjak has extensive experience in construction management of Port Authority projects, including the current AECOM CM call-in services contract.

Port Authority of NY & NJ:

- **PATH projects:** While assigned to the Resident Engineering office at Journal Square, responsible for PATH projects covering train station exhaust fans, elevators, fire alarm and pre-action systems, communication center relocations, floor renovations, emergency generator load bank, security swipe card and CCTV upgrades, security bollard and barrier wedges and 15 KV isolation switches.
- **Lincoln Tunnel Capital Projects Coordinator (Group Maint Supv), 1998-2002:** Aassured a balance between facility requirements and contractor's needs for completing their work. Initiated meetings, discussions and coordinated with Maintenance staff, Operations, Police, Engineering and contractors to achieve this cooperation. Covered the position of General Maint Supervisor and Construction Coordinator in their absence. Reviewed and commented on proposed plans and specifications covering capital and major work programs to be completed by contractors which saved time and money on many projects and have produced a better product for the facility. For example with the SCADA project, I proposed cutting over every other traffic light to SCADA until 50% were done. Then while operating the tunnel traffic lights on SCADA cut over the rest of traffic signals.
- **Lincoln Tunnel Field Maintenance Supervisor, 1993-1998:** Supervised staff of 23 skilled journeymen. Made schedules and ordered materials daily. Forced a review of tunnel Fire Ventilation Patterns to be more efficient and safer for the public. Administered facility cell phone and radio communication handsets.
- **Lincoln Tunnel Systems Controller, 1985 - 1990:** Administrator of facility's ACCESS security system, checking its operation daily. Responsible for administering the facilities ACCESS cards for contractors and employees.
- **Electrician, 1990 - 1993**

Awards and Achievements

- The Robert F. Wagner, Distinguished Public Service Metal, 1997: an award for many years of outstanding work and in fabricating the LED tunnel/ceiling traffic fixture. This fixture is now in use at the Lincoln and Holland Tunnels.
- Achievement Award, 1994: for liaison work with Cellular One for installation of a new cellular telephone system for the Lincoln Tunnel.

Saber R. Ghazaly Construction Inspector

Firm: LPE Enterprises

Education

BS/2004/Civil Engineering, Zagazig University, Egypt

Certifications

ACI Concrete Construction Special Inspector—The American Concrete Institution (2009)

Structural Masonry Special Inspector—International Code Council (2009)

ACI I Concrete Field Testing Technician—The American Construction Institution (2008)

10-Hour Construction Safety and Health Course—U.S. Department of Labor: OSHA

NYC DOB 4-HR Supported Scaffold User Certificate—TSC Training Academy (2008)

Asbestos Certification—New York State Department of Labor (2008)

Mr. Ghazaly has experience supervising all phases of construction projects: reading all engineering drawings, quality and cost control, supervision and inspection of project, monitoring schedule, delivering quality and excellence on time. He has strong analytical skills, and is capable of implementing solutions to multiple needs in a diverse environment.

World Trade Center Transportation Hub & Transportation Pass: QA/QC Reinforced Concrete Special Inspector. Conduct quality assurance of structural concrete for transportation hub (upside-down building) & transportation pass; Revise shop and contract drawings. Perform quality assurance for placement of reinforcement and formwork; Perform quality assurance for concrete placement and curing; Prepare daily field report of construction activities and report deficiencies for the contractor and client.

Field Special Inspector, Tectonic Engineering, Long Island City, NY: Conducted inspection of rebar, concrete sampling and testing, compaction, structural masonry, fireproofing, and fire-stopping phases of construction projects; Determined maximum dry density and optimum moisture content of soil by one-point proctor test on field; Tested soil percentage of compaction using the nuclear gauge (troxler). Conducted visual inspection of aggregate and recycled concrete for compaction; Inspected formwork and reviewed the reinforcement details and embedded items prior to concrete placement; Monitored the procedure of pumping concrete and supervise preparation of samples for testing lab; Controlled the environmental condition for concrete by means of curing; Conducted the inspection of installation of structural masonry, face brick, and architectural stone; Assured quality of CMU, rebar, grout, mortar, and prepared samples of grout and mortar to be tested; Monitored renovation of architectural masonry work (pointing, cleaning, face brick and stone replacement); Prepared daily field report of construction activities and report deficiencies for the contractor and client.

Project Monitor, Consulting & Testing Services, Inc., North Brunswick, NJ: Monitor and inspect all phases of Asbestos Containing Material (ACM) removal control for projects; Prepare air samples according to the scope of the project and New York State and New York City specifications.

Site Manager, Sama Misr, Cairo, Egypt: Established a two story television building and four villas. Inspected and handled drainage system, water supply, road improvement, landscape, and swimming pool.

Leonardo Nunez

Construction Inspector

Firm: LPE Enterprises

Education

Business Management Degree (Associate), Katherine Gibbs School, New York, NY

Certifications

ACI Concrete Construction Special Inspector
ACI Concrete Filed Testing Technician – Grade I
Path Roadway Worker Protection Certification (Employee in Charge)
Special Inspection of Structural Masonry Construction (The Masonry Society 10 hour Seminar)
OSHA Training (10 hour)
MTA NYCT Track Safety

Mr. Nunez has over 15 years of experience in construction inspection of transportation and building projects.

World Trade Center Transportation Hub/Site: Construction inspector during underpinning (preloading/loading) phase of the MTA 1/9 Subway line, demolition, excavation and clean up for Towers Two, Three, Four & Path building areas; Assist as requested by Resident Engineers on both the East and West Bathtubs work packages; Conduct Inspection services during construction of WTC East/West connector; Ensure arch erection, concrete/steel reinforcement installation and fire proofing application was performed in accordance with the approved contract documents; Assure project site specific rules and regulations and applicable plans for operations management, site safety and quality management are followed; Responsible for monitoring daily activities of all trades under General Condition Package; Keep detailed documentation and maintenance of working files, monitoring and approving all time and material for payment, daily report completion, management of material deliveries and ticket collection; Daily inspection of job site for safety and compliance; On-site problem solving; Served in the capacity of an Office Engineer auditing contractors invoices for payment.

Foreman, Martin Construction Brooklyn, NY; Project Assistant, Nunez Block & Construction Dominican Republic: 7 years of numerous renovation projects; responsibilities include estimating, purchase materials, as well as, overseeing crew to ensure work is performed as per the contract. Hands on field responsibilities including the coordination and oversight of electrical systems, demolition and installation of 120/240 volts lighting and power circuits, panel board and transformer installation with associated conduit, sink and tub installation, heater and a/c systems, plastering, drywall installation, painting.

Guest Service Agent, New York Hilton & Towers, New York, NY: Management and coordination of staff members, assigned task to various trades, answered and attended to internal incoming calls, serviced guests & team member inquiries.

Construction Team Foreman, New Yorker Hotel, New York, NY: Responsibilities included supervision of 400 guest rooms renovation project, prepared purchase orders, submitted daily progress reports, kept time and material log.

SCI Engineering
Key Personnel Resumes

Khalid Algende, PE

Inspector

Firm: SCI Engineering, P.C.

Education
BS/1984/Civil Engineering,
Alexandria University

Registrations
PE/New York No. [redacted]

Certifications
ACI Concrete Field Testing
Technician- Grade I
ACI Concrete Construction
Special Inspector
NYC DOB 4-HR Supported
Scaffold user
10- HR OSHA

Mr. Algende is an experienced Inspector with over 20 years of experience in the construction industry.

WTC Transportation Hub- (Greenwich street Corridor): Senior special inspector for inspection for reinforced concrete members sucha s slab, columns, walls, beams and footings. Responsible for monitoring concrete placement and testing; review of strucutral shop drawings and making correction according to contract drawing; reviewing RFI's responses and submitting them to contractor.

Rosenwasser/Grossman Consulting Engineers, P.C., New York, NY: Senior inspector responsible for: sub grade (soil and rock) inspection. Monitored and inspected all reinforced concrete structural members in the building system included foundation works such as footing, pile caps, foundation walls, straps, slab on grade & superstructure works such as columns, shears walls, beams and slabs. Inspection included framework, resting, shoring and re-shoring. Conducted masonry wall inspection. Reviewed structural shop drawings and making required corrections.

Tectonic Engineering Consultants, P.C.: Inspector for various Schools for NYCSCA & NYC Housing Authoirty. Duties consisted of the following: concrete testing and inspection; reinforement steel inspection; soil compaction testing; masonry inspection and mortar testing; fire stopping and fire proofing inspection; driving piles and pile load test inspection.

Quality Engineer, Alexandria, Egypt, Residential & Commerical Buildings: Concrete inspection for all footings, columns, beams and slabs. Performed masonry inspection. Reviewed drawing, calculate quantities and prepared daily report

Jose Amador

Inspector

Firm: SCI Engineering, P.C.

Education
AAS/1981/Architecture, Universidad Autonoma de Caribe

Registrations
PE/New York No. [redacted]

Certifications
ACI Concrete Construction Special Inspector ID [redacted]
ACI Concrete Field Testing Technician - Grade 1 ID [redacted]
Troxler Nuclear Gauge Certification [redacted]
DDC Certified QAB ID [redacted]
Quality Management Services QMS ID [redacted]
NICET 2 Certification [redacted]
OSHA 10 hrs Safety Training Course
Construction Management Program (The Port Authority of NY&NJ)
NYC DOB 16 hr

Mr. Amador has over ten years of experience in project management, and technical support positions, with broad based responsibilities in architectural and structural engineering within the construction industry. He is certified as an ACI Concrete Construction Special Inspector, ACI Concrete Field Testing Technician-Grade I and has demonstrated his ability to build long-term client relationships and determine cost effective solutions to progress, or regulatory issues.

Desimone Consulting Engineers: Field Engineer. Provided on-site observation, inspection and approval of all construction work to ensure compliance. Projects range from 50 millions to 1.2 billions dollars in Queens New York. Ensured site-level compliance with design, contract documents, standards, policies and practices. Interacted regularly with Construction Manager to report site activities. Inspected form work, rebar placement and concrete placement for deep foundations, structural slabs and all structural building elements. Erection of building structural steel, and installation of steel decking. Oversaw all masonry work; special interest on load bearing walls where they joint steel members, metal deck or structural slab. Followed up on lintels schedule; employed knowledge in construction methods, building systems, and steel structures to identify field conditions as well as assisted in the planning of resolutions for problems that arise from inspections. Detailed sketches to complete Requests for Information (RFI) in cases where work does not comply with the contract documents. Follow through on RFI's to final resolution. Maintained computer database documenting inspections and inventory.

Parsons& Brinkerhoff, Inc. General Research Staffing: Building Inspector for NYCHA - SCA projects. Performed condition assessment surveys for residential and commercial structures to determine cause of damages and identify deficiencies that require maintenance, repair or replacement. Maintained accuracy and consistency of inspections by implementing appropriate quality control and quality assurance measures; including the use of checklists to ensure uniformity and completeness. Analyzed information including notes and photographs detailing deterioration that could potentially reduce structural load capacity or create maintenance issues.

Gnome Group - Onsite Staffing Agency: Construction Supervisor. Developed a $12 million worldwide fiber network interfacing with client management. Acted as First Liaison between main office and field contractors, Oversaw the preparation of project records in accordance with client's QC manual and other

Jose Amador continued

regulatory standards Interface with Construction Manager and Resident Engineer on all facets of the project Manage inspection staff, including sub-consultants .Checked daily reports and quantity calculations. Also, prepared project status/progress reports, assisted project management with document control, coordinated receipt of material certifications and reviewed material that was being used. Reviewed contractor's payment request for final approval, provided construction site supervision, and quality control, performed different sites visit to determine design constraints with specifications and city building regulations. Due to the nature of the project, special emphasis was given to low voltage installation and fire suppression, pre-action and gas system. Monitored costs and progress, ensuring project completion within budget and deadlines. Coordinated final inspections and review all laboratory results to successfully turn project over to ownership.

Haider Engineering, P.C.: Construction inspector for NYCHA projects. Performed field inspection for major construction repairs on building renovations. Surveyed and recommended corrective action for structural defects in existing building conditions approved final workmanship and payment requisitions submitted by contractor. Prepared daily progress reports, scheduled meetings and initiated memos to contractors as needed.

Barbara Thayer P.C.: Construction inspector for NYCDDC, NYC-DOT, MTA, Amtrak and NYSDOT projects. Worked directly with local building officials on road construction to supervise quality control and adherence to specifications, duties included the rehabilitation of the architectural and structural issues on overpass street bridges in Brooklyn and Queens, maintenance issues, paint system, scour control, street lighting, and the structural elements of the entire bridge. Maintained and protected of traffic (MPT). Oversaw safe guards on environmental activities. Lead paint and asbestos removal. Removal of existing overlay and installation of T-41 Overlay (1/4"-1/2" overlay thickness). Repaired roadway, abutments and wing walls, railings, , including crack repair, waterproofing, modification of drainage systems, rehabilitations as well as new installations, ensured protection of landscaping during construction activities and inspection of pavement markings. Assisted the P.E. in the development of protocol, for control inspection procedures, for MTA and DOT bridges, handled placement of utilities including excavating and backfilling for proper installation of all pipe lines, was responsible for soil analysis classification, permeability and percolation index to determine the suitability of soil, testing of soil bearing capacity by roller method. Monitored placement of fabric for soil stability purpose. Conducted surveying for final as-built drawings. Inspection at the pre-cast facility and monitoring placement of pre-cast concrete deck panels in the field.

Samuel Bautista Inspector

Firm: SCI Engineering, P.C.

Education
BS/1983/Civil Engineering, Feati University, Manila, Philippines

Registrations
Registered Civil Engineer (Philippines License No: [redacted]

Certifications
ACI Concrete Field Testing Technician- Grade I
ACI Concrete Construction Special Inspector
ICC Steel and Bolting Special Inspector
ICC Masonry Special Inspector
ICC Spray- Applied Fireproofing Special Inspector

Mr. Samuel Bautista is an experience Construction Inspector with over twenty years of experience in the construction industry. He has an extensive background in water supply system construction & maintenance, road and building construction & maintenance as well as in construction supervision. Sam has excellent interpersonal and relationship building abilities acquired from serving as a liaison between government officials, clients, consultants, contractors and the public. He has working knowledge of the industry standards and provisions, such as, ICC, ACI, AISC, ASTM, and the Asphalt Institute.

Cole Consulting, Inc, NY: Project inspector:

- **Construction of East River Plaza**, a commerical complex located at the corner of FDR Drive & 116 Street. Conducted daily inspection for precast erection and high strength grout appliaction.
- **Construction of the World Trade Center Memorial Project:** Performed reinforcing steel, formworks and concrete placement inspection for the construction of the slurry wall of the project.
- **Grouting of caissons at the United Nations CMP Project**.
- **Construction of 303 E 33rd Condominium**: Performed rebar, conrete placement and masonry inspection for the project.
- **Lincoln Center Redevelopment Project**: Conducted rebar, concrete placement, Steel erection, welding and bolting inspection for packages 5,6 abd 9 of the project.
- **United Nations CMP Project**: Conducted rebar, concrete placement, fireproofing, steel erection, welding and bolting inspection for the project.

Local Water Utilities Administration, Philippines: Resident engineer for the construction of various water supply system projects as well as the rehabilitation of existing water supply system facilities. Ensured that all construction plans and specifications were in accordance with Local Water Utilities Administration's (LWUA) specifications which embodies in part provisions of the American Water Works Association Statndards (AWWA), American Concrete Institute (ACI) and American Society on Testing of Materials (ASTM).

Ministry of Public Works and Highways, Philippines: Civil Engineer/Project Inspector. Performed Civil Engineering for the government agency charged with infrastructure development throughout the country; collaborated with consultants in the construction of highway and bridge projects.

Kwame Clouden Inspector

Firm: SCI Engineering, P.C.

Education

BS/Civil Engineering, City College of New York (in process)

AAS/2004/Civil Engineering, NYC Technical College

Certifications

ACI Concrete Construction Special Inspector

ACI Concrete Field Inspector Testing Technician – Grade I

OSHA 10-hr Safety Certified

Mr. Clouden has over seven years of experience as a concrete engineer and is a certified ACI Concrete Construction Special Inspector and Field Inspector- Grade I. Mr. Clouden is familiar with the testing standards and procedures of ACI, ASTM, and AASHTO and his responsibilities have included structural inspection, blue print reading, rebar inspection and the preparation of written reports.

Delta Testing Lab, Mount Vernon, NY: Civil Engineer Technician/ Inspector:

- Masonry Inspection
- On-site Concrete Inspection
- Structural Inspection • Blueprint Reading
- Rebar Inspection
- Preparation of Written Reports

Desimone Consultant Engineers, New York, NY: Civil Engineer Technician/ Inspector:

- On-site Concrete Inspection
- Construction of Control Charts
- Structural Inspection
- Blueprint Reading
- Rebar Inspection
- Preparation of Written Reports

New York State Dept. of Transportation (NYSDOT), Long Island City: Transportation Concrete Inspector

- Earthwork Inspection
- Asphalt Paving Inspection
- On-site Concrete Inspection
- Preparation of Written Reports
- Structural Inspection
- Materials Inspection
- Drainage Inspection
- Field Surveying

Illard Johnson

Inspector

Firm: SCI Engineering, P.C.

Education

BS/Civil Technology, Farmingdale University (in process)

AAS/1999/Civil Engineering, Nassau Community College

Certifications

ACI Concrete Field Testing Technician – Grade I

ACI Concrete Construction Special Inspector

Mr. Illard Johnson has over ten years experience in construction of highways and roads, as well as biennial bridge inspections, throughout New York. He has operated NYSDOT's Global positioning System (GPS) to map and chart bridges for input into the NYSDOT Bridge Inspection Information System (BISS). He was a part of one of the first teams to learn and operate the NYSDOT's Bridge Inspection Program and Pen Interface (BIPPI).

Route 9A – Westside Highway, New York State Department of Transportation (NYSDOT): Inspector currently working on emergency repairs on Route 9A. Duties entail identifying structural deficiencies along the highway for possible emergency repairs. Deficiencies may include but not limited to, roadway spalls, cracks, concrete barriers misalignment, sidewalk hazards/ deficiency and improper stoplight signaling, highway signs in need of repairs or replacement, pedestrian safety inspection along Rte 9A (Hudson River Park) including needs for proper fencing (pipe rail), WZTC "Work zone traffic control" .

Williamsburg Biennial Bridge Inspection, NYSDOT: Assistant team leader on the Williamsburg Bridge Biennial Inspection project, duties included Bridge Inspections from roadways, towers, cables and suspension cables. Conducted inspection for missing rivets and bolts, climbed bridges and monitored them, as well as provided calculations and measurements by using calipers and other engineering tools. Data input from the field.

CB Construction, Great Neck, NY: Construction Technician. Laid concrete and form work. Worked on erected beams and rafters, roofing plies, wall studs, wood piles, sheetrock and stairs; laid concrete and form work for concrete, measured and cut sheetrock, wood piles, siding, flooring, and sub flooring.

Reconstruction of Robert Moses Causeway, NYSDOT: Construction Inspector. Supervised bridge rehabilitation and reconstruction for the Robert Moses Causeway, responsibilities consisted of compiling and submitting a work log and bridge rehabilitation progress report on a daily basis.

Queens County Biennial Bridge Inspection: Assistant Team Leader. Drafted condition plans of bridge components and performed calculation for concrete abutments and pier constructions; attended State conferences and courses on Bridge and Highway Construction and Inspection.

Rochelle Lancey Inspector

Firm: SCI Engineering, P.C.

Education
City College School of Architecture, New York, NY

Certifications
ACI Concrete Construction Special Inspector
ICC Structural Masonry Special Inspector
EIC Path Railway System

Ms. Rochelle Lancey is a highly skilled professional with over 20 years of combined experience in the construction industry working as a resident engineer, inspector and project manager.

WTC Towers: Senior inspector on WTC Towers 1, 3 & 4 under the direction of Port Authority resident engineer:

- Observed and reported on contract civil work
- Prepared a daily report on safety observations
- Coordinated inspection of architectural finishes
- WTC Tower 1: Foundation, footings and concrete columns were being completed, and the work in basement levels zones B, B3, and elevator core had begun. Specific duties included observing and documenting the work of Laquilla dn Collavino.
- WTC Towers 3 & 4: Observed and reported on blasting operations, excavation to grade, and subsequent concrete and rebar installations for footings, slabs and shear walls. Monitored rock anchor and caisson drilling, installation and testing.
- Reviewed Tishman's daily reports for accuracy. Participated in meetings prior to and during blasting operations.

NYC DDC, Long Island City: Project Manager for projects in a variety of settings, including: firehouses, police and fire facilities, schoold and community centers. Managed projects and budgets ranging from $1M - $15M. Partial list of projects

- NYPA Property Clerk Storehouse-interior and exterior restoration and security systems
- NYPA CRS-Rooftop parking replacement, skylights
- Maspheth Town Hall – Historic interior and exterior restoration, windows, underground drainage landscaping and playgrounds, new electric, HVAC, sprinkler and security system
- Montessori Learning Center – new roof and rooftop playground, interior upgrade and HVAC

New York City Department of General Services / Bureau of Construction (DGS/BOC): Construction Project Manager/Resident Engineer. Partial list of projects:

- NY Aquarium Discovery Cove – New Building for aquatic exhibits
- Grand Army Plaza Library- New administrative wing
- DOT Bridge Repair Facility – Demo and rebuild two story occupied structure

Omont McBride

Inspector

Firm: SCI Engineering, P.C.

Education

BA/1997/Human Relations, University of Pittsburg at Bradford

Certifications

ACI Concrete Field Testing Technician- Grade I
ACI Concrete Construction Special Inspector
ICC Structural Masonry Special Inspector
NICET Level I in soils, asphalt, and concrete
10 hour OSHA site safety
QC Resource Training

Mr. Omont McBride is a result driven/ professional project coordinator and inspector with a strong background supervising projects in diverse environments. He is ACI level I & II certified and has knowledge of fire stopping, fireproofing, curtain wall, welding, vibration monitoring, pile driving, lateral, uplift, and static load tests.

Testwell Laboratories, Inc., Ossining, NY: Project Coordinator and Inspector. Monitored the controlled inspections for pile driving, concrete, rebar, masonry, welding, bolting, fire-stopping, fireproofing, curtain wall and plumbing. Supervise controlled inspection activities on various projects.

Jetblue Airways, Terminal at JFK Airport, Jamaica, NY: Project Coordinator and Inspector. Monitored the controlled inspections for pile driving, concrete, rebar, masonry, welding, bolting, fire-stopping, fireproofing, curtain wall and plumbing. Performed inspections of construction activities to ensure conformance with approved designs/plans. Monitored project cost and schedule performance against Jetblue's Accepted Program.

380 Redevelopment, Terminal I: Project Coordinator and Inspector. Monitored the controlled inspections for pile driving, concrete, rebar, masonry, welding, bolting, fire-stopping, fireproofing, curtain wall and plumbing. Hired by Av Air Pros Services to oversee the project with CM (VRH Construction). Controlled all inspections from foundation, core and shell of each Gate constructed.

Multi-tenant Cargo Facility Tract 8 & 9A: Project Coordinator and Inspector. Monitored the controlled inspections for pile driving, concrete, rebar, masonry, welding, bolting, fire-stopping, fireproofing, curtain wall and plumbing. Assisted the project manager with the daily activities and schedule. Responsible for masonry, rebar, concrete, hydrostatic testing, hydrant flow testing, gas leak testing, duct leak testing, and curtain wall.

Borgata Casino North Expansion Project, Atlantic City, NJ: Project Coordinator and Inspector. Monitored the controlled inspections for pile driving, concrete, rebar, masonry, welding, bolting, fire-stopping, fireproofing, curtain wall and plumbing. Monitored field staff and daily activities. Ensured that all inspections were done according to specs and code.

Newark International Airport, Terminal C Parking Garage: Project Coordinator and Inspector. Provided oversight of responsible for load tests, pile driving, concrete, rebar, masonry, and curtain wall.

Orville McPherson

Inspector

Firm: SCI Engineering, P.C.

Education

BS/2000/Mechanical Engineering, New Jersey Institute of Technology

Certifications

ACI Concrete Field Testing Technician- Grade I

ACI Concrete Construction Special Inspector

Professional Associations

American Society of Mechanical Engineers

Mr. McPherson is a highly motivated certified ACI Concrete Construction Special Inspector with eight years of experience in the construction industry.

Distinct Engineering Solutions, Inc., North Brunswick, NJ: Engineer/ Inspector. Performed field survey to determine the structural integrity of various buildings using building codes to ensure that the structures were safe. Provided AutoCAD drawings to ensure clarity to determine the areas of structures that may require improvement. Inspected rebar and concrete on structures for various structures using engineering skills to ensure they were in compliance with specifications, building codes, and othert regualtions. Performed slump, air content, unit weight and temperature tests to ensure the concrete were adequate, reliable and within contract requirements.

Axis Design Group International, Newark, NJ: Engineer/Field Inspector. Inspected rebar and concrete on structures using engineering skills to ensure structures were in compliance with specifications, building codes, and other regulations which resulted in structures being safer and more reliable. Used AutoCAD to draft steel for various structures which resulted in about 15% savings in time and money because the structures were safe and xconflicts were resoloved quickly. Worked as an assistant Project Manager, assisted in coordinating the MEP drawing with the different subcontractors which resulted in at least a 10% savbings in time and money because problems between the subcontractors were resolverd early and effficiently. Reviewed and revised shop drawings to ensure that the lathers, steel designers, and other trades were in accordance with the scope of work.

Trematore Plumbing and Heating, Fairfield, NJ: Designer/Engineer. Used AutoCAD to design plumbing for various buildings including schools, apartments, companies, etc; which resulted in about a 20% savings in time and money because conflicts with other trades were resolved quickly. Re-designed and revised architectural and engineering drawings for specific projects which saved time and money in terms of coordination because intial problems were resolved early. Designed plumbing for Extreme Make Over: Home Edition 2006 season finale episode which made the house safer and more efficient. Made detailed drawings which includes diagrams, floor plans, detailed piping/equipment connections, etc. Trained new employees in AutoCAD.

Mahfuzur Mowla

Inspector

Firm: SCI Engineering, P.C.

Education

BS/Facility Management, New York City College of Technology (in process)

AAS/Civil Engineering, New York City College of Technology

AAS/Construction Management, New York City of Technology

Certifications

ACI Concrete Field Testing Technician- Grade I

ACI Concrete Construction Special Inspector

OSHA 10 Hours

NICET: Material Testing Method- Level I

USNRT: Radiation Safety – Nuclear densometer

Mr. Mowla is a construction inspector with four years experience in the construction industry. He is currently certified by the American Concrete Institute as a Concrete Field Testing Technician and Concrete Special Inspector. Mahfuzur also holds a NICET I certification in Material Testing as well as USNRT in Radiation Safety.

Independent Testing Labs and Delta Testing Labs: Field Technician Lab Manager. Responsibilities consist of ensuring field technicians are properly trained, ensuring job coverage and overseeing their performance in the field and in the laboratory.

Concrete, Mortar, & Grout Inspection:

- Determining P.S.I. using the Windsor Pin Test System
- Determining P.S.I. using the Windsor Probe Test System
- Determining Slump using Slump Cone
- Obtaining Air Percent in Concrete utilizing Air Pressure Pot
- Obtaining Concrete Core Samples using Concrete Coring Drilling Equipment
- Concrete Batch Plant Inspection
- Masonry
- Core drilling

Steel Inspection:

- Rebar Inspection
- Bolting Inspection
- Fire stopping Inspection
- Load test

Soil Inspection:

- Soil Compaction using Nuclear Densometer / Sand Cone.
- Determining Soil Bearing Capacity using the Windsor Penetrometer
- Sub grade Inspection.

Laboratory Testing:

- Wash Sieve Analysis
- 5 point proctor
- Compressive strength of concrete materials
- Calibration of various gauges
- Soil classification (soil boring)
- Air content (concrete)
- Unit Weight test
- Brick Absorption test.
- Plastic Limit, Liquid Limit.

John Sterlace Inspector

Firm: SCI Engineering, P.C.

Education

North Rockland High School, Thiells, NY (1998-2002)

Certifications

ACI Concrete Field Testing Technician- Grade I
ACI Concrete Construction Special Inspector
ACI Aggregates for Concrete
Troxler Nuclear density Gauge

Mr. Sterlace is an ACI certified construction inspector, who has gained experience working on New York State Department of Transportation (NYSDOT), Dormitory Authority State of New York (DASNY) and New York City Department of Environmental Protection (NYCDEP) inspection projects.

Tectonic Engineering Consultants, P.C.: Construction inspector for civil/ site work for NYCDEP, NYSDOT & DASNY

- Material inspection and testing of concrete, asphalt, soils, steel according to specifications
- Perform concrete batch plant inspection of aggreagates and materials in conrete load
- Document the duties of controlled inspections

Michael Suazo, PE

Inspector

Firm: SCI Engineering, P.C.

Education

B.S., in Civil Engineering, Mindanao State University, Marawi City Philippines

Licenses

Professional Engineer: Philippines (License [redacted])
Environmental Planner: Philippines (License [redacted])
Safety Officer (License [redacted])

Certifications

ACI Concrete Field Testing Technician- Grade I
ACI Concrete Construction Special Inspector
30- HR OSHA
Certified Welding Inspector

Training

Maintenance and Protection of Traffic (NYSDOT)
Lead Health and Safety (NYSDOT)
Construction Materials Quality Control (Phil. Institute of Civil Engineers)

Mr. Suazo is a construction inspector with over nine years of experience in the construction industry. He is an ACI certified Inspector that is experienced in sidewalks, water mains, sanitary sewers building structures and bridge inspections.

NYC Department of Environmental Protection (DEP): Assistant Civil Engineer. Supervised construction of water mains, sanitary, storm and combined sewers throughout the 5 boroughs of NYC. Duties consisted of the supervision of trench excavation, shoring, stone bedding with filter fabric and concreting of cradle; installation of sewer and water main pipes and fittings, spurs, gate valves, hydrant and manholes; backfilling and compaction/temporary pavement; pavement restortation. Composed inspection reports and checked as-built drawings. Composed and sent letters to contractors realting to the project execution. Enforced safety measures during construction.

WSP Cantoe Seinuk Structual Engineers: Field engineer in high rise building construction. Supervision in reinforcement and concrete placement for pipe piles, pile caps, grade and strap beams, slab on grade, mud slab, shear / foundation wall, foundation footings, elevator core wall, tie/link/upturned/ring beams, colums, posts, parapers, curbs, aprking ramps, bulk head and floor slabs, to ensure conformance with structural, architectural drawings and specification. Monitored, checked and enforced safety progrfam of the company during construction.

Delta Testing Laboratories: Construction inspector for pier and building construction. Coordinated with project superintendents and construction managers regarding inspection for reinforcement, masonry, and concrete placement. Reviewed structral, architectural shop drawings, submittals and specifications prior to inspection. Wrote inspection reports and enforced safety measures during construction.

Tectonic Engineering Consultants: Construction Inspector. Coordinated construction work by contractors to assure compliance with contract documents and ensured safety. Supervised inspection work in the rehabilitation of sanitary and combined sewers using DEP approved lining methods (Contract # SELCDDC01) throughout the five boroughs. Conducted batch plant inspection sievw analysis and calculated required information for NYC Transit Authority and Dept. of Environmental Protection (DEP) concrete inspection tickets for concrete batched, and coordination with NYCTA and DEP project engineer and dispatcher with regards to concrete batching.

Section F
Rates

Name	Title	Firm	Hourly Rate
Achille Niro, PE	Principal	AECOM	225.00*
Nicholas DiGregorio	Project Manager	AECOM	99.55
Antonio Rosciglione, AIA	Construction Manager	AECOM	64.40
Frank Cienski, PE	Construction Safety Engineer	AECOM	55.44
Warren Gaskill	Construction Safety Engineer	AECOM	61.47
John Dineen	Contract Administrator	AECOM	48.28
John Kovac, PE	Cost Estimator	AECOM	62.55
Boris Lenderman	Cost Estimator	AECOM	60.10
George Greenberg, PE	Scheduler	AECOM	59.17
Erik Lange	Scheduler	AECOM	44.89
Johan Leurdijk	Scheduler	AECOM	68.63
John Sidorowicz	Scheduler	AECOM	56.04
Teddy Yime, PE	Scheduler	AECOM	53.48
Christopher Curtis, PE	Structural Engineer	AECOM	44.96
John Daza, PE	Structural Engineer	AECOM	52.13
Hasan Abdallah, PE	Resident Engineer	AECOM	51.11
Roland Abi Nader	Resident Engineer	AECOM	46.75
Paul Menzel, PE	Resident Engineer	AECOM	58.89
Paul Mortenson, PE	Resident Engineer	AECOM	57.68
Steve O'Malley, PE	Resident Engineer	AECOM	55.73
Munaf Patel, PE	Resident Engineer	AECOM	41.34
Richard Rohr, PE	Resident Engineer	AECOM	72.51
Henry Shen, PE	Resident Engineer	AECOM	57.90
David Karpis	Office Engineer	AECOM	38.25
Vyacheslav Kogan	Office Engineer	AECOM	31.37
Kayad Altuwal	Field Engineer	AECOM	57.65
Joseph Cossentino	Field Engineer	AECOM	54.80
Sergey Abramov	Inspector	AECOM	36.36
Izu Aigbogun	Inspector	AECOM	42.16

*billing rate

Name	Title	Firm	Hourly Rate
Shakeel Amray	Inspector	AECOM	32.54
Marlon Belfor	Inspector	AECOM	43.54
Yury Benyaminov	Inspector	AECOM	44.04
Geoffrey Cohen	Inspector	AECOM	47.35
Hanif Contractor	Inspector	AECOM	42.28
Michael Farruggia	Inspector	AECOM	46.56
Edward Fortyz	Inspector	AECOM	49.10
Manuel Galarza	Inspector	AECOM	37.16
Vincent Kinlan, PE	Inspector	AECOM	51.20
Ron MacPherson	Inspector	AECOM	45.25
Oscar Maya	Inspector	AECOM	42.03
Aharon McIver	Inspector	AECOM	40.84
Ralph Montoya	Inspector	AECOM	30.09
Angel Morales	Inspector	AECOM	44.88
Ion Panaitescu-Neata	Inspector	AECOM	40.44
Kanti Patel	Inspector	AECOM	54.01
Kervin Ramos	Inspector	AECOM	39.92
Nurul Sadat, PE	Inspector	AECOM	48.96
Denis Shatokhin	Inspector	AECOM	26.78
Mike Slavin	Inspector	AECOM	50.76
Isaac Stokes	Inspector	AECOM	44.88
Stephen Chaya	Construction Manager	Tishman	73.65
Steve D'Alessandro	Construction Manager	Tishman	91.15
Hugh Leung	Construction Manager	Tishman	49.48
Joe Roque, LEED AP	Construction Manager	Tishman	69.01
William Smith	Construction Manager	Tishman	68.93
Joseph Calise	Inspector	Tishman	52.86
Carmine Castellano	Inspector	Tishman	60.36
Peter Pena	Inspector	Tishman	54.54
Philip Taranto	Inspector	Tishman	33.85
Alfredo Troetsch	Inspector	Tishman	66.15
Francisco Gonzalez	Contract Administrator	Tishman	36.67
Abby Martin	Contract Administrator	Tishman	48.96
Khurram Ahmad	Scheduler	Tishman	81.67
Chris Seliga	Scheduler	Tishman	90.31
Ed Bubias	Estimator	Tishman	67.97

Name	Title	Firm	Hourly Rate
Jimmy Diamantopoulos	Estimator	Tishman	98.71
Robert Baptiste	Field Engineer	Tishman	33.33
Tom Ryan	Field Engineer	Tishman	47.66
Patrick Wong	Field Engineer	Tishman	33.33
Thiru Srinivasan, PE	Constr. Mgr/Resident Engineer	IH Engineers	63.00
Maksudur Rahman	Inspector	IH Engineers	38.05
Mohammad A. Shaikhji	Inspector	IH Engineers	41.00
Robert Rasmussen	Construction Manager	Industria	52.00
Douglas Johansen	Construction Manager	Industria	64.00
Christine Collins	Office Engineer	Industria	31.00
George DeCristoforo	Inspector	Industria	52.00
Tim Tabor	Inspector	Industria	45.00
James Dergin, LEED AP	MEP Inspector	Industria	54.00
Harry Stocker	MEP Inspector	Industria	45.00
Scott DiStefano	Jr. Mechanical Engineer	Industria	32.50
Jim Adam	Cost Estimator	Industria	50.00
Omer A. Sanchez	Cost Estimator	Industria	44.00
Sheketa Daniels	Administrative Assistant	Industria	27.50
Kathleen Wittrock	Administrative Assistant	Industria	27.50
Czirjak, William	Construction Inspector	LPE Enterprises	50.00
Ghazaly, Saber	Construction Inspector	LPE Enterprises	45.00
Nunez, Leonardo	Construction Inspector	LPE Enterprises	44.00
Khalid Algende, PE	Construction Inspector	SCI Engineering	60.00
Jose Amador	Construction Inspector	SCI Engineering	38.00
Samuel Bautista	Construction Inspector	SCI Engineering	35.00
Kwame Clouden	Construction Inspector	SCI Engineering	30.00
Illard Johnson	Construction Inspector	SCI Engineering	30.00
Rochelle Lancey	Construction Inspector	SCI Engineering	55.00
Omont McBride	Construction Inspector	SCI Engineering	48.00
Orville McPherson	Construction Inspector	SCI Engineering	27.00
Mike Mowla	Construction Inspector	SCI Engineering	40.00
John Sterlace	Construction Inspector	SCI Engineering	25.00
Michael Suazo, PE	Construction Inspector	SCI Engineering	40.00

Section G
Firm Qualifications and Experience

AECOM is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 45,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation and technical excellence in delivering solutions that create, enhance and sustain the world's built, natural, and social environments. A *Fortune 500* company, AECOM serves clients in approximately 125 countries and had revenue of $7.3 billion during the 12 months ended March 31, 2011.

A Leader in Construction Management

AECOM's construction management team helps clients deliver their projects on time and within budget. With one of the largest groups of Certified Construction Managers in the industry, AECOM excels at managing the entire construction process, from pre-design through occupancy. We work to streamline the construction process, controlling costs, schedule and scope of work without compromising quality. Throughout a project's duration, AECOM's program and project managers act as agents for the owner, on site and integral to all construction services. AECOM has the proven track record delivering results that inspire confidence in our clients and partners. The value delivered to our clients is measured through quantifiable savings in time and money.

With Global and Local Experience

AECOM USA, Inc. brings to this assignment comprehensive national and local construction inspection experience. AECOM, a leader in the delivery of transportation and construction management projects

in the United States, has more than 6000 employees working in 28 major offices. A global powerhouse in transportation infrastructure with over 80 years of experience, AECOM has managed some of the most significant transportation construction management, project management, planning and design projects, including ITS, in the United States. With its corporate headquarters in New York City and several other offices throughout the NY/NJ Metropolitan area, AECOM combines a global and national strength, knowledge base and commitment with a large local presence. Our local staff includes roughly 600 professionals and support staff approximately half of whom are construction specialists working on the area's busiest transportation facilities.

Proven on Call-in Assignments

AECOM has the depth and breadth of resources to respond to any task request, as approximately 20% of our local workload emanates from our on call contracts. We have structured ourselves to be able to efficiently respond to our transportation clients within this type of project delivery system. Locally, we have significant experience providing services on a call-in, on-call, as-needed basis for a variety of transportation agencies for both design and construction management/inspection services. This is clearly evident by our current and previous assignments for local agencies, including the Port Authority.

AECOM was under contract under the previous CM call-in agreement (#410-06-013 Construction Management services on a "Call-in" Basis During 2006 – 2010).

Other call-in assignments include:

Port Authority of New York and New Jersey: AECOM is currently providing As-Needed services for Program Management, Aviation Planning, General Planning, Civil Rail Design, PATH Planning, and Security Design.

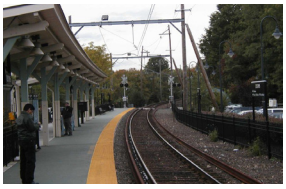
NYSDOT, Region 11: AECOM has participated in the realization of numerous high-profile CI projects such as the current $69 million reconstruction of the Route 9A Promenade (West Street); the $80 million construction of 9A, segment 5; the $70 million rehabilitation of the Miller Highway Viaduct, from 57th to 74th Streets; the $60 million construction of the Oak Point Rail Link Connector, and several construction inspection term agreements.

NJDOT (North region) Construction engineering and inspection services: As required, AECOM provided personnel including resident engineers and NICET-certified inspectors on a where and when basis to staff five state-funded construction contracts on a two-year term agreement. Project work included full depth milling and replacement of asphalt overlay, drainage, gutters, curbs and sidewalks.

MTA Bridges and Tunnels: AECOM has been working on this term agreement since 2004, which has involved a variety of construction and maintenance projects throughout the B&T network. Tasks (18 tasks to date) have included projects at the Triborough, Throgs Neck, Bronx-Whitestone and Verrazano-Narrows Bridges; as well as at the Queens-Midtown Tunnel.

MTA Metro-North Railroad: AECOM has provided construction supervision and design services under its general engineering consulting assignments for numerous projects, including station rehabilitations, grade crossing eliminations, commuter parking and line structure

MTA Long Island Rail Road: AECOM has provided both construction management and design services under its general engineering consulting contract for a number of projects, including undergrade bridge inspection, value engineering studies, structural bridge design and track design.



New Jersey Transit: AECOM has provided General Engineering Consulting services for bridge and rail projects under two contracts involving, to date, six assignments.

AECOM has been successful at responding efficiently to any task request—about 20% of our local workload emanates from our call-in contracts.

A Local Team with Qualified Available Resources

To supplement our resources, AECOM has assembled a team of local firms to support us on this assignment.

An Ideal Partner in Construction Management

Tishman Construction

Our primary subconsultant, Tishman Construction, is headquartered in New York City and recently merged with AECOM to enhance our global resources in construction management, particularly in the NY/NJ Metropolitan area. Tishman is responsible for the construction of more than 450 million square feet of space, incorporating facilities of every size and type, including arts and culture, commercial, convention centers, education, gaming, government, healthcare, hospitality, residential, retail, sports and leisure, technology and transportation.

AECOM

Prime, *responsible for project execution, allocation and assignment of construction management personnel and resources*

TISHMAN

Specialty Subconsultant *chosen for their prior experience on PANYNJ projects and recognized expertise in construction management*

IH Engineers, P.C. (MBE)
Industria, Inc. (MBE)
LPE Enterprises (WBE)
SCI Engineering, P.C. (MBE)

M/WBE Subconsultants *selected to meet the Authority's goals and to perform meaningful roles as needed based on their prior experience on PANYNJ and NY/NJ area construction projects*

Tishman is very well prepared to provide professional construction management and related technical services to the Port Authority of New York & New Jersey because the firm is successfully managing several active construction projects with the Port Authority at the present time, including:

Port Authority Capital Security Program: Construction Manager for a $230-million Security Capital Program, which incorporates more than 30 projects at multiple PANYNJ facilities, including airports, PATH tunnels and stations, bridges and tunnels, and the bus terminal in Times Square.

One World Trade Center: Managing the construction of this building, which will be the city's tallest at 1,776 feet upon completion.

World Trade Center Transportation Hub: CM in a joint venture with Turner to build the PATH terminal.

World Trade Center Vehicular Security Center: CM for center that will protect the World Trade Center site by using the latest in proven technologies.

Meeting the Authority's M/WBE goals with Recognized Local Partners

Our team also includes the following qualified, local MBE/WBE firms, with whom we have worked in the past and who will allow us to meet or exceed the authority's M/WBE participation goals without sacrificing quality in the performance of the work.

IH Engineers, P.C.

IH Engineers is a growing MBE/SBE firm that has been providing quality consulting engineering services in the tri-state area for over a decade. The firm's staff of over 70 professional engineers, inspectors, and technicians is trained in current standards for inspection and design, and utilizes the most current practices and analytical software applications. IH has over 35 construction management and inspection personnel in the NY/NJ area with a wide variety of construction experience that includes both large and small scale projects involving bridges, roadways, tunnels, and facilities.

Industria, Inc.

Industria, a Port Authority-certified MBE, has provided professional services on real estate, construction and facility projects to private and municipal clients in New York for the past 16 years. The firm provides full construction management services or any component thereof. Industrial has played a major role on major Port Authority projects providing program management/construction consulting services to the Aviation Department at Newark Airport; constructibility, and cost services and program management on the World Trade Center Redevelopment Program; and currently, program management services on the Terminal B Modernization Program at Newark Airport

LPE Enterprises, Ltd.

LPE Enterprises is a New York-based WBE/DBE program management and construction management support services firm. The firm's staff members, many of whom have been with the company since its founding in 1988, have extensive expertise in such areas as office engineering, architectural drafting, contracts administration, construction inspection, estimating, document controls, and technical administrative services. Of particular relevance to the Authority's Call In Construction Management agreement is the fact that LPE personnel have been providing construction management support to Port Authority facilities for many years. Specifically, LPE staff are currently supporting the JFK, LGA, EWR and Teterboro Airport Resident Engineering offices under existing call-in agreements.

SCI Engineering, P.C.

SCI Engineering is a multi-disciplined professional engineering MBE firm, founded in 1981. SCI offers comprehensive engineering services that include bridge engineering, construction inspection, highway traffic and transportation and construction management. SCI's Construction Management division works with public entities including city, county and state governments as well as private developers and other engineering firms to ensure timely, practical and thorough solutions are implemented. The firm has been providing CM services to the Port Authority under a call-in agreement, which has included various tasks for the JetBlue and American Airlines terminals at JFK Airport.

Demonstrated Performance on Similar Projects

Our previous experience is demonstrated by the many successful similar assignments we have performed for the Port Authority and other NY/NJ agencies. Representative examples are described below:

Project Title	Client Contact	Dates/Cost
Call-in Construction Management Services for 2006-2010 NY/NJ	Port Authority of NY & NJ William Kehoe [redacted]	Compl: 2010 $4.5 million (fee)

Project Description and Highlights

AECOM has provided services on an extension of staff basis to the Authority AECOM has submitted proposals on over 40 individual Task Requests ranging from construction inspectors to office engineers and contract auditors. With this procurement model AECOM has assisted the Authority in staffing projects and programs at their various facilities quickly and cost effectively. Staff selected for assignments is integrated into a project made up of Authority and consultants under the leadership of an Authority Resident Engineer and Engineer of Construction. AECOM provides communications and administrative support to our assigned staff to ensure and maintain their connections to AECOM's home office. To date AECOM has provided 14 staff including staff from our subconsultants on projects at all of the Authority's Line Departments. Also, AECOM is currently providing vehicles to the JFK Resident Engineer's Office for use by the CM staff to assist in their assignments.

Project Title	Client Contact	Dates/Cost
Security Capital Program Construction Management NY/NJ	Port Authority of NY & NJ John Drobny Security Program Director [redacted]	Compl: 2011 $230 million

Project Description and Highlights

AECOM is providing construction management and general contractor (CM/GC) services to facilitate the procurement, administration, and performance of the security capital program at various authority facilities, including work at JFK, LGA and EWR airports; the Bayonne Bridge and George Washington Bridge; and PATH. terminal. In a separate contract, Tishman is serving as CM/GC for a portion of the work that includes site excavation, shoring, installation of concrete barrier wall with granite architectural façade, bollards with railings, manual barrier gate, vehicular and pedestrian pathways, fencing, and landscaping.

Project Title	Client Contact	Dates/Cost
World Trade Center Vehicular Security Center NY, NY	Port Authority of NY & NJ Steven Plate [redacted]	Compl: 2014 $670 million

Project Description and Highlights

Tishman is providing CM services for the Vehicular Security Center (VSC) project that is being developed to protect new public investments at the WTC site by using the latest in proven technologies, including a vehicle scanning system, vehicle arrest devices, control gates, security booths, CCTV surveillance system and an Operations Office to provide off-street screening of vehicles entering the WTC Site.

Project Title	Client Contact	Dates/Cost
World Trade Center Transportation Hub NY, NY	Port Authority of NY & NJ Steven Plate [redacted]	Compl: 2014 $3 billion

Project Description and Highlights

Tishman, in a joint venture, has been contracted by the Port Authority to complete the construction of the new World Trade Center PATH Terminal, designed by AECOM in association with world-renowned architect Santiago Calatrava.

Project Title	Client Contact	Dates/Cost
Call-in Program/Project Management Services **Contracts 1, 2 and 3** NJ/NY	Port Authority of NY & NJ John Drobny [redacted] Contract 1: 1998-2001; Contract 2: 2001-2004; Contract 3: 2007-2010	

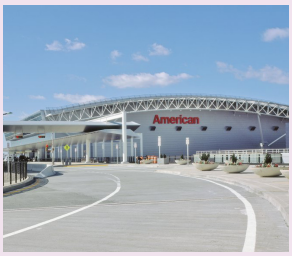
Project Description and Highlights

AECOM provided program/project management services to assist the PA in managing their Capital Program and Major Works Projects under 3 separate contracts. The project scope included providing project managers to be located at either the World Trade Center or the Technical Center, who were responsible for the day-to-day management of Port Authority projects. Project managers were provided to the Engineering Department to work with the various Line Departments including Aviation, Terminals Bridges & Tunnels, Port Commerce, PATH, World Trade Center, and Economic Development. Sample projects include JFK Delay Reduction and Bay Runway Rehabilitation; PATH Restoration of Exchange Place Station - Post-9/11; TB&T Bayonne Bridge Deck Rehabilitation; Holland Tunnel Architectural and Structural Rehabilitation; EWR Southern Access Roadway Project - 3 Contracts; Ports 6 Projects for New ExpressRail at Port Elizabeth; and many others.

Project Title	Client Contact	Dates/Cost
American Airlines Terminal at JFK Airport Jamaica, NY	American Airlines Corporate Real Estate Lewis Walling [redacted]	Compl: 2008 $1.3 billion

Project Description and Highlights

AECOM provided design, program management and construction administration services for this new $1.3-billion Terminal Complex located on a 42-acre site between Northwest and American Airlines' terminals. The new 2,278,000-square-foot, 56-gate project consists of a terminal and three concourses. The program management services included cost and schedule management, oversight of contracts, change management control, commissioning, and inspection and testing (QA/QC). Construction administration activities provided for A/E oversight of the work, response to RFIs, submittal coordination and review, and design changes in support of field construction and client requirements.



Project Title	Client Contact	Dates/Cost
Indefinite Quantity CM & Inspection Services Contract for the MTA Security Program NY, NY	MTA Capital Construction Tom Reed [redacted]	Compl: 2012 (cost see below)

Project Description and Highlights

AECOM has been contracted by MTA Capital Construction to provide construction management and inspection services for the MTA Capital Security Program projects on a task order basis. Services are provided during pre-construction, construction and close-out phases of projects at various facilities of Metropolitan Transportation Authority (MTA), including MTA New York City Transit (NYCT), MTA Long Island Rail Road (LIRR), MTA Metro North Railroad (MNR), MTA Bridges & Tunnels (formerly known as Triborough Bridge & Tunnel Authority), MTA Bus and Long Island Bus.

Construction work includes civil, structural, electrical, mechanical and architectural. The type of facilities to be retrofitted include tunnels, bridges, terminals and stations, various rail, bus, tunnel and bridge operation and maintenance facilities, storage yards, office buildings, communications , power and signal infrastructure.

Under this program, AECOM has been assigned the following construction management tasks:

- Times Square Station Perimeter Security: $5 million
- RFK/Triborough Bridge Structural Hardening: $50 million
- Penn Station Perimeter Security: $8 million

Project Title	Client Contact	Dates/Cost
Belt Parkway Bridges Brooklyn, NY	New York City Department of Transportation (NYCDOT) Andre Celestin [redacted]	Compl: 2011 $25 million

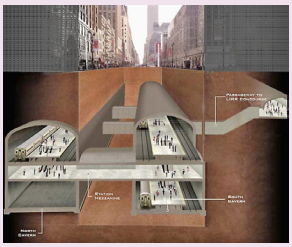
Project Description and Highlights

AECOM, in joint venture, is providing program management, resident engineering and construction inspection services for the reconstruction of seven bridges on the Belt Parkway. AECOM's program management services include constructibility reviews, scheduling of both design completion and construction, as well as the implementation of a community outreach program. The resident engineering and construction inspection services are focused on overseeing the actual construction, ensuring delivery of a quality project.

Project Title	Client Contact	Dates/Cost
Trans-Hudson Express Tunnel NY/NJ	New Jersey Transit with PANYNJ Art Silber, Project Director [redacted]	Compl: 2017 $8.7 billion

Project Description and Highlights

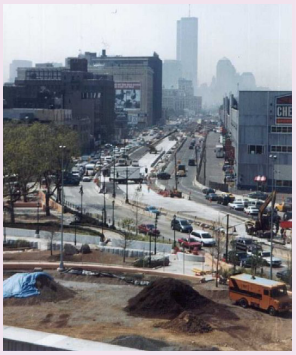
The Access to the Region's Core Trans-Hudson Express Tunnel project is a nine-mile long commuter rail service expansion, being developed by NJ Transit in partnership with the Port Authority. The CM Consortium, a joint venture of Tishman Construction, and two engineering firms, is serving as the project controls and construction management services consultant for THE Tunnel. The CM Consortium, along with the project's design team that includes AECOM, has completed a significant amount of planning work on the underground expansion of Penn Station.



Project Title	Client Contact	Dates/Cost
Route 9A, West Street Rehabilitation NY, NY	New York State Department of Transportation (NYSDOT) Manuel Silver [redacted]	Compl: 2001 $80 million

Project Description and Highlights

AECOM provided construction inspection services for the rehabilitation of 1.5 kilometers of Route 9A (West Street). Project work involved the replacement of the existing roadway, the installation of signalized intersections, a new drainage system to collect stormwater runoff, and new water mains. This project involved extensive public and private utility relocation work by the contractor. This project consisted of four principal stages which are further divided into approximately 25 substages. Each of these stages included several MPT configurations. The project also included A+B bidding incentives. During all stages of the construction, the public, potentially impacted agencies and commercial and residential concerns were addressed.



Project Title	Client Contact	Dates/Cost
Secaucus Interchange 15X Secaucus, NJ	New Jersey Turnpike Authority Ricardo McNeil [redacted]	Compl: 2007 $170 million

Project Description and Highlights

AECOM provided construction supervision services for the Secaucus Interchange-15X, the first new interchange to be constructed along the New Jersey Turnpike in 20 years. The new interchange provides direct access to the new Frank R. Lautenberg Rail Station and the proposed Allied Junction office complex The interchange includes a new toll plaza, including a utility building; and toll booths, including installation of the EZ-Pass and fiber-optic systems that interconnect with the existing NJ Turnpike functions. The team also performed constructibility reviews and developed a master schedule to integrate the current and future contracts. The construction was performed adjacent to, and in some cases in conjunction with, the work efforts by the NJ Transit contractors.

Section H
Management Approach

AECOM, along with our subconsultants, will deliver to The Port Authority of New York and New Jersey the staffing, knowledge, experience, and proven ability needed for the successful performance of Expert Professional Construction Management and Related Technical Services on a "Call-In" Basis for the Years 2011 through 2014. This expertise is demonstrated by the following key attributes of our team:

- **The knowledge we have gained of PANYNJ processes, procedures, and operations** from a long history of providing both design and construction services across almost all of your facilities.
- **The quality of the key individuals whose resumes are included in our proposal**, as well as the locally available team resource pool of close to 700 construction management professionals and support staff.
- **The diversity and complexity of construction projects that have been successfully undertaken** and completed by the members of our CM team.
- **Our success is due to our proven approach** to executing pre-construction, construction and post construction phases of assignments to which we have been tasked.
- **Our proven ability to provide professional construction management "Call-In" services** for a wide range of local transportation agencies with similar facilities and needs.

To undertake this critically important program for the Authority, we have designated Nicholas DiGregorio, as our project manager. Mr. DiGregorio is a vice president with AECOM with 38 years of construction management experience. Mr. DiGregorio has

served as project principal on many of the construction management and inspection projects mentioned within this proposal. Mr. DiGregorio has always worked closely with clients to ensure that their needs are met throughout the construction of their projects and will bring the same level of dedication to ensure that the Authority's program is completed on time, within budget, and with minimal impact on their facility operations.

Experience in Construction Management and Inspection Services on both a Project and a Call-In Basis

AECOM has been supporting the metropolitan region's public transportation agencies with professional engineering and construction management services to advance their capital construction and infrastructure needs by working on some of their most challenging and high profile projects for the past 75 years, and has been working for the PANYNJ for over 40 years. This has included services delivered on both a project specific basis and on a call-in basis. A sample of this experience is discussed in Section G: Firm Qualifications, on the resumes of the individuals proposed in Section E, and finally in the response to the specific tasks outlined in the RFP contained in this section.

Port Authority of New York and New Jersey
AECOM has provided Expert Professional Construction Management "Call-In" services for many years including the current Agreement for 2006 to 2010. Under this contract AECOM has provided construction management staffing directly or through its subconsultants for project assignments at Newark, LaGuardia, Stewart and JFK Airports, PATH, Port Commerce and TBT Facilities.

The most notable high profile strategic PANYNJ project that we have been a part of is the JFK Bay Runway 13R-31L Reconstruction Project. AECOM's scope of services included providing construction, project management and scheduling support services for the $300 million reconstruction of Runway 13R-31L, as well as 12 additional projects aimed to reduce runway delays. Activities included initiating, planning, executing, inspecting, monitoring and controlling, and closing of projects.

To meet the aggressive construction schedule, time-saving activities were utilized, such as building special dedicated roads for construction vehicles, preordering and storing materials, building two on-site concrete plants, and scheduling shifts around the clock, seven days a week to ensure the project met the four-month runway closure schedule.

In addition to rehabilitating the pavement, the 15,000 foot long runway was widened from 150 feet to 200 feet to accommodate the new, larger aircraft, such as the Airbus A380 and the Boeing 747-800. Two new high-speed exits, taxiways, and holding pads were also constructed to help reduce delays at the airport in the future. The Bay Runway's new concrete surface is expected to last 40 years, produce an estimated long-term savings of $500 million, and reduce the need for ongoing maintenance. The new enhancements are expected to reduce overall delays by an estimated 10,500 hours per year.

The runway project also includes new drainage and lighting, re-graded safety areas and a relocated patrol road. Sustainability elements of the project include reusing milled asphalt from the runway to rebuild access roads, treating storm water prior to discharge in a bio-swale, increasing the amount of fly ash in the concrete to reduce cement content, and using HDPE piping made from recycled material.

Re-opening runway 13R-31L three days early demonstrates AECOM's commitment to set the industry standard for client service, our passion to solving clients' problems in innovative and creative ways, and exploring new opportunities with them.

In addition to the knowledge of your facilities gained from our construction management and program management assignments, AECOM has also provided civil, architectural and structural engineering services as part of several "Call-In" Engineering Programs since their initial inception. In continuous service to the Authority over that timeframe, **AECOM has completed well over 100 design and construction support assignments with total construction value in excess of $400 million.** During the course of these contracts, **we have completed "Call-In" assignments at LaGuardia, JFK, Teterboro and Newark Airports, all of your bridge and tunnel facilities, including the George Washington Bridge; the three Staten Island Bridges—the Bayonne, Goethals and Outerbridge Crossing; the Lincoln and Holland Tunnels; the Port Authority Bus Terminal; PATH; and the NY and NJ Marine Terminals.** Each of our assignments has been performed within your established budgets and schedules, and to your complete satisfaction.

Through these years of service to the PANYNJ, AECOM has developed the knowledge and the understanding of what is necessary to effectively deliver capital construction and infrastructure improvement projects at each of your facilities, while minimizing impacts to facility operations. This knowledge and understanding will be critically important as we are tasked with constructibility, construction staging and scheduling assignments at your facilities. It will also be important as our construction inspection staff works closely with your facility personnel to ensure that the contractors they are monitoring comply with the staging and maintenance of traffic requirements specified by their contracts. It is only through all parties to the projects, AECOM staff, Authority personnel, and the Contractor understanding the importance of maintaining facility operations while completing their work in a quality manner that a successful project will be achieved.

Relevant Task Specific Experience

TASK A. Constructibility/Bidability and General Engineering Review

AECOM has been at the forefront in using our construction management expertise to assist our clients in improving project delivery by providing independent reviews of their contract documents. More and more of our clients are recognizing that it is more cost effective to identify and rectify constructibility issues in their plans and specifications before contracts are awarded and avoid schedule delays and cost increases during construction.

Whether the project involves complex highway and bridge work, aviation, ports or transit/rail facilities, AECOM has demonstrated our ability to make a positive contribution to project delivery as a result of our constructibility and bidability reviews during the design phase. AECOM will apply our extensive construction knowledge and experience with planning, design, procurement, and field activities to achieve overall project objectives. Our team's construction management staff focuses its constructibility review to minimize potential change orders and enhance claims avoidance through a partnership developed with the designer to obtain the best possible design solutions. To accomplish these goals on behalf of the Authority our construction management team will implement the following constructibility approach:

- Become intimate with the project goals, design plans and specifications, and project site taking into consideration the means and methods of construction.
- Evaluate fabrication, transportation, and installation of preassembled contract components. Conduct a detailed site review to establish compatibility of the

design with existing facilities and construction site features.

- Review staging and phasing sequences to mitigate potential conflicts with protection of existing operations, removal/relocation of utilities, site access, safety and security.
- Review interface with other construction activities in the ares.
- Analyze the integration of force account work for projects oin the PATH system.
- Review available material and equipment, lay-down and storage areas.
- Consider the effects of seasonal weather conditions in regards to the construction activity sequence, logic and storage/lay-down accessibility, and operational concerns of each facility.
- Evaluate erection equipment to physical constraints and site limitations.
- Review the congested work areas, long constricted space with potential bottlenecks

In summary, a thorough Constructibility Review Program will provide full project analysis through planning and construction executions. Basic design approaches, which consider construction operations in sequence, will promote work efficiency, timely completion, budgetary control and safety. Constructibility is a major tool in meeting project objectives and goals.

Our team will review feasibility of the preliminary master schedule, including an analysis of contract durations. The schedule will be analyzed to identify critical ties to designs, procurement, interface with PATH force account work, and utility work force account activities. Additionally, our team will support the Authority in their coordination with third parties that may be involved in the project.

Claims Avoidance Recommendations

Services that our Team provides through preconstruction and construction revolve around claims avoidance. We will identify ambiguities and/or unconstructible items to minimize and/or eliminate potential changes and claims. Better documents enhance competitive bids, reduce the likelihood of changes or claims, and provide the best opportunity to complete the project on time and within budget.

TASK B. Construction Staging

While constructibility and bidability reviews can ferret out design flaws that can impact and potentially delay a project, a careful analysis of construction staging can result in substantial savings in construction schedules and result in cost savings to the Authority and reduced impacts to its facilities' operations and patrons.

A thorough and well developed construction staging plan is necessary for any successful construction project. AECOM is well aware of the flow and sequence of the many construction activities necessary to contract in an operating environment, such as the Authority's bridges, tunnels, airports, and PATH or port facilities. AECOM will review the staging plans developed by the design team with the input of the particular facility's operations, maintenance, police and security staff, as appropriate. If the design team has not prepared staging plans, AECOM in cooperation with the designers and facility input can prepare them. Construction staging plans will be developed in conjunction with the proposed construction schedule and in the process develop a greater level of detail for the proposed schedule.

In the development of staging plans all elements of the construction will be examined by AECOM to determine the impacts of availability of materials, long lead items, such as fabricated components and specialty equipment, operational restrictions, seasonal sensitive work, skilled labor availability, regulatory approvals and business agreements may have on the number of stages and their respective durations within the project.

In addition, special consideration will be given to construction logistics planning, which will have considerable impacts on the productivity and performance of the work including elements such as the following:

- contactor's staging area

- haul routes for materials delivery
- construction and security fencing
- stockpile locations
- parking for construction workers
- worker badging and security clearances by the Authority, state and federal agencies
- special conditions and precautions
- hours of work
- receipt of all necessary permits
- right of entry agreements if needed
- work to be performed by utility company forces
- for aviation projects access to aeronautical operating areas (AOA)
- for PATH projects track rights, availability of work trains and force account support

These are some of the many items that need to be examined as part of the construction staging development process. The AECOM staff is fully aware of these myriad issues that can have an adverse impact on any construction project and we will thoroughly vet these issues as part of the staging development activities.

Although we have demonstrated our ability to be proactive during design and find cost-effective and improved construction staging alternatives, the opportunity to positively impact project delivery doesn't end once the project is awarded. The Authority recognizes this by including as part of this task that we *"review construction staging and recommend changes, as appropriate, throughout the construction phases of the contract."* Throughout our experience providing construction management services we have been able to identify and recommend changes to construction staging and phasing during the course of projects, which have improved both the operating conditions at the project site, improved the construction schedule and/or reduced project cost. During construction, changes to the approved staging plans may originate from multiple sources, such as the contractor, operation staff, new business requirements, project scope changes, etc. When these situations arise AECOM will provide an expeditious evaluation of the proposed changes to determine the positive and negative consequences of the changes and make recommendations that will be in the best interests of the project and the Authority.

TASK C. Schedule Development and Monitoring

AECOM has expert professional staff dedicated to developing, reviewing and monitoring the progress schedules for major projects and programs. These scheduling specialists provide schedule development, monitoring, claims analysis and monthly reporting for all of the major transportation infrastructure projects managed by AECOM. Each of these projects has benefited from the proactive involvement of the firms' project control groups who monitor and create schedules, perform monthly reviews, propose schemes for mitigating adverse impacts and provide comprehensive monthly reports for project management.

For the past three years AECOM has provided scheduling services to the aviation project management staff to develop schedules for two major programs and a number of individual projects that were determined to be very important to the capital program.

Specifically our schedulers developed the master schedules for the reconstruction of the Bay Runway 13R-31L Reconstruction Project at JFK and the Terminal B Modernization Program at EWR.

These two scheduling efforts are notable because they were developed at the program master schedule level and included multiple project schedules from design thru to construction phases. These master schedules were used to monitor and control the multiple projects including those under construction where the contractors' schedules were integrated into the master schedule to evaluate the overall status of the program and if there were any adverse impacts wityh the contractors schedules.

The results that the Bay Runway scheduling and planning relative to the runway closure were flawlessly executed by all project team members are very well known within the Authority and the outside construction community. This is a great endorsement of the excellent scheduling support services AECOM has provided to the Authority.

AECOM schedulers are experienced in using Primavera P6 and implementing the software on projects and programs. They are experienced at developing program schedules, design schedules, design-build schedules and construction contract schedules. After acclimating themselves to a project, our schedulers will gather pertinent information to start the development of an initial project schedule. At the same time, they will develop a detailed work breakdown structure (WBS) and a cost structure that will be used on the project. The WBS and cost structure will be developed with input from project participants to ensure that it will reflect the project plan and the cost reporting structure. The WBS will include sections that track planning, design, constructibility review, contract bidding and construction.

The cost loading of the schedule will be developed in close association with the cost estimators. This will allow us to integrate the cost estimates directly into the schedule. Initially the schedule will be cost loaded at a high level using the WBS and as cost estimates are developed, the cost structure will be further detailed to allow more accurate projections. The estimates will be used to develop the cost structure of the schedule and the durations for schedule activities as construction schedules are developed for detailed constructability analysis. The cost loading will allow us to develop cost projections for the overall duration of the Project

For large programs an overall master schedule will be developed with placeholders for each planned project. This initial master schedule will layout the whole program from start to finish and will be used to monitor and update progress on a monthly basis. It will include design, constructibility analysis, contract packaging and construction activities so that we can monitor and achieve the project goals and milestones. The initial master schedule will be used to analyze and project construction workload, escalation factors for cost estimates and community impacts. As designs are developed, individual schedules for each project will be developed and linked to the master schedule and other schedules in the program. This will allow analysis of how each project affects other projects and the overall program with respect to time, cost and risk. Each individual project schedule will initially be developed based on the plan of the designers, the experience of the scheduler and the assumptions of the cost estimate. The initial schedule will be refined to a point where it can be used to analyze any alternatives that were developed during the constructibility review. The initial schedule and promising alternatives will be integrated into the master schedule to see how they affect the overall staging, duration and cost of the program.

The detail that we develop for the master schedule and the schedules for each segment will be used throughout the duration of the project. As the project switches from design and constructibility to construc-

tion, the framework of the master schedule, detailed WBS and segment schedules will be carried forward into construction. The master schedule will be used to track remaining design and constructibility reviews on other projects while the construction schedules from contractors will be integrated into the master schedule. This will allow us to track the impacts of the construction progress on the design and contract packaging of other projects. Also, informed decisions can be made on active construction projects with respect to value engineering proposals, stage changes and acceleration efforts to keep the overall program on schedule. The detail that we initially developed for each segment will be used to produce a schedule template and schedule narrative for each construction package. The schedule template can be used by contractors to develop their baseline schedules. The template will speed the process for the baseline schedule development considerably because the whole structure of the schedule including important milestones and activities that link to other aspects of the program will be prepared for each contractor. The schedule narrative will be used to explain the schedule template and how to develop the schedule. This is an important part of scheduling with Primavera P6 because it ensures the integrity of the database for the overall master schedule.

In summary, our schedule plan is to create a seamless cost loaded program master schedules to integrate all aspects of a project into one database. The master schedule will be used to track the overall progress of the whole project. Individual project schedules will be developed to determine project durations and contractual milestones. Project schedules will be used to analyze the impacts of constructibility alternatives to the overall program. Risk factors can and will be applied to critical aspects of the project to allow close monitoring. We will use the schedule as a tool throughout the duration of the project to analyze time, cost and risk.

A representative sample of construction projects where AECOM is currently providing construction management and scheduling support services on an extension of staff basis include the following:

- Delta JFK Redevelopment Program
- MTA On-Call CM Services
- Metro-North Railroad Croton-Harmon Shops
- Amtrak First Avenue Vent Shaft
- NJT Portal Bridge Capacity Enhancement (below left)
- MTA Bridges and Tunnels RFK Bridge Security Hardening (below center)
- NYSDOT Route 9A North (below right)
- NYSDOT Alexander Hamilton Bridge
- NYCDOT Belt Parkway Bridges Reconstruction
- NYCDOT East 78th Street Pedestrian Bridge
- NYCDOT BQE Bridges Painting
- NYCDDC Flushing Avenue
- NYCDDC Fordham Road
- NJDOT Route 3 over Passaic River
- NJDOT GSP Interchange 142 with I-78
- NJTA GSP Widening
- NJTA Turnpike Widening
- NYCEDC Hudson River Park
- NYCEDC Bush Terminal

TASK D. Quality Assurance Inspections

Between AECOM, Tishman Construction (our recent construction management acquisition) and our subconsultants, the team brings over 700 local, dedicated construction specialists to serve the needs of the Authority under this Call-In Program. Our proposed staffing includes resumes for personnel that not only typify the quality and quantity of our teams' resources, but will also be made available at various times during the term of the Authority CM contract. As an example, AECOM is overseeing the rehabilitation of various BQE bridges for NYCDOT we anticipate that staff reduction will begin in the first quarter of 2011 as the project draws closer to completion. These seasoned staff members will be available if the Authority requires support on their Tunnels and Bridges construction program.

A review of the resumes will further reveal that a vast majority of the key staff has directly relevant CM experience for projects covering a wide range of disciplines, including highway/bridge, transit/rail, aviation, marine and other transportation facilities.

There is no area of construction management at any of your facilities where the AECOM team hasn't established a reputation of excellence; whether its work at JFK, EWR, LGA, PATH or at your port facilities.

When the Authority asks AECOM to provide inspection services to ensure compliance and conformance with all construction contract requirements their expectations and requirements are relatively simple. Provide trained, competent and experienced construction inspection staff that understand the work they are monitoring, that understand the specifications that govern that work, and most important understand that the work is being performed at facilities whose main purpose is the efficient and effective movement of people and goods.

Through our construction management of work at facilities like American Airlines JFK Terminal 8, Gowanus Expressway, Route 9A, Belt Parkway, Brooklyn Bridge, NJ Turnpike, LaGuardia, Kennedy and Newark Airports our construction and design staff has earned their reputation for excellence. And in addition to working with our clients to build a quality project in a timely manner that reputation is in large part because our staff truly understands the importance of accomplishing those goals of quality and timeliness without sacrificing facility operations and minimizing the impact of construction on people and goods movement.

In every aspect of construction management, inspections and contract administration AECOM will provide trained, competent and experienced inspection staff to ensure compliance with the contract documents. Our staff's qualifications include professional engineers, ACI certified inspectors, ICC certified structural steel and bolting inspectors, AWS certified welding inspectors, NACE certified inspectors, NICET certified inspectors, lead and asbestos monitoring licensed inspectors, and MPT training certified inspectors.

TASK E. Contract Administration

The Authority needs to have total confidence in the technical and managerial talent of its CM consultants. The team must have the depth and breadth of resources to respond to any request for service, a clearly predefined and field-tested management plan and strong management capabilities to keep all project

activities on track. An indefinite quantity construction management program differs from a standard procurement in that the consultant needs to quickly react to the agency's request for services, and be able to be responsive to the widely varying needs and concerns that arise. Therefore, the program must be managed and staffed by seasoned personnel who are experienced with Authority design standards and each facility's operational constraints.

The AECOM team understands the nature of the work to be performed under this program and can effectively use our extensive experience and knowledge to accomplish any assignment successfully.

Management Structure

AECOM has developed a field-tested management approach to handle CM call-in task services. This approach has been developed based on our experience working with many different programs and agencies, but especially through AECOM's work for the Authority. With client input, we continue to improve and refine our approach. At the top of our agenda is a clear and distinct approach that delineates project responsibilities and provides for accountability. By keeping all of the individual roles distinct, we have learned to avoid many of the pitfalls associated with performing project work under an aggressive time schedule and meeting the demands of all of the concerned departments within the agency.

Project Planning

Upon receiving a task order from the Authority, our project manager, Nick DiGregorio, will begin the planning and scheduling activities necessary to prepare a proposal for work to be performed under the task. He will outline the task activities and allocate the necessary resources to effectively complete the task.

Project planning for each task will address the following questions:

- Which departments and facilities will be involved in the task scope of work?
- What is the work to be done?
- When is this work to be done?
- How much will the execution of the work cost?
- Who will perform the work?

By further defining the answers to these questions for each task, project management is given the opportunity to use all available manpower and resources to provide the most cost effective solutions for the Authority.

For task orders requesting construction management services on an extension of staff basis, Nick will evaluate all AECOM team staffing, including our subconsultants, that best meets the requirements defined by the Authority on a cost-effective basis, and multiple resumes will be submitted for evaluation and selection.

Project Definition: Upon contact from the Authority for the assignment of a specific project, we will conduct a meeting to define the project requirements. This will be accomplished by defining the methodology to be used during each task and activity. Project definition will be performed at the beginning of each project.

Project Staff Selection: We will select a project team from our large pool of qualified individuals including our subconsultants. This project team will consist of seasoned individuals with extensive relevant project experience. The project manager will coordinate a support staff of professionals highly qualified in their respective areas of expertise. The project team members will be selected based on the following criteria:

- Their technical skills and expertise
- Their familiarity with the project issues involved
- Their experience with the particular agency(s) or facility(s)
- Management and contract administration skills
- Project Controls expertise

Pre-construction Services

The AECOM team's proactive approach to preconstruction will be of tremendous benefit to any of the construction tasks to be assigned. We will use all of the knowledge and experience that the team's members bring. This will enable us to perform these services efficiently and effectively so that this work can

be moved quickly to the construction phase.

Constructibility Reviews: In accordance with task order requirements, a constructibility review may be performed by our experienced construction professionals, during the course of a design process and prior to design completion. This review will define the project construction needs and will pinpoint possible conflicts between the design and the actual construction requirements. The AECOM staff is highly knowledgeable of the construction climate and industry requirements in the New York metropolitan area. This review will also serve as a value engineering function, pre-defining methods to limit the cost of construction and reducing any construction conflicts that may lead to cost overruns without impeding a contractor's responsibility for valid means and methods.

During design development, senior construction managers will perform an independent review of the project plans, specifications and cost estimates in accordance with our quality assurance program. This method of quality control allows us to make a fresh independent and unbiased review of the project requirements. It is the responsibility of the reviewer to be as critical as possible, and it is the responsibility of the project manager and key professionals to address the issues raised by the reviewer.

Any recommended changes to the construction documents will include an evaluation of schedule, budget impacts to the construction contract and benefits of the recommendations. All findings during the pre-construction review will be discussed and coordinated with the Authority and the affected operating, maintenance units and divisions/departments so that all issues are properly resolved.

Procurement: The AECOM team will assist the Authority during the procurement process. This effort will include site tours, meetings, bid evaluation and technical advice to the selection committee.

We have successfully performed this role in the past on many projects, such as MTA Second Avenue Subway Project and currently on the Delta JFK Redevelopment Program.

Construction Cost Estimates: Independent construction cost estimates will be performed as required and will include Authority labor and force account estimates. The AECOM team has had extensive experience in performing detailed estimates of this kind.

Construction Services

Based on the requirements of the Authority and our prior project experience with all other agencies, we have developed a general approach to construction inspection, but will modify the approach according to each task that may arise under this program. In particular, we have taken into consideration the following key elements:

- Maintaining facility operations at all times
- Coordinating the Authority's interests with different public and private entities
- Working with a combined Authority/consultant project team

We will protect the interests of the Authority by requiring quality performance from the contractor chosen to perform the work. We will verify that all of the work is performed in accordance with design drawings and contract documents in a timely manner. We are, in particular, very sensitive to the maintenance of facility operations.

Similar to our recent experience with construction projects where transit service, bridge and facility operations must be maintained, AECOM will develop a work program, phasing plan and schedule as required to meet project goals in a safe and timely manner. We will maintain open, frequent and pro-active communication among the project team, Authority, the contractor, the designer, the community, public agency or private entities involved.

AECOM will give special consideration to minimizing interference of the contractor with facility operations. We will make special efforts to coordinate the requirements of the contractor and agency for track outages, lane closures, flagging and other force account and coordination of contract work that may involve facility tenants.

Project Control: The use of our internal project control system allows us to monitor and control the project elements. We will monitor project status by performing the following:

- Task progress actual and forecast
- Project progress determinations
- Project expenditure actual and forecast
- Overall schedule and budget conformance determinations
- Schedule status assessments, task-by-task
- Budget status assessments, task-by-task

These monitoring elements will be used on the larger, more complex projects to obtain milestones, recognize project constraints and highlight any problem areas.

Schedule Control: Based on the project objectives and milestones specified in the scope of work, the baseline schedule will be monitored and updated on a monthly or biweekly basis. This schedule will indicate task status and the milestone deadline. By using this schedule control procedure, the AECOM team will identify any problem areas and take corrective steps before major project delays or cost overruns occur.

This schedule control method assures that the project submission and milestones are met while providing a continuous status of the work effort.

Budget Control: The cost plan will be controlled by estimating task/activity expenditures on a task-by-task and overall project basis. The expenditures will be compared with the approved costs (earned value). This system allows us to carefully monitor costs to ensure tasks stay on budget as well as the overall project.

Project Coordination and Communication: In order to ensure that all other elements of both technical and managerial aspects of the project are met, an efficient coordination and communication effort will be employed internally, and between the project team and the Authority. One of the keys to AECOM's success over the life of on-call contract assignments has been our proactive approach to communicating critical project information. By making sure all concerned parties are informed, critical decisions are made in a timely manner to keep the tasks on schedule.

Project Meetings: The project team will hold regular internal coordination meetings throughout the life of each project. The project manager will run these meetings and all professionals assigned to the project will be in attendance. These meetings will allow the project team to discuss the following project aspects:

- Overall project progress
- Cost issues
- Contract change orders
- Schedule conformance
- Budget conformance

Also, AECOM will be responsible for recording and distributing the minutes of meetings. A draft copy will be submitted to the Authority for review and approval.

Mobilization: At the beginning of the project, we will assist the Authority in establishing responsibilities for the project team members, the contractor(s), the construction supervision and inspection teams, and other affected entities. We will develop and implement a comprehensive supervision plan and an outline of procedures covering all aspects of communication, coordination, distribution of project paperwork, schedule of meetings, organizational responsibilities and lines of authority for project personnel.

Work included in the course of this task involves the following detailed subtasks:

Review of Project Requirements – We will review all design documents, quality assurance plan, capital projects operating procedures, project management plan and the project management guidelines. We will also review design criteria for each of the projects and the construction contract documents. In this systematic manner, we will develop a complete understanding of all aspects of the construction efforts including the related environmental issues.

Tunnels/Bridges/Terminals/Transit/Airports/Port Operations – As discussed in an earlier section, AECOM has extensive experience working in or around the daily operation of Authority facilities, obtained on projects performed at all of your airports, all of your bridge and tunnel facilities, the Port Authority Bus Terminal and port facili-

ties. Our current assignment on the PATH Planning and Oversight contract has given us extensive insight and involvement with the PATH system.

AECOM staff has been working closely with all of the PATH Operating Divisions for the planning and coordination of construction throughout the system. We are supporting the scheduling of work trains, track rights and force account labor for the ongoing PATH Capital Program, including the scheduling of work trains for the PATH WTC Transportation Hub.

Coordination with Outside Agencies and Organizations – We will coordinate project construction activities among the designer, contractor, adjacent owners, utility companies and various public agencies. During our many projects, AECOM has successfully coordinated construction activities among impacted entities. At the start of the project, we will work with the Authority to develop a plan of action that details and schedules all necessary approval and permit requirements. The plan will include a description of the levels of coordination that have already taken place during design, a summary of the permits that have been issued, and a summary of the approvals that have been granted by various agencies and private owners as well as those still to be obtained.

Project Files: Upon contract award, we will establish and maintain project files, which will conform to the requirements set forth in the contract. We will also prepare a table showing all procedures for routing of correspondence and submittals.

We will record all communication to the contractors through the use of field transmittal memoranda (FTM). FTMs will be used for transmitting and documenting written directions, decisions, documents and notifications of changes, and they will be used for any other purpose that requires written communication with the contractor.

We will establish a document log for the project. This log will be used to monitor and to organize contractor submittals, correspondence, field design changes, contract change orders, progress payments and/or documents.

Our office engineers will be responsible for document control and will maintain a project file with record copies of updated contract drawings, compliance documents, contracts, inspection forms, daily logs, inspection and testing reports, invoices, meeting minutes, progress reports, progress payments, quality control and safety program reports, specifications, addenda, change orders, claims, compliance documents, progress photos, permits, shop drawings, samples, drawing register and distribution list. The office engineers will also prepare a submittal requirements list and schedule for the contract and will log, review, and distribute submittals to the design engineering staff and to the Authority when the submittals are received.

On a periodic basis, we will review the log to determine if submittals are being received, reviewed and returned in an efficient manner that meets schedule requirements. We will also maintain contract drawings and inspection reports in the document control file.

Contractor Monitoring and Coordination during Construction: We will monitor, review and evaluate the construction by the contractor in accordance with contract documents, Authority requirements and industry procedures. The work, which will be performed by the AECOM team, is addressed in the following subtasks.

As the Authority's consultant, we will assist with the coordination of the work of the contractor with any ongoing projects and operations at, or near, the project

site. To achieve close coordination of work activities among the numerous parties, we will hold contractor coordination meetings. Attendees will include our resident engineer, the contractors' representatives, the Authority's representatives and design team members, as appropriate.

Contractor's Plant, Personnel and Performance – The AECOM team will monitor the execution of the contractor's work to verify compliance with the contractual requirements. The team will review the contractor's (including key subcontractor's) health and safety plan before work commences and monitor the implementation of their safety programs at regular intervals. We will monitor that work is performed in accordance with the contract documents, with Authority requirements and, where appropriate, consistent with established methodologies. The resources required for a given task including quality, safety and security expertise, will be identified on a task-by-task basis to ensure the right expertise and appropriate level of support consistent with the complexity and risks associated with a given activity.

Easements, Permits and Variance – We will verify that the contractor has obtained necessary easements, permits, and variances. Prior to the actual start-up of the project, we will review with the contractor his obligations and requirements to obtain necessary documentation.

Contractor's Compliance with Contractual Reporting Requirements – We will monitor compliance by the contractor with contractual reporting requirements for bonds, insurance, certified payroll, D/M/WBE goals, safety, quality control and other programs, as specified in the construction contract documents.

Environmental Concerns – If contaminants are identified within the project area, environmental specialists will carefully monitor the operations to verify that they are managed in accordance with applicable local, state and federal regulations. We have provided these same services on virtually every construction inspection program we have completed for the various regional transportation agencies. Environmental Planning and Management (EPM), is our preferred partner for this type of work and is available to support this team as our subconsultant, as they have on many of our previous projects.

Submittals – We will maintain full-size bound sets of updated contract drawings. The office engineer will maintain a drawing register, which will provide a complete list of drawings and their current revision numbers. The office engineer will monitor and track each shop drawing and will coordinate his efforts with those of the design engineer. The resident engineer will record and monitor the status of receipt, distribution and return of shop drawings using the shop drawing log. Shop drawings distributed to the Authority are for information only. The Authority will communicate any comments to the resident engineer.

For field-related submittals, such as safety and erection plans, we will be responsible for approval. We will solicit comments from the Authority prior to processing the submittals.

Deliverables – We will handle and process contractor deliverables in accordance with contract requirements. The office engineer will be responsible for document control, previously discussed in this proposal.

Field Inspection and Testing – The quality control, inspection and testing functions represent the front line of our construction inspection effort. At the beginning of the project, we will develop quality assurance procedures and detailed inspection plans based on our hard-earned experience and the acceptance criteria indicated in the project plans and specifications. After review and approval by the Authority, we will clearly define the plan to the contractor. The resident engineer and inspectors will use the plan as a guideline to carry out their duties and responsibilities and to determine if the work is being performed in accordance with the construction contract documents. The resident engineer will audit the activity of the inspectors who will have no authority for allowing deviations from the contract requirements. The resident engineer will process requested deviations and will submit them to the project manager and to the Authority for approval.

The inspectors will also assist the resident engineer in verifying quantities of work performed, materials used, fabrication dimensions, consistency with contract documents and adequacy of the contractor's resources.

The inspectors will document the daily work activities on their daily reports. They will also document specific activities such as excavation quantities and concrete placement, and will record critical information such as slump, air content and temperature.

The inspectors will be trained in our project-specific QA plan and will become familiar with the contractor's plan and procedures. They will monitor the work of the contractor using these documents as a basis. The inspectors will also monitor the contractor's activities to identify and to resolve potential problems before they occur.

Materials Monitoring – During the weekly contractor coordination meeting, we will monitor the contractor's placement of material orders to determine if scheduled delivery will support the project milestones. We will review any early procurement items or long-lead items required by the contractor and will make appropriate recommendations based upon an analysis of current supplier delivery time for materials and equipment required for the project. The evaluation will consider the time necessary for shop drawing preparation, for shop drawing review by others and for delivery of materials. The times and corresponding dates will be incorporated into the project master schedule.

Facility Operations – As previously stated, maintenance of operations at any facility is of paramount importance. We will monitor the contractor's activities to ensure that only approved operations are scheduled. We will also monitor the contractor's operations to ensure that proper maintenance and protection of traffic plans are in place prior to performing work that requires lane closures on bridges or in tunnels.

Safety – The contractor is responsible for the safety of his employees and the public. The contractor will submit a written safety program (HASP) to the Authority for approval. We will monitor the contractor's implementation of their approved safety program. Noncompliance and unsafe work practices will be discussed during construction progress meetings and documented in the meeting minutes. Safety issues will be reported in our monthly report. Toolbox safety meetings will be encouraged.

Meetings, Schedules and General Administration: This phase of the program involves the development and institution of project controls to direct the project to its timely completion. We will institute scheduling, cost and documentation controls in the same manner as we have done on similar successful projects.

For each task order we will review the contractor's baseline schedule. Upon receipt of a baseline schedule that properly responds to the review comments, the baseline will be accepted and progress tracked against this document. Our periodic reports include the following items:

- Actual progress compared with the baseline (planned) schedule
- Costs incurred and estimated costs at completion compared to budget estimates (earned value)
- Cost variance analysis
- Problems encountered and corrective actions taken
- Pending and approved change orders

Meetings – We will chair and/or attend meetings required to actively manage the project. These meetings will include the following:

- Pre-construction meeting
- Biweekly (or as required) progress meetings
- Monthly construction schedule meetings
- Monthly invoice meetings
- Force account scheduling and coordination meetings
- Meetings with local city and county agencies and other organizations affected by the project
- Contractor safety meetings

We will plan and conduct those meetings chaired by us according to a prepared agenda distributed in advance of the meeting. We will prepare meeting minutes and distribute them to the appropriate parties.

We will clearly identify in these minutes the required actions and responsible parties.

During the construction scheduling meetings, we will review and update the progress of contract work and level of contractor's resources. We will discuss and resolve current and possible future problems. We will take minutes of these scheduling meetings (including action items assigned to the various parties present), distribute them and permanently enter the minutes into the historical file.

On a monthly basis, we can prepare a summary computerized schedule and a written progress narrative for the contract. In the narrative, we will detail the monthly progress, identify potential delays, and propose alternative corrective solutions, if required. In this way, the Authority will be assured that the contractor is working in the most cost and time effective manner.

We can incorporate a detailed contractor schedule and daily activity reports into a four-week, look-ahead project schedule, which will be reviewed at the coordination meeting. This schedule has a calendar format covering the next four-week period. At each update, we would note progress, make changes and schedule an additional week's activities, thereby providing a four-week schedule at all times. This schedule provides a detailed bar chart of daily and weekly construction activities by discipline and by contract package within a facility or physical area. We will indicate interfaces between the contractor and the force account work on this schedule.

Construction Schedule – The AECOM team will use Primavera software to support scheduling functions. Control of resources, both labor and equipment, will be important. Primavera's resource leveling functions are straight-forward, and period and plots are available on-screen or plotted.

A detailed project schedule, covering the entire contract period will be developed by the contractor. The schedule will be prepared using the critical path method (CPM) and will consist of network diagrams and an accompanying computer-generated mathematical analysis. The CPM network will be the precedence type.

In addition to construction activities, the detailed network activities will include the submittal and approval of materials, samples and shop drawings, procurement of critical materials and equipment, installation and testing of special materials and equipment, interruption of service, deliveries of owner-furnished equipment and materials, project phasing, force account support requirements and any other contract requirements.

On a monthly basis, prior to contractor billing, the contractor will meet with the resident and office engineers to review and to update the progress of construction in accordance with the most recent CPM schedule. The two parties will mutually review and mark up the schedule to indicate all changes since the previous update. Changes will include, but will not be limited to, entering the actual activity start and finish dates, the scheduled changes to future activities, and the percentages of activities partially completed.

A narrative report will accompany the schedule update. The narrative will discuss progress made and problems encountered during the reporting period. In addition, the contractor will indicate planned progress during the succeeding period, anticipated or potential problems or delays, which may impact the project schedule, and corrective measures to mitigate schedule slippage.

The original baseline schedule and appropriate baseline schedule dates will be retained and shown for comparison to progress as requested by the Authority.

Contractors' Invoices – The contractor will prepare a progress payment request on a monthly basis. An allocation of the contract price by work item will be agreed upon by the Authority, our resident engineer and the contractor prior to submitting the first request. Any revisions to this allocation, including those resulting from approved change orders, must be approved by the agency prior to submitting any report showing a revised allocation.

Each month, the contractor will submit the progress payment request for the previous month to the Authority with a copy to our resident engineer. We will review the request and submit it to the Authority in a timely fashion with a recommendation for payment. Our review will determine whether or not all D/M/WBE reports, payroll reports, insurance certificates and progress photos received during the payment period have been reviewed and are acceptable. Our recommendation will include an explanation of disallowed amounts, if any.

Clarification of Contract Documents – We will coordinate and prepare replies to requests for clarifications received from the contractor. We will interface with the design engineer as necessary to obtain resolution in a timely manner.

Change Orders – A contract change order is written authorization issued by the Authority and signed in acceptance by the contractor. The change order revises the existing contract in a way that adds to, deletes from or alters the work contained in the original contract. It is anticipated that contract change orders may result from design revisions, field changes or claims. Change orders may be identified or initiated either by the Authority or by the contractor. We will establish a case file for each potential change and accumulate information and data relevant to that case. We will maintain a contract change log in tabular form, which contains key data regarding approved and potential contract changes. Change orders include changes in scope, emergency field changes, and claims.

If the contractor is directed to perform work that he considers to be outside the contract scope or that he determines has an impact on the contract completion date, then the contractor must notify the Authority contract manager in writing. This written notice must explain why the contractor believes the work to be extra. We will maintain a file for each item that the contractor may claim a contract change for additional costs and/or time. These files will be prepared at the time that the claim is first anticipated and will be updated as appropriate.

We will review each contractor claim and will prepare and submit a claim analysis to the Authority contract manager. Our resident engineer will be responsible for preparing the claim analysis. He will coordinate our comments and those from the Authority. The resident engineer will provide interpretation of the contract scope. Our inspectors' daily reports and engineers' diaries will provide a written record of circumstances regarding the claim. Our resident engineer's diary, FTMs and meeting minutes will provide key documentation to analyze the claim. Our estimator and scheduler will assess the impacts on cost and schedule.

Field Survey – To monitor the contractor's survey activities, we will be responsible for the following activities:

- Monitoring surveying and layout performed by the contractor
- Resolving deviations reported by contract
- Maintaining an accurate surveyor's log for our survey

Daily Reports – The primary purpose of the daily reports is to provide a complete chronological history of significant events during the construction period. These reports will be considered documents of record in possible future claim hearings or court cases. Therefore, the writing style will feature clear and concise presentation of facts in neat and legible handwriting.

Our inspector will prepare a construction daily report covering his/her area of responsibility. This report is primarily a factual report of conditions, accomplishments and statistical data. The following information, at a minimum, will be included in each report:

- Weather and working conditions affected by weather, if any
- Number of personnel (by craft) and major equipment (by type) used by the contractor
- Significant work items started or completed
- Quantities or significant work items performed

The report will be prepared and submitted to the resident engineer not later than noon of the day following the reporting period. The resident engineer will prepare an independent daily report summarizing the

overall activities of the day. The contractor will submit to the resident engineer daily force reports.

*Weekly Field Activity Repor*t – By noon on the Wednesday of the week following any construction work on the site, we will furnish to the Authority a weekly field activity report (WFAR).

Monthly Report – We will prepare and deliver a detailed monthly report to the Authority. Copies of the report will be submitted by the 10th of each month covering the work performed during the previous month. The monthly report will contain the schedule information, and will address the progress, problems, resolutions, compliance, deviations and status of each aspect of this project.

The Monthly Report will provide the following information, at a minimum.

I. Executive Summary
II. Project Cost
    A. Original Contract Amount
    B. Current Budget
    C. Expenditures to Date
    D. Estimate at Completion
III. Project Schedule and Progress
    A. Narrative
    B. Project Master Schedule to Complete
    C. Summary of Contractor's Activities
    D. Schedule of Activities for Coming Month
    E. Summary of Force Account Activities
    F. Physical Progress Curve, Graph and Table
    G. Work in Progress Report
IV. Construction Contract Status
    A. Narrative
    B. Accident Frequency Graph
    C. Safety Statistical Summary

V. Quality Control
    A. Narrative
    B. Non-Conformance

Post Construction, Closeout and Acceptance

In this phase of the project, the AECOM team establishes the basic administrative steps that we will take when contract work has been completed and is ready for acceptance by the Authority. For completion and acceptance of each portion of the work, the following steps are required:

- The contractor will submit to the Authority (with a copy to us) a notice of completion when he believes that the portion of the work is substantially complete and ready for inspection
- We will then prepare a punchlist of outstanding work items including incomplete or deficient work, outstanding contractual obligations such as as-built drawings, warranties, training obligations and any other unresolved issues such as backcharges or claims
- Upon completion of punchlist items by the contractor, we will prepare and submit to the Authority a letter recommending acceptance of the work

For the final portion of the work, the following additional steps are required:

- The contractor will submit to the Authority a final progress payment report, which requests release of retainage
- We will review this report and prepare a final payment checklist
- The contractor will execute a certification and release form prior to closeout

As-Built Drawings: The contractor will maintain a complete set of as-built drawings, which reflect changes from original construction drawings and which provide a record set of drawings showing the facility as constructed.

The contractor will be required to submit to the agency marked prints showing complete information as required for the correction of drawings to the as-build condition. The resident engineer will review the mark-ups for accuracy and format and will return the mark-ups to the contractor. The contractor will then prepare and submit copies of the mark-up to the Authority. We will maintain one set of as-builts at the site office.

At project completion, the contractor will transfer the as-built changes to reproducible drawings.

Construction Records: Throughout the course of the project, we will maintain our records in accordance with the requirements set forth in the QA plan. Using this method, we will constantly maintain the records so that they are easily accessible to involved parties. At project completion, we will inventory and document records so that they can be easily transferred and used in the Authority's archives.

TASK F. Cost Engineering/Estimating Services

AECOM has supported the Authority through the call-in program from its inception. As part of our design work, which has included all engineering and architectural disciplines, we have provided cost estimates in accordance with the Authority's Construction Estimating Guide. Our cost estimate reliability stems from our use of historic data from other Authority and local transportation projects coupled with continual checks against current industry trends. We bring a detailed understanding of the challenges associated not only with construction within the New York City Region, but specifically at the Authority's facilities and their operating requirements. Our work has included development of construction cost estimates at each of the airports, all of the bridges and tunnels and at the bus terminal.

Our track record for delivering cost estimates at all stages of the development of projects including final Engineers Estimates that are accurate and reliable is excellent.

As part of our ongoing work for the Authority, AECOM's cost estimating group is producing detailed cost estimates for very large and highly complex projects. This project cost estimating process was designed to be in accordance with the cost estimate procedures outlined in the Authority's cost estimating guidelines. In most instances, the cost estimates far exceed these guidelines and have received favorable reviews for their levels of accuracy and thoroughness.

The cost estimating process achieves its accuracy by following the bid estimating process commonly used by contractors. Labor, material and equipment costs are calculated by estimators with specific construction experience through the development of Crew Mixes commonly found on New York City job sites. All crew mix information is supported by direct and current information including union contracts and work rules provided by the General Contractors Association, equipment operating and rental rates provided by Blue Book, and material quotes received from vendors and experienced contractors. These costs are applied against productivity and the result is a direct trade cost that addresses all potential outcomes by closely following a similar process as the contractor who will eventually provide the ultimate estimate comparison/justification through the bid process. General Conditions, Overhead and Profit and Contingency are then applied on a contract or construction activity specific basis.

A more detailed description of the AECOM cost estimating methodology follows here, and, to the extent it is appropriate, will be utilized on task orders that are awarded under the call-in program:

Following the definition and confirmation of cost estimate scope, the project team will focus on updating the Cost Estimate Model. The cost estimate model consists of a labor rate database, an equipment rate database, a material pricing matrix, and a crew mix library that are directly linked to project Bid Forms used in developing the cost estimate(s). This model allows for these estimate building blocks (labor, material and equipment) to be amended and updated at any time while providing an immediate cost impact to the construction estimates. The model also provides a detailed audit trail supporting the vetting, adjusting and quality assurance efforts in addition to independent oversight reviews. Further definition of each component of the project cost estimate model is as follows.

Labor and Equipment Rates: AECOM maintains a digital library of trade labor rates which was prepared to support Authority projects and consists of various trades based on current labor contracts, union agree-

ments and prevailing labor rates. The labor database calculates the total hourly rate of each construction crew member based on the Base Rate, Holiday Rate, Fringe Benefits and Payroll Taxes (FICA, FUI, and SUI, etc.). The labor rate database is regularly updated to reflect the most current rates and work rules.

Similarly, a digital library of equipment rates is prepared to support Preliminary Engineering Cost Estimates and is based on the Blue Book monthly rates as provided by Equipment Watch. The equipment database calculates the total rate of each piece of construction equipment based on rental and operating costs.

Crew Mix: Construction crews consist of a pre-determined arrangement of labor and equipment required to perform specific construction activities. The Crew Mix Form outlines the necessary crew members (labor) and equipment required for construction of each project element in accordance with local labor agreements. Once the labor and equipment rates are updated and the databases are verified, a total crew cost can then be calculated. Labor and equipment requirements for specific construction activities are identified based on estimator/engineer construction experience and, if necessary, contractor outreach. The crew members and pieces of equipment are noted on the Crew Mix Form and relevant cost information is automatically linked from the updated databases.

Each Crew Mix Form represents a single crew and lists the number of workers, the labor and equipment rates and a description of the work performed. Each crew is assigned a unique crew code for reference in developing the project cost estimates. This digital library, similar to the other databases maintained in the cost estimate model, is considered a "living document", meaning that modifications and updates can always be made in order to further advance the cost estimates. Estimators can use previously developed crew mixes or create new crew mixes for specific construction operations.

Quantity Take-Off: Quantity Take-off Forms represent the translation of design drawings to actual units of material used in developing the cost estimate. These forms are provided to all estimators for the recording of quantities, identification of CSI Division, WBS element, project site location, Contract Package, and specification section, where applicable. In addition, suggested cost allowances and/or conceptual design information for project elements without significant design development are also to be provided through the use of this document. These forms represent a key component of the detailed audit trail of cost estimate development and can be used in review/vetting sessions. The project team will consider Quantity Take-Off Forms as a cost estimate deliverable to be included in the current overall estimate submission as support documentation.

Material Quotes: Material pricing can be determined through research of available, industry-accepted pricing catalogs such as R.S. Means for common construction materials. However, certain equipment and materials require special vendor outreach, particularly for construction elements included in any landmark or architecturally complex task. Estimators and engineers will contact outside material and equipment vendors for current pricing quotations while strictly adhering to security procedures related to the release of project and design information. Vendor quotations solicited through FAX, teleconference, or invitations to the project office(s) for discussion will all be recorded on a Project Material Pricing Matrix which will be included into the Cost Estimate Model. The matrix will contain a description of the material, pricing quotes, vendor name and contact information, and the date of contact. This document will also be updated as the design progresses. This matrix will be considered a cost estimate deliverable to be included in the overall estimate submission as support documentation. If necessary, individual vendor solicitations can also be provided in the form of telephone quotation sheets, facsimile transmittals, etc.

Bid Forms: The Bid Forms represent the calculations for each construction activity. They are line item breakdowns of each design element that includes costs for labor, material, and equipment by linking directly to the

aforementioned databases. Estimators enter descriptions of the construction activity, the material quantities involved in this activity and the appropriate Crew Code denoting the preferred crew selected to perform the work. The labor and equipment information is automatically provided via the Crew Code which activates a direct link to the Crew Mix Form. Material pricing can either be manually entered or linked to the Project Material Pricing Matrix. These costs are factored based on estimator application of labor productivity for each construction activity.

The Bid Forms also allow estimators to apply subcontractor markups for general conditions and overhead and profit

Another Bid Form item is the application of an Allowance for Indeterminate (AFI). This percentage application represents a cost adjustment based on estimator experience and discretion. It is not a true allowance/ contingency as it is generally applied to construction activities in which there is available design information. However, some construction activities may require special consideration that is not apparent on design drawings such as access limitations, interfaces with other construction elements, etc.

The Bid Form also provides information to the Construction Scheduler(s), such as crew days, crews per shift and man-hour information so that the Construction Cost Estimate and the Construction Schedule are prepared from identical input(s).

Master Template: The Master Template, representing a final summary of costs, is organized by CSI Division but also details location, elevation, type of work, WBS and Contract Package information. All the information contained in these summary sheets is directly linked from the Bid Forms. Each construction activity is listed with its appropriate coding (location, elevation, package, etc.). The quantities are valued by applying a unit cost that is thoroughly developed through the Bid Forms.

This template breaks down project costs using the sixteen (16) CSI Division format combined with a unique project Coding System. As expressed above, this template also includes code structure for the following categories:

- WBS - Work Breakdown Structure elements
- Type - Allocates cost based on the type of work including sitework, structural, MEP fit-outs, architectural finishes, security measures, sustainable design and PATH force account.
- Location - Location within the Project Site
- Elevation - Level of structure in which the construction is to occur
- Contract Package - The Contract Package number applicable to the construction activity
- Review, Vetting, QA/QC Procedures

We intend to fully confirm and clarify the cost estimate QA/QC procedures to ensure a satisfactory understanding by all oversight parties of the project's commitment to quality checks and reviews.

TASK G. Resources

The AECOM team of construction professionals together, can offer over 700 regional professional and support staff in virtually all disciplines and specialties to meet any construction need the Authority may encounter in the delivery of the Capital Program. These individuals are currently supporting projects, many of which are under "call-in" type programs for virtually every transportation agency in the region, including road and bridge, rail and transit, port facilities and airport clients.

Our ability to effectively support these call-in programs continues to be enhanced as we grow our resource pool. As an example AECOM's recent acquisition of Tishman Costruction has expanded our construction management capabilities and resources with over 400 professionals. These staff enhances our construction management capabilities in facilities, vertical construction as well as transportation facilities. Further, these construction management professionals can be supported by over 8,000 other staff nationally in any specialty area that may be needed.

With over 75 years of providing construction management and design services to virtually all of the local transportation agencies, and 40 for PANYNJ, AECOM

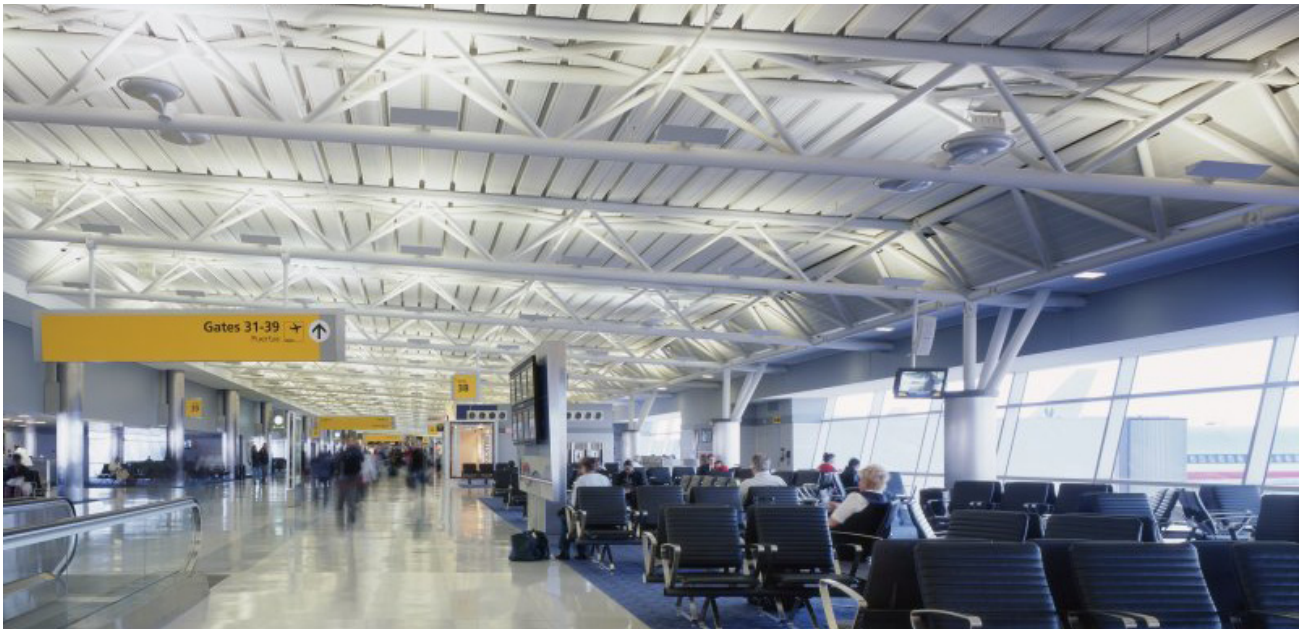
has worked with hundreds of subconsultant and vendors in the region and we know where to obtain services or products that we cannot fulfill ourselves. We have a rich history of supporting M/WBE initiatives by our public sector clients and have worked successfully with many local firms that can fulfill specialized needs or supplement construction management staff.

For the purposes of this submittal, we have included four M/WBE subconsultants with proven track records with the PANYNJ on our team to provide construction inspection support: IH Engineers, P.C. (MBE); Industria (MBE); SCI (MBE); and LPE Enterprises, Ltd. (WBE). These firms represent some of the best firms that we work with locally, all of which have or continue to support current AECOM projects and can be called upon to support this program. Many of their key staff also have experience working at Authority facilities. As such, AECOM is committed to meeting the 12% MBE and 5% WBE participation goals set forth by the PANYNJ set aside program.

The AECOM team possesses the critical agency operation, construction supervision and inspection expertise, hands-on knowledge of the Authority's assets and an understanding of its practices and procedures to provide unparalleled CM services for the bridges, tunnels, PATH, airports, and marine facilities in your transportation network.

We are ready, willing and able to undertake any assignment and are certain that we will meet or exceed your expectations.

Section I
Affiliates



AECOM USA Affiliate	Federal ID	Address
AECOM Services, Inc.	[redacted]	515 South Flower Street Los Angeles, CA 90071
AECOM, Inc.	[redacted]	Two Technology Park Drive Westford, MA 01886
EDAW	[redacted]	150 Chestnut Street San Francisco, CA 94111
Economic Research Associates (California)	[redacted]	515 South Flower Street Los Angeles, CA 90071
Earth Tech/Archer Western, LLC	[redacted]	515 South Flower Street Los Angeles, CA 90071
Earth Tech WE Holding, Inc. (Delaware)	[redacted]	515 South Flower Street Los Angeles, CA 90071
Cass Water Engineer, Inc. (Delaware)	[redacted]	515 South Flower Street Los Angeles, CA 90071
Tishman Construction Corporation	[redacted]	666 Fifth Avenue New York, NY 10103

About AECOM

AECOM is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 45,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation and technical excellence in delivering solutions that create, enhance and sustain the world's built, natural, and social environments. A *Fortune 500* company, AECOM serves clients in approximately 125 countries and had revenue of $7.3 billion during the 12 months ended March 31, 2011. More information on AECOM and its services can be found at www.aecom.com.

AECOM USA, Inc.
605 Third Avenue
New York, NY 10158
212.973.2900

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605 Third Avenue
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(212) 973-2900 tel
(212) 972-0682 fax

May 24, 2011

The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010
Attention: RFP Custodian

Re: RFP Number 24440 – Proposal for Performance of Expert Professional Construction Management and Related Technical Services on a "Call-In" Basis During 2011-2014

Dear RFP Custodian:

Reference is made to Article V of the Port Authority's Request for Proposal. AECOM USA, Inc. is enclosing relevant disclosures responsive to the Article 27 of the Sample Contract included with the Request for Proposal.

Should you have any questions or comments, please contact our Northeast Region General Counsel, Elise Greenspan, at 212-973-3043.

Very truly yours,
AECOM USA, Inc.

Gary Morris, PE
Senior Vice President

Certification Statement

Article 27A

a. On August 14, 1981, AECOM Services, Inc. formerly known as Daniel, Mann, Johnson, & Mendenhall ("DMJM"), entered a plea of guilty to a single violation of 18 U.S.C. Section 1343 in the United States District Court for the District of Massachusetts. The plea arose out of a series of political contributions which DMJM had made in Massachusetts approximately 40 years ago (April 1969 and March 1972). It was not alleged that the contributions were made to influence particular decisions by public officials or to obtain specific contracts. DMJM conducted its own internal investigation of these events in 1980-81, prior to entry of the plea. DMJM also cooperated fully with both the federal investigation and a subsequent civil investigation on the same matter conducted by the Commonwealth of Massachusetts.

   As stated herein, while DMJM entered its plea in 1981, the questionable activity occurred almost 40 years ago. Since that time, 100% of the ownership interest in DMJM has been transferred to other parties and a substantial change in the Board of Directors, management and personnel has occurred. In view of the foregoing, in December 1984, the Massachusetts Division of Capital Planning and Operations, which is the debarment authority in Massachusetts, specifically decided that it would be inappropriate to institute debarment proceedings against DMJM in light of the substantial change in management at DMJM, and other factors demonstrating the integrity of the management. Other states have reviewed the matter and have officially reached the same conclusion.

b. An officer of M&E Pacific, Inc., a subsidiary of Metcalf & Eddy, Inc. (now part of AECOM USA, Inc. by merger), was investigated for alleged violations of the Hawaii Campaign Spending Laws. The individual was removed as an officer of M&E Pacific and M&E. Thereafter, he agreed to plead no contest to a misdemeanor charge. Much of this activity occurred prior to the acquisition of Metcalf & Eddy by AECOM Technology Corporation, and this individual's actions were incurred without the knowledge of management of Metcalf & Eddy, Inc., and his actions did not involve any corporate funds. There was never an investigation or any allegations of wrongdoing against M&E Pacific and Metcalf & Eddy, Inc.

c. On July 12, 2004, AECOM Canada charged (convicted on October 6, 2005 upon guilty plea) of one count of failing to comply with safety requirements for air shipping a nuclear densometer contrary to Canada's Transportation of Dangerous Goods Act.

d. On March 15, 2004, two related complaints alleging non-payment of vacation pay contrary to Alberta Employment Standards Code were filed against AECOM Canada In January and February, 2006 AECOM Canada was ordered to pay vacation pay.

Article 27B

A subsidiary of AECOM Services, Inc. operating in Utah, voluntarily excluded itself from proposing on projects with the Utah Department of Transportation for six months, ending October 21, 2000. This voluntary action was taken to allow an internal billing audit (and subsequent UDOT audit) to be completed. The subsidiary had internally discovered that it had supplied overlapping billings to UDOT on a Utility and Encroachment Inspection Contract. This matter was resolved by paying UDOT for the cost of the audit and giving UDOT credit for erroneously billed amounts. The subsidiary continues to work for UDOT, providing services under this and other contracts.

Article 27C

a. In March of 2011, AECOM USA, Inc. received a Notice of Termination for Cause from the Long Beach Unified School District in California. AECOM contested this notice. The parties have negotiated a settlement of this matter and the termination has been re-categorized as Termination for Convenience.

b. In May of 2011, AECOM USA, Inc. of Michigan, a subsidiary of AECOM USA, Inc., received a Notice of Termination for Cause from the City of Lansing, Michigan on a bridge rehabilitation project. AECOM intends to contest this notice.

Article 27D

AECOM USA, Inc. was formerly known as DMJM+HARRIS, Inc. prior to its name change on November 3, 2008, and was known as Frederic R. Harris, Inc. prior to name change on October 1, 2001.

Article 27G

a. The Department of Justice conducted an investigation of projects related to the District of Columbia Department of Transportation ("DCDOT"). As part of that investigation, AECOM USA was served with subpoenas and cooperated with the Government. We understand that the investigation included inquiries of other companies which also contract with DCDOT. We were not advised that we were the target of the investigation, and no charges or claims were brought against AECOM USA as part of this matter. On February 23, 2007, Ken Keitt, a former Vice President at AECOM USA, was indicted for allegedly directly or indirectly providing an illegal gratuity to a former DCDOT official. Senior management at AECOM USA had no knowledge of these alleged gratuities, and the government did not charge AECOM USA. Furthermore, AECOM's Code of Conduct forbids employees from providing cash payments to government officials. As noted, AECOM USA cooperated with the government's investigation. Upon mutual agreement, Mr. Keitt resigned in February of 2004. Mr. Keitt vigorously contested the indictment. The matter proceeded to trial in May of 2008 and the jury reached a verdict of not guilty and Mr. Keitt was acquitted. This matter is closed.

b. While neither AECOM USA, Inc. nor Consoer Townsend Environdyne Engineers, Inc. (now part of AECOM USA, Inc. by merger) were named as a target of any investigations, there was a Connecticut State Attorney investigation concerning the Connecticut Department of Transportation. As part of that investigation, DMJM Harris and Consoer Townsend Environdyne Engineeers, Inc. (CTE), both known now as AECOM USA, Inc., were served with subpoenas and fully cooperated with the Government. We understand that the investigation included inquiries of numerous other companies. No charges or claims were brought against AECOM USA, Inc. nor were we ever advised that we were a subject or target of the investigation. This matter is concluded.

c. While AECOM, Inc. (formerly known as ENSR) has not been named as a target of any investigations, nor have there been any charges or claims brought against AECOM, Inc., there was a government investigation related to a client of AECOM, Inc. As part of that investigation, a subpoena was served on AECOM, Inc. AECOM, Inc. has complied with the subpoena request and has offered to assist further with any additional requests made by the government. This matter has been concluded with no charges brought against AECOM, Inc. regarding this matter.

d. While neither DMJM Aviation nor Austin AECOM was named as target of any criminal investigation, nor were there any criminal charges or claims brought against DMJM Aviation or Austin AECOM, there was a government investigation related to a project of DMJM Aviation and Austin AECOM. As part of that investigation, the Government requested information and the companies fully cooperated with the Government. This mat-

ter related to an investigation by the Inspector General's office for the City of Chicago regarding an approval given to a contractor to proceed with certain extra work. The City was attempting to determine which entity or individual, either internally at the City or through one of the City's independent consultants, authorized the extra work. Austin AECOM and DMJM Aviation fully cooperated with the investigation, including providing its project records to the Inspector General and making its personnel available for interviews. This matter has been concluded with no charges brought against AECOM regarding this matter.

THE PORT AUTHORITY OF NY & NJ

Construction Management and Related Technical Services as Requested on a Call-in Basis 2011-2014

May 26, 2011 | RFP No. 24440

HILL

Hill International

Hill International

Hill International, Inc.
One Penn Plaza,
Suite 3415
New York, NY 10119
Tel: 212-244-3700
Fax: 212-244-3740
www.hillintl.com

May 26, 2011

Bid/RFP Custodian, Procurement Department
The Port Authority of New York and New Jersey
One Madison Avenue, 7th Floor
New York, NY 10010

Subject: Construction Management and Related Technical Services on a Call-in Basis 2011-2014
RFP No. 24440

Dear Bid/RFP Custodian:

Hill International, Inc. (Hill) is pleased to submit our proposal to provide Construction Management and Related Technical Services to the Port Authority of New York and New Jersey (the Authority) on a "Call-In" basis for 2011-2014. Hill has a vast portfolio of task order projects and is exceedingly familiar with delivering on-call construction management services for some of New York's most prominent agencies, including the New York City Department of Design and Construction (NYCDDC), New York City Department of Parks and Recreation (NYCDPR), Metropolitan Transit Authority (MTA) Long Island Railroad (LIRR), New Jersey (NJ) Transit, New York City Transit Authority (NYCTA), Federal Transit Administration (FTA), Federal Emergency Management Agency (FEMA), and the Authority, among others. Success in providing such services requires an understanding of the program, available resources, responsiveness, and a corporate commitment to the program. Hill offers the Authority all of these elements.

Hill is a leading international construction consulting firm that specializes in providing construction management, program and project management, cost engineering and estimating, scheduling, quality assurance, inspection, claims analysis, and innovative dispute resolution services to clients involved in major construction projects worldwide. We have successfully managed more than 5,000 projects with a total construction value over $250 billion, and we are the largest pure construction management firm in the country. This breadth and depth of experience allows us to facilitate the staffing needs of any foreseeable Authority project. Hill has also assembled a diversified team of MBE and WBE-certified engineering firms providing the expertise, flexibility, and resources to address all specialized service elements of the Authority's projects. Joining Hill on this assignment are ELLANA, Inc., a certified WBE / DBE, who will be providing estimating services; M.P Engineers, P.C., a certified MBE / DBE, who will be providing testing and inspection services; and KS Engineers, P.C., a certified MBE who will be providing inspection services. Furthermore, our team comprises individuals who possess the first-hand knowledge and experience to function as an extension of Authority staff. We have the ability to provide technical personnel in a wide variety of skill sets, including project managers, estimators, inspectors, schedulers, project controls specialists, and a multidiscipline cadre of engineers.

Hill has enjoyed an excellent working relationship with the Authority for more than ten years, during which time we have provided project controls, construction management, and project and program management services for various Authority assignments. Hill has worked with the Authority at the World Trade Center Transportation Hub and Reconstruction, the PANYNJ PATH Capital Program Logistics Planning Support Services On-Call Contract, and the PANYNJ Jet Blue Terminal at JFK Airport. Hill also has experience providing services for some of the most widely recognized clients and projects in the New York Metropolitan area, including the NYCDDC's rehabilitation of New York City Hall, the MTA No. 7 Subway Line, the NJ Transit Construction Management On-Call Contract, and the Statewide Traffic Management Center in Woodbridge, NJ.

In summary, the Hill Team delivers to the Authority:

- A dedicated Project Manager with the ability to rapidly mobilize Hill's staff
- A robust pool of resources to meet any task order requested, the team has a staff of 450 plus personnel in the tri-state area
- A team with an intimate knowledge of Authority operations
- A global leader in managing construction risk
- Commitment of top-level management
- Major offices in New York City and New Jersey
- A team that wants to continue to work for you

We look forward to continuing to provide services to the Port Authority in the years ahead on this new program. Should you have any questions regarding our submittal, or desire additional information, please contact me at 212-244-3700, or at clarkepile@hillintl.com.

Sincerely,

D. Clarke Pile, PE
Senior Vice President

Port Authority of New York and New Jersey

Construction Management and Related Technical Services on a Call-in Basis 2011-2014

May 26, 2011 | RFP No. 24440

Proposal

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Agreement to Terms and Conditions . . . . . K

A **Attachment B - Agreement on Terms of Discussion**

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

Hill International, Inc.

(Company)

(Signature)

Senior Vice President

(Title)

May 24, 2011

(Date)

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DO NOT RETYPE.

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

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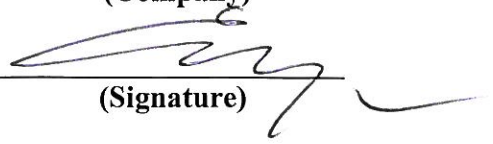
ELLANA, Inc.

(Company)



(Signature)

President

(Title)

5-13-2011

(Date)

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ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

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SJH Engineering, P.C.
(Company)

S. Jayaraman
(Signature)

Principal
(Title)

May 12, 2011
(Date)

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ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

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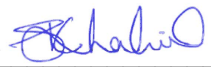
KS Engineers, P.C.
(Company)



(Signature)

President
(Title)

May 24, 2011
(Date)

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B **Attachment C - Company Profile**

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #24440)

1. Company Name (print or type):

   Hill International, Inc.

2. Business Address (to receive mail for this RFP):

   One Penn Plaza, 34th Floor, Suite 3415

   New York, NY 10119

3. Business Telephone Number: 212-244-3700

4. Business Fax Number: 212-244-3740

5. Firm website: www.hillintl.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 2 / 13 / 1976

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   Please see attached.

9. Officer or Principal of Firm and Title:

   D. Clarke Pile, PE, Senior Vice President

10. Name, telephone number, and email address of contact for questions:

    D. Clarke Pile, PE

    212-244-3700 / clarkepile@hillintl.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

Business Name	Place of Incorporation	EIN	Principal Office Address
Hill International, Inc.	Delaware	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Afghanistan Branch			
Oman Branch			
Trinidad Branch (registered in Trinidad)			Abercromby Court, 86 Abercromby Street, Port of Spain, Trinidad W.I.
6204902 Canada Inc.	Canada	[redacted]	3660 Hurontario Street 6th Floor, Mississauga, Ontario, L5B3C4, Canada
Asia/Pacific Hill International Holding PTE Ltd.	Singapore	[redacted]	33 West Coast Rise, Singapore 127476 Tel: 856-810-6200 Fax: 856-810-0404
Philippines Branch		N/A	6758 Ayala Avenue, 1226 Makati City
Beijing Hill International Construction Consulting Company Limited	China		Unit 17, 17F PingAn International Financial Center Tower B, No. 1-3, XinYuan South Road, Chaoyang District, Beijing 100027, China Tel: +86-10-5829 1808 Fax: +86-10-5829 1999
Berger Hill Limited (JV Company)	Malta		Palazzo Pietro Stiges', 90, Strait Street, Valletta VLT 1436, Malta
Qatar Branch		N/A	
Egypt Branch		N/A	
Boyken International, Inc.	Georgia	[redacted]	400 Northridge Road, Suite 1200, Atlanta, Georgia 30350 Tel: 770- 992-3210 Fax: 770-002-1489
Boyken International de Mexico	Mexico	NA	400 Northridge Road, Suite 1200, Atlanta, Georgia 30350 Tel: 770- 992-3210 Fax: 770-002-1489
Boyken International Pty S.A.	Panama	NA	400 Northridge Road, Suite 1200, Atlanta, Georgia 30350 Tel: 770- 992-3210 Fax: 770-002-1489
Boyken Carribbean Inc.	US	[redacted]	400 Northridge Road, Suite 1200, Atlanta, Georgia 30350 Tel: 770- 992-3210 Fax: 770-002-1489
Engineering S.A.	Brazil		
Gerens Hill Gestion de Activos, S.A.	Spain	[redacted]	8 Jose Echegaray Street, Building 3, 1a, Las Rozas (Madrid)
Gerens Hill International, S.A.	Spain	[redacted]	8 Jose Echegaray Street, Building 3, 1a, Las Rozas (Madrid)
Algeria - Permanent Establishment for a Secific Purpose -Specific Project			Project: Hotels Ibis/Novotel, Square Hadj Ali, 25000 Constantine
Hill Construction Consultancy Pte. Ltd. *(p/k/a Singapore Hill International Pte Limited (thru 2/3/10)* *p/k/a James R. Knowles (Singapore) Pte Ltd)*	Singapore	[redacted]	331 North Bridge Road, #12 01/02, Odeon Towers, Singapore 188720 Tel: +00 65 6338 2455 Fax: +00 65 6339 8568
Hill Construction Management Ltd.	Serbia	[redacted]	Bulevar Mihajla Pupina str No. 1OV/423, 11070 Novi Beograd-- Tel: 856-810-6200 -- Fax: 856-810-0404
Hill Fenton Development, Ltd. (JV Company)	British Virgin Islands		30 DeCastro Street, Road Town, Tortola, British Virgin Islands
Hill International (Anatolia) Ltd.	Turkey	[redacted]	closed 5/15/09 Documents must be kept 5 years
Hill International (Australia) Pty Limited *(p/k/a Knowles Australia Pty Limited)*	Australia	[redacted]	ASN Building, Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia Tel: +00 612-9222-1799 Fax: +00 612-9222-1788
Hill International (Azerbaijan) Limited	Azerbaijan	[redacted]	Baker & McKenzie - CIS Limited, 96, Nizami Street, The Landmark Building, Baku AZ1010, Azerbaijan (Job site): 78 Parliament Ave, Baku, Azebaijan
Hill International (Bucharest) SRL	Romania	[redacted]	Bucharest, district 1, 17-19 Dr. Iacob Felix, 3rd Floor, Romania Tel: +40-21-319-5248 Fax: +40-21-319-5268 Contact: Costas Gravanis
Hill International (Deutschland) GmbH *(p/k/a James R Knowles (Deutschland) GmbH)*	Germany	[redacted]	Prinzregentenstr. 20-22, D-80538 Munich, Germany
Dusseldorf Branch	Germany	N/A	Zweigniederlassung,, Dusseldorf 40213, Geschaftsanschrift Graf Adof Platz 15, D 40213, Dusseldorf Contact: Thomas Hans-Hofbauer
Hill International (Egypt)	Egypt		39 Beirut Street, Heliopolis 11341, Cairo, Egypt Tel: 856-810-6200 Fax: 856-810-0404
Hill International (Egypt) Ltd.	British Virgin Islands	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Hill International (Georgia) Ltd.	Georgia	[redacted]	Bucharest, district 1, 17-19 Dr. Iacob Felix, 3rd Floor, Romania Tel: +40-21-319-5259 Fax: +40-21-319-5279 Contact: Costas Gravanis
Hill International (Hellas), S.A.	Greece	[redacted]	37A Kifissias Avenue, 2nd Floor, Office 203, Maroussi 151 23 , Athens, Greece Tel: +30-210-610-5171 -- Fax: +30-210-610-5172
Hill International (Hong Kong) Ltd. *(p/k/a Hill International (HK) Limited* *p/k/a Pickavance Consulting Limited)*	Hong Kong	[redacted]	2401 Wing on Centre, 111 Connaught Road, Central, Hong Kong -- Tel: +852-2542-2818 Fax: +852-2541-4648
Japan Branch	Japan	N/A	2401 Wing on Centre, 111 Connaught Road, Central, Hong Kong Tel: +852-2542-2818 Fax: +852-2541-4648
Hill International (Kuwait) Ltd.	Malta	[redacted]	Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT 1463, Malta
Hill International (Libya) Ltd.	Malta	[redacted]	Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT1463, Malta Tel: 856-810-6200 Fax: 856-810-0404
Registration in Libya		[redacted]	Ben Ghazi, Garyounis District, Building No. 126, Flat No. 7
Hill International (Middle East) Ltd. *(p/k/a Hill International (Overseas) Ltd.* *p/k/a Hill International (Asia) Ltd.)*	British Virgin Islands	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Malta : Mind and Management moved to Malta eff 12/5/2008 and the company registered as an Overseas Company in Malta	Malta		Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT 1463, Malta

Business Name	Place of Incorporation	EIN	Principal Office Address
Abu Dhabi Branch		N/A	Suite 1601, 16th Floor, Butti Al Otaiba Building, Sheikh Khalifa Street, Abu Dhabi, UAE
Bahrain Branch		N/A	Almoayed House at Seef, Office 41, Bldg No 2332 Road No 2830, Block No 428 Alseef District Kingdom of Bahrain
Dubai Branch		N/A	Sultan Business Centre, Offices 501, Plot number 11 , Oud Metha Road Dubai (Sec Cert. 7 Mar 08) Contact: Samantha Sogolo
Kuwait Branch		N/A	c/o System Development and Project Management, PO Box 13385 Kifan, 71954, Kuwait Contact: Samantha Sogolo
Morocco Branch		N/A	Contact: Samantha Sogolo
Qatar Branch		N/A	Al Jaber Tower, 4th Floor, Unit 4, Museum Road, Old Salata, PO Box 21835 Doha, Qatar
Saudi Arabia Branch		N/A	Bin Homran Centre, Al Thalia Street,Tower (A), Fourth Floor Office Number 410A, P.O. Box 50426 Jeddah 21523, Saudi Arabia Contact: Samantha Sogolo
Hill International (Morocco) s.a.r.l.	Morocco	[redacted]	Corner Jean Jaurex Str. & Roudani Blvd. 7th Floor, Gauthier district, 20000, Casablanca, Morocco
Hill International (North Africa) Ltd.	Egypt	[redacted]	City Stars, Star Capital 8,2nd Flr Offices 23 & 24, El Forsan St Nasr City, Cairo, Egypt Tel:+202 24801900 Fax: +202 24801903
Hill International (Puerto Rico), Inc.	Delaware	[redacted]	303 Lippincott Centre, Marlton, NJ 08053 Tel: 856-810-6200 Fax: 856-810-0404
Hill International (Syria) LLC	Syria		Damascus – Mazzeh Sharqeya – Al Farabi Street – Al Farra Building
Hill International (Syria) Ltd.	Malta	[redacted]	"Palazzo Pietro Stiges", 90 Strait Street, Valletta VLT1463, Malta
Hill International (UK) Ltd.	England	[redacted]	1 London Bridge, London, SE1 9BG Tel: +44-20-7089-7020 Fax: +44-20-7089-7030
Romania Branch		N/A	Municipiul Bucuresti, Sector 1, B-DUL Nicolae Titulescu, Nr. 1, Bl.A7, Sc.4, Et.1, Ap.96
Hill International Brasil Participacoes LTDA	Brazil		Rua Henri Dunant, 1031, sala 06, Chacara Santo Antonio, Sao Paulo, SP., Brazil
Hill International de Mexico, SA de CV *(p/k/a Gerencia International de Proyectos, SA de C.V.)*	Mexico		Avenida Nichupte, 19, Supermanzana 19, Manzana 2, Plaza Galerias Infinity 1a, of. 107, Cancun, Quintana Roo, Mexico, Cp. 775500
Hill International Development Inc	Delaware	[redacted]	
Hill International Development Ltd.	British Virgin Islands		303 Lippincott Centre, Marlton, NJ 08053
Hill International Development (II) Ltd.	British Virgin Islands		303 Lippincott Centre, Marlton, NJ 08053
Hill International Holdings Ltd	Malta	[redacted]	Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT 1463, Malta
Hill International Hospitality (Americas) Ltd.	British Virgin Islands		303 Lippincott Center, Marlton, NJ 08053
Hill International LLC (Oman)	Oman		
Hill International Malaysia Sdn Bhd *(p/k/a James R. Knowles (M) Sdn Bhd)*	Malaysia	[redacted]	Level 7, Unit 7, Block 3B, Plaza Sentral, Jalan Stesen Sentral 5, Kuala Lumpur Sentral, 50470 Kuala Lumpur Tel: +603-2274-0917 Fax: +603-2274-0918
Hill International N.V.	Netherlands		
Hill International Petrol (Egypt) Ltd. (JV Company)	Egypt		City Stars, Star Capital 8, 2nd Floor, Office 23 & 24, El Forsan St., Nasr City, Cairo, Egypt Contact: Sarah Hussenein
Hill International Project Management (India) Private Limited	India		
Hill International Real Estate, LLC	Pennsylvania	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Hill International Real Estate Partners, LP	Pennsylvania	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Hill International Rijeka d.o.o.	Croatia	[redacted]	Rijeka, Nikole, Tesle 9, Croatia Tel: 856-810-6200 Fax: 856-810-0404
Hill International S.A.	Luxembourg	N/A	41 Boulevard Prince Henri L 1724 Luxembourg Tel: 011-352-46-83-83 Fax: 011-352-46-84-84
Greek Branch (registered in Greece)		N/A	62 Kifissias Avenue, Maroussi,Athens 151 25, Greece
Kosovo Branch			
Kursdistan Branch			
Latvia Branch (registered in Latvia)		N/A	13-36 Dzirnavu Street, Riga, LV-1010
Romania Branch		N/A	Municipiul Bucuresti, Sector 1, B-DUL Nicolae Titulescu, Nr. 1, Bl.A7, Sc.4, Et.1, Ap.96
Hill International Services Ltd.	British Virgin Islands	[redacted]	30 DeCastro Street, Road Town, Tortola, BVI Tel: 856-810-6200 Fax: 856-810-0404
Hill International Sp. zo.o *(p/k/a Euromost Polska Sp. zo.o)*	Poland	[redacted]	Atrium Plaza, Jana Pawla II 29, 00-867 Warsaw, Poland Tel: +48 22 58 13 777 Fax: +48 22 58 13 778
Hill International Vietnam Co. Limited	Vietnam	[redacted]	Post Box No. 33, Thank Khe Post Office, 251 Nguyen Van Linh St., Danang City, Vietnam
Hill Jianke Project Management (Shanghai) Co. Ltd. (JV Company)	China		Room No. 208, Unit F, Building 5, No. 7 Xiushan Road, Chongming Industrial Park, Chongming County, Shanghai, Ching
Hill Redwood Development Corp. (JV Company)	Delaware	[redacted]	303 Lippincott Centre, Marlton, NJ 08053 also c/o ZAC Management Group LLC, 101 West Avenue, Suite 300, Jenkintown, PA 19046

Business Name	Place of Incorporation	EIN	Principal Office Address
Hill Redwood Development, Ltd (JV Company)	British Virgin Islands	[redacted]	30 de Castro Street, Road Town, Tortola, British Virgin Islands
HillTMG Project and Construction Management EJSC (JV Company)	Egypt		36 Mosadak Street, Al-Doki, Giza
HillStone International, LLC	Delaware	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
HRD Services Limited	British Virgin Islands	[redacted]	30 de Castro Street, Road Town, Tortola, British Virgin Islands
I M Petroleum Services Ltd.	British Virgin Islands		30 de Castro Street, Road Town, Tortola, British Virgin Islands
James R. Knowles (Australian Holdings) Pty Limited	Australia	[redacted]	Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia Tel: +00 613 9699 5124 -- Fax: +00 61 3 9699 5104 Contact: Anna Empy
James R. Knowles (Egypt) Limited	Egypt	[redacted]	119 Misr Helwan Agricultural Road, Maadi, Cairo, Flat 42, Egypt Tel: +20-2-525-4115 Fax: +20-2-525-4118
James R. Knowles (Holdings) Limited	England	[redacted]	Vistorm House, 3200 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4BU Tel: +44-1928-756500 Fax: +44-1928-756501
James R. Knowles (Hong Kong) Limited	Hong Kong	[redacted]	2401 Wing on Centre, 111 Connaught Road, Central, Hong Kong Tel: +852-2542-2818 Fax: +852-2541-4648
James R. Knowles (Middle East) Limited	Cyprus	[redacted]	
James R. Knowles (NSW) Pty Limited	Australia	[redacted]	Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia Tel: +00 613 9699 5124 Fax: +00 61 3 9699 5104
James R. Knowles (Overseas) Limited	Cyprus	[redacted]	
James R. Knowles (Thailand) Ltd.	Thailand	[redacted]	
James R. Knowles (Worldwide) Limited	England	[redacted]	Vistorm House, 3200 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4BU Tel: +44-1928-756500 Fax: +44-1928-756501
John Shreeves and Partners Limited	England		1 London Bridge, SE 1, 9BG, London EC1M 5RR Tel: +44-20-7596-0000 Fax: +44-20-7596-0100
KJM & Associates, Ltd.	Washington	[redacted]	500 108th Avenue NW, Suite 1000, Bellevue, WA 98004 Tel: 425-451-3881 Fax: 425-454-8965
Knowles Consultancy Services Inc.	Canada	[redacted]	15999 Hurontario Street, Suite 106, Mississauga, Ontario L5G451 Canada Tel: 905-804-1958 Fax: 905-804-9327
Knowles Director Inc.	Marshall Islands		Ajeltake Road, Ajeltak Island, Majuro, Marshall Islands MH96960 Tel: 856-810-6200 Fax: 856-810-0404
Knowles Hill Pty Limited *(p/k/a Knowles Lawyers Pty Limited)*	Australia	[redacted]	Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia
Knowles Limited	England	[redacted]	
Knowles North America Holdings Inc.	Canada	[redacted]	3660 Hurontario Street, 6th Floor, Mississauga, Ontario L5B3C4
Knowles Secretary Inc.	Marshall Islands		Ajeltake Road, Ajeltak Island, Majuro, Marshall Islands MH96960 Tel: 856-810-6200 Fax: 856-810-0404
KRJ Consulting Limited *(p/k/a James R Knowles Limited)*	England	[redacted]	Vistorm House, 3200 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4BU Tel: +44-1928-756500 Fax: +44-1928-756501
Makan Hill International Ltd. (JV Company)	Cayman Islands		Pending: Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands
McLachlan Lister Pty Ltd.	Australia	[redacted]	Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia
McLachlan Lister Services Pty Ltd.	Australia	[redacted]	Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia
McLachlan Lister Services Unit Trust	Australia	N/A	N/A
Mediterranean Leisure (Egypt) Ltd.	British Virgin Islands		30 de Castro Street, Wickhams Cay 1, Road Town, Tortola, British Virgin Islands
PCI Group, LLC	Nevada	[redacted]	10801 West Charleston, Suite 650, Las Vegas, NV 89135 Tel: 702-515-7490 Fax: 702-515-7491
SIA Hill International Baltic	Latvia	[redacted]	Elizabetes str.15-1 Riga, Latvia LV-1010 Tel: 856-810-6200 Fax: 856-810-0404
Stanley Baker Hill (Iraq), Inc.	Delaware		303 Lippincott Centre, Marlton, NJ 08053 Tel: 856-810-6200 Fax: 856-810-0404
Stanley Baker Hill, LLC (JV Company)	Delaware	[redacted]	225 Iowa Avenue, Muscatine, IA Tel: 563-264-6204 Fax: 563-264-6658
TCM Group	California	[redacted]	3130 B Inland Empire Blvd, Ontario, CA 91764
Transportation Construction Services, Inc.	Delaware	[redacted]	303 Lippincott Centre, Marlton, NJ 08053 -- Tel: 856-810-6200 -- Fax: 856-810-0404
Trident Development Enterprise, LLC	Florida		4901 Vineland Road, Orlando, FL 32811 Tel: 407-756-7505
TRS Consultants, Inc.	California	[redacted]	5000 Executive Parkway, Suite 430, San Ramon, CA 94583 Tel: 925-275-9870 Fax: 925-275-9930
Yeil Hill International CM Ltd. (JV Company)	Korea		Lotte Kwanak Tower, room 402, 395-67 Shindaebang-dong, Dongjak-gu, Seoul, Korea 156-711 Tel: 82-2-849-5660 Fax: 82-2-849-5661

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #24440)

1. Company Name (print or type):

   ELLANA, Inc.

2. Business Address (to receive mail for this RFP):

   40 Exchange Place Suite 1904, New York, NY 10005

3. Business Telephone Number: 212-971-0936

4. Business Fax Number: 212-361-6169

5. Firm website: www.ellana.net

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 07 / 01 / 1998

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   N/A

9. Officer or Principal of Firm and Title:

   Ella Bereznitsky, President

10. Name, telephone number, and email address of contact for questions:

    Ella Bereznitsky, 212-971-0936, ebereznitsky@ellana.net

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☒ Yes ☐ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

By

Office of Business & Job Opportunity

Ellana, Inc.

Certificate PA-24746

This certificate acknowledges that the above named firm is certified as a **Women-owned Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: April 7, 2010

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: April 7, 2015

Form: 6/10/93

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #24440)

1. Company Name (print or type):

   SJH Engineering, P.C.

2. Business Address (to receive mail for this RFP):

   26 Jefferson Plaza, Princeton, NJ 08540-9542

3. Business Telephone Number: 732-329-0500

4. Business Fax Number: 866-812-1207

5. Firm website: www.sjheng.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 03 / 26 / 2003

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   N/A

9. Officer or Principal of Firm and Title:

   S. Jayakumaran, Ph.D, P.E. - Principal

10. Name, telephone number, and email address of contact for questions:
    S. Jayakumaran, 732-329-0500, sjay@sjheng.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☒ Yes ☐ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

THE PORT AUTHORITY OF NY & NJ

VIA E-MAIL

May 18, 2011

S. Jayakumaran
President
SJH Engineering, P.C.
26 Jefferson Plaza
Princeton, NJ 08540-9500

Dear Mr. Jayakumaran:

This letter confirms that the office of Business & Job Opportunity received your M/WSBE certification package on March 10, 2011 for review. On March 11, 2011 we assigned your file to Mr. Carl Peters. If more information is needed to help us with, the review Mr. Peters will be in touch with you. All communication will be in writing and we will notify you of our final decision.

For the status of your file, you may contact me, Lorna Harris, at either (***212) 435-7837 or lmharris@panynj.gov.***

On April 7, 2006, the Office of Business & Job Opportunity approved SJH Engineering, P.C. as an M/WSBE. This certification will remain in effect until we complete our current review and make a determination.

Sincerely,

Lorna Harris

Lorna Harris
Business Development Representative
Office of Business Diversity & Civil Rights

For

Roger J. Hsu
Manager, Certification
Office of Business Diversity & Civil Rights

233 Park Avenue South
New York, NY 10003
T: 212 435 7000

New Jersey Unified Certification Program

NJ UCP

NJTRANSIT The Way To Go.

New Jersey Department of Transportation

THE PORT AUTHORITY OF NY & NJ

CERTIFIED

DISADVANTAGED BUSINESS ENTERPRISE

SJH ENGINEERING, PC

This certificate acknowledges that the above named firm is certified as a Disadvantaged Business Enterprise as defined in Title 49, Part 26 of the US Code of Federal Regulations. This certification will remain in effect for three years from the certification date and must be updated annually. The New Jersey Department of Transportation must be notified within 30 days of any changes in the business that may affect ownership and control.

Your firm will be listed in the NJ UCP directory under the following NAICS Code(s).

NAICS CODE	[redacted] Engineering Services			

NJ Department of Transportation certified your firm as a DBE on behalf of all NJ UCP partners.

Signed Nelida Valentin

Nelida Valentin, Executive Director

Signed

Paul F. Sprewell, Manager

CERTIFICATION DATE: March 22, 2009

EXPIRATION DATE: March 21, 2012

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #24440)

1. Company Name (print or type):

   KS Engineers, P.C.

2. Business Address (to receive mail for this RFP):

   494 Broad Street, 4th Floor

   Newark, NJ 07102

3. Business Telephone Number: 973.623.2999

4. Business Fax Number: 973.242.2955

5. Firm website: www.kseng.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 4 / 21 / 1991

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   None

9. Officer or Principal of Firm and Title:

   Kamal Shahid, PE

10. Name, telephone number, and email address of contact for questions:

    Kamal Shahid, PE / 973.623.2999/ kshahid@kseng.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☒ Yes ☐ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

by

Office of Business & Job Opportunity

KS Engineers, P.C.

Certificate PA-20373

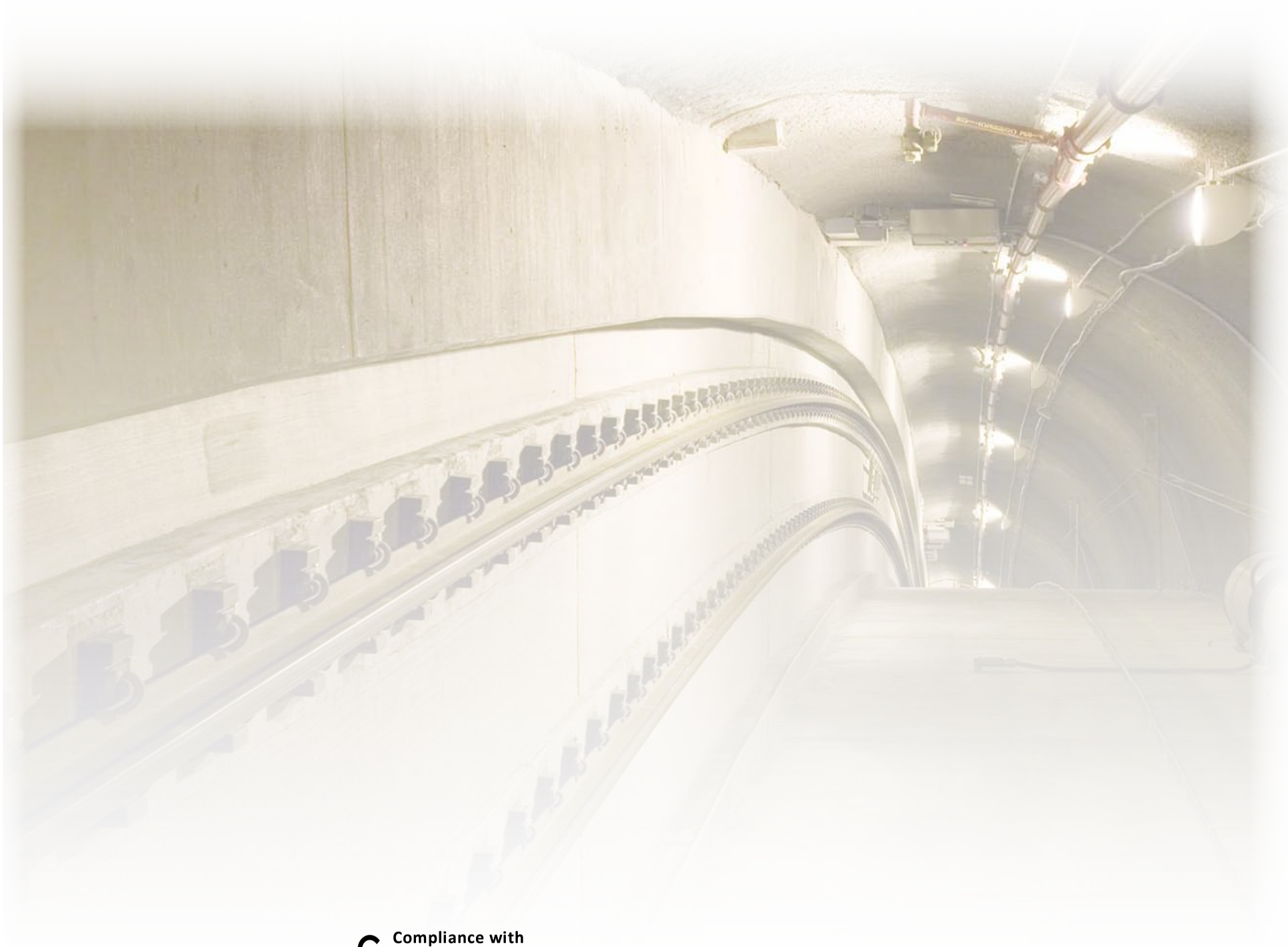
This certificate acknowledges that the above named firm is certified as a **Minority-owned Business Enterprise.** This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10,1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: 3/15/2010

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: 3/14/2015

Form: 6/10/93



C Compliance with Prequalification Requirements

Compliance with Prequalification Requirements

Capability to Provide Services

Hill International, Inc. (Hill) is a leading international construction consulting firm that provides program and project management, construction management, cost engineering and estimating, quality assurance, inspection, scheduling, claims analysis, innovative dispute resolution, and staff augmentation services to clients involved in major construction projects worldwide. Hill has the expertise and experience to manage major projects from concept to successful completion. We have successfully managed more than 5,000 projects with a total construction value over $250 billion, and we are **the largest pure construction management firm in the country**. Hill is a publicly-traded company listed on the New York Stock Exchange.

Hill is also an international leader in construction claims management, considered to be **the largest construction claims firm in the world.** Founded in 1976 as a multi-disciplined management consulting firm that helps construction participants minimize risks, Hill has developed a reputation for our innovative approaches to preventing and resolving construction schedule and cost overruns. We offer public and private clients a full spectrum of construction-related services that enable them to complete construction on time and within budget while minimizing claims and other problems. Hill has helped our clients resolve more than 25,000 claims and disputes valued at more than $100 billion. Hill employs more than 3,000 professionals and support personnel in 100 offices in 35 countries worldwide, making us well-equipped to perform on-call services. Our staff includes architects, engineers in all construction and building-related disciplines, planners, schedulers, estimators, value engineering specialists, construction managers worldwide, resident engineers, construction inspectors, and a full range of technical and support staff to represent owners. Our diverse pool of seasoned professionals have performed over 1,000 task order contracts during the last several years.

Our professionals have extensive experience providing the range of services anticipated by the Port Authority, and understand the unique challenges and nuances of these services as they relate to the New York / New Jersey region.

Constructability

All Hill staff members proposed for the Authority's projects have considerable constructability review expertise. Our team understands the impact design can have on construction, and also realizes that constructability has to be considered from day one of the design process. Pooling the efforts of designers and builders at the initial stage of design reduces problems and can also help realize significant cost and schedule savings.

Construction Staging

Our team offers to the Authority unparalleled experience in construction staging. Hill logistical experts will consider all project elements in preparing project staging plans, including site planning, project schedule, closures, parking, deliveries, security, storm water/sedimentation/

erosion control, safety, right of way preservation, traffic mitigation, site logistics (project trailer, portable toilettes, etc.), and equipment/supplies storage. Hill's final construction staging product is a cogent project narrative, seamlessly integrated into the overall execution plan.

Scheduling

Scheduling is critical to the success of any project. Hill has specific experience in the preparation and maintenance of construction schedules for the Authority, and will apply this knowledge on our assignments. Hill understands the project schedule must be both sensitive and responsive to the needs of the Authority. Schedules will be reviewed outlining and highlighting major activities, milestones, decision points, and time frames required. Our staff will prepare Critical Path Method (CPM) project schedules using Microsoft Project and Oracle's Primavera SureTrak, P3, and P6 web-based. Hill utilizes the schedule as a tool during all project meetings to highlight progress, to discuss and plan for upcoming required decision points, milestones, and submittal activities.

Quality Assurance

Our quality assurance and quality control (QA/QC) staff are integral components of the Hill team. Hill's QA/QC process focuses on three overall areas of quality in our work:

- Quality of Service: Most design and construction industry problems are accompanied by failures in personal relationships. These failures prevent collaboration and make it difficult if not impossible to find a solution to a given problem. Hill's QA/QC approach calls for constant and open communication among all invested project stakeholders to ensure crucial working relationships are maintained.

- Quality of Technical Work: The quality of Hill's technical documents, estimates, schedules, etc. is unmatched, thanks to the commitment of our senior management. At Hill, our management structure requires senior management staff to review all work products. This approach to delivering technical quality focuses on leading the process directly rather than on double-checking work.

- Quality of the Final Project: The project itself is the final and enduring measure of quality. Project quality is largely the province of the design professionals and the contractor(s), but Hill understands our role is to ensure the designer and contractor deliver no less than their best. We accomplish this by monitoring work being performed by contractors/ subcontractors, testing materials, checking subcontractor layouts, vendor surveillance, as well as overseeing the final acceptance of subcontractor work.

Contract Administration

Our Contract Administration methodology includes procurement of the contract, administration during the construction, and acceptance of the work. The contract administration methodology includes:

- Contract preparation and procurement
- Contract supervision
- Change order management (configuration management)
- Assessment of contractor's payment applications
- Contract closure

Estimating

Hill views cost estimating as an integral part of any capital program. Among the industry leaders in cost estimating services, Hill has honed our estimating systems through decades of experience—including our work with the Authority—to ensure each project we undertake receives the maximum amount of relevant, accurate, and timely estimating information. To accomplish this goal, we have refined the estimate development cycle to ensure the finished product meets the highest standards for quality control, technical performance, technical review, scope compliance, and product presentation

The Hill estimating team (as shown on the organization chart) for the Authority has the technical skills and hands-on expertise to do any and all of the required estimating scopes of work. The team will verify that all estimating scope of work is identified, responsibilities are defined, and that the actions of those accountable are specified in our Cost Estimating Management Plan.

Resources

With more than 3,000 employees, Hill has the depth and breadth of resources to supplement the Authority's staff on any conceivable project. Our professionals have the experience, skills, and technical support to meet any project demands. Furthermore, Hill's professionals are not only credentialed, they have seasoned, hands-on experience in the construction industry. This experience, gained in the trenches of construction projects both in the New York Metropolitan area and across the globe, gives our project teams the practical knowledge they need to effectively staff virtually any type of capital project. Hill's available staff includes construction managers, resident engineers, construction superintendents, estimators, schedulers, inspectors, contract administrators, and construction claims avoidance experts, among others.

New York Office

Hill's New York office will manage this contract with our local resources and personnel to meet the requirements anticipated under this RFP. Our office is centrally located at One Penn Plaza, New York, NY with more than 120 individuals on staff experienced in performing construction management and construction inspection services in the New York / New Jersey Metropolitan Area. Should the need arise, Hill will call on the resources available from its more than 3,000 professionals worldwide. Additionally, our subconsultants for this contract were carefully selected for their strong local understanding of the New York and New Jersey region.

ELLANA, Inc.
40 Exchange Place
New York, NY

MP Engineers, P.C.
252 W 37th Street Suite 503
New York, NY

KS Engineers, P.C.
494 Broad Street, 4th Floor
Newark, NJ 07102

Certificates of Authorization

At the end of this section are Hill's and our team members' Certificates of Authorization to practice professional engineering in New York and New Jersey.

Construction Inspection Staff

Hill has construction inspection staff with experience in performing construction inspection services in civil, structural, electrical, and mechanical engineering. Below is a table of Hill's local personnel who meet the specific certification and license requirements for this contract.

Engineers/Architects Licensed in New York and/or New Jersey

Below are our engineers and architects licensed in the states of New York and New Jersey.

Name/Role	Registrations/Certifications
Wagih Andraos, PE Project Manager	Professional Engineer, NJ, [redacted] Professional Engineer, NY, [redacted]
Matthew Barboni, PE, RLA Resident Engineer	Landscape Architecture, NY, [redacted] Professional Engineer, NY, [redacted]
Francis Bauer, PE Project Manager	Professional Engineer, NJ, [redacted]
Stephen Berglund, PE Project Manager	Professional Engineer, NJ, [redacted]
Jennifer Bolstad, RLA Resident Engineer	Landscape Architecture, NY, [redacted]
Chad Brown, RLA Resident Engineer	Landscape Architecture, NY, [redacted]

Name/Role	Registrations/Certifications
Jose Diaz, PE Project Manager	Professional Engineer, NY, [redacted] Professional Engineer, NJ, [redacted]
George Duda, PE Project Manager	Professional Engineer, NJ, [redacted]
Vincent Gallagher, PE Project Manager	Professional Engineer, NJ, [redacted]
Paul Giangreco, PE Project Manager	Professional Engineer, NY, [redacted]
Frank Giunta, PE Claims Analyst	Professional Engineer, NJ, [redacted]
Michael Griffin, PE Project Director	Professional Engineer, NJ, [redacted] Professional Engineer, NY, [redacted]
Richard Griffin, RA Claims Analyst	Registered Architect, NY , [redacted]
James Grundhoffer, PE Project Director	Professional Engineer, NY, [redacted]
Elliott Hardie, PE Project Manager	Professional Engineer, NY, [redacted]
Arthur Keltos, PE Senior Project Manager	Professional Engineer, NJ, [redacted]
William Krauss, RA Resident Engineer	Registered Architect, NY, [redacted]
John Lehman, PE Project Manager	Professional Engineer, NJ [redacted]
James Levey, PE Construction Manager	Professional Engineer, NJ, [redacted]
Christopher Ling, RA Claims Analyst	Registered Architect, NJ, [redacted]
Maurice Masucci, PE Claims Analyst	Professional Engineer, NJ, [redacted]
Leslie McCarthy, PE Claims Analyst	Professional Engineer, NJ, [redacted]
Gene McGarry, PE Senior Project Manager	Landscape Architecture, NY, [redacted]
James McKay, PE Claims Analyst	Professional Engineer, NJ, [redacted]
Karen Mohlenbrok, PE Project Manager	Professional Engineer, NY, [redacted]
James Mortimer, PE Project Manager	Professional Engineer, NJ, [redacted]

Name/Role	Registrations/Certifications
David Oldham, RA Senior Project Manager	Registered Architect, NY, [redacted]
James Palmer, PE Construction Manager	Professional Engineer, NJ, [redacted] Professional Engineer, NY, [redacted]
Luis Pinto, RA Project Manager	Registered Architect, NY, [redacted] Registered Architect, NJ, [redacted]
Philip Ragland, RA Project Manager	Registered Architect, NY, [redacted] Registered Architect, NJ, [redacted]
Bernard Rohe, PE Project Manager	Professional Engineer, NJ, [redacted]
Timothy Ronan, PE Project Manager	Professional Engineer, NY, [redacted]
Ellias Sarrinikolaou, RLA Resident Engineer	Landscape Architect, NJ, [redacted] Landscape Architecture, NY, [redacted]
Frederick Schmitt, PE Executive Consultant	Professional Engineer, NJ, [redacted] Professional Engineer, NY, [redacted]
Stuart Seidman, RA Senior Project Manager	Registered Architect, NJ [redacted]
John Sousa, RA Senior Project Manager	Registered Architect, NY, [redacted]
Doug Traver, RLA Vice President	Landscape Architecture, NY, [redacted]
Lawrence Veit, PE Vice President	Professional Engineer, NJ, [redacted]
Robert Zanetti, PE Executive Consultant	Professional Engineer, NJ, [redacted]

ACI Concrete Construction Special Inspectors

Below are our ACI Concrete Construction Special Inspectors.

Name	Role	Registrations/Certifications
Mohammad A Shaikhji *Hill International, Inc.*	Construction Inspector	[redacted]
Pankaj Raval *Hill International, Inc.*	Construction Inspector	[redacted]
Roger Lopez *Hill International, Inc.*	Construction Inspector	[redacted]
Mike Maggio *MP Engineers, P.C.*	Construction Inspector	[redacted]

Name	Role	Registrations/Certifications
Kwesi Amegah *KS Engineers, P.C.*	Construction Inspector	[redacted]
Rochelle Lancey *KS Engineers, P.C.*	Construction Inspector	[redacted]
Jeanne Brady *KS Engineers, P.C.*	Construction Inspector	[redacted]
Kuldip Sachdev *KS Engineers, P.C.*	Construction Inspector	[redacted]
Duke Samala *KS Engineers, P.C.*	ConstructionInspector	[redacted]
Orville Mcpherson *KS Engineers, P.C.*	Construction Inspector	[redacted]

ICC Certified as Structural Steel and Bolting Inspectors

Below are our ICC Certified Structural Steel and Bolting Inspectors.

Name	Role	Certifications No.
Mike Maggio *MP Engineers, P.C*	Construction Inspector	[redacted]
Shawn Heaney *MP Engineers, P.C*	Construction Inspector	[redacted]
Steven Heeter *KS Engineers, P.C.*	Construction Inspector	[redacted]

NACE Level 1 Coatings Certified

Below are our NACE Level 1 Coatings Certified personnel.

Name	Role	Registrations/Certifications
Ahmed Husain Zubair *KS Engineers, P.C.*	Construction Inspector	[redacted]

Hill's New York Certificate of Authorization

N. Y. S. DEPARTMENT OF STATE
DIVISION OF CORPORATIONS AND STATE RECORDS ALBANY, NY 12231-0001

FILING RECEIPT

ENTITY NAME: HILL INTERNATIONAL, INC.

DOCUMENT TYPE: AMENDMENT (FOR. BUS) COUNTY: NEWY
PROCESS NAME

SERVICE COMPANY: CT CORPORATION SYSTEM SERVICE CODE: 07

FILED:08/07/2006 DURATION:********* CASH# [redacted] FILM # [redacted]

ADDRESS FOR PROCESS

CT CORPORATION SYSTEM
111 EIGHTH AVENUE
NEW YORK, NY 10011

REGISTERED AGENT

FILER	FEES	120.00	PAYMENTS	120.00
	FILING	60.00	CASH	0.00
	TAX	0.00	CHECK	120.00
ERIN E. LESCHAK	CERT	0.00	CHARGE	0.00
HILL INTERNATIONAL INC.	COPIES	10.00	DRAWDOWN	0.00
303 LIPPINCOTT CENTRE	HANDLING	50.00	OPAL	0.00
MARLTON, NJ 08053			REFUND	0.00

[redacted] DOS-1025 (11/89)

NYS Department of State

Division of Corporations

Entity Information

Selected Entity Name: HILL INTERNATIONAL, INC.

Selected Entity Status Information

Current Entity Name:	HILL INTERNATIONAL, INC.
Initial DOS Filing Date:	APRIL 07, 2004
County:	NEW YORK
Jurisdiction:	DELAWARE
Entity Type:	FOREIGN BUSINESS CORPORATION
Current Entity Status:	ACTIVE

Selected Entity Address Information

DOS Process (Address to which DOS will mail process if accepted on behalf of the entity)

CT CORPORATION SYSTEM
111 EIGHTH AVENUE
NEW YORK, NEW YORK, 10011

Chairman or Chief Executive Officer

IRVIN E RICHTER
303 LIPPINCOTT CENTRE
MARLTON, NEW JERSEY, 08053

Principal Executive Office

HILL INTERNATIONAL, INC.
303 LIPPINCOTT CENTRE
MARLTON, NEW JERSEY, 08053

Registered Agent

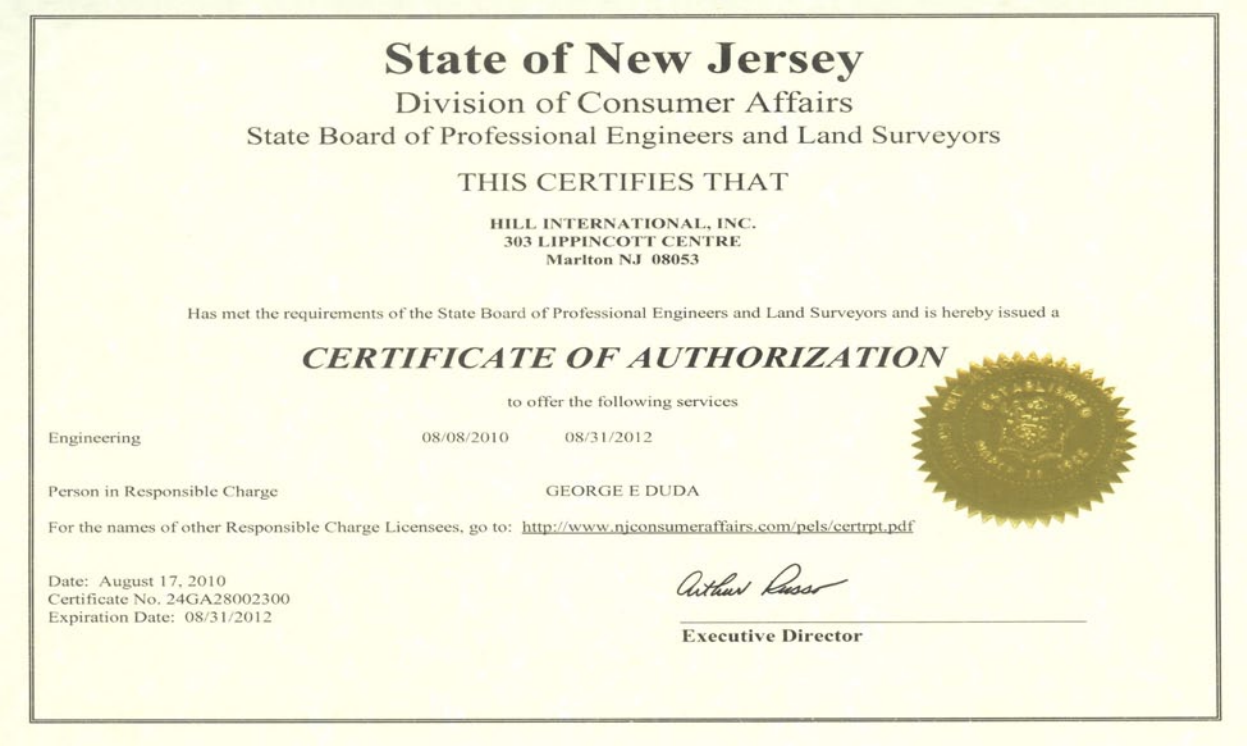
NONE

NOTE: New York State does not issue organizational identification numbers.

Search Results New Search

Division of Corporations, State Records and UCC Home Page NYS Department of State Home Page

Hill's New Jersey Certificate of Authorization



State of New Jersey
Division of Consumer Affairs
State Board of Professional Engineers and Land Surveyors

THIS CERTIFIES THAT

HILL INTERNATIONAL, INC.
303 LIPPINCOTT CENTRE
Marlton NJ 08053

Has met the requirements of the State Board of Professional Engineers and Land Surveyors and is hereby issued a

CERTIFICATE OF AUTHORIZATION

to offer the following services

Engineering 08/08/2010 08/31/2012

Person in Responsible Charge GEORGE E DUDA

For the names of other Responsible Charge Licensees, go to: http://www.njconsumeraffairs.com/pels/certrpt.pdf

Date: August 17, 2010
Certificate No. 24GA28002300
Expiration Date: 08/31/2012

Executive Director

Hill's New Jersey Business Registration

STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE

DEPARTMENT OF TREASURY/
DIVISION OF REVENUE
PO BOX 252
TRENTON, N J 08646-0252

TAXPAYER NAME:
HILL INTERNATIONAL, INC.

TRADE NAME:

ADDRESS:
303 LIPPINCOTT CENTRE
MARLTON NJ 08053

SEQUENCE NUMBER:
[redacted]

EFFECTIVE DATE:
06/28/06

ISSUANCE DATE:
11/16/06

James J. Fiorentino
Acting Director
New Jersey Division of Revenue

FORM-BRC(08-01)

This Certificate is NOT assignable or transferable. It must be conspicuously displayed at above address

ELLANA, Inc.'s Business Registration

04/11/05

Taxpayer Identification# [redacted]

Dear Business Representative:

Congratulations! You are now registered with the New Jersey Division of Revenue.

Use the Taxpayer Identification Number listed above on all correspondence with the Divisions of Revenue and Taxation, as well as with the Department of Labor (if the business is subject to unemployment withholdings). Your tax returns and payments will be filed under this number, and you will be able to access information about your account by referencing it.

Additionally, please note that State law requires all contractors and subcontractors with Public agencies to provide proof of their registration with the Division of Revenue. The law also amended Section 92 of the Casino Control Act, which deals with the casino service industry.

We have attached a Proof of Registration Certificate for your use. To comply with the law, if you are currently under contract or entering into a contract with a State agency, you must provide a copy of the certificate to the contracting agency.

If you have any questions or require more information, feel free to call our Registration Hotline at (609)292-1730.

I wish you continued success in your business endeavors.

Sincerely,

John E. Tully, CPA
Director

Reg'd 4/15/05

STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE

DEPARTMENT OF TREASURY/
DIVISION OF REVENUE
PO BOX 252
TRENTON, N J 08646-0252

TAXPAYER NAME:
ELLANA, INC.

TRADE NAME:

ADDRESS:
312 WEST 36 ST FL 2
NEW YORK NY 10018-6436

SEQUENCE NUMBER:
[redacted]

EFFECTIVE DATE:
09/16/04

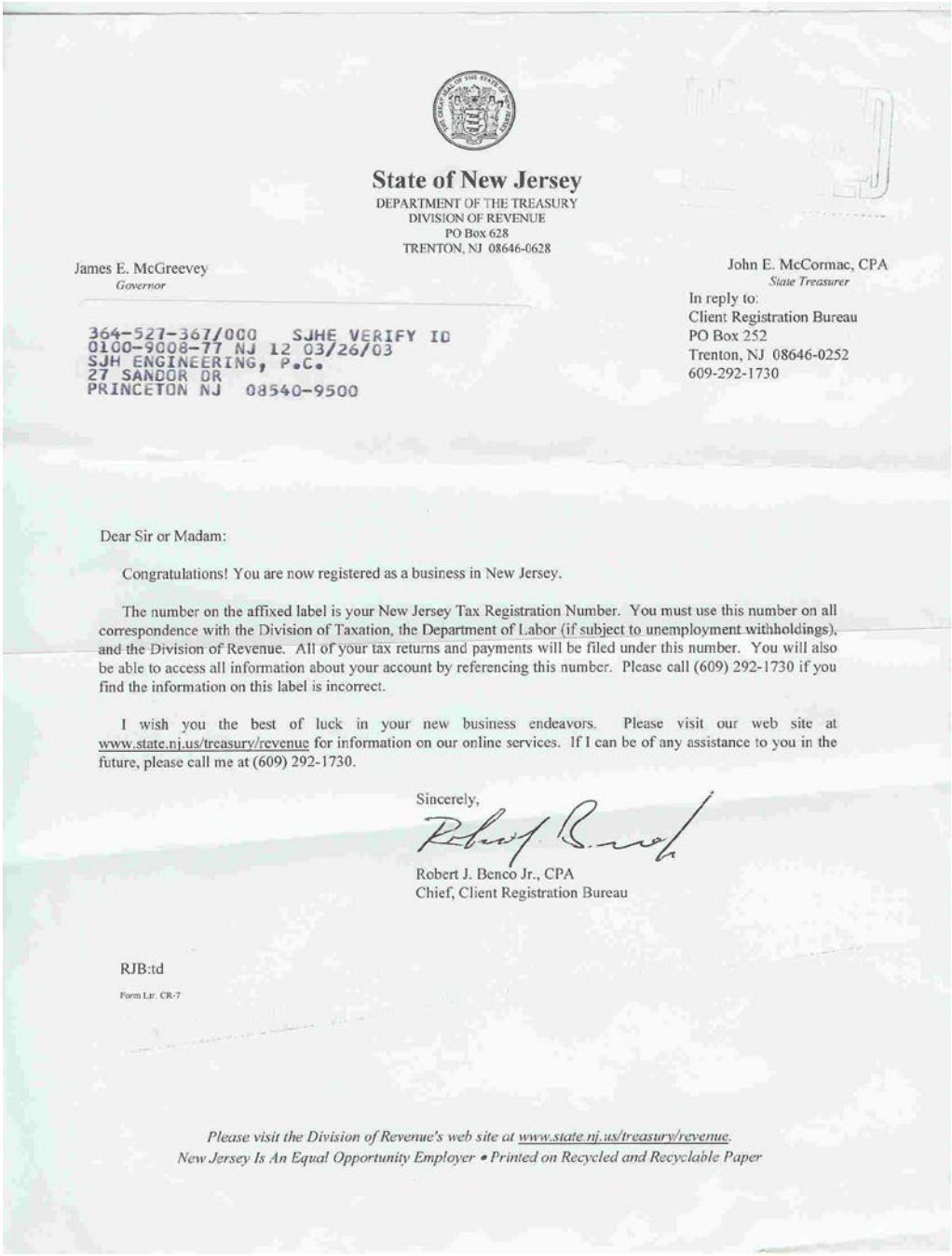
ISSUANCE DATE:
04/11/05

Director

FORM-BRC(08-01)

This Certificate is NOT assignable or transferable. It must be conspicuously displayed at above address.

MP Engineers, P.C.'s Business Registration



State of New Jersey
DEPARTMENT OF THE TREASURY
DIVISION OF REVENUE
PO Box 628
TRENTON, NJ 08646-0628

James E. McGreevey
Governor

John E. McCormac, CPA
State Treasurer

In reply to:
Client Registration Bureau
PO Box 252
Trenton, NJ 08646-0252
609-292-1730

364-527-367/000 SJHE VERIFY ID
0100-9008-77 NJ 12 03/26/03
SJH ENGINEERING, P.C.
27 SANDOR DR
PRINCETON NJ 08540-9500

Dear Sir or Madam:

Congratulations! You are now registered as a business in New Jersey.

The number on the affixed label is your New Jersey Tax Registration Number. You must use this number on all correspondence with the Division of Taxation, the Department of Labor (if subject to unemployment withholdings), and the Division of Revenue. All of your tax returns and payments will be filed under this number. You will also be able to access all information about your account by referencing this number. Please call (609) 292-1730 if you find the information on this label is incorrect.

I wish you the best of luck in your new business endeavors. Please visit our web site at www.state.nj.us/treasury/revenue for information on our online services. If I can be of any assistance to you in the future, please call me at (609) 292-1730.

Sincerely,

Robert J. Benco Jr., CPA
Chief, Client Registration Bureau

RJB:td
Form Ltr. CR-7

Please visit the Division of Revenue's web site at www.state.nj.us/treasury/revenue.
New Jersey Is An Equal Opportunity Employer • Printed on Recycled and Recyclable Paper

KS Engineers, P.C.'s Business Registration

STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE

DEPARTMENT OF TREASURY/
DIVISION OF REVENUE
PO BOX 252
TRENTON, N J 08646-0252

TAXPAYER NAME:
KS ENGINEERS, P.C.

TRADE NAME:

ADDRESS:
494 BROAD STREET, 4TH FLOOR
NEWARK NJ 07102

SEQUENCE NUMBER:
[redacted]

EFFECTIVE DATE:
02/14/95

ISSUANCE DATE:
04/28/09

Director
New Jersey Division of Revenue

FORM-BRC
(04-08) D205846V

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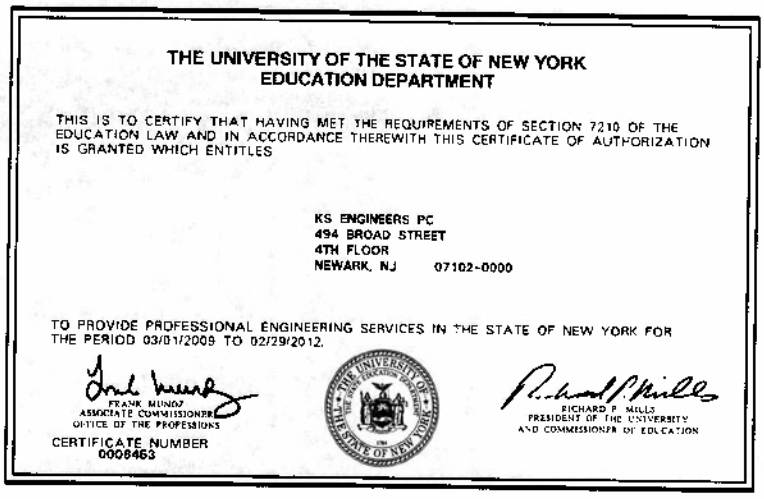
KS Engineers, P.C.'s Certification to Practice Professional Engineering in New York



THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

KS ENGINEERS PC
494 BROAD STREET
4TH FLOOR
NEWARK, NJ 07102-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 03/01/2009 TO 02/29/2012.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

CERTIFICATE NUMBER
0008463

D Multiplier

Multiplier

Hill's multiplier is 2.10

ELLANA, Inc.'s multiplier is 2.37

MP Engineers, P.C.'s multiplier is 2.31

KS Engineers P.C.'s multiplier is 2.0

HILL INTERNATIONAL, INC.
CALCULATION OF OVERHEAD RATES
YEAR ENDED DECEMBER 31, 2009

	PER FINANCIALS	ADJUST	ADJUSTED AMOUNT	NOTES	ALLOC. %	FIELD	OFFICE
DIRECT LABOR	$33,090,405	0	$33,090,405			$18,986,667	$14,103,738
INDIRECT EXPENSES							
UNAPPLIED SALARIES - FIELD	5,355,214	0	5,355,214		100.00%	5,355,214	0
UNAPPLIED SALARIES - OFFICE	5,967,380	0	5,967,380		100.00%	0	5,967,380
ADMINISTRATIVE SALARIES	19,592,244	(1,844,401)	17,747,843	1	54.81%	9,727,593	8,020,250
TAXES AND FRINGES	9,295,136	0	9,295,136		54.81%	5,094,664	4,200,472
BUSINESS DEVELOPMENT	1,098,555	(920,432)	178,123	2	54.81%	97,629	80,494
PROFESSIONAL MEMBERSHIPS	159,036	(17,000)	142,036	2	54.81%	77,850	64,186
LIBRARY	97,534	0	97,534		27.07%	26,402	71,132
RECRUITING	182,245	(45,561)	136,684	3	54.81%	74,917	61,767
INSURANCE	2,244,987	0	2,244,987		54.81%	1,230,477	1,014,510
PROFESSIONAL FEES	4,860,461	(777,983)	4,082,478	4	54.81%	2,237,606	1,844,872
TRAVEL & ADMIN COSTS	2,344,546	(693,391)	1,651,155	5	54.81%	904,998	746,157
AUTOMOBILES	84,895	(84,895)	0	6	0.00%	0	0
BUSINESS MEETINGS	3,979	0	3,979	7	27.07%	1,077	2,902
TUITION	122,684	0	122,684		54.81%	67,243	55,441
COMPUTER MAINTENANCE	1,396,598	0	1,396,598		27.07%	378,059	1,018,539
OFFICE EQUIP MAINTENANCE	25,579	0	25,579		27.07%	6,924	18,655
OFFICE SUPPLIES	196,703	0	196,703		27.07%	53,248	143,455
RENT	4,756,350	0	4,756,350		27.07%	1,287,544	3,468,806
REPRODUCTION	384,541	0	384,541		27.07%	104,095	280,446
TELEPHONE	1,058,368	0	1,058,368		27.07%	286,500	771,868
POSTAGE	226,490	0	226,490		27.07%	61,311	165,179
STATIONARY & PRINTING	74,075	0	74,075		27.07%	20,052	54,023
OFFICE EXPENSE	599,499	(116,208)	483,291	8	27.07%	130,827	352,464
BUILDING MAINTENANCE	51,999	0	51,999		27.07%	14,076	37,923
DEPRECIATION	2,113,109	0	2,113,109		27.07%	572,019	1,541,090
BAD DEBT EXPENSE	334,472	(334,472)	0	9	0.00%	0	0
OTHER INDIRECTS	1,602,815	(1,602,815)	0	9	0.00%	0	0
GOODWILL AMORTIZATION	1,471,160	(1,471,160)	0	9	0.00%	0	0
ALLOCATED CORPORATE	(10,297,649)	0	(10,297,649)		54.81%	(5,644,141)	(4,653,508)
TOTAL INDIRECT EXPENSES	$55,403,005	($7,908,318)	$47,494,687			$22,166,184	25,328,503
OVERHEAD RATE						116.75%	179.59%

E Key Personnel Qualifications

Key Personnel Qualifications

Our mission is to create a seamless organization with the Authority, and to assist in placing the right staff to deliver expert professional construction management and related technical services.

The following profiles show our team's capacity to provide the array of services required by the Authority's on-call contract. Hill offers extensive construction management consulting services. Having participated in over 5,000 project assignments with a total construction value of over $250 billion, Hill has managed all phases of the construction process, from pre-design through completion. Our professionals have provided construction management services for a wide range of market sectors, including rail, transit, airports, bridges and roadways, building facilities, and ports, among others. In addition to our construction management experience, Hill enjoys an excellent working relationship with the Authority, and is currently working with the Authority on the renewal and reconstruction of the World Trade Center and the PANYNJ PATH Capital Program Logistics Planning Support Services On-Call Contract,.

Hill has assembled a team of experts to meet the scope of work for the Authority. They include professionals from Hill International, and our sub-consultants, Ellana, MP Engineers, and KS Engineers. The team is led by Jim Grunhoffer, PE, as Project Manager, and supported by the Project Executive Frank Colucci, PMP.

James R. Grundhoffer, a Professional Engineer and Certified Construction Manager, has more than 25 years of experience in project and construction management for numerous projects in the New York / New Jersey region. His work includes transit projects, highways, courthouses, post offices, highway management systems, jet engine test facilities, and nuclear facilities. Mr. Grundhoffer has a strong grasp and understanding of project management procedures specific to the New York and New Jersey area and has served as Project Executive, Project Manager, Resident Engineer, General Superintendent, Chief Construction Engineer, Senior Inspector, Field Civil/ Structural Engineer, and Surveying Party Chief for a number of projects throughout the greater Metropolitan region.

Frank Colucci brings 30 years of diversified experience on a variety of projects spanning the transportation, industrial, institutional, and utility business sectors. With specific experience working on on-call contracts for some of New York's most widely-recognized agencies, Mr. Colucci offers the Authority a broad range of knowledge and a depth of expertise on multiple aspects of project development. This includes cost engineering, estimating and project controls, contract administration, change order preparation and negotiation, quality assurance, total quality management, claims management, and pressure vessel and piping stress analysis.

Subconsultants

The Hill Team has three sub consultants we strongly believe will enhance the project through their project experience, quality of their staff, and proven project success. Hill's commitment to meet the Authority's disadvantaged business goals is consistent with our firm's reputation as a leader in small business and minority teaming. For this assignment, we have selected what we believe are the best-qualified MBE/WBE firms. Hill is committed to a goal of no less than 12% of total contract value to MBE participation and 5% to WBE participation. Each of the MBE/WBE firms on the Hill

team contributes a unique and important skillset and was chosen for their specific expertise. Our team includes:

ELLANA, Inc., a certified WBE/DBE fi rm, is a professional constructi on cost management firm. Their staff of architects and engineers are trained and qualifi ed in all constructi on disciplines to provide cost estimating and project planning services. ELLANA provides quality cost estimating and cost control services at all stages of design and construction, from initial budgeting and conceptual studies to detailed construction documents. They know that accurately forecasting project costs, maintaining schedules, and controlling costs are vital to the success of any project. ELLANA designs its services to provide the most accurate and complete information about construction costs to owners, architects, engineers, and developers at the earliest stages of the planning and design processes so as to bett er plan, control, and manage costs throughout the life of the project. ELLANA's goal is to safeguard the client's best interests and business goals while working to achieve a successful project. They off er the following services:

- Cost Esti mate Preparati on at All Levels of Project Design
- Constructibility Reviews
- Project Administrati on
- Project Cost Controls
- Constructi on Scheduling

MP Engineers, P.C., a certified MBE, is Multi-Disciplinary Consulting Engineering firm specializing in Construction Inspection and Management, Structural Engineering design, Architecture, Buildings, Highways, Bridges and Services during Construction. MP Enginers, P.C.'s experience in Structural and Architectural Design ranges from straightforward assignments to complex structures with curved geometries in tight spaces and busy areas with congested pedestrian and vehicular traffic, and covers all phases from conceptual design to final design. Our Construction Inspection Staff is also highly experienced, having performed bridge inspections for PANYNJ, NYSDOT, NYCDOT, and NJDOT, as well inspections of buildings and schools for other government agencies including the MTA on their Second Avenue Subway Project. With offices in New York and New Jersey, MP Engineers, P.C. is strategically located to serve the Port Authority of New York and New Jersey.

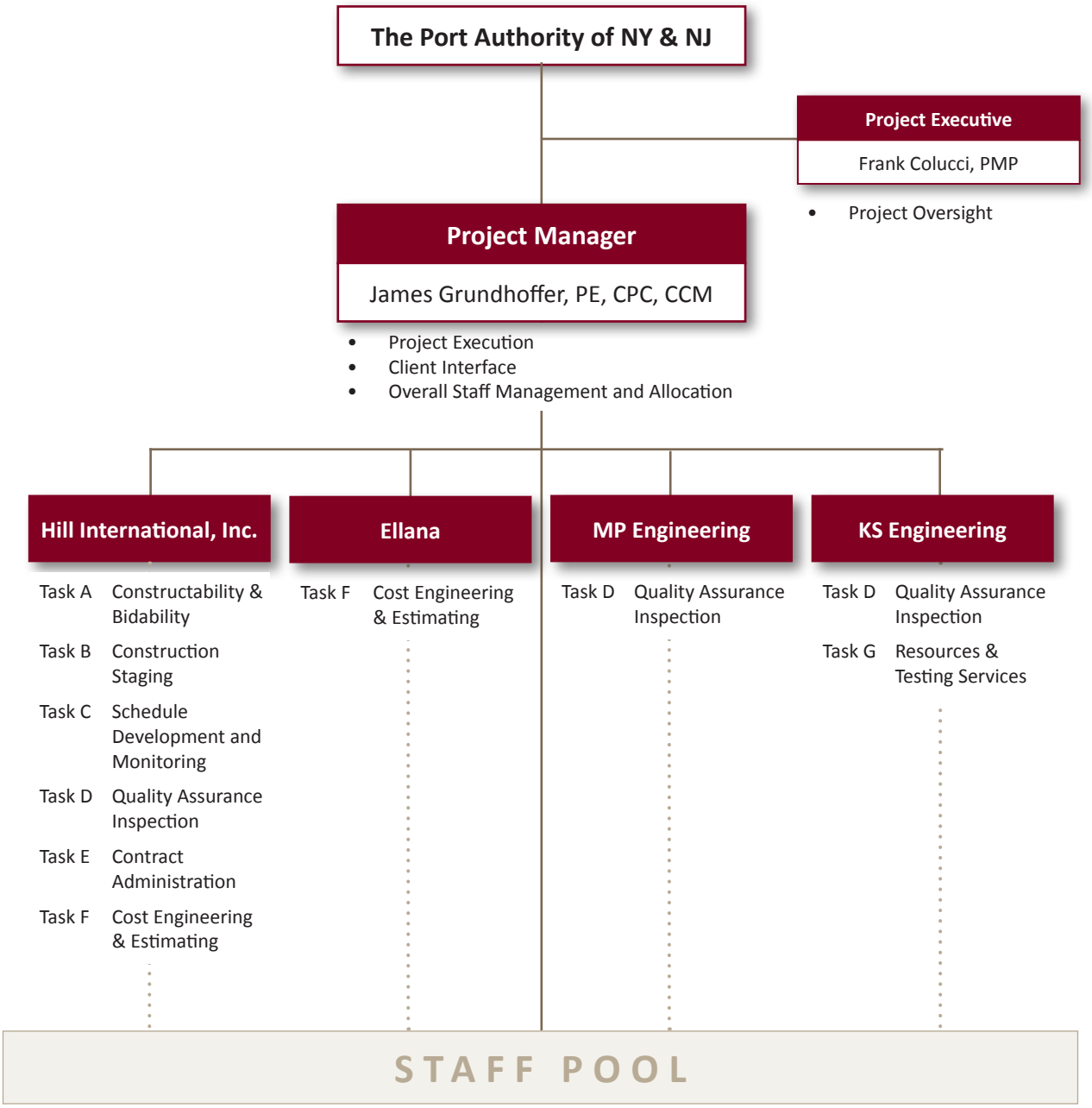
KS Engineers, P.C. (KSE), a certified MBE/SBE with full-service offices in Newark, NJ, New York City, Utica, NY and Philadelphia, PA, is a highly qualified professional engineering firm that provides civil engineering; structural engineering; geotechnical engineering; construction management & inspection; landscape architecture; aerial mapping ground control; boundary survey, topographic survey, Right-of-Way and GPS mapping services. Since KSE's founding in 1991, the quality and on-time delivery of services have been key factors in the firm's strong growth. Over the past decade, KSE has grown from a small firm to a highly reputable mid-sized, full-service Civil/Structural

engineering firm. KSE has a staff of approximately 100 full time employees, including 35 full-time design professionals, over 40 construction inspectors of various levels, 4 licensed land surveyors, four survey crews, 25 licensed civil/structural engineers, 7 LEED certified professionals and more than 20 support engineers and surveyors. KSE has provided all levels of inspectors as well as resident and office engineers for projects on key transportation arteries throughout New York and New Jersey. Their clients include the NYCDDC, NYSDOT, NYCDOT, TBTA, Metro-North, NYCT, NJ Transit, Port Authority of New York and New Jersey (PANYNJ), and other major transportation agencies as well as several counti es in New York and New Jersey. Their dedication to excellence and commitment to their clients has garnered high ratings for Construction Inspection Services from NYSDOT, NJDOT and other transportation authorities, including NJDOT's highest possible rating for Constructi on Inspection Services. KSE has been providing Call-In Construction Management services for the Port Authority since 2004 including Airports, Marine Terminals, and PATH facilities.

Our team's combined resources meet all of the construction management and inspection services anticipated under this on-call contract. The matrix below depicts our team's capabilities to fulfill the scope of work items outlined in the RFP.

Firm	Task A: Constructability Bidability	Task B: Construction Staging	Task C: Schedule Development and Monitoring	Task D: Quality Assurance Inspection	Task E: Contract Administration	Task F: Cost Engineering/ Estimating	Task G: Resources/Testing Services
Hill International, Inc.	●	●	●	●	●	●	
ELLANA, Inc.	●					●	
MP Engineers, P.C.				●			
KS Engineers, P.C.			●	●	●		●

Organizational Chart



Key Personnel Matrix

The matrix below depicts the various tasks each of our staff are capable of performing.

Name	Role	Task A: Constructability/ Bidability	Task B: Construction Staging	Task C: Schedule Development and Monitoring	Task D: Quality Assurance Inspection	Task E: Contract Administration	Task F: Cost Engineering/ Estimating	Task G: Resources/Testing Services
Frank Colucci, PMP	Project Executive	●	●	●	●	●	●	
James Grundhoffer, PE, CPC, CCM	Project Manager	●	●	●	●	●	●	
David L. Oldham, RA	Project Manager	●	●	●	●	●		
Luis Philip Pinto, RA	Project Manager	●	●	●	●	●		
Gener McGarry, LEED AP	Project Manager	●	●	●	●	●		
Philip Ragland, RA, LEED AP	Project Manager	●	●	●	●	●		
Douglas V. Traver, RLA	*Executive Leadership* Vice President	●	●	●	●	●		
Raymond Tom	Estimator	●			●	●	●	
Thomas Anderson	Estimator	●			●	●	●	
Manuel De La Hoz	Estimator	●			●	●	●	
Thomas Owens	Estimator	●			●	●	●	
Leonard Posten, CCE, MRICS, AVS	Estimator	●			●	●	●	
Gurcharan Chopra	Estimator Inspector	●			●	●	●	
John Lehman, PE	Project Manager Construction Manager	●	●	●	●	●	●	
Edward Nicholson, PE	Project Manager Construction Manager	●	●	●	●	●	●	

Name	Role	Task A: Constructability/ Bidability	Task B: Construction Staging	Task C: Schedule Development and Monitoring	Task D: Quality Assurance Inspection	Task E: Contract Administration	Task F: Cost Engineering/ Estimating	Task G: Resources/Testing Services
Jose Diaz, PE	Project Manager Construction Manager	●	●	●	●	●	●	
Paul Giangreco, PE	Project Manager Construction Manager	●	●	●	●	●	●	
Ronald Backman	Scheduler		●	●				
Dereck Baker	Scheduler		●	●				
Artan Bytyci	Scheduler		●	●				
Stephen Crowley	Scheduler		●	●				
Peter Jahchan, LEED AP	Scheduler		●	●				
James DiVita	Construction Inspector				●			
George Fernandez	Construction Inspector				●			
Christopher Gleeson	Construction Inspector				●			
George Guzman	Construction Inspector				●			
Troy Millard	Construction Inspector				●			
Nicholas Pace	Construction Inspector				●			
Daniel Perez	Construction Inspector				●			
Steven Rios	Construction Inspector				●			
Michael Ross	Construction Inspector				●			
Darlene Scott	Construction Inspector				●			

Name	Role	Task A: Constructability/ Bidability	Task B: Construction Staging	Task C: Schedule Development and Monitoring	Task D: Quality Assurance Inspection	Task E: Contract Administration	Task F: Cost Engineering/ Estimating	Task G: Resources/Testing Services
Keith Stapleton	Construction Inspector				●			
Bethoven Torio	Construction Inspector				●			
Michael Abarno, CCM	Construction Inspector Field Engineer				●			
Luis Cortes	Construction Inspector Field Engineer				●			
Elliott Hardie, PE, LEED AP	Construction Inspector Field Engineer				●			
Raed Jaber	Construction Inspector Field Engineer				●			
Adam Panzarella, LEED AP	Construction Inspector Field Engineer				●			
Jorge Rodriguez	Construction Inspector Field Engineer				●			
Thomas Wilson, Jr., PSP	Construction Inspector Field Engineer				●			
Suzanne Kaplan	Contract Administrator					●		
Calvin Lee, PMP	Contract Administrator					●		
Marc Zaretsky	Contract Administrator					●		
Mohammad A. Shaikhji	Construction Inspector				●			●
Pankaj Raval	Construction Inspector				●			●
Roger Lopez	Construction Inspector				●			●
Henry Chin *ELLANA, Inc.*	Estimator						●	
Walter Fitzer *ELLANA, Inc*.	MEP Estimator						●	

Name	Role	Task A: Constructability/ Bidability	Task B: Construction Staging	Task C: Schedule Development and Monitoring	Task D: Quality Assurance Inspection	Task E: Contract Administration	Task F: Cost Engineering/ Estimating	Task G: Resources/Testing Services
Anil Shah *MP Engineers, P.C.*	Construction Inspector				●			●
Bhadresh Patel, PE *MP Engineers, P.C.*	Construction Inspector				●			
Hitesh Bhatt *MP Engineers, P.C.*	Construction Inspector				●			●
Jing Kang, P.E. *MP Engineers, P.C.*	Construction Inspector				●			
Mike Maggio *MP Engineers, P.C.*	Construction Inspector				●			●
Shawn Heaney, *MP Engineers,P.C.*	Construction Inspector				●			●
Kwesi Amegah *KS Engineers, P.C.*	Construction Inspector				●			●
Rochelle Lancey *KS Engineers, P.C.*	Construction Inspector				●			●
Jeanne Brady *KS Engineers, P.C.*	Construction Inspector				●			●
Kuldip Sachdev *KS Engineers, P.C.*	Construction Inspector				●			●
Duke Samala *KS Engineers, P.C.*	Construction Inspector				●			●
Orville Mcpherson *KS Engineers, P.C.*	Construction Inspector				●			●
Steven Heeter *KS Engineers, P.C.*	Construction Inspector				●			●
Ahmed Husain Zubair *KS Engineers, P.C.*	Construction Inspector				●			●

Frank A. Colucci, PMP

Project Executive

Bringing 30 years of diversified experience on a variety of projects spanning the transportation, industrial, institutional, and utility business sectors, Mr. Colucci possesses a strong grasp of transit projects in the New York and New Jersey area. With extensive experience working on on-call contracts for some of New York's most widely-recognized agencies, Mr. Colucci offers the Port Authority a broad range of knowledge and expertise on multiple aspects of project development, including cost engineering, estimating and project controls; contract administration; change order preparation and negotiation; quality assurance; total quality management; claims management; and pressure vessel and piping stress analysis.

Education:
M.B.A., Business Administration, Wagner College, 1988

M.E., Mechanical Engineering, City College of New York, 1977

B.E., Mechanical Engineering, City College of New York, 1972

Registrations:
Project Management Professional

Professional Memberships:
Project Management Institute

American Society of Mechanical Engineers

Relevant Experience

Port Authority of New York and New Jersey, Downtown PATH Restoration Project, New York, NY

Mr. Colucci was assigned as a Project Manager on Hill International's project for the Port Authority to restore rail transit service between New Jersey and lower Manhattan. He had overall responsibility for the preparation of replacement-in-kind estimates to support the FEMA/ Insurance reconciliation process pertaining to the World Trade Center disaster losses, as well as for the preparation and reconciliation of check estimates for work packages associated with the temporary World Trade Center PATH Station, Hudson River Tunnels E&F and the PATH Exchange Place Station. Mr. Colucci also provided overall program management and technical support services and was responsible for facilitating completion of various technical reports and review of design work order packages, managing and meeting schedule commitments, monitoring project expenditures and deliverables, and tracking and maintaining internal budgets.

Port Authority of New York and New Jersey, PATH On-Call Services, Various Cities, NY & NJ

Mr. Colluci serves as a Deputy Project Manager for the on-call services contract. Hill is providing expert professional planning, project management, and related services as requested on a call-in basis during 2010-2014 for the Port Authority Trans-Hudson Corporation (PATH). Hill is responsible for Task Order 5: Scheduling Services and Task Order 6: Study Increased Service to 33rd Street Station

Metropolitan Transportation Agency (MTA) and Long Island Rail Road, Capital Project Management Department, Long Island Rail Road (LIRR) Estimating Services, NY

Mr. Colucci is serving as Project Manager on this task order contract, which is currently providing estimating services for the LIRR's 2005-2009 Capital Program Infrastructure Improvements Program.

Metropolitan Transportation Agency (MTA), MTA Independent Engineer's Certification Program, Certification of MTA Bus Company's Inspection, Maintenance, and Repair Programs, NY

Mr. Colucci is currently serving as the Project Manager of the team performing the monitoring and analysis of the MTA Bus Company's maintenance, inspection, and repair programs. The project's goal is to determine whether the programs are adequate to maintain the bus fleets in an overall "state of good repair."

Metropolitan Transportation Agency (MTA), MTA Independent Engineer's Certification Program, NY

Mr. Colucci is currently serving as Project Manager of the team performing the monitoring and analysis of the New York City Transit Authority (NYCT), Long Island Rail Road (LIRR), and Metro-North Railroad (MNR) maintenance, inspection, and repair programs. The project goal is to determine whether the programs are adequate to maintain the transit systems, and associated mechanical equipment such as chillers, cooling towers, and elevators and escalators, in an overall "state of good repair." Mr. Colucci personally performs the review and certification for NYCT stations, mechanical equipment and bus fleets; and MNR stations, including Grand Central Terminal; and the LIRR stations.

Metropolitan Transportation Agency (MTA), Capital Projects, NY

Mr. Colucci performed five years of project management/construction oversight on New York City MTA capital projects exceeding $2 billion. He quickly became recognized for rendering qualified, innovative recommendations and solutions which enabled those agencies to effectively manage and facilitate construction completion on various projects in their capital program. Under Hill International's Independent Engineering Consultant (IEC) contract with the MTA, Mr. Colucci provided project oversight.

James R. Grundhoffer, PE, CPC, CCM

Project Manager

James R. Grundhoffer, a Professional Engineer and Certified Construction Manager, has over 25 years of experience in project and construction management for wastewater treatment plants, educational and cultural facilities, courthouses and post offices, transit, highways and highway management systems, jet engine test facilities, and nuclear facilities and materials. Mr. Grundhoffer has a strong grasp and understanding of project management procedures specific to the New York and New Jersey area and has served as Project Executive, Project Manager, Resident Engineer, General Superintendent, Chief Construction Engineer, Senior Inspector, Field Civil/Structural Engineer, and Surveying Party Chief for a number of projects throughout the region

Education:
B.S., Civil Engineering, University of New Haven, CT, 1995

Certificate, 4 Hour User/ Erector Supported Frame Scaffold Safety Training, Total Safety Consulting, New York, 2006

Certificate, OSHA 510, Construction Industry, UMDNJ, School of Public Health, 2009

Registrations:
Superintendent of Construction, New York City

Professional Engineer, New York

Professional Engineer, Connecticut

Certified Construction Manager

Certified Professional Constructor

Professional Memberships:
American Society of Civil Engineers

Construction Management Association of America

Relevant Experience

New York City Department of Design and Construction (NYCDDC), Cultural Institutions Unit, Various Projects, NY

Hill International is providing program management and oversight for several projects for the NYCDDC for renovations, alterations and expansions to museums, libraries and zoos. Hill holds contracts with each contractor in compliance with the City's procurement regulations for design and engineering services by architects under contract with the NYCDDC. Mr. Grundhoffer is Hill's Program Manager responsible for providing management and oversight services for projects under this contract, including design and constructability reviews for civil and structural design: Projects include:

- **Renovation and Expansion of the Museum of the City of New York.** Hill provided construction management services for upgrades, renovations, and additions within the museum. The project included a new slate tile roof, mechanical and electrical upgrades, a new building addition, a building renovation, and an expansion over a six-year period. Approval from the City Landmarks Commission was required prior to the start of construction. Mr. Grundhoffer served not only as Program Manager, but also as Site/Civil Field Engineer responsible for the constructability reviews.
- **Renovations to the Schomburg Center for Research in Black Culture.** Hill was selected by the New York City Department of Design and Construction (DDC) to provide Construction Management Services for the $8.2 million renovation project at

the Schomburg Center. These renovations include a new curtain wall at the main entrance, new lobby and gallery space, construction of a scholars lounge, replacement of the heating and cooling systems, and addition of office, research and collection space. During construction, Hill focused on the special needs of working in an operating museum. Hill's services included interacting with the DDC and the New York Public Library, coordinating and advising Schomburg staff regarding work in the occupied space of the building, and managing day-to-day operations of the field staff. Mr. Grundhoffer provided overall program management of the site.

- **New Lobby and Expansion to the Queens Theater in the Park.** Mr. Grundhoffer served as Program Manager for this project responsible for the civil and structural oversight during the design process. The project involved the renovation and addition of a new maintenance and multi-level use 3-story wing. The new wing will include the installation of a freight elevator, kitchen, pantry, dressing rooms, and mechanical and electrical rooms. The project also includes the renovation of the building exterior and roofing, modifications to the existing loading dock, re-grading, and paving.
- **Renovations to the New York Public Library.** Serving as Program Manager, Mr. Grundhoffer was responsible for oversight of the investigation and repair project involving the various balusters, cornices, keystones, column capitals, and pediments comprising the façade of the building. During the investigation, it was determined that some decorative stone elements appeared to have fallen from the column capitals and pediments at the front of the building. Subsequently 28 column capitals and two pediments were wrapped with safety nylon netting to catch any stone fragments that could possibly fall and injure people or cause damage to the building.

Dormitory Authority of the State of New York (DASNY), Bronx County Hall of Justice, NY

The new Bronx Criminal Court Complex is an 11-story, 775,000 SF complex that is located on East 161st Street near Grand Concourse. Hill International is the Construction Manager for the completion of the project. Mr. Grundhoffer serves as the General Superintendent of Construction and Chief Construction Engineer to oversee all field and construction related activities and the performance of all project General Conditions work. He coordinates with DASNY, other NYC agencies, the A/E team, contractors, and tenant agencies for the preparation of contractor punch lists; completion of remaining punch list work by 18 prime contractors; closeout of open construction related issues; equipment commissioning and system start-up; owner and tenant requested program changes; remediation and repair of defective construction; owner and tenant acceptance and turnover of the building and equipment; and coordination of several tenant agencies for move-in to start court operations. Mr. Grundhoffer leads Hill's effort to support DASNY in the correction of defective construction, conducts constructability reviews of A/E and contractor submissions of proposed alternatives to remediate the defective work and prepares the general conditions and scope documents for work scheduled to bid and begin in the Spring of 2009.

David L. Oldham, RA

Project Manager

Education:
B.S., Building Construction, University of Florida, 2008
Certificate, 30 Hour OSHA, US Department of Labor, 2007

Registrations:
Registered Architect, New York

Awards/Honors:
Jones Endowment Scholarship PCEA Scholarship

David L. Oldham, a Registered Architect, has over 33 years of experience in project management, capital planning, design, construction, and operational planning support. Mr. Oldham's project experience includes performing arts centers, botanic gardens and parks, theaters, museums, libraries, educational facilities, fire and police facilities, office buildings, health care, and research laboratories. His specialized computer software skills include AutoCAD and Microsoft Project, and he is fluent in Spanish with a working knowledge of French and Mandarin.

Since 1992, Mr. Oldham has been the sole proprietor of Inteplan, an integrated facilities planning consultancy, providing clients with comprehensive design, construction, and operational planning support.

Relevant Experience

New York City Department of Design and Construction, Cultural Facilities Unit, Queens Theatre in the Park, New York, NY

Hill provided construction management services for this $15 million expansion and renovation project. Mr. Oldham was responsible for management of four prime construction contracts, preparation of change orders, approval of schedules and payments, coordination with the Theatre occupants and continued public use of the building during construction, and resolution of any issues that arose on the project.

New York City Department of Design and Construction, Queens Library/Children's Discovery Center, New York, NY

The Queens Central Library Children's Library Discovery Center and Central Library renovation is the construction of a 24,000 SF new library wing to house the new Children's Library Discovery Center (CLDC) and staff areas, as well as the construction of a new 1,800 SF central mechanical plant. Hill provided pre-construction services, including constructability review, final estimate, scheduling, bidding, construction services, and close-out for the renovation. The library serves Queens' population of more than 2.2 million, including one of the largest immigrant populations in the country.

As Project Manager, Mr. Oldham was responsible for the constructibility review and for the management of five prime contracts, including the $3 million exhibits contract. The central library building remained fully operational during the construction. The project is on track for LEED Silver certification.

5th Avenue Residential Renovation, New York, NY

This is an $8 million renovation of an 8,000 SF duplex cooperative apartment. As Owner's Representative, Mr. Oldham was in charge of monitoring and reporting to the Owner on the progress of the work. He reviewed the project scope, change orders, and payments; expedited the schedule; and resolved any issues that arose.

Latvian National Library, Riga, Latvia

Hill provided project management services to the Latvian National Library during the design and pre-construction of the new library. As Consultant to Hill, Mr. Oldham served as Design Review Manager and provided program preparation and design management during the pre-design phase, including coordination of the architects and MEP and structural consultants.

Prior Experience

Various Projects, Inteplan

Prior to joining Hill, Mr. Oldham was the Sole Proprietor of an integrated facilities planning consultancy. Projects included theaters, performing arts facilities, museums, libraries, a health center, and other facilities. He was also involved with numerous corporate interiors, including several projects for the Bowne Company in multiple cities, national headquarters for Barnes and Noble College Bookstores, research laboratories for the Burke Rehabilitation Hospital, and classrooms for the Laboratory Institute of Merchandising. Clients and projects have included:

- New Jersey Performing Arts Center, Newark, NJ
- Brooklyn Botanic Garden, New York, NY
- New York State Theater, New York, NY
- Folger Shakespeare Library Theater, Washington, DC
- Brooklyn Children's Museum, NY
- Wave Hill Environmental Center, Riverdale, NY
- Brooklyn Historical Society, NY
- Pennington School, Pennington, NJ
- New 42nd Street Corporation, New York, NY
- New Victory Theater and New Amsterdam Theater
- New York State Urban Development Corporation
- Manhattan Neighborhood Network, NY
- Harlem School for the Arts, NY
- New York Institute of Technology Library, NY

Luis Philip Pinto, RA

Project Manager

Education:
Bachelor of Architecture, Pratt Institute, New York, 1984

Registrations:
Registered Architect, New York

Registered Architect, New Jersey

Luis Philip Pinto, a Registered Architect, has over 25 years of experience in architecture, design, planning, and construction. Mr. Pinto has served as Project Manager, Construction Manager, Resident Engineer, Project Engineer, and Principal Architect. His project experience includes correctional facilities; schools; mixed-use facilities; transit facilities; and residential, commercial, and office buildings. Mr. Pinto's specialized computer software skills include Microstation Intergraph, AutoCAD, Primavera Expedition, and Prolog.

Relevant Experience

el Museo del Barrio, New York City Department of Design and Construction, Cultural Unit (DDC), New York, NY

Hill International is providing construction management services for the $15 million renovation of the museum galleries, curatorial facilities, lobby, café, and the exterior courtyard. Mr. Pinto serves as Project Manager and is responsible for overseeing the technical inspection, supervision, management, coordination, and administration of the renovation of the el Museo del Barrio facilities while the building is occupied. He is also responsible for the building-wide fire alarm and elevator upgrade and modernization at the Heckscher Building.

Prior Experience

Various Projects, New York City Transit (NYCT), New York, NY

Mr. Pinto acted as an Assistant to the Construction Manager. His responsibilities included the management of several construction projects. He prepared daily reports, punch list items, additional work orders, and the response to the contractor's request for information. He reviewed shop drawings, catalogue cuts, and as-built drawings. He approved payment estimates, monitored construction operations, and participated in the resolution of major issues, such as contractor interface issues.

Various Projects for Station Program Planning and Development, New York City Transit (NYCT), New York, NY

Mr. Pinto was responsible for implementing NYCT's subway station rehabilitation program. He prepared station surveys and reports to determine the preliminary causes of structural and architectural deterioration. He prepared detailed scopes of work for station rehabilitation and structural rehabilitation. He also developed punch list items for project acceptance.

Various Projects, Department of Architecture, New York City Transit (NYCT), New York, NY

As Architect, Mr. Pinto was responsible for the development and production of architectural drawings of mass transit facilities. His additional responsibilities included review and implementation of project scopes of work for compliance with design guidelines, departmental requirements, other agency design requirements, and field conditions. He reviewed shop drawings and prepared field inspection reports. He also supervised subordinate staff in the preparation of architectural drawings.

Food Serve Cook Projects, Rikers Island, Queens, NY

Mr. Pinto was responsible for overseeing the completion of the Food Serve Cook projects at Rikers Island, whose construction costs were over $60 million. He managed contract closeout, including, state, local utility, and local agency inspections. He coordinated contractor work completion strategies, claim avoidance, and resolution. He also had direct interaction with the client, updating them on the status, decisions needed, and problem solving techniques.

Site 3 Battery Park City Parks Conservancy (BPCPC) Facility, New York, NY

Mr. Pinto was responsible for overseeing pre-design, design, and pre-construction as the Owner's Representative and Construction Manager for the facility in Battery Park City. The facility included the interior space of a proposed mixed-use core and shell space designated for the BPCPC. The space was to be built in accordance with PBCA Green Guidelines, meeting the USGBC and LEED Commercial Interior rating. His responsibilities included coordination of the intent of the professional design team with the contractor's installation; full project coordination, program management, and scheduling, as it related to the fit out of the Parks Interior space; and coordination and management of the fit out design work with the Owner, User, Architect and Developer in accordance with the established project schedule. He reviewed design documents for constructibility and conducted value engineering. He also assisted the BPCA in packaging contract documents inclusive of developing the General and Special Conditions and Division 1 specifications.

Various Projects, New York City Department of Design and Construction (NYCDDC), Rikers Island, NY

Mr. Pinto was responsible for multiple simultaneous projects at Rikers Island totaling over $60 million. He provided direct oversight in construction management, resident engineering, field inspection, project controls, cost estimating, value engineering, and claims assistance. Mr. Pinto exercised a lead role in behalf of the client, NYCDDC, on multiple disciplined task teams. He provided overall project oversight to ensure staff resources were properly deployed and interacted with the client to sustain contractual obligations.

Gene A. McGarry, LEED AP

Project Manager

Gene A. McGarry, a Registered Landscape Architect, has over nine years of experience in landscape architecture, administration and project controls. Mr. McGarry has prepared project drawings and specifications, performed shop drawing and submittal review, and maintained client contact through project completion. He has also prepared and maintained project schedules and provided on-site construction supervision and troubleshooting. Mr. McGarry's specialized software skills include AutoCAD, MicroStation, Primavera Project Planner, Expedition, Prolog Manager, Constructw@re and SpecsIntact.

Education:
B.S., Landscape Architecture, University of Maryland, College Park, MD, 1996

Registrations:
Landscape Architecture, New York

LEED Accredited Professional

Professional Memberships:
American Society of Landscape Architects

Relevant Experience

New York City Department of Design and Construction, Lion House at the Bronx Zoo, New York, NY

Hill is providing construction management services for reconstruction of the historic Lion House at the Bronx Zoo. As the largest building on renowned Astor Court, the Lion House was originally designed as an exhibit area for big cats. The Lion House requires major infrastructure work before it can safely be transformed into the new Madagascar Exhibit. The planned reconstruction of this landmark building involves significant roof and façade work to restore the remarkable terra cotta animal friezes and sculptures to their original splendor. Mr. McGarry serves as Assistant Project Manager for the project.

City of New York Department of Parks & Recreation, Various Projects, New York, NY

As Project Manager for the New York City Department of Parks & Recreation, Mr. McGarry oversees a staff of 20 people working on various park projects throughout the city. He is involved in all phases of construction from bidding through close out. Projects include:

- ***Union Square:*** Hill provided construction management services for the renovation of Union Square North. The project included reconstruction and expansion of the historic pavilion, new playgrounds, water features, paving, and extensive infrastructure work to improve the operations of the Green Market. Union Square is one of the most high profile and widely used parks in New York City. Logistics at the site have proven to be extremely challenging due to the high level of pedestrian traffic, limited site access, and the need to keep

the Green Market open during construction. The pavilion has served as host of many important historic events, including the first ever Labor Day celebration.

- ***Saint Nicholas Park:*** Hill provided construction management services for the reconstruction of the historic bluestone staircases throughout Saint Nicholas Park in northern Manhattan. The project included demolition and reconstruction of many grand staircases to include safety rails, new paths through the park, and infrastructure work to improve site drainage and lighting. Saint Nicholas Park is adjacent to City College of New York and receives heavy pedestrian traffic throughout the day because it links the College to the nearest subway station. Saint Nicholas Park is an Olmsted designed park and the renovation work keeps the historic character of the park intact.

- ***Central Forestry:*** Hill provides construction management services for several programs within the City's Central Forestry Division. Hill's staff, of roughly 20 site construction specialists, oversees the planting of tens of thousands of Street Trees each year. The Street Tree program is the largest and most complex in the country and could be considered the most important "green" project in the City. The value of the program is immeasurable as it provides benefits to the residents in many ways, such as beautifying city streets, reducing pollution, increasing property values, reducing energy costs, and reducing the heat island effect. Hill is on-site for the preparation, planting, and finishing of each and every street tree planted throughout all five boroughs of New York City. In addition to managing the Street Tree program, Hill provides construction management services for the Greenstreets Division, Natural Resource Group, and Tree Trust Program. These projects specialize in creating green space and small parks in extreme urban environments, adding valuable places for the communities.

- ***DeLury Square:*** John DeLury Square is an important component of Mayor Bloomberg's Fulton Corridor Initiative focusing on the creation and refurbishment of several parks within the corridor. This existing park was demolished and expanded at the corner of Fulton and Gold Streets to create an attractive focal point between the World Trade Center and South Street Seaport sites. The new 8,850 square foot park will include a number of features including a fountain and pool, lush plantings, granite stone outcroppings and stone benches, pathways, lawn area, and game table. Bench seating with a simple yet graceful style will accommodate visitors wishing to rest along the pathway sand near the fountain. Security will be provided with an attractive custom steel fence and entrance gates, and new park lighting. Hill International is providing construction management services for the 2.3 million dollar project.

Philip Thomas Ragland, RA, LEED AP

Project Manager

Education:
Bachelor of Architecture, Pratt Institute, New York, 1984

Registrations:
Registered Architect, New York

Registered Architect, New Jersey

Philip T. Ragland, a Registered Architect, has over 23 years of experience in the construction industry for commercial, office, educational, hospitality, industrial, and institutional buildings. Mr. Ragland has provided design-build services, design management, constructibility and code review, acquisition due diligence, field observation and financial projection of capital needs, historic preservation, site and building studies, and construction management and monitoring services for a variety of projects. He has also provided expert witness testimony and has written technical reports. Mr. Ragland's specialized computer software skills include Primavera P3, and he has a working knowledge of French.

Relevant Experience

Bronx County Hall of Justice, Dormitory Authority of the State of New York (DASNY), NY

The new, $425 million Bronx County Hall of Justice is an 11-story, 775,000 square-foot complex that is located on East 161st Street near Grand Concourse. Hill International is the Construction Manager for the completion of the project. Mr. Ragland serves as Project Manager and is managing the production and completion of a 22,000-item punch list. He analyzes contract completion and advises the owner on payments to the contractors. He is coordinating the installation of furniture, fixtures and equipment, and reporting corrective action to the owner.

Various Projects, University of Connecticut, Storrs, CT

Hill was selected by the University of Connecticut to provide technical expertise and support in the development of RFQs, RFPs, bid documents, contracts, purchase orders, and policies, procedures, and standards for construction procurement and contract administration for its Office of Capital Project and Contract Administration (CPCA). As Project Manager, Mr. Ragland provides Hill's design and construction services for the projects and reports to the Director of CPCA, interfaces with Architecture and Engineering Services, and works along side CPCA staff.

Prior Experience:

JFK International Airport Facility Renovation, Port Authority of New York and New Jersey.

Mr. Ragland provided design-build services for this $2.7 million airport facility renovation.

Office Building, New Water Street Corporation, New York, NY

As Consultant, Mr. Ragland provided constructibility and code review for tenant alterations in a four million square foot office building.

Katrina Psychiatric Call Centre, Mental Health Association of New York City, NY

Mr. Ragland provided design and installation for the $200,000 psychiatric call center. The project was finished in 28 days (start to finish).

ADA Upgrades, Sixty Public Facilities, United States Postal Service, Philadelphia, PA

Mr. Ragland provided design-build services for ADA upgrades to 60 facilities in the Pennsylvania and New Jersey area.

Industrial Facility, Corporate Office Properties Trust, Columbia, MD

As Consultant, Mr. Ragland provided acquisition due diligence and financial pro-forma for a 400 square foot industrial facility.

Various School Projects, New Jersey Schools Development Authority (NJSDA), (formerly NJSCC), Jersey City and Trenton, NJ

Mr. Ragland provided a 5-year master plan for 60 school buildings, a $1.1 billion program. He established construction strategy, budgets, phasing, and logistics and authored guidelines for regulatory compliance, community relations, approvals, affirmative action, and historic preservation. He also provided design management of a $27 million elementary school and a $31 million middle school.

Multi-Building Pharmaceutical Complex, Rhodia Chirex Pharmaceuticals, Deepwater, NJ

As Consultant, Mr. Ragland provided field observation and financial projection of capital needs for a multi-building pharmaceutical complex. He evaluated the building, site, and support systems within the complex infrastructure.

Office Campus, United States Internal Revenue Service, WV

Mr. Ragland managed the design of homeland security upgrades to this rural office campus.

Douglas V. Traver, RLA

Executive Leadership, Vice President

Mr. Traver, a Hill Vice President in the New York City office, is a Registered Landscape Architect with more than 24 years of experience in project and construction management, site engineering, and design for both new construction and restoration of existing facilities. He serves in a project management or executive role and combines his expertise in landscape architecture and construction with professional management skills in the design and administration of major development projects in urban settings. His experience encompasses a wide variety of projects throughout the New York Region, including educational, parks and recreation, institutional, and government facilities. Mr. Traver provides technical consultation and project management services on capital construction and forestry projects, including services related to complex project coordination in a city environment.

Relevant Experience

New York City Economic Development Corporation, East River Waterfront Esplanade and Piers, New York, NY

Mr. Traver serves as Hill's Senior Project Manager, providing supervision of all construction management services during the enhancement of the esplanade, upgrades to several piers, and creation of a major new waterfront park for the public. Hill is providing project management services for the pre-construction, bidding, and construction oversight of the $120 million esplanade enhancement and pier upgrade project for the new East River waterfront park. Hill is providing design reviews, value engineering, project planning and coordination, budget tracking, master and construction schedules, and estimating support during the design and construction of the project.

New York City Department of Parks and Recreation, City of New York Parks and Recreation Department Program, New York, NY

As Project Executive for this dynamic requirements program, Mr. Traver supervises a staff of architects, engineers, and field inspectors overseeing site construction and renovation of various parks and recreational facilities. He is responsible for overseeing numerous projects, including more than 100 contracts for the Central Forestry Division's Planting Program, the $43 million reconstruction of McCarren Park Pool and Bathhouse, and the $20 million reconstruction and expansion of the Union Square Park Pavilion, as well as other construction projects valued at over $280 million. Hill provides construction management

Education:
Bachelor of Science, Landscape Architecture, College of Environmental Science & Forestry, Syracuse, NY, 1986

Registrations:
Landscape Architecture, New York

Landscape Architecture, Maryland

Professional Memberships:
American Society of Landscape Architects

Awards/Honors:
CMAA Project of the Year Award, Staten Island Zoo Reptile House, Metro NY/NJ Chapter, 2008

Gold Award, Bronx Zoo Lion House Renovation, Building Design & Construction Magazine, 2009

Seminars:
"Construction Management" Hot Springs, VA 1999

"Construction Management" Hilton Head, SC 1997

"Construction Management" Hilton Head, SC 1995

"Construction Management" Richmond, VA 1995

services for the Department of Parks and Recreation's multi million dollar term contract which encompasses the construction or renovation of parks projects within the five boroughs of New York City. Our services include continuous on-site supervision, maintaining accurate records, preparing detailed construction reports, ensuring adherence to contract documents, maintaining schedules, establishing lines of communication, reviewing contractor payments, preparing change orders, and addressing community outreach needs.

New York City Department of Design and Construction, Lion House at the Bronx Zoo, Bronx, NY

As Senior Project Manager, Mr. Traver was responsible for managing the pre-construction and construction services for the rebuild of this historic facility. He provided oversight and senior-level management ensuring the quality, budget, and schedule of the project were a success. Hill International provided construction management services for the reconstruction of the historic Lion House at the Bronx Zoo. The 1970s-built facility required major infrastructure improvements before it could be safely opened to the public. The reconstruction of the 18,000 SF building involved significant structural, roof, and façade work, including preservation of much of the historic character of the building and terra cotta lion figures.

New York City Department of Design and Construction, Cultural Unit (DDC), el Museo del Barrio, New York, NY

Hill International is providing construction management services for the $15 million renovation of the museum galleries, curatorial facilities, lobby, café, and the exterior courtyard. The project features renovation and expansion of the first floor including the removal, reconfiguration and interior renovation of the existing museum public and gallery spaces, addition of a café and interior galleries, gift shops and renovation of the existing courtyard.

Putnam County, Department of Highways and Facilities, Kent Senior Center, Kent, NY

Mr. Traver served as Principal for the Kent Senior Center responsible for project oversight, quality assurance, monitoring costs, and maintaining the construction schedule. Mr. Traver supervised a staff of architects, engineers, and field inspectors and oversaw site construction of the facility. Hill is providing construction management services for the $8 million, two-story, 21,000 SF Kent Senior Center which houses comprehensive services for senior citizens.

New York City Department of Design and Construction (DDC), Cultural Affairs Unit, On-Call Construction Management Task Order Services, New York, NY

As Program Manager, Mr. Traver oversaw a staff of more than 30 professionals during the development and implementation of the program requirements for the construction of numerous alterations and expansions to museums, libraries, and zoos. His responsibilities for the $130 million program included managing each project from bid preparation through construction closeout. Hill International serves as DDC's construction management consultant for a city-wide task order contract. Tasks include building renovation and expansion, new building construction, building utilities upgrades and replacement, architectural renovation and repair, safety improvements in access/egress ways, and fire alarms and sprinkler systems upgrade.

Raymond Tom, LEED AP

Estimator

Education:
Bachelor of Architecture, Architecture, Pratt Institute, 1993

A.A.S., Architectural Technology, New York City Technical College, 1990

Registrations:
LEED Accredited Professional

Raymond Tom has 17 years of diverse experience as a Senior Project Architect in architecture and interior design. Mr. Tom has strong leadership skills in managing the project team coordination process for multiple projects through all phases of design and construction. His project experience includes healthcare, hospitality, education, stadiums, corporate offices, banking, mixed-use, entertainment, retail and shopping malls, and gaming. Mr. Tom's specialized computer software skills include AutoCAD R13 through 2008, and Revit, 2009. He is fluent in English and Cantonese.

Relevant Experience

New York City Department of Design and Construction, City Hall Renovations, New York, NY

Mr. Tom serves as Cost Estimating Manager for the historic landmark building's renovations. Supporting management through various phases of the project, Mr. Tom provides support and manages the cost estimates and budgeting process. Hill is providing construction management services for the $80 million renovation of New York City Hall in Lower Manhattan. Renovations will include exterior and roofing improvements; refinishing of the iconic steps; installation of new electrical, fire, audio-video, heating, ventilation, and air conditioning systems; modernization of its elevators; and the complete renovation of all interior spaces.

City University of New York, Brooklyn College Performing Arts Center, NY

Mr. Tom serves as Hill's Design Phase Manager and provides services in all phases of design from pre-design to construction documentation. He prepares Document Review Reports describing the results of his review of project plans. He generates Constructability Reviews and Reporting of the drawings and specifications; existing site conditions; and proposed mechanical, electrical, and plumbing systems, as well as soil conditions review. The addition not only includes performance and rehearsal spaces for the music and theater departments, it also creates a new front door and image for the entire campus. The new Center includes a 64,000 SF addition to the existing Whitman Hall and features a 200-seat flexible stage performance space with variable acoustics; rehearsal rooms for orchestra, choral and theater; a state-of-the-art

recording studio; the Pima Center for Computer Music; music studios and practice rooms; and a scene shop. A gracious lobby, envisioned as a venue not only for pre- and post-performance gatherings but also for campus-wide receptions and special events, welcomes visitors, students and staff alike. This project is being designed and constructed to meet LEED Silver Accreditation.

Prior Experience

NBBJ, Various Projects, New York, NY

Serving as Senior Project Architect, Mr. Tom's overall responsibilities included CAD documentation and coordination, weekly site meetings and field reports, shop drawing reviews and approvals, and expedited RFI responses. He developed a strong relationship with the client and the construction manager diligently resolving existing site condition conflicts, while maintaining the integrity of the architectural design. He collaborated with multiple project teams providing technical support on local Department of Building filing processes, and CAD documentation accelerating the construction completion schedule. He mentored and guided junior staff through the process of CAD file management, documentation, and coordination through design and construction.

Gensler, Various Projects, New York, NY

As Senior Project Architect, Mr. Tom managed a project team clearly defining roles and assigning priorities that resulted in timely completion of contract documentation for all phases of design and construction. He demonstrated effective project scope management through rigorous team coordination ensuring that the project included all and only, the work required to complete it within the budget. He efficiently executed construction administration duties through project closeout, significantly reducing the number of contractor RFIs and potential associated costs. Mr. Tom also proactively generated local code and accessibility compliant analysis reports and conducted documentation code compliance review, successfully obtaining final Certificates of Occupancy. Projects included:

- **Crowne Plaza Times Square Hotel Renovation, New York, NY** - 6,000,000 GSF with 770 rooms, Design Development, Construction Documentation, and Construction Administration.

- **St. John's University Center & Academic Center, Queens, NY** – Architectural services featuring design & construction documentation and construction administration for new 130,000 GSF center that contains state-of-the-art classrooms, a multi-purpose room, meeting rooms, computer labs, and study areas, as well as student organization spaces and dining facilities. Mr. Tom's role as a Senior Project Architect consisted of generating building code analysis and DOB permitting drawings, detailing & coordinating CAD documentation between all consultants, participating in budget cost estimating review & value engineering, establishing project electronic filing standards, and delegating team member responsibilities and projected manhours for project completion.

Thomas O. Anderson

Estimator

Mr. Anderson has 32 years of experience in construction, engineering, and procurement for building projects, including Federal and military projects, data centers, healthcare facilities, process and chemical manufacturing facilities, universities and libraries, information technology centers, bioscience laboratories, high-rise buildings, bio-tech fermentation and purification facilities, pharmaceutical facilities, single and combined cycle power plants, hotels, and office campuses and buildings.

Mr. Anderson has worked with clients to establish funding proposals; interfaced with architectural and engineering personnel for compliance to scope, schedule, and cost; and developed scopes of work. He has developed construction package documentation, developed conceptual estimates, reviewed bid packages, and performed bid estimates for construction. He has provided cost control, selected contractors, negotiated and expedited field change orders, and prepared monthly activity reports. Mr. Anderson has been responsible for critiquing projects at various stages of completion, tracking field progress, and establishing cost benchmarking and estimating cost models. He has also provided value engineering, and cost studies and models of concepts that may or may not be included in the final design.

Education:
Coursework, Civil Engineering, Lehigh University 1971-1974
A.A., General Education, Northampton Community College, 1975
Coursework, Drexel University 1977-1979

Professional Memberships:
American Association of Cost Engineers (AACE)
American Society of Professional Estimators (ASPE)

Prior Experience

Various Projects, Lawrenceville, NJ

As Estimating Executive, Mr. Anderson was responsible for the following projects:

- **Lower Manhattan Development Corporation (LMDC), New York, New York:** $45 million De-Construction Project Change Order for 130 Liberty Street for LMDC.
- **Colgate University, Hamilton, New York:** $40 million Library and Center for Information technology Building.
- **State University of New York, Farmingdale Campus, Farmingdale, New York:** $13.5 million Academic Incubator Bioscience Laboratory Facility (Design/Build).
- **GlaxoSmithKline, Upper Merion, Pennsylvania:** $28 million Building 38 GMP Compliance Project.
- **Glaxo, Inc., Zebulon, North Carolina:** $100 million sterile and non-sterile liquid fitting and packaging facility.

- **Pfizer, Inc., Terre-Haute, Indiana:** $72 million Inhaled Insulin Facility.
- **Genentech, Vacaville, California:** $265 million multipurpose biotechnology facility.

Various Projects, Parsippany, NJ

As Director of Pre-Construction, Mr. Anderson was responsible for the following projects:

- **Schering Plough, Summit, New Jersey:** The project was a $450 million series of campus improvements, which included multiple office renovations projects and research laboratory renovations. It also included a building renovation into a new cafeteria, which included a $220 million combination new 95,000 square foot office building, a new modular design/build 25,0000 square foot solid dosage and oral liquids filling manufacturing facility, and a warehouse renovation of 200,000 square feet into a new utility and manufacturing support and storage facility.
- **Becton Dickinson, Fort Lauderdale, Florida:** The project was a $50 million powder manufacturing addition and renovation and a Sterile Liquid Upgrade to a recently purchased facility in Fort Lauderdale.
- **Conceptual Hotel ClubSport Facility:** The project was an $88 million to $95 million building program for a Developer in three different locations and with three different programs and facility requirements. The variances were in the number of room keys, and the type of parking facilities, including surface parking, parking deck, and/or sub-level parking at each of the three different locations.
- **Latex Manufacturing Facility:** The project was a $47 million latex manufacturing facility in Maricopa, Arizona.
- **Merck & Company, Rahway, New Jersey:** The project was a new $8 million high-pressure gas supply line from the supplier into the Central Plant Distribution System for Merck's Rahway plant.
- **Numerous IBM Projects:** Projects included office renovations, new substations, and Data Center upgrades.

Various Projects, Philadelphia, PA

As Senior Estimator, Mr. Anderson was responsible for the following projects:

- **Liquid & Solid Dosage Finish/Fill Facilities:** $82 million grassroots manufacturing and warehousing facility for Alcon Laboratories, Inc., Fort Worth, Texas.
- **Bulk Pharmaceutical Facilities:** $24 million organic synthesis (Rhodimet AT88) facility for Rhone-Poulanc, Institute, West Virginia.
- **Pilot Plants/Research Development Facilities:** $25 million chemical development pilot plant for Glaxo SmithKline (formerly Sterling Winthrop, Inc.) Upper Providence Township, Pennsylvania.

Manuel De La Hoz

Estimator

Education:

B.E., Technical Drawing, Institution of Industrial Technology of Atlantico, Columbia, 1974

Diploma, Technical Drawing, Institution of Industrial Technology of Atlantico, Columbia, 1971

Manuel E. De La Hoz has over 26 years of experience in construction and engineering, estimating and project management for HVAC, plumbing and piping, fire protection, elevators, and electrical projects. He has been provided services on multiple projects for the Port Authority and has been involved with bids and management of some of the largest mechanical projects in the New York and Philadelphia metropolitan area, including airports and pharmaceutical projects.

Mr. Del La Hoz is the lead estimator that coordinates estimating efforts for the New York Constructability Department. In addition, Mr. Del La Hoz reviews estimates, and constructability analysis, and provides pre-construction services. His experience also includes the new electronic meter reading technology used by utility companies. He is a certified QuickPen user as well as a certified Itron AMR installer. Mr. De La Hoz's specialized computer skills include QuickPen Estimating.

Relevant Experience

Port Authority of New York and New Jersey, World Trade Center (WTC) Transportation Hub, New York, NY

Hill is providing program management services in connection with the planning, design and construction of the new World Trade Center Transportation Hub, including the new permanent PATH Terminal, which is expected to cost $2.5 billion. Hill provided similar services in connection with the $566M temporary PATH Station. Mr. De La Hoz was involved with the estimating effort for the Port Authority's 3.5M SF of reconstruction below street level with initial budget estimates, design estimates and final estimates, including FTA grantee funding scope. In addition to the new PATH terminal, the site includes security, tenant and bus parking; core and tower podiums; central power and mechanical plants; memorials; as well as cultural and performing arts centers.

Port Authority of New York and New Jersey, Retail Redevelopment at World Trade Center (WTC) Site Estimate, New York, NY

Hill International provided the Stage I Design Construction cost estimate for the World Trade Center Retail Redevelopment. Mr. De La Hoz was involved with the estimating effort for the Port Authority's 3.5M SF of reconstruction below street level with initial budget estimates, design estimates and final estimates, including FTA grantee funding scope.

He also coordinated the estimate of all of the construction divisions for several phases. The site includes security, tenant and bus parking; core and tower podiums; new PATH terminal, new center power and mechanical plants; memorials; retail space; cultural and performing arts centers.

New York City Department of Design and Construction, City Hall Renovation, Pre-Construction Services, New York, NY

Hill is providing construction management services for the $80M renovation of New York City Hall in Lower Manhattan. Renovations will include exterior and roofing improvements; refinishing of the iconic steps; installation of new electrical, fire, audio-video, heating, ventilation, and air conditioning systems; modernization of its elevators; and the complete renovation of all interior spaces. Involved with preconstruction, budgeting and estimating, as Senior Estimator, Mr. De La Hoz led the estimating effort for the schematic design, design development, 50% CD, 9.5% CD and 100% CD estimates for the construction program. His detailed estimates include all civil, architectural and structural, mechanical and electrical divisions; as well as Pack 1 and 2. Mr. De La Hoz is also assisting the project management team to validate contractor's bid and to review scope of work, in addition to other specialized project management tasks.

State of Connecticut Office of Policy and Management, New Haven Rail Maintenance Facility Expansion, Phases 1, 2 and 3, New Haven, CT

Hill International reviewed and analyzed the scope, cost and budget established by the Connecticut Department of Transportation for the New Haven Rail Maintenance Facility Expansion Project. Prior to Hill's engagement, the estimated costs for the execution of the proposed project greatly exceeded the original budgetary estimates. Hill critically evaluated the adequacy of the original work scope and estimate, determined the factors driving the increases in estimated costs, performed an independent cost estimate, reviewed the scope to recommend ways to reduce project costs (Cost Containment Analysis), provided budgeting options, reviewed DOT capital project budgeting and cost estimating procedures and protocols, conducted a project risk assessment and assessed the reliability of the out-year estimates, proposed yard expansions and configuration control. In addition to estimating the HVAC, plumbing and fire protection, Mr. De La Hoz provided the estimating effort with schematic design, design development, 75% CD and budget reconciliation.

Brooklyn Navy Yard Development Corporation (BNYDC), Brooklyn, NY

Hill International will be providing architectural design, structural engineering, site planning, cost estimates for each proposed design and all phases of program development required to develop a new three- story, $18M project which encompassing 70,000-80,000 SF multi-tenanted LEED Silver certified industrial building adjacent to the Sands Street Gate at the Brooklyn Navy Yard. Mr. De La Hoz estimated the HVAC, plumbing and fire protection estimates for the office building. He also provided the estimating effort with schematic design, design development 50% CD estimates for the construction program which included engineering oversight, client advice and design suggestions.

Thomas J. Owens

Estimator

Education:
B.A., Accounting, William Paterson University, 1974

Thomas J. Owens has over 36 years of experience as a Construction Estimator and Chief Estimator for sitework, foundations, masonry, structural steel, miscellaneous metals, rough and finish carpentry, doors and windows, exterior facade, roof, drywall, flooring, wall finishes, painting, Division 10, Division 13, and elevators. Mr. Owens has also provided estimating for fire protection, plumbing, HVAC, and electrical. Projects have included hospitals and nursing centers, universities and colleges, theaters, historic renovation projects, transportation, sports facilities, industrial facilities, and drug manufacturers. Mr. Owens holds general contracting licenses in Hawaii, South Carolina, Tennessee, and Arizona. His specialized computer software skills include Expedition and Timberline.

Relevant Experience

Various Projects, Barr and Barr Builders, New York, NY

Senior Estimator. Barr and Barr Builders is active in the building of nursing centers, universities, and theaters, including historic renovations. Mr. Owens supervised the estimating for complete building budgets, including sitework, foundations, masonry, structural steel, miscellaneous metals, rough carpentry, finish carpentry, doors, windows, exterior facade, roof, drywall, flooring, wall finishes, painting, Division 10, Division 13, and elevators. He also supervised estimating for the MEP trades such as fire protection, plumbing, HVAC, and electrical. He provided complete drawing take off, quantity listing details, and a summary of the estimate. He also provided estimates for bulletin drawing revisions and major scope additions. Mr. Owens interfaced with trade subcontractors during bid and award meetings.

Various Projects, Terminal Construction Corporation, Wood Ridge, NJ

As Senior Construction Estimator, Mr. Owens supervised the estimating of projects, including bid and award for all trades on public works projects ranging from $20 million to $150 million. He evaluated subcontract bids against in-house estimates to determine the final bid, including contingencies. He monitored the progress of job construction in order to prepare the monthly pay application to the client and the subcontract pay approval report. He prepared and updated all pending items, Requests for Information, and document reports. He communicated with the client and subcontractors both verbally and written.

Various Projects, Lockwood Greene Engineers, Somerset, NJ

Supervisor Construction Services/Estimator. Mr. Owens supervised construction and subcontractors, including bid initiation, evaluation and award; selection and prequalification of contractors; and technical and commercial negotiations. He organized deliverables into major purchases and contracts, and prepared contracts, including all documentation and exhibits. He was responsible for estimating all areas of construction, including sitework, foundations, structural, general, architectural, interior fit out and alterations, and mechanical and electrical. He also administered contracts, including change orders, field inspections, monthly meetings, and billing.

Various Projects, Robins Engineers and Constructors, Totowa, NJ

As Construction Manager, Mr. Owens supervised construction operations for projects estimated or performed in 40 states. These jobs were self-performed or subcontracted. He supervised the preparation of construction estimates for all trades, both direct hire and subcontracted. He reviewed plans and specifications to determine materials, labor, and equipment costs. Mr. Owens established field and construction management requirements, including indirect costs. He initiated and evaluated construction proposals, and prepared S/C Agreements, including T&C, specifications, drawings, and exhibits.

Leonard Posten, CCE, CPE, MRICS, AVS

Estimator

Leonard Posten has over 29 years of experience as an estimator on general commercial, education, transportation, and public utilities projects. Working in private and government sectors, Mr. Posten's responsibilities have ranged from cost review and estimates, RFP review, planning, budget preparation and management, and quantities take-off from the design phase through completion. He has held senior-level positions in the estimating field, with additional experience in project management and civil engineering design. He is fluent in English and Russian.

Education:

Coursework, Module I - Value Analysis/ Value Engineering, SAVE International, 2008

M.S., Industrial & Civil Construction, SM Kirov Institute of Transportation & Engineering, Ukraine, 1975

Coursework, Civil Engineering, Polytechnic University, New York, 1978-1980

Registrations:

Certified Cost Engineer

Certified Professional Estimator

Royal Institution of Chartered Surveyors

Associate Value Specialist

Relevant Experience

Metropolitan Transportation Authority, Long Island Rail Road (LIRR) Estimating Services, Long Island, NY

Hill International is providing estimating services for the LIRR Capital Project Management Department infrastructure improvements projects. As Project Estimator, Mr. Posten is responsible for the cost estimating of various railroad projects, including construction, electrical, and mechanical work, as well as change order requests. He also priced the operation and maintenance costs for the industrial wastewater pre-treatment facilities. Mr. Posten's duties included phase estimates for progressive design projects, construction cost analysis, bidding reviews, information inquires and vendor quotes. Projects have included:

- **Atlantic Terminal Entry Pavilion** – numerous change requests.
- **Seaford Station** – platform rehabilitation.
- **Bayshore Station** – pedestrian bridge overpass.
- **Richmond Hill Advance Yard** – installation of a new double-walled diesel fueling system.
- **Holban Yard** – new addition for the Maintenance of Way repair facility.
- **Ronkonkoma Station** – parking rehabilitation and site improvements.

Dormitory Authority of the State of New York, Bronx County Hall of Justice, Bronx, NY

Mr. Posten is responsible for change order review; justification of entitlements; cost estimating of work, including proposed change orders; negotiations and reconciliation with the general contractor; and review of related documentation.

Prior Experience

P.T. & L. Contracting Corporation, Various Civil and Environmental Projects, Paramus, NJ

Mr. Posten provided estimating services for new construction, renovations, and demolition on the following projects:

- **Port Authority of New York and New Jersey –** airports, marine tunnels, and ventilation buildings.
- **U.S. General Services Administration (GSA)** – U.S. Courthouse, Green Bus Company, and fueling facilities.
- **Federal Emergency Management Agency (FEMA)** – World Trade Center demolition and clean-up.
- **New York City School Construction Authority**
- Municipal Landfills
- **Staten Island Ferry Terminal**
- **Brooklyn Museum**

Envirodyne Engineers of New York, Inc., New York, NY

Mr. Posten supported all phases of civil engineering design in steel and reinforced concrete for various highway and railroad structures, including bridges and subway systems.

Interstate Industrial Corporation, Clifton, NJ

As Senior Estimator for a general Contractor on several municipal projects, Mr. Posten was charged with take-off and cost estimates on architectural, structural, and civil site works. He reviewed RFPs from subcontractors and coordinated quotes from different trades. Some major projects included:

- Harbor Residential buildings
- Correctional Facilities
- New York City School Construction Authority projects
- Water Filtration Plants
- Sewage Treatment Plants

Gurcharan Chopra

Estimator and Inspector

Gurcharan S. Chopra has over 40 years of extensive experience in electrical engineering in the management of design and construction of industrial and commercial projects. These include: power distribution, including standby generation, programmable controllers and control systems; lighting; and fire alarm and electronic security systems. Mr. Chopra's project experience includes office buildings and commercial facilities, hotels, industrial and manufacturing facilities, wastewater treatment, transportation, power plants, and petrochemical facilities. He has also provided construction management and project management oversight for various New York City Agencies' projects.

Education:
B.S., Electrical Engineering, Banaras Hindu University, India, 1953

Publications:
"Programmable Controllers at New Pellet Terminal", International Journal of Storing and Handling Bulk, Vol. 1, No. 1, p. 119, (Published in West Germany, 1981)

Seminars:
"Bulk Handling With Programmable Controllers," Detroit Engineering Society, Detroit, MI, (1981)

Relevant Experience

Port Authority of New York and New Jersey, Downtown Restoration Program and Insurance and FEMA Claims-WTC Facilities and PATH, New York, NY

Mr. Chopra performed design review of the new electrical systems being installed and estimating for selected work packages for a fast-track project to restore the rail access to the World Trade Center after the September 11, 2001 damage. He also estimated the Traction Power System replacement costs for Insurance and FEMA claims after the 9/11 damage.

New York Metropolitan Transit Authority, MTA Independent Engineer's Certification Program, New York, NY

Hill International was awarded a three-year contract to serve as the MTA's Independent Engineer for the certification process. Hill staff will conduct surveys or inspections of the systems and of the inspection, maintenance and repair programs certifying that the programs are: reasonable and appropriate; sufficient reasonably to assure the continued operation of the system; and with operating budget. Mr. Chopra provides ongoing review and audit of the traction power maintenance of the New York City Transit Subways.

Metropolitan Transit Authority, Independent Engineering Consultant, New York, NY

Mr. Chopra performed oversight of design and construction projects under New York City Transit's electrical and communications program with a total value over $1 billion dollars. Projects included renovation of old traction power substations by providing solid state rectifiers, new high tension service, switchgear, DC circuit breakers, power transformers, third rail equipment, positive and negative cabling, tunnel

and station lighting, police radio systems for underground to above ground communications, construction of a rail control center, and 482 communications rooms.

New York City Department of Design and Construction, City Hall Renovations, New York, NY

Mr. Chopra provides cost estimating services for the historic landmark building's renovations. Supporting management through various phases of the project, Mr. Ahmed provides constructability reviews and develops cost estimates and budgeting. Hill is providing construction management services for the $80 million renovation of New York City Hall in Lower Manhattan. Renovations will include exterior and roofing improvements; refinishing of the iconic steps; installation of new electrical, fire, audio-video, heating, ventilation, and air conditioning systems; modernization of its elevators; and the complete renovation of all interior spaces.

City University of New York, Brooklyn College Performing Arts Center, NY

Mr. Chopra provides cost estimating services. The addition not only includes performance and rehearsal spaces for the music and theater departments, it also creates a new front door and image for the entire campus. The new center includes a 64,000 SF addition to the existing Whitman Hall and features a 200-seat flexible stage performance space with variable acoustics; rehearsal rooms for orchestra, choral and theater; a state-of-the-art recording studio; the Pima Center for Computer Music; music studios and practice rooms; and a scene shop. A gracious lobby, envisioned as a venue not only for pre- and post-performance gatherings but also for campus-wide receptions and special events, welcomes visitors, students and staff alike. This project is being designed and constructed to meet LEED Silver Accreditation.

Dormitory Authority of the State of New York (DASNY), Bronx County Hall of Justice, New York, NY

The Bronx Criminal Courthouse Complex is a new facility to house the Supreme Court Criminal Team, which will include 47 courtrooms. The 744,000 SF $390 million complex will occupy a 2.5 block site near Grand Concourse and stand 11 stories tall. This facility is one of the largest court complexes in North America. Hill provided full spectrum construction management services to support DASNY. Mr. Chopra served as Electrical Inspector responsible for all electrical work. He researched old electrical change orders, issued rejection letters, and negotiated unfinished change orders. He was also responsible for preparing new estimates for the complete range of electrical work and estimating complex change orders for all electrical systems, including the Security and Antenna Systems, Telecom and Data Fiber and Copper Networks, and the Audio Video System.

John H. Lehman, PE

Project Manager andConstruction Manager

John H. Lehman has over 35 years of experience in the transportation sector. Mr. Lehman has directed multi-disciplinary, multi-national engineering design teams on rail car manufacturing and large construction projects. He specializes in heavy equipment design, maintenance and operation, construction, and operations analysis for rail car procurement, rail car manufacturing facilities and car repair and locomotive servicing facilities. Mr. Lehman has prepared engineering and economic studies on equipment selection and maintenance, transportation operations, and plant location.

Education:

Master of Management, Transportation, JL Kellogg School of Mgmt, Northwestern University, 1980

B.S., Mechanical Engineering, University of Illinois, Urbana-Champaign, 1972

Registrations:

Professional Engineer, Illinois

Professional Engineer, New Jersey

Relevant Experience

Port Authority of New York and New Jersey, World Trade Center Transportation Hub, New York, NY

Mr. Lehman is providing support to Port Authority Engineering in the areas of train operations, project phasing, and program cost estimation for the restoration of PATH train service and the rebuilding of the World Trade Center. Mr. Lehman also prepared operating plans and participated in the peer review activity, which determined the preferred location, track layout, and construction phasing scheme for the replacement of the World Trade Center PATH station.

New York State Metropolitan Transportation Authority (MTA), MTA Independent Engineer's Certification Program, New York, NY

Mr. Lehman is responsible for evaluating the adequacy of the maintenance budgets and the efficacy of the maintenance programs for the rolling stock and track departments of MTA's operating agencies. The reviews include: New York City Transit - Car Equipment and Track and Right-of-Way; Long Island Rail Road - Maintenance of Equipment and Maintenance of Way-Track; Metro North Railroad - Engineering Department-Track.

New York State Metropolitan Transportation Authority (MTA), Independent Engineering Consultant, New York, NY

Mr. Lehman served as an independent engineering consultant to the MTA with oversight responsibility for $5 billion of vehicle procurement and new construction. His projects included: New York City Transit Authority new subway cars program, 1,762 cars, $2.7 billion; Long Island Rail Road electric cars, 326 cars, $785 million; and the LIRR Jamaica Station Improvements. He also contributed to a study on proposed shop layout revisions to NYCTA's 207th Street Overhaul Shop.

Washington Metropolitan Area Transit Authority (WMATA), Washington, DC.

Mr. Lehman is providing Project Management Oversight (PMOC) for the Federal Transit Administration (FTA) for the WMATA rail car procurement. Oversight includes evaluation of budgeting, rail fleet acquisition and maintenance planning, and issues related to manufacturing, testing and acceptance. His projects include: 5000 Series new cars, 192 cars, $383 million; BREDA Rehabilitation Project (2000/3000 Series), 364 cars, $400 million; and the 6000 Series new cars, 184 cars, including options, $378 million. Mr. Lehman also provided PMO services for the FTA for the Shops/Yards Expansion projects under the WMATA Metro Matters program. Oversight includes monitoring of program management, including budgets and schedules, monitoring construction progress for three projects, Greenbelt Shop, Shady Grove Shop and Brentwood Shop, with a construction cost of $142 million.

Metropolitan Washington Airports Authority, Dulles Corridor Metrorail Extension, Vienna, VA

Mr. Lehman is providing Project Management Oversight for the FTA for the Dulles Corridor Metrorail Extension project that was begun by the Virginia Department of Rail and Public Transit. Services include monitoring; risk analysis; and evaluation of scope, cost, and schedule. The project cost is in excess of $2 billion.

Various Projects, Federal Transit Administration (FTA), Washington, DC.

Mr. Lehman provides a variety of Project Management Oversight services to the Federal Transit Administration. Projects include:

- Central Florida Commuter Rail (Orlando) – Scope Review, Monitoring.
- Utah Transit Authority Draper Rail Transit Extension – Risk Analysis.
- Utah Transit Authority Weber County Commuter Rail Project – Risk Analysis, Monitoring.
- Utah Transit Authority Mid-Jordan Light Rail Transit Project – Risk Analysis, Monitoring.
- Tren Urbano, Puerto Rico – Change Order Review.South Florida RTA (Tri-Rail Commuter Service) – Monitoring.
- Nashville Regional Transportation Authority Commuter Rail Project – Monitoring.
- SEPTA Silverliner V Commuter Car Procurement – Monitoring.
- Delaware Transit Corporation Wilmington to Newark Commuter Rail Improvements – Monitoring.
- Programmatic Task Order – Documentation Quality Control Review Procedures.

Edward F. Nicholson, PE

Project Manager and Construction Manager

Education:
M.S., Transportation, Polytechnic University of New York, 1973

M.S., Electrical Engineering, New York University, 1969

B.E., Electrical Engineering, Manhattan College, 1965

Registrations:
Professional Engineer, Connecticut

Edward F. Nicholson, a Professional Engineer, has over 30 years of experience in all phases of rail rapid transit systems. Mr. Nicholson provided project management oversight to major transit authorities, and has overseen the planning, design and construction of capital projects for several major city transit agencies, including New York City Transit Authority and the Port Authority of New York and New Jersey. He has overseen the purchase of new railcars, the design and construction of rail control centers, rehabilitation of major stations, shops and yards, as well as bridge and tunnel rehabilitation projects. Mr. Nicholson managed the Port Authority Trans-Hudson's (PATH) Transportation Division, as well as their Signals and Communications Division, and was named as Port Authority Transportation Person of the Year in 1996.

Relevant Experience

Port Authority of New York and New Jersey, PATH Station Reconstructing, World Trade Center, NY & NJ

Mr. Nicholson provided technical support for the restoration of PATH rail service between New Jersey and lower Manhattan. On this project, Mr. Nicholson was part of the program management team overseeing the design and construction of a new rail transit terminal on the site of the former World Trade Center PATH station. In addition, he supported the design and installation of new power, signal and communications systems to replace those destroyed in the attack on September 11, 2001. Mr. Nicholson also provided technical support in the negotiation of insurance and FEMA claims for PATH.

MTA-Independent Review, Metropolitan Transportation Authority, New York, New York, Independent Engineering Consultant

As the Program Manager, Mr. Nicholson oversaw the planning, design and construction of capital projects for the NYMTA's three major transit systems: the New York City Transit Authority (NYCTA), the Long Island Railroad (LIRR) and Metro-North Railroad (MNR), as well as its Bridges and Tunnels Agency. Examples of the programs that he oversaw include the purchase of new railcars; the design and construction of a new rail control center with a new centralized train control system and new Communication Based Train Control System; the design and implementation of direct LIRR train service into Grand Central Station; and the rehabilitation of major stations, shops, and yards, as well as bridge and tunnel rehabilitation projects.

MTA Independent Engineer's Certification Program, New York Metropolitan Transportation Agency (MTA)

Mr. Nicholson was Deputy Project Manager of the team performing analysis of NYCTA, LIRR and MNR system maintenance, inspection and repair program plans and budgets and certifying whether the program plans and budgets were adequate to maintain the system in good repair.

Prior Experience

Port Authority Trans-Hudson Corporation PATH

As Superintendent of Transportation, Mr. Nicholson managed a staff of 460 people, and was responsible for all train operations on PATH, a rail rapid transit system operating between New Jersey and New York City, with a ridership of over 60 million passengers a year. His responsibilities included train operations, fare revenue collection, passenger information and assistance, budget development of $40 million annually, staffing, coordination and emergency response activities. A number of major capital projects were also completed successfully, including a new rail car maintenance facility, a new emergency ventilation system, a railcar overhaul program, and a new centralized fare collection system.

Port Authority Trans-Hudson Corporation PATH

Mr. Nicholson managed a staff of 100 people and was responsible for all design, construction and maintenance activities relating to signal and communications systems. He was also directly responsible for developing and integrating sophisticated technological improvements into PATH's operations. Mr. Nicholson also provided oversight and direction during the design and successful completion of several major projects, including:

- Centralized control of PATH tower interlocking into the PATH Control Center
- Modernization of PATH's communication systems
- Signal system upgrading
- Selected and managed consultant contracts for technical support services
- Upgraded preventive maintenance and training programs

Various Projects, Port Authority Trans-Hudson Corporation PATH

As Senior Rail Planning Engineer, Mr. Nicholson served as Assistant Project Manager for the PATH control center project and was responsible for development of electrical and communications systems integration, including radio, CCTV, emergency and passenger assistance telephones and remote control systems. Mr. Nicholson's other projects included:

- Project Manager for train-wayside radio system installation
- Member of PATH system task force responsible for the development of traction power, signals, communications and SCADA systems
- Prepared environmental impact statements and evaluated alternatives

Jose A. Diaz, PE

Project Manager and Construction Manager

Jose A. Diaz, a Hill Vice President, is a Civil Engineer with over 30 years of engineering and project management experience. Mr. Diaz has expertise in construction and project management, geotechnical and environmental engineering, and construction claims analysis. He also has extensive experience in cost engineering, including the development of complex cost models relating to commercial interactions between stakeholders, including private developers and public agencies. His experience encompasses a wide variety of projects throughout the United States and overseas. Projects have included educational, retail, and commercial buildings; transportation facilities, such as highways and rail yards; major industrial facilities, such as pharmaceutical processing plants, fossil and nuclear power plants; sanitary and industrial waste landfills; superfund remediation sites; and chemical handling and recycling facilities. Mr. Diaz provides technical consultation and project management services on capital construction and environmental remediation projects, including services related to complex engineering and construction-related claims and disputes.

Education:
M.S., Civil Engineering, Rensselaer Polytechnic Institute, 1979
B.S., Civil Engineering, Rensselaer Polytechnic Institute, 1976

Registrations:
Professional Engineer, New York
Professional Engineer, New Jersey
Professional Engineer, Pennsylvania
Professional Engineer, Puerto Rico

Professional Memberships:
American Society of Civil Engineers
Chi Epsilon - Civil Engineering Honor Society

Awards/Honors:
James G. Hellmuth Unit Citation, PANY&NJ, 9/11 World Trade Center Loss Recovery Project

Relevant Experience

Port Authority of New York & New Jersey (PANYNJ), World Trade Center (WTC) Downtown Restoration Program, New York, NY

Hill is providing program management services in connection with the planning, design, and construction of the new facilities at the World Trade Center, including the new permanent PATH Terminal (Transportation Hub). On assignment at the WTC site as Project Director, Mr. Diaz headed up a Hill International team responsible for providing program management services to PANYNJ related to the redevelopment of the project site. Services include scheduling, cost modeling, budgeting, and cost controls for all the capital programs planned for the WTC site valued in excess of $12 billion. Redevelopment programs include the WTC Transportation Hub, the WTC Memorial, site infrastructure, and retail and commercial facilities.

Port Authority of New York and New Jersey (PANYNJ), Insurance & FEMA Claims – World Trade Center & PATH, New York, NY

Mr. Diaz served as project manager, on an assignment with the PANYNJ and working for the Assistant Chief Engineer, for the 9/11-related World Trade Center loss recovery effort. He was a member of the Loss Recovery Team and was responsible for managing the estimating

efforts for the capital losses sustained by the PANYNJ and for presenting the estimated loss claims to the insurers and FEMA. The project involved over $1 billion in losses related to the World Trade Center buildings and the PATH system. Losses to the PATH system include the World Trade Center Station, the tunnels under the Hudson River, and Exchange Place Station in New Jersey.

New York Metropolitan Transportation Authority (MTA), MTA Independent Engineer's Certification Program, New York, NY

Mr. Diaz is responsible for evaluating the adequacy of the maintenance programs for the Line Structures managed and executed by the MTA's operating agencies (New York City Transit, Long Island Rail Road, and Metro North Railroad). The reviews include the evaluation of the structural maintenance and repair programs for a vast infrastructure of bridges, retaining walls, viaducts, culverts, and tunnels.

Metro-North Commuter Railroad, Harmon Yard Remediation, New York, NY

Mr. Diaz completed an assignment as Project Manager for a $20 million environmental clean-up project for Metro-North Railroad involving remediation of a PCB and organic compound laced lagoon. He was responsible for overall project management and organization, overseeing the site remediation and removal of the contaminated materials.

Metro-North Commuter Railroad, Harmon Yard Seepage Control Project, New York, NY

As Project Director, Mr. Diaz oversaw the design and installation of a seepage control cut-off wall, containment boom, and free-product (NAPL) recovery system at the Harmon Yard for Metro-North Railroad.

Metropolitan Transit Authority, Houston Metro Commuter Rail, US 90A, Harris County, TX

Mr. Diaz performed a peer review of the Environmental Assessment report for a proposed light rail transit line linking the City of Houston with Missouri City, Texas.

State of Connecticut, Office of Policy & Management, New Haven Rail Maintenance Facility, New Haven, CT

Hill was retained by the Office of Governor M. Jodi Rell to review and analyze the scope, cost and budget of a proposed major expansion of the New Haven Rail Maintenance Facility, including the construction of new office, training, and employee wellness facilities, estimated in excess of $1 billion. As Project Manager, Mr. Diaz managed and participated in the analysis, the development of recommendations, and the preparation of reports presented to the Governor and the Legislature. Our analysis and recommendations reduced estimated costs from $1.7 billion to approximately $850 million. Hill critically evaluated the adequacy of the original work scope and construction cost estimates; determined factors that were driving increases in estimated costs; performed independent cost estimates; reviewed scope to recommend ways to reduce project costs; provided budgeting options; reviewed DOT capital project budgeting and cost estimating procedures and protocols, including configuration management controls and conducted a project risk assessment.

Paul T. Giangreco, PE

Project Manager and Construction Manager

Paul T. Giangreco has more than 30 years of project management and civil engineering experience, including expertise in contract dispute and claims resolution. Mr. Giangreco's project experience includes light rail transit, subways, and nuclear power plants. He is adept at communicating issues and ideas to senior management, funding and oversight agencies, and to other outside parties, including appearances at public hearings. He has presented seminars in automatic train supervision. Mr. Giangreco's specialized computer software skills include Primavera Expedition and Primavera P3.

Relevant Experience

The Port Authority of New York and New Jersey, Downtown Restoration Program, World Trace Center Reconstruction, New York, NY

Hill International is providing cost and scheduling support to the World Trade Center Reconstruction project. Serving as Cost Engineer in the Cost Management and Controls Unit, Mr. Giangreco is responsible for all cost-related issues on several major elements of the overall $8.5 billion construction. The elements of the overall program assigned to him include the Vehicular Security Center, Central Chiller Plant, Tour Bus Parking Facility (Phase II), West Basement Vehicle Access Facility, and selected sub-packages of the Transit Hub. His responsibilities include development, review, and reconciliation of in-house and external cost estimates; construction change order negotiation and review; budget and procurement tracking; and reporting of cost data to the funding agencies, including the Federal Transportation Administration.

Prior Experience:

Newark City Subway Accessibility Improvement Project, Newark Penn Station, NJ

Mr. Giangreco provided overall management of all aspects of the execution of this $8 million capital project which is restoring various historic elements of this 70 year old station while simultaneously adding four elevators and two escalators and while the station is in use. His responsibilities included project execution, pricing, scheduling, contract administration, quality assurance and safety. He also served as primary contact with the station owner, New Jersey Transit.

New Jersey Transit (NJT), Southern New Jersey Light Rail Transit

Education:

M.S., Civil Engineering, Polytechnic University, New York, 1977

B.E., Civil Engineering, Cooper Union, New York, 1974

Registrations:
Professional Engineer, New York

Awards/Honors:
Heroism and Bravery in the Face of Extreme Danger. Received an award from the New York City Transit Authority for intervening in a robbery attempt of an ATM user in the World Trade Center Concourse. Apprehended the robber for arrest by police.

Seminars:
Automatic Train Supervision to New York City Transit's System, New York City Transit Authority, November 3, 1995, New York, New York, Chaired and Led Discussion of the project

System Project, Riverside, NJ

Serving as Construction Manager on a $440 million line connecting Camden to Trenton, Mr. Giangreco supervised project estimators and schedulers and drafted scopes of work for additional work orders initiated by the owners. He participated in weekly strategy sessions with NJT managers in advance of change order negotiations with design/build firm, as well as biweekly project management team meetings among the major project stakeholders.

New York City Transit Authority, Department of Capital Program Management, Various Projects, NY

Mr. Giangreco was responsible for the execution of major capital improvement projects with individual values up to $150 million. He managed a staff of 25 construction inspection professionals covering every aspect of contractor field activities through project execution. Projects supervised by Mr. Giangreco included structural rehabilitation of entire transit lines, station and signal modernization, bus depot construction and environmental projects, including underground storage tank projects and asbestos abatement. He was responsible for all aspects of project performance, supervised quality of construction, schedule maintenance and monitoring, budgetary control, safety, contractor and consultant progress and payments, field conditions and change orders, regulatory compliance, and coordination with in-house operations.

Engineering and Construction Firm, Various Projects, Oradell, NJ

Working in the firm's Infrastructure Division, Mr. Giangreco managed multi-discipline design efforts on client projects and task orders, including the ongoing Engineering Services Contract with New Jersey Transit. Mr. Giangreco was responsible for all aspects of project execution and profitability, including schedule adherence, man-hour expenditure rates, progress payments, and change order negotiation and execution. He also managed business development efforts to secure additional client design contracts and task orders and prepared responses to Request for Proposals on design/build efforts, specializing in builders of mass transit facilities.

Pennsylvania Power and Light, Susquehanna Nuclear Station, Salem Township, PA

Mr. Giangreco managed a multi-discipline site staff of 40 engineers and designers performing field design for the addition of an emergency diesel generator facility at Pennsylvania Power and Light's Susquehanna Nuclear Station.

Engineering Firm, Various Nuclear Power Plant Projects, Cherry Hill, NJ

Mr. Giangreco performed a variety of project management, contract administration and technical functions for two turnkey nuclear power plants. He developed a commodity-based method of tracking and reporting project percent complete and investigated and responded to client audit findings, including the development of corrective actions.

Ronald Backman

Scheduler

Ronald J. Backman has more than 40 years of experience in project controls, planning, scheduling, and cost controls for power, light rail, airports, infrastructure, correctional facilities, and biotechnology projects. Mr. Backman has also provided claims and delay analysis. Serving as Scheduling Supervisor, Mr. Backman was responsible for an earth-filled dam, which was the tallest dam ever built, and required a seven-mile conveyor system, as well as three tunnels. His specialized computer software skills include Primavera P3 and P6 and SAP 2010. Prior Experience:

Mr. Backman served as Chief Planning/Scheduling Engineer, Project Controls Manager, Project Scheduling Supervisor, Senior Scheduling Representative, Scheduling Manager, Scheduling Supervisor, and Scheduler for the following projects.

Prior Experience

Hudson-Bergen Light Rail Transit System, Lyndhurst, NJ

For a $1.3 billion Design-Build-Operate-Maintain (DBOM) light rail system between Bayonne and Hoboken, Mr. Backman responsibilities included:

- **Bayonne Light Rail System.** Mr. Backman developed, with field supervision, the construction schedule for the rail system and platform installation from Bayonne to Hoboken.
- **Newark Airport Light Rail System**. Mr. Backman developed, with field supervision, the construction schedule sequencing rail and platform installations at terminals, parking garages, and the tie-in to the existing New Jersey Transit System to New York City.

Metro North Station Upgrades, New York, NY

Project Scheduling Supervisor. Mr. Backman created and managed detailed engineering and construction schedules for station upgrades. He also reviewed weekly progress with the MTA.

Subway Communication Upgrade, Crow Construction, New York, NY

Mr. Backman created a schedule showing the proposed integration of communication between the transit police, fire department, and MTA.

Bay Area Rapid Transit (BART), Embarcadero Infill Upgrade, San Francisco, CA

Bechtel Power Corporation, San Francisco, California, Project Scheduler. Mr. Backman developed the initial construction schedule for Montgomery Station.

San Roque Multi-Purpose Project, Philippines, New York, NY

Scheduling Supervisor. During the four-year construction period for this earth-filled dam, which was the tallest dam ever built, a seven-mile conveyor system was needed to build the dam, as well as three tunnels to divert the Agno River. Mr. Backman's duties included developing and monitoring, with field supervision, a detailed Level I, II and III construction schedule in conjunction with engineering and procurement. The schedule, maintained in New York, was resource-loaded for dollars, estimated quantities, and heavy equipment.

Dereck C. Baker

Scheduler

Education:
Coursework, Lincoln University, 1984-1988
B.S., Mechanical Engineering, Temple University, Philadelphia, Pennsylvania, 1991

Dereck C. Baker has over 18 years of experience as a mechanical engineer in general contracting, project controls, construction management, and engineering. Mr. Baker's construction project experience includes housing and low-income housing, student dormitories, commercial, religious facilities, airports, pharmaceutical, food refining, chemical plants, and power plants. Project values have ranged from $100,000 to $4.3 billion. He has been responsible for overseeing the preparation and development of engineering, procurement, construction, and construction management capital cost estimates. He has also developed budgets for engineering construction projects; prepared and maintained detailed engineering and construction schedules; setup and maintained the operation of the project field office; oversaw the work of the construction management team; and established and maintained progressing tools to track the progress of construction and engineering work.

Mr. Baker has been responsible for developing Project Phasing and Area Breakdown Structures, Work Breakdown Structures, supporting the development of contracting plans and engineering work packages, and establishing cost control programs to document and report real and potential cost overruns for various clients and internal upper management. His specialized computer software skills include Primavera Project Planner, Primavera Expedition, 2D-AutoCAD, 2D MicroStation, and 3D Plant Design System.

Relevant Experience

Port Authority of New York & New Jersey (PANY&NJ), World Trade Center (WTC) Downtown Restoration Program, New York, NY

Hill International has been retained by the Port Authority to provide program management services for this complex and highly visible capital program. Hill's program management services include scheduling, estimating, cost modeling, budgeting, and cost controls for each of the capital projects. PANY&NJ's scope of work includes all of the infrastructure work, including power and utilities, and a new chiller plant and boiler plant to supply mechanical services to the proposed towers WTC-1 and Towers 2, 3, and 4. The scope of work also includes a new PATH Hall and Transit Hall, modifications to the existing PATH commuter rail station, a new PATH Electrical Substation; a new Vehicle Security Center; a new parking garage for cars and tour busses;

construction of the new September 11 Memorial; and the relocation, re-routing, expansion, and/or extension of the surrounding roads and streets. Mr. Baker serves as Senior Planner/Scheduler for the Transportation Hub project. He is responsible for the planning and coordination efforts for the PATH Hall/Transit Hall Structures to grade Construction, with a specific emphasis on the construction of the 20MW Primary and Secondary Power Systems, the Electrical Distribution Systems, mechanical (HVAC and Mechanical Piping), plumbing, Fire Protection and controls portions of the construction effort, due to the complex nature and startup, commissioning, and turn-over requirements to multiple Program stakeholders.

Cybul & Cybul Architects, Brooklyn Navy Yard Food Processing Facility, Brooklyn, NY

Hill International provided cost estimating services for the project. Mr. Baker oversaw the estimating work products of a team of estimators. He was responsible for establishing estimating protocols to ensure the development of accurate, concise, and timely estimates. Based on the level of design or owner information available, he was responsible for interpreting the percentage of accuracy of the estimate and any necessary contingencies. He worked closely with owners, architects, and engineers to evaluate the owner's capital improvement plans for feasibility, constructability, and pricing to facilitate the owner's funding of the project. He utilized a variety of estimating sources, such as vendors, suppliers, historical data, and prior experience with similar types of projects to determine the estimated value of the project. He also provided constructability reviews that allowed the owner to realize a $15 million saving on this new food production facility.

Prior Experience:

The Shaw Group, Inc., Various Projects, Cherry Hill, NJ

As the Lead Project Planner/Scheduler, Mr. Baker was responsible for developing and maintaining a fully integrated EPC and Startup/Commissioning schedule. He developed and implemented a fully man-loaded and resource schedule that was an instrumental tool used to integrate the schedule into the cost aspect of the project controls team. He established an effective method to streamline the use of sub-projects for work scope associated with multiple subcontractors into the Master Project. He developed the level one, two, and three schedules, which were useful tools in effectively communicating the schedule to management and the various levels of the project team.

Engineering and Construction Firm, Various Projects, Marlton, NJ

As Lead Project Controls Engineer, Mr. Baker was responsible for preparing project estimates for a variety of engineering and construction projects; tracking projects against an established set of guidelines; monitoring, reporting, and forecasting the total project cost (based on actual data); and reporting engineering and construction progress versus the budget and baseline schedule. He utilized the cost, schedule, and project information to anticipate problem areas that could adversely affect the project objectives. Based on his review, he prepared a detailed analysis of the events that had or might potentially impact the project and prepared recommendations for a course of action to mitigate the situation.

Artan Bytyci

Scheduler

Education:
Associates, Computer Science, Polytechnic University of Tirana, Albania, 1994
B.S., Engineering/ Geology & Mining, Polytechnic University of Tirana, Albania, 1995

Artan Bytyci has over 12 years of experience in scheduling, project management, and contract management for industrial, commercial and residential projects. Mr. Bytyci has served as chief estimator, bid package preparer and coordinator, and project scheduler. He has finalized buyouts with subcontractors and suppliers, prepared submittal packages, and coordinated with the architect for any discrepancies and possible change orders. At the request of the U.S. Army Corps of Engineers, Mr. Bytyci took a three-month course in scheduling, management and quality control, earning a certificate as Quality Controller. His specialized computer software skills include Primavera P3, Suretrak, Expedition, AutoCAD, Quickbooks, and Infopath.

Relevant Experience

Port Authority of New York and New Jersey, World Trade Center Downtown Restoration Program, New York, NY

Hill International is providing program management services for the program, including the permanent WTC PATH Terminal and the WTC Site Public Infrastructure and Site Redevelopment. Mr. Bytyci is providing scheduling services including creating new CPM schedules based on Client's requirements.

MTA-NYC Transit Authority, 7th Subway Line Extension, New York, NY

The project will provide transit access to the West Side of Manhattan, including the Jacob Javits Convention Center, by extending the No. 7 Line westward from Times Square under West 41st Street and southward along Eleventh Avenue to the southerly terminus at West 25th Street. Hill International, in joint venture, is providing construction management services, as well as project controls services throughout the duration of the project. As Project Scheduler, Mr. Bytyci monitors progress, reports issues, and advises project team accordingly.

New York Department of Design and Construction, City Hall Renovation, New York, NY

This project was an $80 million renovation of New York City Hall in Lower Manhattan. The renovations were throughout the structure, including exterior and roofing renovations, refinishing of its iconic steps, the installation of new electrical, fire, audio-video and heating, ventilation and air conditioning systems, modernization of its elevators, and the complete renovation of all interior spaces.

The Dormitory Authority of the State of New York, Bronx County Hall of Justice, New York, NY

The new Bronx County Hall of Justice is an 11-story, 775,000 SF complex that is located on a 2½-block site on East 161st Street near Grand Concourse. The first two floors above grade contain public services, including the jury assembly building, and the third through sixth floors contain 47 courtrooms of the Bronx County Supreme Court, which is New York's trial court. The seventh floor contains seven grand jury hearing rooms, and the eighth and ninth floors house district attorney offices and judges' chambers. The civic plaza covers a new underground parking structure for 240 cars. Mr. Bytyci was responsible for change order review.

New York City Department of Design and Construction, Lion House at the Bronx Zoo, New York, NY

Hill provided construction management services for the reconstruction of the historic Lion House at the Bronx Zoo. The Lion House had not been used since the mid-1970s, and required major infrastructure work before it could safely be returned to service. The historic character of the building, including the many lion figures made from terra cotta, is being preserved. Mr. Bytyci provided scheduling services to the project.

New York City Department of Design and Construction, el Museo del Barrio, New York, NY

This was a museum renovation project, including the removal, reconfiguration and interior renovation of the existing museum public and gallery spaces, addition of a café and the interior renovation of the galleries, gift shops and renovation of the existing courtyard. As Scheduler Mr. Bytyci monitors the progress, reports issues, and advises the project team accordingly.

New York City Department of Design and Construction, Queens Public Library Renovation, New York, NY

For this library renovation Hill is providing full pre-construction services including constructability review, final estimate, scheduling and bidding; construction period services and close-out, all in accordance with our CM-Build contract. As Scheduler Mr. Bytyci monitors the progress, reports issues, and advises the project team accordingly.

Prior Experience:

Communication Building Renovation, Shinnecock Station, Hampton Bay, NY

The $3.1 million project involved the renovation of an existing 3-story building for the Coast Guard, as well as the erection of a new 120 foot antenna tower. It also involved a single general contractor with multiple subcontractors. Mr. Bytyci's duties included project management, scheduling, quality control, and coordination of subcontractors' work between different phases of work, both interior and exterior. Mr. Bytyci also analyzed and expedited the delay of work caused by 9/11..

Stephen V. Crowley

Scheduler

Education:
B.A., History, York College of Pennsylvania, 1972

Professional Memberships:
American Association of Cost Engineers

Stephen V. Crowley has more than 30 years of experience in power, industrial, commercial and infrastructure engineering and construction markets. Mr. Crowley's expertise includes estimating, project controls, project management, field, and office operations. His background includes AIA contract documents and administration, and OSHA 1926 training.

Mr. Crowley's specialized computer software skills include Primavera P3, Timberline, Lotus, WordPerfect, GE Power Systems Estimating Database, US Cost Success, Win Estimator, Digitizer, and various in-house programs.

Relevant Experience

Commercial and Transportation Building Projects, New York, NY

Mr. Crowley prepared proposal estimates, including complete mechanical and electrical systems from conceptual to detail basis, for commercial and transportation building projects. Assigned to Continental Airlines C Terminal expansion at Newark Airport, Mr. Crowley's estimating covered CSI divisions included 2, 3, 5, 11, and 14 as well as scope package preparation.

New York City Department of Environmental Protection (NYCDEP)
Croton Water Treatment Plant, Bronx, NY

Assigned to the NYCDEP, Mr. Crowley prepared change order estimates for CSI Divisions 2 through 16 and he negotiated change order settlements for the Croton Water Treatment Plant project ($2 billion). Mr. Crowley's duties also included approval of monthly progress payments.

Various Construction Projects, Oradell, NJ

Mr. Crowley prepared civil and mechanical conceptual and detailed estimates for proposals and independent cost studies for institutional, power, industrial, and federal (DOD/DOE) sectors. He prepared power estimates for simple/combined cycle; coal/circulating-fluidized-bed (CFB) technology; as well as transmission and distribution projects.

Various Projects, New York City, NY

Mr. Crowley prepared conceptual and detailed proposal estimates for commercial, residential, retail, distribution, hospital and interiors projects for CSI divisions 1 through 16.

Various Projects, New York City, NY

Mr. Crowley prepared conceptual and detailed proposal estimates for commercial building, retail, manufacturing, educational and telecommunications projects. He also prepared scope packages and performed project buyouts. On smaller projects, Mr. Crowley's experience included CSI divisions 1 through 14.

Various Projects, Ramsey, NJ

Mr. Crowley monitored construction activities on turnkey projects, prepared subcontract bid packages and constructability reviews, and estimated all construction costs for firm price proposals for the food/process industries. He also established an estimating database.

GE Power Systems, Schenectady, NY

Mr. Crowley prepared turnkey proposal estimates for simple/combined cycle combustion and steam turbine power plants including Balance of Plant (40 MW to 1000 MW). He also updated the estimating database.

Various Projects, Poughkeepsie, NY

Mr. Crowley was responsible for estimating, procurement and management of semiconductor and wastewater treatment plants (WWTP), biotech, commercial, power (fossil) and industrial projects for a $30 million per year mechanical contractor. He had total fiscal responsibility including pay request and change order settlement. Mr. Crowley's duties also included submittals as well as resolution of engineering problems.

Various Projects, Clinton, NJ

Mr. Crowley prepared estimates for process, power, biotech and industrial proposals, attended pre-bid meetings, selected subcontractors, updated labor rates and estimating standards, and called on new clients for business development. He was the Lead Estimator on a successful major pharmaceutical proposal.

Various Projects, Bridgewater, NJ

Mr. Crowley updated the monthly cost report and schedule. He also prepared, updated and negotiated design change notices with client; and had a field assignment for Merck Projects in Danville, Pennsylvania dealing with xanthan gum and avermectin compounds.

Peter Jahchan, LEED AP

Scheduler

Education:
B.E., Mechanical Engineering, Concordia University, Montreal, Canada, 1989

Registrations:
LEED Accredited Professional

Professional Memberships:
US Green Building Council

Peter Jahchan has over 17 years of professional experience in construction management; construction claims preparation and review; construction project forensic accounting; surety consultancy, including performance and payment bond claims investigation and processing; construction litigation support and expert testimony; contracts administration; project planning; and cost control. Mr. Jahchan's project experience includes fire stations, public libraries, hotels, hospitals, wastewater treatment plants, public and private schools, telecommunication networks, housing, commercial malls, high rise towers, infrastructure works, and stadiums. For the past nine years he has been a Senior Claims Analyst, and his expertise includes time impact analysis, scope variation claims, loss of productivity, wrongful termination, and surety performance bond and payment bond claims. Mr. Jahchan's specialized computer software skills include Primavera P3 and P6, Photoshop, and Powerpoint. He also holds LEED AP accreditation and is fluent in French and Arabic.

Relevant Experience

Hudson Valley Transportation Management Center, NY

On behalf of the Bonding company, Mr. Jahchan evaluated a $1.2 million delay claim by the General Contractor against the New York State Office of General Services.

Route 59 Bridge, Ramapo, NY

Hired by the General Contractor, Mr. Jahchan prepared a $1.3 million extended general conditions claim against the New York State Department of Transportation. The claim included a detailed time impact analysis and an audit grade project accounting. He actively participated in out-of-court settlement negotiations, which resulted in a favorable settlement in excess of $1 million.

FBI Building, Newark, NJ

The Bonding company hired Mr. Jahchan to defend a $4 million performance bond claim by the General Contractor against the Surety. He provided extensive expert support services to the defending counsel, including a rebuttal report of an expert report submitted by the claimant. He also actively participated in out-of-court settlement negotiations, which resulted in a settlement of the claim for $375,000.

United States Mission at the United Nations, New York, NY

Mr. Jahchan was hired by the General Contractor to prepare and negotiate a $750,000 claim against the General Services Administration for major scope of work changes on this abatement and demolition project. He actively participated in the negotiation process, which resulted in a favorable out-of-court settlement.

Baruch College, Manhattan, NY

Hired by the Surety, Mr. Jahchan prepared an elaborate analysis of over 40 Primavera P3 schedule updates. He prepared detailed deposition questions and related exhibits for the attorneys' use. The case is currently in litigation in the New York State Court.

Coney Island WPCP, Brooklyn, NY

Mr. Jahchan was hired by the Surety to prepare and defend a delay and disruption claim on behalf of the Principal against the New York State Department of Environmental Protection. The work product entailed an elaborate time impact analysis, because the project consisted of 12 distinct milestones. The time impact analysis resulted in a favorable out-of-court settlement.

Jacobi Medical Center, Bronx, NY

Working for the Surety, Mr. Jahchan prepared and defended a delay and disruption claim on behalf of the electrical contractor against the Dormitory Authority of the State of New York. The work product entailed an elaborate time impact analysis and loss of labor productivity calculations. The case is ongoing in the New York State Court.

Cooper Square Community Housing, New York, NY

At the request of the Bonding company, Mr. Jahchan evaluated alleged construction claims by the Principal valued at more than $1.3 million. He provided a preliminary cost-to-complete analysis.

Route 78 Weigh Stations, New Jersey DOT (NJDOT), Bloomsbury, NJ

At the request of the Bonding company, Mr. Jahchan evaluated alleged construction claims by the principal valued at more than $35 million. He also performed a preliminary time impact analysis.

Whitlock Mills, Jersey City, NJ

Mr. Jahchan was hired by the Surety to provide Primavera P3 scheduling services on a $37 million private housing development. The project is still under construction.

Whitlock Mills, Jersey City, NJ

Mr. Jahchan was hired by the Principal as the Expert in an Alternate Dispute Resolution proceeding, which pertains to pending change orders valued in excess of $1.2 million. The dispute is currently ongoing.

James J. DiVita

Construction Inspector

Education:
B.S., Applied Math & Statistics, Stony Brook University, New York, 1985

James J. DiVita has over 22 years of experience as an operations manager, officer in charge, and owner of various home improvement, construction and maintenance, and retail store businesses. Mr. DiVita has built construction and maintenance businesses from the ground up; has been responsible for the day-to-day operations of various businesses; designed, estimated and sold home improvement projects; and dispatched work crews for various construction projects. He also has experience as a financial consultant for stocks, bonds, and mutual funds, and as a research analyst and data processing manager for insurance companies.

Prior Experience

Triple J. Contracting, Various Projects, Stony Brook, NY

As Owner of a contracting business, Mr. DiVita designed, estimated, and sold home improvement projects. He oversaw and assisted in all projects from start to completion and hired and supervised all subcontractors.

Classic Fireplace & Stove, Selden, Various Projects, NY

Mr. DiVita served as President and ran the day-to-day operations of a retail store and home improvement business. He was responsible for marketing, including print advertisements, direct mailings, and store promotions. He also supervised work crews during the installation of products.

Rite Way Maintenance, Various Projects, Hicksville, NY

Mr. DiVita built a construction and maintenance business from the ground up. He designed and implemented a customer database and scheduling system. He was also responsible for marketing and advertising, including the implementation of telemarketing.

American Construction & Maintenance, Various Projects, Farmingdale, NY

As Operations Manager, Mr. DiVita routed and dispatched work crews for a large construction and maintenance company. He also organized the accounting, bookkeeping, and filing systems.

AXA Advisors, Various Projects, Melville, NY

Mr. DiVita acted as a broker to facilitate trades of stocks, bonds, and mutual funds with the client's brokerage accounts. He worked with

individuals in the areas of risk management, education funding, retirement, and estate planning. He also worked with businesses to set up qualified retirement plans, including 401(k), pension, and profit sharing plans.

Bertholon Rowland Corporation, Various Projects, New York, NY

Mr. DiVita was responsible for the data processing needs of the various departments within a large insurance brokerage. He was also responsible for hardware operation, maintenance, and system backups.

Equitable Insurance, Various Projects, New York, NY

As Assistant Supervisor/Research Analyst, Mr. DiVita researched and compiled data for the actuarial department of the group health division of Equitable Insurance.

George L. Fernandez

Construction Inspector

Education:
B.S., Construction Management, Ferris State University, Michigan, 1992

A.A.S., Building Construction Technology, Ferris State University, Michigan, 1990

George L. Fernandez has over three years of experience as the owner of a landscape design firm. He began is own landscape design firm in 2004 and was an exhibitor in the World Trade Center Site Memorial. His general contracting experience includes all types of site construction. He has a strong horticultural knowledge and is experienced in planting large specimen quality plant material.

For 23 years Mr. Fernandez served the Port Authority of New York & New Jersey as a Police Officer in Law Enforcement and Accident Investigation Photography. He is bilingual in Spanish and English.

Relevant Experience

New York City Department of Parks & Recreation (NYCDPR), New York Tree Trust Fall 2008, New York, NY

Hill International has been retained to provide construction management services to the NYCDPR for the Fall 2008 street tree-planting program. As Field Inspector, Mr. Fernandez provides supervision of all aspects of planting new street trees and replacement trees throughout the five boroughs of New York City. He is also responsible for coordination and accounting of payments for the project.

New York City Department of Parks & Recreation, Street Tree Division, New York, NY

The City of New York Parks & Recreation, Capital Project Division retained Hill International as a consultant for construction project management services on an as needed basis for projects located throughout the City. Hill provides pre-construction review and estimating, supervision and inspection, contract administration, technical support, and administrative support services. As Field Inspector, Mr. Fernandez supervises all aspects of planting new street trees and replacement trees within the five boroughs. This includes removal of dead trees and stumps, saw cutting concrete for new planting sites, excavation and preparation of the sites, planting, and installation of concrete or granite block pavers. His other responsibilities include daily and weekly reporting, tracking, and processing of payments, conducting final and guarantee inspections, and project completion procedures.

Prior Experience

Port Authority of New York and New Jersey, Jersey City, NJ

For 23 years, Mr. Fernandez served the Port Authority of New York & New Jersey as a Police Officer in Law Enforcement and Accident Investigation Photography.

Safescapes Design LLC, Various Projects

As the Principal Owner of Safescapes Design, Mr. Fernandez has a thorough working knowledge of urban and residential landscape design and strong botanical knowledge. The company designed hardscapes, water features, softscapes, golf course development, and environmental concerns. Mr. Fernandez also holds a Westchester County, New York Contractor's license. Projects include stormwater management for an existing rock garden along with the installation of plant materials; formal entrance plan along with the installation of flagstone pavers and plant material; and several other residential designs and installations.

Christopher Gleeson

Construction Inspector

Christopher Gleeson has over 23 years of experience in plumbing, mechanical, and fire protection systems. Mr. Gleeson has managed the mechanical aspects of various New York properties located in all boroughs, has trained personnel, reviewed job specifications, performed material take offs and estimating, and managed the demolition of multiple floor spaces. He has worked with Con Edison and the New York City Department of Environmental Protection to correct violations and coordinate and make water main repairs. He is experienced with all building trades and utility companies. Mr. Gleeson holds OSHA 30-hour certification, 40-hour Site Safety Managers Certification, 4-hour Supported Scaffold Users Certification, New York City Department of Building 40-hour Site Safety Managers Certification and Supported Scaffold Users Certification, and is 10-hour HAZMAT/SCBA certified. He is in the process of securing his Green LEED Certification, and he is First Aid, CPR, and AED certified.Prior Experience:

Education:

Coursework, Business Administration, Suffolk Community College, 2007

Certificate, 40 Hour Site Safety Manager Program, Total Safety Consulting Training Academy, 2009

Certificate, Supported Scaffold User, Total Safety Consulting Training Academy, 0

Prior Experience

Various Projects, Anvil International, New York, NY

As Mechanical Specialist for Anvil, Mr. Gleeson was responsible for training personnel on Anvil International's Gruvlok grooved pipe systems along with associated pipe support for plumbing, mechanical and fire protections systems in the greater New York City area. He reviewed job specifications to ensure that grooved pipe systems were acceptable. He gave presentations to contractors and engineers regarding the product line. He followed up with engineers and contractors regarding projects in preconstruction, bidding, and during the construction phases for product support. He performed material take offs on prints or through CAD. He tracked jobs in the greater New York City Area using the McGraw-Hill Dodge reports. He performed cost analysis and assisted in negotiating prices between supply companies and subcontractors. He also developed leads and maintained business relationships with contractors from Long Island, New York City, Westchester, and Duchess counties.

Various Projects, Turner Construction, New York, NY

Mr. Gleeson served Turner Construction as a Project Superintendent and MEP Superintendent. Projects included:

- **Emergency Data System Back-up Center, New York, NY**. Mr. Gleeson managed the$65 million project, which included the demolition of multiple floor space and the installation of two Caterpillar Gen Sets and fuel oil system, as well as the tie in to the electrical service. The project included the installation of 46 3-inch conduits through multi-tenant occupied office space using two shifts of tradesmen. It included reconstruction of ceilings, build-out of aluminum sheeting lined sheet rock enclosures to accommodate conduit runs. There were also tie ins to the existing CHW system that serviced several server rooms (freeze seal and valve tie in) and coordination with several property management firms and the chief engineers. He also provided installation of structural steel for the support of conduit risers and generator support with grating and access hatches.
- **229 West 43rd Street, New York, NY.** Landmark Building Office Renovation Project. This $95 million landmark building project included over 640,000 square feet. Mr. Gleeson managed a new steam station and steam heat renovation, new chilled water system connecting to the existing chillers, and the installation of a new chemical feed station. The project also included six new electrical services and the decommissioning of four services and the respected switchgear rooms. A new combined fire protection system and two dry systems were installed. A new water distribution system using an existing room tank, roof drains, a pneumatic controlled sewage ejector, and new core bathrooms were also installed. The existing gas service was also removed. Mr. Gleeson conducted weekly inspections with New York City Fire Department during the demolition phase and throughout the project. He also worked with various City agencies extensively, including the New York City Department of Environmental Protection, the New York City Department of Buildings, the New York City Fire Department and Con Edison.
- **NYCEDC Facilities Management, New York, NY.** MEP Superintendent. Mr. Gleeson managed the mechanical aspects of various New York City properties located in all boroughs. The work included estimation, take offs, steam boiler installation, cooling tower installation, new gas service and water services. He also managed the maintenance contracts and the work performed on these properties. He conducted multiple RFPs, the change order process, and walkthroughs. He also worked with Con Edison and the New York City Department of Environmental Protection to correct violations and to coordinate the making of water main repairs.

George J. Guzman

Construction Inspection

George J. Guzman has over 12 years of construction experience for private home restorations, schools, townhouses and apartments, luxury condominiums, and store renovations. Mr. Guzman has served as project manager, estimator, field supervisor and inspector. He also has training in air brakes and has worked on air brake problems for subway trains for the New York City Metropolitan Transportation Authority. Mr. Guzman is fluent in Spanish.

Relevant Experience

New York City Housing Authority (NYCHA),New York City Housing Authority Developments, New York, NY

Hill International is providing pre-construction, construction, and construction management on various NYCHA projects throughout the five boroughs of New York City. Mr. Guzman's responsibilities include constructability review, correspondence with the A/E, site surveys and preparation of the site for contractors, overseeing the work, maintaining job site records and requests for information, conducting project site meetings with the client and contractor, and solicitation of bids.

Prior Experience:

TRIGLAV Construction, Various Projects, Astoria, Queens, NY

Mr. Guzman served as Project Manager for private home restorations. He was responsible for coordination between the prime contractor, project architect, engineers, and field inspectors. He reviewed drawings and specifications, prepared RFIs, and reviewed daily reports. Mr. Guzman's projects include:

- **Roosevelt Island School** – For this $300 million restoration project, Mr. Guzman was Project Manager and subcontractor to A.G. Contracting for sheetrock, patching, and painting of the entire school.
- **College Point View Town Houses, College Point, NY** – Mr. Guzman served as Project Manager and was subcontractor to JTR, LLC for this $89 million project. His duties included preparation of the look-ahead schedule; review of drawings and specifications; preparation of RFIs, daily reports, and preparation of procedures for critical jobs. He issued additional work authorizations, and assisted with the preparation of estimates.

Various Projects, F.A. Contracting, Long Island, NY

Mr. Guzman served as estimator for private home restorations. Other projects included:

- **RAOS Restaurant Apartments** – Project Manager for the construction completion of this $25 million project.

Various Projects, Padua Lugo, Ltd., East Harlem, NY

Mr. Guzman served as Field Supervisor on the following projects:

- **Private Housing Restoration** – $100,000
- **Store Renovations** – $100,000
- **Polo Grounds Housing Projects, Field Inspector** – For the $5 million project, Mr. Guzman was responsible for daily inspections, completing daily reports, and manpower reporting.

Perez Plaza, Santiago, Dominican Republic

Mr. Guzman was Project Manager for several $1.2 million buildings from the ground up, including luxury condominium complexes.

Luxury Cars 4 You, Long Island, NY

As a Partner of this Limousine Company, Mr. Guzman was responsible for hiring staff, business development, payroll, and accounts payable and receivable

Various Air Brake Projects, NY

Mr. Guzman worked for several companies specializing in air brakes maintenance and troubleshooting for the New York MTA. Mr. Guzman served as Air Brake Specialist/Supervisor to retrofit air compressors for all New York based R68 trains for the MTA. He also provided maintenance and troubleshooting, maintained daily reports, and conducted daily inspections. Mr. Guzman began this career as a mechanic supervising the building of the R68 subway trains from architectural specifications. He also installed and tested the air brake systems and air proportion systems.

Troy T. Millard

Construction Inspector

Education:
B.A., Geology, University of Colorado at Boulder, 1998

Mr. Millard has 12 years of experience in landscape architecture, design, and project management. Mr. Millard has specialized in and designed rock structures and waterfalls, overseen design of plantings, grading, utilities, and surveying, and supervised and managed installers. He was also the owner of a landscape design and project management firm. His specialized computer software skills include AutoCAD 2000, Photoshop, Illustrator, In Design, and Sketchup.

Relevant Experience

New York City Department of Parks & Recreation, PlaNYC Schoolyards to Playgrounds Unit of Capital Projects Division, New York, NY

Mr. Millard manages all site construction activities associated with the transformation of existing schoolyards into neighborhood playground parks in The Bronx as part of the Mayor's PlaNYC 2030 Schoolyards to Playgrounds initiative. These projects "green up" schoolyards by introducing trees, lawns and planting areas along with providing seating areas, game tables, new play equipment, new athletic courts, color seal coat interpretive graphics, synthetic turf fields, decorative pavement treatments, spray features, accessible drinking fountains and safety surfacing for the surrounding community to utilize during after-school hours and weekends. Mr. Millard provides the day-to-day communication link between the schools administration, the NYC Department of Parks and Recreation, the Trust for Public Land and the general contractor on all design, safety and construction related issues. His other responsibilities include site inspection, technical design review, daily and weekly site progress reporting, and budget estimating as well as the tracking and processing of payments.

New York City Department of Parks & Recreation, Street Tree Division, New York, NY

Mr. Millard manages all aspects of planting new street trees and replacement trees within the five boroughs of New York City. The project includes removal of dead trees and stumps, saw cutting concrete for new planting sites, excavation and preparation of the sites, planting, and installation of concrete or granite block pavers. Mr. Millard acts as the primary interface between the community and the construction team. His other responsibilities include daily and weekly reporting, tracking and processing payments, conducting final and guarantee inspections, and project completion procedures.

Prior Experience

Various Projects, Millard Landscape Consulting, White Plains, NY

Mr. Millard owned and operated a landscape-consulting firm in White Plains. He offered services in landscape design and project management.

The LaurelRock Company/Dickson DeMarche Landscape Architects, Various Projects, NY and CT

LaurelRock provided high-end landscape architecture, construction management, horticulture, and maintenance services to residential clients in Fairfield County, Connecticut and Westchester County, New York. Mr. Millard began his career with LaurelRock as Design Drafter, progressed to Construction Manager, and was then promoted to Production Manager. In this position, he supervised all landscape installation, the in-house Installation Manager, and associated crews.

Pawling Properties Associates, Quaker Hill Native Plant Botanical Garden, Pawling, NY

As Designer, Mr. Millard conceptualized, designed, and developed complex naturalistic rock structures and waterfalls. He oversaw and aided in the usage of CAD for planting, grading, utilities, and surveying. He coordinated and supervised the collection of data from the quarries and coordinated the distribution of these materials to the installation crews. He also developed a custom inventory management system for incoming materials, and supervised other installers, while managing his own installing crew.

Woodman Brothers, Various Projects, Parker, CO

As Drafter, Mr. Millard provided finished drawings in AutoCAD for use in pricing and building home landscaping projects. He performed quantity takeoffs and materials list for each job.

Design Fabricators, Inc., Various Projects, Lafayette, CO

This company specialized in making store furniture for such stores as Barnes and Noble, Starbucks, J. Crew, and Nickelodeon Stores, as well as smaller malls, stores, and restaurants. Mr. Millard built cabinets and casework, and other wood working projects.

Nicholas J. Pace

Construction Inspector

Education:
A.S., Labor Studies, Empire State College, 1998

Nicholas J. Pace has over 16 years of experience and diversified knowledge in the construction industry as an electrical tradesman. Mr. Pace holds a Certified "A" Classification Electrical Construction designation and is trained in OSHA Safety, 2009, Asbestos Training, 1998, Fiberoptic 2008, and RCN 2005. He has held positions as an electrical foreman and has led teams of electricians to complete all electrical work on or ahead of schedule and within the project budget. His experience also includes security and fire alarm systems, as well as mechanical and plumbing systems.

Prior Experience

Various Projects, Kleinberg Electric, New York City, New York

As Electrical Foreman, Mr. Pace was responsible for the following projects:

- **No. 7 Subway Line Extension, New York City Transit** - Responsible for the installation of 1,380 volt power feeds for the tunnel boring machines (TBMs).
- **Major Deegan Expressway -** Responsible for the installation of power feeds and circuits.
- **59th Street Bridge -** Responsible for the installation of power feeds and circuits.
- **30th Street Water Treatment Plant, Hunts Point -** Responsible for the installation of power feeds and circuits.

Various Projects, James F. Volpe Electric, New York City, New York

Holding the position of Electrical Foreman, Mr. Pace led a strong team of Local 3 electricians and successfully completed all electrical work on or ahead of schedule and within budget for the following projects:

- **Verizon Building Garage and Office Building Renovation,** 42nd Street and 11th Avenue.
- **Verizon Office Building**, 140 West Street, 9th Floor building renovation.
- **Verizon Office Building Renovation,** 50th Street and 10th Avenue - Security and fire alarm installation.
- **Westin Hotel** - 24 floors of suite renovation.
- **Intermediate School PS143 Renovation**
- **DEP Reservoir (near Lehman College)**

Various Projects, Fred Geller Electric, New York City, New York

For this electrical installation firm, Mr. Pace successfully completed all electrical work on or ahead of schedule and within budget for the following projects:

- **Embassy Suites, World Trade Center Site, New York, New York -** Installation of the theater and auditorium system, circuits for suites, fire and smoke dampers, kitchen lighting, and wiring for the mechanical and plumbing system.
- **Martha Stewart Studio -** Fire alarm and electrical system installation.
- **Bryant Park -** Theater and auditorium system installation.
- **Arthur Ashe Stadium Renovation -** Presidential suite, players lounge and data system installation.
- **Sty Town Peter Cooper Village -** Complete re-wiring of the complex.
- **City College of New York -** Security system installation.
- **MetLife Building -** Theater and auditorium system installation.
- **7 Times Square Tower -** Electrical wiring of 45 floors.
- **Hearst Building -** Electrical wiring of 44 floors.
- **Columbia University -** Installation of baseball field and athletic field track lighting.
- **Columbus Circle -** Theater and auditorium system installation and kitchen renovation.
- **Lehman Brothers Building -** Fire alarm, electrical system, and furniture partition installation.
- **Bear Stearns Building -** Fire alarm, electrical system, and furniture partition installation.
- **Pathmark -** Installation of electrical circuits and equipment for ATMs at various locations.

Daniel Perez

Construction Inspector

Education:
Coursework, Business Administration, South University 2010-Present

Daniel Perez has 10 years of experience in construction management; the installation of telecommunication equipment, wiring, and hardware; the installation of fire alarm equipment; and the installation of CATV, HSD, and VOIP equipment and wiring for hospitals, and commercial and residential buildings.

Mr. Perez was also the owner of a subcontracting company that performed installations for CATV, HSD, and VOIP equipment in both commercial and residential buildings in Florida. He has also served as a Project Officer for the New York City School Construction Authority responsible for various school projects. Mr. Perez monitors schedules and takes appropriate actions to ensure that the project is completed on schedule and within approved cost limitations.

Relevant Experience

New York City School Construction Authority (NYCSCA), Project Officer, New York, NY

Functioning under the direction of a NYCSCA Senior Project Officer, Mr. Perez serves as a Project Officer providing the administration and coordination of activities for the design and construction of both smaller rehabilitative and more complex and/or high visibility construction and modernization school projects. Mr. Perez ensures the quality and high standard of performance and compliance in both design and construction by all consultants and vendors. He makes decisions and takes action in a timely manner to expedite the timely completion of the construction process. He is also responsible for correct of mistakes and errors in design and construction before they can be extensively incorporated into the project.

Mr. Perez's duties include constant reading and interpretation of drawings and specifications related to all types of projects; review of payment requisitions and adjustment of line items according to actual work completed; and scheduling meetings with appropriate personnel for construction progress and school issues that need to be addressed. He also generates and completes documents related to change orders and payment requisitions using Expedition software; and he records and documents detailed daily activities at job sites. In addition, Mr. Perez is responsible for recording meeting minutes and scheduling inspections for proper monitoring of installations. He is also familiar with all FID and DOB close-out procedures.

Prior Experience

Various Projects, New York City School Construction Authority (NYCSCA), Long Island City, NY

Mr. Perez served as Project Officer for NYCSCA from 2007 to the present. His duties included monitoring schedules and taking appropriate actions to ensure that the project was completed on schedule and within approved cost limitations. He provided ongoing interface with contractors, construction managers, United Federation of Teachers (UFT) representatives, architects, engineers, and Senior Project Officers on any project issues. Mr. Perez also issued field statements or directives to contractors to enforce contract compliance, and reviewed change orders submitted by contractors for validity. He made recommendations to supervisors and negotiated with contractors on change orders and payments. He also reviewed the contractors' claims and made recommendations as to the appropriate actions. He filed contract and project documentation, and visited various job sites as required in the performance of his duties.

Various Projects, Televerse Communications (TVC), Selden, NY

As Project Manager, Mr. Perez installed Intertel Telephone systems and all types of computer-related connections. He generated baseline schedules to ensure that the project was completed in the allocated time. In addition, Mr. Perez trained new employees on the installation of equipment and hardware; provided direction to workers regarding proper installation of equipment, hardware and connections; and was responsible for ongoing interface with general contractors, company owners and Televerse senior management.

Various Projects, Wiring Technology, Orlando, FL

Mr. Perez worked throughout Orlando in all Florida Regional Hospitals and installed Access Points for wireless computer connections. He was trained on Hillrom systems and the installation of Hillrom equipment such as nurse call, staff emergency, and monitoring stations.

Various Projects, Subcontracting Company, Orlando, FL

Mr. Perez served as a subcontractor for Brighthouse and installed CATV, HSD, and VOIP equipment. He also trained new technicians in troubleshooting and field work. Most work was done in both commercial and residential buildings. As the Owner, he was also responsible for extensive paper work for billing, equipment, and inventory.

Various Projects, Televerse Communications (TVC), Selden, NY

Working in both commercial and residential sites, Mr. Perez received extensive hands-on training with Intertel Telephone Systems, and installed hardware for phone systems on various commercial sites. He ran Cat 5 and Cat 6, 100 to 500 pair cable and fiber optic cable. He was also responsible for the termination of 66 blocks, 110 blocks, Krone blocks, and fiber ends.

Steven Rios

Construction Inspector

Steven Rios has 26 years of experience in demolition and site preparation; plumbing, electrical, masonry, and mechanical work; heavy construction; and property maintenance and management. Mr. Rios has documented roofing experience and holds a CertainTeed Quality Master & Master Shingle applicator certification. In addition to installing and inspecting roofing, he has been involved with demolition and installation, structural reinforcement, steel beam installation, framing, and window and door installation. Mr. Rios is fluent in Spanish and Portuguese, with a working knowledge of Italian.

Prior Experience:

Various Projects, New York City School Construction Authority (NYCSCA), New York, NY

As Roofing Inspector, Mr. Rios was responsible for the inspection of ongoing roofing and construction projects for the New York City School system. He documented work in progress by photos and an integrated network log, scheduled and performed flood tests, provided follow-up inspections, noted violations that were not according to NYCSCA specifications, and attended ongoing training sessions by the NYCSCA and the manufacturers' application courses.

Various Projects, ZMK Group, Inc., New York, NY

Mr. Rios served as Carpenter and worked on the renovation of an apartment in a landmark building in New York City.The work involved complete demolition and gutting; leveling of existing floors, plumbing of walls, steel and wood framing, drywall, and DuraRock; custom carpentry work and milling for soffits and lighting; housing ceiling structures; installation of HVAC;and the installation of bathroom fixtures, lighting fixtures, and ventilation systems. He also assisted with the installation of custom moldings and woodwork.

Various Projects, Massartre, Ltd., New York, NY

As Carpenter, Mr. Rios was involved with Brownstone restoration work. The work included demolition and installation of PSL Beam and steel flooring joists and sheathing; alterations to the existing structure to bring it up to code; steel beam installation for exterior decking; building structures, including bulkheads, safety railings, and hoists; and window and door installation.

Various Projects, Metric Roofing, Inc., Commercial Tile Division, Phoenix, AZ

Mr. Rios supervised 600 units on four different tracts of land. He worked with the site superintendents and other trade managers to develop schedules and address issues. He also maintained and updated progress reports; ordered needed stock for job completions; provided safety training; served as interpreter for management and labor; scheduled crews for job specific tasks; and maintained the time and labor sheets and logs.

Various Projects, Rios Roofing Company, Mount Vernon, NY

The company provided roofing and gutter repairs, removal of roofing, and roofing replacement and maintenance for commercial and residential customers. As Owner of his own roofing company, Mr. Rios was responsible for sales, project management, and administration. He initiated customer contact, made product presentations, and tailored options to the customer's specification. Mr. Rios provided project management and was responsible for site preparation, equipment operations, hiring and training of workers, ordering of materials and arranging delivery, and waste management. As part of his administration duties, he provided proposals, estimates, and contracts. He also secured work permits and insurance documentation, and provided inspection for general contractors, insurance and real estate professionals, as well as engineers and architects.

Various Projects, Salvatore & Son Roofing, Yonkers, NY

Mr. Rios served as an apprentice to his father, who was the Owner of this 40-year old company. After his apprenticeship, he then supervised his own roofing crew.

Michael T. Ross

Construction Inspector

Education:
B.A., Biological Sciences,
Rutgers University, 1999

Michael T. Ross has over 10 years of experience in quality control and inspection for the pharmaceutical and biotechnology industries. Mr. Ross has written and reviewed manufacturing related documents, trained coworkers, and functioned as team leader in critical areas. He is skilled in both aseptic techniques and cGMP environments. He has contributed to ongoing efforts to develop, validate and qualify, and improve testing methods, including Cytokine ELISA testing and chondroitin sulfate assays. Mr. Ross has also written, revised, and reviewed Standard Operating Procedures, Batch Production Records, and official forms.

Prior Experience

Various Projects, Forticell Bioscience, New York, NY

As Quality Control Associate II, Mr. Ross contributed to ongoing efforts to develop, validate, qualify, and improve testing methods, including Cytokine ELISA testing and chondroitin sulfate assays. He supported the transfer of test methods to external contractors. He also conducted routine and specialized analysis of raw materials and the in-process and finished product for product release in accordance with established procedures, including cell culture and biological tests, and chemistry assays. Mr. Ross reviewed internal QC/QA data and manufacturing batch records for completeness, scientific accuracy, and cGMP compliance. He reviewed, analyzed, and evaluated data to ensure accuracy and conformance to specifications, and managed any investigations of failures or deviations. He maintained the laboratory area, including routine cleaning of incubators, biosafety cabinets, and other laboratory equipment.

Various Projects, Enzon Pharmaceuticals, Inc., Bridgewater, NJ

Mr. Ross achieved a 100% batch acceptance rate in the aseptic filtration, diafiltration, and Pegulation of a bulk drug substance for three different components in a classified (Class 100) manufacturing environment. He visually inspected the finished drug substance for particulates ensuring quality compliance. He labeled and packaged filled vials with accurate Lot numbers and expiration dates. He also assumed extra duties, including the writing of investigations and computer validation of a Calibration Management System.

Various Projects, Imclone Systems, Incorporated, Branchburg, Nj

As Operator III, Clinical Manufacturing, Mr. Ross wrote, revised, and reviewed Standard Operating Procedures, Batch Production Records, and official forms, ensuring that operations were accurately replicable. He assisted in the validation of a new CIP system, and trained four new Operators to independently perform equipment preparation and media/buffer manufacturing. Mr. Ross wrote and investigated Non-Conformance Events, revising SOPs to ensure ongoing consistent compliance. He scheduled and prepared media and buffer batches, working with supervisors of the Cell Culture and Purification areas. He ensured that batches were delivered on time to meet manufacturing demands. Mr. Ross performed ph, osmolality, and conductivity tests on media and buffer batches. He also functioned as the Bioservices Supervisor, directing 8 operators during the supervisor's absence. He assisted in the Purification and Cell Culture areas running bioreactors, performing tangential flow filtration, and doing cell counts as needed.

As Quality Assurance Assistant for Imclone Systems, Mr. Ross maintained the master original and electronic document files ensuring easy access for quality audits, FDA inspections, etc. He provided technical assistance throughout the documentation initiation, review, and approval process. He performed incoming inspection and labeling of raw materials, components, and finished product, and ensured that materials met specifications. Mr. Ross also sampled raw materials and components used in both clinical and commercial manufacturing for microbiology testing and QC analysis. He received special recognition for contributions to the 2001 BLA filing.

Various Projects, Firmenich Incorporated, Plainsboro, NJ

Mr. Ross allocated, compounded, and synthesized artificial and natural flavors to fill client sample requests. He led the set up of two new sample production laboratories: power mixing and meat flavor synthesizing. He also trained technicians to operate in both laboratories.

Darlene Scott

Construction Inspector

Darlene A. Scott has over 20 years of experience as an engineering technician, as well as an assistant estimator, for various construction management projects, including transportation and educational facilities. As an Engineering Technician with Hill International, Ms. Scott works closely with project and construction managers to ensure an effective document management system on various projects.

Relevant Experience

World Trade Center (WTC) PATH Station Reconstruction, Port Authority of New York and New Jersey

As Assistant Estimator, Ms. Scott prepared initial budget estimates, design estimates, and final estimates for the Port Authority's 3.5 million square feet of reconstruction below street level. The site included security, tenant and bus parking; core and tower podiums, new PATH terminal; central power and mechanical plants; memorials; and cultural and performing art centers.

Insurance and FEMA Claims-World Trade Center & PATH, Port Authority of New York and New Jersey

For all Port Authority projects, Ms. Scott developed and implemented an effective document control system and managed the processing, retrieval, and distribution for thousands of documents from design and construction plans.

New Jersey Transit CM/GEC Services, Newark Pennsylvania Station Improvements Project, Newark, New Jersey

As the On-Site Engineering Technician to New Jersey Transit's Resident Engineer, Ms. Scott was responsible for document control management, utilizing NJ Transit's standardized document control system, for three major projects: Rehabilitation/Access Improvements; NJ Transit Police Headquarters; and Elevator and Escalator Improvements. Additional responsibilities included review and preparation of payment applications; processing of submittals and change orders; review of contract documents; and survey take-offs. She worked closely with NJ Transit personnel.

New Jersey Transit CM/GEC Services, Newark Elizabeth Rail Link (NERL) and Broad Street Extension Project, Newark, New Jersey

Ms. Scott served as On-Site Engineering Technician and was responsible for the document control management of the light rail project. In addition, Ms. Scott prepared payment applications, processed

Education:

Certificate, The National Society of Collegiate Scholars, Drexel University, 2008

A.A.S., Office Systems Technology in Business, Burlington County College, 1989

Certificate, 10-Hr OSHA Compliance for the Construction Industry, UMDNJ - School of Public Health, 2008

Professional Memberships:

Construction Management Association of America (CMAA)

Awards/Honors:

Inducted into "The National Society of Collegiate Scholars" for commitment to Scholarship, Leadership and Service by Drexel University, (2008)

submittals and change orders, and reviewed contract documents. She worked closely with NJ Transit personnel.

New Jersey Transit CM/GEC Services, Newark City Subway Light Rail Signal Modernization, Newark, New Jersey

As the On-Site Engineering Technician, Ms. Scott was responsible for document control management for the 13-station subway system project. In addition, she prepared payment applications, processed submittals and change orders, and reviewed contract documents. Ms. Scott worked closely with NJ Transit personnel.

New Jersey Transit CM/GEC Services, Orange Street Station Line, Newark, New Jersey

Ms. Scott served as On-Site Engineering Technician and was responsible for the document control management of the light rail project. In addition, she prepared payment applications, processed submittals and change orders, and reviewed contract documents. Ms. Scott worked closely with NJ Transit personnel.

Federal Transit Administration Projects

As an Administrative Assistant, Ms. Scott provided assistance to the Project Management Oversight (PMO) staff on various projects, including Frankford Elevated Reconstruction, Norristown High Speed Line, RailWorks, Port Authority of Allegheny County, and the Camden Waterfront Transportation Complex.

Ms. Scott's other projects have included Atlantic City Airport; Bi-State Metro Link, St. Louis, Missouri; and several feasibility studies, including the Burlington-Gloucester Corridor, New Jersey study.

400 Bus Procurement, Southeastern Pennsylvania Transportation Authority (SEPTA), Philadelphia, Pennsylvania

Ms. Scott was responsible for various administrative duties, including report preparation and payment requisitions.

City of Philadelphia, Division of Aviation, Philadelphia International Airport, Philadelphia, Pennsylvania

As Assistant to the Project Director, Ms. Scott was responsible for document control management.

New Jersey Turnpike Authority, Turnpike Widening Project, Northern New Jersey

Serving as Technical Assistant to the Project Staff, Ms. Scott was responsible for document control management.

Keith R. Stapleton

Construction Inspector

Education:
B.S., Environmental Studies, University of Vermont, 1999

Coursework, City College of New York, 2002

Professional Memberships:
American Society of Landscape Architects

Keith R. Stapleton has over has over ten years of experience in landscape design and architecture for private, municipal, residential and master plan projects. Mr. Stapleton also has experience as an assistant property manager for mid-sized residential dwellings and commercial storefronts in New Jersey. His specialized computer software skills include Adobe Photoshop, AutoCAD, and Quickbooks.

Relevant Experience

City of New York Department of Parks & Recreation, Street Tree Division, New York City Department of Parks & Recreation (NYCDPR), New York, NY

Hill International was retained by the NYCDPR as a consultant to manage the construction or renovation of Parks projects within the five boroughs of New York City. Hill has provided continuous staffing on numerous construction improvements totaling $20 million. Hill provides pre-construction review and estimating, supervision and inspection, contract administration, technical support, and administrative support services. As Field Inspector, Mr. Stapleton supervises various city wide projects within the Street Trees, Greenstreets, and Natural Resources Groups. He has overseen native forest and watershed reforestation; the planting of new trees on various streets, parks, bluebelt sites, and golf courses; preparation of planting sites (including saw cutting, excavation, and installation of landscape fabrics); removal of dead trees and stumps; and installation of granite block pavers and tree guards. Mr. Stapleton has also supervised the renovation and replanting of a park with contaminated soil, balancing the sensitivities faced by the New York City Parks Department and the local community. His responsibilities also include daily and weekly reporting; tracking of budgets and payment processing; conducting final and guarantee inspections; and project completion procedures.

Prior Experience

Quaker Hill Native Plant Garden, Pawling Properties Associates, Pawling, NY

As Landscape Designer, Mr. Stapleton was responsible for landscape design for the Quaker Hill Native Plant Garden, a 1,300-acre private estate and botanical garden. His primary responsibility was to conceptualize, design, and execute the installation of landscape

design that accurately represented various ecological communities of the Eastern United States. Other duties included installation coordination, crew supervision, computer-drafted design presentations, plant inventory management, and basic budgeting.

Various Projects, Quennell Rothschild & Partners, LLP, New York, NY

Mr. Stapleton assisted project managers at this award winning landscape architectural and planning firm by using historical research, preparation of plans and documents, and computer-aided design.

Various Projects, TK Landscape Architects, Colchester, VT

Mr. Stapleton assisted the owner in business development for a small entrepreneurial firm via municipal, residential, and master plan projects.

Various Projects, Terrace Holding Corporation, Woodcliff Lake, NJ

Mr. Stapleton served as Assistant Property Manager for six mid-sized residential dwellings and two commercial storefronts in Bergen County, New Jersey. He was responsible for assisting in the coordination and supervision of contractors, tenant relations, turnover of rental units, preparation for state inspections, and oversight of the grounds.

Bethoven C. Torio

Construction Inspector

Education:
B.S., Electrical Engineering, Ortanez University, Philippines, 1980

Professional Memberships:
American Society of Professional Engineers

Bethoven C. Torio has over 30 years of experience in electrical construction project management and estimating for residential, commercial, and industrial projects with small, medium, and large power distribution and auxiliary system layout. Mr. Torio has in-depth knowledge of electrical installations and a wide variety of electrical materials. His electrical estimating experience includes projects with electrical construction values of $2-3 million. Mr. Torio has been responsible for analyzing electrical schematic diagrams and material take-off for lighting, small power, LV and HV power distribution, fire alarm, smoke and heat detector, telephone and intercom, and CCTV/ security systems, as well as other auxiliary layouts. He has reviewed design options and recommended the best solutions based on cost, engineering quality, availability of materials, and material submittals for "approved equal items." Mr. Torio's specialized computer software skills include AutoCAD and computer generated estimating software. He is fluent in English and Tagalog.

Relevant Experience

Dormitory Authority of the State of New York (DASNY), Bronx County Hall of Justice, New York, NY

Hill International represents DASNY in dealing with DASNY's subcontractors and other matters as required. Hill's services include change orders, punch list inspection, allowances, schedule delay analysis, parking garage and pre-cast inspection, and claims support. Mr. Torio serves as Electrical Estimator responsible for the estimating and processing of electrical change orders.

New York City Housing Authority, Low Income Housing Renovations, New York, NY

Hill International is providing services for a CM-Build contract with the New York City Housing Authority for renovations to Albany Houses totaling nine buildings and 1,229 apartments. Mr. Torio coordinates with the building tenants for the electrical work upgrades to be done to their apartments and coordinates this with the electrical contractor. He inspects and checks the electrical materials being used onsite in order to ensure that they meet specifications; inspects the electrical upgrade and the basement electrical room power upgrade for each building as they are finished; and provides daily inspections reports for day-to-day work, work accomplished, and manpower.

Prior Experience

TLH Construction Corporation, Various Estimating Projects, Brooklyn, NY

Mr. Torio reviewed and analyzed all bid documents, specifications, and electrical plans to determine the scope of work and required contents of estimate. He provided materials and labor take-off from plans, riser and block diagrams, and details in proposed project drawings to build a complete estimate of the project cost, as well as for use in project proposals. He prepared written requests for information, communicated with specialty subcontractors and material suppliers, reviewed design options and recommended solutions based on cost, engineering quality, and availability of materials. During construction, Mr. Torio provided inspection of all ongoing electrical work and determined percentage of work accomplished for billing purposes. He also monitored project expenses against the estimated project cost. Projects included:

- **Nine Light Rail stations,** Air Train from Jamaica to JFK Airport, (Howard Beach, Sutphin, and Jamaica), Port Authority of New York and New Jersey, Electrical Estimator/Electrical Inspector.
- **Church of Christ Building,** Forest Hills, New York, Electrical Estimator/Electrical Inspector.

Alstyne Electrical Services, Various Estimating Projects, Corona, NY

Mr. Torio reviewed and analyzed all bid documents, specifications, and electrical plans to determine the scope of work and required contents of estimate. He provided materials and labor take-off from plans, riser and block diagrams, and details in proposed project drawings to build a complete estimate of the project cost, as well as for use in project proposals. He transferred all material, labor and take-offs to Excel spreadsheets and ensured that all working documents and data were maintained to back up the estimate figures. Projects included:

- **Gospel Temple Church,** Minford Place, Bronx, New York, Electrical Estimator/Inspector.
- **Six-Story Commercial and Residential Building Renovation,** Flushing, New York, project design and estimated.
- **Three Residential Buildings,** Flushing, New York, 12 condominium unit buildings, project design and estimated.

Paladin Renovations, Various Estimating Projects, New York, NY

Mr. Torio reviewed and analyzed all bid documents, specifications, and electrical plans to determine the scope of work and required contents of estimate. He provided materials and labor take-off from plans, riser and block diagrams, and details in proposed project drawings to build a complete estimate of the project cost, as well as for use in project proposals. He oversaw electrical construction activities of the project, provided construction administration, and ensured installation work was current based on project schedule milestones and budget. He ensured procurement and delivery of materials to the job site. He also conducted weekly meetings with the project electrical foreman and lead man.

Michael Abarno, CCM

Construction Inspector and Field Engineer

Michael Abarno, a Certified Construction Manager, has over 18 years of experience in a supervisory position for educational facilities and office buildings. Mr. Abarno has coordinated and supervised all trades on site from start-up through punch list. He has also been responsible for change orders, scope modifications and contract amendments, claims, and cost and schedule.

Education:
Coursework, Civil Technology, College of Staten Island, CUNY, 1994-2000, 0

Registrations:
LEED Green Associate

Certified Construction Manager

Professional Memberships:
CMAA

Relevant Experience

New Jersey Schools Construction and Renovation Program, New Jersey Schools Development Authority (NJSDA), (formerly NJSCC), Region 6, NJ

Hill is providing program management services for renovations and additions to schools in Region 6. As the project management firm, Hill is charged with administering and managing a $350 million school construction contract from the pre-development phase through construction and the post-occupancy phase. Mr. Abarno is currently serving as a Senior Project Manager on Hill's Region 6 project and is responsible for the management of four school construction projects with a combined value of approximately $100 million. He also served as Construction Manager for the design phase on the Trenton Central High School project. Some of his duties have included approval of the design consultant and contractor's monthly payment requisitions; approval of contractor's change orders; negotiation and preparation of design consultant's scope modifications and contract amendments; review and recommendations to the NJSDA for resolution of contractor claims and cost and schedule improvement recommendations. Projects include:

- **Burlington City High School, Burlington, NJ.** This project consists of a 49,982 SF expansion and a 149,000 SF renovation of the Burlington City High School, which currently houses grades seven through twelve. Interior renovations to the High School consist of resizing and realigning 75% of the existing classrooms to meet the current educational requirements. The project includes a new addition that will house a new state-of-the-art media center, as well as general classrooms, art rooms, computer rooms, and science rooms. The scope of work consists of the expansion and renovation of the existing cafeteria and food service area, and a complete renovation of the music wing along with a small expansion in the instrumental room.

- **Wilbur Watts Intermediate School, Burlington, NJ.** The new Wilbur Watts Intermediate School will house grades three through six, as well as the Board of Education offices. In addition it will include a separate maintenance facility and the District's main football field and track. New children's basketball courts and play equipment will also be situated in proximity to the new building. The project will involve the demolition of the existing deteriorating Wilbur Watts Intermediate School and associated structures. An auditorium is included, which will be funded by the Burlington City Board of Education.
- **Joyce Kilmer Elementary School, Trenton, NJ.** The new Joyce Kilmer Elementary School consists of three floors, totaling 119,882 SF with an anticipated student enrollment of 727 students. The facility will be constructed on an open athletic field space and the existing facility will serve as swing space until the new facility is completed. The first floor will contain administrative offices. The second floor will contain Pre-K through second grade classrooms. A central courtyard will provide light and ventilation to educational spaces and will also be utilized as a "Living Science Center" and supplemental educational space. The third floor will be comprised of third through fifth grade classrooms, two small group instruction rooms, a Special Education self-contained classroom, and space for future classrooms.
- **Parker Elementary School, Trenton, NJ.** The project consists of a 19,200 SF addition and the full renovation of 58,000 SF of existing space. The new addition includes a cafeteria and kitchen, media center, administration suite and early childhood house. The design reflects and addresses the tight restraints of this urban community school by capturing needed green space, provides a basketball court, and a more efficient parking layout. Finally, in the spirit of a true urban school, the top of the childhood house is utilized as a rooftop reading deck. Parker Elementary School is configured for Pre-K through eighth grade with enrollment of 475 students. Mr. Abarno served as Construction Manager for the design phase of the Parker School project.
- **Trenton Central High School, Trenton, NJ.** The project consists of three additions totaling 129,500 SF and the renovation of 395,000 SF of existing building space. The Trenton Central High School renovation takes into account the current condition of the facility, required additions and alterations of spaces, projected enrollment data, and proposed curriculum changes. The school currently houses over 3,000 students. Mr. Abarno served as Construction Manager during the design phase of the addition/renovation project and also completed the Trenton High Roof project. He was also responsible for the preparation of the construction phasing and logistics plan for multi-phased project.

Luis Cortes

Construction Inspector and Field Engineer

Education:

B.S., Civil Engineering, Polytechnic University, 2001

A.A.S., Civil Engineering, New York City Technical College, 1998

Certificate, 4 Hour User/ Erector Supported Frame Scaffold Safety Training, Total Safety Consulting, New York, 2006

Luis G. Cortes, civil engineer, has 10 years of experience in design, construction and construction management. Mr. Cortes' experience includes pre-construction scope development, new building construction, landmark building restoration, construction management, scheduling, quality control, cost estimating, safety management, change order administration, contract negotiation, RFI tracking and response, and claims avoidance and resolution. His project experience includes water treatment plants, zoos, libraries, museums, schools, parks, transportation facilities, and courthouses.

Relevant Experience

Dormitory Authority of the State of New York, Manhattan Psychiatric Center, New York, NY

Mr. Cortes served as Project Manager for the Manhattan Psychiatric Center. He provided coordination, supervision, and inspection of all work a the site. He coordinated with the facilities personnel, including DASNY, OMH, and the contractors. The close coordination and management brought this project to a close ahead of schedule and on budget. Hill provided construction management and inspection services and maintained continuous coordination between DASNY, the Office of Mental Health, project engineers, and the contractor. We assisted DASNY in supervising the contractor, resolving construction issues, performing inspections, monitoring the progress of work completed, the work schedule, correspondence, and followed up construction issues/request for information with design engineer. Hill's staff coordinated daily with Office of Mental Health regarding safety of their patients/clients, facility and staff. Additional coordination of traffic control, construction progress, access to the facility, utilities and other contractors working simultaneously in the area was on-going. All landscaping, roads, site work and other areas disturbed were restored to existing condition. The project was initially anticipated to be completed by September 2009; but was ahead of schedule, with completion at the end of June 2009.

Dormitory Authority of the State of New York, Bronx County Hall of Justice, Bronx, NY

The Bronx County Hall of Justice is an 11-story, 775,000 SF complex located on a 2½ block site. It also contains an underground parking structure for 240 cars. Hill provided construction management,

program change management, change order processing, and negotiation, construction inspection, schedule and delay analysis, claims analysis and support and project closeout. Mr. Cortes serves as Superintendent for the project, which is valued in excess of $400 million. He is responsible for coordinating multiple trade contracts, including HVAC, plumbing, general contractor, and electricians. This project involved extremely careful coordination of the numerous contractors and trades involved in order to ensure that the appropriate security safety measures were taking place in and around the facility.

Columbia Presbyterian Hospital, Oxford Construction Development, Inc., New York, NY

Hill provided construction management, services for the installation of emergency signage done under fast track construction throughout the campus. As Superintendent, Mr. Cortes supervised and coordinated the installation of exit lights throughout several hospital buildings. He took over the existing contractor's workforce and coordinated phased construction and installation through the operational facility in order to meet the accelerated, fast-track schedule.

New York City Department of Design and Construction (DDC), Cultural Facilities Unit, Various Projects, New York, NY

As Construction Manager, Mr. Cortes has managed the restoration, renovation, and new construction of several cultural buildings under Hill's CM-Build contract with the DDC. The program is part of the DDC's continuing construction of various cultural buildings throughout the City. He has been responsible for coordination and supervision of all construction activities, estimating, quality control, and safety and maintenance of contract documents. Projects include:

- ***New York Public Library:*** Serving as Construction Manager, Mr. Cortes was responsible for the investigation and repair project involving the various balusters, cornices, keystones, column capitals, and pediments comprising the façade of the building. During the investigation, it was determined that some decorative stone elements appeared to have fallen from the column capitals and pediments at the front of the building. Subsequently 28 column capitals and two pediments were wrapped with safety nylon netting to catch any stone fragments that could possibly fall and injure people or cause damage to the building.
- ***Schomburg Center for Research in Black Culture:*** Hill was selected by the New York City Department of Design and Construction (DDC) to provide Construction Management Services for the $8.2 million renovation project at the Schomburg Center. Mr. Cortes provided construction management services for the project.
- ***Museum of the City of New York:*** Hill provided construction management services for upgrades, renovations, and additions within the museum. The project included a new slate tile roof, mechanical and electrical upgrades, a new building addition, a building renovation, and an expansion over a six-year period. Approval from the City Landmarks Commission was required prior to the start of construction. Mr. Cortes served as Construction Manager for this project.

Elliott Ira Hardie, PE, LEED AP

Construction Inspector and Field Engineer

Education:
B.E., Mechanical Engineering, City College of New York, New York, New York, 1976

Registrations:
Professional Engineer, New York

LEED Accredited Professional

Professional Memberships:
United States Green Building Council

Elliott I. Hardie, a Professional Engineer, has over 30 years of experience in design and construction of institutional, residential, educational, commercial, retail, and healthcare related projects. Mr. Hardie has extensive on-site experience, participating in on-site coordination construction meetings; and reviewing Requests for Information (RFI), contractor's schedules, and change orders. He has prepared project construction reports and punch lists to ensure contract document and code compliance.

During his current tenure with Hill, Mr. Hardie has been involved with several Constructability Reviews on various state and city projects; such reviews required making recommendations/suggestions to the design team. Principally the reviews include cost-saving ideas which would be realized prior to construction (i.e., Long-Lead Items), as well as material "runs" such as piping and ductwork, and mechanical room layout (strategically locating M.E.R.s, keeping in mind maintenance and acoustical considerations.) The cost savings for both labor and material could be realized during construction.

Mr. Hardie founded his own consulting engineering company in 1981. During his 20 years as Owner, he participated in many Value Engineering sessions for projects in the Healthcare and Education sectors, and provided managerial overview and value engineering to ensure compliance with code, budget, and time constraint requirements. He was responsible for planning and scheduling of mechanical, electrical, plumbing, and fire protection projects and contract documents. Mr. Hardie also served as General Engineer and Safety Officer for the U.S. Veterans Administration at a full-service hospital for veteran patient care at the Brooklyn Veteran's Administration Hospital in Brooklyn, New York and the Veterans Administration Extended Care Center, Queens, New York.

Relevant Experience

Bronx County Hall of Justice, Dormitory Authority of the State of New York (DASNY)

Hill International is providing construction management services for the Bronx Criminal Courthouse Complex, a new facility to house the Supreme Court Criminal Team, which will include 47 courtrooms. The 744,000 SF, $390 million complex will occupy a 2.5 block site near Grand

Concourse and stand 11 stories tall. Serving as Mechanical Project Manager, Mr. Hardie reviews contractor's installations to ensure compliance with contract documents, reviews contractor's requisitions and recommends payment, and prepares punch list items. He also reviews change order requests and recommends approval based on the scope of work and standard estimating procedures. He assists Hill staff when technical questions or issues are posed.

Lion House at the Bronx Zoo, New York City Department of Design and Construction (NYCDDC), Bronx, NY

Hill is providing construction management services for the reconstruction of the historic Lion House at the Bronx Zoo. The Lion House has not been used since the mid-1970s, and requires major infrastructure work before it can safely be returned to service and transformed into the new Madagascar Exhibit. The historic character of the building, including the many lion figures made from terra cotta, is being preserved. The building is being designed and constructed as a "green building" with silver LEED certification. Mr. Hardie's duties and responsibilities included liaison between the NYCDDC, WCS (User Group), and contractors, and the review of contractor's proposed change orders, requisitions, and work schedules. He was also responsible for system installation review, including punch lists for all trades. The systems included HVAC, geo-thermal (5 standing wells), fire protection (wet and pre-action), plumbing (domestic hot and cold water), storm and sanitary, and gas service distribution.

East River Esplanade and Piers Project, New York Economic Development Corporation, New York, New York

Hill International is part of a team providing project management services for the pre-construction, bidding, and construction oversight for the implementation of the project. This project seeks to improve access to the waterfront, enhance pedestrian connectivity, and create waterfront amenities for public use and enjoyment. As a result of the Mayor's vision for a 21st century Lower Manhattan, the project has received critical national and international acclaim and recognition. As the Mechanical Engineering Manager, Mr. Hardie is responsible for preparing construction cost estimates, constructibility review, and scheduling for the $10 million pilot project that will be the cornerstone of an ambitious plan to renovate the East River Waterfront.

Prior Experience

Airport Facilities

- **JFK International Airport Terminal 4, Queens, NY** – El Al Israel Airlines, Air India, Pakistan Airlines, and various retail spaces.

Governmental Facilities

- **New York City Department of Design and Construction, New Langston Hughes Branch Library, Corona, NY**
- **New York City Department of Design and Construction, Senior Centers Air Conditioning, Brooklyn, NY** – three locations.

Raed M. Jaber

Construction Inspector and Field Engineer

Raed M. Jaber has over 14 years of experience in construction management, electrical engineering, and mechanical engineering and design for fire department communication facilities, transit and subway maintenance shops and stations, airports, educational facilities, postal distribution centers, pharmaceutical loading docks, and chemical weapons disposal. Mr. Jaber has been involved with new construction, renovation and rehabilitations, condition assessments, and design drawings development for electrical, mechanical and plumbing disciplines. He also served as lead research member for a chemical weapons disposal project in association with the United States Army, and was a graduate teaching assistant at the Idaho State University, College of Engineering. Mr. Jaber's specialized computer software skills include Prolog and he is fluent in English and Arabic.

Relevant Experience

Dormitory Authority of the State of New York, Bronx County Hall of Justice, Bronx, NY

The Bronx County Hall of Justice is an 11-story, 775,000 SF complex located on a 2½ block site. It also contains an underground parking structure for 240 cars. Hill provided construction management, program change management, change order processing, and negotiation, construction inspection, schedule and delay analysis, claims analysis and support and project closeout. As Assistant Project Manager for the Mechanical, Electrical and Plumbing (MEP) work, Mr. Jaber performed all the duties of commissioning the electrical and electronic systems throughout the building. He completed all program change orders and electrical (low-voltage, high-voltage) estimating; supervised installation, testing, and training of all security systems needed to service both the Office of Court Administration facilities and the Department of Corrections facilities; and assisted in the completion and testing of mechanical systems. Mr. Jaber also supervised contractors and other Hill staff members.

Prior Experience:

New York City Transit Authority, White Plains Line, Comprehensive Rehabilitation of Ten Stations, Bronx, NY

As CAD Designer, Mr. Jaber was responsible for performing design drawings development of the electrical, mechanical, and plumbing disciplines for the project.

Education:
M.S., Measurement and Control Engineering, Idaho State University, 1995

B.S., Engineering Science, College of Staten Island, New York, 1991

Professional Memberships:
American Society of Mechanical Engineers

Awards/Honors:
Best Leading research Member Award, Associated Western University

Publications:
"Aeroassisted Guidance of Orbital Vehicle," AIAA Annual Proceedings, Technical Article, (1995)

Seminars:
Monthly Research Results Meeting, Lockheed Martin Research Presentation, Pocatello, Idaho, (1997)

Newark International Airport, Terminal B, Newark, NJ

Serving as Electrical Engineer, Mr. Jaber was involved with the design of the Terminal B modernization project, which was estimated to cost $20 million for the design phase only. His responsibilities included the design of power distribution, security systems, and fire alarm modification.

New York City Department of Design and Construction, Fire Department of New York City, Dispatch Communications Office, New York, NY

Mr. Jaber served as Construction Manager for the $86 million renovation of the Fire Department's communication facilities for the DDC. He was responsible for supervision of contractors, and installation, testing, and commissioning of 500KW emergency generators augmented with 225KVA UPS systems and ASCO ATS's. He participated in examination of shop drawings and verification of contractor compliance with the installation of power systems, as well as security and fire alarms. His responsibilities also included coordination of project documents, submittal logs, shop drawings, and coordination of all project controls. The work was performed on four sites, including Brooklyn, Bronx, Queens, and Staten Island.

New York City Transit Authority, 207th Street Overhaul Shop Rehabilitation, New York, NY

As Electrical Engineer, Mr. Jaber was involved with the design team for the electrical rehabilitation of the New York City Transit Subway Overhaul Maintenance Shop. The facility required the modernization of existing power systems. Mr. Jaber participated in the review, recommendations, and design phase of the rehabilitation project.

New York City School Construction Authority, Various City Schools, New York, NY

Mr. Jaber served as Electrical Engineer involved with the design, survey and condition assessment of various city schools throughout the metropolitan area. His responsibilities included design modifications and new systems of security, fire alarm, and multi-media facilities. Electrical work was estimated to be approximately $2 million.

United States Postal Service, Postal Distribution Center, Bronx, NY

As Electrical Engineer, Mr. Jaber was involved with the design, survey and condition assessment of the Bronx Postal Distribution Center, with an estimated cost of $1 million. The Postal Service also required the examination of their current power distribution system. Mr. Jaber's responsibilities included a report on power capacity and recommendations of modifications.

City University of New York (CUNY) Operations and Maintenance Pilot Program for Brooklyn and Lehman Colleges, New York, NY

Mr. Jaber served as a member of the electrical and mechanical team of engineers surveying and collecting data on electrical and mechanical equipment. The team was also responsible for preparing reports for the procurement, operation, and maintenance of the equipment for these colleges.

Adam C. Panzarella, LEED AP

Construction Inspector and Field Engineer

Adam C. Panzarella, a LEED Certified Professional, has several years of construction experience in New York City and Florida. Mr. Panzarella has assisted in managing numerous complex construction projects, both public and private. His experience includes airports, apartments, condominiums, and custom homes. Mr. Panzarella's specialized computer software skills include Primavera Expedition, AutoCAD, and Revit.

JFK International Airport, OTG at JFK T5 Venture, LLC, Jet Blue Terminal 5, New York, NY

Mr. Panzarella works hand-in-hand with the architect and owner on a very tight schedule for the 50,000 SF of concession space in the terminal. He concentrates on document control, but assists with all aspects of the job. Hill is providing Owner's Representative services for the interior fit-out of 16 individual food concession spaces located inside Jet Blue Terminal 5 at JFK International Airport. Hill is responsible for contract administration, project controls, coordination of design issues with the design team, and liaison between the owner and contractor.

Prior Experience

Bovis Lend Lease, Various Projects, Tampa, FL

Mr. Panzarella gained knowledge from office and field experience in the construction process. Projects included:

- **The Place at Channelside** – This was a 244 unit condominium valued at $70 million. Mr. Panzarella managed the punch list. He interacted and coordinated daily with project managers from both the construction management firm and the subcontractors.
- **Aqualea** – This was a world-class resort and residence facility valued at $105 million. Mr. Panzarella created RFIs, estimates, and organizational charts relating to various projects.

Joseph Harris Construction, Apartment Complex, Gainesville, FL

Mr. Panzarella assisted the crew foreman with the layout and framing of apartment complex units in a fast-paced environment. He completed 24 units in several weeks and developed key team building skills.

McClellan Incorporated, Various Projects, Clearwater, FL

Mr. Panzarella helped to manage the different phases of construction from the ground up.

Education:
B.S., Building Construction, University of Florida, 2008

Certificate, 30 Hour OSHA, US Department of Labor, 2007

Registrations:
LEED Accredited Professional

Awards/Honors:
Jones Endowment Scholarship

PCEA Scholarship

Anderson Construction Industries, Custom Home, Jupiter, FL

Mr. Panzarella assisted with formwork, steel work, and concrete pour on this multi-million dollar custom home.

McClellan Incorporated, Various Projects, Clearwater, FL

Mr. Panzarella, as Assistant to the Contractor/Carpenter, helped to manage the different phases of construction from the ground up on an addition ranging from $100,000.

Anderson Construction Industries, Custom Homes, Jupiter, FL

Mr. Panzarella, as Carpenter's Helper, assisted with formwork, steel work, and concrete pour on this multi-million dollar custom home.

Jorge E. Rodriguez

Construction Inspector and Field Engineer

Education:
Diploma, Architecture, National University of Colombia, Bogota, Colombia, 1981

Certificate, 4 Hour User/ Erector Supported Frame Scaffold Safety Training, Total Safety Consulting, New York, 2006

Registrations:
Registered Architect, Colombia

Jorge E. Rodriguez has 18 years of experience in urban renovation planning and architectural design, and construction management of new projects and existing building renovations. Mr. Rodriguez' background also includes ten years of environmental assessments, hazardous materials' surveys, abatement, and air monitoring and inspections experience. His 28 years of project experience includes office and residential buildings, commercial and industrial construction, libraries, and educational facilities. He is skilled in AutoCAD Advance Release 13, Auto Architectural, 3D Advance R-13, and Primavera Expedition; and he is fluent in Spanish.

Relevant Experience

Silvio Mollo Federal Building, General Services Administration (GSA) New York, NY

Hill International was retained by GSA to provide construction management services for the replacement of two existing cooling towers at the rooftop. Mr. Rodriguez provided Hill's services and was responsible for establishing document control procedures and providing on-site project administration, which included construction inspection, and review of contractors' applications for payment.

LaGuardia Community College Capital Improvements Project, Dormitory Authority of the State of New York (DASNY), Queens/ Long Island City, NY

Hill International was retained by DASNY to provide construction management services for the installation of a new fire alarm system and smoke dampers for Building "E" at the College. Mr. Rodriguez is providing Hill's services and his responsibilities include establishing document control procedures and providing on-site project administration, which includes submittal processing, construction inspection, and review of contractors' applications for payment.

NYC DDC Schools Program, New York City, New York City Department of Design and Construction (DDC)

Hill International was retained by the DDC to provide program and construction management services for the health and safety renovations at over 50 schools throughout New York City. Mr. Rodriguez provided pre-construction and construction management services on over eight buildings. These services included performing constructibility reviews of the design consultant's documents; establishing document

control procedures; and providing on-site project administration, including submittal processing, construction inspection, and review of contractor's applications for payment.

Brooklyn Central Library, Cultural Facilities Unit Program, New York City Department of Design and Construction (DDC), New York, NY

Hill International was retained by the DDC to provide construction management services for the health and safety renovations of the New Plaza and Auditorium for the Brooklyn Central Library project. Mr. Rodriguez is providing Hill's services and is responsible for establishing document control procedures using Expedition, submittal and RFI processing, and providing on-site project construction inspection for the project.

Prior Experience

Various Projects, D&S Restoration, Paterson, NJ

Mr. Rodriguez was a Project Manager/Supervisor and was responsible for directing representatives of the employer on asbestos projects. His responsibilities included management of field personnel performing asbestos abatement, asbestos surveys and air monitoring, scheduling of work, ordering of work materials, directing subcontractors, and development of reports for work provided. He supervised the modification of a sprinkler system as part of a fit out for an entire tenant floor in an office building, including the installation of photoelectric sensors for fire detection, replacement of all fusible like sprinkler heads, and the rewiring of the interlocks for fire doors, fire dampers, and smoke control fans.

Various Projects, C.S.T. Environmental, Inc., North Bergen, NJ

As Project Supervisor, Mr. Rodriguez performed and coordinated several asbestos projects for the Port Authority of NY/NJ, School Construction Authority and the Housing Authority. He was responsible for setting the priority of assignments; establishing the organization of work procedures; and general oversight of personnel, equipment, air monitoring, and inspections of overall performance at project sites.

Various Projects, Florida Investment Properties, Inc., Orlando, FL

Mr. Rodriguez became licensed as a general contractor by the State of Florida and conducted competitive commercial and residential contracts. His responsibilities included generation of specifications and designs, preparing construction cost estimates and project budgets, supervising work administration, and scheduling and preparing reports for the client, and development of projects. In addition, he performed asbestos surveys and Phase 1 environmental assessments for commercial firms.

Various Projects, L.V.I. Environmental Services, Inc., Hackensack, New Jersey

As Project Supervisor/Foreman, Mr. Rodriguez assisted in all phases of general abatement assignments. As Supervisor, he performed several asbestos abatement projects. He was responsible for personnel, scheduling of work and material, and low-pressure air breathing systems.

Thomas H. Wilson, Jr., PSP

Construction Inspector and Field Engineer

Education:
B.S., Construction Engineering Technology, Spring Garden College, 1980

Registrations:
Planning and Scheduling Professional

Thomas H. Wilson, Jr., a Planning and Scheduling Professional, has more than 30 years of engineering and construction management experience in educational facilities; justice facilities; transportation, railway, and vehicular bridges; medical facilities; wastewater; and structural buildings. He has developed, maintained, and monitored various projects extensively utilizing *Primavera Project Planner* scheduling (and successfully migrated to the updated *Oracle/P6 version)* and *Project Management System*, change order review, and cost estimating. Mr. Wilson's responsibilities have included civil and structural inspections, project quality control, and value engineering. He has worked on various assignments developing schedules for presentations, new project baselines, and technical support for existing facilities. His background also includes claims analysis.

Relevant Experience

Transportation

Metropolitan Transportation Authority (MTA) Long Island Railroad (LIRR), Woodside Station Rehabilitation, NY

Providing Project Controls, Mr. Wilson managed the project cost loaded distributed control system (DCS) schedule supplied by the contractor. The project included demolition of platforms and installation of new ones, installation of five new elevators, expansion of the mezzanine level, replacement of the existing escalator, platform relighting and new electrical services, installation of tactile warning strips, relocation and construction of four stairs, removal of concrete, bridge widening, new pedestrian ramps and signage, and removal of lead paint and minor amounts of asbestos. His duties also included preparation of in-depth monthly reports for the construction manager, along with direct reporting to the LIRR of the numerous changes made by the contractor during the updating process.

Hudson-Bergen Light Rail Transit System (LRTS), NJ

As Scheduling Engineer utilizing *Primavera P3*, Mr. Wilson was the scheduling engineer for this multi-discipline design effort, working with team engineers to develop the design schedule. His duties involved meeting with various team engineers, assimilating the information, transforming it into scheduling data, processing it, and then reviewing it with team leaders for correctness and conciseness. Upon finalization,

the completed computerized baseline schedule was submitted to the client for additional input or comment. All team engineers and the externally concerned parties updated the project design schedule monthly. This information was also provided to the team in the form of a monthly status report, with a 3 1/2" diskette provided to the client for their review. This provided the team with areas of concern and actions required to maintain or accelerate in order to meet the mandatory completion date.

New Jersey Transit, Market Street Bus Maintenance Facility Rehabilitation, Paterson, NJ

As Scheduler, Estimator, and Site Inspector, Mr. Wilson was involved in the intense period of design activity (charrette) that started this project, and then provided additional cost estimating and value engineering services.

Southeastern Pennsylvania Transportation Authority (SEPTA), Manayunk Bridge, Philadelphia, PA

Mr. Wilson provided value engineering, cost estimating, CPM scheduling, and other design support services for the remedial A/E design for this historic preservation project.

Southeastern Pennsylvania Transportation Authority (SEPTA), Manayunk Bridge, Philadelphia, PA

Mr. Wilson provided supplemental inspection and conformance services for this historic preservation project.

Southeastern Pennsylvania Transportation Authority (SEPTA), Railworks Main Line Bridge Improvement Phase II, Philadelphia, PA

For Scheduling and Cost Control, Mr. Wilson's duties included quantity and quality control of materials and workmanship in place for compliance with contract documents and inclusion in daily reports. The daily inspections included demolition of existing concrete structure and associated bridge span, remedial work, reinforcement, placement, and concrete placement. Mr. Wilson also performed inspection of the associated steel girder and appurtenances placement installed shear bolt quantity and quality review.

Southeastern Pennsylvania Transportation Authority (SEPTA),Signal and Cable Replacement R6 Line, Philadelphia, PA

As Scheduler, Estimator, and Site Inspector, Mr. Wilson was responsible for daily inspections of cable replacement, cribbing, signal cable houses, and proper placement of new signal crossings.

Southeastern Pennsylvania Transportation Authority (SEPTA),Broad Street Subway Signal Modernization, Philadelphia, PA

As Scheduler, Estimator, and Site Inspector, Mr. Wilson was involved in the cost estimating and scheduling of the new signal system, which involved upgrades to a car's signal system.

Suzanne B. Kaplan

Contract Administrator

Suzanne B. Kaplan is an experienced Contract Administrator with familiarity in the design and reconstruction of construction projects. Ms. Kaplan also has experience in the negotiation of contracts. She has participated in all facets of litigation, including the preparation of contracts and insurance documents, document review and control, and management of general conditions contacts.

Relevant Experience

The Dormitory Authority of the State of New York (DASNY), Bronx County Hall of Justice, Bronx, NY

Hill International is providing change order, punch list inspection, allowance reconciliation, schedule delay analysis, parking garage/ pre-cast inspection, project closeout, and claims support services as part of DASNY's team. Hill also represents DASNY in dealing with prime contractors, subcontractors, and other matters as required. Ms. Kaplan serves as Assistant Contract Administrator and is responsible for the preparation and review of contract documents and invoices, maintaining document logs, managing the contractor's claims log and general conditions, and interfacing with the client and contractors, as necessary, regarding change orders, cost control, and other project matters.

New York City Department of Design and Construction, Various Projects, New York, NY

As Contract Administrator for Hill International, Ms. Kaplan prepared bids and reviews statements of work and specifications to identify risks; informs management of contractual risks and obligations; and offers solutions to mitigate contractual and program risks. She handles insurance issues, compiles and analyzes data, and maintains historical information. Ms. Kaplan provides analysis and reports on contract documents and negotiates revised conditions of contracts and subcontracts. Projects include:

- Museum of the City of New York New Addition
- el Museo del Barrio
- Queens Theatre in the Park
- Kingsbridge Library

Education:

J.D., Law, Hofstra University, School of Law, Hempstead, New York, 2005

B.A., Art History, Hofstra University, Hempstead, New York, 2001

Registrations:

New York Bar

New Jersey Bar

Professional Memberships:

New York State Bar Association

American Bar Association

Reference:

New York City Department of Design and Construction

Renovation of City Hall, New York

Sal Cali

[redacted]

- Lion House at the Bronx Zoo
- The Staten Island Zoo, Reptile Wing
- Queens Public Library Renovation

New York City Housing Authority (NYCHA),Various Projects, New York, NY

Hill International is providing construction management (CM/Build) services to the New York City Housing Authority for various capital housing projects throughout the five boroughs of New York City. As Contract Administrator for Hill International, Ms. Kaplan prepared contract documents and bid packages to be issued to contractors; reviews contractor qualifications; and collaborates with NYCHA personnel, as necessary, for successful completion of the project.

Prior Experience:

Law Firm, Various Projects, Hicksville, NY

Ms. Kaplan assisted attorneys in all facets of litigation, including landlord and tenant disputes and the sale of real property. She drafted contracts of sales, wills, and Certificates of Incorporation. She also researched various legal issues, such as registration and licensing of compositions with the American Society of Composers, Authors and Publishers.

Law Firm, Various Projects, Rockville Centre, NY

As Legal Assistant, Ms. Kaplan assisted in workers' compensation cases from intake to close. She interfaced with doctors, insurance companies, and opposing counsel. She also communicated with and prepared clients for court appearances; organized client files and medical records; and attended hearings, depositions, and conferences.

Calvin A. Lee, PMP

Contract Administrator

Calvin A. Lee has over 20 years of experience in construction management, contracts management, procurement, and claims avoidance for correctional, educational, housing and sports stadium projects. Mr. Lee has experience with VENDEX and New York City Procurement Policy Board Rules. He has drafted and negotiated prime contracts, handled legal claims and insurance matters, handled procurement of goods and services, and revised and drafted standard forms of subcontract and general conditions for at-risk construction projects.

Education:
J.D., Law, New York University Law School, 1985

B.A., Political Science, University of Pennsylvania, 1982

Registrations:
New Jersey Bar

Project Management Professional

Professional Memberships:

Project Management Institute

New Jersey Bar

New York City Bar Association

Deep Foundation Institute

American Bar Association

Secure Worker Access Consortium (SWAC)

Construction Management Association of America (CMAA)

Relevant Experience

Port Authority of New York and New Jersey, World Trade Center PATH Station Reconstruction, New York, NY

Hill International is providing program management services in connection with the planning, design and construction of the new World Trade Center Transportation Hub, including the new permanent PATH Terminal and the temporary PATH Station. As Senior Contracts Manager for Hill, Mr. Lee collaborates extensively with the Port Authority project managers, staff, and its consultants relative to addressing contract issues and obligations, and offers solutions to mitigate contractual and program risks. He handles, processes, and administers construction issues and potential claims issues, contract interpretation, delays and disruptions in the contract work, and the responsibility for delays.

New York City Department of Design and Construction, Dormitory Authority of the State of New York, and Metropolitan Transportation Authority, Various Projects, New York, NY

As Contract Administrator for Hill International, Mr. Lee prepares bids and reviews statements of work and specifications to identify risks; informs management of contractual risks and obligations; and offers solutions to mitigate contractual and program risks. He handles insurance issues; compiles and analyzes data; and maintains historical information. Mr. Lee provides analysis and reports on contract documents and negotiates revised conditions of contracts and subcontracts. Projects include:

- El Museo del Barrio
- Lion House at the Bronx Zoo
- Museum of the City of New York
- Queens Theatre in the Park
- Staten Island Zoo

- Schomburg Center for Research in Black Culture
- Brooklyn Public Library
- Kingsbridge Library
- DASNY Bronx Criminal Courthouse Complex
- MTA Independent Engineer's Certification Program

Prior Experience

Environmental Consulting Firm, Various Projects, White Plains, NY

Mr. Lee's responsibilities included legal review of requests for proposals and qualifications; drafting and negotiating of prime contracts and subcontracts; engagement letters, confidentiality and non-disclosure agreements; and design-build, teaming, and licensing agreements. He also handled legal claims and insurance matters for project officers and managers located throughout the country, and oversaw outside counsel on litigation matters.

New York City Housing Authority, Various Projects, New York, NY

Serving as Assistant Chief in the Contracts Division of the Law Department, Mr. Lee was responsible for procurements valued in excess of $1.5 billion annually. He interfaced daily with Executive Department leaders and the directors of 16 operational departments and their staff with respect to counseling and educating them on legal issues in connection with the procurement of goods and services needed to operate the Housing Authority. Projects included:

- **Construction Management Program, $200 million.** Mr. Lee provided clients with legal counseling on legal issues in connection with the construction management program on the interior and exterior renovation of buildings and structures.
- **Alternative Management Program, $100 million.** As Assistant Chief in the Law Department, Mr. Lee provided legal counseling to clients in connection with the Housing Authority's utilization of private managers to manage its developments.
- **Hope VI Program, $200 million.** Mr. Lee provided legal counseling to clients regarding the Hope VI Program involving the revitalization of distressed housing stock.

Large Construction Corporation, Various Projects, New York, NY

Mr. Lee drafted and negotiated construction contracts and handled the procurement of related goods and services. He advised the construction management staff and project offices on VENDEX and the New York City Procurement Policy Board Rules, procurement, contracts and insurance issues, and avoidance of construction-related claims. He also handled contractor claims and disputes, and revised and drafted the standard form of subcontract and general conditions for contract documents which were utilized on at-risk construction projects.

Marc S. Zaretsky

Contract Administrator

Education:
J.D., Hofstra University School of Law, New York, 1991

M.B.A., Law/Business, Hofstra University, New York, 1991

B.B.A., Banking & Finance, Hofstra University, New York, 1986

Registrations:
Admitted to Practice Law in the State of New York

Marc S. Zaretsky has over 17 years of diverse legal and business experience in the energy and construction industries relating to project finance, project management, claims consulting and contractor and subcontractor disputes management. Mr. Zaretsky's project experience includes transportation, hotels, petrochemical, and power projects. He has served as general operations manager, senior counsel, and general counsel and secretary providing legal and business support to all departments. Principal in his own law firm, Mr. Zaretsky's practice included general law with concentrations in construction, energy, corporate, estate planning, and real estate matters involving both commercial and residential transactions. He has also served as Professor in the Continuing Education Program for Paralegal Studies at Hofstra University.

Relevant Experience

Dormitory Authority of the State of New York, Bronx County Hall of Justice, Bronx, NY

The new Bronx County Hall of Justice is an 11-story, 775,000 SF complex that is located on East 161st Street near Grand Concourse. Hill is the Construction Manager for the completion of the project. Mr. Zaretsky serves as the Senior Project Manager responsible for providing Hill's services, including construction inspection, change order management, punch list inspection, and overall coordination of testing and training of building systems. He also provides claims avoidance and management and participates in the documentation, negotiation and settlement of claims. He schedules, coordinates and monitors all project-related activities between DASNY, clients, consultants, contractors, and other agencies and coordinates project closeout procedures with clients, Architects and Engineers, and contractors.

New York City Department of Design and Construction, Various Projects, New York, NY

As Senior Contracts Administrator, Mr. Zaretsky drafts, negotiates, and finalizes contracts for clients and subcontractors. He classifies and categorizes all client and subcontract contract documents and reviews subcontractor insurance and bonding requirements for proper coverage. He reviews bid information and assists and analyzes concerns in connection with non-responsive bids; assists project managers in connection with responding to subcontractors and clients for

various matters; and also coordinates strategy with and between project managers and senior management. Projects include:

- Brooklyn Public Library.
- Staten Island Zoo.
- Lion House at the Bronx Zoo.
- Museum of the City of New York.
- Queens Theater in the Park.
- Schomburg Center for Research in Black Culture.
- Fifth Avenue Renovation at the Pierre Hotel.

Prior Experience

Various Projects, Engineering and Construction Consulting Firm, Rockville, MD

Mr. Zaretsky facilitated the firm's work in providing critical path method analysis; technical schedule review; time, cost, and productivity analyses; claim preparation; program management; and progress evaluation and management. He directly interacted with clientele, including owners, developers, contractors, attorneys, and sureties throughout the world. Mr. Zaretsky was responsible for the daily operations and allocation of resources for offices located in Maryland, Texas, and Florida; and was also personally involved and responsible for the larger, more complex projects, mediations, arbitrations, and litigations.

Various Projects, International Construction and Program Management Company, NY

As Senior Counsel, Mr. Zaretsky provided legal and business support to all departments. He interfaced with project managers and regional and division managers in connection with the acceptability of client agreements. He directed site personnel in connection with contractor and subcontractor problems and solutions, claims resolution, and contract preparation and negotiation. He prepared, reviewed and negotiated client agreements, subcontracts, claims consulting agreements, and joint venture and team agreements. Mr. Zaretsky also monitored and assisted with claims and lawsuits against the company in conjunction with outside counsel.

Various Projects, International Design/Build Engineering Company, NY

Mr. Zaretsky created the legal department specializing in power plant construction and management. He drafted, reviewed and negotiated international and domestic commercial contracts, financial agreements, consents, legal opinions, and other documents necessary for financial closings and refinancings of power projects. Mr. Zaretsky represented the Company as Subordinated Lender, EPC Contractor, Carried Cash Flow Interest Holder, and/or Limited Partner. He negotiated and reviewed the purchase of project and office insurance policies; settled employment claims and other litigations involving the company; and supervised, coordinated, and participated with outside counsel and consultants in litigations and arbitrations. Mr. Zaretsky also drafted and negotiated commercial leases, vendor, and subcontract agreements.

Mohammad A. Shaikhji

Construction Inspector

Mr. Shaikhji is a seasoned construction inspector with extensive experience in asphalt and concrete. He offers hands-on experience in material testing and survey work and is proficient in asphalt and concrete mix design. Mr. Shaikhji has completed work in and around the New York area and has provided services for widely recognized clients, including the U.S. Army Corps of Engineers.

Certifications:

ACI Conccrete Construction Special Inspector, Grade Level II (01117134)

NICET IV(124995)

Traffic Awareness Certificate (Course #1016)

Traffic Control Certificate (Course # 1010)

NJ SAT

Prior Experience:

Hayden Wegman Inc. New York, NY, Sr. Construction Inspector, June 02 - June 06

- Worked on resurfacing of route 206 with 3" of binder course and 1.5" of surface course, overseeing and guiding five construction Inspectors
- Location Survey of center line and slope stakes
- Scheduling work in consultation with contractor, according to site conditions
- Collection of daily reports of inspectors and submitting them to office of resident engineer after necessary checks on quantities , man & equipment hours shown in reports
- Keeping register of inspectors shifts and weekly hours, absence, sick days and any overtime hours worked
- Helping and guiding inspectors on technical points of specification and general conditions of contract, whenever needed.Supervision of contractor's daily activities to ensure that work is performed in compliance with plans and specifications
- Reviewing estimates and other details of proposal submitted by contractor for change orders approval
- Kept records for work performed on time & material cost basis and providing office with required details about equipment, man power & material used
- Controlling and testing gradation and quality of different filling materials by keeping eye on classification tests and sieve analysis tests.
- Controlling quality of embankment, at all layers, by supervising its placement, grades, gradation, compaction and shape.

- Controlling pavement by inspection and, testing at different stages e.g. taking temperature of mix while laying mix, checking smoothness transversely and longitudinally. Keeping eye on Job Mix Formula to see that variations in it, are within tolerances in specs.
- Supervising samples of hot mix for extraction test to determine percentage of asphalt and gradation of aggregate
- Supervising field density tests and thickness tests of laid hot mix to see if it complies with specifications.
- Supervision and control of concrete required in culverts and small bridges by slump test and taking cylinders for 7 days and 28 days strength tests.
- Supervising reinforcement bars bending, placing and binding for foundation wing walls and slabs of culverts as per plans.
- Inspections of concrete curbstones, construction joints and expansion joints in contact of concrete or bituminous surface course.
- Checking and establishing different traffic control patterns for different conditions of work, adhering to Manual of uniform traffic control and devices.

I.H.Engineers, Senior Construction inspector, May 10 - Sep 10

Worked on 70 million project of I 295 from exit 45 to exit 57 in Burlington NJ

Prometech-JMT, Senior Construction Inspector, Sept 09 - Feb10

Worked on Project of restoring Philadelphia streets i.e Market street from street # 34 to #40 and Point Breeze street.Work included inspection of dismantling old curbs and side walk slabs and replacing them by Sparkling Concrete slabs and special brick. pavement. Duties were inspection to see that work is done as per plans and specifications., measurement of quantities of work done before monthly pay estimate ,quality assurance and supervision of junior inspectors.

Greenman-Pedersen Inc., Construction Inspector, Mar 09 - Aug 09

Following duties were performed on Resurfacing Project of 78W and 78E for Delaware Bridge Commission. Inspection of laying 1" thick mix for preventing reflection cracks.Inspection includes but not limited to checking of alignment, laying, compaction, density and mix composition. Inspection of 2" thick intermediate and 2"thick surface (Super pave mix) course including but not limited to checking temperature, thickness, compaction, density tests, extraction test, air void measurements and quantity laid etc. Inspection of grouting work through bore holes to stabilize moving rigid pavements and keeping record of grout volume. Inspection of stitching of cracked slabs and keeping record of quantities. Inspection of dismantling and repouring slabs which has failed specific tests for settlement under load. Updating record for completion of project e.g. "As Built Drawings' and "Extra Quantities" by checking all 187 items of Contact Documents. Inspection of road side curbs and storm water drainage structures on Rt I-80.

Pankaj Raval

Construction Inspector

Certifications:
American Concrete Institute Level I certificate.

ACI Level II, Concrete Construction Special Inspector.

Mr. Raval is a seasoned construction inspector with extensive experience in asphalt and concrete. He offers hands-on experience in material testing and survey work and has completed work in and around the New York, providing services for widely recognized clients, including the MTA and NYCDD.

Prior Experience

Tectonic Engineering , Field Inspector, LIC , NY

- Field concrete testing and water content of concrete by microwave drying oven (AASHTO T318) at different jobs of DEP, SCA, MTA, DDC and private jobs like Jacob Javits Center etc.
- Checking that the rebar's were placed in accordance with contract documents
- Drawing reading,
- Concrete batch plant inspection.

N.R. Associates, Site Supervisor, Deesa, Banaskantha

Supervised about. 150 laborers in the construction of irrigation canals which included reinforced concrete and grade preparation. Supervised for excavation & laying of sewerage & drinking water pipelines, with the fixtures like union, coupling, sluice valve, air valve etc. Prepared payment estimates for unit price items to be submitted to the local government office.

Mrugesh Constructions, Site Supervisor, Ahmedabad, Gujarat

- Checked water content for different types of aggregates like stones and sand.
- Checked RCC pipes and joints
- Drawing, reading, and rebar checking

Shivmayur Construction, Construction Supervisor, Ahmedabad,Gujarat

Supervised approximately 200 laborers in the construction of water supply, wastewater and storm sewer projects for commercial and residential projects to include asphalt highways and municipal developments.

Roger Lopez

Construction Inspector

Prior Experience

Atlantic Engineering Laboratories, Inc., Senior Construction Inspector

- Performed general inspection in building, site and roadway construction
- Soil backfill inspected and compaction tested with moisture-density gauge
- Supervised reinforcing steel placement for reinforcing concrete footing walls
- Proof rolling monitored prior to soil placement (fill) for grading
- Performed on site concrete sampling and testing (slump, unit weight, air content, microwave and temperature) in compliance with drawings, specifications, government code and ACI standards
- Foundation sub-grade inspected for allowable bearing capacity
- Inspected compaction of hot mix asphalt
- Utility work visually inspected
- Pile driving monitored
- Tested flow cone, specific gravity and sampled grout for piles and base plates
- Take off in soil cuts and fills for site and road grading
- Classification of soils on site and laboratory
- Recommended client suitable soils material for filling according to drawings and specs
- Team leader in large concrete pours

Schnell Contracting Services, Assistant Project Manager/estimator

- Assisted project manager in the bidding process
- Take-off performed reviewing drawings and specifications for caulking, damp and waterproofing.
- Conducted site inspections
- Contacted clients for submittals and proposals

Tri-Con Construction Rockaway, NJ, Assistant Project Manager/

Education:
Bachelor of Science in Engineering Technology, Construction Engineering Technology, New Jersey Institute of Technology
Newark, NJ, 2000-2003

Certifications:
ACI level I

ACI-Concrete Special Instructor Grade Level II

NJSAT, TCC, 10-hr OSHA,

NYC DOB 4-hr supported scaffold user

NICET I (soil & asphalt),

NICET II (concrete), DCA (concrete placement and reinforced concrete),

Troxler nuclear density gauge operation

Safety officer

- Coordinated safety related matters with contractors and personnel on site
- Reported manpower and construction conditions to superintendant
- Performed visual inspection for compliance with CM, GC and government code
- Assisted superintendent to oversee construction progress
- Recorded work performed in daily basis
- Ordered material directed by super or project manager
- Responded RFI's to construction manager, contractors and suppliers

SESI Consulting Engineers, Pine Brook, NJ, Soil Inspector

- Tested backfills and fills using nuclear density methods
- Conducted dynamic compaction inspection
- Presented reports to client
- Monitored ground movement with seismograph when dynamic compaction was performed

Henry Chin, RA

Estimator

Education:
BS/Architecture/New York Institute of Technology

Licenses/Certifications:
Licensed Architect in the State of New York, [redacted]

Mr. Chin has more than 25 years of experience in architectural design and construction cost estimating, specializing in conceptual project budgeting and detailed cost estimating at various stages of design and construction. Mr. Chin has a unique combination of estimating knowledge and sensitivity to architectural design and costs. Prior to joining ELLANA, he was the lead estimator with a major construction management firm for many high-profile projects.

Relevant Experience

PANYNJ, World Trade Center Tower One, New York, NY

This assignment entailed providing on-site project control services for the construction of the 2.6 million-sf, 102-story Tower One at the World Trade Center site. Services include assisting the program manager with independent estimate preparation for trade bid packages; bid reviews; estimate preparation for bulletins, addenda, and change orders; and tracking and updating budget costs. Tower One was designed to achieve LEED® Silver Certification.

World Trade Center Memorial & Museum, New York, NY

This project entailed providing schematic, design development, and construction document cost estimate preparation, being built at the former location of the Twin Towers, on an as-needed basis. Services include: project estimating; cost allocation; cost evaluations of the various design options; value engineering; and cost reconciliation with the construction manager. Work also included supporting mechanical and administrative spaces and a memorial plaza finished with architectural stone and landscaping. This 250,000sf project is designed to LEED® requirements.

Public Safety Answering Center II, (PSAC II), Bronx, NY

Senior Project Cost Manager responsible for preparing cost estimates for the new, 525,000-sf building. The building complies with all applicable laws and ordinances, including the Green Buildings Law (Local Law 86 of 2005) governing sustainable design. The scope of services include cost estimates preparation at all design milestones, value engineering estimates, and cost studies of various design options.

PANYNJ, Path Christopher Street and 9th Street Station Entrances, Jersey City, NJ

Senior Project Cost Manager responsible for cost estimating services to the design team at the conceptual design stage for the preparation of an analysis report for both stations and conceptual design for a new station entrance at the 9th Street Station. The logistically-challenging proposed new 9th Street Station entrance includes an underground mezzanine tunnel over the existing PATH lower-level platform tunnel.

MTA "Task Order" Design/Technical Services - Security Capital Program, New York, NY

This project included the provision of cost estimating services for engineering design and technical services for the improvement of capital program. Services include risk and vulnerability assessments, development of a security program and security design guidelines, engineered solutions for threat mitigation, cost/benefit analyses of alternative mitigations, conceptual design, design development, final design, contract document preparation including drawings and specifications, preparation of project phasing plan and cost estimates, value engineering, and pre- and post-construction contract award services for a variety of security projects.

Walter Fitzer

MEP Estimator

Education:
AAS/HVAC & Refrigeration/ SUNY Farmingdale - Agricultural & Technical Institute

Licenses/Certifications:
Certified HVAC Specialist/ American Society of Heating, Refrigeration & Air Conditioning Engineers

Walter A. Fitzer, Chief MEP Estimator, has more than 30 years of experience in mechanical/electrical design, field supervision, and cost budgeting and estimating. He has a wide range of project experience and is responsible for MEP estimate preparation from the conceptual through construction document phases, as well as coordination of MEP scopes and costs with the architectural trades. He is fully involved in value engineering sessions and project cost analyses, estimates, presentations, cost reconciliations, and negotiations.

Relevant Experience

PANYNJ, World Trade Center Tower One, New York, NY

Chief MEP Estimator responsible for cost estimating services for the 3-million square-foot Tower One at the World Trade Center site. Services include assisting the Project Program Manager with independent estimate preparation for trade bid packages; bid reviews; estimate preparation for bulletins, addenda, and change orders; and tracking and updating budget costs.

PANYNJ, Architectural, Engineering, and Interior Design Services for Offices at 4 World Trade Center, New York, NY

Chief MEP Estimator responsible for cost estimating and scheduling services for the new corporate offices of the Port Authority of NY & NJ, consolidating about 1,700 Port Authority staff from multiple buildings in Manhattan and New Jersey in one central location at 150 Greenwich Street in Manhattan. The offices will cover approximately 15 to 20 contiguous floors, 1 podium floor (approximately 35,000 square feet located on the retail level to include a cafeteria, conference center, and an emergency command post), and 1/3 of the subgrade space in the new World Trade Center - Tower 4 Building. In compliance with current PANYNJ sustainability objectives all office buildings will comply with the World Trade Center Sustainable Guidelines, leading to a LEED gold rating.

PANYNJ, World Trade Center Final Streets and Surfaces, New York, NY

Chief MEP Estimator responsible for providing design-development cost estimating services for the construction the Final Streetscape for the entire World Trade Center Site.

PANYNJ, World Trade Center Towers 1 and 2, New York, NY

Chief Mechanical/Electrical Estimator responsible for change-orders for MEP tenant work and lobby finishes.

New York City Housing Authority Term Contract, New York, NY

Chief MEP Estimator responsible for providing cost estimating services for this requirements contract for various buildings throughout the New York City Area. Projects generally include exterior restoration of the existing facades, mechanical and plumbing upgrade, interior kitchens and finishes replacement, and site/landscape/playground development

PANYNJ Architectural Call-In Services, NY/NJ

Chief MEP Estimator responsible for providing cost estimating services on an on-call basis for this "call-in" contract for PANYNJ. Tasks included the renovation of the Goethals Bridge Administration Building for which existing documents and assessment report were reviewed; assisted in determination of initial SF cost for alternatives; reviewed 50% and 100% drawings and prepared construction cost estimates, including list of unit price items with estimated quantities.

Anil Shah

Construction Inspector

Mr. Shah has over seven years of experience in the construction inspection of roadways, streets, and other facilities. He has worked on heavily travelled roadways and highways. He is also very experienced in the coordination of the contractor's activities with the local agencies, and communities.

Relevant Experience

Port Authority of NY & NJ, APM Terminal

Supervised construction of a new area construction for ship containers' station. Duties included the supervision of the preparation of solid sub-grade for four (4) layers of superpave pavement with controlled compaction inspection. Also inspected the rebar placement and the placement of concrete pavement, and the adjacent superpave HMA pavements.

Port Authority of NY & NJ, Terminals B & C, Newark Airport

Milling & resurfacing of Terminals B & C arrival lane and toll booth area. Duties involved the inspection of the surface preparation and the placement and compaction of superpave materials, striping and lane markings.

Port Authority of NY & NJ, Paving Material and Construction Airport, Morristown, NJ

Duties included supervision of the sub base preparation in the areas of new four (4) layer of airport runway pavement, and the placement and compaction of the new asphalt concrete pavement.

Landfill Construction for Middlesex County, NJ

Inspection of the construction of a landfill, an environmental project for Middlesex County. Prime duties included monitoring and ensuring that the fill materials are suitable for embankments as per the plans and specifications. Compaction testing. Inspection of smooth drainage construction with the placement of double layer geo-grid and liner material. Also inspected the construction of access roadways.

Reconstruction of 50 Km Two-Lane Arterial Highway, Central Province, Sri Lanka

Supervised the stabilization of slopes, cut-and-fill earth work, soil stabilization, rock blasting, and asphalt pavement placement. Reviewed the contractor's schedule, cost control, and compliance to drawings and specifications. Prepared daily field reports.

Education:

Diploma in Civil Engineering – M.S. University, Baroda- India

(U.S. Equivalency: Associate Degree in Civil Engineering Technology from a Regionally Accredited Institution.)

Certifications:

NICET III Highway Construction (Aug. 18, 2009)

NICET II Asphalt, Concrete and Soil (Construction Material Testing)

ACI -Concrete Field Testing Technician Grade I (Expires October 4, 2013)

SAT -Asphalt Technology Certificate (Expires July 1, 2013)

Work Zone Safety Awareness (September 28, 2009)

WACEL (Washington Area Council of Engineering Laboratories)

Foundation Technician

Concrete 2 Technician

Untermeyer Dam Project, Kinnelon, NJ

Controlled construction of earthen dam embankments fill as per approved materials. Also supervised the concrete work for both end wall encasing the earthen dam with heavy duty grouting into existing rocks at footing elevation of the concrete wall. Inspected the placement of reinforcement and concreting.

NJDOT, 206 Fast Track Re-surfacing Project, Lawrenceville, NJ

Supervision of the Milling & Resurfacing of a five-mile roadway near Lawrenceville Township, NJ. Duties included milling inspection and the inspection of surface preparation and controlling of compaction for superpave material. The work also included Long Life Pavement markings.

NJDOT, Rt. 78 West from exit 50 B, NJ

Milling and resurfacing with lane widening for about four (4) miles from Exit 50 B. Duties involved milling inspection and the supervision of surface preparation and controlling of compaction for superpave material and Long Life Pavement markings. Also inspected the bridge deck and steel stringer repairs, including localized bridge painting, within the project limits along the corridor.

NJDOT, Rt. 33 at Manalapan, NJ

Milling and resurfacing with lane widening about five (5) miles on the East and West of Rt. 33. Duties included milling inspection and the supervision of surface preparation, and controlling the compaction for superpave placement. Inspected contractor's MPT set up and lane closings.

NJDOT, Rt. 46 west at Riverview Drive & Rt. 287, Piscataway, NJ

Inspected milling and resurfacing, and lane widening. Inspection of surface preparation and compaction control for superpave. Inspected striping and pavement markings, the contractor's MPT set up, and lane closings.

Bhadresh Patel, P.E.

Construction Inspector

Education:
B.S., Civil Engineering, S.P University, Vidyanagar, India (1964)

Post Graduate Diploma – Tata Iron & Steel Co., India

Registrations:
Professional Engineer, New York ([redacted]

Professional Engineer, New Jersey, [redacted]

Professional Engineer, Florida [redacted]

Mr. Patel has been intensively involved in the analysis and design of several complex structures, and has functioned in the capacity of a Senior Project Engineer, Senior Design Engineer, Quality Control Engineer and a Senior Analyst on a number of transportation projects, involving bridges of various configurations. Mr. Patel also has prior experience on Port Authority facilities such as the George Washington Bridge approach ramps, Lincoln Tunnel and George Washington Bridge Bus Station. Details of his relevant experience are described below:

Relevant Experience

Port Authority of New York and New Jersey, George Washington Bridge Rehabilitation, Upper Level Approach Ramp (I-95) over Hudson Terrace, NJ

Functioned as the Team Leader for the inspection of the four (4) span steel structure, supported by steel bents and full height concrete abutments. The end spans have been converted to buildings for use by PANY&NJ facilities. Based on the inspection findings, starting to develop repair details for the rehabilitation of the structure.

Port Authority of New York and New Jersey, Rehabilitation of Approach Bridges to the Lincoln Tunnel, NY

Rehabilitation Design and Construction Support Services for eleven (11) bridges. Project consisted of in depth inspection and evaluation of existing conditions of the bridges. Development of repair details of superstructure steel and deck repairs, substructure spalls and cracks, replacement of existing frozen bearings at four locations, construction cost estimates and specifications. Also provided construction support services during construction.

Port Authority of New York and New Jersey, Broadway Bridge at George Washington Bridge Bus Station

For the rehabilitation design of Bus Station ramp over Broadway. Designed the replacement of finger joints, drainage system, and developed other repair details to address ceiling repairs.

LIRR, Reframing Inspection at Madison Yard, East Side Access Project

Inspected the reframing and load transfer of the existing columns at Madison Yard in Manhattan for the East Side Access project. The inspections included, the newly installed steel frames, jacking operations, cutting of the columns and the final load transfer of the

columns. Also functioned as the onsite PE for the monitoring of the load transfer operations, and for the observations of the various monitoring devices such as strain gages.

NJTA, Garden State Parkway Widening Program, OPS 3248 MP 58 to MP 64.5, NJ

For the design of two bridges over the Garden State Parkway and the extension of four (4) culverts under the GSP. Prepared bridge study report for Phase B submission. Reviewed span lengths, abutment types, and evaluated structure depths. Currently developing final designs for the bridges and four culverts.

NJTA, Reconstruction of Newark Bay Bridge, NJ Turnpike Extension over the confluence of Hackensack and Passaic Rivers, NJ

For the major reconstruction of 1.5 mile long bridge main span and approach spans. Developed deck joint replacement details at the various joints, barrier replacement details and a new transformer enclosure details. The existing finger joints in the deck are being replaced with modular joints. The joints were between spans of various of structural configurations, including floorbeam/girders spans and beam spans.

NYCDOT, Rehabilitation of St. George Ferry Terminal, Staten Island, NY

Provided preliminary engineering services to define project scope for a major Design-Build Contract to rehabilitate and upgrade the car and bus ramps at St. George ferry terminal. Specific responsibilities included the preliminary plans for all nine (9) bridges in the project as well as preparing cost estimates based on proposed scope of work.

NYCDOT, Brooklyn Bridge Rehabilitation, Brooklyn, NY

Design and development of structural details, staging plans, construction plans and construction cost estimate for the reconstruction of Brooklyn Bridge approaches. Designed and developed construction repair details of steel stringers, cantilever brackets concrete filled bridge deck steel grating, deck joints. Developed reconstruction and repair plans for concrete substructures such as backwall and abutments.

NYCDOT, Rehabilitation of Ramp Structures at St. George, Staten Island Ferry Terminal, NY

Project included providing preliminary engineering services to define project scope for a major design-build contract to rehabilitate and upgrade the car and bus ramps at the St. George Ferry Terminal. Specific responsibilities included developing the preliminary plans for all 9 bridges in the project as well as preparing detailed cost estimates based on proposed scope of work.

Hitesh Bhatt

Construction Inspector

Mr. Bhatt has over 10 years of field inspection experience with utilities, highways, tunnels, bridges, and various civil engineering projects. He has served as Construction Inspector for several agencies such as the Port Authority, New Jersey Department of Transportation, and the New Jersey Turnpike.

Education:
Engineering Diploma,
R.C. Technical Institute,
Ahmedabad, India – 1991

Certifications:
NICET II

A.C.I. Level 1 Field Testing Certification – 4-29-2011

SAT -Society of Asphalt Technologies – Asphalt Paving Construction Technologist – July 1, 2011

TCCP –Rutgers Traffic Control Course

Troxler Training Certification in Nuclear Gauge Safety and HAZMAT

Relevant Experience

Port Authority of NY & NJ, Reconstruction of Loading and Unloading Dock and Parking Lot Howland Hook, Staten Island, NY

Inspected the reconstruction of the Parking Lot at Howland Hook in Staten Island, and performed the inspection of Asphalt Pavement, and Soil Compaction.

Port Authority of NY & NJ, Reconstruction of Runways at Teterboro Airport, NJ

Inspected the construction of a new runway and a new taxi way. Performed the supervision of construction.

Port Authority of NY & NJ, Port Authority Bus Terminal, 42nd Street, New York, NY

Inspected installation of a new water main adjacent to the Port Authority Bus Terminal in Manhattan. Performed compaction, concrete and asphalt testing. Inspected concrete rebar installation, and concrete placement. Performed slump test, air entrainment and the preparation of concrete cylinders at the concrete delivery truck. Coordinated the traffic lane closures with NYPD and NYCDOT.

NJ Transit, Reconstruction of Broad Street Train Station, Jersey City, NJ

The project involved the reconstruction of the station building and the approach roadways. Performed concrete, rebar, mortar, subgrade compaction and asphalt testing. Inspected construction of a new bridge and approach roadway work.

NJTA Contract No. P100.117, Bridge Deck and Substructure Repairs on the GSP MP 86.4 to 127.2, including the Driscoll Bridge, NJ

Inspected bridge deck repairs, pier repairs, other miscellaneous concrete repairs and emergency steel repairs on several GSP bridges. Also inspected the placement of traffic control devices as per the MPT plans and completed daily inspection reports.

NJTA Contract No. P100.074 -Southern Bridge Deck Repairs & Resurfacing Mile 0 to Mile 113.

Performed inspection of milling and paving of Garden State Parkway. Inspected removal of existing bridge deck and placement of new bridge deck at several bridges. Checked MPT scheme in field as per design drawings and NJ Turnpike standards. Supervised installation of new pavement markings and installation of new joints. The project also included several miscellaneous bridge repairs, including steel repairs, parapet replacement and deck replacement.

County Engineering Department, Milling and Overlay; Paving of County Roads Sussex County

Functioned as a Senior Inspector for the Milling and Overlay of several miles of County Roads for the Sussex County Engineering Department. Performed asphalt compaction test and monitored temperature for new asphalt pavement. Completed daily reports for inspection. Most of the work was performed during night time.

Jing Kang, P.E.

Construction Inspector

Education:
M.S. Structural Engineering, SUNY Buffalo, 1993

B.S. in Civil Engineering, South China University of Technology, 1991

Registrations:
Professional Engineer, New York ([redacted])

Professional Enginerr, New Jersey [redacted]

Mr. Kang has extensive experience in the inspection, analysis, design, construction support, management and supervision of projects involving highway structures including various types of bridges, culverts and sign structures, as well as experience in coordination with public agencies. He was a Project Manager for many NYCDOT and NYSDOT reconstruction projects, including the design of the first cable-stayed bridge over navigable water in the State of New York, a federally funded project involved coordination/permitting with over 15 Federal, State and City agencies. His experience encompasses activities from project initiation to project close-out. Some specific projects are identified below.

Relevant Experience

NJTA, Garden State Parkway Shoulder Restoration (OPS 3299), MP 88.5 to MP 93.5, NJ

Project Manager for the design of four bridges carrying the mainline Garden State Parkway. Supervise the preparation of contract plans and coordinate with prime consultant.

NJTA, Garden State Parkway Widening Program (OPS 3248), MP 58 to MP 64.5, NJ

Assistant Project Manager for the design of two bridges over the Garden State Parkway. Supervise and review seismic analysis and design of the integral abutment bridges and review of contract plans.

NYSDOT, Bronx River Parkway Safety Improvements, New York, NY

Project Manager responsible for the preliminary design (Phases I-IV) of the project. Responsible for alternative analysis, preparation of Design Report, coordination with sub-consultants regarding traffic modeling and signal warrant study, drainage design and environmental issues including Section 4f requirements.

NYCDOT, East 78th Street Pedestrian Bridge over FDR Drive, New York, NY

Project Manager responsible for the final design of this 182m long pedestrian bridge with box girder main and east ramp spans, and rolled beam west ramp spans.

NYSDOT, Reconstruction of Pelham Parkway and Hutchinson River Parkway Interchange, New York, NY

Project Manager responsible for the preliminary design (Phases I-IV) of the project. Responsible for alternative analysis/design of Single-Point Urban Interchange (SPUI) and Tight Diamond Urban Interchange (TUDI) replacing the existing substandard two level cloverleaf interchange, preparation of Design Report, coordination with sub-consultants regarding environmental and drainage issues.

NYCDOT, Component Rehabilitation of Ten Bridges, New York, NY

Project Manager responsible for the construction support services of component rehabilitation of ten bridges in various boroughs of NYC, including superstructure replacement with extensive utility work of the 149th Street Bridge over LIRR.

NYCDOT, City Island Road Bridge over Eastchester Bay, New York, NY

Responsible for the design of this single-tower, single span cable-stayed bridge. Responsible for analysis; design of the proposed bridge and approaches including temporary bridge; coordination with sub-consultants for preparation of the contract plans; and coordination with various Federal, State and local agencies for permits and approvals.

NYSDOT, Taconic State Parkway and Route 9A Interchange Ramp, Town of Mt. Pleasant, NY

Project Manager for Construction Support Services and Project Engineer responsible for design of flyover ramp connecting southbound Route 9A with southbound Taconic State Parkway. Responsible for design of highway alignment, drainage, and curved steel girder bridge over Route 9A. Also responsible for realignment of existing bikeway and retaining wall design.

WSDOT, New Tacoma Narrows Bridge, Tacoma, WA

Senior Structural Engineer for the new parallel suspension bridge carrying SR16. Responsible for 2D and 3D nonlinear finite element analysis of the structure using LARSA 2000 and SAP 2000 and design of suspension system, suspended superstructure and major components. Also worked on wind engineering and construction engineering.

MSHA/VDOT, Woodrow Wilson Bridge, Oxon Hill, MD

Structural Engineer for replacement of the bridge carrying I-95/I-495 over the Potomac River. Responsible for analysis and design of various components of the bascule spans, including design of cast-in-place, post-tensioned concrete pier and 3D modeling of bascule superstructure using SAP 2000. Also responsible for redesign of the entire approach superstructure from welded box girder to welded plate girder to keep construction cost within budget.

Mike Maggio

Construction Inspector

Over the last eight years Mike Maggio has had extensive experience in the various construction quality control activities, including the testing of bolting and welds. His experience of bolt testing has included bearing connections, friction type connections, and the weld testing has included various weld types such as, fillet welds, partial penetration groove welds, and stud welds. In addition to his intense experience he also is certified by the various organizations including the ACI, OSHA and NYCDOB. His experience has included work with the private clients as well as government agencies, such as the NYC Transit, and NYC School Construction Authority. He is very familiar with the local code requirements such as the NYC Building Code, and the IBC. He is also familiar with NYC Department of Building filing requirements. Some of his relevant projects are detailed below.

Relevant Experience

Stonybrook University -Simon Center for Math and Geometry, Montreal, Canada

Seven story steel superstructure on cast in place foundation. Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds, metal decking welds. Steel plant source inspection of Canatal Industries in Montreal Canada

Hyde Charter School, 830 Hunts Point Avenue, Bronx, NY

Four (4) story school building - steel superstructure on cast in place foundation. Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds, metal decking welds

61 5th Avenue, New York, NY

Eight (8) story residential- steel superstructure on cast in place foundation, inspections included; Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and

Education:
Associates Degree–
Business Management

Certifications:
ACI Certification
ID# 01133912

ACI Concrete Field Technician level I

ACI Concrete Special Inspector Level II

ACI Concrete Laboratory Testing Technician Level 1

ACI Concrete Strength Testing Technician

ACI Aggregate Testing Technician Level 1

AWS-CWI Certified Welding Inspector

ICC Certified Structural Steel/Bolting Inspector

OSHA 10 hour Construction Safety and Health

OSHA 30 hour Construction Safety and Health

NYC DOB Supported Scaffold Certification

NYC DOB Suspended Scaffold Certification

New York City Transit Authority Track Safety Certified

Radiation Safety Officer (RSO)

Nuclear gauge Safety/ Hazmat Certified (Troxler)

Experienced Mold/ Moisture Indoor Air Quality Consultant

tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds, metal decking welds.

30-20 Thomson Avenue, Long Island City, NY

Inspection QA/QC for the installation of pressure grouted micro piles, concrete pile cap/elevator pit and steel frame structure for two new elevator shafts, floor access ramps, rack and pinion drive mechanism. Operations conducted after hours, enforcing stringent control of means and methods due to limitations associated within interior atrium PA space, occupied multi-use commercial/ educational facility. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds. Steel fabrication source inspections protocol that included the limitation of individual welders to process and positions prequalified.

276 Water Street, New York, NY

Five (5) story residential- steel superstructure on cast in place foundation. Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds, metal decking welds.

African American Museum, 1280 5th Avenue, New York, NY

Thirty (30) story residential/commercial- cast in place superstructure with steel 4 story façade/ atrium. Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds. Load testing of connections at marquee.

Shawn Heaney

Construction Inspector

Education:
B.S. Civil Engineering, University of Hartford, West Hartford, Connecticut 2002

Registration:
EIT – October 2003

Certifications:
ACI Certified Field Technician Level 1

ICC Certified Structural Steel and High Strength Bolting Special Inspector

ICC Certified Structural Masonry Special Inspector

OHSA 10-Hour Construction Safety

Shawn Heaney has been involved in the testing of bolts for buildings of various configurations for the past eight (8) years. His experience includes testing of bolts of various categories such as ASTM A325 bolts, A490 bolts, slip critical connections, bearing type connections, and galvanized and regular bolts. He is very familiar with implementing quality control procedures as it relates to delivery and storage of bolting materials, and the proper installation of the bolted type connections. In addition he is also certified by OSHA and ACI. Having worked in the New York area, he is very familiar with the NYC Department of Building requirements and the local codes. His relevant experience is detailed below:

Relevant Experience

Hyde Charter School, 830 Hunts Point Avenue, Bronx, NY

Conducted on-site Skidmore Bolt Testing to confirm on-site, high-strength, non-galvanized, A325 and A490 tension-indicating bolting assembly strength, including Direct Tension Indicating Washers, for multiple size assemblies, for installation into slip critical connections. Skidmore Testing performed on-site on two (2) separate occasions to achieve conformance with the Specification for Structural Joints Using ASTM A325 or A490 Bolts as prepared by the RCSC. Conducted an on-site meeting that included request/review of the proper procedure required when receiving, storing and installing high-strength bolted assemblies that included: Material Test Reports for each piece of the bolted assembly; Material Packing List of items received on-site; review of importance of Manufacturer Heat and Lot Numbers; stressed importance of proper bolt assembly on-site storage; proper keg/container labeling; proper bolt assembly removal/replacement to/from on-site storage; identified Skidmore Test Device valid date of Calibration; reviewed requirements utilizing a torque-wrench, pneumatic and hydraulic, including valid Certificate of Calibration. Performed controlled inspection of installation of all slip-critical high-strength A325 and A490 tension-indicating bolt assemblies including direct tension indicating washers. Inspection included the use of the standard 5-inch feeler gauge as required.

61 5th Avenue, New York, NY

Performed controlled inspections of installation of high strength steel and associated bearing connections consisting of high-strength

A325 tension-indicating bolt assemblies for the Cellar, 1st, 2nd and 3rd Floors of a 9 Story steel frame structure. Conducted on-site meetings with responsible field supervision highlighting the importance of proper on-site material storage, on-site material control, material documentation required and proper installation of tension-indicating bolt assemblies at each structural connection.

2293 3rd Avenue, New York, NY

Conducted on-site Skidmore Bolt Testing to confirm on-site, high-strength, non-galvanized, A325 and A490 tension-indicating bolting assembly strength, for multiple size assemblies, for installation into slip critical connections. Skidmore Testing performed on-site on one (1) occasion to achieve conformance with the Specification for Structural Joints Using ASTM A325 or A490 Bolts as prepared by the RCSC. Conducted an on-site meeting that included request/review of the proper procedure required when receiving, storing and installing high-strength bolted assemblies that included: Material Test Reports for each piece of the bolted assembly; Material Packing List of items received on-site; review of importance of Manufacturer Heat and Lot Numbers; stressed importance of proper bolt assembly on-site storage; proper keg/container labeling; proper bolt assembly removal/replacement to/from on-site storage; identified Skidmore Test Device valid date of Calibration; reviewed requirements utilizing a torque-wrench, pneumatic and hydraulic, including valid Certificate of Calibration. Performed controlled inspection of installation of remaining load bearing connections consisting of high-strength A325 and A490 tension-indicating bolt assemblies. Inspection included the use of the standard 5-inch feeler gauge as required.

81 Franklin Avenue, New York, NY

Performed controlled inspections of installation of high strength steel and associated bearing connections consisting of high-strength A325 tension-indicating bolt assemblies for the Penthouse and Bulkhead Area of a 9 Story combined steel frame/structural masonry structure.

1623 Kings Highway, Brooklyn, NY

Conducted a series of controlled inspections to document the existing steel frame structure including confirming existing column and beam size, structural connection configuration and bolt assembly size/type. Prepared a report identifying the existing steel installed on-site versus the design drawings available and noted any existing discrepancies.

Kwesi Amegah

Construction Inspector

Education:
B.S., Civil / Structural Engineering, University of Michigan College of Engineering

Registrations:
ACI Field Testing Technician-Grade I

ACI Concrete Construction Special Inspector (CCSI)

Mr. Amegah has more than 20 years of multifaceted experience encompassing inspection, civil and structural engineering as a Civil Engineer. His experience in construction inspection and bridge inspections including completion of various in-depth inspection programs in the New York metropolitan area. He also has experience in civil design including roadway replacements involving drainage, sewers, utilities, curbs and sidewalks. In addition, his structural experience includes the removal, replacement and reinforcement of steel and concrete bridge elements.

NYS DOT, Route I-495 Mill & Fill Exit 57 to 64, Towns of Brookhaven & Islip & Village of Islandia, Long Island, NY

Mr. Amegah served as Senior Inspector, providing inspection and other related services for 19.9 million dollar project involving grinding existing asphaltic concrete wearing concourse and repaving. Inspection services also include site maintenance and safety protection.

PANY&NJ, Construction Management Services, NY Marine Terminal, Howland Hook & Teterboro Airport, PIDS

Mr. Amegah served as Senior Inspector, responsible for building demolition at Howland Hook, Staten Island contractor oversight as part of work at NYMT. Mr. Amegah is participating in the testing phase and inspection of the perimeter intrusion detection system, fencing sensors and radar system both day and night at PANYNJ Airport. Also supervised the assembly of large erosion mats made of concrete sections encased in geotextile material being fabricated in Bayonne for future relocation and installation.

NYCDDC, REI Services for HWCR08B, Citywide Milling Project Involving Grinding Existing Asphaltic Concrete Wearing Course, Manhattan and the Bronx, NY

Mr. Amegah served as Inspector, responsible for this $7 million project, providing inspection and other related services for projects involving grinding existing asphaltic concrete wearing concourse at various locations on an as-needed basis. Some issues that involve inspection services include site maintenance and safety, protect tree from construction debris, milling two inches of existing asphalt, smaller milling machine was used to grind asphalt in hard to reach places such as around catch basin or corner of a curb and a sweeper was used behind milling machine to clean up the debris. Tasks include all services necessary and required for the inspection, management

and administration of this project, for the required construction work to be properly executed, completed on time and conforms to the plans, specifications and requirements of the construction contract.

NYCDDC, (HW2CR08B), Grinding and Milling of Various Streets in the Borough of Manhattan, NY

Mr. Amegah served as Senior Inspector. His responsibilities included inspection of milling of roadway pavement resurfacing in the borough of Manhattan for NYCDDC. Responsible for managing inspection staff, reviewing and approving field changes, resolving any construction problems, claims and disputes, supervision of contractor's work, processing of contractor's monthly payments, coordinated with the various community boards, NYCDDC and other related agencies.

Various Projects, Munoz Engineering, New York, NY

Mr. Amegah served as Senior Inspector with responsibilities including inspection of roadway pavement resurfacing in the borough of Manhattan for NYCDDC Previous assignments included inspection of structural retrofit of Verrazano Narrows Bridge and inspection of Port Authority of NY/NJ Newark Airport Parking Garage C for baseline Facility Condition Survey Report.

Connecticut DOT, I-84 Widening

Mr. Amegah served as Senior Inspector and provided inspection services for the widening of Interstate 84 between Waterbury and Cheshire, CT. Responsible for inspection of reinforced concrete pipes and the inspection of modifications made to existing interstate bridges. Also responsible for the investigation of catch basins.

NYCDDC, Richmond Road REI

Mr. Amegah served as Senior Inspector and provided field inspection and preparation of daily reports for the installation of sewers, water main, and roadway replacement for this roadway in Staten Island, NY. The scope of work included the installation of a new 72-inch trunk main in Richmond Road between Narrows Road and Duzer Street and in Vanderbilt Avenue between Van Duzer Street and Tompkins Avenue. A new 60-inch water main was also installed in Swan Street between Van Duzer Street and Bay Street.

Various Projects, Desimone Consulting Engineers

Mr. Amegah served as Structural Engineer and provided steel and reinforced concrete design and structural inspection services for high rise buildings including the NYU Cancer Institute, 160 E. 34th Street, New York, NY and the Estates of Kew Gardens Hills, 75-25 153rd Street, Queens, NY.

NYCDDC, Capital Reconstruction Projects

Mr. Amegah served as Senior Inspector and was responsible for NYCDDC capital reconstruction projects, including replacement of major roadways in Brooklyn and Queens and associated drainage, sewer, utilities, curbs, and sidewalks.

Rochelle Lancey

Construction Inspector

Ms. Lancey has about 29 years experience in engineering. Her experience ranges from heavy/highway construction to subdivision/ land development construction surveillance and escrow contract monitoring. Project experience includes engineering design, field surveying, quantity computations, bidding and contract ratification, construction surveillance, construction materials testing, review of subdivision and land development plans, developing specifications of municipal projects for local government clients as well as private clients.

Senior Inspector – PANYNJ World Trade Center

Ms. Lancey served as Inspector on WTC Towers 1, 3 & 4 under the direction of the Port Authority Resident Engineer.

Initially, Ms. Lancey was assigned to WTC Tower 1. Foundation, footings and concrete columns were being completed, and the work in basement levels Zone B, B3, and elevator core had begun. She observed the excavation into rock, rebar and concrete installation of footings, foundations and slurry liner wall. She discussed current issues with the contractors, the consulting engineers, and PA surveyors, and prepared a daily narrative for the PA records reporting the progress of the work with reference to contract drawings and specifications. She also attended pre-construction meetings for Tower 3 and general WTC coordination meetings. She reviewed and made comments on submittals, and payments as requested by The Resident Engineer.

Later, Ms. Lancey was assigned to WTC Towers 3, 4, 7. In the field, the contract for the construction was just commencing on Towers 3 & 4. She observed and reported on blasting operations, excavation to grade, and subsequent concrete and rebar installations for footings, slabs and shear walls. She also monitored rock anchor and caisson drilling, installation and testing. She represented the RE on incidents of an environmental nature, such as fuel spills, and coordinated with PA staff to improve site safety.

At Tower 7, KSE was performing final sign-off for Certificate of Occupancy for mechanical and electrical installations. Ms. Lancey participated in routine progress inspections, and punch list walk-through of completed work. In the office, she continued her duties in reviewing of shop drawings, including crane and stair towers, as directed by The

Education

Coursework, City College School of Architecture, New York, NY

Coursework, Hunter College, New York, NY

Registrations:

ACI Concrete Construction Special Inspector

ICC Structural Masonry Special Inspector

EIC Path Railway System

Scaffold Safety

OSHA 10 Hour Construction Safety

Resident Engineer. She also reviewed the construction manager's daily reports for accuracy. She participated in meetings prior to and during blasting operations.

Ms. Lancey then served as Inspector on WTC Tower 1 under the direction of the Port Authority Resident Engineer. Her field duties included observation and reporting on contract work. Initially, she reported on civil, mechanical and electrical progress. As staff increased, she concentrated on the civil work. Daily Reports included details of concrete installations for the core and slabs, masonry walls, and steel structure. Ms. Lancey worked in cooperation with PA Materials inspectors, PA Safety personnel, Structural Engineers, the construction manager and various contractors on behalf of the RE.

Ms. Lancey also prepared a daily report on Safety Observations, which was forwarded to The construction managers. She was also responsible to coordinate inspection of Architectural finishes with the construction manager, prepare punch list, and sign-off. This included exposed concrete wall finishes, curtain wall, woodwork, and flooring.

Various Projects, NYC Department of Design & Construction, Long Island City, NY

Ms. Lancey served as Project Manager for government projects in a variety of settings, including fire houses, police and fire facilities, schools and community centers. She managed projects and budgets ranging from $1 to $15 million. She was responsible to review design documents, shop drawings, and specifications for accuracy and completion; coordinate all work performed by Agency and Consultant architects, engineers, surveyors, and testing services; supervision of field installations for mechanical, electrical, and plumbing in addition to general construction for prime and sub-contracts; and coordinate and conduct progress meetings, maintain work schedules, approved detailed estimates and payments.

She drafted, negotiated, and authorized change order requests; prepared punch lists; served as a liaison between client, consultants, and various government agencies. She also ensured deadlines were met and projects were within budget and generated reports and correspondence for project tracking. Projects included:

- **NYPD Property Clerk Storehouse**-Interior and exterior restoration, auxiliary power, lighting and security system
- **NYPD CRS**-Rooftop parking replacement, skylights.
- **Maspeth Town Hall-**Historic interior and exterior restoration, windows, underground drainage landscaping and playgrounds, new electric service, lighting, HVAC, sprinkler and security system.
- **Montessori Learning Center**-New roof and rooftop playground, interior upgrade and HVAC
- **Kingsbay Senior Center-**New kitchen, new electric service and lighting, interior upgrade, HVAC.

Jeanne Brady

Construction Inspector

Registrations:

NICET III Certification 90903

ACI, Concrete Construction Special Inspector

ACI, Concrete Laboratory Testing Technician

ACI, Concrete Field Testing Technician- Grade I

Recent and Relevant Experience

NYS DOT, D261021, Reconstruction and Bridge Replacements Route 59, Town of Clarkstown, NY

Ms. Brady served as Inspector for roadway reconstruction and bridge replacements (prestressed concrete box beam) on Route 59 from Sickletown Road to Route 303.

NYC DEP, Concrete Quality Assurance Program, New York, NY

Ms. Brady served as Concrete Technologist/Services Supervisor for inspection of various concrete batch plants and laboratories, universal labs, Tectonics Consultants, Futuretech and Fairways. Responsibilities include monitoring of trial batching procedures for newly designed concrete mixes; verifying compliance of plants and laboratories, as per specifications; recording laboratory test results and readings (concrete cylinder breaks, slump tests, air content, unit weights, etc.); Overseeing field testing and performing audits as requested. Training and supervising Assistant Concrete Technologists in service related inspections and audits.

Interim Stability Improvements at the Gilboa Dam, Schoharie County, NY

Ms. Brady served as Site Inspector responsible for quality assurance personnel in charge of overseeing the contractor's quality control for the installation of post-tensioned rock anchors. Duties include record keeping of daily construction activities, including installation of pre-production anchors, environmental controls, safety measures, drilling of anchor holes, grouting of anchor holes, and installation of post-tensioned rock anchors.

Garden State Parkway, Bridge Repairs North

Ms. Brady served as Engineering Technician, Level III worked directly with and responsible for 5(+) person crew. Worked on repairs to 16 bridges along a 15-mile span of the Garden State Parkway. Activities included substructure concrete repair, concrete deck repair, and temporary support of stringers, asphalt milling and paving, installation of guide rail, and maintenance and protection of traffic.

Village of Port Chester, Waterfront Redevelopment

Ms. Brady served as Engineering Technician, Level III worked directly with and responsible for 9+ person crew. Worked on widening and

redevelopment of U.S. Route 1. Activities included excavation, traffic signals, street lighting, concrete and granite curbs, sidewalks, asphalt overlay, and MPT.

Reconstruction of I-287, Stage 2A

Ms. Brady served as Engineering Technician, Level III and worked directly with and was responsible for 5+ person crew. Worked on widening of I-287 and replacement of 3 bridges. Activities included installation of drainage, installation of guide rail, milling and placement of asphalt, survey of final grades and creation of as-built drawings.

Reconstruction of the Palisades Interstate Parkway

Ms. Brady served as Engineering Technician, Level II and worked directly with and was responsible for 7+ person crew. Worked on widening and reconstruction of the Palisades Interstate Parkway. Activities included placement of inlets and drainage pipes, excavation, embankment, grading, silt fence, and maintenance and protection of traffic.

Reconstruction of I-287 over the Saw Mill River Parkway, NY

Ms. Brady served as Engineering Technician, Level II and worked directly with and was responsible for 5+ person crew. Worked on replacement of an existing bridge structure with a structure composed of steel tubgirders and pre-cast piers and decks. Activities included asbestos removal, drainage, excavation, embankment, pile driving, post tensioning and grouting of pier and deck segments, and conducted slump and air tests on concrete.

Reconstruction of Route 17, Ramapo, New York

Ms. Brady served as Engineering Technician, Level II. Her activities included excavation, embankment, clearing and grubbing, landscape, guide rail, survey, and H-piles.

Reconstruction of Routes 6 and 17, Town of Woodbury, NY

Ms. Brady served as Engineering Technician Trainee and worked as a trainee during construction of Route 6 extension. Activities included excavation, embankment, survey, draining and MP&T.

Kuldip Sachdev

Construction Inspector

Mr. Sachdev has over 30 years of engineering and construction inspection experience in transportation and industrial facilities, including over 25 years with New York City Transit. His experience includes construction management, supervision, inspection, and design review, auditing, and planning for various New York City Transit Authority, Board of Water Supply, and NYC Department of Environmental Protection projects. He has inspected track, structures, concrete, paving, ancillary railroad systems, bus depots, electrical, and mechanical systems for compliance with plans, drawings, and specifications. He is familiar with NYC Transit and Port Authority systems and procedures.

Port Authority of New York & New Jersey, Port Commerce Facilities, New York, NY

As Senior Construction Inspector, Mr. Sachdev inspected contractor's work related to $45 million intermodal facility at Port Ivory, Howland Hook and tenant alteration applications at Port Newark/Elizabeth. Inspected construction of two-story, 9000 SF administration building for Maher, including civil, architectural, structural, and MEP.

Port Authority of New York & New Jersey, Restoration of PATH Service to Manhattan, New York, NY

As Senior Construction Inspector, Mr. Sachdev inspected contractor's work connected with the $360 million project, including temporary PATH station at WTC, rehabilitation and expansion of Exchange Place Station, and rehabilitation of Tunnels "E" and "F". Verified compliance with plans and specifications. Prepared daily narratives and reports. Also responsible for coordination with train master for removal of blast material for new crossover tunnels, inspection of additional PATH projects including CCTV upgrade at South Street Yard, including new light poles, foundation excavation, and concrete placement; additional elevators at Pavonia Station; and chemical grouting at various locations.

New York City Transit, Rehabilitation of New Lots Line, Brooklyn, NY

Mr. Sachdev served as Resident Engineer, providing construction supervision and coordination of Elevated Subway Line Project. The project involved replacing structural steel girders, seat brackets, column rehabs, track work, stair replacement, and mezzanine hanger repair, replacement of structural concrete and water proofing of thru-spans.

Education:

M.S., Civil Engineering, University of Washington, 1970

B.S., Civil Engineering, University of Washington, 1966

Registrations:

Licensed Professional Engineer in the State of New York

ACI Level 1 Certified

ACI Level 2 Concrete Construction Inspector (CCSI) Certified

Structural Steel Bolting Course

OSHA 10 Hour Certified

New York City Transit, Rehabilitation of Various Pump Rooms in Brooklyn and the Bronx, NY

For this project, the work involved providing new electrical service, pumps, discharge lines, valves, new structural slab, new doors and lighting. Mr. Sachdev served as Resident Engineer.

New York City Transit, Handicap Ramps for SIRTOA Stations, Staten Island, NY

The project consisted of providing over 500 feet of ramps over pile foundations at two elevated stations, Dongan Hills and Great Kills. Mr. Sachdev served as Resident Engineer.

New York City Transit, Rehabilitation of Castleton Avenue and Yukon Avenue Bus Depot, Staten Island, NY

The projects involved new bus lifts, structural slab, new roll up doors, lighting, electrical service, oil separator tank and discharge pipes, paving, new parking lots and fencing. Mr. Sachdev served as Resident Engineer.

New York City Transit, Structural Rehabilitation of SIRTOA, Right of Way, Staten Island, NY

The project consisted of providing new retaining walls, crib walls, soil stabilization, riprap and sheet piling along SIRTOA right-of-way at various locations. Mr. Sachdev served as Resident Engineer.

Parking Lots at Two SIRTOA Stations, Staten Island, New York

Mr. Sachdev served as Resident Engineer for the construction of parking lots at Dongan Hills and Annandale Stations including excavation, drainage, paving, and striping.

New York City Transit, Engineering Audit of Various Transit Authority Projects, New York, NY

As Engineer Auditor, Mr. Sachdev provided auditing of payments, material, and additional work orders.

New York City Transit, Various Projects

Mr. Sachdev served as Civil Engineer, providing planning, scope, and property acquisition of various projects.

New York City Department of Environmental Protection, Sewage treatment plants at Ward Island and Port Richmond, New York, NY

As Assistant Civil Engineer, Mr. Sachdev provided inspection of pile foundation and structural walls for sewage treatment plans.

New York City Board of Water Supply, Third Water Supply Tunnel, New York, NY

As Assistant Civil Engineer, Mr. Sachdev provided design review and checking working drawing for the third water supply tunnel.

Duke Samala

Construction Inspector

Education:
B.S., Civil Engineering, La Salle University, Manila Philippines, 2000

OSHA 10-Hour Construction Safety Training, 29 CFR 1926.21(b)

Confined Space Entry Entrant, Attendant and Supervisor, 29 CFR 1910.146(g)

NYC Department of Buildings 4 Hr Supported Scaffold User

Underground Construction for Tunnels and Shafts, 29 CFR 1926.800

Welding and Welding Codes 4.5-Hour Course Completion, American Council of Engineering Companies of NY

Registrations:
ACI Field Testing Technician, Grade I

ACI Concrete Construction Special Inspector

Registered Civil Engineer, Manila, Philippines

NYC Transit, CM-1311, Construction Management for No. 7 Subway Line Extension Project, New York, New York

As Senior Tunneling Inspector for this $1.5 billion project, Mr. Samala was responsible for providing construction management services that will extend the No. 7 Line westward under West 41st Street and southward under Eleventh Avenue to the southerly terminus at West 25th Street. The extension provides a 7,100 feet long two-track railroad with two lay-up tracks for the storage of six trains. It also provides two new stations; at West 41st Street and Tenth Avenue and a 2-track terminal station on Eleventh Avenue at West 34th Street. Project also includes working in the tunnel under the Street level Site “A” that is located on the East side at 11th Avenue between 25th and 26th Streets as shown in the above picture. Work in this area includes deck and concrete edge pans, safety lines, temporary lights, and tower stairs.

NYC Department of Environmental Protection, Protection Capitol Improvement Project – Water Tunnels and Associates Works, New York, New York

Mr. Samala served as Senior Inspector/Engineer, providing inspection and support services for the work being performed as part of the construction of the Croton Water Filtration Plant in Bronx, New York. The filtration plant construction is part of the NYCDEP’s Bureau of Engineering, Design & Construction project to upgrade the water supply system, improve water quality and ensure compliance with stricter water quality standards.

The principal items of the tunnel and shaft work consist of the construction of two 13.5-ft diameter Treated Water (TW) tunnels, approximately 3,500-ft in length, excavated using a Robbins Open-Main Beam High Performance Tunnel Boring Machine (TBM) and lined with 9-ft diameter concrete-lined steel pipe between the filtration plant and the Jerome Park Reservoir (JPR) shaft chamber. Tunneling was also comprised of the excavation of a 32-ft diameter starter tunnel chamber approximately 385-ft in length and a 14.5-ft diameter Raw Water (RW) tunnel, approximately 865 feet in length, between the filtration plant and the New Croton Aqueduct (NCA), and lined with cast-in-place concrete using Everest forms having a finished inside diameter of 12 feet. Two shafts were also constructed utilizing raise bore excavation methods. Throughout the execution of the contract, Mr. Samala’s responsibilities included:

- Provide support to the Resident Engineer for field office administrative duties performing technical and administrative activities within Contract Compliance, Quality Control and Quality Assurance (QC/QA).
- Provide engineering inspection and monitoring of day-to-day operations of tunnel, civil, and structural related construction work including TBM tunnel excavation and shaft construction including conformance to project plans and specifications, health and safety regulations, and environmental compliance and reporting.
- Evaluate excavation support requirements and grouting;
- Field checks of placement/location of supports, reinforcing steel, embeds, anchor bolts, forming system, shoring, and sub-base material before placement of concrete.
- Inspection of final lining including welded steel pipe, reinforcing steel and concrete quality control; understanding of tunneling construction methods and equipment and knowledge of OSHA regulations regarding confined space entry, ability to work independently to identify construction issues and communicate these issues effectively to others in a team environment, documentation skills required to provide clear and concise reports of daily activities.
- Analyzing applicable codes, standards and project contract documents and monitors construction activities to ensure compliance with contract documents.
- Preparing a variety of records, including daily progress reports, material accounting records, performing and/or evaluating tests and inspections.
- Monitoring contractors' compliance with approved Quality Control Plan.
- Providing general inspection of contractor and subcontractor work to assure a safe and workmanlike operation and quantifying production delays.

Various Projects, Gilsanz Murray Steficek Structural Engineers & Building Envelope Consultants LLP, New York, New York

Mr. Samala served as Structural Engineer/Inspector, providing design and inspection services as follows:

- **JP Morgan Chase Building Renovations -** handled the structural design of building renovation executive floors down to base building; designed high density file system beam support and reinforcement of existing wide flanges; designed web openings and existing beam cut enlargements with reinforcement plates; structural analysis.
- **MTA, Grand Central Terminal** - performed Tunnel Inspection of MTA tracks 33 to 42 at Grand Central Terminal slab, column, and existing conditions, documentation and creation of Controlled Inspection reports. Responsible for the review of AutoCAD designs on blueprints and plans, review of shop drawings and preparation of architectural and structural drawings/plans using AutoCAD software. Site inspection conducted on a regular basis, project updates and weekly on-site meetings with client, architect, MEP contractor, and General Contractor; review of site and plan addendum, and change orders.

Orville McPherson

Construction Inspector

Education:
BS/Mechanical Engineering, New Jersey Institute of Technology, 2000

Certifications:
ACI Concrete Field Testing Technician, Grade I (Expires December 18, 2013)

ACI Concrete Construction Special Inspector (Expires May 27, 2014)

Associations:
American Society of Mechanical Engineers

Mr. McPherson is a highly motivated professional with more than eight years experience working as a Field Engineer in the plumbing and heating field. He is extremely proficient in AutoCAD, Microsoft Office and Pro-Engineer, with a working knowledge of Solidworks. Certified by ACI as a Concrete Field Testing, Grade I and Concrete Construction Special Inspector. Mr. McPherson has worked on multi-million dollar projects including the MTA East Side Access - Madison Yard Site Clearance, Wegmans Food Market, Harrison High School, Stevens Institute, 5 schools in Bridgewater, NJ and Ramapo College to name a few. He also engineered the plumbing design for the 2006 season finale of television show Extreme Makeover: Home Edition.

Engineer/Inspector (Distinct Engineering Solutions, Inc.), North Brunswick, NJ

- Performed field survey to determine the structural integrity of various buildings using present building codes to ensure that the structures were safe. Provided AutoCAD drawings to ensure clarity to determine the areas of structures that may require improvement. Provided detailed reports.
- Inspected rebar and concrete on structures for various structures using engineering skills to ensure they were in compliance with specifications, building codes, and other regulations. Performed slump, air content, unit weight and temperature tests to ensure the concrete were adequate, reliable and within contract requirements.

Engineer/Field Inspector (Axis Design Group International), Newark, NJ

- Inspected rebar and concrete on structures using engineering skills to ensure structures were in compliance with specifications, building codes, and other regulations which resulted in structures being safer and more reliable.
- Used AutoCAD to draft steel for various structures which resulted in about 15% savings in time and money because the structures were safe and conflicts were resolved quickly.
- Worked as an assistant project manager in which I helped coordinate MEP drawing with the different subcontractors which resulted in at least a 10% savings in time and money because problems between the subcontractors were resolved early and efficiently.

- Reviewed and revised shop drawings to ensure that the lathers, steel designers, and other trades were on one accord as the work that needs to be done.

Designer/Engineer (Trematore Plumbing and Heating), Fairfield, NJ

- Used AutoCAD to design plumbing for various buildings including schools, apartments, companies, etc. which resulted in about a 20% savings in time and money because conflicts with other trades were resolved quickly
- Redesigned and revised architectural and engineering drawings for specific projects which saved time and money in terms of coordination because initial problems were resolved early
- Designed plumbing for EXTREME MAKEOVER: HOME EDITION 2006 season finale episode which made the house safer and more efficient.
- Made detailed drawings which included diagrams, floor plans, detailed piping/equipment connections, etc.
- Trained new employees in AutoCAD.
-

Engineering Consultant (McKeon-Grano), Paramus, NJ

- Worked for Schering-Plough in the engineering validation department to improve system safety and efficiency.
- Validated HVAC systems to make sure they were up to Gmp standards in accordance with Gmp codes.
- Written and executed IQ, OQ and PQ documents.
- Used and revised AutoCAD drawings of the HVAC system to find the most efficient and safest way to maintain the system.

Steven R. Heeter

Construction Inspector

Mr. Heeter has engineering/construction inspection related experience with increasing responsibilities as an engineer's aide and engineering technician that dates back to 1987. He is qualified by training and experience to oversee and perform a wide range of field and laboratory evaluations, inspections, and tests related to geotechnical engineering, environmental engineering, and construction materials testing. Mr. Heeter has gained training and experience while working under the direction of graduate and professional engineers. He is proficient in assisting engineers and working independently either in the laboratory or in the field. He is a self-starter with strong organizational skills and a high degree of attention to detail. As a supervisor, he has good communication and people skills, and ability to effectively manage technicians as required.

Mr. Heeter has specialized expertise and skills in the following areas: monitoring placement of reinforcing steel and post-tensioning systems, monitoring of tendon stressing operations and measuring and documenting tendon elongations; review of reinforcing steel and post-tensioning shop drawings for conformance with structural and other contract drawings; independent monitoring of fill placement and grading operations on structural or otherwise critical fills, evaluations of undercutting, monitoring grading operations, providing recommendations regarding substandard and complex work; performing a range of laboratory construction materials tests and soil physical property tests; performing deep foundation evaluations and auger and penetrometer tests; performing administrative functions and direction and supervision of technicians on major projects or in the laboratory; monitoring concrete and asphalt placements from batch plant to placement; proficient in performing office duties and administrative functions; extensive knowledge of employee and client relations; ability to follow instructions and exercise good judgment in independent work.

Education:
Southern Polytechnic, Marietta, Georgia, Civil Engineering, coursework

Certifications
ICC Structural Masonry Inspector

ICC Reinforced Concrete Special Inspector

ICC Prestressed Concrete Special Inspector

ICC Structural Steel and Bolting Special Inspector

ICCSoils Special Inspector

National Institute for Certification in Engineering Technologies, NICET

NICET Construction Materials Testing - Soils Level IV

NICET Construction Materials Testing – Concrete Level IV

NICET Construction Materials Testing – Asphalt Level IV

NICET Transportation Engineering Technology - Highway Materials III

NICET Geotechnical Engineering Technology - Laboratory IV

NICET Geotechnical Engineering Technology - Construction III

ACI Concrete Field Testing Technician – Grade I

Troxler - Radiation Safety

Relevant Experience

Municipalities/Government

- Cobb Adult Detention Center
- Paulding County Courthouse and Administrative Building

- Gordon County Jail and Judicial Complex
- Shepherd Track Landfill Closure
- Joan Glancy Memorial Hospital and Parking Deck
- Shepherd Center Additions and Renovations
- GDOT-41 District Administration Building
- DOT-22 Maintenance Headquarters
- Piedmont Hospital Campus
- Cobb Superior Courthouse
- Cherokee Fire Station No. 6

Education

- Emory University Lab & Classroom
- Building
- Dekalb Technology College, DTAE-102
- Atlanta Public Schools Headquarters Facility
- North Paulding Middle School
- NW Cobb Elementary School
- Arnold Mill High School
- Cass High School Replacement
- J-44 Ft. Valley State University – New Building
- Lassiter High School Utility Rework
- Savannah College of Art and Design
- Atlanta Digital Media Center

Commercial:

- Federal Reserve Bank, Atlanta, GA
- CDC Central Utility Plant
- Spring Hill Court Hotel and Parking Deck
- Delta Credit Union
- Hotel Palomar

Ahmed Husain Zubair

Construction Inspector

Education:
B.S., Civil Engineering, Drexel University, 1997

Registrations:
OSHA 30 Hours Safety Course/ 2005 And 2009

OSHA 500 Trainer Course 2009

National Association Of Corrosion Engineers, International

NACE Certified Coatings Inspector (Certification # [redacted] /Valid Upto 2013

NACE Marine Coating Inspection

NACE Basic Corrosion

Reinforced Steel & Concrete Inspection Certificate

Mr. Zubair has over 14 years of experience in construction inspection. His experience covers both highway and bridge work, including bridge structural painting and paint removal; scheduling; cost estimation; processing change orders; sanitary sewer and water main installation; air monitoring; maintenance and protection of traffic; surveying monuments; excavation; sub-base concrete and asphalt pavement; erection of electric poles; sidewalk installation; etc. He is proficient in the following programs/systems: SureTrak, Primavera, AutoCAD 2002, MURK, ASTM standards, ACI codes, and AASHTO Specifications for Highway Bridges. Mr. Zubair's relevant experience includes:

NYS Thruway Authority, Painting of Six Bridges in the NY Division of NYSTA in Rockland and Orange Counties, NY

Mr. Zubair was Resident Engineer responsible for providing civil engineering expertise to the Painting of 6 Bridges Project on NYS Thruway. Protect client's interest thru quality control and mitigation of schedule problems relating to completion deadlines. Conduct Pre Construction meeting and monthly progress meetings. Track submittals from Contractor. Verify Contractor's Insurance Certificates. Ensure Contractor's compliance with EEO and NYS DOL rules. Monitor Contractor's Apprentice Training Program. Review and comment on Containment shop drawings and Suspended Platform System. Monitor CPM schedule and progress of work as per schedule deadlines. Check RFIs, evaluate RFIs feasibility and coordinate with field inspectors and design consultant and contractor. Field verify rigging of Suspended Platform System and installation of Class 1 A Containment prior to lead removal operations and ensure all construction proceeds in accordance with contract specifications and approved shop drawings. Delegate duties to Inspectors and oversee their work and Daily Work Records. Review and sign off Daily Work Records of Construction Inspectors daily reports. Coordinate with MTA Metro North and all other utility agencies involved, to mitigate upcoming problems and conflicts. Oversee MPT setup and sign installations and lane closure communication to NYST Traffic. Approve quantities for monthly payments and enter the same on NYSTA CEES program. Process monthly payments and change orders. Write Engineer's Diary as per MURK rules.

NYS DOT Region 11, Nassau Expressway & Interim Nassau Expressway Pavement Rehabilitation & Resurfacing (Including painting of 7 bridges)

Mr. Zubair was Chief Inspector responsible for providing civil

engineering expertise to the whole construction project of rehabilitation of 7 bridges and ramps. Responsibilities included protecting client's interest through quality control and mitigation of schedule problems relating to completion deadlines. Monitor CPM schedule and progress of work as per schedule deadlines. Check RFIs, evaluate RFIs feasibility and coordinate with field inspectors and design consultant and contractor. Widening of highway ramps. Installation of new sub base and concrete pavements. Shoring and replacement of bridge decks. Replacement of bridge bearing. Operations involve shoring and hydraulic jacking of bridges. Installation of Calcium Patch to replace deteriorated concrete on approach slabs at abutment locations. Review shop drawings, perform site inspection, ensure all construction proceeds in accordance to contract specifications and approved shop drawings. Oversee MPT setup and sign installations. Check installation of vehicle arresting barrier net. Coordinate and liaise with different City and State agencies to mitigate upcoming problems and conflicts. CALL INFORM traffic communication about all lane closures and openings.Review and sign off Daily Work Records of Construction Inspectors daily reports. Performed office engineering duties also by obtaining work completion information from all inspectors daily reports and tallied the quantities completed with quantities approved for payment and matched the same with CEES quantities data entry.

NYS DOT Region 10, Replacement of Joints of 33 Bridges in Nassau and Suffolk County in Long Island, NY

Mr. Zubair served as Chief Inspector for the replacement and waterproofing of existing joints of 33 Bridges in Nassau and Suffolk County in Long Island. Installation of elastomeric concrete at expansion joints. Also replacement of bearings of 2 Bridges over Long Island Railroad. Operations involve shoring and hydraulic jacking of bridges. Review shop drawings, perform site inspection, ensure all construction proceeds in accordance to contract specifications and approved shop drawings. Review Inspector's daily reports. Installation of Calcium Patch to replace deteriorated concrete on approach slabs at abutment locations. Oversee MPT setup and sign installations. Check installation of vehicle arresting barrier net. Coordinate with CALL INFORM traffic communication about all lane closures and openings.

NYS DOT Region 10, Robert Moses Causeway over Great South Bay N/B Substructure Repair and Painting N/B and S/B, NY

Mr. Zubair served as Senior Inspection for the inspection of structural marine concrete repairs in the Great South Bay. Installation of steel reinforcement and cathodic protection system. Inspection and documentation of installation of cathodic protection system and corrosion protection operations especially abrasive blasting to 'near-white metal' standard and painting of structural steel surfaces. Rigging of chain-link fence platform and installation of Class 1 A containment prior to lead removal operations. Cathodic protection of subsurface and marine reinforced concrete structures subsequent to removal of existing steel jackets and spalled concrete. Installation of embedded zinc anodes in underwater concrete piles supporting roadway bridge slabs. Also performed the following office engineering duties: Prepared monthly payment estimates by proportionally allocating money to work completed as per difficulty of work; obtained work completion information from all inspectors daily reports and tallied the quantities completed with quantities approved for payment and matched the same with CEES quantities data entry.

F Rates

Rates

Company Policy for Compensation for Premium Pay

Depending on the Company's work needs, employees may be required to work overtime. For purposes of determining which hours constitute overtime, only actual hours worked in a given workday or workweek will be counted. Vacation time and Company holidays will be counted as hours worked; however, Leave Without Pay ("LWP") will not be counted as hours worked. All overtime work must be previously authorized by a supervisor. However, the Company provides compensation for all overtime hours worked by non-exempt employees in accordance with state and federal law. Exempt employees may often have to work hours beyond their normal schedules as work demands require. No overtime compensation will be paid to exempt employees. The only exception to this is where the payment of overtime to employees is required by a specific client contract and the client approves the actual payment. In these situations exempt employees working on the specific contract may be compensated for their overtime as required in the applicable client contract. If during the week of a client holiday which is not a Hill holiday, an exempt employee will be paid for all billable hours worked. In these situations there are specific forms that must be completed and approved by the Senior Vice President responsible for the project and then sent to Payroll to provide notification and authorization.

Hourly Rates

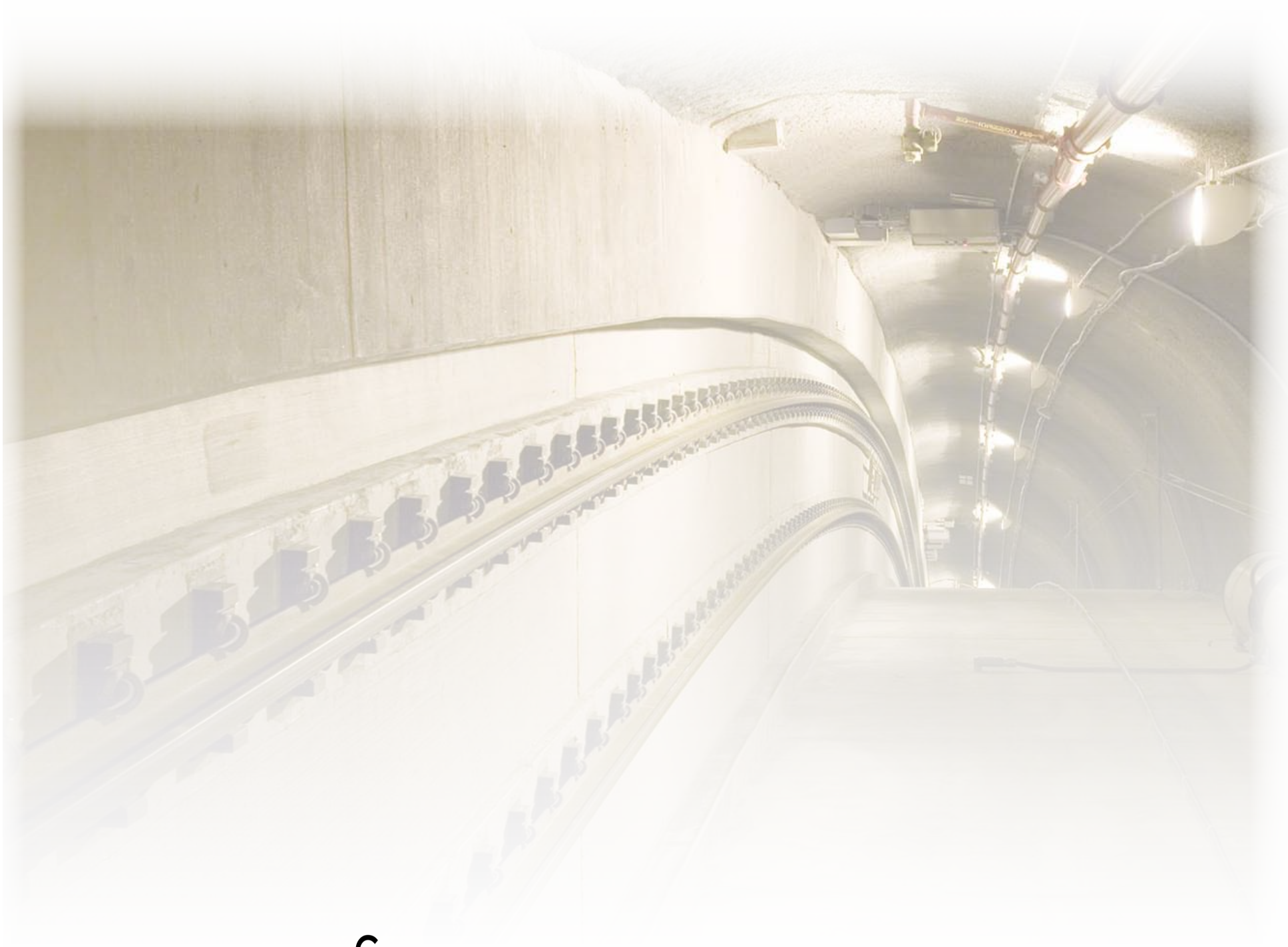
Below are the hourly rates for our proposed personnel.

Name	Role	Rate
Frank Colucci, PMP	Project Executive	$87.98
James Grundhoffer, PE, CPC, CCM	Project Manager	$91.11
David L. Oldham, RA	Project Manager	$67.31
Luis Philip Pinto, RA	Project Manager	$73.80
Gener McGarry, LEED AP	Project Manager	$60.38
Philip Ragland, RA, LEED AP	Project Manager	$55.29
Douglas V. Traver, RLA	*Executive Leadership* Vice President	$100.00
Raymond Tom	Estimator	$58.17
Thomas Anderson	Estimator	$53.61
Manuel De La Hoz	Estimator	$58.85

Name	Role	Rate
Thomas Owens	Estimator	$55.29
Leonard Posten, CCE, MRICS, AVS	Estimator	$50.96
Gurcharan Chopra	Estimator / Inspector	$67.31
John Lehman, PE	Project Manager Construction Manager	$78.36
Edward Nicholson, PE	Project Manager Construction Manager	$85.00
Jose Diaz, PE	Project Manager Construction Manager	$86.30
Paul Giangreco, PE	Project Manager Construction Manager	$65.62
Ronald Backman	Scheduler	$49.00
Dereck Baker	Scheduler	$70.43
Artan Bytyci	Scheduler	$56.01
Stephen Crowley	Scheduler	$44.74
Peter Jahchan, LEED AP	Scheduler	$50.48
James DiVita	Construction Inspector	$35.77
George Fernandez	Construction Inspector	$37.26
Christopher Gleeson	Construction Inspector	$52.88
George Guzman	Construction Inspector	$35.91
Troy Millard	Construction Inspector	$39.23
Nicholas Pace	Construction Inspector	$43.27
Daniel Perez	Construction Inspector	$31.50
Steven Rios	Construction Inspector	$36.54
Michael Ross	Construction Inspector	$25.00

Name	Role	Rate
Darlene Scott	Construction Inspector	$30.70
Keith Stapleton	Construction Inspector	$34.13
Bethoven Torio	Construction Inspector	$37.79
Michael Abarno, CCM	Construction Inspector Field Engineer	$68.75
Luis Cortes	Construction Inspector Field Engineer	$44.61
Elliott Hardie, PE, LEED AP	Construction Inspector Field Engineer	$55.86
Raed Jaber	Construction Inspector Field Engineer	$47.36
Adam Panzarella, LEED AP	Construction Inspector Field Engineer	$32.69
Jorge Rodriguez	Construction Inspector Field Engineer	$50.96
Thomas Wilson, Jr., PSP	Construction Inspector Field Engineer	$57.69
Suzanne Kaplan	Contract Administrator	$36.78
Marc Zaretsky	Contract Administrator	$76.92
Mohammad A Shaikhji	Construction Inspector	$30.38
Pankaj Raval	Construction Inspector	$31.00
Roger Lopez	Construction Inspector	$31.00
Henry Chin *ELLANA, Inc.*	Estimatorr	$73.55
Waler Fitzer *ELLANA, Inc*.	MEP Estimator	$70.43
Anil Shah *MP Engineers, P.C.*	Construction Inspector	$30.00
Bhadresh Patel, PE *MP Engineers, P.C.*	Construction Inspector	$54.00
Hitesh Bhatt *MP Engineers, P.C.*	Construction Inspector	$28.25

Name	Role	Rate
Jing Kang, P.E. *MP Engineers, P.C.*	Construction Inspector	$56.50
Mike Maggio *MP Engineers, P.C.*	Construction Inspector	$40.00
Shawn Heaney *MP Engineers,P.C.*	Construction Inspector	$35.00
Kwesi Amegah *KS Engineers, P.C.*	Construction Inspector	$45.00
Rochelle Lancey *KS Engineers, P.C.*	Construction Inspector	$47.00
Jeanne Brady *KS Engineers, P.C.*	Construction Inspector	$41.25
Kuldip Sachdev *KS Engineers, P.C.*	Construction Inspector	$45.00
Duke Samala *KS Engineers, P.C.*	Construction Inspector	$37.00
Orville Mcpherson *KS Engineers, P.C.*	Construction Inspector	$40.00
Steven Heeter *KS Engineers, P.C.*	Construction Inspector	$45.00
Ahmed Husain Zubair *KS Engineers, P.C.*	Construction Inspector	$45.00



G Relevant Experience

Relevant Experience

Experience with Port Authority of New York/New Jersey Projects

The Hill Team enjoys a successful working relationship with the Port Authority of New York and New Jersey spanning more than ten years. This includes our work on such notable projects as the World Trade Center Transportation Hub, the Jet Blue Terminal project, the Technology Management Initiatives program, and our current and ongoing on-call work for the PATH system. Through these assignments and others, Hill has developed a thorough understanding of all PANYNJ procedures and protocols. These include PANYNJ reporting requirements, document control, and management structure. This familiarity with PANYNJ will allow our team to expedite all appropriate reporting and documentation associated with the work. Our PANYNJ experience includes:

- World Trade Center, Downtown Restoration Program
- Various Support Services for New Jersey Airports
- World Trade Center Transportation Hub
- PATH Various On-Call Services
- Program Management Support Services for Technology Management Initiatives Program
- Value Engineering Procedures
- Department-Wide Upgrade of Cost Estimate Procedures
- Battery Park City Ferry Terminal
- Airtrain Terminal at Jamaica Station
- Newark International Airport, Lot E Garage
- Value Engineering Procedures, Program Wide
- Program Management Support for ETMD
- EZ Pass Plus Contract Development
- George Washington Bridge, Lessons Learned
- TB&T Infrastructure Management
- Program Management Support Services for New York Division
- Constructability/Bidability Reviews, Willingboro, NJ
- Project Manager-Tunnels, Bridges & Terminals, New York
- Program Management Support for Maintenance Management Systems Projects, New York
- Restoration of Services, World Trade Center
- Standard Specifications and Conformed Documents, New York
- Project Management Support for Operations, Newark
- Insurance and FEMA Claims: WTC Facilities and PATH
- Port Authority of New York & New Jersey Headquarters, *ELLANA, Inc.*
- World Trade Center Tower One, *ELLANA, Inc.*
- PANYNJ Architectural Services Call-In for 2007- 2010, *ELLANA, Inc.*
- LIRR East Side Access Project
- Engineering Management of the Rehabilitation of, *M.P Engineers, P.C.*
- PS50, Jamaica, NY Exterior Masonry and Roofing, *M.P Engineers, P.C.*
- "Call-In" Construction Management Services 2007-2009, *KS Engineers, P.C.*

The profiles on the following pages further outline our experience managing projects similar to those anticipated by the Port Authority's on-call contract.

World Trade Center Transportation Hub

New York, NY

Client:
Port Authority of New York and New Jersey

Service:
Estimating
Program Management

Total Project Value:
$3 Billion

Completion Date:
2009

Reference:
Port Authority of New York and New Jersey

Iran Engel, Assistant Director, Audit

[redacted]

Hill International has been working for the Port Authority of New York and New Jersey since early 2002 to provide program management and technical support for the restoration of PATH train service to Lower Manhattan in the wake of the World Trade Center Disaster. To enable this restoration, two Hudson River Tunnels and the Exchange Place Station were rehabilitated and restored, and a temporary PATH WTC Station was constructed. Hill played a significant role in the successful completion of these integral projects. With Hill's help, the Port Authority's goal to restore downtown service as quickly as possible was achieved on November 23, 2003—approximately one month ahead of schedule.

Hill provided technical and related project management support on Phase I of the program including development of design criteria for proposed high-tech Signal Control System for the PATH System, technical reviews of design work order packages for the temporary WTC PATH Station, rehabilitation of Tunnels E and F, and refurbishment of the Exchange Place PATH Station.

Based on Hill's accomplishments and success during Phase I of the Downtown Restoration Program, the company was selected to continue providing program management, estimating, and technical support services on Phase II of the program. The work scope included development of the Permanent WTC PATH Terminal, WTC Site Public Infrastructure, and associated Site Development. The site will include up to 10 million SF of commercial office space and up to 1 million SF of retail, hotel, and conference center facilities — all part of approximately $2.5 billion in recovery projects identified to restore and enhance the WTC Site and Lower Manhattan.

World Trade Center Reconstruction

New York, NY

Client:
Port Authority of New York and New Jersey

Service:
CPM Scheduling
Estimating
Program Management
Project Controls

Total Project Value:
$12 Billion

Completion Date:
2012

Reference:
Port Authority of New York and New Jersey

Bill Wong, Project Manager

[redacted]

The World Trade Center site is a 16-acre section of downtown Manhattan surrounded on either side by Church, Liberty, Vesey and West streets. The Downtown Restoration Program involves redevelopment of the facilities at the World Trade Center site.

Hill International has been retained by the Port Authority to provide program management services for this complex and highly visible capital program. Hill's program management services include scheduling, estimating, cost modeling, budgeting, and cost controls for each of the capital projects. In addition, Hill is providing, as needed, design reviews, value engineering and constructibility studies.

Hill developed a comprehensive cost model that incorporates all of the capital costs for the programs, valued at more than $12 billion. The model uses a WBS system that allows queries of multiple elements to generate task-specific reports, allowing management to make informed decisions as the programs have developed from conceptual design through the construction phases.

Hill also worked on the development of a tailored Integrated Master Schedule (IMS) for the program. The IMS provides schedule information for each of the various projects going on at the World Trade Center site. These projects include the Port Authority's World Trade Center Transportation Hub, the new Freedom Tower, the Memorial Museum, the Vehicular Security Center and Tour Bus Parking Facility, the Chiller Plant, Streets/Utilities, Parking facilities and Tenant Retail.

PATH Capital Program Logistics Planning Support Services, On-Call Services, Task Order 5

New York, NY

Client:
Port Authority of New York and New Jersey

Service:
Planning
Alternative Analysis
Studies
SCHEDULING

Total Project Value:
$4.1 Billion

Completion Date:
2014

Reference:
Port Authority Trans Hudson Corporation

Wilfredo Guzman, PE,
Senior Program Manager
[redacted]

The PATH Capital Program Logistics Planning Group is working with a number of steakholders within the Port Authority responsible for the delivery of the Capital Program. These entities include PATH Operating and Maintenance Divisions, Engineering Department Design and Construction Devision, and the World Trade Center Construction Development. As the work of each group advances and the detailed schedules are generated, the Logistics Planning Group needs to evaluate any changes to the level of resources needed to deliver the Program. The Logistics Planning Group is seeking scheduling assistance to work with the stakeholders in the development of a Master Schedule depicting all the planned work over the next several years, and to maintain the Master Schedule on a regular basis (approximately, quarterly) to reflect any changes to the proposed schedules. The Master Schedule is to be resource-loaded to reflect the staffing and equipment that will be needed from PATH to support the Program elements, as well as to indicate the area of the PATH sstem where work is planned. The Master Schedule will be developed utilizing Primavera P6 scheduling software.

As part of our services for Task Order 5, Hill is working with the Assistant Program Manager, PATH Logistics Planning Group, and meeting with key staff responsible for delivery of PATH's Capital Program to secure the current schedules for the contract work that they are managing.

Jet Blue Terminal

Queens, NY

Client:
OTG at JFK T5 Venture, LLC

Service:
Contract Administration

Total Project Value:
$35 Million

Completion Date:
2008

Reference:
Port Authority of New York and New Jersey

Emanuel Ciminiello,
Assistant Resident Engineer

[redacted]

This project, at JFK International Airport's Terminal 5, encompassed the build-out of 22 food and beverage concessions throughout the terminal that serve as themed restaurants, bars, markets and kiosks. The concessions range in size from 600 to 4,000 SF and are scattered throughout the 635,000 SF terminal's departure and arrivals levels.

The project scope of work also included providing 10 interactive tables throughout the terminal that allow for the ordering of food and provide convenient work stations. The base building's core and shell infrastructure required mechanical, electrical and plumbing upgrades, modifications and additions in order to accommodate the unique spaces.

The project had inherently complex logistics, requirements, and limitations, which necessitated detailed, hands-on management by Hill's CM team. The project schedule was very aggressive, access was limited, work had to be completed in secured areas, and the work had to be performed while the international airport—one of the busiest in the world—remained fully operational. The project's tight schedule demanded 20-hour working shifts, which required the Hill team to overlap resources and supervision, thus ensuring that its management effort was consistent and that the flow of communication and project information was not interrupted. Hill also intervened to supplement supervision when the general contracting team's coverage was lacking. Hill also interpreted the design intent for the subcontractors, and advised on safety and quality assurance matters.

The degree of complexity was increased by an inflexibility of federal, state and regional construction and logistical protocols along with stiff regulatory codes. By implementing an open forum style meeting with all parties, Hill discussed all issues with the airport, regulatory agencies, the owner and the entire project team to ensure that the project complied with regulations, but that the regulatory process did not inordinately slow the project's progress.

City Hall Renovations

New York, NY

Client:
New York Department of Design and Construction (NYCDDC)

Service:
Project Management
Construction Management

Total Project Value:
$90 million

Completion Date:
2011

Green Rating:
Silver Planned

Reference:
New York City Department of Design and Construction

Sergio O Silveira, RA, Assistant Commissioner

[redacted]

When the New York Department of Design and Construction (NYCDDC) realized the need to restore New York's renowned City Hall, they selected Hill International to provide project and construction management for the 70,000 SF project, recognizing that expertise in government projects and the ability to work under close scrutiny from the public eye would be needed to successfully guide them through the the highly publicized, $90 million project.

Built in 1812, City Hall is among the nation's oldest governmental facilities still in continuous use. As the first major upgrade to the building's infrastructure in nearly 100 years, the project faced several unique challenges, including:

- An urban, public park setting characterized by heavy tourist traffic, limited site access, and heightened security protocals.
- Inter-agency coordination between the NYCDDC, the Mayor's office, the New York Public Design Commission, the NYPD, the New York Parks Department, and the New York Transit Authority, among others.
- A fixed date for completion and requirement to keep the Mayor's office in full business operation for the duration of the project.
- Advanced measures for the protection, preservation, and restoration of priceless historic interiors, artwork, and artifacts
- Management of a large project team of over a dozen specialty contractors.

#7 Subway Line Extension

New York, NY

Client:
Metropolitan Transportation Authority (MTA)

Service:
Construction Management

Total Project Value:
$2.1 Billion

Completion Date:
2013

Reference:
Metropolitan Transportation Authority (MTA)

Paul Matthews, PE,
Construction Manager
[redacted]

The No. 7 Subway Line Extension project will provide transit access to the West Side of Manhattan, including the Jacob Javits Convention Center, by extending the No. 7 Line westward from Times Square under West 41st Street and southward along 11th Avenue to the southerly terminus at West 25th Street. The planned extension provides 9,432 feet of tunnel to accommodate a two-track railroad with two lay-up tracks for storage of three trains each. The extension also provides for two new stations: an intermediate station at West 41st Street and 10th Avenue and a two-track terminal station on 11th Avenue at West 34th Street. The No.7 Subway Line Extension will transform the Hudson Yards into vibrant 24-hour neighborhood containing a mix of commercial, residential, retail, and recreational uses while enhancing the vitality of New York City as a whole.

The scope of work includes two 22.5-foot-diameter bored tunnels and a station structure (34th Street Station) approximately 66 feet by 960 feet, extending about 110 feet below ground level. Two interlocking structures, constructed in rock-by-mining method, will be connected to the 34th Street Station structure. The intermediate station at West 41st Street and Tenth Avenue includes five cross passages to connect the two running tunnels, and underpinning and structural modifications of the existing 8th Avenue subway structure will be performed.

The Hill/LiRo/HDR Joint Venture is responsible for providing construction management services during all tunneling work and during construction of all facilities and infrastructure including track, and rail systems and stations. Hill is also providing project controls services using an earned value management system (EVMS) integrated with Primavera resource/cost-loaded schedule software, to closely monitor the program schedule and budget, and Constructware document controls software, to organize the program documents. The endeavor also requires intensive coordination between multiple stakeholders and city agencies.

New Jersey Transit
Construction Management TOC/GEC Services

Newark, NJ

Client:
New Jersey Transit

Service:
Construction Management
Estimating

Total Project Construction Value:
$260 Million

Completion Date:
Ongoing

Reference:
AMTRAK

James Savarese, Deputy Division Engineer, Projects
[redacted]

Hill International, Inc. is providing On-Call Construction Management Services on a task order basis for various NJ TRANSIT (NJT) projects. Hill has successfully completed four task order contracts over ten years and has been awarded a fifth 3-year contract for a variety of NJT projects. As NJT's General Engineering Consultant (GEC) and Task Order Contract (TOC) Consultant, Hill's services were provided on an on-call basis. The range of services included construction and project management, design and constructibility reviews, scheduling, cost estimating, construction administration, site inspection, shop drawing review, document control, and change order and claims assistance for the construction and renovation of existing rail facilities and rail systems. Representative assignments included:

- **Newark City Subway Broad Street Extension MOS-1:** project management services
- **Newark City Subway Track Rehabilitation:** construction management services
- **Newark City Subway Signal Modernization:** construction management services
- **Newark City Subway Overhead Contact System:** construction inspection services
- **Newark City Subway Penn Station Traction Power Negative Return:** CM services
- **Hackensack River Bridge Fender Repair:** construction inspection services
- **Modernization of Newark Penn Station:** CM and inspection services
- **Rehabilitation of the North Jersey Coastal Line (NJCL) Woodbridge Train Station:** construction management services
- **Rehabilitation of the NJCL Avenel Station:** construction management services
- **Newark Penn Station ADA Project:** claims analysis support services
- **Metropark Station Rehabilitation Project:** economic feasibility study and PLA
- **NCS Overhead Contact System Conversion at Orange Street and Central Avenue Segments:** construction management services
- **Paterson Station ADA Improvements:** constructability and design review services
- **NJCL Traction Return Power Mitigation Project:** construction management services
- **NJCL Middletown Station Improvements:** construction inspection services
- **Rehabilitation of the NJCL Long Branch Station:** construction management services

Port Authority of New York & New Jersey Headquarters

4 World Trade Center, New York, NY

Client:
STUDIOS Architecture

Service:
Cost Estimating
Project Scheduling

Total Project Value:
Confidential

Completion Date:
Ongoing

Reference:
STUDIOS Architecture

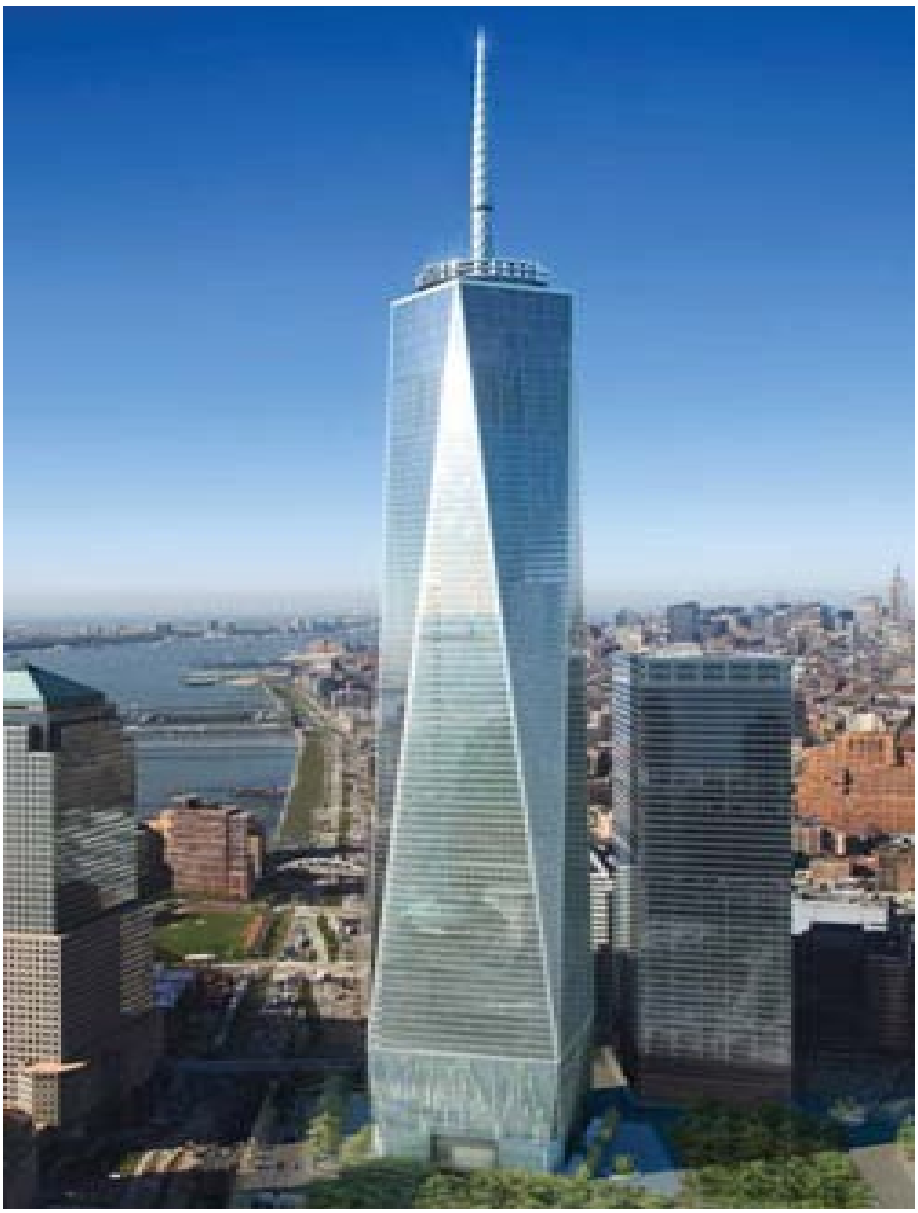
Adrianne Cartelli,
Associate Principal

[redacted]

ELLANA is responsible for the project cost estimating and scheduling services for the new corporate offices of the Port Authority of NY & NJ, consolidating about 1,700 Port Authority staff from multiple buildings in Manhattan and New Jersey in one central location (approximately 450,000sf) at 150 Greenwich Street in Manhattan. The offices will cover approximately 15 to 20 contiguous floors, 1 podium floor (approximately 35,000 square feet located on the retail level to include a cafeteria, conference center, and an emergency command post), and 1/3 of the subgrade space in the new World Trade Center - Tower 4 Building. In compliance with current PANYNJ sustainability objectives, all office buildings will comply with the World Trade Center Sustainable Guidelines, leading to a LEED® Gold rating.design reviews, estimating and scheduling for all contracts, identification of the interface points between each contract, maintenance of constant communication with the NJTA and State Police operations regarding staging areas, traffic flow, parking, building access, and security. The project was completed on schedule and within the NJTA budget.

World Trade Center Tower One

New York, NY



Client:
Tishman Construction Company

Service:
Cost Estimating
Change Order Management

Total Project Value:
Confidential

Completion Date:
Ongoing

Reference:
Tishman Construction Corporation

James Durkin, First Vice-President

[redacted]

ELLANA is providing cost estimating and project cost control services for the 2.6 million-sf, 102-story Tower One at the World Trade Center site. Services include assisting the Project Program Manager with independent estimate preparation for trade bid packages; bid reviews; estimate preparation for bulletins, addenda, and change orders; and tracking and updating budget costs. Tower One is being built according to World Trade Center Sustainable Design Guidelines and will, at a minimum, conform to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) standard.

PANYNJ Architectural Services Call-In for 2007-2010

New York, NY

Client:
William Nicholas
Boudova & Associates

Service:
Cost Estimating
Project Scheduling

Total Project Value:
Various

Completion Date:
2008

Reference:
William Nicholas
Boudova & Associates
Christopher Kovary, AIA
[redacted]

ELLANA provided cost estimating and scheduling services for the fit-out of Authority offices located at 115 Broadway and 116 Nassau Street in Manhattan.

LIRR East Side Access Project

New York, NY

Client:
Dragados-Judlau JV
MTA Capital Construction,
New York, NY

Service:
Construction Management

Total Project Value:
$190,000
(Engineering Fee)

Completion Date:
2010 to Date

Reference:
Gladys Lo, P.E., Judlau
Contracting Corp
[redacted]

The MTA is in the midst of an ambitious project to bring Long Island Rail Road trains into the Grand Central Station terminal via the East Side Access Project. The project was spurred by a study that showed that more than half of LIRR riders work closer to Grand Central than Penn Station. A new bi-level, eight-track tunnel will be excavated under Park Avenue, more than 90 feet (27 m) below the Metro-North track and more than 140 feet (43 m) below the surface. Reaching the street from the lowest level, more than 175 feet (53 m) deep, will take about 10 minutes. LIRR trains will access Park Avenue via the existing lower level of the 63rd Street Tunnel, connecting to its main line running through Sunnyside Yard in Queens. Extensions are being added on both the Manhattan and Queens sides.

For this project, M.P Engineering, P.C., developed and executed detailed monitoring plans and sequence of operations for jacking, load transfer, steel members and reframing to provide access room for escalator shaft wellways at 45th Street (Wellway 1), 46th Street (Wellway 2), 47th Street (Wellway 3), and 48th Street (Wellway 4). SJH also performed the field monitoring of the Load Transfer operations, and functioned as the onsite Professional Engineer for the GC.

"Call-In" Construction Management Services 2007-2009

Various Locations, NY & NJ

Client:
Port Authority of NY & NJ

Service:
Construction Management Inspection Services

Total Project Value:
$1.2 Million

Completion Date:
2008

Reference:
Port Authority of New York and New Jersey

William Kehoe,
Project Manager

[redacted]

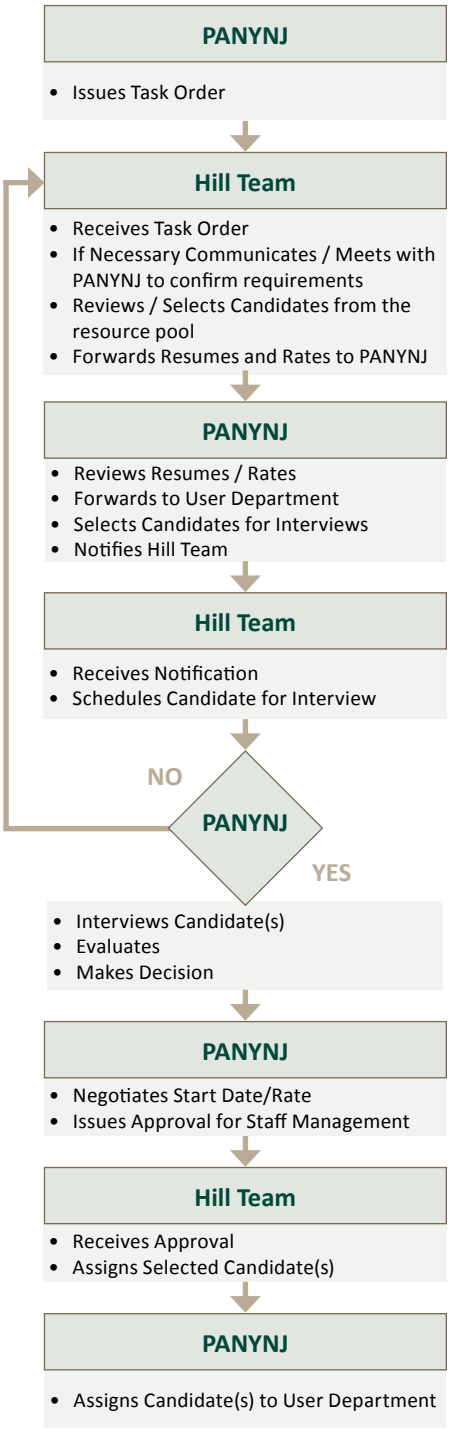
Services being provided under this contract generally consist of performing construction management & inspection services of structural steel, structural concrete, asphalt and concrete paving, painting of structural steel, electrical, mechanical, construction contract administration, constructability review, construction scheduling & cost estimating. To date KS Engineers, P.C. (KSE) has been given the following construction management assignments under this "Call-In" agreement:

- EWR 264.003 – Lower Level Expansion and B-1 Circulation - Project Scheduler. The scope of work of this contract is to develop the at-grade space in Terminal B into a new domestic baggage claim hall on the lower level of Terminal B, including two new substations. Approximate contractual amount of $53M. (09/2006 – 09/2009)
- LGA 124.029, ARFF – Assistant Resident Engineer responsible for electrical/mechanical building construction at the ARFF project and to work on other general LGA contracts including volume of electrical/mechanical work, including High Pressure Water Storage & Pump Station. (01/2008 – 2009)
- NJ Marine Terminal – Civil Inspector monitoring activities at Marine Terminal construction sites; includes installation, testing and inspecting civil works. Provides oversight to ensure construction progresses as scheduled and contract specifications are adhered to.(5/2008 – 2009)
- EWR, CTA Toll Plaza & Terminal B Renovations – Electrical Inspector responsible for the inspection of the installation and/or commissioning of electrical equipment (including high tension), communication and fire alarm systems, and electrical rehabilitation of existing building systems (including switchgears, switchboards, emergency generators, fire alarm systems). (06/2008 – 2009)

H Management Approach

Management Approach

Our Capability to Successfully Plan, Schedule, and Execute is unparalleled and we are committing our full resources to the success of this project and the work that our staff will be supporting. Hill is experienced at providing services on on-call contracts with many agencies that include the PANYNJ, New York MTA, and NJT. We know that a rapid and effective response will be expected when the Port issues task orders to include providing the right candidate resumes and rates. Carefully matching personnel assignments to performance requirements for every task, and maintaining a strong pool of in-house staff, will enable us to provide the required resources at the appropriate times, resulting in efficient, cost-effective, and highly productive services. Our organizational structure and procedures are based on long and successful experience on this type of contract, including over 1,000 task orders over the last several years. We understand the balance between staffing support and the organization required to manage and perform these contracts.



Our project Manager (PM) will serve as the single point of contact with the PANYNJ staff requiring staffing support. Upon receipt of a task order the PM will evaluate the requirements and match them with staff in the resource pool, coordinating with our sub consultants, we will make every effort to quickly and efficiently respond with numerous highly qualified candidate resumes that are within the task orders rates.

Upon successful placement of staff the PM will establish and maintain communications with both the newly assigned staff and the PANYNJ supervisor to ensure that services provided are in accordance with the task order and to the satisfaction of the PANYNJ. Throughout the duration of the task order this communication will ensure the highest level of service and mission accomplishment.

The Hill team has the background, skills, and experience to carry out this project. Three key elements required for successful performance of on-call services are:

- To respond with the right personnel in a timely fashion and at the right rate.
- To provide technically competent and experienced architects, engineers, technicians, and construction management personnel to perform the specific tasks as requested in the task order and to work as a team with the owner.

- To maintain continuous effective communication with the PANYNJ and our staff providing the services to ensure overall satisfaction and success.

In response to each proposed assignment, Hill will review the requirements, select the right candidates, and will submit to the Port Authority along with their rates for the final assignment. As the resumes provided in this proposal indicate, our proposed construction management staff has extensive relevant experience in new construction, additions, and renovations. ***Our staff also has considerable experience working on Port Authority projects.***

The resumes contained in this proposal highlight the type of staff we can provide. We have extensive additional resources that can be brought in to provide expert professional services as necessary. The Hill team has a full complement of staff expertise, including structural, civil, mechanical, and electrical disciplines. Our construction management staff includes project managers, construction managers, field engineers, inspectors, office engineers, estimators, schedulers, contract managers, and safety engineers. Many of our personnel and management staff are multi-faceted in their skills and expertise and can be assigned to work in one or more roles depending on the size and complexity of the task order. A vast majority of our staff are licensed as Professional Engineers and Architects. Others possess professional certifications that include PMP, CCM, LEED AP.

Affiliates

Business Name	Place of Incorporation	EIN	Principal Office Address
Hill International, Inc.	Delaware	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Afghanistan Branch			
Oman Branch			
Trinidad Branch (registered in Trinidad)			Abercromby Court, 86 Abercromby Street, Port of Spain, Trinidad W.I.
6204902 Canada Inc.	Canada	[redacted]	3660 Hurontario Street 6th Floor, Mississauga, Ontario, L5B3C4, Canada
Asia/Pacific Hill International Holding PTE Ltd.	Singapore	[redacted]	33 West Coast Rise, Singapore 127476 Tel: 856-810-6200 Fax: 856-810-0404
Philippines Branch		N/A	6758 Ayala Avenue, 1226 Makati City
Beijing Hill International Construction Consulting Company Limited	China		Unit 17, 17F PingAn International Financial Center Tower B, No. 1-3, XinYuan South Road, Chaoyang District, Beijing 100027, China Tel: +86-10-5829 1808 Fax: +86-10-5829 1999
Berger Hill Limited (JV Company)	Malta		Palazzo Pietro Stiges', 90, Strait Street, Valletta VLT 1436, Malta
Qatar Branch		N/A	
Egypt Branch		N/A	
Boyken International, Inc.	Georgia	[redacted]	400 Northridge Road, Suite 1200, Atlanta, Georgia 30350 Tel: 770- 992-3210 Fax: 770-002-1489
Boyken International de Mexico	Mexico	NA	400 Northridge Road, Suite 1200, Atlanta, Georgia 30350 Tel: 770- 992-3210 Fax: 770-002-1489
Boyken International Pty S.A.	Panama	NA	400 Northridge Road, Suite 1200, Atlanta, Georgia 30350 Tel: 770- 992-3210 Fax: 770-002-1489
Boyken Carribbean Inc.	US	[redacted]	400 Northridge Road, Suite 1200, Atlanta, Georgia 30350 Tel: 770- 992-3210 Fax: 770-002-1489
Engineering S.A.	Brazil		
Gerens Hill Gestion de Activos, S.A.	Spain	[redacted]	8 Jose Echegaray Street, Building 3, 1a, Las Rozas (Madrid)
Gerens Hill International, S.A.	Spain	[redacted]	8 Jose Echegaray Street, Building 3, 1a, Las Rozas (Madrid)
Algeria - Permanent Establishment for a Secific Purpose -Specific Project			Project: Hotels Ibis/Novotel, Square Hadj Ali, 25000 Constantine
Hill Construction Consultancy Pte. Ltd. *(p/k/a Singapore Hill International Pte Limited (thru 2/3/10)* *p/k/a James R. Knowles (Singapore) Pte Ltd)*	Singapore	[redacted]	331 North Bridge Road, #12 01/02, Odeon Towers, Singapore 188720 Tel: +00 65 6338 2455 Fax: +00 65 6339 8568
Hill Construction Management Ltd.	Serbia	[redacted]	Bulevar Mihajla Pupina str No. 1OV/423, 11070 Novi Beograd-- Tel: 856-810-6200 -- Fax: 856-810-0404
Hill Fenton Development, Ltd. (JV Company)	British Virgin Islands		30 DeCastro Street, Road Town, Tortola, British Virgin Islands
Hill International (Anatolia) Ltd.	Turkey	[redacted]	closed 5/15/09 Documents must be kept 5 years
Hill International (Australia) Pty Limited *(p/k/a Knowles Australia Pty Limited)*	Australia	[redacted]	ASN Building, Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia Tel: +00 612-9222-1799 Fax: +00 612-9222-1788
Hill International (Azerbaijan) Limited	Azerbaijan	[redacted]	Baker & McKenzie - CIS Limited, 96, Nizami Street, The Landmark Building, Baku AZ1010, Azerbaijan (Job site): 78 Parliament Ave, Baku, Azebaijan
Hill International (Bucharest) SRL	Romania	[redacted]	Bucharest, district 1, 17-19 Dr. Iacob Felix, 3rd Floor, Romania Tel: +40-21-319-5248 Fax: +40-21-319-5268 Contact: Costas Gravanis
Hill International (Deutschland) GmbH *(p/k/a James R Knowles (Deutschland) GmbH)*	Germany	[redacted]	Prinzregentenstr. 20-22, D-80538 Munich, Germany
Dusseldorf Branch	Germany	N/A	Zweigniederlassung,, Dusseldorf 40213, Geschaftsanschrift Graf Adof Platz 15, D 40213, Dusseldorf Contact: Thomas Hans-Hofbauer
Hill International (Egypt)	Egypt		39 Beirut Street, Heliopolis 11341, Cairo, Egypt Tel: 856-810-6200 Fax: 856-810-0404
Hill International (Egypt) Ltd.	British Virgin Islands	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Hill International (Georgia) Ltd.	Georgia	[redacted]	Bucharest, district 1, 17-19 Dr. Iacob Felix, 3rd Floor, Romania Tel: +40-21-319-5259 Fax: +40-21-319-5279 Contact: Costas Gravanis
Hill International (Hellas), S.A.	Greece	[redacted]	37A Kifissias Avenue, 2nd Floor, Office 203, Maroussi 151 23 , Athens, Greece Tel: +30-210-610-5171 -- Fax: +30-210-610-5172
Hill International (Hong Kong) Ltd. *(p/k/a Hill International (HK) Limited* *p/k/a Pickavance Consulting Limited)*	Hong Kong	[redacted]	2401 Wing on Centre, 111 Connaught Road, Central, Hong Kong -- Tel: +852-2542-2818 Fax: +852-2541-4648
Japan Branch	Japan	N/A	2401 Wing on Centre, 111 Connaught Road, Central, Hong Kong Tel: +852-2542-2818 Fax: +852-2541-4648
Hill International (Kuwait) Ltd.	Malta	[redacted]	Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT 1463, Malta
Hill International (Libya) Ltd.	Malta	[redacted]	Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT1463, Malta Tel: 856-810-6200 Fax: 856-810-0404
Registration in Libya		[redacted]	Ben Ghazi, Garyounis District, Building No. 126, Flat No. 7
Hill International (Middle East) Ltd. *(p/k/a Hill International (Overseas) Ltd.* *p/k/a Hill International (Asia) Ltd.)*	British Virgin Islands	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Malta : Mind and Management moved to Malta eff 12/5/2008 and the company registered as an Overseas Company in Malta	Malta		Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT 1463, Malta

Business Name	Place of Incorporation	EIN	Principal Office Address
Abu Dhabi Branch		N/A	Suite 1601, 16th Floor, Butti Al Otaiba Building, Sheikh Khalifa Street, Abu Dhabi, UAE
Bahrain Branch		N/A	Almoayed House at Seef, Office 41, Bldg No 2332 Road No 2830, Block No 428 Alseef District Kingdom of Bahrain
Dubai Branch		N/A	Sultan Business Centre, Offices 501, Plot number 11 , Oud Metha Road Dubai (Sec Cert. 7 Mar 08) Contact: Samantha Sogolo
Kuwait Branch		N/A	c/o System Development and Project Management, PO Box 13385 Kifan, 71954, Kuwait Contact: Samantha Sogolo
Morocco Branch		N/A	Contact: Samantha Sogolo
Qatar Branch		N/A	Al Jaber Tower, 4th Floor, Unit 4, Museum Road, Old Salata, PO Box 21835 Doha, Qatar
Saudi Arabia Branch		N/A	Bin Homran Centre, Al Thalia Street,Tower (A), Fourth Floor Office Number 410A, P.O. Box 50426 Jeddah 21523, Saudi Arabia Contact: Samantha Sogolo
Hill International (Morocco) s.a.r.l.	Morocco	[redacted]	Corner Jean Jaurex Str. & Roudani Blvd. 7th Floor, Gauthier district, 20000, Casablanca, Morocco
Hill International (North Africa) Ltd.	Egypt	[redacted]	City Stars, Star Capital 8,2nd Flr Offices 23 & 24, El Forsan St Nasr City, Cairo, Egypt Tel:+202 24801900 Fax: +202 24801903
Hill International (Puerto Rico), Inc.	Delaware	[redacted]	303 Lippincott Centre, Marlton, NJ 08053 Tel: 856-810-6200 Fax: 856-810-0404
Hill International (Syria) LLC	Syria		Damascus – Mazzeh Sharqeya – Al Farabi Street – Al Farra Building
Hill International (Syria) Ltd.	Malta	[redacted]	"Palazzo Pietro Stiges", 90 Strait Street, Valletta VLT1463, Malta
Hill International (UK) Ltd.	England	[redacted]	1 London Bridge, London, SE1 9BG Tel: +44-20-7089-7020 Fax: +44-20-7089-7030
Romania Branch		N/A	Municipiul Bucuresti, Sector 1, B-DUL Nicolae Titulescu, Nr. 1, Bl.A7, Sc.4, Et.1, Ap.96
Hill International Brasil Participacoes LTDA	Brazil		Rua Henri Dunant, 1031, sala 06, Chacara Santo Antonio, Sao Paulo, SP., Brazil
Hill International de Mexico, SA de CV *(p/k/a Gerencia International de Proyectos, SA de C.V.)*	Mexico		Avenida Nichupte, 19, Supermanzana 19, Manzana 2, Plaza Galerias Infinity 1a, of. 107, Cancun, Quintana Roo, Mexico, Cp. 775500
Hill International Development Inc	Delaware	[redacted]	
Hill International Development Ltd.	British Virgin Islands		303 Lippincott Centre, Marlton, NJ 08053
Hill International Development (II) Ltd.	British Virgin Islands		303 Lippincott Centre, Marlton, NJ 08053
Hill International Holdings Ltd	Malta	[redacted]	Palazzo Pietro Stiges, 90 Strait Street, Valletta VLT 1463, Malta
Hill International Hospitality (Americas) Ltd.	British Virgin Islands		303 Lippincott Center, Marlton, NJ 08053
Hill International LLC (Oman)	Oman		
Hill International Malaysia Sdn Bhd *(p/k/a James R. Knowles (M) Sdn Bhd)*	Malaysia	[redacted]	Level 7, Unit 7, Block 3B, Plaza Sentral, Jalan Stesen Sentral 5, Kuala Lumpur Sentral, 50470 Kuala Lumpur Tel: +603-2274-0917 Fax: +603-2274-0918
Hill International N.V.	Netherlands		
Hill International Petrol (Egypt) Ltd. (JV Company)	Egypt		City Stars, Star Capital 8, 2nd Floor, Office 23 & 24, El Forsan St., Nasr City, Cairo, Egypt Contact: Sarah Hussenein
Hill International Project Management (India) Private Limited	India		
Hill International Real Estate, LLC	Pennsylvania	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Hill International Real Estate Partners, LP	Pennsylvania	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
Hill International Rijeka d.o.o.	Croatia	[redacted]	Rijeka, Nikole, Tesle 9, Croatia Tel: 856-810-6200 Fax: 856-810-0404
Hill International S.A.	Luxembourg	N/A	41 Boulevard Prince Henri L 1724 Luxembourg Tel: 011-352-46-83-83 Fax: 011-352-46-84-84
Greek Branch (registered in Greece)		N/A	62 Kifissias Avenue, Maroussi,Athens 151 25, Greece
Kosovo Branch			
Kursdistan Branch			
Latvia Branch (registered in Latvia)		N/A	13-36 Dzirnavu Street, Riga, LV-1010
Romania Branch		N/A	Municipiul Bucuresti, Sector 1, B-DUL Nicolae Titulescu, Nr. 1, Bl.A7, Sc.4, Et.1, Ap.96
Hill International Services Ltd.	British Virgin Islands	[redacted]	30 DeCastro Street, Road Town, Tortola, BVI Tel: 856-810-6200 Fax: 856-810-0404
Hill International Sp. zo.o *(p/k/a Euromost Polska Sp. zo.o)*	Poland	[redacted]	Atrium Plaza, Jana Pawla II 29, 00-867 Warsaw, Poland Tel: +48 22 58 13 777 Fax: +48 22 58 13 778
Hill International Vietnam Co. Limited	Vietnam	[redacted]	Post Box No. 33, Thank Khe Post Office, 251 Nguyen Van Linh St., Danang City, Vietnam
Hill Jianke Project Management (Shanghai) Co. Ltd. (JV Company)	China		Room No. 208, Unit F, Building 5, No. 7 Xiushan Road, Chongming Industrial Park, Chongming County, Shanghai, Ching
Hill Redwood Development Corp. (JV Company)	Delaware	[redacted]	303 Lippincott Centre, Marlton, NJ 08053 also c/o ZAC Management Group LLC, 101 West Avenue, Suite 300, Jenkintown, PA 19046

Business Name	Place of Incorporation	EIN	Principal Office Address
Hill Redwood Development, Ltd (JV Company)	British Virgin Islands	[redacted]	30 de Castro Street, Road Town, Tortola, British Virgin Islands
HillTMG Project and Construction Management EJSC (JV Company)	Egypt		36 Mosadak Street, Al-Doki, Giza
HillStone International, LLC	Delaware	[redacted]	303 Lippincott Centre, Marlton, NJ 08053
HRD Services Limited	British Virgin Islands	[redacted]	30 de Castro Street, Road Town, Tortola, British Virgin Islands
I M Petroleum Services Ltd.	British Virgin Islands		30 de Castro Street, Road Town, Tortola, British Virgin Islands
James R. Knowles (Australian Holdings) Pty Limited	Australia	[redacted]	Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia Tel: +00 613 9699 5124 -- Fax: +00 61 3 9699 5104 Contact: Anna Empy
James R. Knowles (Egypt) Limited	Egypt	[redacted]	119 Misr Helwan Agricultural Road, Maadi, Cairo, Flat 42, Egypt Tel: +20-2-525-4115 Fax: +20-2-525-4118
James R. Knowles (Holdings) Limited	England	[redacted]	Vistorm House, 3200 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4BU Tel: +44-1928-756500 Fax: +44-1928-756501
James R. Knowles (Hong Kong) Limited	Hong Kong	[redacted]	2401 Wing on Centre, 111 Connaught Road, Central, Hong Kong Tel: +852-2542-2818 Fax: +852-2541-4648
James R. Knowles (Middle East) Limited	Cyprus	[redacted]	
James R. Knowles (NSW) Pty Limited	Australia	[redacted]	Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia Tel: +00 613 9699 5124 Fax: +00 61 3 9699 5104
James R. Knowles (Overseas) Limited	Cyprus	[redacted]	
James R. Knowles (Thailand) Ltd.	Thailand	[redacted]	
James R. Knowles (Worldwide) Limited	England	[redacted]	Vistorm House, 3200 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4BU Tel: +44-1928-756500 Fax: +44-1928-756501
John Shreeves and Partners Limited	England		1 London Bridge, SE 1, 9BG, London EC1M 5RR Tel: +44-20-7596-0000 Fax: +44-20-7596-0100
KJM & Associates, Ltd.	Washington	[redacted]	500 108th Avenue NW, Suite 1000, Bellevue, WA 98004 Tel: 425-451-3881 Fax: 425-454-8965
Knowles Consultancy Services Inc.	Canada	[redacted]	15999 Hurontario Street, Suite 106, Mississauga, Ontario L5G451 Canada Tel: 905-804-1958 Fax: 905-804-9327
Knowles Director Inc.	Marshall Islands		Ajeltake Road, Ajeltak Island, Majuro, Marshall Islands MH96960 Tel: 856-810-6200 Fax: 856-810-0404
Knowles Hill Pty Limited *(p/k/a Knowles Lawyers Pty Limited)*	Australia	[redacted]	Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia
Knowles Limited	England	[redacted]	
Knowles North America Holdings Inc.	Canada	[redacted]	3660 Hurontario Street, 6th Floor, Mississauga, Ontario L5B3C4
Knowles Secretary Inc.	Marshall Islands		Ajeltake Road, Ajeltak Island, Majuro, Marshall Islands MH96960 Tel: 856-810-6200 Fax: 856-810-0404
KRJ Consulting Limited *(p/k/a James R Knowles Limited)*	England	[redacted]	Vistorm House, 3200 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4BU Tel: +44-1928-756500 Fax: +44-1928-756501
Makan Hill International Ltd. (JV Company)	Cayman Islands		Pending: Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands
McLachlan Lister Pty Ltd.	Australia	[redacted]	Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia
McLachlan Lister Services Pty Ltd.	Australia	[redacted]	Suite 1, Level 1, 1-5 Hickson Road, The Rocks, Sydney NSW 2000, Australia
McLachlan Lister Services Unit Trust	Australia	N/A	N/A
Mediterranean Leisure (Egypt) Ltd.	British Virgin Islands		30 de Castro Street, Wickhams Cay 1, Road Town, Tortola, British Virgin Islands
PCI Group, LLC	Nevada	[redacted]	10801 West Charleston, Suite 650, Las Vegas, NV 89135 Tel: 702-515-7490 Fax: 702-515-7491
SIA Hill International Baltic	Latvia	[redacted]	Elizabetes str.15-1 Riga, Latvia LV-1010 Tel: 856-810-6200 Fax: 856-810-0404
Stanley Baker Hill (Iraq), Inc.	Delaware		303 Lippincott Centre, Marlton, NJ 08053 Tel: 856-810-6200 Fax: 856-810-0404
Stanley Baker Hill, LLC (JV Company)	Delaware	[redacted]	225 Iowa Avenue, Muscatine, IA Tel: 563-264-6204 Fax: 563-264-6658
TCM Group	California	[redacted]	3130 B Inland Empire Blvd, Ontario, CA 91764
Transportation Construction Services, Inc.	Delaware	[redacted]	303 Lippincott Centre, Marlton, NJ 08053 -- Tel: 856-810-6200 -- Fax: 856-810-0404
Trident Development Enterprise, LLC	Florida		4901 Vineland Road, Orlando, FL 32811 Tel: 407-756-7505
TRS Consultants, Inc.	California	[redacted]	5000 Executive Parkway, Suite 430, San Ramon, CA 94583 Tel: 925-275-9870 Fax: 925-275-9930
Yeil Hill International CM Ltd. (JV Company)	Korea		Lotte Kwanak Tower, room 402, 395-67 Shindaebang-dong, Dongjak-gu, Seoul, Korea 156-711 Tel: 82-2-849-5660 Fax: 82-2-849-5661

J Conflict of Interest

Conflict of Interest

Neither Hill International, Inc., our subconsultant team members, nor our project personnel, have any conflict of interest that would preclude us from performing the services required under this contract without the appearance of any impropriety.

K Agreement to Terms and Conditions

Agreement to Terms and Conditions

Hill International, Inc. agrees with the form of contract and all its terms and conditions.

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The Port Authority of New York & New Jersey

RFP Number 24440
May 26, 2011

Request for Proposals

For the Performance of Expert Professional Construction Management and Related Technical Services As Requested On A "Call-In" Basis During 2011-2014

Jacobs Engineering New York Inc.
260 Madison Avenue #1200
New York, NY 10016 USA
1.212.268.1500 Fax 1.212.481.9484

May 26, 2011

Tim Volonakis
Manager
Professional, Technical and Advisory Services Division
Procurement Department
The Port Authority of New York & New Jersey
One Madison Avenue
New York, NY 10010

RE: Technical Response for the Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014
RFP Number 24440

Dear Mr. Volonakis:

Jacobs is pleased to submit our Technical Proposal to provide Construction Management Services to the Port Authority of New York and New Jersey for RFP #24440 and Addendum #1, 2, & 3. We offer PANYNJ the depth of services and resources to make this Call-In construction contract an unparalleled success. Jacobs is well qualified to deliver the level of Construction Management services necessary to complete any assignment while delivering value.

We meet and exceed the proposer requirements listed in the above referenced RFP and we have demonstrated in this submission our compliance with the following qualification requirements:

- ✓ We have offices in New York/New Jersey Metropolitan Area with at least 50 individuals on staff experienced in performing construction management and/or construction inspection services in NY/NJ
- ✓ We have a Certificate of Authorization to practice Professional Engineering in the states of New York and/or New Jersey
- ✓ Our team has Construction Inspection staff experienced in performing construction inspection services in at least one of the following disciplines: Civil, Structural, Electrical and Mechanical Engineering and include the following:

  1. At least ten (10) engineers/architects licensed in the states of NY/NJ – Our team includes 13
  2. At least ten (10) must be ACI Concrete Construction Special Inspectors – Our team includes 11
  3. At least three (3) must be ICC Certified as Structural Steel and Bolting Inspectors – Our team includes 5
  4. At least one (1) must be NACE Level 1 coatings certified – Our team includes 2

In addition to compliance with the proposer requirements listed above, the Jacobs team brings value in delivering this contract with a focus on:

- **Projects will achieve your functional and performance goals.** Through our extensive relevant PANYNJ experience, we have routinely captured lessons learned and best practices, which we will carry forward to drive a unique level of quality and efficiency into each assignment.
- **Projects will finish on time.** We will continue to aggressively manage project schedules from pre-design phase through occupancy. Our staff of PANYNJ experienced professionals understands the importance of staying on schedule.
- **Projects will finish in budget.** We will continue to work collaboratively with the designers to design to budget and contractors to minimize the impact of changes. You will always know where the project budget stands. If the budget is threatened, we will lead the effort to mitigate the threat.
- **Projects will achieve the high performance green building goals of PANYNJ.** Our team includes LEED certified professionals in every discipline. We are expert in energy management, conservation and alternative energy sources. We will bring best practices learned on our projects throughout the world. We also bring one of the nations foremost Commissioning services to our work to further enhance the sustainability goals of these projects.
- **Our efficiency and depth of resources saves you money.** We are expert at organizing our approach and resource delivery to provide the right support at the right time. We have all of the necessary expertise in-house and will continue to focus those resources in an efficient economical manner insuring that you only pay for the exact support you need. We exceed your Prequalification Requirements and identify 73 experienced staff members, 13 professional engineers/architects, 11 ACI Concrete Special Inspectors, 5 ICC Certified Structural Steel and Bolting Inspectors, 2 NACE Level 1Certified individuals.

In closing, Jacobs offers an extremely qualified team and an approach based on relevant experience and Application of Best Practices, and we are excited about the opportunity to once again support the Port Authority of New York and New Jersey.

Sincerely,

Vincent A. Mangiere, PE
Chief Executive Officer
Jacobs Engineering New York Inc.

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Section A

Attachment B

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

260 Madison Avenue, Suite 1200, N

(Company)

(Signature)

Jacobs Engineering New York Inc.

(Title)

(Date)

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DO NOT RETYPE.

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Section B

Attachment C

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #24440)

1. Company Name (print or type):

   Jacobs Engineering New York Inc.

2. Business Address (to receive mail for this RFP):

   260 Madison Avenue, Suite 1200, New York, NY 10016

3. Business Telephone Number: 212-268-1500

4. Business Fax Number: 212-481-9484

5. Firm website: www.jacobs.com

6. Federal Employer Identification Number (EIN) [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 02 / 09 / 1934

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See Section I

9. Officer or Principal of Firm and Title:

   Vincent A. Mangiere, PE, Chief Executive Officer

10. Name, telephone number, and email address of contact for questions:

    Vincent A. Mangiere, 212-268-1500

    vinny.mangiere@jacobs.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☑ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

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Section C

Compliance With Prequalification Requirements

C. COMPLIANCE WITH PREQUALIFICATION REQUIREMENTS

Currently Jacobs maintains two offices in the heart of Midtown Manhattan, combined they include over 300 professionals providing Construction Management and Design services to our local clients. Services in connection with this Construction Management "Call-In" program will be delivered through our 260 Madison Avenue office. Our New York Office brings an exceptional combination of relevant local experience and IDIQ experience. In recent years the New York office has managed approximately $2 billion in construction value for clients such as Port Authority of New York and New Jersey, GSA Region 2, the State of New York Office of General Services, DASNY, City of New York Department of Design & Construction, Nassau County, MTA, IBM, JP Morgan/Chase, and Polytechnic University, Below, and in our Key Personnel Matrix in Section E, we highlight how we meet or exceed PANYNJ requirements.

	Prequalification Category	Team Meets or Exceeds Criteria	Actual Team Number
A.	Office in New York/New Jersey Metropolitan Area with at least 50 individuals on staff experienced in performing construction management and/or construction inspection services in NY/NJ	✓	300
B.	Firms must have a Certificate of Authorization to practice Professional Engineering in the states of New York and/or New Jersey	✓	Yes
C.	Construction Inspection staff shall be experienced in performing construction inspection services in at least one of the following disciplines: Civil, Structural, Electrical and Mechanical Engineering and include the following:	✓	Yes
	1. At least ten (10) engineers/architects licensed in the states of New York and/or New Jersey	✓	13
	2. At least ten (10) must be ACI Concrete Construction Special Inspectors	✓	11
	3. At least three (3) must be ICC Certified as Structural Steel and Bolting Inspectors	✓	5
	4. At least one (1) must be NACE Level 1 coatings certified	✓	2

Professional Engineers/Registered Architect New York/New Jersey			
1	Rich LaRuffa, PE Value Engineer-Jacobs	40	Professional Engineer NY [redacted]
2	Robert Bauco, PE Project Manager-Jacobs	17	Professional Engineer NY [redacted]
3	Richard Wenger, PE Project Manager-Jacobs	19	Professional Engineer NY [redacted]
4	David Leymeister, PE Project Manager-Jacobs	21	Professional Engineer NY [redacted]
5	Nejat Hedyat, PE Resident Engineer-Jacobs	38	Professional Engineer NY [redacted]
6	Craig Lewis, PE Structural Engineer-Jacobs	32	Professional Engineer NY [redacted]
7	Brad Hollingsworth, PE Mechanical Engineer-Jacobs	12	Professional Engineer NY [redacted]
8	William Moser, PE Sr. Resident Engineer-Jacobs	31	Professional Engineer NY [redacted]
9	Mark Platz, PE Construction Manager-Jacobs	36	Professional Engineer NY [redacted]
10	Dipak D. Shah, PE Resident Engineer-Jacobs	31	Professional Engineer NY [redacted]
11	J. Leo McGlynn, PE Railroad Engineer-Jacobs	32	Professional Engineer NJ [redacted]
12	Reza Noorishad, PE Resident Engineer-Jacobs	26	Professional Engineer NJ [redacted]
13	John Howell, RA IT Design Review-Jacobs	25	Registered Architect [redacted]
ACI Concrete Construction Special Inspectors			
1	Michael Stevens Structural Engineer-Jacobs	4	ACI Concrete Construction Special Inspector Expires 5-26-2015
2	Robert Morris Senior Inspector-Jacobs	24	ACI Concrete Construction Special Inspector Expires 4-13-2016
3	Dean Lerescu Senior Inspector-Jacobs	30	ACI Concrete Construction Special Inspector Expires 4-7-2016
4	Paul DeCasas Inspector-Jacobs	26	ACI Concrete Construction Special Inspector Expires 5-26-2015
5	Henry Heredia Inspector-Jacobs	13	ACI Concrete Construction Special Inspector Expires 4-7-2016
6	Kwesi Amegah Senior Inspector-KSE	20	ACI Concrete Construction Special Inspector Expires 3-11-2015
7	Duke Samala Senior Inspector-KSE	11	ACI Concrete Construction Special Inspector Expires 7-1-2014
8	Jeanne Brady Senior Inspector-KSE	16	ACI Concrete Construction Special Inspector Expires 12-9-2013
9	Kuldip Sachdev Senior Inspector-KSE	30	ACI Concrete Construction Special Inspector Expires 6-16-2014
10	Rochelle Lancey Senior Inspector-KSE	29	ACI Concrete Construction Special Inspector Expires 6-1-2014
11	David Post Construction Inspector-SAVIN	24	ACI Concrete Construction Special Inspector Expires 5-27-2014

ICC Certified Structural Steel & Bolting Inspectors			
1	Steve Goss Special Inspector-Jacobs	21	ICC Certified Structural Steel & Bolting Inspector Expires 2012
2	Michael Caraway Field Engineer-Jacobs	6	ICC Certified Structural Steel & Bolting Inspector Expires 2012
3	Carl Coyle Special Inspector-KTA	15	ICC Certified Structural Steel & Bolting Inspector Expires 2012
4	Michael Maggio Special Inspector-KSE	10	ICC Certified Structural Steel & Bolting Inspector Expires 2013
5	Shawn Heaney, EIT Special Inspector-KSE	8	ICC Certified Structural Steel & Bolting Inspector Expires 2013
NACE Level 1 Coatings Certified			
1	Shawn Benedict Special Inspector-Jacobs	26	NACE Level 1, 2 and 3 Coatings Certified Expires 2013
2	Ahmed Husain Zubair Special Inspector-KSE	14	NACE Level 1,2, and 3 Coatings Certified Expires 2013

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Section D

Multiplier Breakdown

D. JACOBS MULTIPLIER BREAKDOWN

The "multiplier" referred to in the first line of subparagraph 9.A of the accompanying standard agreement including a breakdown of said multiplier, indicating all of its components (e.g., vacation, holiday, sick pay, workers' compensation, office rent, insurance, profit).

Jacobs Multiplier at Port Authority Offices

Location	D/L	Fringe	Sub Total	G&A	Sub Total	Profit	Total
							Multiplier
At Site	1	27.11%	1.2711	23.45%	1.57	20%	1.9

Multiplier at Jacobs Offices

Location	D/L	Fringe	Sub Total	G&A	Sub Total	Profit	Total
							Multiplier
Home Office	1	27.11%	1.2711	30.35%	1.67	20%	2.0

The Fringe Rate is applied to Direct Labor
The Fringe Rate is inclusive of Vacation, Holiday, Sick Leave, Workers compensation and Insurance
The General and Administrative (G&A) Rate is applied to the sum of the Direct Labor and Fringe
The General and Administrative (G&A) Rate At Site and Home Office is inclusive of General and Administrative
The Profit Rate is applied to the sum of Direct Labor, Fringe and G&A
The Multiplier is applied to the hourly Direct Labor Rate for each labor category dependent upon work location

JACOBS®

Section E

Personnel - Jacobs & MWBE Subcontractors

KEY PERSONNEL INTRODUCTION

Jacobs' primary business is serving public and private sector clients under term contracts. We have structured our offices and our management systems to be able to staff projects in multiple locations to serve key clients. Jacobs has provided services on numerous Indefinite Delivery/ Indefinite Quantity contracts for various clients both in New York/New Jersey and elsewhere in the US. This experience has provided us with a keen understanding of what our clients expect when buying services on an as needed basis.

From an organizational standpoint we recognize that we must be quick to respond. That our staff must truly serve as an extension of the Port Authority's staff, that we must offer the Authority and its management team access to all the resources that would ordinarily be available internally to support your needs and that our services must be of high quality.

We are committed to provide Port Authority with qualified CM personnel who are capable of delivering term assignments in any location served by the Port Authority within New York and New Jersey. Jacobs maintains a staff of over 300 Construction Management Professionals, Architects and Engineers and in New York and New Jersey. In addition to the personnel located in New York and New Jersey, Jacobs can tap into a resource base of over 500 employees in the Northeast and New England including Connecticut and Massachusetts and over 1200 PM/CM personnel nationwide.

On the following pages, we have provided you with 100+ individuals who make up the Jacobs Team to demonstrate the caliber and quality of the personnel we have available and who are familiar with PANYNJ projects. Below is an organization chart followed by the personnel matrix summarizing the personnel qualifications for the selected team. Full resumes are also provided in the following section. In the Section H-Management Approach, we describe how our team will work together and will tap into these resources. The organization chart below demonstrates the breadth of our capabilities and the resources available to our proposed Construction Managers. In keeping with the location and project size, we will work with the Port Authority to assign the right resources from our pool of qualified Jacobs' team members.

The Port Authority of New York & New Jersey Construction Management Services Organization Chart

73 Experienced CM/CI Personnel
13 NY/NJ Registered Engineers/Architects
11 ACI Concrete

5 ICC Certified
2 NACE Certified

The Port Authority of New York and New Jersey

Project Executive

Bill Gove

Sr. Project Managers & Managers

Rick Fennema, CCM
Senior Project Manager

Andrew Kerr
Senior Project Manager

Gus Xenakis, CCM
Senior Project Manager

Curtis Casey
Project Manager

Steve Castagnier
Project Manager

John Demase
Project Manager

Joseph Greene
Project Manager

William Smith, PE
Senior Project Manager

Clinton Jackson
Project Manager

David LaTour
Project Manager

Christine Oats, CCM
Project Manager

Nick Pappas
Project Manager

Marc Riendeau
Project Manager

Rick Wagner
Project Manager

Norman Brown, PE
Senior Project Manager

Construction Managers, Inspectors, & Field Engineers

Gayle Benjamin
Construction Manager

James Buckley
Construction Manager

Anthony Delgado
Construction Manager

Jeffery Ronk
Construction Manager

Eric Monsonis
Construction Manager

Dave Rivera
Construction Manager

Michael Caraway
Field Engineer

Erica Hoke
Project Manager

David Fox
Field Engineer

Matthew Gallagos
Field Engineer

Sheldon Henry
Field Engineer

Vanessa Jimenez
Field Engineer

Artem Kaykin
Field Engineer

Faheem Khan
Field Engineer

Christina Krasanakis
Field Engineer

Anthony Markopoulos
Field Engineer

Timothy Yan
Field Engineer

Robert Raspanti
Electrical Inspector

W. Ross Wear
Safety Engineer

Victor Kee
Senior Inspector

Dan Wardrope
Senior Inspector

Robert Morris
Senior Inspector

Scott Brugge
Senior Inspector

Edward Griffin
Senior Inspector

Hatoum Hatoum
Senior Inspector

Anthony Maialetti (JBC)
Inspector

Hector Chiong
Senior Inspector

Jacob Dallas
Senior Inspector

Paul DeCasas
Inspector

Henry Oviedo
Field Engineer

Vincent Palacio
Senior Inspector

Gerald Petroski
Senior Inspector

Jeff Rudenjak
Resident Engineer

John Cawley, (JBC) PE
Inspector

Burt Salisbury
Senior Inspector

Ray Klein
Mechanical Inspector

Michael Stevens
Structural Engineer

Craig Timko, PM
Resident Engineer

Richard Treloar
Resident Engineer

Steve Gross
Special Inspector

Shawn Benedict
Special Inspector

Dennis Marchetti, PE
Electrical Engineer

NY/NJ Professional Engineers/Architects

Robert Bauco, PE
Project Manager

David Leymeister, PE
Project Manager

Craig Lewis, PE
Principle Structure Eng.

Brad Hollingsworth, PE
Bridge Mechanical Eng.

J. Leo McGlynn, PE
Railroad Engineer

William Moser, PE
Sr. Resident Engineer

Reza Noorishad, PE
Railroad Engineer

Mark Platz, PE
Construction Manager

Dipak Shah, PE
Resident Engineer

Nejat Hedyat, PE
Project Manager

Rich LaRuffa, PE
Value Engineer

Richard Wenger, PE
Project Manager

John Howell, RA
IT Design Review

Safety Managers/Contract Admin & Others

Scott Paul Longazel
Contract Adminstrator

Lauren Roller Schnitzer
Contract Adminstrator

Niurka Ozuna
Contract Adminstrator

Sheryl Seid Ng
Contract Adminstrator

Robert Carson
Safety Manager

Alan Norris
Safety Manager

Joan Roof
Safety Manager

Seppo Siimes
Architect Design Review

Robert Harvey
Electrical Design Review

Mike Teague
Commisioning

Yuri Berman
Commisioning

Ricky Monterosa
Commisioning

Special Certification

ACI

Paul DeCasas
ACI Concrete Construction Special Inspector

Michael Stevens
ACI Concrete Construction Special Inspector

Robert Morris
ACI Concrete Construction Special Inspector

Dean Lerescu
ACI Concrete Construction Special Inspector

Henry Heredia
ACI Concrete Construction Special Inspector

Kwesi Amegah (KSE)
ACI Concrete Construction Special Inspector

Duke Samala (KSE)
ACI Concrete Construction Special Inspector

Jeanne Brady (KSE)
ACI Concrete Construction Special Inspector

David Post (KSE)
ACI Concrete Construction Special Inspector (SAVIN)

Kuldip Sachdev (KSE)
ACI Concrete Construction Special Inspector

Rochelle Lancey (KSE)
ACI Concrete Construction Special Inspector

ICC

Steve Goss
ICC Certified Structural Steel & Bolting Inspector

Michael Caraway
ICC Certified Structural Steel & Bolting Inspector

Carl Coyle (KTA)
ICC Certified Structural Steel & Bolting Inspector

Michael Maggio (KSE)
ICC Certified Structural Steel & Bolting Inspector

Shawn Heaney, EIT (KSE)
ICC Certified Structural Steel & Bolting Inspector

NACE

Shawn Benedict
NACE Level 1 Coatings Certified

Ahmed Husain Zubair (KSE)
NACE Level 3 Coatings Certified

Schedulers & Cost Estimators

Glenn Leblond
Senior Estimator

Joe He
Estimator

Dana Jensen
Estimator

Frank Jenkins
Estimator

Zack Pennington
Estimator

John Hardcastle
Scheduler

Loren Uora, PE (JBC)
Senior Scheduler

David Bjork (JBC)
Senior Scheduler

Ray Xie
Scheduler

Steven Eichinger
Value Engineer

	Name	Overview			No. of Years	Registrations/Certifications
		Public Sector Projects	IDIQ/Term Contract	NY/NJ Location		
Professional Engineers/Registered Architect New York/New Jersey						
1	Rich LaRuffa, PE Value Engineer-Jacobs	✓	✓	✓	40	Professional Engineer NY [redacted]
2	Robert Bauco, PE Project Manager-Jacobs	✓	✓	✓	17	Professional Engineer N [redacted]
3	Richard Wenger, PE Project Manager-Jacobs	✓	✓	✓	19	Professional Engineer NY [redacted]
4	David Leymeister, PE Project Manager-Jacobs	✓	✓	✓	21	Professional Engineer N [redacted]
5	Nejat Hedyat, PE Resident Engineer-Jacobs	✓	✓	✓	38	Professional Engineer N [redacted]
6	Craig Lewis, PE Structural Engineer-Jacobs	✓	✓	✓	32	Professional Engineer N [redacted]
7	Brad Hollingsworth, PE Mechanical Engineer-Jacobs	✓		✓	12	Professional Engineer N [redacted]
8	William Moser, PE Sr. Resident Engineer-Jacobs	✓	✓	✓	31	Professional Engineer N [redacted]
9	Mark Platz, PE Construction Manager-Jacobs	✓	✓	✓	36	Professional Engineer NY [redacted]
10	Dipak D. Shah, PE Resident Engineer-Jacobs	✓	✓	✓	31	Professional Engineer N [redacted]
11	J. Leo McGlynn, PE Railroad Engineer-Jacobs	✓	✓	✓	32	Professional Engineer NJ [redacted]
12	Reza Noorishad, PE Resident Engineer-Jacobs	✓	✓	✓	26	Professional Engineer NJ [redacted]
13	John Howell, RA IT Design Review-Jacobs	✓		✓	25	Registered Architect NY [redacted]

	Name	Overview			No. of Years	Registrations/Certifications
		Public Sector Projects	IDIQ/Term Contract	NY/NJ Location		
ACI Concrete Construction Special Inspectors						
1	Michael Stevens Structural Engineer-Jacobs	✓	✓	✓	4	ACI Concrete Construction Special Inspector Expires 5-26-2015
2	Robert Morris Senior Inspector-Jacobs	✓	✓	✓	24	ACI Concrete Construction Special Inspector Expires 4-13-2016
3	Dean Lerescu Senior Inspector-Jacobs	✓	✓	✓	30	ACI Concrete Construction Special Inspector Expires 4-7-2016
4	Paul DeCasas Inspector-Jacobs	✓	✓	✓	26	ACI Concrete Construction Special Inspector Expires 5-26-2015
5	Henry Heredia Inspector-Jacobs	✓	✓	✓	13	ACI Concrete Construction Special Inspector Expires 4-7-2016
6	Kwesi Amegah Senior Inspector-KSE	✓	✓	✓	20	ACI Concrete Construction Special Inspector Expires 3-11-2015
7	Duke Samala Senior Inspector-KSE	✓	✓	✓	11	ACI Concrete Construction Special Inspector Expires 7-1-2014
8	Jeanne Brady Senior Inspector-KSE	✓	✓	✓	16	ACI Concrete Construction Special Inspector Expires 12-9-2013
9	Kuldip Sachdev Senior Inspector-KSE	✓	✓	✓	30	ACI Concrete Construction Special Inspector Expires 6-16-2014
10	Rochelle Lancey Senior Inspector-KSE	✓	✓	✓	29	ACI Concrete Construction Special Inspector Expires 6-1-2014
11	David Post Construction Inspector-SAVIN	✓	✓	✓	24	ACI Concrete Construction Special Inspector Expires 5-27-2014

	Name	Overview			No. of Years	Registrations/Certifications
		Public Sector Projects	IDIQ/Term Contract	NY/NJ Location		
ICC Certified Structural Steel & Bolting Inspectors						
1	Steve Goss Special Inspector-Jacobs	✓	✓	✓	21	ICC Certified Structural Steel & Bolting Inspector Expires 2012
2	Michael Caraway Field Engineer-Jacobs	✓	✓		6	ICC Certified Structural Steel & Bolting Inspector Expires 2012
3	Carl Coyle Special Inspector-KTA	✓	✓	✓	15	ICC Certified Structural Steel & Bolting Inspector Expires 2012
4	Michael Maggio Special Inspector-KSE	✓	✓	✓	10	ICC Certified Structural Steel & Bolting Inspector Expires 2013
5	Shawn Heaney, EIT Special Inspector-KSE	✓	✓	✓	8	ICC Certified Structural Steel & Bolting Inspector Expires 2013

	Name	Overview			No. of Years	Registrations/Certifications
		Public Sector Projects	IDIQ/Term Contract	NY/NJ Location		
NACE Level 1 Coatings Certified						
1	Shawn Benedict Special Inspector-Jacobs	✓	✓		26	NACE Level 1, 2 and 3 Coatings Certified Expires 2013
2	Ahmed Husain Zubair Special Inspector-KSE	✓	✓	✓	14	NACE Level 1,2, and 3 Coatings Certified Expires 2013

	Name	Public Sector Projects	IDIQ/Term Contract	NY/NJ Location	No. of Years	Registrations/Certifications
Experienced Construction Management/Construction Inspection NY/NJ						
1	Bill Gove Project Executive	✓	✓	✓	40	N/A
2	Rick Fennema, CCM Senior Project Manager	✓	✓	✓	30	Certified Construction Manager
3	Andrew Kerr Senior Project Manager	✓		✓	32	N/A
4	Gus Xenakis, CCM Senior Project Manager	✓	✓	✓	22	Certified Construction Manager
5	Norman Brown, PE Senior Project Manager	✓	✓	✓	38	PE: VA
6	William Smith, PE Senior Project Manager	✓	✓	✓	25	PE: CA
7	Gayle Benjamin Project Manager	✓	✓	✓	10	N/A
8	James Buckley Project Manager	✓	✓	✓	34	N/A
9	Curtis Casey Project Manager	✓		✓	27	N/A
10	Steve Castagnier Project Manager	✓		✓	18	N/A
11	Anthony Delgado Project Manager	✓	✓	✓	11	N/A
12	John DeMase Project Manager	✓		✓	24	N/A
13	Joseph Greene Project Manager	✓		✓	33	N/A
14	Erika Hoke Project Manager	✓		✓	6	N/A
15	Clinton Jackson Project Manager	✓		✓	21	N/A
16	David LaTour Project Manager	✓	✓	✓	11	N/A
17	Eric Monsonis Project Manager	✓		✓	13	N/A
18	Christine Oates, CCM Project Manager	✓		✓	13	CCM; LEED AP; EIT: NY
19	Nick Pappas Project Manager	✓		✓	9	N/A
20	Marc Riendeau Project Manager	✓		✓	12	N/A
21	Jeffrey Ronk Project Manager	✓		✓	15	N/A
22	Dave Rivera Construction Manager	✓	✓	✓	13	N/A
23	Scott Paul Longazel Contract Administrator			✓	7	N/A

24	Lauren Roller Schnitzer Contract Administrator	✓		✓	20	N/A
25	Niurka Ozuna Contract Administrator	✓		✓	6	N/A
26	Sheryl Seid Ng Contract Administrator	✓	✓	✓	22	N/A
27	Joan Roof Safety Engineer	✓	✓	✓	16	N/A
28	Robert Carson Safety Engineer	✓	✓	✓	8	N/A
29	Alan W. Norris Safety Engineer	✓	✓	✓	23	N/A
30	David Fox Field Engineer	✓	✓	✓	3	N/A
31	Matthew Gallegos Field Engineer	✓		✓	7	N/A
32	Sheldon Henry Field Engineer	✓	✓	✓	7	N/A
33	Vanessa Jimenez Field Engineer	✓		✓	6	N/A
34	Artem Khaykin Field Engineer	✓	✓	✓	6	N/A
35	Faheem Khan Field Engineer	✓	✓	✓	9	N/A
36	Christina Krasanakis Field Engineer	✓		✓	7	N/A
37	Anthony Markopoulos Field Engineer	✓		✓	5	N/A
38	Timothy Yan Field Engineer	✓	✓	✓	2	N/A
39	Jeff Rudenjak Resident Engineer	✓		✓	23	ACI Field Testing Technician
40	Craig Timko Resident Engineer	✓		✓	36	ACI Field Testing Technician
41	Richard Treloaar Resident Engineer	✓		✓	40	ACI Field Testing Technician
42	Seppo Siimes Architect Design Rev	✓	✓	✓	23	N/A
43	Robert Harvey Electrical Design Rev	✓	✓	✓	23	N/A
44	Mike Teague Commissioning		✓		8	N/A
45	Yuri Berman Commissioning		✓	✓	33	N/A
46	Ricky Monterosa Commissioning		✓		23	N/A
47	Dennis Marchetti,PE Lead Electrical Engineer	✓		✓	35	PE: VT
48	Robert Raspanti Electrical Inspector	✓		✓	33	Cert: High Voltage Splicing, Electric Arc Welding, Fiber Optic Installations; Licensed NY State Rigger
49	Ray Klein, PE Mechanical Inspector	✓		✓	21	PE: MA, CT, SC, FL
50	Victor Kee Senior Inspector	✓		✓	34	N/A
51	W. Ross Wear Senior Inspector	✓			28	N/A

52	Arthur Salisbury Senior Inspector	✓		✓	40	ACI Field Testing Technician
53	Dan Wardrope Senior Inspector	✓		✓	26	N/A
54	Scott Brugge Senior Inspector	✓		✓	11	Engineer in Training (EIT), NY; LEED Accredited Professional (LEED AP)
55	Edward Griffin Senior Inspector	✓			36	Engineer in Training (EIT), NY; LEED Accredited Professional (LEED AP)
56	Hatoum Hatoum Senior Inspector	✓	✓	✓	26	N/A
57	Hector Chiong Senior Inspector	✓		✓	7	ACI Field Testing Technician
58	Jacob Dallas Senior Inspector	✓		✓	10	ACI Field Testing Technician
59	Robert Morris Senior Inspector	✓		✓	24	ACI Field Testing Technician
60	Vincent Palacio Senior Inspector	✓		✓	30	ACI Field Testing Technician
61	Gerald Petroski Senior Inspector	✓		✓	32	ACI Field Testing Technician
62	Anthony Maialetti Inspector-JBC	✓		✓	20	N/A
63	John Cawley, PE Inspector-JBC	✓		✓	40	N/A
64	Glenn LeBlond Senior Estimator	✓	✓	✓	24	LEED AP
65	Joe He Estimator	✓		✓	15	N/A
66	Dana Jensen Estimator		✓		33	N/A
67	Frank Jenkins Estimator	✓		✓	28	N/A
68	Zack Pennington Estimator	✓		✓	28	N/A
69	Steven Eichinger Value Engineer	✓	✓	✓	28	N/A
70	John Hardcastle Scheduler	✓		✓	8	N/A
71	Ray Xie Scheduler	✓	✓	✓	20	N/A
72	Loren Mora, PE Senior Scheduler-JBC	✓	✓		25	N/A
73	David Bjork Senior Scheduler-JBC	✓	✓	✓	30	N/A

Robert Bauco, PE, CCM

Project Manager
Jacobs

Education:
Bachelor of Architectural Engineering

Registrations:
Professional Engineer: NY
Certified Construction Manager, CMAA

Years of Experience:
17 Years

Professional Engineer NY #082890

Robert Bauco, PE, CCM brings over 17 years of experience in construction management of new construction and renovation projects in New York. From his work on the OGS HVTMC and NYS Thruway Authority Interchange 17Contract 2 Campus, Rob brings directly relevant experience to the team and will serve as a key resource for providing lessons learned gained during the reconstruction and conversion of the OMH Recreations Facility Building 104 for Authority Offices and NYPD facility.

RELEVANT EXPERIENCE

Reconstruction of Interchange 17, Contract 2 – TANY 04-37A Newburgh, NY. *Project Manager.* Provided overall management responsibility for the Jacobs team for this $50M, 90,000 SF+ project. The project includes construction management and inspection services for the construction of a 38.000 SF Maintenance/Vehicle Garage Building; a 13,000 SF State Police Zone Headquarters Building; Toll Collection Facilities (including a Toll Utility Building, two new Toll Plazas and a E-Z Pass only Toll Plaza); and Storage Buildings (vehicle, salt storage, and cold storage).

Hudson Valley Transportation Management Center (HVTMC) Hawthorne, NY. *Project Manager.* Rob has overall management responsibility for the Jacobs team for this $45M, 92,000 SF project involving construction management services. The HVTMC incorporates incident management plans developed by participating agencies and various ITS elements to manage and maintain the transportation system. The project also included construction of a new State Police Headquarters.

International Business Machines, T.J. Watson Research Facility Yorktown Heights, NY. *Project Manager.* Jacobs provides Preconstruction and Construction management services for communication wiring upgrade of an $18M, 750,000 SF research and laboratory facility. The work brought CAT5 copper and fiber optic cable to 3,500 workstations throughout the occupied campus. Requirements included construction of 23 communications rooms linked to the main computer and telephone room.

New Jersey Department of Building and Construction, South Woods State Prison Project, Bridgeton, NJ. *Assistant Project Manager/Project Engineer.* Construction management services for a self-contained, $203M, 1.3 million SF, 3,100 bed medium security correctional institution with support facilities, including medical, education, food service, administration, visiting facilities, and an Industries Compound. The 25-building complex is located on an 85 acre site.

International Business Machines (IBM), TJ Watson Research Facility, New York, NY. *Project Manager.* Jacobs provided Construction Management services for infrastructure wiring upgrades to the $18M, 750,000 SF IBM research and laboratory facility. This work brought CAT6 copper and fiber optic cable to 3,500 workstations throughout the occupied campuses. It also required the construction of 30 communications rooms linked to the main computer and telephone rooms. Rob was responsible for oversight of the design and construction subcontractors in order to achieve owner objectives of quality, budget, schedule, and minimal occupant disturbance.

Rick Wenger
Project Manager
Jacobs

Education:
B.E. Mechanical Engineering

Registrations:
Professional Engineer: CA

Years of Experience:
19 Years

Professional Engineer NY
[redacted]

Rick Wenger is a licensed professional engineer with over 19 years of construction management/ inspection experience. Mr. Wenger is an experienced Resident Engineer with attentiveness to details and options. Past and present experience has primarily focused on constructing and renovating NY City and NY State owned vehicular repair, parking, and administrative facilities with diversified and specialized equipment including fuel storage and dispensing, pneumatically and electrically operated vehicle repair, lifting and frame straightening, and machine/ blacksmith shop. Pre-construction duties have entailed scope development through the understanding of user needs, preliminary and final design documents constructability reviews, preparation of pre-bid Addendums, conducting pre-bid walkthroughs, and bid evaluation/ award.

RELEVANT EXPERIENCE

Rehabilitation of Garage Floor at Central Repair Shop, New York City Department of Sanitation, Queens, NY. *Project Manager.* $10 million demolition and reconstruction of elevated concrete slabs and supporting structural steel for three 20,000 SF garages in an existing, operational facility including installation of a high pressure steam bypass system to de-energize steam piping below, temporary support and protection of ductwork and plumbing assemblages, replacement of electrical busway, lighting, public address and power distribution equipment and enhancement of an oil/water separator system.

NYC Department of Environmental Protection Hillview Reservoir, Yonkers, NY. *Resident Engineer.* Jacobs is providing construction management services for this $500M project which involves improvements to the 90-acre, 900-M-gallon reservoir located in Yonkers. Chlorination of 85 to 90 percent of city water takes place at the reservoir, also pH balance monitoring and corrosion control. Improvements include chamber reconstruction and a chloride addition facility.

MTAB&T's Battery Parking Garage, New York, NY. *Resident Engineer.* $30 million Structural Repairs and Lighting System Improvement; and Mechanical, Plumbing, Fire Protection and Electrical Rehabilitation and Upgrade of the Battery Parking Garage.

New Service Building at Bronx Whitestone Bridge, The Bronx, NY. *Resident Engineer.* Jacobs provided construction inspection and support services to the MTA Bridges and Tunnels for the $15M, 33,000 SF New Service Building at the Bronx Whitestone Bridge. The New Service Building provides space for operations, maintenance and engineering units attendant to the operation of the Bronx Whitestone Bridge Facility. Specifically, it includes locker rooms, muster rooms, administrative offices and repair garages. Security systems coincident with toll collection operations were integral to the facility.

David Leymeister, PE
Project Manager
Jacobs

Education:
MS, Civil Engineering
BS, Civil Engineering

Registrations:
Professional Engineer: New York, 1994, [redacted]
Pennsylvania, 1996, [redacted]
New Jersey, 2003, [redacted]

Years of Experience:
21 Years

Professional Engineer NY [redacted]

David Leymeister, PE has extensive experience in the management and control of transportation projects involving studies, design, design-build, and resident engineering. He is experienced in transit station, private freight service, bridge, roadway, building, bicycle/pedestrian, and tunnel construction. Specific tasks have included coordinating permitting/design/construction, implementing cost controls for design and construction, claims analysis, CPM scheduling, and construction inspection. Dave has demonstrated the ability to successfully manage, achieve a win-win scenario for stakeholders, and improve quality performance by formulating and implementing comprehensive plans for quality assurance. As Quality Manager for our New York, New Jersey, and Philadelphia offices, he ensures that the company policies and procedures are followed as outlined in each project-specific quality plan.

RELEVANT EXPERIENCE

NJ Turnpike Authority (NJTA), Mile 83 and Pearl Harbor Memorial Turnpike Extension. *Project Manager.* This project included multi-span bridges and multiple bridge contracts. Inspection services consisted of the MPT, inspection of the removal/scarification of deteriorated bridge deck slabs, and replacement with new reinforcing steel and concrete; replacement of deck panels; partial depth concrete spall repairs; sidewalk, parapet, and curb surface repairs.

NJ Turnpike Authority (NJTA), Supervision of Construction Services Contract P100.028, GSP Miscellaneous Structural Repairs (OPS P3139). *Project Manager* responsible for overseeing the work to rehabilitate land and water spanning bridges. The work involved construction of concrete repairs on substructure members (abutments, piers, columns, caps) using concrete epoxy concrete compounds; structural steel repairs (on damaged girders, haunches, bearings, diaphragms); steel beam repairs; utilization of temporary shoring/jacking towers to support deck stringers; applied epoxy waterproofing; localized SSPC SPC6 cleaning of lead based paint systems for steel repairs with Level 4 – Class 4 containment.

NJ TRANSIT, Task Order Contract for Architectural/Engineering Services. *Quality Manager* responsible for reviewing contract project documents for conformance to Jacobs policy and procedures; which include the following: proper insurance requirements for prime and all subconsultants and subcontractors, review of proper signatures on all contract documents, risk analysis compliance, client expectation survey along with follow-up client surveys for performance of staff and meeting the requirements set forth in the contract.

NJ Department of Transportation (NJDOT), Term Agreement for Design Services (Task Order Contract). *Quality Manager* responsible for reviewing contract project documents for conformance to Jacobs' policy and procedures; which include the following: review of project procedure manual within 30 days of Notice to Proceed, project-specific quality plan noting tasks assignments and the level of checking/review, project criteria document, project schedule noting all deliverables for the project and tasks, monthly operation reviews of project for conformance of tasks to schedule as it relates to quality and deliverables.

Nejat Hedyat, PE
Resident Engineer
Jacobs

Education:
MS, Civil Engineering
BS, Civil Engineering

Registrations:
Professional Engineer: New York, 1979 [redacted]

Years of Experience:
38 Years

Professional Engineer NY
[redacted]

Ned Hedyat, PE brings over 38 years of experience in both design and construction management. His project management experience includes performing design and constructability reviews, supervision of construction engineers, inspectors and project controls staff, oversight of contractor activities, payment approvals and change order negotiations, contracts' compliance and municipal and utility interfaces.

RELEVANT EXPERIENCE

Brooklyn Battery Tunnel Ventilation Building Repairs - ($30 Million) MTA Bridges & Tunnels. *Resident Engineer*, responsible for administering all facets of the Project (4 Ventilation Buildings and 3 separate Contracts) including, supervision of Construction Engineers, Inspectors and Project Control Staff, Contract Compliance, utility interfaces, payment approvals and change order negotiations. Directed project environmental resolution efforts including hazardous material abatement. Responsible for maintaining complete operational status of this round the clock facility.

Brooklyn Battery Tunnel Roadway Rehabilitation Project - ($65 Million) MTA Bridges & Tunnels. *Resident Engineer*, responsible for administering all facets of this project including, supervision of construction engineers, inspectors and project controls staff, payment approvals and change order negotiations, contracts' compliance and municipal and utility interfaces. Directed project environmental restoration efforts including hazardous materials abatement and landscape restoration. Responsible for maintaining complete operational status of this round the clock facility.

Queens Midtown Tunnel Roof Replacement and Tunnel Rehabilitation - ($97 Million) MTA Bridges & Tunnels. *Resident Engineer,* responsible for administering all facets of this project including design and constructability review, supervision of construction engineers, inspectors and project controls staff, oversight of contractor specifications compliance, payment approvals and change order negotiations, contracts' compliance and municipal and utility interfaces. Directed project environmental restoration efforts including hazardous materials abatement and landscape restoration, implementation of complex maintenance and protection of traffic. Responsible for maintaining complete operational status of this round the clock facility.

Brooklyn Battery Tunnel Roof Replacement and Tunnel Rehabilitation - $60 Million MTA Bridges and Tunnels. *Resident Engineer,* provided management and direction for the performance of the contractors and corresponding activities of the construction management staff. Other duties included resolution of design problems, resolving drawing conflicts, monitoring and facilitating the processing of contractor submittals, work authorizations, and negotiating change orders. Other responsibilities include monitoring contract compliance with respect to safety, quality assurance, cost, scheduling and payment requisitions.

Craig Lewis, PE
Principal Structural Engineer
Jacobs

Education:
B.S., Civil Engineering

Registrations:
Professional Engineer – New York

Years of Experience:
32 Years

Professional Engineer NY [redacted]

Craig Lewis, PE has over 32 years of structural engineering experience. He has served as Project Manager, Project Engineer and Inspection Leader for various bridge inspection, design and construction support projects for several tri-state area agencies including NYSDOT and NYCDOT. These assignments involved coordination with client project managers and site Engineer-in-Charge as well as construction contractors and subconsultants. He also served as Project Engineer on various bridge and building projects for The Port Authority of NY and NJ, MTA Bridges and Tunnels, NYNEX and Independent Contractor Clients.

RELEVANT EXPERIENCE

NYC Economic Development Corporation, 28th Avenue Reconstruction, Queens, NY. *Resident Engineer* for the reconstruction of 28th Avenue that included removal/'replacement of roadways sidewalks, and curbs. Responsibilities included coordination with city agencies, MTA Bus Company and the Community Board; inspection of construction work and materials for conformance to plans and specifications; review of shop drawings; conducting progress meetings; resolving RFI's and unanticipated field conditions, review of contractor invoices, maintenance of records of field change details for inclusion on as-built drawings and providing administrative management.

NYCDOT, Rehabilitation of 6 New York City Bridges New York, NY. *Team Leader and field coordinator* for the in-depth inspection on the following structures:

Metropolitan Ave Bridge
Crooke Ave Bridge
Newkirk Ave Bridge
BQE Cadman Plaza Viaduct

NYSDOT, Rehabilitation of 16 Bridges on Cross Bronx Expressway Corridor, New York, NY. *Assistant Team Leader* for the in-depth inspection of the eastbound and westbound roadway cantilever brackets on the main arch, east approach and west approach spans.

NYSDOT, Steel Detail Vulnerability Assessment of 517 New York City Bridges in Region 11, NY. *Field Inspection* of the steel detail vulnerability assessment of 517 New York City Bridges in Region 11 (3,820 Spans). Photos of the existing conditions were taken and if repairs were performed, then sketches were drawn of member types and sizes used. Work included the evaluation of fatigue prone details. A 3-D model of the Gowanus Expressway behavior was developed for this effort.

MTA-Bridges and Tunnels, 1999 Biennial Inspection of the Henry Hudson Bridge and Queens Midtown Tunnel Approach Bridges, NY. *Team Leader and Field Coordinator* for the biennial inspection of the main bridge and Manhattan and Bronx approach spans of the Henry Hudson Bridge; and the main spans of the QMT approach bridges. Responsibilities also included development of reports summarizing inspection findings.

Bradford R. Hollingsworth, PE
Bridge Mechanical Engineer
Jacobs

Education:
BS, Mechanical Engineering

Registrations:
Professional Engineer: New Jersey [redacted], 1991; New York [redacted] 1991; Pennsylvania [redacted] 1988; Florida [redacted] 1990; Maryland [redacted] 1992

Years of Experience:
12 Years

Professional Engineer NY
[redacted]

Brad Hollingsworth, PE experience includes the design of 30 movable bridge machinery systems (hydraulic and gear driven), inspection of over 50 movable bridges, construction inspection or supervision of almost 50 movable bridge projects, strain gage balance testing of 10 movable bridges, and involvement in the manufacture of machinery for over 100 movable bridges of all types throughout the United States. Brad was the author of two technical papers entitled "AGMA Requirements for Movable Bridge Speed Reducers", presented at the HMS First Biennial Movable Bridge Symposium, November, 1985; and the author of "Standardizing Mechanical Inspections of Movable Bridges", presented at the HMS Third Biennial Movable Bridge Symposium, 1990.

RELEVANT EXPERIENCE

Movable Bridge Design Experience – Bascule Bridges, Cape May Canal project, New Jersey Transit, Cape May, NJ. Design-build contract to activate the single track swing span after many years of abandonment. Inspected the machinery systems and designed repairs to make the swing span operational. Brad worked closely with the Operating Railroad, Contractor and Electrical Designer to complete cost effective rehabilitation of the machinery systems. He also provided hands on assistance during the construction phase of the project.

Harlem River Lift Bridge Project, NYC DOT, New York City, NY. Project consisted of an in-depth inspection and rehabilitation design for Metro-North's twin, two track vertical lift bridges over the Harlem River in New York City. He performed the in-depth inspection and designed a simplified span lock replacement system along with general repairs to the tower drive machinery.

Middle Thoroughfare Bridge, Cape May County, Cape May, NJ. *Project Engineer* for rehabilitation of this single-leaf trunnion bascule bridge.

Beach Lane Bridge, Suffolk County, Southampton, Long Island, NY. *Project Engineer* for design of new mechanical and electrical systems for new double-leaf trunnion bascule bridge. New mechanical system utilizes a fully enclosed gear drive. New control system utilizes PLC control

Lock Street Bascule Bridge, NYSDOT, Phoenix, NY. *Project Engineer* for machinery for this new trunnion bascule bridge.

Union Avenue Swing Bridge, NJDOT, East Rutherford, NJ. *Project Engineer* for interim mechanical and electrical rehabilitation of this swing bridge.

Madison Avenue Swing Bridge, NYCDOT, New York, NY. *Project Engineer* for machinery inspection for replacement for this rim roller swing bridge.

Movable Bridge Design Experience – Lift Bridges, Holley Lift Bridge, NYSDOT, Holley, NY. *Project Manager* for mechanical and electrical replacement and structural rehabilitation of this lift bridge over the New York State Barge Canal.

Main Street Lift Bridge, NYSDOT, Brockport, NY. *Project Manager* for mechanical and electrical replacement and structural rehabilitation of this lift bridge over the New York State Barge Canal.

William C. Moser, PE
Sr. Resident Engineer
Jacobs

Education:
B. S., Civil Engineering
A. A. S., Civil Engineering

Registrations:
Professional Engineer in New York [redacted]
Pennsylvania [redacted]
Virginia [redacted]

Years of Experience:
31 Years

Professional Engineer NY [redacted]

Bill Moser, PE has 31 years of experience in all phases of construction inspection, supervision, management, design coordination and scheduling. Experience includes construction inspection of highway, bridge, building, railroad and marine projects with emphasis in project set-ups, management, record keeping, quality control, material testing, closeouts, problem solving, constructibility reviews and estimating. Project experience includes the following:

RELEVANT EXPERIENCE

Various Company Construction Projects for NewJersey Turnpike Authority and New York State Department of Transportation, Region 11. *Deputy Project Manager/QA/QC Officer* for various company projects most noteably for NYSDOT Region 11 ITS City-wide project. Performed QA/QC analysis of project inspection forces with respect to job knowledge, reviewed office proceedures of the consultant Office Engineer, made positvive recommendations with respect to policies and proceedures and issued a written report to the State EIC Nick Lorincz and consultant Project Manager. Assured that all proceedures were implimented correctly and Clients (NYSDOT, NJTA) were satisfied.

NYC Department of Design and Construction, Flushing Avenue Reconstruction Project, Brooklyn, NY. As *Resident Engineer* managed the installation of trunk and distribution water mains along 4 miles of Flushing Avenue. This project included the relcation of major utilities, watermain installation, complete reconstruction of curbs, sidewalks, roadway, street lighting, traffic signal installation signage and delineation of the new roadway. Coordination with the many businesses, schools, churches and four Community Boards was a key element of this project. Cost $ 47 million.

NYS Department of Transportation, Reconstruction of the Major Deegan Expressway over Exterior Street, New York, NY. As *Resident Engineer* managed the subsurface investigation for the future reconstruction of the Major Deegan Expressway Viaduct. This included the complete set up and closure of the project as well as managing the inspection staff, coordination with the NYSDOT Geotech Department, sample recovery and delivery to the Albany, NY Lab. Special handling of samples was an important part of this project. Due to ongoing projects in the area, coordinated with the these projects for access to and scheduling of the bore hole driling. Cost $ 150,000

NYC Department of Transportation, Protective Coating of the Queensboro Bridge, New York, NY. As the *Resident Engineer* for the 5-year, $170 million Queensboro Bridge Protective Coating Project. This included the installation of temporary platforms which hold the 1A containment systems for the removal of the existing lead paint by blasting to a near white condition, coating the structure with a 4 part paint system, and maintenance and protection of vehicular and pedestrian traffic. He was responsible for all aspects of the construction and management of the inspection staff which includes coordination with other contractors working on the bridge, as well as the maintenance crews and inspection crews.

Mark Platz, PE
Construction Manager
Jacobs

Education:
BS, Civil Engineering

Registrations:
Professional Engineer and Land Surveyor, NJ, [redacted] Expires 4/30/2012
Professional Engineer, NY, # [redacted], Expires 07/31/2013
Professional Engineer, PA, [redacted], Expires 09/30/2011
Professional Engineer, DE, [redacted]
Professional Engineer, IN, [redacted], Expires 07/30/2012
Professional Engineer, RI, [redacted]
Professional Planner, NJ, [redacted]; Expires 05/31/2012
Professional Land Surveyor, PA, [redacted], Expires 09/30/2011

Years of Experience:
36 Years

Professional Engineer NY
[redacted]

Mark Platz, PE has three decades of experience with a proven track record of business aptitude and profitability in Construction Management, Construction, and Engineering. Mark has worked extensively throughout the State of New York and New Jersey, primarily for the Metropolitan Transportation Authority and the Southern Pennsylvania Transit Authority in Philadelphia, PA. With his background as a Program Manager/Construction Manager, Mark possesses solid management techniques that translate to profitable project performance.

RELEVANT EXPERIENCE

Bridges Rehabilitation Design, Long Island, New York, MTA - Long Island Railroad. *Project Manager* for Design and Bid Phase Services for the rehabilitation of four elevated bridge structures in need of critical repair. Situated in heavily urbanized areas, one bridge carries 5 tracks of the LIRR's key Jamaica interlocking including crossover and switch installations. Emphasis was placed on cost effective rehabilitation with careful consideration of Railroad operations and outage restrictions together with railroad force account support.

Metropolitan Transportation Authority - Capital Construction, Methods and Procedures, New York City, NY. *Task Manager.* Drawing on his extensive experience covering many areas of planning, design, construction and management, Mr. Platz served as Task Manager for the MTACC's effort to develop uniform system-wide Methods and Procedures for their nearly $20B New York City construction efforts.

East Side Access, Long Island Railroad to Grand Central Terminal, NYC and Queens, New York. *Task Manager and Team Leader.* Part of Jacobs Construction Management Team for this $8B project providing first-ever LIRR access to Grand Central Terminal, Mr. Platz Served as Task Manager and Team Leader for a number of on-call efforts, including: constructability reviews for tunnel work, underground station and access construction, temporary trestle construction, interlocking reconfiguration and track and electrical systems work; Analysis of Materials and Warehouse management for just-in-time and long term procurement; Program Risk Assessment including design, construction, cost and scheduling; and Alternate Operations Route Planning/Development.

Atlantic Traffic and Design Engineers, Watchung, NJ. *Principal-in-Charge.* Transportation Design and Planning. As Principal-in-Charge, managed planning and design for road, highway and transit systems including I-95 interchange improvements, highway design, transportation hubs, signal design, and transit corridor optimizations. Work areas in NJ, PA, NY, CT. Responsibilities included client/ project interface, public agency and community development activities (presentations and public hearings), proposal development and scheduling/ coordination efforts. Worked with municipal, county and state governments and with Departments of Environmental Protection and Transportation. Managed project efforts from concept through construction completion and acceptance.

Department of Transportation, I-95/ I-287 Interchange Improvements, NY, NJ, PA, CT. *Principal-in-Charge.* Transportation planning and design for highway system. Responsible for client interface, public agency coordination and community development activities.

Dipak Shah, PE
Resident Engineer
Jacobs

Education:
M.E, Civil Engineering
B.E., Civil Engineering

Registrations:
Professional Engineer, NJ (1986)
Professional Engineer, NY (1972)

Years of Experience:
31 Years

Professional Engineer NY
[redacted]

Dipak Shah, PE brings more than 30 years of experience in leading, managing, and directing construction inspection personnel on heavy construction projects, including client liaison, construction contract administration, subconsultant contract administration, manpower scheduling, budgeting, invoicing to clients, processing of contractor and subconsultant payments, cost estimates, claims evaluation and negotiations, pursuit of work, and preparation of technical proposals.

RELEVANT EXPERIENCE

Amtrak/ARRA Project, Rehab at Pelham Bay Bridges and Approaches, Bronx, NY. *Resident Engineer* on a bridge substructure rehabilitation project entailing reinforced concrete pile jacketing of existing deficient piles, rehabilitation of heavy scalling/spalling on existing transmission tower footings, and rebuilding, repointing and grouting concrete core of existing granite stone masonry piers. Responsible for providing construction management and contract administration and supervising integrated field staff of Amtrak/Jacobs personnel and coordinating construction work with various Amtrak Departments and ongoing other contracts nearby.

Bayonne Local Redevelopment Agency (BLRA) Route 440 Infrastructure Improvements Project in Bayonne, NJ. *Resident Engineer* on a roadway project entailing new intersection, modification to existing intersection, relocation of existing overhead utilities, new traffic signals and drainage improvements. Responsible for providing resident engineering construction inspection services, including on-site construction supervision, office engineering and contract administration entailing processing of partial and final payments, change orders, change order negotiations, interfacing with state and local agencies, utilities and private businesses.

New York City Department of Environmental Protection, Oakwood Beach Water Pollution Control Project, Contracts 6B-2 and 6B-3, Staten Island, New York. *Project Manager/Resident Engineer.* Headed a team led by Jacobs including subconsultants to provide construction phase services for this $64 million tunneling project which entailed inspection of shaft construction, soft ground tunneling, direct pipe jacking of a 60-inch fiberglass pipe by utilizing a remotely controlled microtunneling mole, chemical and cement grouting, dewatering installation, monitoring of ground settlement. Responsibilities included supervision of field inspection personnel, critical document control, progress payment approvals, monthly progress reports, estimating, change order negotiations, schedule projections, and subconsultant contract administration. Evaluated and analyzed claims and change orders worth $40 millions.

New York City Department of Environmental Protection, East 233 Street and Webster Avenue, Combined Sewer Project, Bronx, NY. *Resident Engineer.* Provided resident engineering inspection services for the construction of a 10-foot diameter combined sewer tunnel underneath the existing commuter railroad and major highway. Responsibilities included inspection of inlet shaft in compressed air and open cut box sewer construction, processing of monthly payments, change orders, progress reports and coordination of work.

J. Leo McGlynn, PE
Railroad Engineer
Jacobs

Education:
B.S., Civil Engineering, Penn State University,
Conrail Executive Management Program, Penn State University
Conrail Financial Management, University of Pennsylvania – Wharton School

Registrations:
Professional Engineer, New Jersey
Professional Engineer Pennsylvania

Years of Experience:
32 Years

Professional Engineer NJ
[redacted]

Mr. McGlynn is a results-oriented, responsible, engineering professional with extensive experience in railroad engineering, construction management, and design. He is a strong leader with excellent organization, financial management, and team building skills.

RELEVANT EXPERIENCE

CONRAIL, On-Call Engineering and Construction Management Service Contract, NJ. *Project Manager* for Conrail's National Docks Line Clearance Project. This $25 Million dollar project includes enlargement of the 4,100 foot long Bergen tunnel and the 400 foot long Waldo tunnel located in Jersey City, NJ. Tunnel project is progressed 24 hours a day seven days a week. Work will be completed by September 2010. As an extension of Conrail's staff, Jacobs has been responsible for the design, bid assistance, and construction management for on-call assignments. We have completed several fast-track designs that include existing ground survey, identification and coordination for relocation of existing utilities, assessment of track structure, design of track alignments for sidings and yard tracks, staging and sequencing of proposed work, design to cost and bid assistance. The proposed track alignments are optimized to minimize impacts to existing utilities.

North Jersey Terminal Capacity Improvement Infrastructure Project, Newark, NJ for Consolidated Railroad (CONRAIL), Northern, NJ. While still working for Conrail, Mr. McGlynn was the Client Project Manager with overall responsibility for this $68 M+ program. The Program included seven projects: Valley to Stock, Valley to Pike, Pike to PN, Bay Line Yard, Chemical Coast, Double Tracking of the Lehigh Valley Line (Potter to Bound Brook 10.5 miles), and Port Reading Junction, Manville, NJ. Mr. McGlynn worked closely with the Jacobs staff who were providing design, bid assistance, construction support, and construction management as an extension of the Conrail staff.

Consolidated Rail Corporation, Philadelphia, PA. Mr. McGlynn has over 32 years experience with Conrail, where he served in various capacities including:

Director Design and Construction. Mr. McGlynn managed a team that was responsible for the design and construction of all capital and state participation projects and construction agreement negotiation with government and transit agencies. Responsibilities included safety, customer satisfaction, employee development, on-time performance, budget, design, estimating, and construction integration with rail operations. Staff Size 7 to12

Directed a team that completed $168,000,000 in rail infrastructure projects:

North Jersey Infrastructure Project, 10 Miles of double track from Bound Brook to Clark NJ , 8.5 miles of secondary and yard tracks and 8 new remote controlled interlockings.
Reviewed and approved the track design for 75,000 feet of new on dock loading and support tracks at Port Elizabeth.
Led a team that managed the Conrail- NJDOT Joint Participation National Docks clearance and CP Port Reading Junction upgrade and expansion.
Worked with NJDOT Rail freight section managing the design/construction of approved projects

Reza Noorishad, PE
Resident Engineer
Jacobs

Education:
Master of Civil Engineering
Bachelor of Science in Engineering

Registrations:
Licensed Professional Engineer, NJ, [redacted] Expires 04/30/2010
Professional Engineer CT

Years of Experience:
26 Years

Professional Engineer NJ [redacted]

Reza Noorishad, PE brings over 26 years diversified experience serving as resident engineer or chief inspector for bridge and highway construction projects. His areas of expertise include reconstruction of movable bridges, structural steel rehabilitation, and highways. Reza has extensive experience supervising field staff, as well as preparing daily reports and coordinating with various agencies, utilities, and businesses.

RELEVANT EXPERIENCE

Tri-Borough Bridge and Tunnel Authority (TBTA), Throgs Neck Bridge, Replacement of Concrete Deck and Rehabilitation of the Abutment and Retaining Walls. *Senior Inspector* responsible for rehabilitation of Throgs Neck bridge, Queens Approach, abutment and retaining wall repair, jacking existing girders, replacing all the bearings and some of the existing girders, deck replacement at Queens approach. Responsible for supervising all phases of the work, which included supervising construction inspection, MPT, staged construction, superstructure, shielding, bridge deck demolition, stay-in-place forms, reinforcement steel, concrete placement and testing, substructure spall repairs, expansion joint installation, bearing replacement, HMA paving, and line striping.

Burlington County Bridge Commission (BCBC), Abutment Reconstruction of Bristol Bridge, Burlington, NJ. *Resident Engineer* for reconstruction of west abutment (New Jersey side) of Bristol Bridge, jacking west abutment existing girders, replace of concrete-encased end diaphragms, installation of new armor joint, deck and approach slab replacement over the west abutment. Responsible for supervising all phases of the work, which included supervising construction inspection, MPT, staged construction, superstructure, shielding, drainage and electrical facilities, approach slab demolition, reinforcement steel, concrete placement and testing, concrete barrier placement, cast-in-place parapet construction, waterproofing membrane, substructure spall repairs, bearing replacements, HMA paving, and line striping.

NJ Department of Transportation (NJDOT), Reconstruction of the Route 1&9 Bridge Over Route 35, Woodbridge, NJ. *Senior Inspector* for construction of new bridges and new ramps over Route 35, which included new abutment, reinforced concrete deck, structural steel girders, approach roadway, drainage and electrical facilities installation, full depth roadway and reconstruction and paving at Route 35. Responsible for supervising all phases of the work, which included MPT, staged construction, superstructures, shieldings, bridge deck demolition, stay-in-place forms, reinforcement steel, concrete placement and testing, concrete barrier placement, cast-in-place parapet construction, waterproofing membrane, new bearing installation, expansion joint installation, SuperPave asphalt, and line striping.

NYS Department of Transportation (NYSDOT), Taconic State Parkway Route 202/35 to Route 6, Westchester County, NY. *Chief Inspector* for a $29 million project that involved realignment of a four-lane highway, exit modifications, drainage improvement, replacement of four existing overpass bridges with new arch concrete bridges, extensive maintenance and protection of traffic, and coordination of various activities during all stages of construction.

John Mason Howell, AIA, RCDD

IT Design Review
Jacobs

Education:
B.A. School of Architecture and Urban Planning Architecture (minor in Acoustics and computer graphic studies)
B.S. Electrical Engineering

Registrations:
Registered Architect: NY
RCDD, Building Industry Consulting Services International (BICSI)

Years of Experience:
25 Years

Registered Architect New York
[redacted]

John Howell, AIA, RCDD possesses a comprehensive background in all phases of management and technology and is particularly adept at integrating this in the fields of architecture and construction. Serving as Jacobs' Technology Manager, John has attained diversified expertise in technology infrastructure design services, technology project and construction management, architectural programming services, design, cost accounting and manpower allocation systems, project scheduling, long range facility planning, migration planning, Furniture, Fixtures & Equipment (FF&E) inventory and procurement services, and computer systems consulting.

John is currently providing technology design and technology construction management oversight to the AIA (American Institute of Architects) NY Chapter in the development of their new facility, the Center For Architecture, due to open in October 2003. John's aggressive RFQs for voice, video, data equipment and services will deliver top-tier technology at prices this not-for-profit member organization can afford.

RELEVANT EXPERIENCE

Eisenhower Executive Office Building Modernization, Washington, DC Technology and Physical Security. *Program Manager.* Jacobs provided construction management services for the modernization and security upgrades for the historic Eisenhower Executive Office Building (EEOB), on the grounds of the White House Complex and houses various agencies that comprise the Executive Office of the President. The project includes phased construction of an occupied facility. The first two of the three total phases have achieved final completion and substantial completion.

John's role is Program Manager coordinating and overseeing integration of end-user Agencies' unclassified and classified voice and data technology implementation and integration with overall building technology fit-out, including major systems upgrade. John is also coordinating overall Physical Security (access control, intrusion/alarm, video surveillance, and emergency notification) Systems for EOP.

Dumbarton Oaks Research Library & Collection, Washington, DC (an affiliate institution of Harvard University) *Technology Infrastructure Program Manager — Capital Construction & Renewal Program.* Acting as Owner's Representative for voice, data, and security infrastructure and services for this landmark institution and museum, John had the following responsibilities: reports to Directors of Finance; Facilities; Security Ops; Information Technology and interfaces with Architect, Engineers, Construction Manager, and specialists; works with client to determine long-term client technology needs and priorities; Develops and manages budgets and funding requests; specifies IT (wired and wireless) campus infrastructure and products; manages technology and security implementation schedule; successfully managed temporary voice/data/security infrastructure during temporary 'swing-space' relocations of staff necessary for proper construction sequencing; and is Project Manager for installation of devices and "head-end" equipment for security alarm, CCTV, access control systems (design by others) and emergency wired and wireless communications.

Michael C. Stevens
Structural Engineer
Jacobs

Education:
M.S., Construction Management
B.S., Civil Engineering

Registrations:
ACI Certified

Years of Experience:
4 Years

ACI Concrete Construction Special Inspector
Expires 5-26-2015

Michael Stevens has experience in structural analysis and design of bridges and stations. In addition, he is experienced in schedule making. He has gained working knowledge of AISC Manual of Steel Construction, and utilized various structural software (STAAD, SAP) and CADD software (MicroStation-J, MicroStation-V8, and AutoCAD), and Primavera P3 Scheduler.

Michael is a Resident Assistant at Stevens Institute of Technology and has experience in conflict mediation, administration, programming, and community building within the college environment.

RELEVANT EXPERIENCE

NJ TRANSIT, Penn Station New York-31st Street Entrance Design for 7th Avenue Concourse, New York, NY. *Technician* responsible for creating structural and architectural details in MicroStation, responding to RFIs and shop drawings, and conducting field visits to review site conditions and take measurements.. Project involves providing a street-level entrance building to the 7th Avenue Concourse below street level. Jacobs provided structural, architectural, electrical, and mechanical engineering services for the design of the entrance building.

NJ Department of Transportation, Route 36 Highlands Bridge over the Shrewsbury River, Highlands. *Technician* responsible for assisting in the coordination and development of the Final Design submittals, which involved developing cost estimates using NJDOT spreadsheets and standard programs; developing list of pay items both standard and non-standard; coordinating efforts of drawings for various disciplines; creating several different construction schedules; and responding to comments from the residents of Highlands and Sea Bright. Developed Coast Guard Permit drawings. Developed PowerPoint presentations for Community Outreach programs and Historic Sites Council meetings. Currently working on shop drawing and RFI responses. Project involves the final design of a fixed bridge to replace on-line a 1,240-foot long, low-level double leaf bascule bridge. The new bridge features twin precast segmental concrete box girder structures (mainline and curved exit and entrance ramps) designed to be built by the balanced cantilever method. During final design, involved in the development various drawings including traffic control and staging plans, ITS plans, overhead and cantilever sign structures, quantities and rebar list development for various elements.

NJ Department of Transportation, Route 7 Wittpenn Bridge over the Hackensack River, Kearny, NJ. *Technician* responsible for developing various drawings for the vertical lift span and approach spans; analyzing the existing vertical lift towers using STAAD; creating PowerPoint presentations for ASCE and SHPO; and creating permit drawing for the U.S. Coast Guard during the Final Design and Interim Repair Stages include: Project involves the preliminary design of a 9,500-foot long, mid-level bridge carrying Route 7 across the Hackensack River between the Town of Kearny and the City of Jersey City, NJ to replace the existing Wittpenn Vertical Lift Bridge (one of the "Tri-Hack"

Robert Morris
Senior Inspector
Jacobs

Education:
B.S., Civil Engineering

Registrations:
NICET - Level IV, Transportation Engineering Technology, Highway Construction, [redacted] Expires 02/01/13
Rutgers, Traffic Control Coordinator (TCCP), Course [redacted] Earned 2005, Refresher 2010
ACI Concrete Construction Special Inspector, Expires 04/13/2016
ACI, Concrete Field Testing Technician, Grade I, Expires 04/14/15
ACI, Concrete Construction Technology Course (CCTC), Expires 04/2015
NJSAT, Asphalt Technology Certificate, Asphalt Paving Construction Technologist, Expires 07/01/11

Years of Experience:
24 Years

ACI Concrete Construction Special Inspector
Expires 4-13-2016

Robert Morris has extensive experience having served as Senior Inspector on a number of large, complex highway and bridge construction and rehabilitation projects. His experience includes but is not limited to the replacement structural components in conjunction with the construction and rehabilitation of bridges, construction of new roadways, paving and resurfacing, blasting, drainage structures, drill shafts, retaining walls, toll plaza reconstruction, utilities, and tides gates. In addition, Robert has designed water treatment systems, drainage and sewer systems, and pump stations.

RELEVANT EXPERIENCE

County of Somerset, Construction Inspection Services for the Rehabilitation of Main Street Bridge Over Raritan River and Improvements to South Middlebush Road, Somerville, NJ. *Senior Inspector* responsible for inspection services to Somerset County for the Rehabilitation of County Bridge No. H0706 (Queens Bridge) Main Street Over Raritan River & Improvements to South Middlebush Road (County Route 615), at Blackwells Mills Road. The scope of work included the replacement of two culverts and retaining wall on South Middlebush Road (existing culverts and retaining wall were replaced with precast units); installation of a traffic signal at the intersection of Blackwells Mills Road and South Middlebush Road; widening of South Middlebush Road for approximately six feet on each side between the intersection of Blackwells Mills Road and Skillmans Lane; widening of Blackwells Mills Road of approximately 10 feet x 220 feet to the south; and widening (and realignment) of Skillmans Lane of approximately 12 feet x 240 feet.

NYS Dept. of Transportation, Gowanus Expressway, Brooklyn, NY. *Senior Inspector* for the rehabilitation of the viaduct from 6th Avenue to the Brooklyn Battery Tunnel. Inspection assignments included concrete deck repair and replacement, lead paint removal using Class A containments, structural steel evaluations and repairs and joint replacements. The entire project was constructed in a high volume high-density area that included active inspection of MPT detours and schemes.

NYS Dept. of Transportation, Henry Hudson Parkway, New York, NY. *Senior Inspector* for the rehabilitation of seven bridges between 120th and 181st Streets in Manhattan. Inspection assignments included replacement of all bridge-armored joints, replacement of bridge bearings and deteriorated steel members – all in a high volume environment with extensive MPT.

NYS Thruway, I-287 / I-87 Interchange 8 Projects, Westchester, NY. *Senior Inspector* for the widening of NYS Thruway from the Saw Mill River Parkway to Tappan Zee Bridge. Inspection assignments included replacement or rehabilitation of eleven bridges, building of new roadways using "superpave," blasting of rock, new drainage structures, drill shafts, retaining walls and the construction of a new toll plaza. Estimated Construction Cost $168 million.

Dean Lerescu
Senior Inspector
Jacobs

Education:
B.S., Civil Engineering/ Structural Engineering

Registrations:
ACI Concrete Construction Special Inspector – Expires 04-07-2016

Years of Experience:
30 Years

ACI Concrete Construction Special Inspector
Expires 4-7-2016

Dean Lerescu has over 30 years experience in design and construction inspection of industrial buildings housing various utilities and transportation facilities, including ITS. Representative clients include the MTA Bridges and Tunnels, the New York State Thruway Authority, New York State Department of Transportation, Con Edison and others. Dean also has extensive experience with computer programs for structural analysis (Staad, Strudl, Ansys), and is familiar with the computer-aided design software.

RELEVANT EXPERIENCE

Amtrak-Pelham Bay Bridge Infrastructure Rehabilitation. *Field Engineer.* Duties includ construction inspection and quality assurance at the start-up of the restoration process, to insure compliance to the contract specifications. The scope of work included primarily the demolition and restoration of the deteriorated concrete piles which are partially submerged in the water and exposed to weather conditions. The restoration consisted of a tightly fitted reinforcing steel cage over the length of the pile and a permanent fiberglass, cylinder shaped, jacket installed over the cage, also working as a form for pouring of the repair grout designed to fill it.

MTA Bridges and Tunnels, Contract BB-80, Repairs to the Ventilation Buildings at the Brooklyn Battery Tunnel *Senior Inspector* providing construction inspection services for the repairs of the Ventilation Buildings at the Brooklyn Battery Tunnel. The scope of work included the demolition and restoration of the deteriorated sections of the brick and/or concrete covered structural elements (beams, columns, floor slabs, etc.).Following the demo, the exposed structural steel was first abated wherever covered by lead base paint. Subsequently the exposed areas were treated with corrosion resistant coating and finally, the masonry/concrete encasement was restored. Another contract item was the joint pointing on the bricks, granite panels and coping stones, as well as the brick/concrete crack and spall repairs.

MTA Tunnels and Bridges, Contract AW-36 – CCTV and Fiber Optic Upgrade Authority-Wide *Assistant Resident Engineer* on the $13 million MTA – Bridges and Tunnel Authority-wide contract (AW36) involving the installation of CCTV cameras and the optical fiber upgrading at five TBTA facilities throughout New York City. The contract called for new CCTV cameras to be added at certain locations along the roadways at each of the four bridges (Marine Pkwy, Verrazano Narrows, Throgs Neck and Henry Hudson) and at Manhattan Midtown Tunnel.

New York State Thruway Authority, Variable Message Signs, Transmit and CCTV Cameras, Westchester County, NY *Senior Inspector* on this $4 million ITS contract. The work included the installation of 17 CCTV camera sites, 18 TRANSMIT sites, and 2 VMS locations, along 30 miles of the New York State Thruway starting at the NYC line. The CCTV cameras were installed along with the Field Cabinets on poles erected on reinforced concrete foundations.

Paul DeCasas
Inspecor
Jacobs

Education:
B.S., Construction Engineering Technology, A.A.S., Civil and Construction Engineering

Registrations:
ACI Certified
NICET - Associate Engineering Technician [redacted], Expires 03/01/11
NICET - Level IV, Transportation Engineering Technology, Highway Construction, [redacted] Expires 03/01/11

Years of Experience:
26 Years

ACI Concrete Construction Special Inspector
Expires 5-26-2015

Paul DeCasas has extensive construction inspection and observation experience having served as a Construction Manager, Resident Engineer, Assistant Resident Engineer, or Construction Inspector on numerous transportation and communications projects throughout New Jersey and Delaware. Paul has provided construction inspection services for highways, bridges, local and state roads, and railroads for clients including NJ Department of Transportation (NJDOT), NJ Turnpike Authority (NJTA), MTA-Long Island Rail Road (LIRR), MTA-Metro North Railroad (MNR), the Port Authority of New York and New Jersey (PANYNJ), and Somerset, Essex, Middlesex, and Ocean Counties.

RELEVANT EXPERIENCE

NJ Turnpike Authority (NJTA), Supervision of Construction Services. *Resident Engineer* responsible for day and night work cycles to rehabilitate land and water spanning bridges. Mr. DeCasas oversaw construction of concrete repairs on substructure members (abutments, piers, columns, caps), structural steel repairs (on damaged girders, haunches, bearings, diaphragms), utilization of temporary shoring/jacking towers to support deck stringers, applied epoxy waterproofing, localized SSPC SPC6 cleaning of lead based paint systems for steel repairs with Level 4 – Class 4 containment then recoating with an epoxy mastic paint, completing emergency steel repairs under on-call status, MPT for lane closings on GSP and NJDOT roadways.

County of Somerset, Somerset County - Duer Street Bridge, Somerset, NJ. *Resident Engineer/Inspector* responsible for overseeing and inspecting the reconstruction of the single span bridge including existing superstructure demolition and cast-in-place concrete construction for rebuilt abutment wall caps and new deck assembly, re-pointed mortar joints and replacement of natural stone sections of the remaining abutments and wingwalls, construct concrete deck with stay-in-place pans atop new galvanized stringers, construction of cast-in-place pylon walls with ornamental precast baluster for fascia parapet, reconstruction of approach roadways to new bridge profile, drainage improvements, and new curbing and sidewalk. He coordinated primary electric and telephone utility relocations, monitored MPT and long-term detour scheme, public relations with local residents, and milling and HMA paving. He also completed all associated office work (shop drawing review, monthly estimates, change orders, general correspondence, progress schedule review.

County of Somerset, Construction Inspection Services for the Rehabilitation of Main Street Bridge Over Raritan River and Improvements to South Middlebush Road, Somerville, NJ. *Resident Engineer/Inspector* responsible for day, evening, and weekend work cycles for the improvements to South Middlebush Road (County Rte 615) at Blackwells Mills Road. Oversaw reconstructed and new roadway construction to realign vertical and horizontal geometry and left-turn lane additions, replacement of two storm sewer culverts with three-sided precast arch bridges and wingwalls, construction of +/-450 linear feet of a precast T-wall style retaining wall, cast-in-place footings for all precast elements, signalization of one intersection, and drainage improvements.

Henry Heredia
Inspector
Jacobs

Education:
AAS, Civil Engineering

Registrations:
ACI Concrete Construction Special Inspector – Expires 04-07-2016

Years of Experience:
13 Years

ACI Concrete Construction Special Inspector
Expires 4-7-2016

Henry Heredia is experienced in the construction inspection of roadway projects in congested urban environments. He also is experienced in other aspects of construction inspection. He has worked on high profile projects requiring extensive coordination among various disciplines of work and with multiple contractors.

RELEVANT EXPERIENCE

NYS Dept. of Transportation, ITS Maintenance Repair (D015659) (Nick Lorencz – EIC). *Construction Inspector, NICET Level III.* Conducted field inspections of ITS maintenance work of contractor. Work included preventative maintenance to ensure equipment functionality was preserved. Also coordinated T&M repairs whereby equipment diagnostic and resolution were accomplished efficiently. Maintenance and protection of traffic was also inspected and monitored daily.

NYS Dept. of Transportation, Gowanus Expressway Emergency Repair Contract, Brooklyn, NY (D015482) (Albert Wong – EIC). *Highway Construction Inspector, NICET Level III.* Performed daily inspections of the rehabilitation of the viaducts reinforced deck and supporting structural steel that included steel repairs, bearing installation, demolition of existing slab and full depth replacement, and overhead drainage installation.

NYS Dept. of Transportation, I-178 Gowanus Expressway, Emergency Rehabilitation Projects (D007423) (Pat Prenel – EIC). *Highway Construction Inspector, NICET Level II.* During a succession of projects, conducted inspections and submitted daily reports of various operations; directly involved with the following:

- Installation of precast exodermic deck panels on supporting steel
- Demolition and reconstruction of reinforced concrete deck
- Erection of new stringers for new deck
- Paint abatement of existing steel bents using Class A containment
- Designated as MPT person to inspection projects' lane closures

NYS Dept. of Transportation, I-278 Gowanus/Prospect Expressways Emergency Rehabilitation Project, Brooklyn, NY (D007423)(Stan Malik – EIC). *Highway Construction Inspector, NICET Level II/I.* Inspected restoration of retaining wall on Prospect Expressway that included installation of coping stones, landscaping and painting of existing railing, as well as excavation for underground installation of electrical conduit for proposed lighting plan.

Kwesi Amegah
Senior Inspector
KS Engineers, PC

Education:
BS, Civil / Structural Engineering

Registrations:
Bridge Inspection course; New York State Department of Transportation (NYSDOT) Concrete Field Testing Training course; New York City Department of Design and Construction (NYCDDC) OSHA Construction Safety Awareness course
ACI Field Testing Technician-Grade I – Expires 8/20/14
ACI Concrete Construction Special Inspector (CCSI) – Expires 3/11/15

Years of Experience:
20 Years

ACI Concrete Construction Special Inspector
Expires 3-11-2015

Mr. Amegah has more than 20 years of multifaceted experience encompassing inspection, civil and structural engineering as a Civil Engineer. His experience in construction inspection and bridge inspections including completion of various in-depth inspection programs in the New York metropolitan area. He also has experience in civil design including roadway replacements involving drainage, sewers, utilities, curbs and sidewalks. In addition, his structural experience includes the removal, replacement and reinforcement of steel and concrete bridge elements.

RELEVANT EXPERIENCE

PANYNJ, Construction Management Services, NY Marine Terminal, Howland Hook & Teterboro Airport, PIDS. *Senior Inspector* responsible for building demolition at Howland Hook, Staten Island contractor oversight as part of work at NYMT. Mr. Amegah is participating in the testing phase and inspection of the perimeter intrusion detection system, fencing sensors and radar system both day and night at PANYNJ Airport. Also supervised the assembly of large erosion mats made of concrete sections encased in geotextile material being fabricated in Bayonne for future relocation and installation.

NYCDDC, REI Services for HWCR08B, Citywide Milling Project Involving Grinding Existing Asphaltic Concrete Wearing Course, Manhattan and the Bronx. *Inspector* responsible for this $7 million project, providing inspection and other related services for projects involving grinding existing asphaltic concrete wearing concourse at various locations on an as-needed basis. Some issues that involve inspection services include site maintenance and safety, protect tree from construction debris, milling two inches of existing asphalt, smaller milling machine was used to grind asphalt in hard to reach places such as around catch basin or corner of a curb and a sweeper was used behind milling machine to clean up the debris. Tasks include all services necessary and required for the inspection, management and administration of this project, for the required construction work to be properly executed, completed on time and conforms to the plans, specifications and requirements of the construction contract.

NYCDDC, (HW2CR08B), Grinding and Milling of Various Streets in the Borough of Manhattan, NY. *Senior Inspector* responsibilities included inspection of milling of roadway pavement resurfacing in the borough of Manhattan for NYCDDC. Responsible for managing inspection staff, reviewing and approving field changes, resolving any construction problems, claims and disputes, supervision of contractor's work, processing of contractor's monthly payments, coordinated with the various community boards, NYCDDC and other related agencies.

NYCDDC, Richmond Road REI. *Senior Inspector* provided field inspection and preparation of daily reports for the installation of sewers, water main, and roadway replacement for this roadway in Staten Island, NY. The scope of work included the installation of a new 72-inch trunk main in Richmond Road between Narrows Road and Duzer Street and in Vanderbilt Avenue between Van Duzer Street and Tompkins Avenue. A new 60-inch water main was also installed in Swan Street between Van Duzer Street and Bay Street.

Duke Samala
Senior Inspector
KS Engineers, PC

Education:
BS, Civil Engineering

Registrations:
Registered Civil Engineer
ACI Concrete Construction Special Inspector – expires July 2014

Years of Experience:
11 Years

ACI Concrete Construction Special Inspector
Expires 7-1-2014

Duke Samala has 11 years of experience as a Senior Inspector/Field Inspector in the New York Metropolitan area. His expertise centers on engineering inspection and monitoring of day-to-day operations of tunnel, civil, and structural related construction work including TBM tunnel excavation and shaft construction including conformance to project plans and specifications, health and safety regulations, and environmental compliance and reporting.

RELEVANT EXPERIENCE

MTA NYCT, Construction Management for No. 7 Subway Line Extension Project, NY (CM-1311) – *Field Inspector* for this $1.5 billion project for construction management services that will extend the No. 7 Line westward under West 41st Street and southward under Eleventh Avenue to the southerly terminus at West 25th Street. The extension provides a 7,100 ft. long two-track railroad with two lay-up tracks for the storage of six trains. It also provides two new stations at West 41st Street and Tenth Avenue and a 2-track terminal station on 11th Avenue at West 34th Street. Project also includes working in the tunnel under the street level Site "A" located on the East side at 11th Avenue between 25th and 26th Streets. Work in this area includes deck and concrete edge pans, safety lines, temporary lights and tower stairs.

NYCDEP, Contract CRO-313 ($212M contract value) Protection Capitol Improvement Project WM-11 – Water Tunnels and Associates Works – *Senior Inspector/Engineer* providing inspection and support services for the work being performed as part of the construction of the Croton Water Filtration Plant in Bronx, NY. The filtration plant construction is part of the NYCDEP's Bureau of Engineering, design and construction project to upgrade the water supply system, improve water quality and ensure compliance with stricter water quality standards. The principal items of the tunnel and shaft work consist of the construction of two 13.5-ft diameter Treated Water (TW) tunnels, approximately 3,500 ft. in length, excavated using a Robbins Open-Main Beam High Performance Tunnel Boring Machine (TBM) and lined with 9 ft. diameter concrete-lined steel pipe between the filtration plant and the Jerome Park Reservoir (JPR) shaft chamber.

Gilsanz Murray Steficek Structural Engineers & Building Envelope Consultants LLP, NYC– Structural Engineer/Inspector providing design and inspection services as follows:
JP Morgan Chase Building Renovations handled the structural design of building renovation executive floors down to base building; designed high density file system beam support and reinforcement of existing wide flanges; designed web openings and existing beam cut enlargements with reinforcement plates; structural analysis.
MTA, Grand Central Terminal - performed Tunnel Inspection of MTA tracks 33 to 42 at Grand Central Terminal slab, column, and existing conditions, documentation and creation of Controlled Inspection reports. Responsible for the review of AutoCAD designs on blueprints and plans, review of shop drawings and preparation of architectural and structural drawings/plans.

Jeanne Brady
Senior Inspector
KS Engineers, PC

Education:
N/A

Registrations:
NICET III Certification [redacted] thru March 2012
ACI Concrete Construction Special Inspector [redacted] thru December 2013

Years of Experience:
16 Years

ACI Concrete Construction Special Inspector
Expires 12-9-2013

Jeanne Brady brings 16 years of experience as Concrete Technologist/ Services Supervisor, Senior Inspector, and Site Inspector Her duties have included acting as the Owner's representative, overseeing scheduling, budgeting, contract negotiations, and coordination of inspection and engineering services for major construction projects.

RELEVANT EXPERIENCE

NYCDEP, Concrete Quality Assurance Program, New York, NY - *Concrete Technologist/Services Supervisor* for inspection of various concrete batch plants and laboratories, universal labs, Tectonics Consultants, Futuretech and Fairways. Responsibilities include monitoring of trial batching procedures for newly designed concrete mixes; verifying compliance of plants and laboratories, as per specifications; recording laboratory test results and readings (concrete cylinder breaks, slump tests, air content, unit weights, etc.); Overseeing field testing and performing audits as requested. Training and supervising Assistant Concrete Technologists in service related inspections and audits

Interim Stability Improvements at the Gilboa Dam, Schoharie County, NY - *Site Inspector* responsible for quality assurance personnel in charge of overseeing the contractor's quality control for the installation of post-tensioned rock anchors. Duties include record keeping of daily construction activities, including installation of pre-production anchors, environmental controls, safety measures, drilling of anchor holes, grouting of anchor holes, and installation of post-tensioned rock anchors.

Garden State Parkway, Bridge Repairs North - *Engineering Technician, Level III* worked directly with and responsible for 5(+) person crew. Worked on repairs to 16 bridges along a 15-mile span of the Garden State Parkway. Activities included substructure concrete repair, concrete deck repair, and temporary support of stringers, asphalt milling and paving, installation of guide rail, and maintenance and protection of traffic.

Village of Port Chester, Waterfront Redevelopment - *Engineering Technician, Level III* worked directly with and responsible for 9+ person crew. Worked on widening and redevelopment of U.S. Route 1. Activities included excavation, traffic signals, street lighting, concrete and granite curbs, sidewalks, asphalt overlay, and MPT.

Reconstruction of I-287, Stage 2A - *Engineering Technician, Level III* worked directly with and responsible for 5+ person crew on the widening of I-287 and replacement of 3 bridges. Activities included installation of drainage, installation of guide rail, milling and placement of asphalt, survey of final grades and creation of as-built drawings.

Reconstruction of the Palisades Interstate Parkway - *Engineering Technician, Level II* worked directly with and responsible for 7+ person crew working on widening and reconstruction of the Palisades Interstate Parkway. Activities included placement of inlets and drainage pipes, excavation, embankment, grading, silt fence, and maintenance and protection of traffic.

Kuldip Sachdev, PE
Senior Inspector
KS Engineers, PC

Education:
MS Civil Engineering
BS, Civil Engineering

Registrations:
Licensed Professional Engineer in the State of New York
ACI Level 1 Certified
ACI Concrete Construction Special Inspector (Expires 2014)

Years of Experience:
30 Years

ACI Concrete Construction Special Inspector
Expires 6-16-2014

Kulldip Sachdev, PE has over 30 years of engineering and construction inspection experience in transportation and industrial facilities, including over 25 years with New York City Transit. His experience includes construction management, supervision, inspection, and design review, auditing, and planning for various New York City Transit Authority, Board of Water Supply, and NYC Department of Environmental Protection projects. He has inspected track, structures, concrete, paving, ancillary railroad systems, bus depots, electrical, and mechanical systems for compliance with plans, drawings, and specifications. He is familiar with NYC Transit and Port Authority systems and procedures.

RELEVANT EXPERIENCE

Port Authority of New York & New Jersey, Port Commerce Facilities *Senior Construction Inspector.* Inspected contractor's work related to $45 million intermodal facility at Port Ivory, Howland Hook and tenant alteration applications at Port Newark/Elizabeth. Inspected construction of two-story, 9000 SF administration building for Maher, including civil, architectural, structural, and MEP.

Port Authority of New York & New Jersey, Restoration of PATH Service to Manhattan. *Senior Construction Inspector* Inspected contractor's work connected with the $360 million project, including temporary PATH station at WTC, rehabilitation and expansion of Exchange Place Station, and rehabilitation of Tunnels "E" and "F". Verified compliance with plans and specifications. Prepared daily narratives and reports. Also responsible for coordination with train master for removal of blast material for new crossover tunnels, inspection of additional PATH projects including CCTV upgrade at South Street Yard, including new light poles, foundation excavation, and concrete placement; additional elevators at Pavonia Station; and chemical grouting at various locations.

New York City Transit, Rehabilitation of New Lots Line, Brooklyn, NY. *Resident Engineer.* Construction supervision and coordination of Elevated Subway Line Project. The project involved replacing structural steel girders, seat brackets, column rehabs, track work, stair replacement, and mezzanine hanger repair, replacement of structural concrete and water proofing of thru-spans.

New York City Transit, Rehabilitation of Various Pump Rooms in Brooklyn and the Bronx, NY. *Resident Engineer.* The work involved providing new electrical service, pumps, discharge lines, valves, new structural slab, new doors and lighting.

New York City Transit, Handicap Ramps for SIRTOA Stations, Staten Island, NY. *Resident Engineer.* The project consisted of providing over 500 feet of ramps over pile foundations at two elevated stations, Dongan Hills and Great Kills.

Rochelle Lancey
Senior Inspector
KS Engineers, PC

Education:
N/A

Registrations:
ACI Concrete Construction Special Inspector (Expires 2014)
ICC Structural Masonry Special Inspector

Years of Experience:
29 Years

ACI Concrete Construction Special Inspector
Expires 6-1-2014

Rochelle Lancey has 29 years experience in engineering. Her experience ranges from heavy/highway construction to subdivision/land development construction surveillance and escrow contract monitoring. Project experience includes engineering design, field surveying, quantity computations, bidding and contract ratification, construction surveillance, construction materials testing, review of subdivision and land development plans, developing specifications of municipal projects for local government clients as well as private clients.

RELEVANT EXPERIENCE

Port Authority of New York & New Jersey, World Trade Center *Senior Construction Inspector.* Tower 1 - Foundation, footings and concrete columns were completed, and the work in basement levels Zone B, B3, and elevator core had begun. Observed the excavation into rock, rebar and concrete installation of footings, foundations and slurry liner wall. Managed current issues with the contractors, consulting engineers MRCE and Cantor, and PA surveyors, and prepared a Daily Narrative for the PA records reporting the progress of the work with reference to contract drawings and specifications. Also attended pre-construction meetings for Tower 3 and general WTC coordination meetings. Reviewed and made comments on submittals, and payments as requested.

Port Authority of New York & New Jersey, World Trade Center *Senior Construction Inspector.* Towers 3, 4, and 7 - Observed and reported on blasting operations, excavation to grade, and subsequent concrete and rebar installations for footings, slabs and shear walls. Monitored rock anchor and caisson drilling, installation and testing. Represented the RE on incidents of an environmental nature, such as fuel spills, and coordinated with PA staff to improve site safety. At Tower 7, helped perform final sign-off for Certificate of Occupancy for mechanical and electrical installations. Participated in routine progress inspections, and punch list walk-through of completed work.

New York City Department of Design & Construction, LIC, NY. *Construction Project Manager/Resident Engineer.* Project Manager for government projects in a variety of settings, including: firehouses, police and fire facilities, schools and community centers. Managed projects and budgets ranging from $1-15M Reviewed design documents, shop drawings and specifications for accuracy and completion. Coordinated all work performed by Agency and Consultant architects, engineers, surveyors, and testing services. Supervised field installations for mechanical, electrical, and plumbing in addition to general construction for prime and sub-contracts. Coordinated and conducted progress meetings, maintain work schedules, approved detailed estimates and payments. Drafted, negotiated and authorized change order requests. Prepared punch list. Liaison between client, consultants, and various government agencies. Ensured deadlines are met and projects are within budget . Generated reports and correspondence for project tracking. Experienced in Lump Sum, Unit Price, Job Order Contracting, and Time and Material contracts.

David Post
Construction Inspector
Savin Engineers, PC

Education:
Associates Degree, Civil Engineering

Registrations:
ACI Concrete Construction Special Inspector

Years of Experience:
24 Years

ACI Concrete Construction Special Inspector
Expires 5-27-2014

David Post of Savin Engineers was recently promoted to a supervisory role for all night operations on various construction contracts at the Port Authority's PATH facilities. David has over 24 years of experience in construction management and inspection and has been working on PANYNJ projects for over 2 years. His experience includes train station construction work as well as a variety of buildings types. He is an ACI Certified Special Inspector.

RELEVANT EXPERIENCE

Construction Management Term Agreement, PANYNJ *Construction Inspector.* Responsibilities include supervise, direct and provide technical support for Electrical Contractors on Homeland Security construction projects located throughout the entire PATH train station and tunnel system. Provide coordination between related PATH construction projects. Supervise work train movements and placement by coordinating with the contractor and providing direction to the assigned train crew. Coordinate tunnel and train station construction work with various PATH personnel. Provide Assistant Resident Engineer with written reports (Spreadsheet format) and mark-up pictorial reports of project progress and deficiencies. Evaluate and mark-up monthly Payment Requisitions. Evaluate submittal logs. Provide electrical inspection of contract work performed.

Chrisdon Homes, Inc. *Project Manager* Chrisdon Homes is a general contracting company specializing in construction of pre-fab homes in the $200K to $800K price range. As Project Manager, David's responsibilities included site preparation and foundation design, Subcontractor negotiations, building construction operations, material procurement and scheduling, specification and Contract Compliance and Final Inspections.

RSA Enterprises, Inc. *Project Manager* RSA is a construction management company specializing in commercial and residential projects in the 1 to 20 million dollar range. As Project Manager for a $2.5 million project at a prestigious New Jersey Golf and Country Club and a $2.1 million jewelry center, responsibilities included budget estimating, project scheduling, site preparation, customer relations, building construction operations, Subcontractor negotiations, material procurement and scheduling, ADA compliance, Change orders-formulation and negotiation, Specification and contract compliance and Final Inspections

Construction Engineer & Lead Designer – Worked as group lead designer and construction engineer for projects in the 1 to 60 million dollar range, for power plants, mining and quarry operations. Designed bulk material, handling conveyors, steel and concrete structures and g.a.'s with design teams of 5 to 25 employees.

Steve J. Goss
Special Inspector
Jacobs

Education:
N/A

Registration:
ICC Certified ADA Accessibility Inspector/Plans Examiner
ICC Certified Fire Inspector I
ICC Certified Master Inspector
ICC Certified Reinforced Concrete Inspector
ICC Certified Prestressed Concrete Inspector
ICC Certified Structural Steel Welding Inspector
ICC Certified High Strength Bolting Inspector
ICC Certified Structural Reinforced Masonry Inspector
ICC Certified Spray-Applied Fireproofing Inspector
ACI Certified Concrete Technician Grade 1

Years of Experience:
21 Years

ICC Certified Structural Steel & Bolting Inspector
Expires 2012

Steve Goss has more than 21 years of office and field inspection experience working on Wastewater Treatment Plants, Hospitals, Schools, Colleges, Police Facilities, Courthouses, Airports, Amtrak Maintenance Facility, Metro Light Rail, Convention Centers, Libraries, Office Buildings, Commercial Buildings, and Parking Structures. His projects total more than $1.5 Billion. Mr. Goss' experience includes inspection, quality assurance and control, scheduling, field and office supervision, as well as training of new inspectors and engineers.

RELEVANT EXPERIENCE

Amtrak – Los Angeles Maintenance Facility. *Quality Assurance Manger* for the construction of a $25 million 900' long concrete and structural steel building, site improvements, and the relocation of existing rail lines. Duties include Oversight of the Contractor Field Activities; Scheduling, Supervision, and Training of all Field Inspectors; Acting as the On-site Building Official/Fire Marshal – Enforcement of Local Building, Fire and Federal Railway Codes, as well as Insuring Contractor's Adherence to the Contract Documents; Document the Contractor's Weekly Progress; Review RFI's and Submittals; and Attend weekly Contractor/Owner's Meetings.

City of Bakersfield, CA Wastewater Treatment Plant #3 – 2007 Expansion. *Senior Building/Civil Inspector* for the construction of a $211 million expansion and upgrade of the City's existing Wastewater Treatment Plant. Duties include field inspection, (Architectural, ADA, Mechanical, Electrical, Plumbing; Structural and Civil); Scheduling, Coordination, Supervision and Training Junior Inspectors; Training Engineers work as inspectors; Enforcement of the California Building Codes, and Contract Documents; Review RFI's and Submittals; and Interact with the on-site Design Engineer.

The project includes 55 new structures: Administration/Laboratory Building; Operation and Maintenance Buildings, Headworks, Aeration Basins, Blower Building; Secondary Clarifiers; Dafts; Digesters and Control Building; Biofilter, Septage, and Tertiary Facilities; Cogeneration Building; Dewatering Building; RAS/WAS Facility; Pump Stations; Reclaimed Water Tanks; MCC Electrical Buildings, and Percolation Basins.

Kaiser Permanente Hospital – Downey, CA. *Inspector of Record* for the construction of a $650 million new six story acute care hospital, two story surgery center, and parking structure. Duties include field inspection, (Architectural, Seismic for M.E.P and Medical Gases, and Fireproofing); Daily documentation and monitoring of contractor's progress to insure that work is in compliance with the State Building Codes and Contract Documents; Interact with the on-site Architects and Engineers, as well as visiting State Engineers and Fire Marshals.

John Wayne Airport's Parking Structure Expansion Project. *Special Inspector* for the construction and expansion of the existing airport's $20 million 4 story parking structure. Duties include field inspections for the reinforced concrete and post-tension concrete; daily documentation and monitoring of the contractor's progress to insure that work is in compliance with the County Building Codes and interact with the Engineers/County Building Inspectors.

Michael Caraway
Field Engineer
Jacobs

Education:
BS, Civil Engineering

Registration:
ICC Reinforced Concrete Special Inspector [redacted]
ICC Structural Steel & Bolting Special Inspector No. [redacted]
ICC Structural Masonry Special Inspector No. [redacted]
ACI Concrete Field Technician I No. [redacted]
ICC Spray-Applied Fireproofing Special Inspector No. [redacted]
OSHA – 10 hr Occupational Safety and Training Course
OSHA – Confined Space Certified

Years of Experience:
6 Years

ICC Certified Structural Steel & Bolting Inspector
Expires 2012

Michael Caraway has experience as a project engineer and quality inspector. He reviews and negotiates change orders and makes recommendations to the client. Michael's experience includes oversight of submittals, RFIs, logs, punchlist items and handling day-to-day issues to keep the flow of information in the office running smoothly and efficiently.

RELEVANT EXPERIENCE

Wastewater Treatment Plant #3, 2007 Expansion, City of Bakersfield, CA. *Project Engineer/Quality Inspector* on the $211 million Expansion of Wastewater Treatment Plant #3. Responsibilities included field inspection, (Architectural, ADA, Structural, Civil, Mechanical, Landscaping and Plumbing), scheduling, coordination, supervision, submittals, RFIs, logs, punchlist items and handling day-to-day issues keeping the flow of information in the office running smoothly and efficiently. The project included 55 new structures and over 388,000 square feet of landscaped area. Some of the structures included a new Operation Building, Administration/Laboratory Building, Maintenance Building, MCC Electrical Buildings, Headworks Building, Blower Building, Tertiary Facilities, RAS/WAS Facility, Cogeneration Building, Dewatering Building, Digester Control Building, Digester, Aeration Basins, Secondary Clarifiers, Dafts, Biofilters, Septage/Grease Receiving Station, Pump Stations; Reclaimed Water Tanks, and Percolation Basins. The project was completed within 30 months– with less than 4% change orders, and saving the client over $11 million with no claims from the contractor.

Project Engineer responsibilities included: Coordinating field testing and surveying activities; performed quality assurance and quality control inspections per jobsite specifications and California Building Code; issued non-compliance and deficiency reports to General Contractor and follow-up for timely resolution.

Michael also prepared detailed punch lists in conjunction with the City and Design Engineer.

Madera County Government Center and Parking Garage, Construction: $35M. The Madera County Government Center included a 130,300-sf, four story office building a 136,000-sf multi-level parking structure with all associated on and off-site improvements. Field Engineering responsibilities included: executed concrete quantities, trend log monitoring and project daily logs; assisted with field purchasing, equipment maintenance logs, weekly progress photos and safety programs and interpreted plans and specifications as needed.

Michael's Office Engineering responsibilities included: processed: shop drawings, submittals, RFIs, sub. pay applications, material deliveries; established a punch list numbering system for foreman to locate needed improvements per architect; and assisted with owner and subcontractor: change orders, as-built documentation, drawing reviews.

Carl Coyle
Special Inspector
KTA Steel Group

Education:
N/A

Registrations:
N/A

Years of Experience:
15 Years

ICC Certified Structural Steel & Bolting Inspector
Expires 2012

Carl Coyle is an AWS Certified Welding Inspector [redacted]) and an SNT-TC-1A Level II MT and UT. He has over 15 years of experience in the construction and fabrication industry, and has received protective coatings inspection and galvanizing inspection training. Carl is an International Code Council (ICC) Structural Steel and Bolting Inspector.

RELEVANT EXPERIENCE

Port Authority of New York and New Jersey. Providing CWI, UT, and MT inspection services at the World Trade Center site.

Pennsylvania Turnpike Commission. Provided in-process visual inspection for zinc continuity, measure and record zinc thickness, and perform stout knife adhesion testing (per ASTM A123); obtain required State Control Documentation; cursory visual inspection of completed welds, ground edges, and steel condition; inventory by piece number (girders, diaphragms, bearings, scuppers, drains, sign structures and other bridge structures); observe blocking/strapping/chaining of truckload, and record inspection information at V & S Lebanon Galvanizing, Jonestown, PA.

West Virginia Division of Highways. Provided visual and dimensional inspection on miscellaneous bridge items at L.B. Foster, Bedford, PA.

Florida Department of Transportation. Provided coating inspection services on shop fabricated cantilever sign structures at Greiner Industries, Mt. Joy, PA.

Triborough Bridge and Tunnel Authority. Performed ultrasonic testing of field welded repairs on the Throgs Neck Bridge (Project TN-85) in Queens, NY.

Vermont Agency of Transportation. Provided bridge fabrication inspection of plate girders to AWS D1.5 Bridge Welding Code at High Steel Structures, Lancaster, PA.

Pennsylvania Department of Transportation. Provided bridge fabrication inspection and MT and UT witnessing for the Lancaster General Hospital double-deck pedestrian bridge. Provided inspection throughout the fabrication process, including material preparation, fitting, welding, assembly, and painting.

Vermont Agency of Transportation. Provided CWI shop inspection of swept plate girders to D1.5 AWS Bridge Welding Code at International Bridge & Iron, Newington, CT.

Virginia Department of Transportation. Provided CWI inspection for bearings (pot and spherical) and neoprene expansion dam – strip seal in accordance with AWS D1.5 at National Bridge Co., Inc. Buffalo, NY.

Illinois Department of Natural Resources. Provided CWI inspection services on the Sinnissippi Pedestrian Bridge in accordance with AWS D1.5 at the Echo Bridge facility in Elmira, NY.

Pennsylvania Department of Transportation. Provided CWI inspection services for bearings (pot and spherical) and neoprene expansion dam – strip seal in accordance with AWS D1.5 at D. S. Brown, North Baltimore, OH.

Michael Maggio
Special Inspector
KS Engineers, P.C.

Education:
AS Business Management

Registrations:
ACI Certification
ACI Concrete Field Technician
ACI Special Inspector Level II
ACI Concrete Laboratory Testing Technician
ACI Concrete Strength Testing Technician
AWS-CWI Certified Welding Inspector
ICC Certified Structural Steel and Bolting Inspector

Years of Experience:
10 Years

ICC Certified Structural Steel & Bolting Inspector
Expires 2013

Michael Maggio is a Certified Special Inspector, experienced in all facets of construction and project development He has proven ability to establish a company presence, accurately assess situation requirements, efficiently deploy resources, overcome issues and follow up to resolution. Other abilities include scheduling, oversight and quality assurance for all technical field operations including special inspections and special inspectors, integrating design management and review as required for adjacent property surveys, special inspections and lab work, contractor design and environmental issues, deal directly with clients to ensure satisfaction and overcome issues.

RELEVANT EXPERIENCE

Structural Bolting & Welding Inspection Experience

- Stonybrook University -Simon Center for Math and Geometry

7 story steel superstructure on cast in place foundation. Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds, metal decking welds. Steel plant source inspection of Canatal Industries in Montreal Canada.

- 830 Hunts Point Avenue – Bronx, NY – Hyde Charter School

4 story school building - steel superstructure on cast in place foundation. Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/ nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds & metal decking welds.

- 61 5th Avenue – New York, NY

8 story residential- steel superstructure on cast in place foundation, inspections included; Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds, metal decking welds.

- 30-20 Thomson Avenue – Long Island City, NY

Inspection QA/QC for the installation of pressure grouted micro piles, concrete pile cap/elevator pit and steel frame structure for two new elevator shafts, floor access ramps, rack and pinion drive mechanism. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/ nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds. Steel fabrication source inspections protocol that included the limitation of individual welders to process and positions pre-qualified.

- 276 Water Street – New York, NY

5 story residential- steel superstructure on cast in place foundation. Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers.

Shawn Heaney, EIT
Construction Inspector
KS Engineers, P.C.

Education:
N/A

Registrations:
N/A

Years of Experience:
8 Years

ICC Certified Structural Steel & Bolting Inspector
Expires 2013

Shawn Heaney, EIT brings eight (8) years of experience involved in facilities inspection such as high rise buildings, power plants, biofuels processing plants, water systems and railroad car loading/unloading stations. He has worked as the Lead Project Engineer, Project Field Engineer, Development & Design Engineer and Field Engineer involved with commissioning. His experience includes high strength steel and bolting installations including Skidmore Bolt Testing on multiple building structures and industrial facilities. Mr. Heaney has extensive knowledge of building systems and materials and design review abilities, including building code compliance reviews has enhanced his ability to provide accurate professional recommendations. He is a well-rounded facilities assessment, design and construction consultant.

RELEVANT EXPERIENCE

Structural Bolting & Welding Inspection Experience

- 830 Hunts Point Avenue, Bronx, NY

Conducted on-site Skidmore Bolt Testing to confirm on-site, high-strength, non-galvanized, A325 and A490 tension-indicating bolting assembly strength, including Direct Tension Indicating Washers, for multiple size assemblies, for installation into slip critical connections. Skidmore Testing performed on-site on two (2) separate occasions to achieve conformance with the Specification for Structural Joints Using ASTM A325 or A490 Bolts as prepared by the RCSC. Conducted an on-site meeting that included request/review of the proper procedure required when receiving, storing and installing high-strength bolted assemblies.

- 61 5th Avenue, New York, NY

Performed controlled inspections of installation of high strength steel and associated bearing connections consisting of high-strength A325 tension-indicating bolt assemblies for the Cellar, 1st, 2nd and 3rd Floors of a 9 Story steel frame structure. Conducted on-site meetings with responsible field supervision highlighting the importance of proper on-site material storage, on-site material control, material documentation required and proper installation of tension-indicating bolt assemblies at each structural connection.

- 2293 3rd Avenue, New York, NY

Conducted on-site Skidmore Bolt Testing to confirm on-site, high strength, non-galvanized, A325 and A490 tension-indicating bolting assembly strength, for multiple size assemblies, for installation into slip critic al connections. Skidmore Testing performed on-site on one (1) occasion to achieve conformance with the Specification for Structural Joints Using ASTM A325 or A490 Bolts as prepared by the RCSC. Conducted an on-site meeting that included request/review of the proper procedure required when receiving, storing and installing high-strength bolted assemblies.

- 81 Franklin Avenue, New York, NY

Performed controlled inspections of installation of high strength steel and associated bearing connections consisting of high-strength A325 tension-indicating bolt assemblies for the Penthouse and Bulkhead Area of a 9 Story combined steel frame/structural masonry structure.

Shawn Benedict
Special Inspector
Jacobs

Education:
B.S., Civil Engineering

Registration:
ACI Field Testing Technician-Grade 1
ICBO Reinforced Concrete Special Inspector
ICBO Spray Applied Fire Resistant Materials
NACE CIP 1, 2, 3, and Certified Coatings Inspector # 6212
NACE Coatings Inspector Training Session's I, II and III
NACE Peer Review
NACE Basic Corrosion
NACE CP-1 Cathodic Protection Tester

Years of Experience:
26 Years

NACE Level 1, 2 and 3 Coatings Certified
Expires 2013

Shawn Benedict has more than 24 years of experience in the heavy civil construction industry, which has included construction, inspection, construction management, and project management duties on large, complex projects. His experience includes review and evaluation of plans and specifications, developing proposals and contracts; project budgeting and tracking(proposed & agreed upon change orders); negotiation with client project managers; addressing liability and risk management issues; construction techniques; and facility management. He has also been involved in value engineering and constructability studies, project management training, utility coordination, partnering, and alternate dispute resolution processes. His project experience includes civil improvements (roadways and utilities), light and heavy rail infrastructure, and aviation facilities and upgrades.

RELEVANT EXPERIENCE

City of Arlington 67th Avenue Improvement Project, Arlington, WA. *Resident Engineer.* Shawn performed as Resident Engineer on the rehabilitation and expansion of 2.3 miles (4 traffic lanes with landscape median) of existing utilities and road improvements along a very busy corridor of mixed zoning (residential & light industrial). His work included all utility relocations and upgrades (water, sewer, & storm), re-grading existing alignment, installation of curb/gutters/sidewalks, bike trails, asphalt/concrete paving, landscaping, and the installation of new detention/infiltration ponds adjacent to the alignment. In addition, a redesign of an at grade railroad crossing was installed with coordination with BNSF track and signal crews required.

Sound Transit (Link Light Rail, Tacoma Link), Tacoma, WA. *Project Engineer/Quality Assurance.* Shawn performed quality assurance engineering of Tacoma Link Light Rail canopy fabrications (5 stations). This effort included the coordination and completion of construction documents, fabricator pre-qualification, monitoring compliance with applicable AWS, AISC, and SSPC standards set forth in project specifications. A project challenge was the completion of the station canopies to meet the scheduled occupancy and commissioning of the rail system. This challenge was brought about by the dismissal of the original fabricator and replacement with one capable of performing the work within the project's time constraints. Project value: $45M.

Sound Transit (Link Light Rail, South Link), Seattle, WA. *Assistant Resident Engineer C735.* Shawn managed and coordinated civil construction of roadway and track for 4.5 miles of at grade light rail construction. Roadways consisted of 18 linear miles of CCP paving with 9 miles of track being installed using booted and ballasted track construction. Alignment also included concrete curb/gutter and sidewalk constructed consistent with standards established by Sound Transit. Shawn's additional responsibilities included coordination of numerous utility relocations and restoration of private properties adjacent to, and affected by, construction along the alignment. Project value: $175M.

Ahmed Husain Zubair
Construction Inspector
KS Engineers, P.C.

Education:
BS, Civil Engineering

Registrations:
NACE Certified Coatings Inspector (Certification # [redacted] /VALID UPTO 2013
NACE Marine Coating Inspection
NACE Basic Corrosion

Years of Experience:
14 Years

NACE Level 1, 2 and 3 Coatings Certified
Expires 2013

Ahmed Husain Zubair has over 14 years of experience in construction inspection. His experience covers both highway and bridge work, including bridge structural painting and paint removal; scheduling; cost estimation; processing change orders; sanitary sewer and water main installation; air monitoring; maintenance and protection of traffic; surveying monuments; excavation; sub-base concrete and asphalt pavement; erection of electric poles; sidewalk installation; etc. He is proficient in the following programs/systems: SureTrak, Primavera, AutoCAD 2002, MURK, ASTM standards, ACI codes, and AASHTO Specifications for Highway Bridges.

RELEVANT EXPERIENCE

NYSTA, Painting of Six Bridges in the NY Division of NYST in Rockland and Orange Counties, NY. *Resident Engineer* responsible for providing civil engineering expertise to the Painting of 6 Bridges Project on NYS Thruway. Protect client's interest thru quality control and mitigation of schedule problems relating to completion deadlines. Conduct Pre Construction meeting and monthly progress meetings. Track submittals from Contractor. Verify Contractor's Insurance Certificates. Ensure Contractor's compliance with EEO and NYS DOL rules. Monitor Contractor's Apprentice Training Program. Review and comment on Containment shop drawings and Suspended Platform System. Monitor CPM schedule and progress of work as per schedule deadlines. Check RFIs, validate RFIs feasibility and coordinate with field inspectors and design consultant and contractor.

NYSDOT Region 11, Nassau Expressway & Interim Nassau Expressway Pavement Rehabilitation & Resurfacing (Including painting of 7 bridges) – *Chief Inspector* responsible for providing civil engineering expertise to the whole construction project of rehabilitation of 7 bridges and ramps. Responsibilities included protecting client's interest through quality control and mitigation of schedule problems relating to completion deadlines. Monitor CPM schedule and progress of work as per schedule deadlines. Check RFIs, evaluate RFIs feasibility and coordinate with field inspectors and design consultant and contractor. Performed office engineering duties also by obtaining work completion information from all inspectors daily reports and tallied the quantities completed with quantities approved for payment and matched the same with CEES quantities data entry.

NYSDOT Region 10, Replacement of Joints of 33 Bridges in Nassau and Suffolk County in Long Island, NY *Chief Inspector* for the replacement and waterproofing of existing joints of 33 Bridges in Nassau and Suffolk County in Long Island. Installation of elastomeric concrete at expansion joints. Also replacement of bearings of 2 Bridges over Long Island Railroad. Operations involve shoring and hydraulic jacking of bridges. Review shop drawings, perform site inspection, ensure all construction proceeds in accordance to contract specifications and approved shop drawings. Review Inspector's daily reports.

NYSDOT Region 10, Robert Moses Causeway over Great South Bay N/B Substructure Repair and Painting N/B and S/B, NY *Senior Inspection* for the inspection of structural marine concrete repairs in the Great South Bay.

William (Bill) Gove
Project Executive - Jacobs

Education:
B.S., Business Administration

Registrations:
N/A

Years of Experience:
40 Years

Bill Gove brings 40 years of experience in the construction industry working with Owners, Architects, Consultants and Contractors. His extensive and diverse experience includes senior management roles on both public and private sector work in the New York/New Jersey metropolitan region. Specifically, he has worked for many New York City agencies including the Department of Design and Construction, Department of Corrections, Department of Sanitation and Health and Hospitals Corporation. Bill is Manager of Projects in the New York office, overseeing the operations of all projects in the New York metropolitan, tri-state area.

RELEVANT EXPERIENCE

New York State Office of General Services, Camp Smith Readiness Center. *Project Executive.* Responsible for executive oversight, corporate level support and the management of staffing resources for the Pre-construction and Construction Phases of a $30M, 112,000 SF new Readiness Center on the active Camp Smith Military Base in Cortland Manor, NY.

New York State Office of General Services, RMHU Program-Various DCS Facilities. *Project Executive.* Responsible for executive oversight, corporate level support and the management of staffing resources for the Pre-construction and Construction Phases of the existing facilities buildings expansions to provide treatment services for the New York State Department of Corrections mental health inmate population at Coxsackie, NY and Romulus, NY. Each of the buildings is 70,000 SF costing $30 million each.

Bronx Mental Health Campus Redevelopment, Dormitory Authority State of New York, Bronx, NY. *Project Executive.* Responsible for executive oversight, management of staffing resources, and corporate-level support for this $300M, 500,000 SF project. Master CM for the entire campus redevelopment project consisting of the construction of six new buildings, along with supporting infrastructure improvements on an operational campus.

Rockland Children's Psychiatric Center, Dormitory Authority State of New York, Orangeburg, NY. *Project Executive.* Responsible for executive oversight, management of staffing resources, and corporate-level support for this $40M, 104,000 SF project. Construction Management services to DASNY for the design and construction of a state of the art adolescent care facility for NYS Office of Mental Health at the Rockland campus in Orangeburg, New York.

Queens College, Remsen Hall Expansion, Dormitory Authority State of New York, Queens, NY. *Project Executive*. Responsible for executive oversight, management of staffing resources, and corporate-level support for the $30M project. CM Services include Pre-Construction, Construction and General Conditions Administration. The project consists of the construction and connection of a new 3-story, 29,000 SF addition to the existing facility.

Staten Island Supreme Courthouse, Dormitory Authority State of New York, Staten Island, NY. *Project Executive.* Responsible for executive oversight, management of staffing resources, and corporate-level support for this $158M, 182,720 SF project. CM Services to DASNY to include all phases for 656 space Pre-cast Concrete Parking Structure and a 14 Court Courthouse.

Rick Fennema, CCM

Sr. Project Manager
Jacobs

Education:
B.S. Structural Design and Construction Engineering

Registrations:
N/A

Years of Experience:
30 Years

Rick Fennema, CCM has more than 30 years of experience in construction management, program management, claims management, trade supervision, scheduling, estimating, cost control, value engineering, construction engineering, and contracts management. His project experience includes delivery systems such as design-build, engineer-procure-construct, multi prime, general construction, development, and turnkey. Rick has completed hundreds of projects for a wide variety of industries including municipal, industrial, commercial, military, institutional, judicial, public safety, healthcare, power generation, transportation, and housing facilities. He has extensive experience in problem resolution and project rescue; and providing goals to lead projects to recovery while building a consensus among stakeholders. He has also led several construction investigation teams that have resulted in large savings for clients.

RELEVANT EXPERIENCE

Manhattan Supreme Court, Manhattan, NY. *Project Manager.* This project included a $38-million restoration and renovation of this landmark courthouse originally built in 1927. Scope of work for system replacements included provision of new: central HVAC system, power distribution system, fire alarm system, and lighting. Restoration scope of work included: finishes in landmark areas, bronze windows, central rotunda conservation painting, decorative painting in radiating corridors, exterior stone and fascia, skylights, interior and exterior bronze lighting fixtures. Renovation scope of work included: roof repairs, waterproofing, plumbing, security systems, and painting. The project was executed via multi-prime delivery method.

Battery Park City Utility Installation, NY. *Project Manager.* Scope of work included extending various utilities approximately 1,000 feet from the BPCA property line to vaults on the New York Mercantile Exchange site. They included medium pressure steam 16" and 22" diameter mains, high voltage feeders, telecommunications feeders, sanitary lines, fire water mains, city water mains, and gas mains. Asphalt roadway was removed and replaced, concrete structures were supported by piles, and utilities were routed around extensive existing utilities.

Fire Safety Systems Upgrade, NY. *Project Manager.* This project involved design-build services to upgrade and renovate 10 New York City owned buildings to bring them into compliance with city, state, and federal regulatory requirements applicable to fire safety systems and ADA requirements. The program spanned 4.5 million square feet of occupied building space. The buildings included: 7 operating civil court, criminal court, and family court buildings; and 3 various municipal office buildings.

NYCHHC Relocation of Corporate Offices, New York, NY. *Project Manager.* This project included New York City Health and Hospitals Corporation (HHC) consisting of 11 acute care hospitals, including Jacobi Medical Center in the Bronx and Bellevue Hospital in Manhattan; six diagnostic and treatment centers; four long-term care facilities; a certified home health care agency; and over 100 community health clinics. Extensive coordination issues were addressed to meet the needs of 750 employees who were relocating among the facilities.

Andrew Kerr

Sr. Project Manager
Jacobs

Education:
B.S. Chemical Engineering

Registrations:
N/A

Years of Experience:
32 Years

Andrew Kerr has over 32 years of program and project management, engineering, and administrative experience in the design, construction, and operation of campuses, refineries, natural gas processing plants, chemical plants, advanced technology facilities, pharmaceutical facilities, semiconductor fabrication facilities, and remediation projects. As a Program and Project Manager, his responsibilities have included overall management of engineering, design, procurement, and construction activities. Additional responsibilities have included the administration and direction of all phases of contract execution, including assurance of technical quality, adherence to budget and schedule, commercial administration, and conformance with contractual requirements.

RELEVANT EXPERIENCE

Bronx Mental Health Redevelopment Projects, Bronx, NY. *Senior Program Manager.* Responsible for the design and construction of a new 500,000 SF six building campus on the grounds of and to replace the existing campus, constructed while maintaining all existing operations. Responsible for planning, budgeting, estimating, cost and schedule management, design and constructability reviews, coordination of BIM and LEED Silver certification with three separate architectural firms performing the designs, and construction management services.

Harvard Allston Development Group, Cambridge, MA, *Program Manager.* Responsible for the conceptual phase of this $1B LEED Gold scientific research and education center for Harvard University including three buildings with underground parking and central utilities system. Responsibilities included planning, budgeting, estimating, design and constructability reviews, and cost and schedule management.

Johns Hopkins University Applied Physics Laboratory, Laurel, MD. *Program Manager.* Responsible for the overall direction of the over $300MM campus wide development program including 6 new laboratory/office and technical support buildings and site wide infrastructure expansions. Responsible for planning, budgeting, cost and schedule management, and management of APL staff, Jacobs staff, architects and engineers, and general contractors while maintaining design and construction quality focus throughout design and construction.

Lawrence Livermore National Laboratory, Livermore, CA. *Deputy Project Director.* Responsible for the installation of the Beampath Infrastructure System for the National Ignition Facility. Responsible for coordination of engineering, fabrication, and installation of support structures and the integration of same with clean beampath construction.

Twp Pharmaceutical Projects, Madrid, Spain. *Manager of Projects.* Executed two pharmaceutical facility constructions involving offsite fabrication of high purity piping spools and on-site installation of same using various clean connection protocols; development of surface preparation techniques to turn 30 year old walls into pharmaceutical grade clean rooms; grass roots construction adjacent to operating facilities and revamp construction with-in those facilities.

Gus Xenakis, CCM

Sr. Project Manager
Jacobs

Education:
B.S. Architectural Technology

Registrations:
Certified Construction Manager, CMAA

Years of Experience:
22 Years

Gus Xenakis, CCM is a highly skilled project executive who is adept at building and maintaining long-term relationships with clients, designers and contractors. His experience in design and program management includes Wicks Law coordination, contract review and administration, phasing and logistics, construction management and all construction administration duties. Mr. Xenakis has managed and directed project planning, funding and design, constructability reviews, value engineering and cost estimating. He has managed bid documents preparation, and he is accomplished at developing bidder interest, evaluating bids, negotiating contracts and engaging consultants.

RELEVANT EXPERIENCE

Nassau County Building Consolidation Program, Mineola, NY. *Project Manager.* Provided program management for this four-year, $220 million program for Nassau County to reduce its ongoing cost of facilities and increase both productivity of employees and service to county residents. Managing design contracts, construction contracts and systems contracts. Also assisting the county in preparation of grant applications, compliance with the state's green building initiative, and the creation of a real estate database.

Brentwood UFSD Additions and Renovations, Brentwood, NY. *Project Executive.* Provided services for renovation and new construction projects at 18 sites within the Brentwood school district. Project included installation of new EDPM Firestone roofing systems, asbestos abatement of roof flashing and existing boiler rooms, installation of new boilers and control systems, removal of existing underground oil tanks and installation of new fiberglass tanks, replacement of existing asphalt parking areas as well as the installation of new learning technologies including computer stations, cable TV and security systems. Included the construction of six new building additions, which consisted of six new classrooms each.

Cold Spring Harbor CSD, Cold Spring Harbor, NY. *Project Executive.* Project was a four-phase, district-wide capital improvement program. Team members performed comprehensive condition assessments to determine the scope of renovation work to be completed and prepared cost estimates and construction schedules for the overall project.

Dormitory Authority State of New York, Lehman College, Bronx, NY. *Project Executive.* Performed retrofit of an existing building to include a new interstitial floor, multi-media center, computer center and chiller room into the sub-cellars of a 75-year old Educational building. The project has very specialized logistics and access constraints for both structural modifications and new chiller plant installation. The project was executed via the multi-prime delivery method.

New York City Department of Design and Construction, New York City, NY. *Project Executive.* Consisted of a two-year rehabilitation program for 11 schools. Services included building assessment, design management, and construction, followed by a three-year program to renovate 25 schools. The program first assessed the actual conditions and requirements that drive the renovation process.

Norman Brown, PE
Sr. Project Manager
Jacobs

Education:
M.S., Electrical Power Engineering
B.S. Civil Engineering

Registrations:
Professional Engineer, VA

Years of Experience:
38 Years

Norman Brown has 38 years experience in construction and facilities engineering management in both domestic and international venues. His organizational and managerial skills have been utilized in many varied arenas from daily operational construction decisions to evaluation and communication of situational analysis to senior corporate clients and high government officials.

RELEVANT EXPERIENCE

Dormitory Authority State of New York, Queens College Remsen Hall Expansion, Queens, NY. *Project Executive* for the construction management services during pre-construction, construction and general condition phases. Phase 1 includes the construction of a new 3-story addition plus basement; Phase 2 consists of a partial renovation of the 2nd floor of Remsen Hall into Research Labs; and Phase 3 will provide newly renovated space of most of the 3rd floor South Wing for the Center for Biology & Natural Systems.

NJEDA Paterson Schools Program, Paterson, NJ. *Project Executive* for the $400M Health & Safety Conditioning Program for 35 existing schools along with new schools and additions construction. Jacobs provided Program Management services which included health and safety projects, new construction and repair/renovation.

$100M Polytechnic University, Brooklyn, NY. *Project Manager* for the 3-phased construction of a New Academic Building/Athletic Facility, a New Dormitory and the Rogers Hall Renovation (basement and first floor). The New Academic Building space was 79,000 GSF and the Athletic Facility space was 29,000 GSF. The New Dormitory was 18 stories above grade, a cellar and a mechanical penthouse. Rogers Hall Renovation consisted of gut renovation and completed the design of the new addition.

Chelsea School Department, Chelsea, MA. *Project Executive.* Jacobs is providing construction management services under Task Orders for Chelsea School Department. Responsibilities included development of plans, specifications and construction cost estimate documents necessary to advertise, bid and award a contract for the Chiller Replacement work at Mary C. Burke complex of elementary schools. Other duties included developing the contract language for a one year service contract and renewal for a subsequent four year period; reviewed subcontractor performance and made recommendations; and overall management of project.

Merck & Co., Inc. Rahway, NJ. *Project Manager.* Served as the project manager, responsible for the construction of a $45M operations and support facility. The project was fast tracked and involved 25 union subcontractors and was challenged with extremely tight logistics and space constraints. Jacobs was involved from the early design stage to the construction phase of this project.

New York City School Construction Authority, Job Ordering Contracting (JOC), L.I.C., NY. *Project Manager.* Project involved implementation and supervision of a contract with the New York School Construction Authority (NYCSCA) utilizing the Job Order Contracting (JOC) System.

William F. Smith, Jr., PE

Sr.Project Manager
Jacobs

Education:
M.S. Civil Engineering (CM)
M.A. National Security and Strategic Studies Naval War College
B.S. Civil Engineering

Registrations:
Professional Engineer: CA

Years of Experience:
25 Years

William F. Smith, Jr. has over 25 years of experience in the full life cycle of facilities planning, design, construction, and maintenance. He is an experienced manager and communicator with strong technical, administrative, and people skills. He managed a $4.3 billion program for reconstruction of water, wastewater, irrigation, and land reclamation in Iraq, developing projects, forming team of government and support contractors, coordinating with Iraqi and Coalition Provisional Authority leadership.

RELEVANT EXPERIENCE

New US Mission to the United Nations, New York City, NY. *Project Manager* Jacobs provides construction management and commissioning services for the $100 Million, 26 story, structural concrete office building for the US Department of State's team representing the US at the United Nations. The project site is just 100 ft by 150 ft, in a high visibility urban setting directly across from the United Nations. The design of the project has many unique features, including the first use in New York City of self-consolidating concrete (SCC), selected for advantages in achieving the desired color of the architectural concrete, and to ensure coverage of the dense reinforcing steel system. Jacobs' role includes full construction management services, commissioning of building systems, including the low voltage cable plant, and supervision of several follow-on contracts, including the ultimate contract for relocation of the Ambassador and her staff into the new building. As Project Manager, directed effort of a 12-person staff doing quality assurance, change management, schedule reviews, safety oversight and coordination with the owner (GSA), the end-user (the Department of State), the A/E team and the construction contractors, and with numerous NYC agencies.

New Jersey Schools Construction Corporation / NJEDA Schools Construction Program, Paterson, NJ. *Project Manager.* Jacobs is providing program management for the New Jersey Schools program for the Paterson School District, including health and safety projects, new construction and repair and renovations. The contract includes managing design and construction for $150 million in health and safety projects at 36 schools and in the first year of the program, with subsequent assignment of design and construction management for 35 major construction projects, including 12 new schools. As Project Manager, directed effort of a 30-person staff, completing health and safety projects, the construction of two new schools, and the designs of four new schools; progressing the design of 12 additional schools; and coordinating with the client, the school district, local officials, design consultants and construction contractors.

Head of Facilities Management Branch, Headquarters, US Marine Corps, Washington, DC. Directed a 30-person staff of engineers and analysts setting policy and resourcing 17 major installations for facilities maintenance and recapitalization for a plant value of $32 billion. Planned, programmed and managed execution of construction and maintenance for 25,000 homes. Allocated an annual budget of $800 million.

Gayle Benjamin
Project Manager
Jacobs

Education:
B.A. Architecture and Planning

Registrations:
N/A

Years of Experience:
10 Years

Gayle Benjamin has been responsible for administering and managing numerous construction projects throughout the greater New York metropolitan area. Additional responsibilities have included reviewing contractor's estimates and preparing lump sum contracts.

RELEVANT EXPERIENCE

Dormitory Authority State of New York, Queens College Remsen Hall Expansion, Flushing, NY. *Project Manager.* Jacobs is providing construction management services for this circa 1950 hall which houses the Chemistry and Biochemistry and Family, Nutrition and Exercise Sciences Department offices, laboratories, lecture halls, testing rooms, classrooms and demonstration facilities. During the Remsen Hall Expansion Project, the college will expand its current sciences program with new state-of-the-art laboratories and workspaces in a three phase construction process. Jacobs is providing construction management services during Pre-Construction, and Construction, and will also provide General Conditions Administration.

Polytechnic University, Brooklyn, NY. *Civil/Architectural Inspector.* Jacobs provided program management services for $100 million Polytechnic University. The project was a three-phased construction of a New Academic Building/athletic Facility, a New Dormitory and the Rogers Hall Renovation.

New Jersey Schools Construction Corporation / NJ EDA Schools Construction Program, Paterson, NJ. *Project Manager*. Jacobs provided program management and construction management for New Jersey Schools program including Health and Safety projects, new construction and repair and renovations. The New Panther Science Academy included the gut renovation of an existing Auto Parts Facility and conversion into a classroom and computer labs. It also included the addition of a new state-of-the-art planetarium with funding from NASA.

Metropolitan Detention Center, FBOP, Brooklyn, NY. *Project Manager.* Responsibilities included architectural, structural and civil inspection at the $110 million Metropolitan Detention Center. Provided technical guidance to the project engineer. Interpreted drawings and specifications and recommended technical solutions to the A/E. Implemented inspection processes such as daily reports, punch list, document clarification request, submittals, CPM schedule and requisition review. Monitored job-site safety, identified construction quality and processed deficiencies in a timely and constructive manner.

Port Authority of New York & New Jersey's PATH, Jersey City, NJ. *Civil/Architectural Inspector.* Assisted Resident Engineer with construction administration of 56 contracts. Reviewed bids and contracts for conformance and prepared letters of Agreement. Prepared documents for Contract Termination. Reviewed Contracts for completion, prepared Completion of contract Reports and Certificates for Final Compensation. Reviewed monthly application for payment.

James T. Buckley
Project Manager
Jacobs

Education:
AAS, Architectural Technology and Construction

Registrations:
N/A

Years of Experience:
34 Years

Jim Buckley brings 34 years of experience in the construction industry. He has an extensive background in facilities engineering and construction management, with a proven track record in estimating, budgeting, cost accounting and contract administration. He is knowledgeable of codes, design and construction practices, and safety and environmental issues. He is also experienced in contract documentation and CAD design.

RELEVANT EXPERIENCE

NYS Thruway Authority Interchange 17 Contract 2 Campus, Newburgh, NY. *Senior Superintendent.* The Project involves the demolition of existing facilities and the construction of a new State Police Headquarters, Maintenance building, Repair shop, Cold storage building, two Salt Sheds, new Toll Booths and Revenue Collection Facility. Responsibilities for this project include supervision of staff and subconsultant inspectors, documentation of daily inspectors reporting and Storm Water Pollution Prevention Plan, coordination with NYSTA maintenance groups, daily interface with the General Contractor for quality control and specification requirements, and monitoring of construction safety.

Fishkill Correctional Facility, New York State Office of General Services, Fishkill, NY. *Superintendent/Project Manager,* Responsible for management of mechanical, electrical and construction contracts for this 100 cell special housing unit and regional medical facility. Also responsible for coordination of mechanical, electrical, and utility company inspections. Prepared construction documentation for RFI's, field orders, bid specifications, submittals and closeout. Also supervised medical gas, mechanical, electrical, signal, communications, controls, high voltage and underground utilities.

Adelphi University Fine Arts Building, Cranford, NJ. *Project Superintendent.* Onsite supervision and safety for commercial construction, field documentation, administration, closeout of 5-15 subcontracts, coordination of third party, municipal and environmental inspections.

IBM E. Fishkill 300mm Program Tool Hookup, Fishkill, NY. *Project Manager.* As the project manager, Jim's responsibilities included daily coordination and CM reports to the client; supervision of 65-man crew and subcontracts; testing and inspection reporting; and on-time installation and startup of 350 clean tools in 18 months.

IBM E. Fishkill 300mm Program Base Build, Baltimore, MD. *Project Manager.* As the project manager, Jim's responsibilities included: the coordination of 35-trade subcontracts, coordination with the A/E; formulating and implementing the A/E field design clarification program; maintaining and posting field documents, RFI's, submittals, work orders, 3rd party inspections; subcontractor conflict resolution; and space management.

Curtis Casey
Project Manager
Jacobs

Education:
AS, Engineering – Solar Heating and Cooling Technology

Registrations:
N/A

Years of Experience:
27 Years

Curtis Casey has 27 years of experience in management, construction, and engineering, having worked for both design and contracting firms. He is a specialist in planning and delivery of large, complex projects; education, institutional health, heavy commercial, and corrections industries for City, State and Federal clients; research and manufacturing for industrial clients; HVAC systems design, particularly gas/oil-fired, hydronic, and steam heating; chilled water and water source heat pump systems; centralized HVAC and refrigeration; plants and distribution, for residential and multi-story commercial, industrial, and institutional facilities.

RELEVANT EXPERIENCE

Rockland Children's Psychiatric Center, Dormitory Authority of the State of New York, Orangeburg, NY. *Project Manager.* Providing full construction management services for DASNY, for the $47 million new 56 bed inpatient facility for children ages 11 to 18. The new inpatient spaces are four - 14 bed wards of approximately 10,000 square feet each and have an extensive range of outpatient and local school services.

District 1 & 4 Garages and offices for the New York City Department of Sanitation, New York, NY. *Project Manager.* This project involved the $80 million new construction for DOS on this multi-prime project. The project consists of 2 acres of site development to construct two new truck depots with associated district offices, and a third level borough office that bridges these two buildings all supported by an extensive grid of pipe piles for independent reinforced concrete and steel superstructures.

Polytechnic University, Brooklyn, NY. *Project Manager.* This project involved the $140 million expansion and development program which consisted of three primary construction projects for a New Academic Building/Athletic Facility, a New 20 story Dormitory and existing academic building Renovation. Facility infrastructure projects includes Elevators Modernization, Bathrooms Reno, Windows Replacement, and demolition and renovations to existing labs.

Brooklyn Juvenile Detention Center for the New York City Department of General Services, Brooklyn, NY. *Project Manager.* Responsible for construction phase management of a new $58.8 million, 120-bed medium security facility. Supervised field and office support staff (administration, scheduling, inspection and reporting) for this multi-prime project. Liaison to design consultants, contractors, user and client.

Manhattan Psychiatric Center for the New York State Facilities Development Corporation, New York, NY. *Assistant Project Manager.* Responsible for financial, contractual, administrative and personnel issues on this $110 million construction management/multiple prime/multiple project renovation and modernization program.

New Construction of Service Garages and Offices for the New York City Department of Sanitation. *Project Manager, Construction Manager.* $75M multi-prime project consisted of 2 acres of site development to construct 2 new truck depots with associated district offices, and a third level borough office that bridges these two buildings.

Stephen Castagnier
Project Manager
Jacobs

Education:
B.S. Architectural Technology

Registrations:
N/A

Years of Experience:
18 Years

Stephen Castagnier has more than 18 years of project management and administrative experience. As project manager, his responsibilities have included overall management of design, procurement and construction activities. He is experienced in the administration and direction of all phases of contract execution, including assurance of technical quality, adherence to budget and schedule and conformance to contractual requirements.

RELEVANT EXPERIENCE

Dormitory Authority State of New York, Bronx Mental Health Redevelopment Projects, Bronx, NY. *Project Manager* for the design and construction of a new 500,000 SF six building campus on the grounds of and to replace the existing campus, constructed while maintaining all existing operations. Responsible for planning, budgeting, estimating, cost and schedule management, design and constructability reviews, coordination of BIM and LEED Silver certification with three separate architectural firms performing the designs, and construction management services.

General Electric Global Research Center Multi-phased, Campus-Wide Renovations, Niskayuna, NY. *Project Manager* for this $150M four-phased project including a new laboratory wing, an on-site guest lodge, new shipping and receiving buildings including extensive site work, and existing building renovations including a new auditorium, lyceum and common areas. Direct responsibilities included the development of project scope and the management of project contracts, design and change impact reviews, payment review and approval, project scheduling, managing design professionals and staff, and systems integration and commissioning. Directed project meetings for multiple design and vendor teams along with trade contract work.

Putnam County Health Center, Putnam, NY. *Project Manager* for this $22M, 90,000 SF design-build healthcare project. The project included an ambulatory care center, private doctors' offices, an inter-connecting link and extensive site work. Responsibilities included the implementation of all architectural and mechanical design-build contracts including cost estimating and value engineering, project scheduling, material and contract buyouts, insurance review, contract payments and project cost forecasts and payment requisitions. Managed field staff and met on-site with subcontractors to review construction progress and provided direction on design, cost and coordination issues.

$85M Food and Drug Administration Building, Jamaica, NY. *Project Manager* for a 400,000 SF design-build laboratory and office building with a connecting atrium. Directed weekly meetings to facilitate coordination of design and construction. Managed subcontract compliance and submittal processes, contract change orders, and daily trade activities with specific focus on: brick backup panels to structural steel connections, brick, stucco and masonry, glass curtain wall, roofing and weatherproofing for the exterior, and framing, finishes, HM frames, doors and hardware and security systems, high density files systems, laboratory casework, and clean rooms. Acted as primary interface with the Developer, Owner and Design, Engineering and Trade professionals. Managed final completion of site work and project closeout.

Anthony Delgado
Project Manager
Jacobs

Education:
AAS Architectural Engineering Technology

Registrations:
N/A

Years of Experience:
11 Years

Anthony Delgado has over 11 years of experience as a Construction Manager, Site Superintendent and Owner's Representative. Construction values have ranged from $10M to $128M assisting clients with every phase from preconstruction to closeout. This experience includes: development of bid packages under Wick's Law; project rescue including historic renovation, processing of over 200 change orders, and closing out of 29 open contracts under budget; claims related investigative research; and professional presentation training, serving as client representative at public meetings and leading interview teams during pursuits of new leads.

RELEVANT EXPERIENCE

Nassau County Community College, Garden City, NY. *Project Manager.* Jacobs is currently working with Nassau Community College (NCC) providing Construction Management (CM) services to the College's Department of Design and Construction for the construction of a new three-story, 74,000-SF Life Sciences Building. Upon completion the building will house Nursing and Chemistry departments, including their laboratories, lecture classrooms, faculty offices, conferencing spaces, computer labs, and group study spaces.

Dormitory Authority State of New York Lehman College Computer Center (Phase II) Abatement and Renovation, Bronx, NY. *Construction Manager.* Renovation/new construction of 25,000 SF computer and multimedia center in the cellar and basement of Carman Hall, the most heavily used academic building on Lehman's campus. This existing five-story building houses the campus data center and computer labs as well as the education, social work, sociology and nursing program.

State University Construction Fund, SUNY Purchase New Student Center, Purchase, NY. *Owner's Representative.* Served as the owner's representative during the construction of a new 57,000 SF Student Services Building on top of an existing and working Heating Plant. Completed project on time despite General Contractor defaulting. The facility provides centralized space for a new student business center, office-related functions, and a multi-media presentation area. Responsibilities included field oversight services and working closely with Architect, the State University Construction Fund, and the college staff to coordinate contractor activities; maintenance of quality, safety, schedule, commissioning, completion and closeout and budget during ongoing activities.

Brentwood Union Free School District UFSD Additions and Renovations, Brentwood, NY. *Site Superintendent.* Served as Site Superintendent during the expansion, renovation, and new construction projects at 18 sites throughout the District. Numerous high-end features were being installed, including vaulted ceilings with skylights in a new 2,000 SF library. All work was being performed under Wick's Law. Responsibilities included day-to-day observation of field activities, contract coordination and project reporting.

North Babylon Union Free School District UFSD Additions and Renovations, Babylon, NY. *Site Superintendent.* Responsible for field oversight during the first phase of this two-phase renovation and alteration program.

John DeMase
Project Manager
Jacobs

Education:
BS Architecture/Construction Management

Registrations:
N/A

Years of Experience:
24 Years

John DeMase has over 24 years of construction and project management experience for multiple contracts program. As a Project Manager, his responsibilities have included overall management of design, procurement and construction activities. Additional responsibilities have included the administration and direction of all phases of contract execution, including assurance of technical quality, adherence to budget schedule and with contractual requirements.

RELEVANT EXPERIENCE

Smithsonian Institution, Cooper-Hewitt National Design Museum, New York, NY. *Project Manager.* Jacobs is providing construction management services for the Office of Engineering Design and Construction, as well as commissioning services. This includes review, manage and monitor general contractor, subcontractor and consultants construction activities. Provide contract administration services. Review and manage project schedule and identify potential delays as well as other related services. Ensure that contract specifications and plans are implemented accurately and efficiently. Provide contract administration services such as logging, distribution and review of submittals; respond to RFI's, value engineering proposals; correspondence preparation; and evaluate cost impacts due to document changes.

Lincoln Center Re-Development Projects. *Project Manager.* Responsible for multiple contracts for the redevelopment of the Lincoln Center Campus. Projects included infrastructure, reprogramming of public space and updates for student music and theatre classrooms while campus remained active. Directed daily activities of general superintendents, assistant project managers, project engineer and support staff. Established on-site field office and implemented new standard operating procedures for project documents including Change Orders, RFI's, RFP's, PS's and Bulletins. Responsible for reviewing and preparing detailed construction cost estimating, take offs and change orders for negotiation. Set priorities of trade labor and allocated resources based on client/owner and project requirements. Developed logistics plan for all project phasing through CPM scheduling.

Dormitory Authority State of New York Project Management, Bronx Criminal Court Complex, Bronx, NY. *Project Manager.* Responsible as the project manager for the $420M construction of a new 10-story, 740,000 SF facility. Directed the CM, Design Team, and on-site field staff in daily job site activities. Responsible for overseeing job construction for compliance per contract documents. Implemented workflow efficiencies by creating standard procedures and documents for change order estimating. Provided recommendations to owners and design team to minimize change order costs.

Dormitory Authority State of New York Project Management, Bronx County Family/Criminal Courthouse, Bronx, NY. *Project Manager.* Responsible as the project manager for the $58M renovation project of courthouse facility for the reprogramming of space while courts and Bronx Central Booking remain in full operation. Directed the CM, Design Team, and on-site field staff in daily job site activities. Chaired meetings to evaluate and negotiate settlement of change orders and claims.

Joseph J. Greene
Project Manager
Jacobs

Education:
St. John's University

Registrations:
N/A

Years of Experience:
33 Years

Jay Greene has more than 33 years experience in providing project management and construction management services. Throughout his career, Mr. Greene has been responsible for managing all phases of project delivery from preliminary design to design to construction. During the design phase he has been responsible for managing the coordination of architectural and engineering disciplines and their interface with client and/or owner. He has led constructibility reviews, schedule development and budget estimate preparation. His experience in managing the construction of varied buildings and infrastructure projects throughout the New York Metropolitan area provides him with a unique perspective when formulating scopes of work and bid packaging.

RELEVANT EXPERIENCE

Yonkers Waterfront Redevelopment for the City of Yonkers, NY. *Senior Project Manager.* Responsible for providing project management services for the design and construction of streets, plazas, utilities, bulkhead repairs and esplanade for Phase I Development through design, bidding and construction. He manages the overall administration and coordination of the Design Architect and Engineering Consultant, and provides liaison between the Developer of the Waterfront Properties, his Design Team and The City of Yonkers.

Juvenile Detention Facilities, Brooklyn and The Bronx, New York, for New York City Department of General Services. *Project Manager.* Responsible for administration and coordination of prime contractor's (Wicks Law) during the construction phase of two new facilities, totaling approximately $58M in construction value. Program elements of each included 125 beds, full kitchen and dining, gymnasium, outdoor recreation, and medical facilities.

Metro-North Commuter Railroad Substation Improvement Project, The Bronx and Westchester County, NY. *Resident Engineer.* Responsibilities included all phases of construction engineering including structural, architectural, electrical and site work performed in conjunction with the construction of 10 new or rehabilitated substations on this $16 million project.

Rehabilitation of Five Bus Repair Shops, Brooklyn, Queens and The Bronx, NY, New York City Transit Authority. *Project Manager.* Responsible for construction management/engineering of all phases of construction, including site work, excavations, foundations, building construction, HVAC, electrical and plumbing work.

Permanent Housing for Homeless Families Program, New York, New York, for New York State Housing Finance Agency. *Senior Project Manager.* Responsible for structural, architectural, mechanical, electrical and sitework on this $12.5 million, design/build, gut rehabilitation housing project which includes two sites and 89 multi-bedroom units.

Construction Inspection and Support Services on an As-Needed Basis, New York, New York, for Triborough Bridge and Tunnel Authority. *Resident Engineer.* As Resident Engineer for Contract BBM-309, Glycol Piping Replacement at Brooklyn Battery Tunnel, he was responsible for ensuring contractor compliance with contract documents, and schedule control.

Erika Hoke
Project Manager
Jacobs

Education:
B.A. Engineering

Registrations:
N/A

Years of Experience:
6 Years

Erika Hoke is a Project Manager with six years of experience in both government and private sectors. Projects include work on government facilities (offices, high level conference rooms, computer rooms, auditoriums, etc.), judicial, laboratories and SCIF construction. Her project management experience includes management of contractors' adherence and conformance to project specifications. Technical writing kills include preparation of RFPs, Change Orders, and other project documents as required. Erica has knowledge of scheduling and software packages including primavera (P3 and Suretrak). She is well-versed in Jacobs' project documentation software.

RELEVANT EXPERIENCE

General Services Administration, Region 2 U.S. Mission to the United Nations, New York, NY. *Assistant Project Manager.* Jacobs is providing on-call construction management services to GSA, Region 2. The new facility will be a heavily reinforced 26-story 150,000SF high-rise constructed of reinforced concrete.

Eisenhower Executive Office Building (EEOB), Washington, DC. *Project Engineer.* Jacobs is providing Construction Management for the $450 million modernization of the EEOB. The project was initially planned as a security upgrade following the September 11, 2001 terrorist attacks. Completion of phased construction, started in 2004 and scheduled through August 2010, will fully modernize the (EEOB) and result in a renovated building that meets 21st century standards for power, telecommunications, work environment and safety.

Fallon Federal Office Building Base Repair and Alteration Project, Baltimore, MD. *Project Engineer.* Jacobs provided CM services for the complete renovation of the 288,000 SF base of the Fallon Federal Office Building. The work was accomplished in a multi-phased effort in a completely occupied building with minimum disruption. Floors basement, ground, one, two and were be the worksite. All environmental, life-safety and MEP systems will be replaced. The present occupants are VA, VA Service Organizations, INS and IRS. The project will build out an approximately 12,000 SF Childcare Center and will downsize and rebuild the food service cafeteria.

E. Barrett Prettyman U.S. Courthouse, Washington, DC. *Project Engineer.* Jacobs provided Construction Management services for the $103 million new Annex and renovation project at the E. Barrett Prettyman U.S. Courthouse in Washington, DC. The scope of the contract includes contract administration, scheduling, budget management and other construction phase services, including testing, inspections and closeout services. The project includes new construction of a 327,000 GSF, 9 courts, 19 judge chambers annex addition with interior renovations of the existing building and a 9,596 SM parking garage.

Johns Hopkins University Building 17 Precinct Development Project Multi-Purpose Laboratory And Office Building, Applied Physics Laboratory, Laurel, MD. *Project Engineer.* Jacobs provided CM for the new $65M, 230,000 SF Building 17, part of the Applied Physics Laboratory's extensive campus of over 90 specialized facilities. 52,000 SF on floors 5 and 6 was constructed as a shell for future project teams; a 20,000 SF mechanical systems penthouse.

Clinton L. Jackson
Project Manager
Jacobs

Education:
B.S. Architectural Engineering Construction Technology

Registrations:
N/A

Years of Experience:
21 Years

Clinton Jackson brings 21 years of project management experience on IDIQ and Tenant Fit Out projects to this contract. As a Project Manager, his responsibilities have included overall management of engineering, design, procurement, and construction activities.

RELEVANT EXPERIENCE

NJEDA School Building Program, Paterson School District. *Site Manager.* Responsibilities included: overall responsibility for day to day work activities including second shift; maintaining daily dialogue and leading monthly meetings with principals; processing change orders and pay applications; and overseeing weekly progress meetings with A/E and Contractor.

New Brunswick Hope VI (Phase I), $9M – 61 housing units. *Project Manager.* Responsibilities included: serving as liaison between owner and design / construction personnel; reviewed and approved change orders and monthly applications; monitored progress of construction schedule and oversaw bi-weekly construction progress meetings.

Sharon Baptist Church, $10.5M 3-story facility, 75,000 SF. *Project Manager.* Responsibilities included: overall responsibility for project, including supervising staff of four (4); prepared and maintained job cost; developed construction schedules; and met with neighborhood association for monthly updates on construction progress.

PNC Bank Operations Center, Tenant Fit out $9M, 250,000SF. *Assistant Project Manager.* Developed and maintained construction schedule and processed submittals and change orders. Met with owner bi-weekly to review job progress. Reviewed and processed monthly pay application.

Foster/Tanner University Complex, Florida A&M University 2-story music building, 4-story renovation, $7.5M, 90,000SF. *Project Manager.* Prepared and maintained project schedule utilizing AlterGraph program. Handled execution and buy out of subcontracts and prepared monthly billings. Supervised staff of three (3).

State College Area Middle School, 2-story complex, $17M, 155,000 SF. *Assistant Project Manager.* Processed submittals, contracts, and change orders. Prepared monthly pay application for submission to architect/engineer. Prepared and issued monthly project cost reports.

City of West Palm Beach Administration Building, 3-story complex, 7-story parking garage, $19M, 210,000 SF,. *Project Engineer.* Maintained and processed shop drawings, requests for information, and change orders. Assisted in verification of vendor and subcontractor monthly billing cycles. Arranged and documented job site and related meeting minutes.

David LaTour
Project Manager
Jacobs

Education:
AAS Construction Technology

Registrations:
N/A

Years of Experience:
11 Years

David LaTour has over 11 years managing construction projects including claims consulting, litigation support and investigation of payment bond claims and contractor terminations for sureties. He has worked in a variety of roles including construction management, program management, owner's representative and consultant.

RELEVANT EXPERIENCE

New York State Office of General Services Camp Smith Armory / Training Site, Cortlandt Manor, NY. *Project Manager.* Jacobs is providing construction management services to construct the 112,000 SF Readiness Center on the property of Camp Smith. The Armory will be a 3-story structure, constructed of brick and concrete block units with concrete floors, elevator, site work, mechanical, plumbing, fire protection and electrical systems. There will also be a 40,600 SF Army Aviation Support Facility for unheated aircraft storage space, rigid and flexible paving, ground support equipment, hover lanes, fuel storage / dispensing system, aircraft wash facility, exterior lighting, fire protection and fencing.

Rye City School District $10M Capital Improvements Program, Rye, NY. *Project Executive.* Served as Project Executive during infrastructure and capital improvements at the high school/middle school and three elementary schools. The project involved updating the 50-year old buildings to achieve more efficient and reliable systems. Scope of work included several boiler and HVAC replacements, fire alarm system replacements, electrical service upgrades, and the installation of new emergency generators.

Rye City School $1.5M Milton Elementary School Gymnasium, Rye, NY. *Project Executive* for a small gymnasium addition that was originally managed by another CM firm. Responsibilities for this project rescue included review of previous estimates and recommendation for value engineering and scope reduction to meet project budget and procurement.

West Harlem Environmental Action, Inc. $4M Environmental Justice Center, Harlem, NY. *Project Executive* for the adaptive reuse of an existing residential building into community center and office facility. Within the historic district of Hamilton Heights, the Center was a total gut rehabilitation and extension of a four-story row house, into a 7,100 SF LEED gold-certified green building to include meeting areas, exhibition space, offices, a fully catalogued library of hard-to-find environmental publications, a roof garden and courtyard out back.

Cold Spring Harbor Central School District $41M CSD Bond-Related Capital Improvement Program, Cold Spring, NY. *Project Manager* during this four-phase, district-wide capital improvement program. Performed comprehensive condition assessments to determine the scope of renovation work to be completed, and prepared cost estimates and construction schedules for the overall project. Managed the integration of four separate new LANs as well as the construction of state-of-the-art library facilities, a new 10,000 SF school gymnasium, and a new 8,000 SF performing arts complex. Responsible for the construction management of 44 projects requiring 28 Wick's Law.

Eric Monsonis
Project Manager
Jacobs

Education:
M.S. Civil Engineering
(Construction Management)

Registrations:
N/A

Years of Experience:
13 Years

Eric Monsonis has over 13 years of construction management experience as a Project Manager, Project Controls Engineer and Estimator. He is experienced in the overall management of planning process, design and construction from lease negotiations to occupancy.

RELEVANT EXPERIENCE

General Services Administration, Region 2 On-Call Services, New York, NY. *Project Manager.* Jacobs is providing construction management services to GSA for the Alexander Hamilton U.S. Custom House multi-million dollar upgrade and partial replacement of the fire alarm systems throughout this historic building. The building is currently occupied by the Smithsonian National Museum of the American Indian, the Federal Bankruptcy Court for the Southern District of New York, and various Federal Agencies.

The Neenan Company, Fort Collins, CO. *Senior Project Manager* on multiple projects with overall management of planning process, design, and construction from lease negotiation to occupancy; project management responsibilities included conceptual and detailed estimating, design input and scheduling, constructibility review, material and subcontractor selection, contract administration, subcontractor negotiations and buyout, cost control, project scheduling, change management and project closeout; and onsite and direct supervision of the construction of major projects, coordinating a staff of superintendents and junior project managers. Projects included: Slocum Center – 82,000SF ground up Orthopedic Center; San Luis Valley Regional Medical Center – 45,000 SF addition and renovation; Avista Hospital – 80,000SF medical office building; and Longmont United Hospital – 50,000 SF renovation and expansion of surgery department

Fransen Pittman Construction Co., Denver, CO. *Estimator* on multiple projects including office buildings ranging from 3,000 to 200,000 SF; institutional, light industrial and religious. Methods included pre-cast, tilt-up, structural steel, cast in place, structural masonry and wood construction. Managed and administered all company computer resources. Developed detailed cost estimates from conceptual, schematic, design development and construction stage drawings. Estimated all aspects of construction including sitework, core and shell, and interior phases. Developed and recommended design alternatives to meet budget and program requirements.

Trigon-Sheehan, LLC, Denver, CO. *Project Controls Engineer* on multiple projects responsible for team preparing preliminary and definitive estimates and schedules and cost/schedule reporting. Coordinated projects from schedule requirements, provided cost/schedule analysis and oversaw preparation of project status reports. Managed resource use tracking, and managed personnel on field assignments. Projects included a $46M 24" gas pipeline; $8M products terminal; and a $45M triple 36" gas pipeline.

Christine Oates, EIT, CCM, LEED AP

Project Manager
Jacobs

Education:
MBA Financial Management
B.S. Civil Engineering

Registrations:
Certified Construction Manager, CMAA
Engineer-in-Training: NY
LEED AP, 2008

Years of Experience:
13 Years

Christine Oates, CCM has 13 years of experience in providing construction management and program management services on public and government type facilities, educationfacilities (K-12 and Universities), corporate facilities, firehouses, prisons and automotive inspection facilities. Her expertise includes design management, constructability reviews, value engineering, contract administration, document control including shop drawing review, scheduling, construction trade coordination (Wicks Law projects), supervision of project staff, and negotiation of change orders and payment requisitions. With a strong dedication to the successful completion of projects, Ms. Oates encourages teamwork and effective communication to construct quality projects that meet and exceed client expectations while maintaining budgets and schedules.

RELEVANT EXPERIENCE

NYCDDC: Upgrade to Taxi Limousine Commission (TLC) Safety and Emissions Inspection Facility, Woodside, NY. *Project Manager*. Provided construction management/build services for Phases I and II, and design-build services for Phase III. Phase I involved replacement of the roof and roof drainage as well as masonry restoration. Phase II included construction of an office addition and bathrooms, replacement of a parking lot and adjacent sidewalks and renovation and expansion of an existing office. Phase III involved the addition of two new state-of-the-art inspection lanes with new safety and emissions equipment. Work in these lanes included design and implementation of a new computerized inspection system, design and construction of inspection and equipment pits, design and construction of new inspection booths including all required MEP installations. Phase III also involved upgrade of existing lanes so that all lanes at completion would be equal. The TLC inspection facility also received a new central HVAC system.

NYCDDC Construction Management Renovation of Two Fire FDNY Firehouses, New York, NY. *Project Manager.* Managed the construction of two NYC firehouses as part of a $65 million requirements contract with the NYCDDC for construction management services. Prepared bid documents, selective bidders list and procured all required construction trade contractors in accordance. Provided oversight of budget activities, including negotiation of change orders and payment requisitions. Prepared and managed the overall project schedule and coordinated work amongst the various trades pursuant to Wicks Law. The renovation of the firehouses included replacement of apparatus floor, installation of new HVAC system, electrical upgrade, new state-of-the-art kitchen, new bathrooms, reconfiguration of offices, restoration of historic woodwork and restoration of façade including replacement of all decorative stonework.

Columbia University Audubon III Construction Management/Relocation Services. New York, NY. *Project Manager.* Provided CM/relocation services for the cancer research lab which was relocated to a newly constructed state of the art lab. Managed the completion of punch list items and remaining open construction issues, surveyed electrical requirements of existing equipment and retrofitted electrical requirements at the new location. Managed the relocation of all personnel and their associated lab content, and equipment.

Nick Pappas
Project Manager
Jacobs

Education:
N/A

Registrations:
N/A

Years of Experience:
9 Years

Nick Pappas is a construction and program management professional with 9 years expertise in Wick's Law coordination, construction administration, construction document review, phasing, constructability review, value engineering, drafting of RFPs, Scope-of-Work and design management.

Mr. Pappas is experienced in a variety of market niches, including public safety, commercial, government office building renovation, parking lots and site work. He is skilled in building and maintaining long-term client relationships and he has excellent communication skills. Detail-oriented, organized and personable, Nick has proven his ability to manage multiple projects concurrently.

RELEVANT EXPERIENCE

Albany Avenue Elementary School, Albany, NY. The projects included a new four-classroom addition, steel roof deck replacement, supplemental structural steel installation, roof reconstruction, asbestos remediation, new security and fire detection systems, motorized gymnasium bleachers, new concrete entrance and walkways, boiler replacement, new concrete and asphalt bus loop, parking lot reconstruction and new exterior doors.

Belmont Elementary School, North Babylon, NY. Responsible for the on-site management of eight Wick's Law contracts totaling $8 million of renovation work at this elementary school. General construction was completed in only eight weeks. The project included asbestos abatement of all classroom floors, boiler room, crawl space and roof, terrazzo restoration, new boilers, new gas service, new fire alarm system, new ceilings and lighting, new electrical distribution, complete bathroom renovations, parking lot reconstruction and related site work, and full roof replacement.

Farmingdale High School, Farmingdale, NY. The projects included reconstruction of the auditorium featuring full theatrical DMX lighting and state-of-the-art sound system, lecture hall featuring new stage rigging with lighting and curtains, two-story library featuring sound proof studio, gymnasium with new motorized bleachers, music suite and band rooms, including new HVAC system, boiler replacement, unit-vent replacement, new concrete entrance and walkways, site drainage, asphalt driveway replacement, and new tennis courts with site lighting and drinking fountains.

Nassau County Health and Human Services/Department of Social Services, Nassau County, NY. The focus of this project was to consolidate many different departments from Nassau County's Health and Human Services into one building along with the Department of Social Services. As the building was fully occupied upon the County's acquisition, construction had to be phased according to the existing tenant's departure. The construction consisted of a data center with raised floor, three floors of office space fit out, new interior and exterior doors, a card access security system with numerous cameras throughout the building, metal detectors at the public entrance, a lobby with multiple rows of fixed seating and multiple big screen monitors, serving as a waiting area, and installation of approximately 1,450 work stations for the staff. Additional responsibilities included coordinating with the County's Real Estate Department and their move Consultant to assist in moving the staff.

Marc S. Riendeau
Project Manager
Jacobs

Education:
B.S. Construction Management

Registrations:
N/A

Years of Experience:
12 Years

Marc Riendeau has over 12 years of experience in management and administration of construction and engineering for the healthcare, foods / consumer products, pharmaceuticals, and microelectronics / semiconductor industries. He is experienced in execution of single source contracts for design, procurement and construction facilities level projects. He has key experience starting from bid and award of contracts through facility startup and commissioning. He possesses strong field experience in merit shop and union construction projects.

RELEVANT EXPERIENCE

New Jersey Schools Construction Corporation / NJEDA Schools Construction Program, Paterson, NJ. *Project Manager.* Jacobs is providing program management for New Jersey Schools program including health and safety projects, new construction and repair and renovations. The contract include managing $71 million in health and safety projects in the first year of the program, with subsequent assignment of major construction projects, including 11 new schools. The total program value is $830 million (estimated construction cost). Jacobs is currently contracted for the first $400 million of this program, which started in 2001 with estimated completion in 2006.

Material Operations Support Facility (MOSF) & Multiple Scale Organic (MSO), Merck & Co, Inc., Linden, NJ. *Construction Manager.* Managed construction services on an 80K SF, 5-level, $50MM facility for Merck & Co., Inc. Assumed responsibility from the 75% completion milestone through to owner occupancy. Responsible for the coordination of subcontractor activities, forecasting total project costs and scheduling completion milestones in support of substantial completion and commissioning / qualification of cGMP process areas. This included monthly presentation to senior management, strategic planning, cost management, and claim negotiation.

Pilot Plant Renovation, Unilever Bestfoods, Englewood Cliffs, NJ. *Construction Manager.* Responsible for procurement and construction of an EPC, turnkey project;$6.4MM, 25K SF pilot plant renovation for Unilever Bestfoods. Responsible for all facets of procurement and construction including scope development, bid/award of contracts, site safety program implementation, contract management, and daily coordination of the multiple subcontractors/vendors and client personnel.

University of California/Davis, Medical Center Tower II Addition, Sacramento, CA. *Field Manager.* Coordinated inspection activities on a new 13 level Hospital Tower accommodating Nursing Units, Radiology Department, Patient Care Support space, and Life Flight Helideck for UC Davis Medical Center in Sacramento, CA. Interfaced with the Inspectors of Record, Architect, General Contractor, Fire Marshal, and Owner to assure compliance to the Office of Statewide Health Planning and Development (OSHPD) agency. Key focus area related to the testing and commissioning of the Fire Life Safety System. Managed construction activities including seismic bracing and anchorage of Owner Furnished/Owner installed equipment. Managed various documents utilized by the Inspectors of Record during the inspection process and initiated procedures used to document the continuous inspections.

Jeffrey Ronk
Project Manager
Jacobs

Education:
B.S. Business Administration
AAS, Construction Technology/Architectural Technology

Registrations:
N/A

Years of Experience:
15 Years

Jeffrey Ronk has over 15 years of experience in project engineering and construction as a Design Manager, Construction Project Manager II, Program Manager, Project Engineer, Field Engineer C.S.A., Project Superintendent, Construction Technician, and Technical Drafter on Base Building, and Plant Services.

RELEVANT EXPERIENCE

Paterson Public Schools District. *Design Manager.* As part of the Project Management Firm (PMF) responsibilities as a team member is to participate in the management of multiple public schools for the Paterson School District by coordinating the activities of design consultants, reviewing and documenting submission of various levels of designs (Schematic to Construction) and review/ reconcile estimates between the design consultant(s) and the Project Management Firm (PMF). In addition, other responsibilities include chairing meetings, coordinating communication between various user groups and providing feedback/ recommendations to the New Jersey Schools Construction Corporation (NJSCC).

20,000 Ft2 High-Density Record Storage Module and Sorting Room to Harvard's existing book depository. *Construction Project Manager II.* Fulfilled Project Manager's services acting in the capacity of an agent/ representative of the Owner throughout the design and construction phases of the project. assisted the Owner in the planning and evaluation of the project by working with the Owner and Architect. He assisted in the award, execution and monitoring of the design contract. Mr. Ronk also lead design teams in preparing packages for permit applications, conducted design reviews with the design team and Owner to assure timely information flow and consistency with expectations to put together data for the final design plans for bidding and review.

Motorola Facilities, Chandler, AZ. *Project Engineer / Coordinator.* On loan to Motorola Facility Engineering Department reporting directly to the Facility Manger and various Project Managers, Responsibilities included preparation of bid documents, reviewing of quotes and award of bids for various in plant operations at the site. Responsible for tracking and approving of contractor invoices/ change orders, monitoring schedules and coordinating construction activities. Along with Mr. Ronk's administration duties, he coordinated the operation of many trades. Said trades include but not limited too, Mechanical – both wet and dry systems, High Purity Piping installations, HVAC, Sprinkler trades, Electrical – Power and Data and specialty trades such as HPM (Hazard Product Material) installers and Product Non-Handling Systems.

Motorola 52nd St., Phoenix, AZ. *Field Engineer / Project Superintendent*
Responsibilities included constructability reviews of more than 13,000 sq. ft. of projects ranging from Class 100 to Class 10,000 air and particle controlled environments. Responsible for the coordination, construction and renovation of existing areas in an operating facility. In addition, responsible for the moving of existing semi-conductor production equipment and the installation of new production equipment for upgrade operations while production activities are in full output mode.

David Rivera
Project Manager
Jacobs

Education:
Master of Architecture
Master of Urban Planning
Bachelor of Architecture

Registrations:
N/A

Years of Experience:
13 Years

David Rivera has nearly 13 years of professional experience in Architecture and Construction. His experience includes healthcare, education, commercial and corporate interiors. His responsibilities have included building and interiors design, project management, procurement, contract administration, CPM scheduling, construction change orders, project documentation controls and the use of computer-based project management systems. David has also had significant on-site interaction with contractors and consultants. His expertise and talent are evident in his attention to details from pre-design through construction administration.

David smoothly integrates architectural and construction expertise with the most current technological solutions and products. His diverse experience includes instrumental roles in both public and private sector work in the New York metropolitan region. Specifically, he has provided services to a select client list that include: NYC Department of Design and Construction, NYC School Construction Authority, Health and Hospitals Corporation, and New Jersey Economic Development Authority.

RELEVANT EXPERIENCE

Rockland Children's Psychiatric Center, Dormitory Authority of the State of New York, Orangeburg, NY. *Construction Manager.* Providing full construction management services for DASNY, for the $47 million new 56 bed inpatient facility for children ages 11 to 18. The new center will be approximately 104,000 square feet. The facility includes designated areas for functions including residence, education, administration, admissions, medical support, gymnasium, auditorium, food service, and operational support. Principal responsibilities included pre-construction design and constructability reviews, coordinating construction activity among the various prime contractors, review, track and prepare field directives and construction change orders. He reviews and processes requests for information and product data submittals for the Architect's reply or approval respectively and prepares daily reports of construction activities and adherence to safety procedures.

Liberty Science Center, New Jersey Economic Development Authority, Jersey City, NJ. *Senior Project Engineer.* Provided full construction management services for the New Jersey Economic Development Authority, the principal developer, for the $65 million Liberty Science Center Revitalization and Expansion Project. The project consists of two (2) distinct elements; the 85,000 SF West Wing expansion and the 196,000 SF existing building revitalization. Principal responsibilities included review, track and prepare field directives and construction change orders. Review and process requests for information and product data submittals for the Architect's reply or approval respectively. Assist with oversight of document controls, general office administration and personnel development. Specific responsibility for the following Subcontractors: Selective and General Demolition, Testing and Inspection, Site/Earthwork, Structural Steel, Poured-in-place Concrete, and Landscape. This responsibility included limited discretionary authority for managing, coordinating and tracking construction project bid/procurement/award, construction administration and closeout for these Subcontractors as directed by the Project Director.

Scott Paul Longazel
Contract Administrator
Jacobs

Education:
Masters of Business Administration
AB, Engineering, Environmental Science & Engineering

Registrations:
N/A

Years of Experience:
7 Years

Scott Paul Longazel began his career as an Assistant for GE Lighting in 2000. Over the years he has gained experience in project planning and management in both superintendent and project management roles. Scott's experience is in supervision and management of commercial, industrial and residential construction where he has been instrumental in land use coordination, construction, and real-estate development. He has strong experience in scheduling, value engineering, budget review, specification reading, general contracting, design-build practices, construction and owner insurance policies, and requirements for construction/development. Scott understands and brings experience in the U.S. Green Building Council LEED rating system, specifically in how to implement LEED into a development/construction project.

RELEVANT EXPERIENCE

Time Equities, Inc., New York, NY. *Project Manager/Owner's Representative.* Scott was responsible for the construction management of several demolition and construction projects. He managed the development and construction of a 65-story, $500M, multi-use hotel luxury condo high-rise with a planned LEED Gold certification and managed the demolition of three buildings in lower Manhattan to include a 14-story masonry steel building, an 8-story masonry wood building and a 3-story tenement building. With extensive project experience in New York, Scott gained a strong understanding of Lower Manhattan's political system and working relationships with community members such as the New York State Dept. of Transportation, New York City Dept. of Transportation, Lower Manhattan Construction Command Center, Community Board 1, Fire Department of New York, New York Police Department, Verizon and Con Edison.

M. Gordon Construction Co., Linden, NJ. *Project Manager.* Scott simultaneously managed 3 - 4 development and construction projects averaging in size of 40,000 SF. He worked predominantly with high-end Magnetic resonance imaging (MRI) facilities in addition to industrial, religious, Educational and residential facilities. For these projects Scott worked closely with the development team, property management, and construction personnel to deliver turn-key services on the projects. He also managed quality control and insurance programs, implemented and trained staff on Timberline Project Management, coordinated design with design professionals and obtained permits from various city and state agencies.

Irwin & Leighton, Inc., Philadelphia, PA. *Assistant Superintendent.* Scott provided on-site assistance during the construction of Phase I of the renovation of the Acopian Engineering Building at Lafayette College. His responsibilities included completing daily logs, monitoring subcontractor safety, addressing problems associated with demolition and construction, updating plans based on RFI responses and architectural bulletins, and addressing A/E conflicts.

Cutler Associates, Allentown, PA. *Assistant Project Manager.* Scott worked with project managers on multiple projects and gained extensive experience on tilt-up concrete industrial warehouse construction, Educational facilities and commercial office buildings. He was also assigned as the Quality Control Manager for a $12M warehouse facility for General Motors.

Loren Roller Schnitzer
Contract Administrator
Jacobs

Education:
BA Communications

Registrations:
N/A

Years of Experience:
20 Years

Loren Roller Schnitzer has over 20 years of experience in project management, procurement, and move coordination. With her knowledge of base building infrastructure and facilities management, Ms. Roller Schnitzer provides support for the planning of furniture installations and the coordination of activities leading to occupation of a site. Her experience also includes contract administration, site management, corporate facilities management, planning, estimating and scheduling.

RELEVANT EXPERIENCE

GSA Region 2 US Mission to the UN, New York, NY *Relocation Specialist.* This $103 million project involves a safe, secure, and state-of-the-art diplomatic facility for the U.S. delegation to the United Nations. The scope of work for the new building includes construction of a 27-story, 150,000 square foot, steel reinforced, cast-in-place concrete building that will accommodate nearly twice the amount of staff than its predecessor. The most prominent feature of the structure is the facility's blast-proof, architectural concrete exterior. The building includes specialized HVAC, security, and telecommunication systems. Jacobs also serves as commissioning agent for all critical systems of the program.

Polytechnic University, Brooklyn, NY. *Project Manager.* Responsible for the entire FF&E procurement program for the Othmer Dormitory, the Jacobs Academic and Athletic Facility, the Rogers Dining Hall, and the Regna Lounge. Developed program requirements with the end users and architects to create specifications for furniture and equipment. Created and managed the RFP process for all FF&E purchases, including installation services and storage requirements. Managed the furniture purchase process, and delivery and installation of the four projects.

J.P. Morgan, New York, NY. *Project Manager* Acted in a Facilities Management Department staff augmentation role to perform all functions that are required of a J.P. Morgan Project Manager in accordance with their procedures, including execution and completion of construction, renovation and remodeling projects. Supported the JPM Vice President of Facilities Management in space management and real estate strategy. Managed the relocation of the Private Client Group to the new facility. This scope of services included the RFP process; selection and management of the relocation consultant, and mover; and creating internal communications for the purpose of coordinating with the business groups.

SUNY Health Science Center at Brooklyn. Brooklyn, NY. *Project Manager* Managed and assisted the Director of Facilities Project Management in the development and execution of the FF&E budget for the Health Science Education Building. Achieved $1.5 million cost savings through renegotiations of existing New York State and group purchasing contracts. Developed and managed RFP activities for all consultants, contractors and vendors. Directed architects, trades, vendors and consultants in various modification projects. Verified contract deliverables for recommendation of payment. Supervised activities of project staff, relocation consultants and support staff.

Niurka Ozuna
Contract Administrator
Jacobs

Education:
B.S. Business Administration

Registrations:
N/A

Years of Experience:
6 Years

Niurka Ozuna has six years of experience in the architecture/engineering industry, most recently working as a Project Engineer. As a Project Engineer, her responsibilities include performing a variety of routine assignments involved in the coordination of various engineering, construction, scheduling, purchasing and start up aspects of a project ensuring technical excellence across all disciplines.

RELEVANT EXPERIENCE

Dormitory Authority of the State New York, Bronx Mental Health Redevelopment, Bronx, NY. *Project Engineer.* As the Project Engineer, supporting the Senior Program Manager on this $300M project, she reviews designs and coordinates the distribution of client QA/QC submissions and architect responses. Reviews submittals and RFI's and enters them in to Contract Manager. Researches and presents project specific topics such as Noise Mitigation. Attends design and construction project meetings and assists with meeting minutes. Assists with estimate reconciliations and P6 schedule updates.

NYC Economic Development, East River Water Front, New York, NY. *Project Coordinator.* The East River Waterfront Esplanade and Piers Project, Phase 1 includes improvement and redevelopment of an approximate two-mile portion of the East River Waterfront extending from Peter Minuit Plaza at the southern tip of Manhattan to the East River Park on the Lower East Side. The scope of services includes preconstruction master scheduling, cost estimating, risk management, constructability review, packaging alternatives, staging & phasing and contract procurement. As a Project Coordinator, Niurka assisted with processing contract documents, client and sub invoices, supply and service report and other project requests as needed.

New York Metropolitan Transportation Authority (MTA), Engineering Construction Monitoring, New York, NY. *Project Coordinator.* On this project, we provided Independent Engineering Consulting (IEC) services to The New York Metropolitan Transportation Authority's (MTA) overall capital improvements program, which involved project and program monitoring, design reviews and programmatic reviews throughout the Authority's operating agencies which include: New York City Transit; Long Island Rail Road; Metro-North Railroads; Bridges and Tunnels; Second Avenue Subway and the East Side Access Project. As a Project Coordinator, Niurka assisted with certificates of insurance, pre-bills, client and sub invoicing, personnel utilization reporting and file management.

Nassau County Department of Public Works, Nassau County Building Consolidation Program, Westbury, NY. *Administrative Manager.* Nassau County Building Consolidation Program, Westbury provides program management services to help Nassau County to reduce its ongoing cost of facilities and increase both productivity of employees and service to county residents. Niurka's role provided support in staffing the project and contract administration.

Sheryl Seid Ng

Contract Administrator
Jacobs

Education:
N/A

Registrations:
N/A

Years of Experience:
22 Years

Sheryl Seid Ng has 22 years of experience in construction management in both private and public sector work. She has performed document control for several large design and construction programs and also assisted and supported the effort to organize complex billing cycle and to maintain detailed records.

RELEVANT EXPERIENCE

Nassau County Building Consolidation Program, Westbury, NY. *Project Engineer.* Global program management services for the Building Consolidation Program, a $300 million plan, in Nassau County to reduce its ongoing cost of facilities and increase both productivity of employees and service to County residents. Review the monthly requisition from the contractors to ensure that they are compliant with the requirements of the County. Provide assistance to the project managers in all pre-construction activities. Assist in the reconciliation of the Profit Sharing between CB and the subcontractor on the Nassau County project.

University of Connecticut, Summer Work Program, Hilltop Apartments, Storrs, CT. *Project Engineer.* Currently supporting the University of Connecticut Architecture and Engineering Services Department as Program Manager for a series of projects related to the remediation of code discrepancies, facility upgrades, and quality improvements related to existing facilities.

NYCSCA Construction Management Emergency Services New York, NY. *Project Engineer.* Construction management services on an emergency on-call basis for the NYCSCA for schools in all five boroughs of New York City. Responsible for the accounting/document administration. Compiled all the associated reimbursable and labor cost to be invoiced on a monthly basis. Entered into the Client's database the necessary accounting information to issue payment for the various task orders assigned. The volume of billing entailed $8M of which $7M is paid out to contractors.

DASNY, Hunter College - Brookdale Campus Rehabilitation New York, NY. *Project Engineer.* A $17 million project involved in the rehabilitation of the 10-story West Building, the 13-story North Building, and the 6-story East Building. Responsible for organizing and implementing the setup of the Primavera Expedition project management software to maintain all related construction submissions and correspondences.

NYCSCA Construction Management of NYC School Boiler Conversions, New York, NY. *Project Engineer.* Responsible for document control for the renovation and installation of new boiler systems at public schools throughout the New York City boroughs of Manhattan, Queens and Staten Island.

Joan Roof
Safety Engineer

Education:
BS, Psychology

Registration:
N/A

Years of Experience:
16 Years

Joan Roof brings 16 years of experience in the safety industry. She has extensive experience in safety inspection and the development of management plans for projects involving hazardous materials. Her work has involved lead based paint, asbestos, mercury, dioxins and PCBs. Joan's primary responsibility with Jacobs is implementing and overseeing the Safety Program policies and guidelines at all Jacobs project sites.

RELEVANT EXPERIENCE

Paterson Public Schools, Paterson, NJ. *Safety Manager.* Jacobs was hired to perform program management services for the Paterson Public Schools, School Construction Program. The contract included managing $71 million in health and safety projects in the first year of the program, with subsequent assignment of major construction projects for a total program value of $400 million in estimated construction cost. The initial health and safety projects include 35 campuses to review various upgrades such as HVAC, roof and window replacements, asbestos abatement, electrical upgrades, and exterior and interior wall repairs. Provided construction safety oversight on multiple campuses and project sites, safety training to Jacobs, client and partner personnel; performed asbestos, mold and lead-based paint abatement project management.

US Mission to the United Nations, New York, NY. *Regional Safety Manager.* Jacobs was contracted by the General Services Administration (GSA) Region 2 to provide oversight during the demolition of this 17-story high rise building in mid-town Manhattan. Work of the project included asbestos and lead-based paint abatement and general demolition. Joan provided safety oversight, training and assisted the contractors with procedural development for all phases of the project.

South Eastern Pennsylvania Transportation Authority (SEPTA), Philadelphia, PA. *Safety Manager.* Market Street Elevated Rail Replacement Project. Provide ongoing safety support, training and leadership resources to project team at this $800 million light rail replacement project in center city, Philadelphia, Pennsylvania.

Hillview Reservoir, Yonkers, NY. *Regional Safety Manager.* Jacobs contracted with the City of New York Department of Environmental Protection (DEP) to perform Construction Management and Resident Engineering inspection services for multi-prime contractor construction of a chlorine facility, permanent concrete cover, and reconstruction of the treatment chambers at the Hillview Reservoir in Yorkers, New York. The value of the current work is $22 million. Joan is responsible for corporate sponsorship of Jacobs' safety program; safety process development and safety training.

Keystone Building Project, Harrisburg, PA. *Project Health and Safety Officer.* Provided safety management and training for hazardous materials abatement and demolition project of an asbestos, PCB and dioxin-contaminated high-rise office building.

Robert Carson
Safety Engineer

Education:
BS, Safety Studies
AS, Computer Science

Registration:
N/A

Years of Experience:
8 Years

Robert Carson brings eight years of experience in developing and implementing safety programs and is a Jacobs' area HSE manager and safety inspector. He currently oversees the successful development, implementation, and maintenance of the institutional sector's safety program for approximately $200 - $300 million worth of work. Projects range from small interior renovations to 20-story mixed-use buildings throughout New England and the Mid-Atlantic. Robert has chaired internal safety pre-construction meetings with field management, coordinated safety meetings, implemented Contractor Controlled Insurance Programs and developed site-specific safety program and insurance requirements.

RELEVANT EXPERIENCE

General Services Administration (GSA) Region 2, United States Mission to the United Nations, Demolition and New Construction Phases, New York, NY. *Safety Manager.* Jacobs provided CM services for the demolition of the existing 12-story US Mission to the UN and construction of the replacement structure. The structure currently under construction is a $100 million, 27-story high-rise architectural concrete structure. Jacobs' services during construction include document control, budget reporting, scheduling, change management, field inspection, 4D modeling, contractor invoice processing, equipment and system commissioning and project closeout. Robert is responsible for maintaining client's construction safety programs in accordance with the client's and Jacob's policies and procedures. He performs safety audits of contractor activity sites, provides technical assistance to client's Design Process Review involving contractor work, and takes authority to intervene and suspend operations when unsafe acts/conditions cannot be quickly resolved or if immediate danger to life, property, or environment is observed.

General Services Administration (GSA) National Capital Region, Department of the Interior Headquarters, Washington, DC. *Area HSE Manager.* The $220 million project includes the historical renovation of office, mechanical, electrical, telecommunication and support spaces. Jacobs is providing Construction Management Services for the second wing, with options for the remaining wings (construction of the first of six major corridor wings is complete). The building is nine stories high (including basement and mechanical level) and contains 1.3 million SF. Robert is responsible for maintaining the client's construction safety programs in accordance with policies and procedures.

General Services Administration (GSA) National Capital Region, Eisenhower Executive Office Building (EEOB) Modernization, Washington, DC. *Regional Safety Manager.* Jacobs provides Construction Management Services for the modernization of the 686,706 GSF, $350 million EEOB, which sits on an entire city block and functions as the principal facility for White House support operations. The project involves the full modernization and delivery of a renovated building that meets 21st century standards for power, telecommunications, work environment and safety. Robert is responsible for maintaining the client's construction safety programs in accordance with the client's and Jacob's policies and procedures.

Alan W. Norris
Safety Engineer

Education:
MS, Environmental Science,
MS, Occupational Safety & Health
BS, Manufacturer Engineering Technology

Registration:
N/A

Years of Experience:
23 Years

Alan Norris has ten years in health and safety disciplines with an emphasis on major infrastructure and capital construction projects and 10 years in the construction industry. During his career he has won two (2) safety awards.

RELEVANT EXPERIENCE

Jacobs Engineering New York. *Safety Manager.* Alan is responsible for the overall safety compliance for multiple projects in the New York Metropolitan Area by managing all aspects of the project from safety compliance to OCIP management to review of submittals.

Long Island Rail Road and MTA East Side Access Project, New York, NY. *Safety Manager.* Developed and implemented safety compliance procedures for a $6.3 billion tunnel project connecting Queens to Grand Central Terminal in Manhattan for L.I.R.R. and MTA. He managed all safety aspects of the project from initiation to completion. Developed and implemented the safety, security, and environmental procedures for a $2 billion scrubber improvement project and various Tennessee Valley Authority fossil fuel plants. Involvement in all aspects of the project from initiation to completion

Central Artery Project, Boston, MA. *Senior Safety Officer.* Oversaw safety & health issues on a number of project elements, including the Fort Point Casting Basin, involving: safety plans & program development; regulatory compliance issues; staff training & development; updating regulatory changes; representing company at meetings with owner and subcontractors.

Alan utilized his expertise in steel erection, concrete forming & placement, excavation, shoring and heavy equipment operation to successfully maintain positive relations with crafts and their supervisors. He won two safety awards in the three years with Company. Worked within an owner-controlled insurance program and reduced costs significantly via reduced claims for work-related injuries.

Kennedy Airport Light Rail System Project (Howard Beach Spur portion), Queens, NY. *Senior Safety Officer.* Monitored daily safety and health functions, including: representing Company at meetings with owner and subcontractors and developed training programs for craft and supervisory personnel. Alan utilized expertise in health & safety protocols and environmental regulations regarding disposal of contaminated soils and treatment of groundwater. Worked within an owner-controlled insurance program.

Central Artery Tunnel Project, Boston, MA. *Construction Health & Safety Officer.* Oversaw contractor compliance with health & safety pans, including: advising project-management personnel on compliance issues; updating of regulatory changes; review of contractor submittals; auditing of contractor record-keeping; maintained effective dialog with owners' project managers and engineers; advised project managers on all regulatory compliance issues and trained owners' representative

Environmental Specialist, Connecticut Department of Transportation, Cromwell, CT. *Safety Officer.* Audited and verified performance of Department's contractors and recommended and assisted in remedial action.

David Fox
Field Engineer
Jacobs

Education:
B.S. Mechanical Engineering

Registrations:
N/A

Years of Experience:
3 Years

David Fox is experienced in construction administration procedures including: construction inspections; preparation of construction estimates and CPM schedule reviews; and constructability reviews. Although, a recent Graduate, with a BS in Mechanical Engineering, He is very experienced in various areas of the construction industry.

RELEVANT EXPERIENCE

Metropolitan Transportation Authority / New York City Transit Department of Buses - Charleston Bus Annex, Staten Island, NY. *Project Engineer.* Jacobs is providing construction management services including reviews of design-build documents, constructability reviews, construction inspections, contract administration preparation of construction estimates and CPM schedule review. The new bus annex consists of a building with a footprint of approximately 81,000 SF, with outdoor parking areas for buses and employee vehicles. The new building consists of the bus annex at the first floor, with a mezzanine and second floor for offices, locker rooms, and support areas with facilities for the service and maintenance of buses with interior area for bus fueling, bus washing system, revenue extraction, and maintenance bay area with 15 dedicated lift workstations and automated parts retrieval system. There are 13 underground tanks and piping for diesel fuel, fuel oil, motor oil, automatic transmission fluid, antifreeze and windshield washer fluid dispensing and waste systems with two oil/water separators, Green design (DfE) requirements including bus wash with water reclamation system for utilization of site storm drainage water and energy-efficient lighting and HVAC systems. The scope of work included mechanical, electrical, communications and I&C systems for the new building with BMS system integration as well as bus parking area for 220 buses and employee parking area for 196 cars outside the facility.

NJEDA Paterson Public School 24, Paterson, NJ. *Project Engineer.* Jacobs provided construction management services including contract administration, construction inspections, constructability reviews, preparation of construction estimates and CPM Schedule reviews. Public School # 24 is a existing four-story brick building of approximately 76,000 SF. Scope of work included addition of a new curtain wall structure of approximately 33,500 SF constructed on the site of the existing school and linked to the facility by a closed entry element, construction of a new state-of-the-art media center, addition of a new gymnasium, cafeteria, kitchen, nine general classrooms, two science rooms and community health center. The existing building received replacement of the entire existing HVAC, electrical and communications systems as well as architectural renovations. Site improvements included new paving in the courtyard, new concrete sidewalk, steps and ramps, installation of synthetic playground surfaces and new fencing.

Matthew Gallegos
Field Engineer
Jacobs

Education:
B.S. Architectural Engineering

Registrations:
N/A

Years of Experience:
7 Years

Matthew Gallegos has more than seven years of experience as a Project Engineer. He is experienced with project schedule analyst and updates. He is experienced in working in fast-paced and changing environments with the ability to think quickly and successfully and is able to work simultaneously on various projects and adapt to changing work conditions.

RELEVANT EXPERIENCE

NYS Office of General Services, Camp Smith Readiness Center, Cortlandt Manor, NY. *Project Engineer.* Jacobs is providing construction management services to construct the 112,000 SF Readiness Center on the property of Camp Smith. The Armory will be a 3-story structure, constructed of brick and concrete block units with concrete floors, elevator, site work, mechanical, plumbing, fire protection and electrical systems. There will also be a 40,600 SF Army Aviation Support Facility for unheated aircraft storage space, rigid and flexible paving, ground support equipment, hover lanes, fuel storage / dispensing system, aircraft wash facility, exterior lighting, fire protection and fencing.

NYS Office of General Services, Hudson Valley Transportation Management Center, Hawthorne, NY. *Project Engineer.* Jacobs provided construction management services including document control (RFI, Bulletins, Submittals, Change Orders/Field Orders) utilizing OGS' on-site Project Management Control System. Prepared monthly reports, meeting minutes, progress payments, scheduling, and assistance in CAD coordination.

Sheldon Henry
Field Engineer
Jacobs

Education:
M.E. Architectural Engineering and Construction Management
B.S. Industrial Technology and Construction Management

Registrations:
N/A

Years of Experience:
7 Years

Sheldon Henry has more than seven years of experience as a Project Engineer. He is experienced with project schedule analyst and updates, visual construction and engineering simulations. He is experienced in working in fast-paced and changing environments with the ability to think quickly and successfully and is able to work simultaneously on various projects and adapt to changing work conditions.

RELEVANT EXPERIENCE

Dormitory Authority State of New York, Queens College Remsen Hall Expansion, Flushing, NY. *Project Engineer.* Duties include preparing and updating the daily safety plan of action. Communicate closely with the project inspectors to ensure adherence to all QA and QC requirement per the contract. This includes managing and reporting deficiencies, inspection of architectural trade etc. Perform review and evaluation of each trades short term schedule to ensure the project is proceeding accordingly. Process requests for information both incoming and outgoing, conduct progress weekly meetings. Work closely with the legal department to and prepare, update, evaluate and issue contracts to potential prospect.

General Services Administration, Region 2, U.S. Mission to the United Nations, New York, NY. *Project Engineer.* Performed project schedule analyst and updates along with periodic evaluations reports per the contract documents. Duties included visual construction and engineering simulations and coordination to be reviewed by the project team (4-D Cad). Prepared government estimates used to validate subcontractors and suppliers PCO's. As an architectural inspector, verify QA and QC requirements are performed per the contract documents, documented & maintained in accordance with acceptable sections of the contract drawings and contract specifications. Interface/communicated with upper management personnel to identify problems that affect quality, and initiated solutions to quality problems and verified implementation of solutions. (This production plan has resulted in the current 14 day cycle per floor). Work closely with the legal department to and prepare, update, evaluate and issue contracts to potential prospect.

Eastern Connecticut State University, Willimantic, CT. *Project Engineer.* Duties included review of submittal and shop drawing for compliance with contract document. Conducted coordination progress meetings with MEP Trade Contractors on design/installation issues. Prepared Owner and Subcontractor change orders and weekly meeting minutes.

New Haven Rail Yard – Project 301-0086, New Haven, CT. *Project Engineer.* Duties included review of submittal and shop drawing for compliance with specifications. Conducted coordination progress meetings with MEP Trade Contractors on design/installation issues. Prepared Owner and Subcontractor change orders. Prepared and updated job schedule. Reviewed and approved monthly payment requisitions.

Vanessa Jimenezz

Field Engineer
Jacobs

Education:
B.S. Civil Engineering

Registrations:
N/A

Years of Experience:
6 Years

Vanessa Jimenez will serve as Project Engineer on this project. Vanessa's experience has included show drawings and daily reports, project record keeping and the management of RFI's. She is well versed in Primavera Expedition System and Microsoft Office and has had experience in the greater New York area. Currently, she serves as Project Engineer for health and safety and new construction projects.

RELEVANT EXPERIENCE

Staten Island Courthouse, New York, NY. *Senior Project Engineer.* The courthouse will service the needs of Supreme Civil Court, Supreme Criminal Court, the Surrogate Court and related agencies. The court sets shall be comprised of seven Supreme Civil Courts, six Supreme Criminal Courts and a Surrogate Court.

DASNY, Staten Island Paterson Public Schools Health & Safety Renovations Program, Paterson, NJ. *Project Engineer.* The program is a major, $400 million program for the ongoing renovation and new schools construction, and encompassing the entire Paterson New Jersey Public Schools system. Jacobs is providing PM/CM services for all tasks under the contract.

Vanessa served as Project Engineer for the $16.5M Renovation and Addition of P.S. 24 which consists of an existing (four and five) story brick school structure of approximately 74,800 SF, and a new steel framed masonry structure of approximately 34,800 SF to be constructed on the site of the existing school, and linked to it by new enclosed entry elements. As Project Engineer, Vanessa's responsibilities include enforcement of the Safety Program, process GC requisition and change order, manage RFI's and submittal process including tracking and filing, document meeting minutes, maintain drawings and specifications and other misc. administrative activities.

Paterson City Public Schools, Paterson, NJ. *Project Engineer.* School Construction Corporation. Use and maintain Prolog management system including reviewing, tracking and maintaining contractor invoices, change orders. Prepare meeting minutes and cost estimating. Perform in an administrative role with discretionary authority for determining alternatives and carrying out assignments as directed by project managers. Schedule and perform construction site inspection with the Department of Community Affairs (DCA). Field experience including coordinating and monitoring Time and Material work. Prepare project completion packages for final Certificate of Occupancy. Perform Health and Safety Contract Closeout. Document controls and general office duties.

Rehabilitation of Battery Parking Garage and Emergency Garage, Metropolitan Transit Authority, New York, NY. *Construction Management Intern.* Used and maintained Primavera Expedition System to log-in incoming and outgoing correspondences, shop drawings and daily reports as well generating customized reports for monthly client reports. Updated and prepared computerize payment book for unit price items. Prepared Quantity takeoff for change order requests, Organized the Standard Operating Procedure Manual. Obtained Progress Photos for monthly reports and General Office duties.

Artem Khaykin
Field Engineer
Jacobs

Education:
B.S. Civil Engineering

Registrations:
N/A

Years of Experience:
6 Years

Artem Khaykin is experienced in working in fast-paced and changing environments with the ability to think quickly and successfully and is able to work simultaneously on various projects and adapt to changing work conditions. He is detail-oriented and proficient in investigating, comprehending and applying zoning/building codes, specification and technical construction, and contract documents

RELEVANT EXPERIENCE

GSA, Region 2 - African Burial Ground Interpretive Center Museum Phase 1, Project Engineer/QC Specialist. *Project Manager.* The project is a build out for a new museum space on the first floor retail space of a federal building. Project Scope includes: demolition of previous tenants' built-out space (including mechanicals); design and installation of new sprinkler and fire alarm systems with modification to existing facilities; selective demolition and restoration of granite panel wall assemblies in occupied and non occupied spaces; installation of custom bronze/brass door assemblies and modifications to existing curtain walls; and, coordination with full museum build-out management and contractor.

GSA, Region 2 - Alfonse M. D'Amato U.S. Courthouse Phase 1 and Phase 2 Select Repairs, Project Engineer/QC Specialist. *Project Manager.* The project involved interior and exterior remediation and repair work in a fully occupied federal courthouse building.

Phase 1 Project Scope includes: removal of existing granite stone panels on exterior wing walls of the building, investigation of existing conditions, installation of new granite panels and repairs necessary to accommodate re-installation; select demolition of existing rotunda skylight gutters, roof repair and installation of new waterproofing materials, and reinstallation of gutters; and repair of structural concrete beam. Also, work on supported scaffold, tie-off, and inaccessible areas was required.

Phase 2 Project Scope includes: careful demolition of existing concrete and asphalt walk/roadway, elevated architectural concrete walls, soil excavation, removal of existing waterproofing materials, investigation of design and repair solutions. installation of new waterproofing material, repair of existing conditions, and re-building architectural walls and roadway to match existing; installation of new custom grate trench drain and plumbing tie-in to existing building plumbing facilities(concrete demolition and re-installation required); and Installation of continuous custom flashing on approximately 12 floors of the building. The project also include the repair and/or replacement of custom windows, installation of custom flashing, and exterior waterproofing as well as work on suspended scaffold and inaccessible areas.

Faheem Khan
Field Engineer
Jacobs

Education:
B.S. Civil Engineering

Registrations:
N/A

Years of Experience:
9 Years

Faheem Khan's experience encompasses many aspects of civil engineering, including environmental impact statements, preliminary/feasibility studies, and final design to contract plans and specifications, construction management, drainage, cost estimating to bid analysis and construction inspection.

RELEVANT EXPERIENCE

East River Waterfront Esplanade and Piers Project, New York, NY. *Project Coordinator.* Responsible for the improvement and redevelopment of approximately two-mile portion of the East River waterfront that extends from Peter Minuit Plaza at the southern tip of Manhattan to East River Park on the Lower East Side. The Phase 1 project components include the following; The Esplanade, Pier 15, Pier 35 and South Street Improvements. Responsibilities include and not limited to; review of all estimates, drawings and specifications, coordination between all team members and city agencies, constructability reviews, and construction phasing plans.

Yankee Stadium, Bronx, NY. *Construction Inspector.* Responsible for the sewer replacement in E 161st Street. Responsible for overseeing construction of the new 24" DIP on concrete cradle and piles, new drop manhole and tie-in into existing manhole structure per DEP standards and specifications. The new 24" DIP replaced an existing 12" DIP combined sewer necessary to handle flow from the new Yankee Stadium. Additional responsibilities included the overseeing of pile installation according to the specifications and preparing Inspection reports for the work completed on a day to day basis.

East River Science Park, New York, NY. *Project Engineer.* Responsible for schematic and final design of drainage for the East River Science Park Bio-Tech Campus, located between 28th & 30th Streets and the FDR Drive, adjacent to Bellevue Hospital. The campus includes three 16 story research laboratory towers and a 470 car parking structure at service level. Work includes both survey and civil / site engineering design for the 3.5 acre site and includes the relocation of a NYCDEP 48 inch combined sewer, the reconfiguration of a major NYCDEP diversion chamber, new smaller sized storm and sanitary sewers.

Route 9A Project – Lower Manhattan Redevelopment, New York, NY. *Civil Engineer.* Responsible for all cost estimating for the project; West Thames Street to Chambers Street.

Brooklyn Arena and Atlantic Yards, Brooklyn, NY. *Engineer.* Responsible for Maintenance and Protection of Traffic associated with the Brooklyn Arena. These include the replacement of two existing bridges, a temporary bridge, a new LIRR tunnel extension and new subway connections/entrances to the adjacent BMT/IRT and LIRR lines.

Federal Jeans, Queens, NY. *Project Engineer.* Responsible for the preparation of documents as part of the Uniform Land Use Review Procedure (ULURP) application. This effort included the preparation of the Amended Drainage Plan and documentation relating to a site connection proposal for sewer and water systems associated with the 8-acre site. The work involves close coordination with the New York City Department of EPA.

Christina Krasanakis
Project Engineer
Jacobs

Education:
B.S. Civil Engineering

Registrations:
N/A

Years of Experience:
7 Years

Christina Krasanakis is a Civil Engineer with experience on station and facility rehabilitations, design of highway bridges and railroads, and soil, track safety and in-depth structural integrity inspections. Her expertise includes design of steel and concrete structures and structural analysis. She is proficient in AutoCAD and Microstation.

RELEVANT EXPERIENCE

Dormitory Authority State of New York Staten Island Supreme Courthouse, Staten Island, NY. *Civil Engineer.* Jacobs is providing construction management services to construct a new state-of-the-art 154,000 GSF courthouse which will include 14 courtrooms and a 600-car parking structure for the needs of the Supreme Civil Court, Supreme Criminal Court, Surrogate Court and related agencies. Construction management services are being performed in two phases and executed in three separate contracts which are design, construction and general conditions phases.

Conrail, New Jersey for Consolidated Rail Corporation, NJ. *Civil Engineer.* Responsible for the North Jersey terminal capacity improvement infrastructure projects at Conrail. Overall work included track safety inspection of utility relocation for the overall addition of proposed tracks at various locations of Conrail.

Port Authority Marine Terminal, Brooklyn and Staten Island, NY. *Civil Engineer.* Responsible for the inspection of the Brooklyn, Red Hook and Howland Hook Marine Terminals. Overall work included Priority, Safety and Routine repairs to preserve existing buildings and pier sheds.

Route 7 Wittpenn Bridge, Jersey City and Kearny, New Jersey for the New Jersey Department of Transportation. *Civil Engineer.* Responsible for the inspection of soil borings performed before the construction of the Wittpenn Bridge. Inspection included split spoon sampling, vein shear tests and undisturbed tube sampling.

New York/New Jersey One-Call System for Port Authority of New York and New Jersey, NJ. *Civil Engineer.* Daily monitoring of approximately 14,000 "One-Call" notices received annually for geographic proximity and relevance to Port Authority facilities. All "One-Call" tickets were received thru Digtrack software and thoroughly reviewed on the basis of the type of work done as well as the work location.

Port Authority Bus Terminal, New York, NY. *Traffic/Civil Engineer.* Responsible for the 3rd – 7th floors of the Port Authority of New York and New Jersey's Bus Terminal. Civil work included Priority Structural Repairs to preserve the existing structures. Other work included maintenance of traffic while repairs were accomplished.

MTA-Long Island Rail Road Jamaica Central Control Building, Jamaica, NY. *Civil Engineer.* Responsible for interior fit out design of Central Control Building. Overall design includes civil, mechanical (HVAC), plumbing, fire protection) and electrical disciplines. Work included design for floor and ceiling layout as well as maintenance of specifications and production AutoCAD files.

Anthony Markopoulos
Field Engineer
Jacobs

Education:
B.S. Mechanical Engineering

Registrations:
N/A

Years of Experience:
5 Years

Anthony Markopoulos is experienced in construction administration procedures including: construction inspections; preparation of construction estimates and CPM schedule reviews; and constructability reviews. Although, a recent Graduate, with a BS in Mechanical Engineering, he is very experienced in various areas of the construction industry.

RELEVANT EXPERIENCE

General Services Administration, Region 2 U.S. Mission to the United Nations, New York, NY. *Project Engineer.* Jacobs is providing on-call construction management services to GSA, Region 2. The new facility will be a heavily reinforced 26-story 150,000SF high-rise constructed of reinforced concrete. Responsibilities include tracking submittal statuses, maintaining a submittal log, ensuring timely submission and return of submittals by the General Contractor and Architect/Engineer, coordinating shop drawings and managing meetings between the contractors involved with the project's multiple contracts, and providing construction activity, labor count and photographs to the client with daily and weekly reports. Also responsible as the on-site representative of Company's Commissioning Agency and for providing technological and logistical support to upper management.

Pfizer World Headquarters, New York, NY. *HVAC Design Engineer.* Performed load calculations, routed and sized ductwork and piping, and selected air handling and ventilation equipment as per the project specifications. Approved contractor shop drawings and equipment selection and punch list construction.

Transportation Security Administration, Queens, NY. *HVAC Design Engineer.* Performed load calculations, routed and sized ductwork and piping, and selected air handling and ventilation equipment as per the project specifications.

GE Financial Services, Stamford, CT. *HVAC Design Engineer.* Performed load calculations, routed and sized ductwork and piping, and selected air handling and ventilation equipment as per the project specifications. Coordinated with Architect and Client on design changes and issues. Approved contractor shop drawings and equipment selection and punch list HVAC work when completed.

Port Authority of New York and New Jersey, New York, NY. *Construction Management Intern.* Supervised projects involving heating, ventilation, and air condition applications, civil engineering and general construction; provided solutions to project related issues on-site in conjunction with contractors and design engineers from unexpected field conditions to design problems; coordinated with airport security to maintain site security; and submitted daily reports detailing progress on all projects.

Timothy G. Yan
Field Engineer
Jacobs

Education:
B.S. Construction Management

Registrations:
N/A

Years of Experience:
2 Years

Timothy Yan has two years of experience and is currently the Project Engineer for Dormitory Authority State of New York Bronx Mental Health Psychiatric Redevelopment $350M Campus Redesign and Renovation Project. He is providing field supervision and contractor assistance including quality assurance, quality control and safety. He is also participating in the reviewing of all documents pertaining to this project.

RELEVANT EXPERIENCE

Dormitory Authority State of New York Office of Mental Health, Bronx Mental Health Psychiatric Redevelopment, Bronx, NY. *Project Engineer.* Jacobs is providing construction management services for this multi-building facility, LEED Silver, BIM Coordinated Design and Construction project. Responsibilities on this project include: providing field supervision and contractor assistance for day to day activities and tasks including quality assurance, quality control and safety; managing design review comments and participating in design review discussions and other meetings regarding design procedures; assisting in reviewing all documents submitted by Architects and Engineers, including buildings design/narratives, utilities package, security options, etc; gathering and researching building materials, methods and different HVAC systems for the client for best choices in materials, methods and systems, developing the Residential Village Buildings schedule; and providing recent BIM experience and knowledge to assist redevelopment project.

New York City School Construction Authority, Long Island City, NY. *Project Manager Assistant, College Internship program.* Responsibilities included creating field and daily reports, dealing with change orders and written NCRs / NODs, estimating and confirming General Contractor's estimations for the Senior Project Officer and confirming and estimating costs of labor for the Senior Project Manager.

Jeff Rudenjak
Resident Engineer
Jacobs

Education:
B.S., Civil Engineering Technology
A.A.S., Engineering

Registrations:
NICET Level IV, 79942, Expires 10/1/2011
ACI, Concrete Construction Technology Course Expires 02/2013
ACI, Concrete Field Testing Technician – Grade 1, Expires 04/27/10
NJSAT, Asphalt Paving Technologist, Expires 07/01/2012

Years of Experience:
23 Years

Jeff Rudenjak is an accomplished Field/Construction Engineer. He has been the Resident Engineer for the last 18 Southern Bridge Deck and Resurfacing contracts for the NJTA. Jeff was also the Office Engineer for the $33.4 million dualization of two miles of mainline roadway of the New Jersey Turnpike. His duties include issuing task assignments to inspection forces; verifying inspectors' reports; managing various project records; monitoring the shop drawing progress; preparing as-built drawings and progress reports; project scheduling; and reviewing design contract drawings.

Jeff served as inspector for the Howland Hook Marine Terminal construction inspection project in Staten Island, New York. This work involved rehabilitation of yard fire hydrant system and cargo crane wharf rail system; installation of an earth retaining sheet pile wall and redesign of yard drainage network. His duties included site supervision and inspection, and preparation of daily progress reports and as-built drawings. He also performed inspection for a Gulfport Terminal construction project in Staten Island, New York.

RELEVANT EXPERIENCE

NJ Turnpike Authority (NJTA), Bridge Deck Repairs and Resurfacing Mile 0 To Mile 83 and Pearl Harbor Memorial Turnpike Extension, Contracts. *Resident Engineer* responsible for providing construction inspection services related to bridge deck repairs and resurfacing of bridges. This project included multi-span bridges and multiple bridge contracts. Mr. Rudenjak was responsible for coordination and assignment of the inspection team, and tracking and approving payment of all budget related items for the inspection and construction of this project.

NJ Turnpike Authority (NJTA), Design Services for the Lengthening of Six New Jersey Turnpike Bridges, Southern, NJ. *Construction Engineer* responsible for providing construction consultant services consisting of constructability issues, review of MPT schemes, construction schedules, and shop drawing review.

NJ Turnpike Authority (NJTA), New Jersey Turnpike Interchange 9 Toll Plaza Expansion and Construction, New Brunswick, NJ. *Chief Inspector and Office Engineer* on this $7.1-million construction project to expand the toll plaza with widening and additional ramps.

NJ Turnpike Authority (NJTA), 1988-91 Widening, NJ, Completion Date 1991, East Brunswick, NJ, 860001042-2. *Office Engineer* for this $27million project involving the construction of 16 retaining walls and 5 bridges. The project also included grading, drainage, paving, structures, and the relocation of utilities. This $27 million widening project included two miles of four-lane widening.

NJ Turnpike Authority (NJTA), 1989-90 Main Street Overpass, Milltown, NJ. *Office Engineer* for this $5.5-million project involving drainage, paving, relocation of utilities, construction of temporary structure, removal of previous structure, and erection of a new bridge structure over the New Jersey Turnpike, with installation of posts for noise barriers and other related work.

Craig Timko
Resident Engineer
Jacobs

Education:
B.S., Civil Engineering Technology
A.A.S., Civil Engineering Technology

Registrations:
NICET, Level IV, Civil Engineering Technology/Associate Engineering Technician/Transportation Engineering Technology/Highway Construction, US, 37528, Date First Achieved/Earned: 02/25/1987
American Concrete Institute, ACI Concrete Field Testing Technician, Grade I, Expires 03/29/13
American Concrete Institute, NJ Chapter, Concrete Construction Technology Course, Expires 02/13

Years of Experience:
36 Years

Craig Timko has three decades of experience with a proven track record of business aptitude and profitability in Construction Management, Construction, and Engineering. Craig has demonstrated the ability to create positive work environments and enthusiastic teams; possesses solid management techniques that translate to profitable project and office performance; strong communications skills; and experience speaking at company meetings, town meetings, and training events. He has worked extensively throughout the State of New Jersey, primarily for NJDOT, the New Jersey Turnpike Authority, and various counties including Essex County and Ocean County.

RELEVANT EXPERIENCE

County of Ocean, Design and Construction Administration Services for the Bay Avenue Improvements, Toms River, NJ. *Resident Engineer /Project Manager* responsible for inspection of roadway construction, installation of drainage asphalt, sidewalk, curbs, installation of electrical and traffic signals, test pits, as well as collection of field measurements, as-built drawings, monthly estimates, and progress reports.

County of Ocean, County Line Road Reconstruction, Lakewood/Jackson Township, NJ. *Resident Engineer* responsible for providing construction inspection services involving drainage, milling, paving, curbs, sidewalks, driveways, and construction of detention basins and new traffic signals at three intersections including all electrical installations. Mr. Timko was also responsible for extensive utility relocations and community involvement with residents along this highly residential area.

County of Ocean, NJ, Construction Inspection Services for the Reconstruction of Lacey Road, Ocean County, NJ. *Project Manager and On-Site Resident Engineer* responsible for the day-to-day inspection of the roadway reconstruction project. Elements of work include construction of a detention basin and new storm drainage system, new concrete curbs, sidewalks, and driveway aprons throughout the project, roadway widening, new signalized intersection, base and final HMA placement. Mr. Timko's duties include daily inspection of all construction operations, daily inspection reports including quantity tracking, monthly progress estimates, change order preparations, coordination between the County, the contractor, and the Township and final project closeout. Mr. Timko also assists local business owners and residents with problems related to the project.

County of Ocean, Construction Administration Services for the Reconstruction of Brick Boulevard, Brick Township, NJ. *Project Manager* responsible for scheduling inspection staff, monthly progress estimates and reports, shop drawings, and utilities coordination. As Resident Engineer his duties included providing construction administration services involving drainage, paving, curbs, sidewalks, inspection of bridge construction, and piles. Major work items include the total removal of roadway to subbase and the construction of new Aggregate Base Course and HMA paving, the installation of new drainage system, construction of two box culverts, and the construction of a new bridge over Kettle Creek.Vertical Lift Bridges built on the Hackensack River in 1930) and approach viaducts on a north alignment.

Richard S. Treloar
Resident Engineer
Jacobs

Education:
Associate in Arts; Civil Engineering

Registrations:
ACI Certified

Years of Experience:
40 Years

Richard Treloar recently joined Jacobs after a long career with the New Jersey Department of Transportation.

RELEVANT EXPERIENCE

NJDOT Supervising Engineer Construction. *Field Manager.* Under the direction of the Regional Construction Engineer, supervised Resident Engineers/Field Staff during the administration of NJDOT Construction Projects.

NJDOT Project Engineer Construction. *Resident Engineer.* Direct, on site representative of the New Jersey Department of Transportation on highway contracts executed to contractors. Responsible for the administration of the contract including inspection of the work; preparing changes to the contract and correspondence; management of staff; resolution of construction issues; review of progress schedules; inspection, evaluation, and report on the general condition of the contractor's operations, the rate of progress, general and specific compliance with applicable local, state, and federal laws, codes, ordinances; utilized computer applications to complete assigned tasks; utilizing project site visits, evaluated the progress of work and inspection activities twice a day; coordinated all types of utility work. See list of projects.

NJDOT Principal Engineer Construction. *Resident Engineer.* See definition above; October 1997 to August 1998: Regional Safety Engineer responsible for evaluating the safety practices of Central Region construction activities, and participating in the creation of the Department's Office of Capital Project Safety

NJDOT Senior Engineer Transportation. *Asst. Resident Engineer.* Acted as Resident Engineer in his/her absence, supervised field staff, and inspected the contractor's construction activities.

NJDOT Assistant Engineer Transportation. Worked in the Department's Maintenance Engineering Regional Office designing solutions to maintenance issues.

RE - Route 9 Section 23E: Replace the Route 9 Bridge over Conrail and CR 522. Project consisted of structural concrete, pre-cast pre-stressed beams, HPC deck construction, utility relocations, roadway widening. Cost $15M.

RE - Route 9 Section 1M: Replace the one-mile long Route 9 Bridge over the Raritan River. Project consisted of structural concrete, structural steel, HPC deck construction, US Coast Guard coordination. Cost $35M.

RE - Route 35 Shark River Bridge: Replace the Route 35 bascule bridge over the north and south channel of the Shark River. Project consisted of directional drill utilities, H-piles, structural concrete, deep water cofferdams, HPC deck construction, large pre-stressed, pre-cast concrete beams, traffic signals, utility relocations, roadway widening, timber fenders, steel fenders, and extensive traffic control. Cost $45M.

RE - Beaver Dam Bridge: Replace the existing bascule bridge with the State's first hydraulic lift span bridge. Cost $8M.

Seppo Siimes, AIA

Architect Design Reviewer
Jacobs

Education:
B.A. Architecture

Registrations:
Registered Architect: NY and MA

Years of Experience:
23 Years

Seppo Siimes, AIA has more than 23 years of experience on federal, medical, institutional, correctional, residential, and commercial facilities. As a Jacobs Preconstruction Design Manager, Seppo is currently dedicated to design review management, pre-construction and A/E coordination of design-build and construction management projects. His project types include Courthouses, Justice Facilities, State Police Facilities, and various federal projects

RELEVANT EXPERIENCE

Clement Ruiz Courthouse and Federico Degetau Federal Office Building, Carlos E. Chardon Avenue, Hato Rey, PR. *Project Manager.* Responsible for managing the replacement of 1,362 window units for the 450,000-SF, seven-story building which includes a courthouse annex. All of the windows are blast resistant. In addition some of the windows shall have ballistic ratings and some will have infrared and radio frequency protection. The windows shall receive shades and there is some associated work for trim and finishes. This work will be completed while the building is occupied. Seppo attended meeting with each of the 19 agencies to determine their specific needs in terms of the window product; the construction phasing for each department and their operating procedures. Seppo attended progress meetings and provided input on the site logistics and the project schedule. He led a team of design reviewers who provided design and constructability reviews at the conclusion of each phase.

DASNY, Staten Island Supreme Courthouse, Staten Island, NY. *Design and Constructability Review Manager.* Responsible for Design and Constructability reviews for this 154,000-SF courthouse and associated 600-car parking structure. The courthouse will service the needs of Supreme Civil Court, Supreme Criminal Court, the Surrogate Court and related agencies. The court sets shall be comprised of seven Supreme Civil Courts, six Supreme Criminal Courts and a Surrogate Court.

Office of General Services, Hudson Valley Transportation Management Center, Hawthorne, NY. *Preconstruction Manager - Design and Constructability Review.* Jacobs provided CM services for the new construction of the $40-million Hudson Valley Transportation Management Center (TMC). The scope of work included the demolition of the existing State Police Headquarters, providing and maintaining temporary operations facilities during construction. The TMC helps in detection and verification of incidents, provides information to the public, responds to and clears incident sites and restores traffic flow in a safe and efficient manner. As Project Manager, responsibilities included management of CM staff, 6 prime contracts, multiple procurement contracts/vendors, and coordination of utility/ ITS infrastructure installations. Project was delivered under Wick's Law. This project won CMAA's National "Project of the Year" Award in 2005.

New Castle County Courthouse, Wilmington, DE. *Preconstruction Manager/ Project Management.* A $130-million new courthouse. Construction management services in joint venture. The new 15 story facility will consist of 558,000 SF, encompassing 53 courtrooms, to serve the State of Delaware's needs through year 2020 and will provide for horizontal expansion to accommodate growth thereafter.

Robert Harvey
Electrical Design Reviewer
Jacobs

Education:
B.S. Electrical Engineering

Registrations:
N/A

Years of Experience:
23 Years

Robert Harvey is a versatile Lead Electrical Engineer specializing in electrical design for transportation projects who has been involved with all aspects of project development, from conceptual and detailed design through construction management, field inspection, project management and final commissioning. His expertise includes medium and low voltage distribution, motor controls, emergency power design, indoor, outdoor and tunnel lighting design, process controls, instrumentation selection and specification, HVAC and other building control systems, communications design, and life safety systems. His experiences include working for MTA New York City Transit and NYC Department of Transportation.

RELEVANT EXPERIENCE

MTA New York City Transit, Stillwell Ave Station Rehabilitation, Brooklyn, NY. *Lead Electrical Engineer.* Responsible for support of electrical design by review of contractor submittal packages including shop drawing review and answering Requests for Information from the field. This project was unique in making large-scale use of solar photovoltaic panels covering new shed to supplement utility power for large subway station terminal. It also included specification of Supervisory Control and Data Acquisition (SCADA) System and presence for on-site commissioning.

MTA Long Island Rail Road, Murray Hill Station Rehabilitation, Queens, NY. *Lead Electrical Engineer.* Responsible for complete design of all power and lighting for commuter train station. Work included coordination of new electrical service to facility, lighting calculations and design of station plaza lighting, and production of demolition and construction documents, drawings and specifications.

MTA Long Island Rail Road, Jamaica Central Control (JCC) Building, Jay, Hall and Dunton Interlocking, Jamaica, NY. *Lead Electrical Engineer.* Responsible for design of all power, lighting, communications, security, and fire alarm design for architectural fit-out of control room to replace three existing towers. Work included careful integration of power and communications requirements of train control system equipment procured under separate contract into the new control room and associated spaces such as electrical and communications room.

MTA Bridges and Tunnels, Brooklyn Battery Tunnel Switchgear Replacement, Brooklyn, NY. *Lead Electrical Engineer.* Responsible for design of replacement low-voltage switchgear for entire tunnel. Jacobs' services included design of all replacement conduit and wiring to loads fed from switchgear including 4160V feeders to remove ventilation building. Also responsible for multiple UPS design to handle uninterruptible power source to all tunnel lighting.

NYC Dept of Transportation, Four Tunnel Ventilation System Rehabilitation, New York, NY. *Control and Quality Control Engineer.* Responsible for providing site investigation, reports, and contract documents for ventilation system rehabilitation for the Battery Park Underpass, West Street Underpass, Park Avenue Tunnel, and First Avenue Tunnel in New York. Jacobs provided construction support services and witnessed field tests.

Mike Teague, PE, LEED AP

Commissioning
Jacobs

Education:
Bachelor of Engineering, Mechanical Engineering

Registrations:
Professional Engineer: IL
LEED Accredited Professional

Years of Experience:
8 Years

Mike Teague, PE, LEED is a mechanical engineer with 8 years of experience. His expertise includes heating, ventilation and air-conditioning (HVAC) design and building commissioning. Having worked with some of the pioneers of the growing field of commissioning, Mike relates well to an owner's project objectives and needs. His background in design provides him insight into the engineering realities of designing functional systems. Mike is also adept at developing construction checklists and functional performance tests.

RELEVANT EXPERIENCE

Harvard University Chiller Plant Commissioning, Cambridge, MA. *Engineer.* Mike provided comprehensive commissioning services, commencing with a detailed design review of the final contract documents. The major elements of the formal commissioning program are management of the record documentation assembly, supervision of functional performance verification testing and supervision/recording of the operator training program. Seasonal testing is a significant consideration in substantial completion of the chiller plant, along with warranty scheduling and documentation.

Grand Rapids Art Museum, Commissioning Services, Grand Rapids, MI. *Mechanical Engineer.* Mike provided comprehensive commissioning services for the Grand Rapids Art Museum. The new 130,000 square feet building occupies a prominent downtown site and is being submitted for LEED certification at the Gold level. The scope of systems to be commissioned include steam and condensate, HVAC air handling, chilled water, exhaust air, emergency/standby power, security, fire alarm and protection, hot water heating, building automation and lighting control systems.

East Los Angeles College Performing and Fine Arts Complex, Los Angeles, CA. *Mechanical Engineer.* The project is a $35 million low-rise structure, incorporating specialty spaces for both performing and display arts. The project is registered with the United States Green Building Council for LEED Silver certification. Jacobs Carter Burgess is providing fundamental commissioning services, in accordance with the LEED program for a significant array of building systems.

Northeastern Illinois University, Parking Facility, Commissioning, Chicago, IL. *Project Manager.* Mike provided commissioning services for 1,100-car, 5-story parking structure on campus, with grade-level office accommodation for the NEIU security/police department.

The Art Institute of Chicago, New Modern Wing, Commissioning Services, Chicago, IL. *Mechanical Engineer.* Mike provided commissioning and LEED consulting on this 264,000-square-foot new Modern Wing addition. The building will comprise the art gallery, conference rooms, offices, education and general museum facilities, storage and handling areas, and a new main entrance on Monroe Street. Commissioning services includes all HVAC systems, controls/automation systems, steam and chilled water distribution systems, and main electrical service. Registered with the U.S. Green Building Council for the LEED New Construction program for certification. Construction cost is $260 million.

Yuri Berman, CCM, PE, LEED AP

Commissioning
Jacobs

Education:
BS, Mechanical Engineering, Kaliningrad Merchant Marine Academy, Russia, 1975

Registrations:
Qualified Commissioning Process Provider (QCxP)
LEED Accredited Design Professional
Certified Energy Manager (CEM)

Years of Experience:
33 Years

Yuri Berman, PE is a LEED Accredited Design Professional and Commissioning Specialist with 33 years of experience in design of HVAC, plumbing and fire protection systems, and power plants. Yuri has developed commissioning plans, and provided guidance and oversight for documenting performance and for confirming system functionality in accordance with Contract Documents and design intent. He has designed central plants, HVAC, fire protection and plumbing systems for the renovation of large administrative office buildings, educational facilities, sensitive IT facilities, and large industrial facilities.

RELEVANT EXPERIENCE

US General Services Administration (GSA), Department of Transportation Headquarters (DOT, Washington, DC. The US Department of Transportation (DOT) Headquarters Project is a new lease construction project in which major sustainable design elements were integrated to improve the projects' contribution to the environment throughout its life cycle. This DOT project is the first new cabinet-level headquarters to be designed and constructed in the Capitol in over three decades. The new headquarters facility consolidates 5,500 DOT employees from various locations in Washington, DC. The 1.35 million rentable square feet facility consists of offices, emergency command center, auditorium, conference and training center, media center, and food service facilities. Yuri provided Commissioning services.

U.S. Department of State, A-E Services IQC, Worldwide. *Mechanical Engineer.* As part of our IDIQ contract with the U.S. Department of State's Office of Overseas Buildings Operations (OBO), Jacobs provides professional services for the Project Development Division to assess design and construction issues associated with both the rehabilitation of existing OBO facilities and the design and construction of new facilities.

Jacobs provides A/E Design Services, Planning, and Programming and Staff Augmentation for this $500 million program. Project sites include Jeddah, Saudi Arabia; Kiev, Ukraine; Lahore, Pakistan; Riyadh, Saudi Arabia; Sarajevo, Bosnia-Herzegovina; Tijuana, Mexico; Warsaw, Poland.

Maryland Procurement Office, Confidential Client, MD (Under Task Order Contract). *Commissioning Agent.* Jacobs provides Full A-E services, Planning and Design for renovation and new construction for this confidential project. A/E Planning Services include CADD; Systems Integration and Telecom; redundant power and utility systems, site investigation, engineering studies to support design development. Yuri serves as Commissioning Agent for the renovation project on building NPO 7.

National Museum of the Marine Corps, Marine Corps Heritage Center, Quantico, VA. *Senior Project Manager.* Jacobs provided Design Review and Construction Management for the U.S. Marine Corp's new $54 Million National Museum facility complex (Phase I). It is the centerpiece of the Marine Corps Heritage Center, a campus that Marine Corps Heritage Foundation officials say will include a convention center, hotel, IMAX theater, parade grounds and Semper Fidelis Memorial Park. Future plans call for a 65,000-sq.-ft. addition that will house 11,000 sq. ft. of office space, and 11,000-sq.-ft. theatre.

Ricky G. Monterosa
Commissioning
Jacobs

Education:
N/A

Registrations:
N/A

Years of Experience:
23 Years

Ricky Monterosa has over 23 years of experience in technical architecture, including space planning, interior design, construction documentation, millwork detail, and construction administration. He has managed production teams for work of design development through construction documentation. He has a strong background in technical aspects of architecture, with fourteen years experience working with AutoCAD and MicroStation, He has also been involved in numerous high-end millwork design detailing projects.

RELEVANT EXPERIENCE

National Guard Bureau, IDIQ A/E Contract for Horizontal and Vertical Construction, Multiple Locations Nationwide. A/E Design Services; Systems Integration and Telecommunications; Project Monitoring; Physical Facilities Analysis; Construction Monitoring; Safety, Security and Risk Analysis; Special Technical and Supplemental Studies.

Jacobs is providing full A/E services, including charrette processes covering programming, planning and design, to meet 1390/1391 funding requirements for state by state upgrades of Army and Air National Guard facilities. Our work involves design, construction documents and construction administration services in compliance with local and state code requirements.

Regional Training Institute (RTI), Florida Army National Guard. Camp Blanding, FL. *Interior Design Lead* for CD documentation and coordination. Project is a new 282,000-SF, $56.8M multi-building campus, three-phased facility. The Primary Facility includes planning and design for administrative office and supply building, an education facility with 16 classrooms, multipurpose training area, auditorium, library, dining and housing for up to 408 students and 96 authorized personnel. Building information Modeling (BIM) tools are being used in development of construction documents for exterior facades and to develop and evaluate design solutions and cost models for exterior skin. Project involved working with stakeholders to identify and confirm scope and criteria and build program consensus.

Unit Training Equipment Site (UTES), Pennsylvania Army National Guard, Fort Indiantown Gap, Annville, PA. *Staff Architect.* Supported on Construction Documentation and Coordination. Design for a 76,000 SF, $20.7M combat vehicle maintenance and storage facility, including 14-vehicle maintenance work bays, overhead crane, flammable storage, controlled waste and parking for wheeled and tracked vehicles. Sustainability is incorporated, with 54 possible points identified of which 44 are firm to achieve goal of a Gold Rating. Design incorporates criteria for AT/FP, ADA, fire protection and life safety requirements.

Dennis Marchetti, PE

Lead Electrical Engineer
Jacobs

Education:
B.S. Electrical Engineering

Registrations:
PE Vermont License #8640

Years of Experience:
35 Years

Dennis Marchetti, PE has thirty-five years of experience in industrial control system. This includes design, fabrication, inspection, testing, code compliance review, peer review, construction supervision, start-up, troubleshooting, manual writing, equipment failure emergency response and training. He is thoroughly familiar with all types of control systems used on movable bridges, from antiquated manual Ward-Leonard and saturable core reactor starters and full magnetic control to power synchrotie, state-of-the-art programmable logic and touch screen controllers, servo, motion control, primary thyristor, vector and DC drives and event recording and data acquisition systems. Mr. Marchetti has a thorough understanding of hydraulic bridge operation systems.

Dennis' experience includes the inspection of over 75 movable bridge control systems, design of over 25 movable bridge control systems and 3 canal lock control systems, support services for 10 movable bridges, fabrication of 7 movable bridge control systems, systems coordinator/integrator for 4 movable bridges, study for expert witness for 2 accident investigations in addition to the design of control systems for numerous heavy movable structures including theme park attraction, theater stages, etc.

RELEVANT EXPERIENCE

Shrewsbury Bridge, Shrewsbury, NJ; New Jersey NJDOT. *Lead Electrical Engineer.* Performed biennial inspections; wrote reports and repair recommendations according to NBIS and NJDOT standards.

Roosevelt Island Bridge NYCDOT, Queens, NY. *Lead Electrical Engineer.* Contractor's Electrical Coordinator.

Greenbank Bridge, Greenbank, NJ; NJDOT. *Lead Electrical Engineer.* Performed biennial inspections; wrote reports and repair recommendations according to NBIS and NJDOT standards.

Pelham Bay Bridge – Amtrak, Pelham, NY. *Lead Electrical Engineer.* Safety Upgrade of the Control System

Arthur Kill Bridge, Staten Island, NY. *Lead Electrical Engineer.* Troubleshooting

Harlem River Lift Bridge,New York, New York, Triboro Bridge & Tunnel Auth. *Lead Electrical Engineer.* In-depth Inspection and Report

Arthur Kill Lift Bridge, Staten Island, NY. *Lead Electrical Engineer.* Troubleshooting

Pelham Bay Bridge, New York, Amtrak. Lead Electrical Engineer. Control System Integration, Startup and Training

Madison Avenue Bridge, New York City, Madison Ave. Bridge. Lead Electrical Engineer. O & M Manual review

Wittpenn Bridge, Jersey City, NJ, New Jersey Department of Transportation. *Lead Electrical Engineer.* Lift Span Control System Design

Staten Island Ferry Slips, New York City Department of Transportation. *Lead Electrical Engineer.* In-depth Inspection/Production of Testing

Robert Raspanti
Electrical Inspector
Jacobs

Education:
Joint Apprenticeship Trade School of IBEW Local 363 (Industrial Electronics Course Electrical Estimators Course 1971)
Cornell University (Labor Studies Program) Rockland Community College Campus

Registrations:
Certified for High Voltage Splicing /1975
Certified for electric-arc welding/1975
New York State Riggers License/1986
Certified fiber-optic installations/1990

Years of Experience:
33 Years

Bob Raspanti is a seasoned Project Manager and a Jacobs MEP Specialist. His 33 years experience in the construction industry includes 10 years providing oversight of the installation of telecommunications cabling and equipment. His construction background, combined with his technical knowledge, provides him a well-rounded skill set for managing and overseeing multi-faceted type projects. His hands-on roles have included Electrical Systems Commissioning, Project Manager, Electrical Specialist, Superintendent, and Electrical Foreman. Bob was the on-site Field Superintendent for the recently-completed Hudson Valley Transportation Management Center in Hawthorne, NY, a project involving complex, state-of-the-art technology systems.

RELEVANT EXPERIENCE

Hudson Valley Transportation Management Center, NYSOGS, Hawthorne, NY. *Field Inspector.* Jacobs provided Construction Management services to the Office of General Services for the $45 million Hudson Valley Transportation Center (TMC). The TMC helps detect and verify incidents, provides information to the public, responds to and clears incident sites, and helps restore traffic flow.

Robs responsibilities included review of drawings and specifications; site development; (soil-nail wall construction, underground utilities, retention ponds, and storm sewer work); Construction Field Coordination / Controls of 6 Prime Contracts; Chairmen of Daily Superintendent/Foreman coordination meetings. He provided oversight of Electrical Work from Pre-construction to Occupancy; Inspection of Electrical Work including security systems(CCTV, Access Controls, Vehicle Crash Barriers, etc); UPS; 2000KW Generator; CATV; lighting; power; GPS Master Clock. In addition Rob oversaw start-up, testing, commissioning and acceptance of all of the above systems.

J.P. Morgan Chase, New York, NY. *Project Manager.* Rob managed and coordinated various trade contractors involved in day-to-day relocation of business units within J.P. Morgan facilities. In carrying out responsibilities, reported to J.P. Morgan Facilities Department Manager. Work assignments included coordination of tenant fit-out work with client users including fixtures, furnishings and equipment as well as requisite utility installations.

MTA Bridges and Tunnels' Henry Hudson Bridge. *Electrical Specialist.* Rob managed the fiber optic installation on the Northbound Gantry for the new traffic surveillance cameras. This $1.5 million project included cabling and installation of traffic observation cameras for the MTA police.

Federal Bureau of Prisons, 1000 Cell Federal Detention Center, Brooklyn, NY. *Electrical Specialist.* Rob performed total inspection responsibilities for all of the electrical systems for a $105 million, 500,000 SF, 1000 Cell Federal Detention Center. Managed installation of fiber optic backbone to support the Data Center, including LAN installation and horizontal cabling installation. Responsible for integrating the UPS and lightening protection system. Prepared electrical change orders, estimates and technical representation to the Contracting Officer during negotiations.

Raymond C. Klein, PE

Mechanical Inspector
Jacobs

Education:
B.S. Mechanical Engineering

Registrations:
Professioanl Engineer: FL, CT, SC and MA

Years of Experience:
21 Years

Raymond Klein, PE is a highly experienced mechanical engineer with over 21 years of experience in the design of civil mechanical projects for both public and private clients. His expertise covers all aspects of transportation and facility mechanical design including HVAC, plumbing, and safety systems. Mr. Klein is knowledgeable in the most technologically advanced processes and programs associated with mechanical engineering including: indoor air quality maintenance, ACAD, CADvent, and Carrier HAP.

RELEVANT EXPERIENCE

General Services Administration, Region 2 U.S. Mission to the United Nations, New York, NY. *Mechanical Engineer.* Jacobs is providing on-call construction management services to GSA, Region 2. The new facility will be a heavily reinforced 26-story 150,000SF high-rise constructed of reinforced concrete.

New Jersey Schools Construction Corporation / NJ EDA Schools Construction Program, Paterson, NJ. *Mechanical Engineer.* Jacobs provided program management and construction management for New Jersey Schools program including Health and Safety projects, new construction and repair and renovations. The New Panther Science Academy included the gut renovation of an existing Auto Parts Facility and conversion into a classroom and computer labs. It also included the addition of a new state-of-the-art planetarium with funding from NASA.

Tren Urbano-Rio Piedras, Puerto Rico Department of Transportation, San Juan, PR. *Mechanical Engineer* responsible for design of mechanical systems for construction phases of HVAC and plumbing at the University and Rio Piedras stations. The project consists of a new, two-track transit system with approximately one mile of tunnel and two major stations. The 17 km, $1.5 billion design build project will bring transit service to San Juan. Worked on from 2000 to 2001

Blue Line Extension to Largo Design-Build, Washington Metropolitan Area Transit Authority, Addison Route, Washington DC. *Mechanical Engineer* responsible for the design of HVAC and plumbing systems for the Summerfield and Largo stations and Maintenance & Operations building. The project involves a 3.1-mile extension of the Metro Blue Line transit rail system from the existing Addison Road Station to Largo Town Center. The line extension includes two new stations; 1,700 route feet of at-grade double track; 10,500 route feet of underground structure and; 3 aerial structures with a combined length of 2,000 route feet. Worked on this project from 2002 to 2003.

Maverick Station, Massachusetts Bay Transportation Authority, Boston, MA. *Mechanical Engineer* for design of new HVAC and plumbing systems. This project involved rehabilitation an existing subway station. The platform had to be lengthened to account for new/longer trains and the fire protection system and electrical systems had to be brought up to current code requirements. The authority also added a second means of entry and several ancillary spaces. The track drains are located at this station as well and where not in working condition. Part of the project has been to bring the pumps back on line.

Victor Kee
Senior Inspector
Jacobs

Education:
AA, Fine Arts, County College of Morris

Registrations:
N/A

Years of Experience:
34 Years

Victor Kee is a Construction Inspector with more than 34 years of experience as a Construction Inspector, Superintendent, and Foreman. His experience includes inspections as well as all phases of carpentry.

RELEVANT EXPERIENCE

New Readiness Center at Camp Smith, Cortlandt Manor, NY. *Project Superintendent/Construction Inspector.* Jacobs is providing Construction Management services for the construction of a new $26M state of the art "Readiness Center" (armory). This new building houses the 42nd ID Army Band two infantry units, Command group, and a communications group. This facility includes an Assembly Hall, Lecture Hall, SIPNET room, classroom and conference rooms, general and executive office space, storage space, five (5) gun vaults, band practice rooms, recording studio, music and instrument storage.

New Jersey Schools Construction Corporation / NJEDA $830M Schools Construction Program, Paterson, NJ. *Project Superintendent.* Jacobs is providing program management for New Jersey Schools program including health and safety projects, new construction and repair and renovations. The contract include managing $71 million in health and safety projects in the first year of the program, with subsequent assignment of major construction projects, including 11 new schools. The total program value is $830 million (estimated construction cost). Jacobs is currently contracted for the first $400 million of this program, which started in 2001 with estimated completion in 2006.

Project Management Firm, *Project Superintendent.* Responsible for 115,000 SF, $27 million project monitoring work in progress for a Project Management firm. Scheduled and supervised all DCA and testing agency required inspections, filled out daily reports, attended job meetings, and worked with the general contractor and subcontractors coordinating work activities and material deliveries.

American Concrete and Masonry. *Carpenter/Foreman.* Read plans, layout work, ordered materials, setup inspections, and managed workforce to complete projects on time.

Local 124 Carpenters. *Journeyman/Foreman Carpenter.* Attained experience in all phases of carpentry including concrete formwork, wood and metal stud framing, suspended ceilings, doors and hardware, scaffold erection, trim-work, drywall installation, casework fabrication and installation, and learned to read plans and use layout instruments.

W. Ross Wear
Senior Inspector
Jacobs

Education:
History and Economics

Registrations:
ICC Certified

Years of Experience:
28 Years

Ross Wear has more than 28 years experience in the construction and engineering fields. He has been responsible for start-up training, project management and supervision. He also has experience providing technical guidance; meeting and completing schedules within budget; and monitoring contractors to ensure compliance with all contractual obligations, scheduling, and productivity levels. His construction engineering experience consists of addressing civil, structural, mechanical, piping, administrative, engineering, scheduling, and material problems for the field; interpreting specifications, codes, and drawings; amending designs; and coordinating inspections.

RELEVANT EXPERIENCE

Plant Expansion Project, US Borax, Boron, California. *QA/QC Manager.* Scope included civil, reinforced concrete, structural, mechanical, and piping; was the Kern County Deputy Inspector onsite; completed on time and under budget.

Facility Upgrade, GSA Tucson Federal Courthouse, Tucson, Arizona. *Subcontract Coordinator.* GSA supervision of tenant improvements including demolition in a multi-story federal courthouse to facilitate new elevator installation, holding cells, security walls, and utilities; 100% client satisfaction ratings.

405/55 Interchange, Cal Trans, Irvine, California. *QC Inspector.* Scope included Cal Trans Field inspections, traffic closures, and change order processing.

NIF Project, Lawrence Livermore National Laboratory, Livermore, California. *QC Manager.* Supervision of an inspection staff of 9 to assure compliance to contract requirements for lab; set up Installation Verification Checklists, Non-conformance Reporting, tracking, and closure; Welding Program, Calibrated Measuring and Testing Equipment Program and Daily Reporting; supervision of Receipt & Source Inspection Programs, subcontracted QA, inspections, and their contracts.

MTA Universal City Restoration Contracts, Burbank, California. *QC Supervisor.* Supervised an inspection staff in charge of ensuring contractor and subcontractors comply with all City of Los Angeles and Cal Trans requirements for the Lankershim bridge widening, 101 Freeway Over Crossing, Ramps, Red Line Bus Plaza, and parking lots; letter of commendation from JMA / Hatch, Mott, McDonald Corporation.

MTA Redline Subway, Los Angeles, California. *QC Supervisor.* Supervised an inspection staff of 10 in charge of ensuring the contractor and subcontractors complied with all specification, drawing, code, and contract obligations for architectural, civil, structural, electrical and mechanical disciplines. Construction of the Hollywood / Highland Station multi-story underground structure and associated tunnels included supervision of excavation, shoring, backfill, HDPE waterproof membrane, forming, rebar, concrete placement, structural steel, and architectural finishes.

Arthur B. Salisbury
Senior Inspector
Jacobs

Education:
Civil Engineering Technology

Registrations:
NICET - Level [redacted]/US/1987/ 2011
ACI - Level I - American Concrete Institut [redacted]/1998/ 2013
ACI - Level II - American Concrete Institut [redacted]/1998/ 2011
NJ SAT - Asphalt Technology Certificate/2012
TCP - Traffic Control Coordinator, Course #446, Feb. 14, 2003 / Rutgers Center for Advanced Infrastructure and Transportation/Local Technical Assistance Program

Years of Experience:
40 Years

Arthur Salisbury has served extensively on construction inspection and observation projects for the construction and widening of roads, bridges, and toll plazas. His experience covers all phases of highway and bridge construction, including inspection of materials at asphalt and concrete batch plants, as well as engineering and construction survey duties. He has also inspected sandblasting and painting on several bridge rehabilitation projects.

RELEVANT EXPERIENCE

NJ Turnpike Authority (NJTA), Supervision of Construction Services. *Assistant Resident Engineer* responsible for day and night work cycles to rehabilitate land and water spanning bridges. Oversaw construction of concrete repairs on substructure members (abutments, piers, columns, caps), structural steel repairs (on damaged girders, haunches, bearings, diaphragms), utilization of temporary shoring/jacking towers to support deck stringers, applied epoxy waterproofing, localized SSPC SPC6 cleaning of lead based paint systems for steel repairs with Level 4 – Class 4 containment then recoating with an epoxy mastic paint, completing emergency steel repairs under on-call status, MPT for lane closings on GSP and NJDOT roadways.

NJ Department of Transportation (NJDOT), Construction Inspection Services for Shark River Bridge, Belmar, NJ. *Chief Inspector* responsible for construction inspection services including pile installation, inspection of substructure and superstructure concrete, as well as inspection of reinforced and structural steel placement. Mr. Salisbury was also responsible for daily reporting including quantities and as-builts.

NJ Turnpike Authority (NJTA), Bridge Deck Repairs, OPS #1823, NJ. *Chief Inspector* responsible for assisting the Resident Engineer with providing construction inspection services including bridge deck replacement, parapet replacement, armor joint repair and replacement, latex modified concrete placement, and asphalt resurfacing. This project entailed bridge deck repairs and resurfacing on about 15 bridges between Mileposts 0 and 83 and the Pearl Harbor Memorial Turnpike Extension. One of the bridges (the Delaware River Turnpike Bridge) is considered a major structure. This project entails continual (from project inception through February 2000) inspection services and upgrades to 15–20 NJ Turnpike bridges between Mile 0 and Mile 83 (Interchange 9). Additionally, bridge deck repairs are completed on various State and Local Roads during the construction cycle.

NJ Turnpike Authority (NJTA), Southern Bridge Deck Repairs Construction Inspection Services R-1309, Southern New Jersey. *Chief Inspector* responsible for assisting the Resident Engineer with providing construction inspection services including bridge deck replacement, parapet replacement, armor joint repair and replacement, latex modified concrete placement, and asphalt resurfacing. This project entailed bridge deck repairs and resurfacing on about 15 bridges between Mileposts 0 and 83 and the Pearl Harbor Memorial Turnpike Extension. One of the bridges (the Delaware River Turnpike Bridge) is considered a major structure.

Dan Wardrope
Senior Inspector
Jacobs

Education:
Coursework, Construction, University of Washington

Registrations:
N/A

Years of Experience:
26 Years

Dan Wardrope has over 26 years of experience and has worked on a variety of commercial and public facilities projects, including secondary and university facilities, retail facilities, fire house, churches, and residential facilities. His duties have included acting as the Owner's representative, overseeing scheduling, budgeting, contract negotiations, and coordination of inspection and engineering services for major construction projects.

RELEVANT EXPERIENCE

Staten Island Supreme Courthouse, Dormitory Authority State of New York, Staten Island, NY. *Construction Manager.* Jacobs is providing Construction Management services during Design, Pre-Construction and Construction, and will also provide General Conditions Administration. Once built, the new Staten Island Supreme Courthouse will be a state-of-the-art courthouse containing 14 Courtrooms in a 154,000 GSF facility with associated parking for the needs of Supreme Civil Court, Supreme Criminal Court, the Surrogate Court and related Agencies. The new courthouse will also contain secure holding facilities with a capacity to accommodate approximately 100 prisoners. Each detention pen will contain toilet facilities and be constructed to hold separate genders and age groups. The project involves all principal construction management disciplines including architectural, civil, structural, HVAC, plumbing, electrical, fire alarm, telecommunications and security.

International High School, Paterson, NJ. *Superintendent.* This $37.5M project entails the complete new construction, building and site work, for the full program - new International High School. The 115,000+/- square foot facility has been planned as a main four-story structure running east to west with two flanking wings along Grand Street. Responsibilities and tasks included use and maintenance of Prolog Project Management system including customizing reports and forms to document and track contractor activity; review and observation of contractor field labor, material and project activity; assist and track projects' percent of completion to assist in evaluation of contractor requisitions; maintain photographic log; collect and review contractor daily reports; conduct pre-installation conferences; assist with RFI review and resolution; coordinates NJDCA and all other agency construction inspections; and monitors and documents daily compliance with client safety program.

Marshall Street School, Paterson, NJ. *Superintendent.* The $32.4M Marshall Street School is a new K-8 grade school that will house 641 students within one facility with the goal of providing continuity and stability in their critical early years. The contract is divided into three phase (1) demolition and site clearing (2) major site improvements (3) new school construction. Tasks included use and maintenance of Prolog Project Management system including customizing reports and forms to document and track contractor activity; review and observation of contractor field labor, material and project activity; assist and track projects' percent of completion to assist in evaluation of contractor requisitions; maintain photographic log; collect and review contractor daily reports; conduct pre-installation conferences; assist with RFI review and resolution; coordinates NJDCA and all other agency construction inspections; and monitorsand documents daily compliance with client safety program.

Scott E. Brugge
Senior Inspector
Jacobs

Education:
BS, Civil Engineering, University of Massachusetts

Registrations:
Engineer in Training (EIT), NY
LEED Accredited Professional (LEED AP)/United States Green Building Council
OSHA Certification (10 hour, Construction Safety and Health)

Years of Experience:
11 Years

Scott Brugge has become a well-respected leader by continually motivating contractors in the field; enforcing safety, quality, and the requirements of the plans and specifications; monitoring the progress of all trades and facilitating coordination between them; providing necessary project documentation; and following-up on details and issues to keep projects moving forward.

As a LEED Accredited Professional (LEED AP), he has gained the intimate knowledge of the processes as well as requirements needed to help a sustainable project obtain the various levels of "Green Building" certification through the United States Green Building Council.

Previously, he has provided construction management services for eleven school projects in New York City. The work involved repairing and replacing masonry, roofing, and windows. Recently, he was working on-site for the largest and oldest Academy of Music in the United States, the renowned Brooklyn Academy of Music. This project was recently awarded the Preservation League of New York State's Excellence in Historic Preservation for 2006, Preservation/Restoration Award of the Year 2005 for the Victorian Society in America (Metropolitan Chapter), the Lucy G. Moses Preservation Project Award for 2004, and New York Construction's Restoration Project of the Year 2003

RELEVANT EXPERIENCE

Nassau Community College Plaza Deck Restoration, Garden City, NY. *On-site Assistant Project Manager/ Inspector* for the exterior restoration of the 35000 sq. ft. exterior plaza deck of Nassau Community College. He is responsible for coordinating and supervising this project so that the construction activities do not disrupt the College's operations and activities.

Brooklyn Academy of Music Historical Exterior Restoration (Phase I), Brooklyn, NY. *On-site Project Manager.* Responsible for the complete historic exterior restoration of the oldest performing arts center in the United States, the renowned Brooklyn Academy of Music, universally known as BAM. Completed in 1907 (the last time the building's exterior was handled), it was designated landmark status in 1978.

Brooklyn Academy of Music Exterior Restoration (Phase II), Brooklyn, NY. *On-site Project Manager.* Successfully managed the installation of a unique new structural glass canopy on the Opera House façade including a new structural steel support system from within inside the building as well as new exterior lighting, new fiber optic illumination of the newly re-constructed parapet and cornice.

Edward Griffin
Senior Inspector
Jacobs

Education:
N/A

Registrations:
N/A

Years of Experience:
36 years

Edward Griffin serves as a project manager / superintendent / inspector, responsible for performing field inspections of ongoing work and punch list items. He conducts field surveys and site visits. He also works closely with university and Department of Public and Environmental Safety staff to address fire and building code violations.

Before joining our company, Mr. Griffin was a project engineer / superintendent for several years with Sordoni / Skaska Construction. While there, he was responsible for administrative coordination of multiple projects. His duties included project startup through warranty, maintenance of document drawings, estimate and process change orders, submittals, RFIs and contract revisions. He contributed his expertise to a number of projects for Pfizer.

RELEVANT EXPERIENCE

Pfizer, Building 126 Renovation, New London / Groton, CT. *Project Engineer / Superintendent.* Verified and inspected contractors' work. Other duties included maintenance of document drawings, estimate and process change orders, submittals, RFIs and contract revisions from project startup through warranty.

Pfizer, Building 156, New London / Groton, CT. *Project Engineer / Superintendent.* Verified and inspected contractors' work. Other duties included maintenance of document drawings, estimate and process change orders, submittals, RFIs and contract revisions from project startup through warranty.

Pfizer, Magnet Building, New London / Groton, CT. *Project Engineer / Superintendent.* Verified and inspected contractors' work. Other duties included maintenance of document drawings, estimate and process change orders, submittals, RFIs and contract revisions from project startup through warranty.

Pfizer, Railroad Crossing, New London / Groton, CT. *Project Engineer / Superintendent.* Verified and inspected contractors' work. Other duties included maintenance of document drawings, estimate and process change orders, submittals, RFIs and contract revisions from project startup through warranty.

Pfizer, STM Building, New London / Groton, CT. *Project Engineer / Superintendent.* Verified and inspected contractors' work. Other duties included maintenance of document drawings, estimate and process change orders, submittals, RFIs and contract revisions from project startup through warranty.

Hatoum Hatoum

Senior Inspector
Jacobs

Education:
MS, Civil Engineering, Polytechnic Institute, 1982
BS, Civil Engineering, Polytechnic Institute, 1981

Registrations:
N/A

Years of Experience:
26 Years

Hatoum Hatoum is one of Jacobs' most experienced Construction Inspectors for New York area infrastructure projects, having served in these capacities for many New York agencies, including the Port Authority of New York and New Jersey, MTA Bridges and Tunnels, NYCDOT, and NYSDOT. Previously, Mr. Hatoum was an estimator for new construction and renovation projects in the United States and Project Engineer for building and infrastructure projects in Saudi Arabia

RELEVANT EXPERIENCE

MTAB&T Henry Hudson Bridge Lower Level Deck Replacement. *Senior Construction Inspector.* $85 Million renovation of the Lower Level of the Henry Hudson Bridge in New York City. Construction management, inspection testing, emergency response and other services required for administering and managing the project to ensure it meets the cost, schedule, quality, safety and other criteria of this contract. Project HH-80 will involve concurrent work at multiple work locations with days, nights and weekend shift work and close coordination on a daily basis with Bridge Operations, Maintenance, and Engineering staff, and with New York City agencies, utility companies, and other entities engaged in work at the Henry Hudson Bridge.

MTAB&T's Brooklyn Battery Tunnel, New York, NY. *Assistant Resident Engineer.* $80 million Construction Administration and Inspection services for the rehabilitation of roadway and fresh air ducts at the Brooklyn Battery Tunnel. $30 million Structural Repairs and Lighting System Improvement; and Mechanical, Plumbing, Fire Protection and Electrical Rehabilitation and Upgrade of the Battery Parking Garage. Responsibilities include maintaining computerized document control system.

Performance of Expert Professional Program and Construction Management Services on an "As-Needed" Basis, Port Authority of New York & New Jersey. *Construction Inspector.* Responsible for providing construction management and inspection services on project related to PATH. Provided management and oversight for interior renovations at One Journal Square.

Queens Midtown Tunnel Roadway Slab and Fresh Air Duct Sidewalls, Contract QM-12 RFP No. PSC-93-2273, $19 million Construction Inspection and Support Services. *Senior Inspector.* Replacing virtually all of the steel-reinforced concrete that supports the asphalt roadway seen by motorists. Sealing the reinforced concrete with a waterproofing membrane to prevent moisture seepage that weakens the roadway. Resurfacing the roadway with waterproof Trinidad asphalt and grooving the asphalt to prevent vehicle skidding. Thorough lead and asbestos removal in the ducts running along both sides of each tube and upgrading the fresh-air flues.

MTA Bridges and Tunnels, Henry Hudson Bridge, PSC-91-2175, New York, NY. *Senior Inspector.* Project included construction engineering and inspection of repairs and included repairs of abutment, anchor bolt repairs to bridge skewbacks, concrete repairs to piers, underwater concrete repairs, replacement of rip-rap, structural steel repairs at main towers and concrete repairs to skewbacks.

Hector Chiong
Senior Inspector
Jacobs

Education:
AAS, Drafting and Design Technology – In progress

Registrations:
NICET Highway Construction – Level IV, 2002
ACI Field Testing Technician – Grade I, 2000

Years of Experience:
7 Years

Hector Chiong has 7 years of extensive construction inspection and observation experience on transit and bridge projects in the New York Metropolitan area for such clients as MTA, NYSDOT, NYCDDC, NYSDOT and NYCEDC on a "Call-In" basis.

RELEVANT EXPERIENCE

MTA NYC Transit, Charleston Bus Annex, Staten Island, New York. *Civil Senior Inspector.* Safety and Quality Inspection monitoring Design/Build "Green"construction including job site safety which included removal of 10 acre vegetation for major fill/excavation work modifying contour to plan requirements. Installation of sheet piling retaining walls to support bus parking area. Various reinforced concrete construction which includes: building foundation footings, piers, walls, overhead and on-grade slab floors; pile caping, approach ramps, pedestrian bridge deck, barrier walls, sidewalks and steel faced curb construction. Also monitored steel erection work: interior building columns and support steel and exterior bridge steel. Additional exterior work includes: guide railing, bollards, and ornamental railing installations, storm drainage sewer, manholes and catch basins, asphalt concrete placement, line stripping and also exterior architectural block work for building. Supply daily inspection reports.

NYSDOT, Gowanus Expressway Emergency Repair Of Route I-278 Viaduct. *Civil Chief Inspector / HOV Inspector (Level IV).* Management and supervision of field inspection staff performing Safety and Quality inspection work: Elevated bridge deck demolition and fall protection setup, reinforced bridge deck reconstruction, scupper installations, major upgrade to bridge fascia railing. Bridge steel panting and containment setup. Supervised High Occupancy Vehicle (HOV) daily transportation setup, removal and maintenance operation. Inspection of daily MPT lane closure operations. Supply daily inspection reports.

NYCDDC, Pedestrian Ramps at Designated Locations in the Borough of Bronx. *Chief Inspector / Office Engineer (Level IV).* Field supervision and assistance to inspection staff monitoring construction activities: Field survey designated street locations, inspecting existing sidewalk conditions and authorize type of pedestrian sidewalk to reconstruct. Record data on spreadsheets for final review, review Inspector Daily reports, contractor payments and log Engineer's Daily Diary.

NYSDOT, Long Island Expressway / Clearview Expressway, Interchange Improvements Project. *Chief Inspector / Civil Senior Inspector (Level IV).* Job site safety and supervision of field inspection staff supervising the following activities: Construct temporary approach ramps for the installation of a temporary steel bridge for staging work. Excavation and backfilling work, bridge deck demolition and reconstruction, including abutment walls and footing/pier construction. Roadway demolition and reconstruction, under drain and storm drainage installations, asphalt concrete placement, solider pile retaining wall and noise barrier wall construction, MPT safety enforcement.

NYSDOT, Reconstruction of Martin Luther King Expressway NB & SB *Civil Senior Inspector (Level III).* Safety, quality inspection and daily reporting.

Jacob L. Dallas
Special Inspector
Jacobs

Education:
M.E, Civil Engineering
B.E., Civil Engineering

Registrations:
Track Safety, 2008, [redacted]
Concrete Field Testing ACI Certificate, 2008
Asphalt Paving Certification (NJSAT), 2010
AutoCAD/ Land,2009
[redacted]
Traffic Control Cord.
[redacted]
Work Zone Safety Awarenes [redacted]

Years of Experience:
10 Years

Jacob Dallas has over ten years of experience in the construction field and has held numerous progressively responsible positions in construction management. His area of expertise includes Guideway decks, structural concrete and steel, highway box construction, utility relocation and heavy demolition. He has extensive experience in field inspections, office engineering and document control specialties.

RELEVANT EXPERIENCE

Bayonne Local Redevelopment Authority (BLRA), Route 440 Grading, Paving and Traffic Signal Improvements. *Construction Inspector/Office Engineering.* Responsibilities included: Inspection of Maintenance and Protection of Traffic (MPT); Inspection of Installation of new drainage structures and RCP; Inspections of earthwork, paving, concrete work, reinforcement steel placement; responsible for safety coordination and Utility relocation work.

Inspection of roadway boxing for reconstruction; inspection for installation of electrical conduit, modified foundations and traffic signals; HMAC paving of widening roadway, milling and resurfacing and responsible for Safety operations of heavy demolition work.

Conrail National Docks Clearance Project (CSX), Bergen Tunnel Clearance Project, Jersey City. *Part Time Chief Inspector.* Responsible for overseeing construction Inspections for a 4,000 linear foot long tunnel including overseeing heavy demolition of tunnel crown, drilling for anchoring rock bolts and flowable fill placement; mucking and clearing of track bed; and compliance with contract plans and specifications.

Southeastern Pennsylvania Transportation Authority (SEPTA), Market Street Elevated Program Management, Philadelphia, PA. *Civil Construction Management QA/QC Inspection/Office Engineering.* Responsiblities included: document control including shop drawings, transmittals, correspondence, RFIs, distribution and tracking of contract drawing and specification revisions; preparation of PCOs, CICs and Change Orders; maintenance and protection of traffic; inspection of pre-cast Guideway decks, structural concrete and steel; inspection of Bolt up, match marking and Skidmore testing; inspection of post tensioning anchor bolts for pedestals; Safety observations of demolition and removal; inspection of roadway milling and resurfacing; inspection of track construction; inspection of backfilling and compaction and inspection of guardrails.

Robert Morris
Senior Inspector
Jacobs

Education:
B.S., Civil Engineering

Registrations:
NICET - Level IV, Transportation Engineering Technology, Highway Construction, [redacted] Expires 02/01/13
Rutgers, Traffic Control Coordinator (TCCP), Course [redacted] Earned 2005, Refresher 2010
ACI, Concrete Field Testing Technician, Grade I, Expires 04/14/15
ACI, Concrete Construction Technology Course (CCTC), Expires 04/2015
NJSAT, Asphalt Technology Certificate, Asphalt Paving Construction Technologist, Expires 07/01/11
OSHA, 10-Hour Occupational Safety and Health Training Course in Construction Safety and Health, 03/16/03

Years of Experience:
24 Years

Robert Morris has extensive experience having served as Senior Inspector on a number of large, complex highway and bridge construction and rehabilitation projects. His experience includes but is not limited to the replacement structural components in conjunction with the construction and rehabilitation of bridges, construction of new roadways, paving and resurfacing, blasting, drainage structures, drill shafts, retaining walls, toll plaza reconstruction, utilities, and tides gates. In addition, Robert has designed water treatment systems, drainage and sewer systems, and pump stations.

RELEVANT EXPERIENCE

County of Somerset, Construction Inspection Services for the Rehabilitation of Main Street Bridge Over Raritan River and Improvements to South Middlebush Road, Somerville, NJ. *Senior Inspector* responsible for inspection services to Somerset County for the Rehabilitation of County Bridge No. H0706 (Queens Bridge) Main Street Over Raritan River & Improvements to South Middlebush Road (County Route 615), at Blackwells Mills Road. The scope of work included the replacement of two culverts and retaining wall on South Middlebush Road (existing culverts and retaining wall were replaced with precast units); installation of a traffic signal at the intersection of Blackwells Mills Road and South Middlebush Road; widening of South Middlebush Road for approximately six feet on each side between the intersection of Blackwells Mills Road and Skillmans Lane; widening of Blackwells Mills Road of approximately 10 feet x 220 feet to the south; and widening (and realignment) of Skillmans Lane of approximately 12 feet x 240 feet.

NYS Dept. of Transportation, Gowanus Expressway, Brooklyn, NY. *Senior Inspector* for the rehabilitation of the viaduct from 6th Avenue to the Brooklyn Battery Tunnel. Inspection assignments included concrete deck repair and replacement, lead paint removal using Class A containments, structural steel evaluations and repairs and joint replacements. The entire project was constructed in a high volume high-density area that included active inspection of MPT detours and schemes.

NYS Dept. of Transportation, Henry Hudson Parkway, New York, NY. *Senior Inspector* for the rehabilitation of seven bridges between 120th and 181st Streets in Manhattan. Inspection assignments included replacement of all bridge-armored joints, replacement of bridge bearings and deteriorated steel members – all in a high volume environment with extensive MPT.

NYS Thruway, I-287 / I-87 Interchange 8 Projects, Westchester, NY. *Senior Inspector* for the widening of NYS Thruway from the Saw Mill River Parkway to Tappan Zee Bridge. Inspection assignments included replacement or rehabilitation of eleven bridges, building of new roadways using "superpave," blasting of rock, new drainage structures, drill shafts, retaining walls and the construction of a new toll plaza. Estimated Construction Cost $168 million.

Vincent Palacio
Senior Inspector
Jacobs

Education:
Computer Technology

Registrations:
NICET, Level IV, 2006
ACI Certified, 2006

Years of Experience:
30 Years

Vincent Palacio has provided construction inspection services on numerous bridge and roadway projects in the New York City area.

RELEVANT EXPERIENCE

MTA Bridges and Tunnels/TBTA, Brooklyn Battery Tunnel. *Chief Inspector* for rehabilitation of the Manhattan Blower Building and Manhattan Underground Exhaust Building. Work includes steel and concrete repairs, removal of lead paint and asbestos, maintenance of traffic during tube closures, and coordination of work with TBTA operations and maintenance staff.

NYS Department of Transportation, Gowanus Expressway Viaduct Emergency Repair Contract, Brooklyn, NY. *Senior Inspector* responsible for construction inspection services of full-depth and partial-depth concrete deck repairs, structural steel repairs, retaining wall repairs, and maintenance and protection of traffic. The Gowanus Expressway is a three-mile-long elevated viaduct reaching a height of 120 feet over the Gowanus Canal. D007423

NYC Department of Transportation, Manhattan Bridge Reconstruction, New York, NY. *Construction Inspector.* Responsibilities on this $124-million project involved replacement of truss bearings in both approach spans; rehabilitation of south side tunnels; replacement of lower roadway double floorbeams in both approach spans; rehabilitation of the eyebars in anchorage B chambers; rehabilitation of the Brooklyn Plaza Park; replacement of subway floorbeams and stringers on the south side in both approach spans and suspended spans; rehabilitation of the center arch and colonnades at the Manhattan Plaza; and installation of temporary street lighting.

New York City Department of Transportation, Manhattan Bridge Rehabilitation, New York, NY. *Construction Inspector.* Responsibilities on this $97-million project involved the replacement of reinforced concrete-filled grid deck; structural steel stringers and diaphragms; installation of new steel expansion joints and replacement of downspout drainage system for the two west side approach spans; installation of a truss stiffening system for both west side spans and completion of the stiffening system for the east side spans; completion of rehabilitation of pedestrian west walkway including new extension ramp in Manhattan; placement of micro-surfacing overlay on concrete gridwork; chemical stripping of paint; installation of temporary and permanent concrete barriers; installation of shear studs for deck; and placement and field testing of concrete and asphalt.

Reconstruction of Chatham Square, New York, NY for the New York City Department of Design and Construction. *Construction Inspector.* Responsibilities on this $7-million reconstruction project involved the installation of 36", 20", and 12" water mains; rebuilding roadway and sidewalk; installation of new drainage; installation of new traffic signals; street lighting and revised traffic pattern; and establishing park areas within the square and refurbishing statues.

Ornamental Railing Projects, Jamaica, NY. *Project Superintendent.* Supervised multiple projects. Duties involved project layout, scheduling, and direct contact with workforce and clients.

Gerald J. Petroski
Senior Inspector

Education:
A.S., Building Construction / Engineering Technology

Registrations:
ACI Certified

Years of Experience:
32 Years

Gerald Petroski is experienced in various aspects of construction management with over thirty years of extensive construction engineering experience managing a diverse range of rail projects. He regularly monitors construction and design progress, coordination with third parties in regards to clients needs, scheduling client flagmen services for contractor's work operations and invoicing concerns of third parties as they relate to client services. Gerald is also thoroughly experienced in the various aspects of maintenance and protection of traffic, construction staging, and construction administration for major rail reconstruction projects in complex urban environments, particularly in the Metro New York/New Jersey area.

RELEVANT EXPERIENCE

CONRAIL, On-Call Engineering and Construction Management Service Contract, NJ. As an extension of Conrail's staff, we have been responsible for the design, bid assistance, and construction management for on-call assignments. Gerald's assignments have included:

Meeker Ave. Bridge, Newark, NJ. *Project Engineer/Inspector* responsible for Construction Management services for the Meeker Ave. Bridge, Newark, NJ assignment. He was responsible for emergency structural repairs and bridge change out. Work included new steel girders and new grillages; Double track - one freight (Conrail), one passenger (NJ TRANSIT); and two bridges at two spans each. Work had to be accomplished in two weekend shutdowns fir change out

Chemical Coast Bridge Replacement Project - Pyles Creek, Linden, NJ. *Project Engineer* for construction management for the replacement of a four-span, double track, ballast deck railroad bridge over Pyles Creek, Linden, NJ. Work included tidal influenced scheduling, steel pile driving, track relocation, and staging. Mr. Petroski scheduled and coordinated all work with railroad operations by initiating Bulletin Orders for track outages, cut-overs, and track protection. He also managed contract work and coordinated same with railroad trades including Communications and Signals; Track and Building & Bridge Departments.

AboveNet Fiber Optic Cable Relocation for Waldo and Bergen Tunnel Enlargement Project. *Project Engineer* for coordination and construction oversight of the AboveNet FOC relocation through the Waldo and Bergen Tunnels on the National Docks Branch, Jersey City, NJ. Work is for Conrail in advance of the proposed tunnel clearance project. Developed plan for wall-mounted relocation in Waldo Tunnel and coordinated track usage, flagman scheduling, and inspection of physical work. Worked directly with AboveNet consultants to locate existing lines and develop plans for relocation in conjunction with Conrail Specifications and Standards.

Bergen Tunnel Clearance Project, National Docks Branch. *Project Engineer* responsible for coordinating survey and tunnel mapping, rock coring, assist in pre-engineering, development of plans, specifications, proposal, and bid quantity sheets for the proposed project in Jersey City, NJ. Conducted on-site

Anthony M. Maialetti

Inspector
JBC Associates

Education:
N/A

Registrations:
PennDOT CDS NeXtGen Operator, [redacted]
PennDOT Concrete Field Testing Technician, [redacted]
ACI Concrete Field Testing Technician, [redacted]
NECEPT Bituminous Field Technician, [redacted]
NICET III Highway Construction, [redacted]
Troxler Nuclear Gauge, [redacted]
PennDOT ECMS Wave 5 Construction

Years of Experience:
20 years

Anthony Maialetti has over 20 years of construction experience with emphasis in the areas of highway/bridge and airport construction inspection, materials testing, commercial inspection and drilling.

His specific experience includes the PennDOT CDS, inspection of structural concrete, pilings, retaining walls, concrete and bituminous paving, milling, curbs & sidewalks, storm water drainage, erosion & sediment control, signage, sound walls, structural steel, gabions, bituminous paving, maintenance & protection of traffic, utility relocations, concrete & soils testing, box culverts, signalization, permits, CDS operations and sheeting and shoring. Mr. Maialetti's relevant project experience includes the following:

RELEVANT EXPERIENCE

S.R. 0113, Section 08B, Chester County, PA, PennDOT District 6-0 (TCIS-2). This $17.5 million project is for bridge replacement on SR 0113, Section 08B - Gay Street Bridge and the SR 0023, CL2 - Phoenixville Closed Loop Project. Mr. Maialetti's responsibilities involve PennDOT CDS and NeXtGen operations including: review of inspectors' FID reports, material certifications, and IQ Books; preparation of work orders; assisting contractor with coordination of subcontractor and utility contractor schedules; and project documentation.

Surface Treatment, Delaware County, PA, PennDOT, District 6-0. (TCIS-2). Mr. Maialetti performs construction inspection and supervision on projects throughout Delaware County, District 6-0. His responsibilities involve the supervision of inspection staff, field inspection and documentation of the following: milling operations; superpave bituminous placement; RPS bituminous pavement; shoulder repair; tack coat application; utility adjustments; loop sensors; temporary and permanent pavement markings; joint sealing; bituminous base repair and maintenance and protection of traffic.

S.R. 0263, Section BU1, Bucks County, PA PennDOT District 6-0, (TCIS). Mr. Maialetti was responsible for supervision of the consultant filed inspectors on this $3.3 million rehabilitation of S.R. 0263 in Warminster Township. The work included replacement of existing asphalt shoulders with concrete; Class A and Class C concrete patching; base repair; adjustment of manholes and utilities; new curb; handicap ramps; sidewalk and adjustments of existing driveways and side streets; inspection of milling operations, polymer modified emulsified pavement system and complete overlay of project with bituminous binder and wearing courses; sample preparation and testing of concrete cylinders; and CDS NextGen/ECMS operator and field inspector for project.

S.R. 0073, Section M04, Montgomery County, PA, PennDOT District 6-0, (TCIS). Mr. Maialetti was responsible for supervision of consultant field inspectors for this $8.5 million reconstruction/ rehabilitation of S.R. 0073 in Abington and Cheltenham Townships. The work includes inspection of new sanitary and storm sewer; reconstruction of the roadway including; milling operations; base repair; bituminous paving; adjustment of manholes and utilities; new curb and sidewalk; guiderail; pavement markings; maintenance and protection of traffic; adjustments of existing driveways and commercial entranceways and side streets.

John Cawley, P.E.
Inspector
JBC Associates

Education:
B.S., Civil Engineering

Registrations:
Professional Engineer, Pennsylvania, [redacted]
ACI Concrete Technician Certified [redacted]
PennDOT Concrete Technician Certified [redacted]
NECEPT Bituminous Field Technician [redacted]

Years of Experience:
40 years

John Cawley has over forty years of construction-related experience, thirty-one years of which was with the Pennsylvania Department of Transportation. As an employee of PennDOT he was assigned to District 5-0 Construction Unit, worked in the Design Unit, Bridge Unit and Maintenance Unit and served as a Project Engineer. He currently performs supervisory and management duties as consultant inspector.

RELEVANT EXPERIENCE

SR0476-RDC, Montgomery Co., PA, PennDOT District 6-0. As TCIS-2, Mr. Cawley is responsible for coordination and inspection of grading; drainage; bituminous paving; guiderail installation; temporary concrete barrier; and impact attenuators for this $74 million reconstruction project of SR0476 from SR0076 to the Mid County Interchange.

SR0095-MB2, Philadelphia Co., PA, PennDOT District 6-0. As TCM-1, Mr. Cawley was responsible for monitoring the contractor schedule; coordinating inspection schedules and staffing requirements; record, review and verifying all field measurements and contract documentation; and generating work orders and estimates for contractor payment on this $10M structural repair of bridges.

SR 0113-08B, Chester Co., PA, PennDOT District 6-0. As TCIS-2, Mr. Cawley was responsible for inspecting asbestos abatement; bridge demolition; sanitary sewer; contaminated soil removal and disposal; core samples with spoon bit excavation; bridge pier fabrication; inlet, manhole and pipe installation; piles and sheeting and shoring installation; containment; contaminated water filtration and removal; drainage; and rebar for the $23 million bridge replacement for SR 0113, Section 08B - Gay Street Bridge and the SR 0023, CL2 - Phoenixville Closed Loop Project.

S.R. 0309, Sec. 102, Montgomery Co., PA, PennDOT District 6-0. As TCIS-2, Mr. Cawley managed all construction inspection activities for the $88.4 million construction of a major roadway and bridge structures, and refitting of existing bridge structures. His assignments also included inspection of precast reinforced concrete box culvert extensions; cast-in-place reinforced concrete box culvert extensions; fabricated structural steel; gunite repair of existing bridge abutment walls; piles; precast reinforced concrete pedestrian tunnel structure; and pedestrian railing. Additionally, he monitored inspection staff, item quantity computations, payments, and required project documentation.

S.R. 0063, Section M09, Philadelphia Co., PA, PennDOT District 6-0. On this $18 million project, Mr. Cawley supervised inspection staff on a daily basis and assisted the Project Manager. He was responsible for the entire project in absence of the PennDOT Project Manager. The project involved various levels of highway and bridge reconstruction; installation of median barrier/glare screen; bridge approach slabs; pavement relief joints; milling existing bituminous; concrete patching; scarification of concrete bridge decks; latex overlay on bridge decks; structural and ground mounted sound walls; drainage; excavation; structural backfill; and maintenance and protection of traffic.

Glenn LeBlond, LEED AP

Senior Estimator
Jacobs

Education:
BS, Civil Engineering Technology,1992
AAS, Architectural Technology, 1989

Registrations:
LEED Accredited Professional

Years of Experience:
24 Years

Glenn LeBlond, LEED AP, has worked in the construction and construction management industry for 24 years. His experience over this time has covered all facets of the industry. He has worked for both design architects and building contractors. He has also served as an owner's representative as well as a construction manager. His work experience has provided him with a well-rounded and thorough understanding of the building industry. His career focuses remain in cost estimating and budgeting.

RELEVANT EXPERIENCE

GSA-NCR, Dept. of Transportation Headquarters, Washington, DC. *Lead Estimator.* Jacobs provided Construction Quality Management (CQM) for the design and construction of a new headquarters building for the U.S. Department of Transportation. The $325-million, 1.35 million-SF building includes offices, auditorium, conference and training center, media/briefing center, childcare, cafeteria, and retail. Our CQM services for this lease-construction project during the base building and tenant fit-out phases included project management, estimating, GMP bid management, construction inspection, oversight of the Commissioning process, scheduling, earned value management support, design reviews, technical engineering subject matter support and labor standards monitoring. As Lead Estimator for the Tenant fit-out, Glenn developed budget, cost, and IGE estimates that were accurate and complete, using acceptable private and public sector standards and estimating principles, along with value engineering from SD to bids. The project received CMAA's coveted "Project of the Year" award–a national award given for excellence in construction management.

DASNY, Staten Island Supreme Courthouse, Staten Island, NY. *Estimating Manager.* Responsible for cost estimating for this 154,000-SF courthouse and associated 600-car parking structure in the St. George area of Staten Island, N.Y. The courthouse will service the needs of Supreme Civil Court, Supreme Criminal Court, the Surrogate Court and related agencies.

New Castle County Courthouse; Wilmington, DE. *Lead Estimator.* Providing construction management services to the State of Delaware for the $148 million New Castle County Courthouse. The new 21-story facility will consist of 558,000 GSF, encompassing 53 courtrooms, to serve the State of Delaware's needs through year 2020. It will provide for horizontal expansion to accommodate growth thereafter.

Johns Hopkins University Applied Physics Laboratory Program, Laurel, MD. *Chief Estimator.* Jacobs is providing program management services for APL's $300-million program for expansion including over 1 million GSF of laboratory and support space. Jacobs is providing full program management services, including AE and construction procurement support, master project schedule and budget management, estimating, design and constructability reviews, construction quality assurance and contract administration.

Bethesda Chevy Chase High School Modernization, Bethesda, MD. *Estimator.* Jacobs provided construction management services to the Montgomery County Public Schools for the $80 million renovation and an addition to Bethesda-Chevy Chase High School.

Joe He

Estimator
Jacobs

Education:
MA, Computer Science, 2002, Queens College
MCE, Civil Engineering, 1998, the City College of New York

Registrations:
N/A

Years of Experience:
15 Years

Joe He has more than 15 years of experience in estimation and on-call project management and construction management services. He is skilled in the preparation of estimates for concrete, masonry and steel structures, interiors at various levels of fit and finish, all stages of the design and construction process, and new and renovated buildings, including both historic and contemporary structures. His assignments have included Educational, healthcare, industrial, judicial, residential, historic and transportation facilities.

Joe is an integral part of our on-call team, assisting in all aspects of projects from conceptual design budgeting through preconstruction, bid and construction phases. He can assist with the costing of construction at various milestones of design to ensure that the design is within the budget's parameters as wekk as assisting with estimating various design alternatives during the selection/ decision-making process. Joe further assists the team by providing constructability reviews of the design. In addition, he assists during the bid phase by developing cost breakdown structures that facilitate bid evaluations and confirm that bids have been properly prepared. During the construction phase, assists with the preparation of cost reports, estimating of change orders and claims, and negotiating with contractors.

RELEVANT EXPERIENCE

Bronx Criminal Court, NY Core and Shell. The goal of the project was to build the core and shell of a new structure. Mr. He provided change order preparation services during construction. Client: Dormitory Authority of the State of New York (DASNY), Project value, $27 million, Completed 2005

Brooklyn Children's Museum, Brooklyn, NY. The goal of this project was to construct a new museum. Mr. He prepared the general contract bid for the project. Client: NYC Department of Design and Construction (DDC), Project value, $12 million, Completed 2004 (***project was overbid and in the process of re-bid)

K – 12 School Building Renovations, NYC, NY. The goal of this project was estimating various interior and exterior renovation projects. Mr. He led the preparation of over 100 estimates. Client: NY City School Construction Authority (SCA), over 100 estimates ranging from $2 to $10 Million, Project Completed 1999

Theodore Roosevelt Courthouse, Nassau County NY. Restoration, renovation and New Legislative Addition; the goal of the project was to renovate and restore this historic structure from a 19th century courthouse into a modern 21 century executive and legislative building for Nassau County government. Mr. He provided on-call estimating services to check, verify, and negotiate pricing related to architecture and structure change orders requested by general contractor. Client: Nassau County DPW, Project Value $50M, Completed 2007

JFK International Airport, American Airlines Terminal, New York, NY. The goal of this project was to construct a new American Airlines terminal at JFK airport. Mr. He provided on-call extension of staff services to check, verify, and negotiate prices related to architecture and structure change orders requested by various contractors. Client: American Airlines. Project Value $1.4 Billion.

Dana Jensen

Estimator
Jacobs

Education:
BS, Business Administration, University of Northern Colorado, Greeley, 1980

Registrations:
N/A

Years of Experience:
33 Years

Dana Jensen is a Mechanical Estimator with 33 years of professional experience, with particular emphasis on estimating, value engineering, change order negotiation, and claims. He has worked with healthcare, institutional, pharmaceutical, microelectronics, manufacturing, and process facilities. Dana has also managed estimators, subcontractors, and technicians; and trained project managers, purchasing agents, estimators, and sheet metal technicians.

RELEVANT EXPERIENCE

General Services Administration (GSA), Environmental Protection Administration/Region 8 Headquarters Building, Denver, CO. *Estimator.* This $75 million project involves design and construction review services for this 418,300-square-foot office building in lower-downtown Denver to house all EPA personnel. The project included high-end construction finishes, signature architecture, Lower Downtown historic district issues. The project also involved LEED Silver objectives.

General Services Administration (GSA), U.S. Federal Building and Courthouse, General Services Administration/Region 4, Jackson, MS. *Estimator.* This 425,000-square-foot facility houses the Fifth Circuit Court of Appeals, U. S. District Court, U.S. Magistrate Court, U.S. Bankruptcy Court, U.S. District Court Clerk, U.S. Probation, U. S. Marshal Service, U. S. Attorney, GSA, and Senate office space.

James A. Walsh U. S. Courthouse, General Services Administration/Region 9, Tucson, AZ. *Estimator.* This project involved $3.5 million in tenant improvements and life safety modifications to a 72,000-square-foot historic federal courthouse -- primary tenant is U. S. Bankruptcy Courts.

U. S. Federal Building and Courthouse, General Services Administration/ Region 9, Los Angeles, CA. *Estimator.* This $300-million project involved 1-million-square-foot, 17-story courthouse in downtown Los Angeles. The facility houses 26 District and 15 Magistrate courtrooms; and includes 150 enclosed parking spaces delivered through design-build-bridging method.

General Services Administration(GSA), U.S. Federal Courthouse, Region 6, Cape Girardeau, MO. *Estimator.* This $44-million project includes a five-level, 155,000-square-foot federal courthouse on a 2.5-acre site. The facility houses four courtrooms, five judges chambers, the court library, USDC/USBC clerks, Alternative Dispute Resolution. Suite, Jury Assembly, U.S. Trustee, Grand Jury, U.S. Attorney, U.S. Marshals, U.S. Probation Offices, Court Security, pretrial services, public defender, judiciary-related, joint-use, administrative law, and ancillary support services.

General Services Administration (GSA), Region 7, U. S. Federal Building and Courthouse, Brownsville, TX. *Estimator.* This $26 million, new 200,000-square-foot U.S. Federal Building houses the Southern District of the Federal 5th Circuit Court, four District and two Magistrate courtrooms; office space for the District Clerk, U.S. Probation, U.S. Marshal, U.S. Attorney, and other court-related agencies; law library; holding cells; and sallyport. Dana provided pre-construction estimating services.

Frank Jenkins

Estimator
Jacobs

Education:
Certificate, Engineering, Maryland Drafting Institute, 1977

Registrations:
N/A

Years of Experience:
28 Years

Frank Jenkins has more than 28 years of experience working for both electrical contractors and construction management firms. He has extensive estimating experience, providing quantity, pricing, and labor take-offs; bid package estimating; and change order estimating for a wide range of facilities. He brings to this project an in-depth knowledge of the area contracting, subcontracting, and labor markets. He is particularly skilled in accurately forecasting and controlling costs on technically intensive projects.

RELEVANT EXPERIENCE

Polytechnic University, Campus Expansion and Renovations, Brooklyn, NY. *Estimator.* A new Dormitory, Student Center, Gymnasium, Central Plant, and Academic Hall renovations totaling 492,393 square feet. A multiple phased construction program on an existing urban campus site.

Manhattan Psychiatric Center, New York, NY. *Estimator.* A $150 million high rise psychiatric center renovation.

PSE&G Warehouse, Artificial Island, NJ. *Estimator.* A $25 million warehouse for materials and office space.

Dept of Transportation HQ, Washington, DC. *Estimator.* Jacobs provided Agency Construction Quality Management Services for the new 1.35 million SF US Department of Transportation (DOT) Headquarters project, which bears the distinction of being the first cabinet level headquarters facility transition in the US Capitol in over three decades, in addition to the largest Developer (Lease-Construct) project to date for the GSA-NCR.

NIH Building 50, Bethesda, MD. *Estimator.* Building 50 is a $96-million 295,000-SF biomedical research laboratory and offices facility. It includes a 30,000 sf vivarium, BSL-3 laboratories, an electron microscope suite housing the world's foremost collection of medical research electron microscopes, and a nuclear magnetic resonance (NMR) suite housing some of the world's largest NMR machines. It houses researchers from 11 different institutes. Building 50 includes a large public lobby, a veranda with public seating, and conference facilities.

NIH Building 49, Bethesda, MD. *Estimator* Building 49 is a $93.8-million, 265,000 SF laboratory and office building that includes BSL-3 laboratories, an 80,000 SF vivarium, conference space, and a public lobby. The project was designed and constructed on a fast-track, multi-bid package basis to meet funding and schedule requirements.

New Castle County Courthouse, Wilmington, DE. *Estimator* Jacobs, in joint venture with EdiS Company, provided Construction Management services to the State of Delaware for this $134-million, 572,000-SF, 14-story steel framed building consisting of 44 courtrooms. The facility is designed to serve the State of Delaware's needs through year 2020, with capability to expand thereafter. The facility accommodates the State Supreme Court, Chancery, Superior, Common Pleas, Family, and Justice of the Peace Courts, and provides space for the Capitol Police and several other state departments, and provides above-ground parking.

Zack Pennington
Estimator
Jacobs

Education:
BS, Electrical Electronics Technology (Power Distribution), University of Houston, Texas, 1978

Registrations:
N/A

Years of Experience:
28 Years

Zack Pennington has 28 years of estimating experience on major domestic and international construction projects. He is experienced in the estimating of health care, correctional, Educational, high tech, commercial, and infrastructure facilities projects. Zack has performed cost estimating functions in the areas of quantity surveys, material pricing, installation pricing, computer-based estimate production, computer-based cost file maintenance, value engineering, procurement variables determination, and change order evaluation and estimating. He has played an important role in the development of computer-based estimating systems, and has maintained unit price databases for U.S. and foreign operations.

RELEVANT EXPERIENCE

Juvenile Detention Center for the New York City Department of General Services, Brooklyn and the Bronx, NY. *Electrical Estimating.* Jacobs provided construction phase management of a new $58.8 million, 120-bed medium security facility. Supervised field and office support staff (administration, scheduling, inspection and reporting), and served as liaison to design consultants, contractors, user and client.

Hudson Valley Transportation Management Center, Hawthorne, NY. *Electrical Estimating.* Jacobs provided Construction Management services to the Office of General Services for the $45 million Hudson Valley Transportation Center (TMC). The facility consists of two buildings connected by an atrium. This high-tech traffic management center included state police barracks and a 911 center.

George R. Vierno Center Rikers Island, NY. *Electrical Estimating.* Jacobs provided Construction Management and Design-Build services on this $80.5-million, 500-bed addition, fast-track prison. Zack was responsible for reviewing and coordinating work of bid packages with A/E; assisting in preparing bid packages and resolution of design and contract conflicts; review RFIs with A/E and resolving; reviewing shop drawings and submittals and assuring prompt turnaround.

Federal Bureau of Prisons, Metropolitan Detention Center, Brooklyn, NY. *Electrical Estimating.* This $85-million project involved a 1,000-bed maximum-security detention facility located on-site of old Brooklyn Navy warehouse. The project included the demolition of an existing facility renovation of an existing facility to create an interim facility and hazardous waste removal.

Consolidated Forensic Laboratory (CFL), Washington, DC. *Electrical Estimator.* This facility will be a 351,000 gross square-foot building where the District of Columbia will consolidate the functions of public safety and health into a single state-of-the-art facility. The CFL is expected to realize significant District operational and space efficiencies, while enhancing the ability of the District to respond to future public safety and health challenges.

Jacobs performs design and constructability reviews, estimating and cost control, administering the construction phase, maintaining project records, performing construction quality control inspections and will act as the commissioning agent for the project.

Steven Eichinger
Value Engineer
Jacobs

Education:
B.S. Civil Engineering Technology
AAS Architectural Technology

Registrations:
N/A

Years of Experience:
28 Years

Steven Eichinger has more than 28 years of management, engineering, contracting and construction management experience. He has extensive electrical engineering and contracting experience in the design and construction of electrical power distribution systems, emergency/stand-by power systems, uninterrupted power systems, grounding, lightning protection, fire alarm and detection systems, security systems, control systems, fiber optic cabling systems and data centers, SCADA and multi-media network cabling systems, lighting systems, and energy/building management systems. He has a diverse background and proven experience in the maintenance, operation and installation of mechanical and electrical systems and equipment.

In addition to his engineering and contracting experience he has provided construction management services on a wide variety of projects. He has developed and presented numerous training seminars on electrical safety, mechanical and electrical equipment maintenance, and operation of building mechanical, electrical and life safety systems. He has performed forensic analysis for electrical accidents.

RELEVANT EXPERIENCE

VE – New Battery Park City Ferry Terminal, Port Authority of NY/NJ. *Electrical Engineer* team member on a value engineering study for design of a new Manhattan ferry terminal on the Hudson River. The terminal design incorporates a floating barge capable of accommodating both front-loading and side-loading ferries. The terminal capacity is approximately 800 passengers, and includes ticketing, restroom facilities, and a concession and waiting area. The terminal is designed to meet ADA standards for handicap accessibility.

VE – New York City Transit, NY. *Electrical Engineer* team member on several VE studies for station upgrades, a new bus garage and maintenance facilities.

VE – Renovation of the Emanuel Celler Federal Courthouse -US GSA, Brooklyn, NY. *Electrical Team Member* on two VE studies (concept design and design development) for the design of major renovations to the Emanuel Celler Federal Courthouse. Constructed in 1961, the EC is adjacent to the new Federal Courthouse currently under construction. The current project addresses structural reinforcement for seismic and blast resistance, enlarging spaces to address updated court requirements, hazardous material abatement, and compliance with ADA criteria. It also includes major upgrades to building MEP systems and equipment (elevators, etc.).

VE – Renovation of the historic Thurgood Marshall Federal Courthouse – US GSA, NY, NY. *Electrical Team Member* on two VE studies (concept design and design development) for the design of major renovations to the Thurgood Marshall Federal Courthouse. The current project addresses major upgrades to building MEP systems and equipment (elevators, etc.), space plan reallocation, and façade repairs to mitigate water infiltration problems.

John Hardcastle
Scheduler
Jacobs

Education:
BS, Business Administration Management

Registrations:
N/A

Years of Experience:
8 Years

John Hardcastle development, maintenance and reporting for more than six years in various capacities. John is adept at resource integration, cost loading and earned value management by advancing the use of the most recent versions of scheduling software (Primavera 3.0, 4.0 and 5.0). He has participated in projects related to flood reduction, information technology, school construction, building movements and airports.

RELEVANT EXPERIENCE

Columbia University Medical Center, 'Certificate of Occupancy' Coordination. New York, NY. *Project Coordinator.* Certificate of Occupancy Coordination encompasses all coordination activities involved in obtaining final certificates of occupancy for various buildings on the Columbia University Medical Center campus. As Project Coordinator, Mr. Hardcastle's tasks include clearing DOB & ECB violations, obtaining sign-offs for equipment installations and architectural plans, subdividing lots, scheduling inspections, facilitating fine payments, issuing RFPs and levelling/analyzing bids for various aspects of corrective work for buildings.

New York City School Construction Authority, New York, NY. *PMO Office Coordinator.* Coordinated IT department special projects, assisted with the implementation of P3e/c and maintained schedules for all capacity construction projects. The coordination for special projects consisted of developing and maintaining individual project schedules, facilitating project execution amongst all parties involved and ensuring project delivery. The implementation of P3e/c for capital improvement projects included building / aligning / documenting new business processes and procedures with existing SCA business processes, developing schedule templates, and testing P3e/c external customizations. The schedule maintenance for the capacity projects included monthly portfolio updates, schedule development to include all aspects of project life cycle and ad-hoc reporting.

Bank of America, Capital Projects Cash Flow Modeling, New York, NY. *Scheduler.* Developed and maintained the portfolio of capital projects for Bank of America reporting on the projections for project funding and cash flows. Project tasks included developing and updating project template schedules, building primavera cost reports, and developing a spreadsheet model & charts for displaying projected funding and cash flows.

Confidential Project, New York, NY. *Scheduler.* Performed resource leveling to account for and conform to constraint restrictions on trips estimated to move all aspects of client staff and operations. Once resource leveling was performed, Mr. Hardcastle extracted the leveled data for input, analysis and reporting in spreadsheet models.

MTA - Blue Ribbon Panel, Projected Construction Modelling, New York, NY. *Scheduler.* Assisted in performing an analysis of projected $120 billion of construction in New York's five boroughs for the period of 2007 through 2012. The anticipated demand for the primary union trades, and concrete and associated trucking was investigated. Mr. Hardcastle's primary role was spreadsheet model development and quality control.

Ray Xie
Scheduler
Jacobs

Education:
MS, Construction Management
BE, Construction Management

Registrations:
N/A

Years of Experience:
20 Years

Ray Xie is a Senior Scheduler in the Project Controls Sub-unit. Ray has more than two decades of experience in the field of construction/project management, particularly in the areas of project planning and controls. He possesses diverse experience in planning, scheduling, cost monitoring, forecast and control, change management, document management and progress reporting.

RELEVANT EXPERIENCE

New York State Office of General Services, Camp Smith Readiness Center. *Scheduler.* This project involved a new Readiness Center on the active Camp Smith Military Base in Cortland Manor, NY. When complete, the facility will be capable of occupying 248 personnel.

Ray was introduced to the project to assist our Project Manager and the Surety in the development of a completion schedule for a new $30M, 112,000 SF Readiness Center after the Construction Contractor was terminate for cause on this Wick's Law project. Ray was tasked with updating and merging the HVAC, plumbing, fire protection and electrical activities to establish a completion date for the Owner. Primavera P3e was used for the original schedule and used again for the completion schedule.

Amtrak 1st Avenue Ventilation Shaft of East River Tunnel Rehabilitation, New York, NY. *Scheduler.* This project included the complete demolition of existing ventilation shaft structure and facilities down to the tunnel level and the construction of new one under the condition of ongoing train operation. Ray reviewed the General Contractor's construction schedule. Developed and maintained cost and resource-loaded master schedule that included Amtrak Project Management, Construction Management, Design, Amtrak Force Account subproject schedules and incorporated General Contractor's construction schedule. He implemented manpower resource and cost into the master construction schedule and provided monthly review and updates of schedule including evaluating and analyzing schedule, manpower usage and cost status, earned value analysis and forecasting project performance. He also conducted project resource, cost and earned value analysis for progress reporting and prepared weekly and monthly progress reports.

Bank of America Corporate Business Center Relocation Project, New York, NY. *Senior Project Scheduler.* Developed and maintained master project schedule for the project, involving the relocation of about 3,000 bank staff from different existing buildings. The schedule included a relocation schedule, and schedules for IT decommissioning, furniture decommissioning and restoration work in the existing buildings. Due to severe resource and time constraints, developed multiple schedule scenarios/options for what-if analysis in order to reach an optimum solution to the project, identified priorities among tasks and perform resource leveling for smooth operations.

Redevelopment of Lincoln Center for the Performing Arts, New York, NY. *Scheduler.* Developed budget-loaded schedule for the redevelopment of Lincoln Center for Performing Arts and provided cash flow forecast in assisting the client in program planning and capital budgeting.

Loren A. Mora, P.E.
Sr. Scheduler
JBC Associates

Education:
B.S. Civil Engineering

Registrations:
Professional Engineer, Pennsylvania, 1994

Years of Experience:
25 years

Loren Mora has over 25 years of construction experience with emphasis in the area of construction management providing scheduling, cost estimating and control for projects including government offices, public safety/ correctional facilities, schools and higher education, performing arts and recreational facilities, transit and heavy highway. His extensive experience includes: development and monitoring of CPM schedules; tracking and reporting of man hours and cost expenditures; construction/ safety inspections and quality control; contract administration, project reporting and invoicing; estimation; preparation/ review of plans and specifications, and preparation of proposal packages. Mr. Mora's recent project experience includes the following:

RELEVANT EXPERIENCE

Pennsylvania Convention Center Expansion, Philadelphia, PA, Pennsylvania Convention Center Authority. Mora was a Project Manager on this $450 million project working for the general contractor. He was specifically responsible for CPM scheduling, preparing payment applications, and change order preparation and negotiation.

Philadelphia International Airport, Philadelphia, PA, City of Philadelphia Division of Aviation. Mr. Mora was responsible for the following projects at the airport where he prepared the baseline schedule and often the monthly updates: Maintenance Hangar, Ramp Control Tower, Thermal Plant Expansion, Terminal Radar Approach Control (TRACON), and Fire Training Facility.

Enhanced Communication and Operations Center, Pittsburgh International Airport, Pittsburgh, PA, Allegheny County Port Authority. Mr. Mora was responsible for CPM scheduling during design and construction for this $15 million facility.

Suburban Station Renovations, Philadelphia, PA. Southeastern Pennsylvania Transportation Authority (SEPTA). As the senior schedule engineer, Mr. Mora was responsible for preparation, cost loading, updating, analysis, and maintenance of the project schedule. This $29 M. project consisted of renovations to the historic station involving ADA upgrades including the renovation and addition of elevators, stairways, and tactile guides and edging throughout the station, and a complete rehabilitation of the mechanical and electrical systems in the station.

David J. Bjork
Sr. Scheduler
JBC Associates

Education:
B.S. Civil Engineering in Construction and Transportation
M.B.A. in General and Strategic Management

Registrations:
N/A

Years of Experience:
30 years

David Bjork is responsible for managing all aspects of our construction management services and staff. He has over 30 years experience in construction with emphasis in the areas of civil, heavy highway, bridges, transit, aviation and facilities. He has gained this experience by working as both a contractor and an owner's representative, in which he has held the positions of quality control technician, field engineer, senior schedule engineer and project manager. His recent construction management experience includes the following projects:

RELEVANT EXPERIENCE

PennDOT District 6-0, CM for I-95 Four Major Structures (SR95 VAG, BRD, Platt Bridge and I-95 over Pattison Ave.). Mr. Bjork is serving as Project Manager and Scheduler for two bridge repair projects; SR95-BRD (I-95 over Broad St.) and SR95-On Demand (I-95 over Pattison Ave.) Responsibilities include: conduct project meetings, prepare meeting minutes, research issues and prepare letters for PennDOT signature, process submittals and contractor RFIs, assist with time and force account records, analyze time and financial issues submitted by the contractor.

PennDOT, District 6-0, S.R. 0095, Sections ITB, ITC, and ITB. *CM/CI Senior Scheduler* on three Economic Recovery Projects that are Design/Build for the design, installation and testing of fully operational ITS systems and other miscellaneous construction along the Interstate 95 corridor in Bucks and Philadelphia Counties. Hisduties include review of baseline schedule and provide comment; monitor CPM schedule updates and report on project status; evaluate added/deleted work and contractor requests for time extensions.

SR 8018-CAS, Delaware County and US 322 / PA 291 (2nd Street) Interchange, PennDOT District 6-0. This $71 M. project involves the construction of two bridge ramps, widening of the Commodore Barry Bridge to accommodate a deceleration lane to one of the new ramps and an acceleration lane to the other bridge ramp and the jacking and replacement of the existing bridge bearing. Mr. Bjork performed schedule review, monitored CPM updates and reported project status. He evaluated added/deleted work and contractor requests for extensions of time.

TB-09B Triborough Bridge Deck Replacement, Manhattan, NY, Triborough Bridge Authority. Mr. Bjork served as Senior Scheduler for this $39 million reconstruction project involving deck replacement of the Harlem River Lift bridge and approach spans. The project involved stage construction and deck and structural steel replacement and repair, substructure repairs, new pier protection systems, bearing replacement, seismic retrofit and strengthening and installing barrier gates and related work.

GSP 84-1290, Southern Bridges Repair, New Jersey Turnpike Authority. This bridge repair project consisted of 38 bridge structures on the Garden State Parkway. Mr. Bjork was called in after a $5.1M claim against NJTA was submitted by the contractor to verify the project status at the time of completion, to project the completion date based on the contractor's past performance, and to project the completion based on a new contractor.

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Section F

Rates

Rich LaRuffa, PE
Value Engineer
Jacobs

Education:
Bachelor of Science
Master of Science

Registrations:
Professional Engineer: NY and NJ
CVS - Certified Value Specialist - Life

Years of Experience:
40 Years

Professional Engineer NY
[redacted]

Richard LaRuffa, PE has served as Project Director, or Project Manager, overseeing project teams with up to 40 staff members. Assignments included P/CM, construction claims analysis and prudency audits, Value Engineering, Constructability Reviews, CPM scheduling, and cost estimating on projects ranging from $0.5 million to $3.2 billion. Projects include high-rise buildings, hospitals, sewage treatment plants, highways, bridges, airport, rail and bus systems, transportation facilities, prisons and courthouses, educational facilities, golf clubs, auditoriums and banquet halls, refineries, and industrial and power generation plants.

A Life-Certified Value Specialist, Richard has been actively involved in Value Engineering for more than 25 years. He has participated in over 175 VE workshops, as team member or team leader. Richard has presented seminars on project management and value engineering, and teaches the one-week SAVE certified Module I VE Training course and maintains a SAVE certified curriculum.

RELEVANT EXPERIENCE

General Services Administration On-Call VE Services. *Project Manager and lead CVS Team Leader* on VE studies for new federal courthouse projects in Gulfport, MS and Los Angeles, CA, renovations to two historic courthouses in New York City, and the Border Station at Champlain, New York. Historic renovations concentrated on constructability issues including manpower and material flow through operating court facilities under post-9/11 homeland security measures.

MTA New York City Transit, Value Engineering Consultant Services. *Project Manager and primary CVS Team Leader* on 4 successive on-call contracts. To date more than 125 studies have been conducted on station upgrades, power, signal and communications systems, bus depots, TA facilities and NYCT Design Guidelines, on projects totaling more than $4 billion in construction. Reviews include concept designs, preliminary engineering, constructability/construction document designs and contractor submitted value engineering change proposals during construction.

Port Authority of NY & NJ (PANYNJ). *Project Manager/Value Engineer-Team Leader* responsible for conducting a VE workshop on bid documents for a new 800-passenger Ferry Terminal at Battery Park City. Also lead VE Team studies on a new restricted service road at JFK airport, and Homeland Security projects involving perimeter intrusion and protection system concepts at PA airport and rail facilities.

MTA Bridges and Tunnels, Task Order Value Engineering Services, NY, NY. *Project Manager/Team Leader* responsible for conducting fifteen Value Engineering Workshops on Preliminary Design documents.

	Name	No. of Years	Professional Engineers/Registered Architects – New York, New Jersey Registrations/Certifications	Direct Hourly Rate
1	Rich LaRuffa, PE Value Engineer-Jacobs	40	Professional Engineer NY [redacted]	$107.02
2	Robert Bauco, PE Project Manager-Jacobs	17	Professional Engineer NY [redacted]	$72.50
3	Richard Wenger, PE Project Manager-Jacobs	19	Professional Engineer NY [redacted]	$72.83
4	David Leymeister, PE Project Manager-Jacobs	21	Professional Engineer N [redacted]	$100.42
5	Nejat Hedyat, PE Resident Engineer-Jacobs	38	Professional Engineer NY [redacted]	$92.62
6	Craig Lewis, PE Structural Engineer-Jacobs	32	Professional Engineer NY [redacted]	$56.81
7	Brad Hollingsworth, PE Mechanical Engineer-Jacobs	12	Professional Engineer NY [redacted]	$128.75
8	William Moser, PE Sr. Resident Engineer-Jacobs	31	Professional Engineer N [redacted]	$68.36
9	Mark Platz, PE Construction Manager-Jacobs	36	Professional Engineer N [redacted]	$85.01
10	Dipak D. Shah, PE Resident Engineer-Jacobs	31	Professional Engineer NY [redacted]	$88.31
11	J. Leo McGlynn, PE Railroad Engineer-Jacobs	32	Professional Engineer NJ [redacted]	$87.08
12	Reza Noorishad, PE Resident Engineer-Jacobs	26	Professional Engineer NJ [redacted]	$58.97
13	John Howell, RA IT Design Review-Jacobs	25	Registered New York Architec [redacted]	$71.69

	Name	No. of Years	ACI Concrete Construction Special Inspectors Registrations/Certifications	Direct Hourly Rate
1	Michael Stevens Structural Engineer-Jacobs	4	ACI Concrete Construction Special Inspector Expires 5-26-2015	$30.22
2	Robert Morris Senior Inspector-Jacobs	24	ACI Concrete Construction Special Inspector Expires 4-13-2016	$47.75
3	Dean Lerescu Senior Inspector-Jacobs	30	ACI Concrete Construction Special Inspector Expires 4-7-2016	$50.53
4	Paul DeCasas Inspector-Jacobs	26	ACI Concrete Construction Special Inspector Expires 5-26-2015	$62.61
5	Henry Heredia Inspector-Jacobs	13	ACI Concrete Construction Special Inspector Expires 4-7-2016	$32.94
6	Kwesi Amegah Senior Inspector-KSE	20	ACI Concrete Construction Special Inspector Expires 3-11-2015	$45.00

7	Duke Samala Senior Inspector-KSE	11	ACI Concrete Construction Special Inspector Expires 7-1-2014	$37.00
8	Jeanne Brady Senior Inspector-KSE	16	ACI Concrete Construction Special Inspector Expires 12-9-2013	$41.25
9	Kuldip Sachdev Senior Inspector-KSE	30	ACI Concrete Construction Special Inspector Expires 6-16-2014	$45.00
10	Rochelle Lancey Senior Inspector-KSE	29	ACI Concrete Construction Special Inspector Expires 6-1-2014	$47.00
11	David Post Construction Inspector-SAVIN	24	ACI Concrete Construction Special Inspector Expires 5-27-2014	$47.51

	Name	No. of Years	ICC Certified Structural Steel & Bolting Inspectors Registrations/Certifications	Direct Hourly Rate
1	Steve Goss Special Inspector-Jacobs	21	ICC Certified Structural Steel & Bolting Inspector Expires 2012	$64.60
2	Michael Caraway Field Engineer-Jacobs	6	ICC Certified Structural Steel & Bolting Inspector Expires 2012	$32.77
3	Carl Coyle Special Inspector-KTA	15	ICC Certified Structural Steel & Bolting Inspector Expires 2012	$28.33
4	Michael Maggio Special Inspector-KSE	10	ICC Certified Structural Steel & Bolting Inspector Expires 2013	$45.00
5	Shawn Heaney, EIT Special Inspector-KSE	8	ICC Certified Structural Steel & Bolting Inspector Expires 2013	$45.00

	Name	No. of Years	NACE Level 1 Coatings Certified Registrations/Certifications	Direct Hourly Rate
1	Shawn Benedict Special Inspector-Jacobs	26	NACE Level 1, 2 and 3 Coatings Certified Expires 2013	$70.19
2	Ahmed Husain Zubair Special Inspector-KSE	14	NACE Level 1,2, and 3 Coatings Certified Expires 2013	$45.00

	Name	No. of Years	Construction Management/Construction Inspection Professionals-New York	Direct Hourly Rate
1	Bill Gove Project Executive	40	N/A	$117.21
2	Rick Fennema, CCM Senior Project Manager	30	Certified Construction Manager	$146.43
3	Andrew Kerr Senior Project Manager	32	N/A	$102.06
4	Gus Xenakis, CCM Senior Project Manager	22	Certified Construction Manager	$113.75
5	Norman Brown, PE Senior Project Manager	38	PE: VA	$90.95
6	William Smith, PE Senior Project Manager	25	PE: CA	$84.00

7	Gayle Benjamin Project Manager	10	N/A	$61.58
8	James Buckley Project Manager	34	N/A	$59.31
9	Curtis Casey Project Manager	27	N/A	$74.97
10	Steve Castagnier Project Manager	18	N/A	$57.89
11	Anthony Delgado Project Manager	11	N/A	$56.57
12	John DeMase Project Manager	24	N/A	$75.72
13	Joseph Greene Project Manager	33	N/A	$85.05
14	Erika Hoke Project Manager	6	N/A	$44.53
15	Clinton Jackson Project Manager	21	N/A	$77.97
16	David LaTour Project Manager	11	N/A	$69.70
17	Eric Monsonis Project Manager	13	N/A	$53.55
18	Christine Oates, CCM Project Manager	13	CCM; LEED AP; EIT: NY	$76.70
19	Nick Pappas Project Manager	9	N/A	$62.57
20	Marc Riendeau Project Manager	12	N/A	$74.62
21	Jeffrey Ronk Project Manager	15	N/A	$59.04
22	Dave Rivera Construction Manager	13	N/A	$62.46
23	Scott Paul Longazel Contract Administrator	7	N/A	$56.77
24	Lauren Roller Schnitzer Contract Administrator	20	N/A	$65.77
25	Niurka Ozuna Contract Administrator	6	N/A	$47.43
26	Sheryl Seid Ng Contract Administrator	22	N/A	$49.72
27	Joan Roof Safety Engineer	16	N/A	$60.22
28	Robert Carson Safety Engineer	8	N/A	$61.07
29	Alan W. Norris Safety Engineer	23	N/A	$56.34
30	David Fox Field Engineer	3	N/A	$36.11
31	Matthew Gallegos Field Engineer	7	N/A	$38.00
32	Sheldon Henry Field Engineer	7	N/A	$43.27

33	Vanessa Jimenez Field Engineer	6	N/A	$35.54
34	Artem Khaykin Field Engineer	6	N/A	$38.41
35	Faheem Khan Field Engineer	9	N/A	$50.28
36	Christina Krasanakis Field Engineer	7	N/A	$39.98
37	Anthony Markopoulos Field Engineer	5	N/A	$37.03
38	Timothy Yan Field Engineer	2	N/A	$31.21
39	Jeff Rudenjak Resident Engineer	23	ACI Field Testing Technician	$53.35
40	Craig Timko Resident Engineer	36	ACI Field Testing Technician	$62.03
41	Richard Treloaar Resident Engineer	40	ACI Field Testing Technician	$55.59
42	Seppo Siimes Architect Design Rev	23	N/A	$72.14
43	Robert Harvey Electrical Design Rev	23	N/A	$67.87
44	Mike Teague Commissioning	8	N/A	$61.03
45	Yuri Berman Commissioning	33	N/A	$66.21
46	Ricky Monterosa Commissioning	23	N/A	$47.23
47	Dennis Marchetti,PE Lead Electrical Engineer	35	PE: VT	$140.40
48	Robert Raspanti Electrical Inspector	33	Cert: High Voltage Splicing, Electric Arc Welding, Fiber Optic Installations; Licensed NY State Rigger	$62.41
49	Ray Klein, PE Mechanical Inspector	21	PE: MA, CT, SC, FL	$62.56
50	Victor Kee Senior Inspector	34	N/A	$57.35
51	W. Ross Wear Senior Inspector	28	N/A	$54.31
52	Arthur Salisbury Senior Inspector	40	ACI Field Testing Technician	$49.93
53	Dan Wardrope Senior Inspector	26	N/A	$61.98
54	Scott Brugge Senior Inspector	11	Engineer in Training (EIT), NY; LEED Accredited Professional (LEED AP)	$51.61
55	Edward Griffin Senior Inspector	36	Engineer in Training (EIT), NY; LEED Accredited Professional (LEED AP)	$52.53
56	Hatoum Hatoum Senior Inspector	26	N/A	$59.66
57	Hector Chiong Senior Inspector	7	ACI Field Testing Technician	$48.60
58	Jacob Dallas Senior Inspector	10	ACI Field Testing Technician	$35.55

59	Robert Morris Senior Inspector	24	ACI Field Testing Technician	$47.75
60	Vincent Palacio Senior Inspector	30	ACI Field Testing Technician	$50.23
61	Gerald Petroski Senior Inspector	32	ACI Field Testing Technician	$55.93
62	Anthony Maialetti Inspector-JBC	20	N/A	$27.62
63	John Cawley, PE Inspector-JBC	40	N/A	$27.12
64	Glenn LeBlond Senior Estimator	24	LEED AP	$74.95
65	Joe He Estimator	15	N/A	$53.53
66	Dana Jensen Estimator	33	N/A	$59.35
67	Frank Jenkins Estimator	28	N/A	$64.63
68	Zack Pennington Estimator	28	N/A	$62.70
69	Steven Eichinger Value Engineer	28	N/A	$91.81
70	John Hardcastle Scheduler	8	N/A	$49.15
71	Ray Xie Scheduler	20	N/A	$61.03
72	Loren Mora, PE Senior Scheduler-JBC	25	N/A	$62.40
73	David Bjork Senior Scheduler-JBC	30	N/A	$56.00

Multipliers	At Site	Home Office
Jacobs	1.9	2.00
Savin	2.18	2.55
KS	2.0	-
JBC	2.05	2.33
KTA	2.495	-

Direct Hourly Rates are Actual as of May 2011

JACOBS®

Section G

Relevant Experience of Firm

G. FIRM EXPERIENCE

RELEVANT TERM CONTRACT EXPERIENCE

Jacobs is a relationship based company with over 85% of our business coming from repeat clients. Our relationship with the Port Authority of NY & NJ is one such example of our core business value at work. We value our clients and our mission is to learn their processes, understand their mission and help them deliver quality projects on time and within budget to their clients (the ultimate end user).

Over the years, Jacobs has completed multiple projects for the PANYNJ and we were able to develop an understanding of PANYNJ requirements and standards and your way of doing business. We believe that this is the cornerstone in providing successful Term Contract delivery for the PANYNJ. Our client satisfaction surveys for PANYNJ projects averages at 90%, which demonstrates the satisfaction of PANYNJ with our personnel and their ability to delivery CM services. Another key factor to successful term contract delivery is the ability to manage and staff Term Contracts. Jacobs, as a company, is specifically structured to provide full-service support to term contracts. In New York and New Jersey, we have offices in several locations that will facilitate staffing term assignments. While we recognize that most assignments will require onsite staff, Jacobs does maintain operating offices in New York City and New Jersey.

The matrix below demonstrates our ability to successfully deliver and staff term contracts for public and private clients providing similar services as requested in this solicitation. On the following pages, we provide snapshot descriptions of several PANYNJ "Call-In" contracts and profiles for five projects of some of our New York/New Jersey Term Contracts where Jacobs provided similar services to those required in this solicitation.

	IDIQ	NY/NJ	Within 5 Years	Relevant Projects	Preconstruction Services	Construction Services
PANYNJ (2007-2010 CM Services)	✓	✓	✓	✓	✓	✓
PANYNJ (1999-2003 CM Services)	✓	✓	✓	✓	✓	✓
PANYNJ (2004-2006 Program Mgmt for Surveying)	✓	✓	✓	✓	✓	
PANYNJ (2002-2003 Program Mgmt for Surveying)	✓	✓		✓	✓	
PANYNJ Traffic Engineering Call-In 2008-2011	✓	✓	✓	✓	✓	✓
PANYNJ Mechanical Engineering Services Call-In 2007	✓	✓	✓	✓	✓	✓
PANYNJ Traffic Engineering Call-In 2005-2007	✓	✓	✓	✓	✓	✓
NYS DOT Alexander Hamilton Bridge, NY, NY		✓	✓	✓	✓	✓
MTA East Side Access Project LIRR, NY, NY	✓	✓	✓	✓	✓	✓
MTA Bridges & Tunnels Brooklyn Battery Tunnel, NY	✓	✓	✓	✓	✓	✓
MTA Bridges & Tunnels Henry Hudson Bridge, Bronx, NY	✓	✓	✓	✓	✓	✓
MTA Bridges & Tunnels Brooklyn Battery Tunnel, NY	✓	✓	✓	✓	✓	✓

On most of the above listed contracts we have done work for buildings and infrastructure projects similar to the type of projects that PANYNJ delivers. Our experience and knowledge of the PANYNJ Client Base will be invaluable to the successful delivery of every task order assignment issued under this term contract.

PORT AUTHORITY OF NEW YORK & NEW JERSEY – VARIOUS CONTRACTS

Description of Contract

Jacobs provided preconstruction and construction management services for the Port Authority of New York & New Jersey under various "Call-In" CM IDIQ contracts. The contracts covered projects in New York and New Jersey and the projects varied from bus terminals to tunnels and bridges. Below are snapshots of 4 PANYNJ contracts where we have provided services relevant to those requested in this solicitation.

Client Agency
Port Authority of New York and New Jersey

Contact Reference
Port Authority of New York and New Jersey
Bill Kehoe
One Madison Avenue
New York, NY 10010
(201) 216-2070
Bill.kehoe@panynj.gov

#1 Port Authority of New York and New Jersey

Expert Professional Construction Management Services on an "As-Needed" Basis 2007-2010

Jacobs provided Construction Management and Inspection Services to the Port Authority of New York & New Jersey at various Authority facilities as determined by the Engineer. The services included, but were not limited to, performing inspection services, constructability reviews, contract administration, and preparation of construction estimates and schedules. Jacobs, along with our team member Savin Engineers, provided construction management and inspection services at: George Washington Bridge, NY, Journal Square (PATH), Hoboken, NJ, Port Newark, NJ Stewart Airport, NY Teterboro Airport, NJ and Howland Marine Terminal, NY.

For the George Washington Bridge project, Contract Administration includes but is not limited to review and preparation of payment applications to various contractors; developing and processing post award contract changes, construction cost estimates, status reporting and document control.

Client Agency
Port Authority of New York and New Jersey

Contact Reference
Port Authority of New York and New Jersey
Alan Ginder
2 Gateway Center, 16 NW
Newark, NJ 07102
(973) 565-7849
Alan.ginder@panynj.gov

#2 Port Authority of New York and New Jersey

Traffic Engineering Call-In Agreement on an "As Needed" Basis – 2008-2011

Jacobs has had successive agreements with the PANYNJ to perform traffic engineering services on a call-in basis. Serving as an extension of the Authority's staff, we provide traffic engineering and planning services at various PANYNJ locations including bridges, tunnels, transit terminals, and airports. These services include data collection, conceptual planning, formulation and testing of alternatives to traffic congestion problems, traffic forecasting, traffic modeling, traffic simulation of vehicular and pedestrian systems, and preliminary engineering.

Inland Port Terminal Study and Newark-Liberty International Airport CUSS Survey. Assignments have included the Inland Port Terminal Study were we have been working with the Port Commerce Department in identifying potential inland intermodal terminal sites for handling international containers from the Port Newark-Elizabeth Marine Terminal.

We also conducted a survey for the Department of Airports to gather data on customer use self-service (CUSS) kiosks at Terminal B. These devices were tested at the airline check-in counters to facilitate the processing of passengers departing from the airport. This effort included pre-survey logistics planning and execution of three-week survey and data tabulations. The data was given to PANYNJ for evaluating a savings of time to passengers, the effectiveness of the technology, and the public's acceptance of the kiosks.

#3 Port Authority of New York and New Jersey

Mechanical Engineering Services – Design of Fire/Smoke Management and Tunnel Ventilation Systems on a Call-In Basis during 2007

Client Agency
Port Authority of New York and New Jersey

Contact Reference
Port Authority of New York and New Jersey
Cheng Chang
2 Gateway Center
Newark, NJ 07102
(973) 565-7598
cheng.chang@panynj.gov

Task 1. Review of Contract Documents for the Hudson Mews Overbuild Project. The scope of work included: review of the Hudson Mews Overbuild Ventilation contract drawings and results of the analysis prepared by the consultant; review of the construction documents including specifications prepared by the consultant; review the CFD analysis results based on the design changes and performance of independent CFD analysis for the alternative design; participation in the meetings with PANYNJ and with the consultant; and evaluation of a fire/life safety design concept for the Overbuild Project

Task 2. Confidential Project Review. Our scope of work included: review of the Preliminary Engineering Drawings and results of the analysis and support of the Port Authority in decision making process and review of the proposed alternatives.

Task 3. Review of the Concept Design Documents for the PATH Train Downtown Project. The scope of work included: review of the Concept of Smoke Management proposed by the Consultant; review of the Tunnel Ventilation Conceptual Drawings and results of the analysis; and participation in the meetings with the PANYNJ.

#4 Port Authority of New York and New Jersey

Traffic Engineering Call-In Contract 2005-2007

Client Agency
Port Authority of New York and New Jersey

Contact Reference
Port Authority of New York and New Jersey
Alan Ginder, PM
Two Gateway Center
Newark, NJ 07102
(973) 565-7871
Alan.ginder@panynj.gov

Port Authority Bus Terminal Data Collection. Our firm developed and implemented a data-gathering program that involved developing a time record of all bus activity at multiple locations within the terminal and along the ramps used for ingress and egress. We developed a six-day data collection plan to gather information. A major challenge of this assignment was to have time-synchronized information (hours-minutes-seconds). We achieved this objective by using 100 PDA devices transmitting the data in real time to Jacobs' remote web-server. Field personnel were deployed with the devices for two time-periods 5-10 AM and 3-8 PM. Jacobs mobilized and trained a 120-person field crew, programmed and tested the PDA devices, and completed the survey within four weeks.

World Trade Center Traffic Simulation. As part of planning efforts for the redevelopment of the World Trade Center site, we developed a simulation model, using a VISSIM platform, of the surrounding arterial streets to assess curbside use by tour buses, taxis, and limousines. The simulation depicts vehicular and pedestrian activity, and assesses levels of service of the streets, curbside, and sidewalk. The model evaluated various scenarios for traffic operations on Dey Street and the impact on pedestrian and traffic movement on the adjacent streets.

LaGuardia Airport Traffic Survey. As part of the redevelopment efforts at LaGuardia Airport (LGA), we conducted a comprehensive traffic survey on the public roadways within the eastern end, Central Terminal Building, and Marine Terminal areas of LGA that includes the Grand Central Parkway, 82nd Street, and 101st Street approaches to and exits from the airport. The data collection program included 78 ATR Locations, 12 manual intersection count locations, and 10 manual vehicle classification locations with 10 classification types. We processed the traffic data to provide summary tables, peak-hour traffic flow maps, and detailed printouts of all count locations. The final product was a summary report of the data collection and data processing efforts and AutoCADD files of the traffic volume maps layered over an aerial of the airport roadway network.

NYS DOT Cross-Bronx Expressway, I-95 Alexander Hamilton Bridge

New York, NY

Client
Syed Rahman, PE
[redacted]
NYS Dep. of Transportation
47-40 21st Street
Long Island City, NY 11101

Construction Cost
$410 Million

Project Duration
Design: 1994-2009
Construction: 2008-2014

Relevant Experience
- Rehabilitation of Bridge Structures
- Replacement of Bridge Structure
- Maintenance and Protection of Traffic
- Traffic Services
- Final Roadway Design Utilities
- Infrastructure
- Traffic Signal Modifications
- Contract Documentation
- Agency Coordination
- Cost Estimating
- Construction Support Services

The NYSDOT designated Jacobs as the prime consultant for the rehabilitation of the Alexander Hamilton Bridge, encompassing 16 bridges on the CBE between Amsterdam Avenue, as well as to be the Coordinating Consultant for the entire CBE corridor rehabilitation projects. The project required extensive construction sequence development to enable the structure to be rehabilitated while maintaining traffic lane capacity. It also required extensive coordination with community boards, NYC Department of Transportation, MTA Metro-North Railroad, NYC Parks Department, Office of Construction Mitigation and Coordination, and Port Authority of NY & NJ.

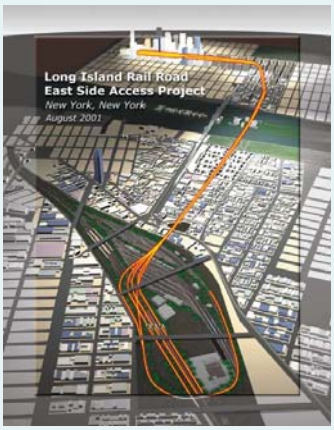
The Alexander Hamilton Bridge is the vital link in the CBE connecting Manhattan and the Bronx. The existing bridge is a 10-span structure carrying 3 lanes of CBE mainline traffic and 1 feeder-lane on each side of the roadways. There are 7 multi-steel-beam approach spans at the eastern end of the structure and 2 multi-steel-beam approach spans at the western end of the structure. Between the approach spans is a multi-steel-arch center span that spans across the Harlem River.

Jacobs provided in-depth, detailed inspection, load rating, alternatives development, and final design and preparation of construction documentation for the rehabilitation of the main 505 ft span arch bridge over the Harlem River, the replacement of the complete concrete deck of the 1,530 ft long main bridge, the replacement of the tightly curved Ramp TE over the west approaches of the main bridge, and the rehabilitation of the connecting ramps between the Cross Bronx Expressway (I-95) and the Major Deegan Expressway (I-87).

Another major element of the rehabilitation project was the replacement of the Ramp TE bridge. The existing bridge is a 12-span concrete box structure carrying two lanes of off-ramp traffic from eastbound CBE to the eastbound Washington Bridge. The total length of Ramp TE is 664 feet. This bridge crosses over the Alexander Hamilton Bridge, and its structural condition is poor. The scope for Ramp TE is complete replacement with the proposed new superstructure to be a twin steel box. The twin steel-box section will be lighter in weight and will provide sufficient torsionional resistance to the bridge curvature and superelevation.

The Ramp TE bridge is founded in a park for its full length. For this reason and also due to the steep terrain and the complexity of maintenance and protection of traffic on the Alexander Hamilton Bridge beneath during construction, an innovative demolition and construction scheme has been developed, which will undertake all operations from the bridge itself with no major construction equipment working from the park land.

Under the Construction Support phase Jacobs is providing services to the client for structural steel and reinforced concrete shop drawing review, structural bearing shop drawing review, and is reviewing Contractor submittals for temporary works such as structural jacking, temporary supports, and off-line detour structures. Contractor material submittals are also being reviewed for approval. Further, Jacobs is providing engineering services for investigating site conditions that lead to field changes, and modifying the design to reflect such changes.



MTA Capital Construction East Side Access Project
New York, NY

Client
Alan Paskoff
Senior Vice President
Project Executive ESA
[redacted]

MTA Capital Construction
2 Broadway
New York, NY 10004

Construction Cost
$7.2 Billion

Project Duration
2009 - 2014

Relevant Experience
- Constructability review and bidability review
- Construction cost estimate and schedule
- Risk analysis & mitigation
- Assist pre-bid conference
- Perform bid evaluation
- Construction inspection
- Monitor contractors' work to ensure it is performed safely
- Claim avoidance and management

The Long Island Railroad (LIRR), the world's busiest commuter railroad, has only one stop on the West Side of Manhattan – Penn Station – that is operating at capacity. In addition, nearly one half of the commuters who ride into Penn Station are actually destined for offices on the East Side.

Jacobs, as the lead of a Joint Venture, was retained by the Metropolitan Transportation Authority Capital Construction Company to provide construction management and inspection services for more than 20 construction contracts and railroad force account agreements. Services include providing staff to monitor and perform quality inspections for various building, railroad and tunneling contracts. Additionally, the scope of services include: performing constructability reviews, safety audits, processing all construction documentation and contract close out.

The purpose of the project is to provide direct LIRR rail access to Grand Central Terminal and relieve some of the congestion at Penn Station; it will also provide a shorter travel time for Long Island commuters headed for Manhattan's East Side.

East Side Access is the largest project ever undertaken by the MTA. Each component by itself would be a major undertaking and include tunneling deep under Manhattan's East Side, tunneling through soft ground in Queens, connecting to the complex of crossovers and switches at Harold Interlocking in Queens, and creating a new terminal below Grand Central Terminal. East Side Access combines all these components and more and will be constructed in an urban area dense in population, buildings, infrastructure, and rail lines while causing minimal disruption to daily life and railroad operations.

Elements of the $7.2 billion project include:
- A 1.6 km of hard-rock, dual-bored Tunnel Boring Machine (TBM) tunnels under Manhattan's Park Avenue
- Four soft-ground TBM tunnels in the Queens Sunnyside Yards
- A new concourse to be carved with "drill and blast" methods under Grand Central Terminal in Manhattan
- A new station at Sunnyside Yards in Queens
- Considerable surface work amid active rail activity in Sunnyside Yards
- New above-ground entrances and vent shafts in Manhattan requiring mid-block demolition.

Challenges
- Multi-phased constructions in urban area with congested existing facilities, utilities, and transportation mechanisms/parties that can not be interrupted.

Solutions
- Intense coordination among contractors' activities in adjacent sites for the ESA projects and many other heavy construction activities in Manhattan for other projects.

Brooklyn Battery Tunnel BB-28/BB-81

New York, NY

Client
MTA Bridges & Tunnels
New York, New York
Mr. Earl Walcott
[redacted]

Construction Cost
$80 Million

Project Duration
2002 – 2007

Relevant Experience
Construction Administration and Inspection Services

Client Commendation

"The project team is very well versed on the project scope and is in constant communication with the contractor to ensure that the scope is delivered. When changes are identified the Jacobs team does a great job to ensure that any changes fall in line with the scope and intent of the project."

Client Survey
October 2006

Constructed in the 1940's the Brooklyn Battery Tunnel serves as vital transportation link between the boroughs of Brooklyn and Manhattan. A testimony to its constructors as well as its Owner/Operator is the uninterrupted service it has provided over the past 50 plus years. Recognizing the important role this asset plays in the vitality of the New York metropolitan area, the Authority has more recently embarked on a program to ensure its dependability well into the 21st Century.

In the early to mid 1990's the Authority initiated a Rehabilitation Program for the Brooklyn Battery Tunnel. The initial contract involved as its major components, the Rehabilitation / Replacement of the Tunnel Ceiling and the Replacement and Enhancement of the Tunnel Lighting System. Under the proposed second phase Rehabilitation (BB-28/BB-81) the Authority rehabilitated the Roadway and Fresh Air Ducts, both tubes along with miscellaneous other work.

The project scope included:

- Abatement of lead containing materials (lead paint at various locations, debris in exhaust ducts).
- Abatement of asbestos containing materials (transite, electrical wiring, conduits pipe insulation and gasket MTL).
- Roadway rehabilitation including removal of asphalt, concrete demo and repair, waterproofing and asphalt placement.
- Underside roadway demolition with shotcrete and corrosion protection system installation in the fresh air ducts.
- Removal of existing cathodic protection system.
- Replacement of roadway manhole frames and covers.
- Rehabilitation of steel curbs and gutters.
- Replacement of bench wall terra cotta tile with polymer concrete panels and repair existing panels.
- Replacement or rehabilitation of all existing fire standpipe system elements in both tubes, the Brooklyn and Governor's Island Vent Buildings, the Manhattan and Brooklyn Plazas, the Manhattan Blower Building and the Manhattan Exhaust Building.
- Tunnel wall tile cleaning and selective replacement.
- Catwalk and kneewall repairs including new catwalk splicing chambers.
- Fresh air duct invert and wet and dry crack repairs in both tubes.
- Niche and personnel door replacement.
- Replacement of portal drains and mid-river drainage piping.
- Concrete repairs at the Governor's Island crossovers including leak repairs.
- Structural repairs to the Brooklyn Vent Building and Sump Room.
- Replacement of tunnel wall signs.
- Installation of RPZ's at Brooklyn Service Building and Ventilation Building and Manhattan Blower Building.
- Balancing and testing of the ventilation system.

Henry Hudson Bridge
Lower Level Deck Replacement
HH-80
Bronx, NY

Client
MTA Bridges & Tunnels
New York, New York
Mr. Walter Hickey, PE
[redacted]

Construction Cost
$80 Million

Project Duration
2006 – 2009

Relevant Experience
Construction Administration and Inspection Services

Client Commendation

"Field activities are properly supervised and managed daily by the Jacobs team. Someone from Jacobs is continually monitoring the worksite. Hatoum and Ed (Jacobs inspectors) are always in the field observing the various project activities. The weekly reports are used as a tool to track and measure progress and productivity on the project. The level of service and dedication to this project being provided by Jacobs is "great".

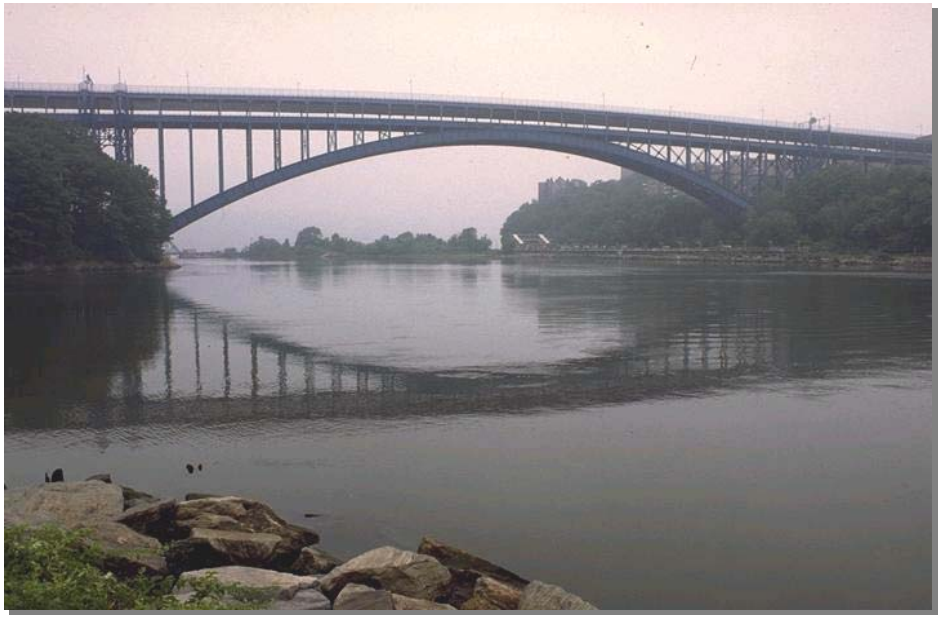
Client Survey
February 2010

Jacobs performed construction administration and inspection services for MTA Bridges & Tunnels on Project HH-80. This project involved the replacement of the Lower Level Deck and installation of the ASSHTO Compliant Bicycle Path at the Henry Hudson Bridge. Project HH-80 included the following:

- South Approach (Bents 1 to 8) – Lower Level Roadway
- Steel Supported Span (Bents 8 to 21) – Lower Level Roadway
- North Approach (Bent 21 to 39)
- Abatement of all Lead Containing Materials; and
- Asbestos Abatement including worker protection

Project HH-80 involved concurrent work at multiple work locations with days, nights and weekend shift work and close coordination on a daily basis with Bridge Operations, Maintenance, and Engineering staff, and with New York City agencies, utility companies, and other entities engaged in work at the Henry Hudson Bridge.

One of our successes was due to the brief safety minute we had at the beginning of all meetings we ran. We had regular interface with the Triborough Bridge & Tunnel Authority (TBTA) safety consultant. Between Jacobs and the TBTA this project ran like a tight ship when it came to safety. The Partnering Sessions we held on this project were also very successful in keeping all the teams focused on the project. In fact, the partnering session that was planned at the mid-point of construction was not held due to the very successful working relationships the teams had created.



Project BB-80A, Ventilation Building Repairs at the Brooklyn Battery Tunnel

Brooklyn, NY

Client
MTA Bridges & Tunnels
New York, New York
Mr. Earl Walcott
[redacted]

Construction Cost
$2.3 Million

Project Duration
November 2006 – December 2009

Relevant Experience
Construction Administration and Inspection Services

Client Commendation

"The Jacobs team has gone above and beyond in personal safety diligence. With regard to monitoring the safety of the contractors, the Jacobs team is outstanding."

Client Survey
February 2009

Jacobs provided construction administration and inspection services for Project BB-80A. This included the repair of the Brooklyn Ventilation Building, The Governor's Island Ventilation Building, Manhattan Blower Building and the Manhattan Underground Exhaust Building. All work was performed concurrently repairing identified deficiencies in the interior and exterior of ventilation buildings including water intrusion, cracked masonry and concrete, efflorescence, delaminations, corrosion of exposed metals and others to preserve or extend the useful life of these structures and the tunnels that they serve.

Some repairs included:

- Repair and conservation of building envelops and exterior appurtenances (roofing, windows, louvers, etc.) including necessary repair or replacement of exhaust shafts to stop water intrusion
- Repair of interior walls, floors, columns, stairs and stairwells, acoustical sound blocks, etc. to correct all defects, deficiencies, and code compliance issues
- Abatement of lead containing paint and/or other hazardous materials
- Abatement of asbestos containing material such as caulking, transite covers of electrical boxes, etc.
- Maintenance and protection of traffic

Concurrent with the building repairs, the contractor also conducted repairs to the airshaft walls, both below and above the damper doors. This required installation of rigging equipment and compliance with all safety regulations required by law and set forth by the MTA Bridges & Tunnels.

The challenging and unique part of this project was that the Authority broke the original BB-80A contract into three separate contracts:

- BB-80AM: Ventilation Building Repairs at Manhattan Blower Building and Manhattan Underground Exhaust Building.
- BB-80AB: Ventilation Building Repairs at Brooklyn Ventilation Building.
- BB-80AG: Ventilation Building Repairs at Governors Island Ventilation Building.

This breakdown of the main contract resulted in the award of the three new contracts to two separate contractors. This increased the need for Jacobs to coordinate with BBT maintenance, especially for such items as security and site access, lockout/tag-out of fans, and lead and asbestos abatement.

Furthermore, Jacobs Engineering personnel had to coordinate between different work activities taking place at different locations concurrently and at different times to ensure that interruption to the maintenance and operations functions of the Brooklyn Battery Tunnel were minimized and that adherence to the project schedule and cost was achieved despite the additional administrative and inspection work resulting from breakdown of the main contract.

ADDITIONAL PANYNJ EXPERIENCE

Current Experience

World Trade Center Streets, Utilities, and Related Infrastructure
PATH Christopher Street Substation Modernization
Call-in Contracts for: Civil Engineering, Civil Engineering – Rail, ITS, Mechanical/Fire Protection, Fire/Smoke Management, Traffic Planning, Aviation, Structural Bridges, and Construction Management

2008-2010 Civil Engineering

LaGuardia Airport, Storm Cleaning Stage I Report – Review of Existing Storm Drain Videotape Inspections and Recommendation of System Improvements
JFK Int'l Airport, North Boundary Road Stage I Report – Recommendations for Roadway Improvements
Stewart International Airport, Runway Incursion Mitigation Study, Phase 1A, AOA Perimeter Road, New Windsor, NY
Teterboro Airport, Construction Staging and/or Stock Piling Area, Stage I, Patrol Road
JFK Int'l Airport, Storm Sewer Outfall Rehabilitation 10 & 13
JFK Int'l Airport, Quantity Estimate-JFK 1020
Teterboro Airport, Flood Hazard Work

2008-2010 Structural Engineering (Bridges)

LaGuardia Airport – Deck Lighting Engineering Design Analysis
LaGuardia Airport – Runway Expansion Joint Condition Inspection
Port Newark Port Street Improvements, East of NJ Turnpike, – Structural engineering design services and preparation of a Stage I Design Report
AET Collection System – Structural Engineering services (Stages III and IV)

2005-2007 Traffic Engineering

Port Authority Bus Terminal Data Collection; development and Implementation of a data-gathering program that involved developing a time record of all bus activity at multiple locations within the terminal and along the ramps used for ingress and egress.
World Trade Center Traffic Simulation; development of a simulation model, using a VISSIM platform, of the surrounding arterial streets to assess curbside use by tour buses, taxis, and limousines. The simulation depicts vehicular and pedestrian activity, and assesses levels of service of the streets, curbside, and sidewalk.
LaGuardia Airport Traffic Survey, Comprehensive Traffic Survey on the public roadways within the eastern end, Central Terminal Building, and Marine Terminal areas of LGA that includes the Grand Central Parkway, 82nd Street, and 101st Street approaches to and exits from the airport. The data collection program included 78 ATR Locations, 12 manual intersection count locations, and 10 manual vehicle classification locations with 10 classification types.

2005-2007 Civil Engineering

Teterboro Airport Runway 1 EMAS, Hydrologic/Hydraulic Studies and Permit Documents
McLester Street and North Avenue Realignment, Elizabeth, NJ
Newark International Airport Study to Install New Oil Water Separator at Building 117, Stage 1

2002-2004 Facility Condition Surveys

Marine Terminal, Howland Hook Facility Buildings, Staten Island
Six PATH Stations between NY and NJ
Marine Terminal, Sheds at Brooklyn Pier 6 & 8, Brooklyn
Marine Terminal, Sheds at Brooklyn Pier 9B & 11, Brooklyn
Newark International Airport, Terminal B
NJ Marine Terminal – Condition Survey of Group 2 Buildings
NY Marine Terminal, Brooklyn Piers – Condition Survey of 15 Misc. Buildings
PATH Stations, Condition Survey of 6 PATH Stations, New York-New Jersey

2002-2004 Civil Engineering

LaGuardia Airport, Police Emergency Garage Relocation
LaGuardia Airport, Sanitary Force Main Replacement
LaGuardia Airport, Concourse B Apron Rehabilitation
JFK International Airport, Guard Post "R" Relocation and Reconstruction of North Hangar Road
LaGuardia Airport, Design of Upgraded High-pressure/Low-pressure Crossover Chamber 'A'
LaGuardia Airport, Guard Post Drainage Improvements
La Guardia International Airport, LGA-699, Rehabilitation of Taxiways F and D and West Side Aprons

JACOBS®

Section H

Management Approach

H. MANAGEMENT APPROACH

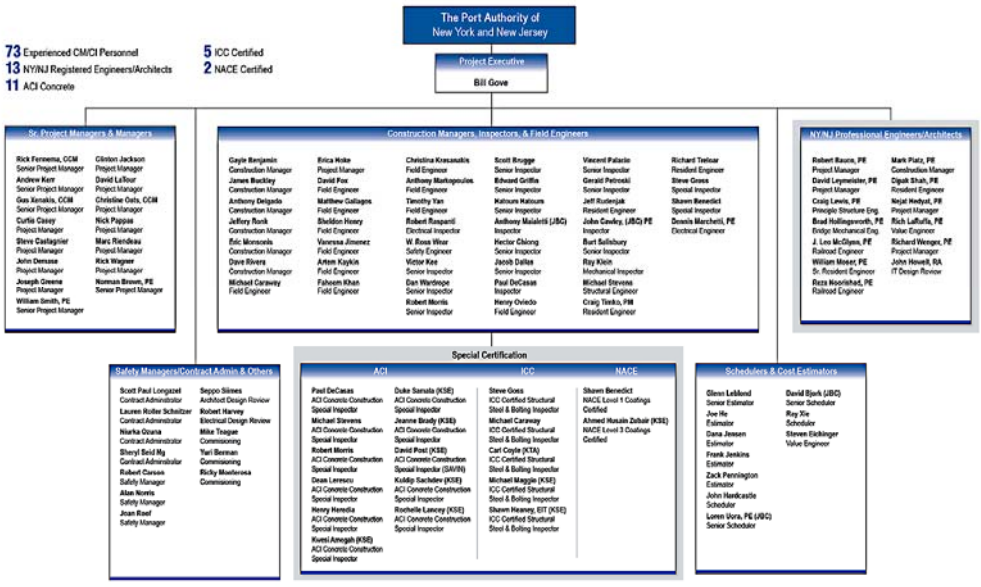
ORGANIZATIONAL STRUCTURE

We have structured our organizational chart to address the Port Authority's needs for a "Call-In" contract. The organization chart as presented below and in Section E provides an overview of our team categorized by group and by functional role. Each of these individuals is a member of the Jacobs team which is dedicated solely to the design and construction management of office facilities, bridges, tunnels, airports and terminals, both port and land based in both the public and private sector.

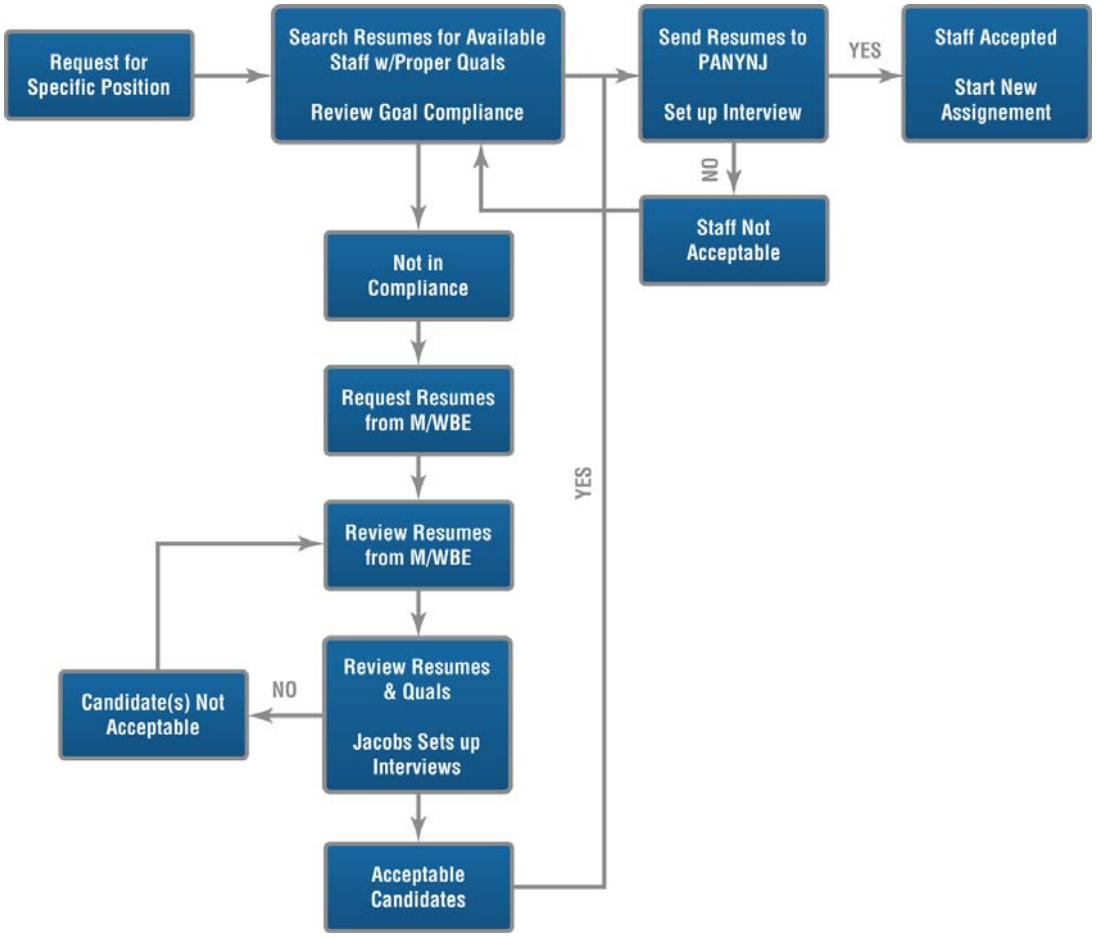
In an effort to be responsive to your requirements, we identified a total of 100+ individuals who bring knowledge and background as Senior Project Managers, Project Managers, and Construction Managers and bring the experience and capabilities to manage capital projects and project teams from conceptual design through construction. These team members are experienced in utilizing project controls systems to manage document control, submittals, RFI's, change orders etc. Our Inspectors, Field Engineers, and Contract Administrators are comprised of experienced Site Quality Control specialists of all disciplines. The Schedulers, Estimators, and Design Reviewers may be required to support the Authority under the proposed Agreement.

Jacobs is specifically organized to provide services on "Call-In" type contracts. Nearly 45% of our work is performed under "Call–In" or Indefinite Quantity type Agreements for public sector clients including the Port Authority. The Flow Chart which follows depicts the process that we use to identify, select and submit candidate staff to the Authority for review and approval. The process starts with a request for staff from the Authority. We will then select the candidate(s) that are best fit for the assignment from our staff and present their resume(s) to the Authority for review. If the resume(s) is accepted we will arrange an interview for the candidate(s). If the submitted candidate is not accepted by the Authority, we will provide resumes for different candidates for the Authority to review.

In order to meet and or exceed the goals of the program for minority and women participation we intend to solicit support from a number of firms that we have successfully worked with in the past, firms such as Savin Engineers (MBE), JBC Associates (WBE) and KS Engineers (MBE). Each of the firms noted have provided services to the Authority with Jacobs in connection with our previous Agreements with the Port. We are confident in their ability to provide quality services to our team.



TASK INITIATION FLOW CHART



MANAGEMENT APPROACH TO PERFORM REQUIRED SERVICES

We have structured our management approach to address all the tasks listed under the Scope of Work for this Call-In Contract. Through this approach we discuss how we intend to keep the Port Authority apprised of the project status and how we will ensure the quality of the work product. We have tailored our approach to be able to deliver the following benefits to all tasks performed under this contract:

- Minimize disruption to occupied areas in phased construction – we recognize that tenant must be capable of functioning at their normal efficiency during business hours. We will mitigate construction impact of worker productivity. We will work with the contractor to develop a mitigation plan to address any noise, dust or specific construction issues that might be disruptive. We will also develop a communication plan similar to what we have done on numerous projects where items of concern can be quickly surfaced and addresses.
- Safety of the occupants and the construction team – safety is our priority for every task or project especially when working in an occupied facility. We will develop specific safety plans of action for every task and will maintain safe access and egress to and from the workspace at all times. We will also communicate with the tenants, to keep them informed and ensure safety awareness.
- Overcome constraints of phasing and building occupation through planning, coordination and communication – we have extensive experience working in an occupied space and in multiple phased projects

and our approach brings best practices on how to efficiently plan, coordinate and communicate with the Port Authority, the contractors, the designers and the occupants while keeping the project on time and on budget.

Below we have highlighted how we will perform each task listed in the scope of work while achieving the above listed benefits.

A. CONSTRUCTABILITY/BIDABILITY

We will assign a person on the team to be responsible for managing all constructability reviews for the project. This individual will lead a multi-disciplined team of architects, engineers and construction personnel and will keep the Port Authority informed during the process and provide the results of each review with specific recommendations. We have performed an extensive number of constructability reviews for airports, office facilities, bridges, tunnels and terminals and will bring our "lessons learned" from both our design and construction experience in these facilities to all projects executed under this contract.

Our approach toward constructability focuses on bringing genuine "hands-on" construction input into the entire project delivery process, with a particular focus on the design phases of the process. The primary objective is to realize significant construction safety, cost and schedule benefits. An added objective is to turn the facility over in a sequence that matches the intended start-up / facility activation process.

We will also review the documents for *operability*. On all our reviews, but particularly on projects for public clients that give a genuine priority to long-term life cycle cost issues, we frequently suggest that these reviews include representatives from our client's operations and maintenance staffs.

Our team will take the lead in collating all comments from all reviewers including the various Port Authority user groups and others as appropriate. We will use Contract Manager (Expedition) specially designed for this purpose as our database tool. At each review milestone we will collect and publish the comments in a report that will be distributed to all parties.

We will prioritize our comments with top priorities given to safety and quality issues, as well as errors and inconsistencies. Where appropriate we will recommend alternate designs, including an estimate of cost and overall impact on the proposed budget and schedule.

B. CONSTRUCTION STAGING

Jacobs performs CM services for numerous airports, office facilities, bridges, tunnels and terminals, both for Government and State entities. The majority of this work is typically done while the facilities are occupied, which requires extensive coordination as well as special staging and phasing. We will accommodate planning and scheduling after hours work for specific areas to minimize interruption to daily activities. *The focus of our staging will be to maintain facility operations, minimize tenant/occupants inconvenience and expedite construction*. We have successfully completed numerous federal projects where construction was performed in occupied facilities, and we will bring best practices to this contract.

For every task, we will develop the site logistics plan, construction packaging and phasing plan. Our site logistics plan will focus on providing access for equipment, staging areas for materials, lifting plans, location of temporary facilities, location of tool (sharps) storage outside the secure perimeter along with daily logistics of equipment movements through loading docks and address environmental, safety and site security concerns. In addition, we will address staging areas for contractors and subcontractors for each phase of construction. We will include logistics requirements as part of every bid package so that the contractors bid to the Authority will include the

specific conditions and restrictions relative to hazardous material remediation, the work of other contractors and public safety. Our approach to packaging and phasing will be tailored to address the physical constraints of the site, contract completion milestones and the appropriate division of work.

C. SCHEDULE DEVELOPMENT AND MONITORING

We are providing scheduling services on many of our current assignments and the staff we have proposed for this contract has extensive knowledge of CPM scheduling.

Where the Authority requests, we will prepare a Summary Level Master Schedule for a particular task, identifying the critical path and identifying issues, constraints and other requirements that could have an impact on the schedule. We will continue to maintain and refine this schedule during the design and bidding process, developing and recommending alternate solutions to eliminate or mitigate issues which may have a negative impact.

The construction contractor, at the time of award, will be required to submit his detailed construction schedule. Utilizing our own independently developed schedule, we will review the contractor's schedule for reasonableness and compliance with contract requirements (staging, weather sensitive work items, coordination with operational requirements of the facility, etc.) If such issues are not adequately addressed, we will work with the contractor to resolve these schedule deficiencies.

We have found it beneficial to hold an initial scheduling meeting, as soon as possible after the award and prior to the contractor's initial submittal of its CPM schedule. This would allow the Authority to outline the content and logic of the schedule requirements so that the contractor can better address its schedule to our requirements.

Once the contractor's initial schedule submittal is received, a second meeting is advisable to review any discrepancies, discuss the logic of the contractor's CPM and comment where necessary. We will treat the approval of the initial schedule as a priority item of the highest order. The resultant schedule will provide an effective tool to monitor and control performance of the contractor.

Upon the Authority's acceptance of the schedule, we will continually monitor progress and prepare and submit a complete review of the contractor's CPM update on a monthly basis. We will verify the accuracy of work complete, and provide comments and recommendations to the Authority should the look ahead schedules be in non-compliance with the baseline schedule or other ongoing facility projects.
We would recommend that monthly meetings be convened to review and discuss project status and to obtain the contractor's CPM update. This will provide, at specific points in time, a complete and accurate report of actual construction progress being made as compared to the established planned schedule.

D. QUALITY ASSURANCE INSPECTION

Our field inspectors will be responsible for ensuring that installation is carried out in accordance with the required level of quality. Materials will be examined prior to being covered up. Inspections will be coordinated with the Architect and regulatory agencies and inspector sign-off sheets issued, countersigned by agency inspectors where appropriate. Defective or unacceptable installations will be rejected and removed or corrected. All quality control documentation from the contractor will be immediately forwarded to the appropriate Port Authority staff.

We will promptly inform the contractor in writing of any poor quality work and items of non-conformance. We will also work proactively with the contractor to resolve any quality control issues. Resolutions will be approved only with Port Authority concurrence and approval. A status report for all improper work and non-conformance items will be prepared, including dates of satisfactory resolution of such items. Should a poor quality or non-conformance item

remain uncorrected, a Non-Conformance Report will be issued promptly to document the matter and it will include a recommended corrective action and correction date.

Safety is our priority at all times and our inspectors will address any safety concerns immediately and before they become a hazard. We will reach out to workers or any staff members for any safety concern. Our regional safety manager will also visit project sites on regular basis to inspect the site for any safety issues or concerns and to provide recommendations for any safety improvements.

E. CONTRACT ADMINISTRATION

Task "E" requests the CM to provide services in administering construction contracts, including developing and processing of post award contract changes (PACC) and change orders, processing time and material records (T & M), payment applications, updating of computer databases such as CONTRAK, status reporting, document control and attending contractor status meetings. We will address these based upon our knowledge of the Port Authority of NY & NJ's procedures and our experience in providing these services to the Port Authority in our current assignment at the George Washington Bridge.

Developing & Processing Post Award Contract Changes (PACC)

The development of a PACC is initiated when a contractor submits an RFI (Request for Information) to the Resident Engineer. The Resident Engineer reviews the RFI, then researches the contract documents and consults with appropriate consultants in order to make a determination that the work is either in or out of the contractor's contractual scope of work. If the determination is made that the work is within the contractual obligations of the contractor, and/or if the work is required and the contractor disputes the determination, the PANYNJ can direct the contractor to proceed on T&M. The PANYNJ Field Engineer will monitor the contractor's performance of this work on a T&M basis. If the work is imminently required, and the determination is in the contractors favor that the work is indeed in addition to his scope of work, the PANYNJ may then also direct the contractor to proceed on T & M concurrently while the PACC is being processed. The PANYNJ Field Engineer maintains T&M records of the performance, including labor, equipment and materials for this work. This work can later be converted to a lump sum or other means of compensation to the contractor.

If the work is determined to be within scope of the contract, a PIN (Pending Item Notification) is assigned and a rough order of magnitude estimate is developed. The PIN is entered into the PANYNJ database, CONTRAK (recently changed to WINTRAK). The Engineer of Construction and/or Program Manager can view the PIN and have an opportunity to challenge its validity and also have the authority to deny or proceed with the processing. Sometimes this decision will be based on contract funding and/or schedule limitations. A negative decision does not always mean the change is unwarranted, but it could be that the project just cannot afford to proceed with this work. After the PIN is entered into CONTRAK, the Port Authority Team (Resident Engineer, Consultants, Office Engineer and Field Engineers) develop a detailed scope of work and detailed estimate. The scope and estimates are reviewed and signed off by Office Engineer. The signed off scope and estimate is sent to the Resident Engineer for review and approval. A formal request for proposal is prepared in the form of a PACC, with an identification number, and sent to contractor. The PACC contains the scope of work and a request for a proposal (quote) either T&M, lump sum or unit price (PA's estimate not included).

The original PACC along with a detailed estimate is sent to the Engineer of Construction (EOC) and Program Manager (PM) for sign off at the same time it is sent to contractor. The EOC and PM have another opportunity to question the detailed estimate.

The contractor submits his proposal to the resident Engineer, based on the PACC he received. The Resident Engineer will review the submission along with the Field Engineer and Office Engineer. If the review is favorable,

the Resident Engineer can sign the PACC, but only up to an authorized amount (i.e. Resident Engineer can sign up to $25K). If the review is favorable, but the amount is above the Resident Engineer's authority to sign, the PACC is sent up the PANYNJ ladder for signature. If the review is questionable, a detailed breakdown with backup is requested from the contractor (usually with lump sum or unit prices).

The contractor will resubmit the PACC with a breakdown and requested back-up. The Field Engineer and/or Office Engineer will review PACC resubmission and compare to the PANYNJ's Engineer's detailed estimate. Any differences are questioned and/or reconciled with contractor via communications on phone, correspondence or at project meetings. If it cannot be reconciled, the contractor is directed to proceed on T&M. If the PACC can be reconciled, the PACC is signed and approved by the appropriate PANYNJ authority and is now considered a Change Order. The PANYNJ's Construction Management Division (CMD) prepares and issues a Contract Change Order to the contractor authorizing him to proceed.

Processing Time & Material Records

When a contractor has been issued a PACC/C.O. or directive to proceed with work on a Time & Material basis, he proceeds with the work and prepares a "Contractors Daily Record Ticket". This is a daily record of manpower, equipment and material used to perform the work. This is given to the Field Engineer. The Field Engineer will stamp, sign and edit accordingly to verify work performed. The signed ticket is given to the Office Engineer (OE). The OE maintains all T&M records and daily reports and tracks them against the established budget. The OE produces a monthly status report and it is entered in CONTRAK. The contractor submits a monthly invoice to the OE for T&M work. The OE reviews the invoice and audits it against the T&M tickets. The OE uses reference manuals, i.e. Blue Book for equipment and checks the invoice against certified payroll and prevailing wage rates. At completion of the OE's audit, the invoice is stamped, signed and given to the Resident Engineer (with audit backup) for approval. The Resident Engineer initials the invoice and a copy is faxed to the contractor. The contractor includes copy of the faxed approval with his payment application to PANYNJ. The payment application includes a change order log as backup for payment. The log includes the Office Engineer's faxed approved desk audit.

Payment Applications

When a contractor submits a payment application to the Resident Engineer, the Resident Engineer transmits the application to the Field Engineer assigned to that work for review. The Field Engineer reviews his findings with the Resident Engineer. Appropriate changes are then made to the pay application. The Resident Engineer signs the payment application and enters it in CONTRAK and SAP. The Resident Engineer will then send the Payment application to the EOC for review and signature. Once reviewed by the EOC, he then forwards to CMD (Construction Management Division) for processing. The CMD reviews for accuracy, assures entry into CONTRAK and SAP. Then the CMD sends the approved payment application to Disbursements, where check is prepared and payment is sent to contractor.

Updating Computer Databases Such as CONTRAK

CONTRAK is updated based on actual changes as well as forecasted changes. This update usually occurs monthly. CONTRAK includes status for schedules, work in place, payment of invoices, PINs track changes (PACC's) and or time and material and "Clause Work". An Important function of CONTRAK is to compare actual and forecasts to budget. This is important to check against funding and schedule. Results could be an increase in funding authorization and/or extension of time. CONTRAK is updated by the Resident Engineer's Team (Office Engineer, Field Engineer and Resident Engineer) and given to an Administrator to enter the information into the database. Remarks and comments are also entered into the CONTRAK database.

Status Reporting

Status info of schedule, Working Place, Payments, PINs PACC's, Time & Material work and Clause Work can be downloaded and reported through CONTRAK. A number of different reports can be generated by this database. These reports are available to the PANYNJ and Consultant Staff. Status reporting is also generated through progress meetings, contractor schedule updates, daily narratives, minute meetings and progress reports. Shop drawings and submissions are logged and tracked and reports generated accordingly.

Document Control

Entries for all work must be maintained in CONTRAK to log and track all information. All correspondence is addressed to the Resident Engineer. Shop drawings and submittals are logged and tracked for status. Record drawings are maintained by the Field Engineer and updated accordingly. All files are kept in accordance with project number PANYNJ filing system.

Attending Contracting Status Meeting

Usually, Resident Engineer, Field Engineer, Office Engineer, Inspectors, Project Manager and Contractors attend status meetings. Discussed are safety outstanding issues, RFIs, PACCs, change orders, submittals, permits, schedule status, long-lead items, progress status, closures, lane closure requests, escorts and security requirements. Records of meeting events are noted on Meeting Minutes.

F. COST ENGINEERING / ESTIMATING SERVICES

Our Estimating Team has an excellent track record of accuracy in estimates. ***On our most recent projects, our estimators were within 1% of the actual construction bid cost.*** Our services include providing full estimates, take-offs, estimate review and reconciliation, cost and market analysis, pro-active participation in constructability and value engineering reviews, planning, bid package assistance, and change order estimating and negotiation.

Jacobs cost engineering and estimating team features veteran cost and construction expertise, and a full in-house compliment of architectural, structural, civil, mechanical and electrical estimating specialists with directly relevant experience in estimating costs of specific type projects attendant to all of PANYNJ facilities and structures including airports, office facilities, bridges, tunnels or terminals, both port and land based. Detailed cost estimates are based on quantities of specific construction materials and are refined through schematic design, design development and contract document stages to reflect new input from the design and construction team. Local subcontractors and suppliers are consulted to fine tune pricing. Early, accurate and continuous estimating feedback will help keep designs on track and within budget. At the same time, Jacobs frequently reviews architect/engineers estimates. Our seasoned estimating team works proactively to reconcile and validate A/E's estimates to help assure cost predictability and control. We are familiar with the Authority's "Construction Estimating Guide" and maintain a copy in our estimating department.

This familiarity allows us to be pro-active in a project's early design stages, which is when we can be of greatest service to the Authority by making participants think about their needs and getting team buy-in on issues at an early stage. We will bring the Authority, AE/s and Engineers together and lead a Q&A session that looks at what is "behind the walls," analyzes special considerations, and examines all assumptions and qualifications for the project, from owner expectations to funding & market conditions.

This enables our estimators to capture the real substance of what the facility will require and the challenges the team will be facing as design and construction proceed. At this point we will establish budgets and contingencies, develop elements of critical path and evaluate possibilities of outside influence – market conditions, inflation, labor shortages, or design uncertainties

Jacobs has extensive knowledge of the local contracting community and New York/New Jersey State procurement regulations. We will assist in developing solicitation documents, coordinating bid phase due diligence, distributing contract amendments and managing the Q&A process. We will review potential bidders, bid documents, and bids received, and participate in the evaluation and recommendations for award. Bid document reviews included correctness of project description, statement of work (scope), qualification statement, pricing proposal format and form of contract.

During the bidding process for each package, our team will coordinate pre-bid meetings, site tours as well as collate questions and responses to bidders' questions. We will ensure that this process is rigorously documented and that responses are formally distributed to all bidders. Once bids are received, we will analyze each bid for completeness and interview each apparent low bidder to ensure a total understanding of the contents. We will then send a recommendation to the Port Authority for award. We will review bids against the budget, and, if in excess, we will propose strategies for redesign or re-bid.

G. RESOURCES

The primary contact with the Authority will be Bill Gove, our proposed Project Executive. Bill has performed similar services for the Authority on previous "call-in" assignments, including the provisions of services for Construction Management and Expert Surveying Services. Through this experience, he has gained a thorough knowledge of the Authority's procedures, policies and personnel, and will be able to respond immediately to your needs; providing the proper staffing and expertise for your assignments.

At the same time as we are identifying in house candidates we also will make sure that we are meeting the M/WBE goals established for the project. With an emphasis on exceeding the contractually established goals, we will also look at each request for staff an opportunity for M/WBE support. This process is also depicted in the flow chart and includes the addition of interviews of M/WBE candidates prior to the submission of their resumes to the Authority for review and interview. Once an M/WBE candidate is selected their participation on the project will be seamless to the Authority.

JACOBS®

Section I

Affiliates

I. AFFILIATES

A parent and affiliates of Jacobs Engineering New York Inc., located at 260 Madison Avenue #1200, New York, NY 10016, include the following:

Jacobs Engineering Group Inc. (Parent Company of Jacobs Engineering New York Inc.)
1111 South Arroyo Parkway
Pasadena, CA 91105
Tel: 626.578.3500
EIN: [redacted]

Jacobs Civil Consultants Inc.
5 Penn Plaza
New York, NY 10001
Tel: 212.944.2000
EIN: [redacted]

Jacobs Project Management Co.
260 Madison Avenue, Suite 1200
New York, NY 10016
Tel: 212.268.1500
EIN: [redacted]

JACOBS®

Section J

Conflict of Interest

J. CONFLICT OF INTEREST

In accordance with Section III J (Submission Requirements), Jacobs maintains no conflict of interest in relation to the awarding of this contract.

JACOBS®

Section K

Contract Exceptions

K. CONTRACT EXCEPTIONS

We have reviewed your proposed Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014 RFP Number 24440 contract, and find it to be generally acceptable as the basis for the negotiation of a mutually-agreed-to final contract between the parties.

JACOBS

Jacobs Engineering New York Inc. | 260 Madison Ave. #1200 | New York, NY 10016

LiRo Engineers, Inc.

A LiRo Group Company

Three Aerial Way, Syosset, NY 11791 Telephone: 516.938.5476 Facsimile 516.938.4368

May 23, 2011

Mr. Tim Volonakis
Port Authority of NY & NJ
Manager
Professional, Technical and Advisory Services Division
Procurement Department
One Madison Avenue, 7th Floor
New York, NY 10010

Re: RFP Number 24440

Dear Mr. Volonakis:

It is our pleasure to submit four copies of our proposal for the Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014 to The Port Authority of New York and New Jersey (Authority). LiRo's qualifications and experience are uniquely matched to the Authority's requirements. We offer primary strengths in Professional Construction Management and On Site Inspection, Construction Staffing, Scheduling, Cost Estimating, Design/Constructability Review, and Value Engineering augmented by a full service architectural, engineering and environmental staff.

We are currently performing work for the Authority on a similar Call-In contract for 2006-2010 and have demonstrated ***LiRo's ability to be immediately responsive and provide the depth of resources to address all staffing needs placed upon us by the Authority***. Ranked #3 by New York Construction magazine among the region's Top Government Service Buildings Contractors and among the Top 30 Construction Managers by Engineering News-Record, the LiRo Team has the largest construction management resource pool in the New York and Northern New Jersey region.

While our staff has worked on many, if not the majority, of the Port Authority facilities, they also bring lessons learned and experiences for some the nation's largest and most prestigious projects. These include:

- Bay St. Louis Bridge, $267M
- Biloxi Bay Bridge, $338M
- Atlanta/Hartsfield International Airport, $6.7B
- Chicago/O'Hare International Airport, $495B
- Boston/Logan International Airport, $1B
- Port of Los Angeles, $298M

Locally, LiRo has performed an extensive amount of transit, bridge, tunnel, aviation, and port work including the following:

- $1B in Triborough Bridge and Tunnel Authority (TBTA) bridge work
- $12+B in New York City Transit work
- $1B in New York State Department of Transportation bridge work
- $800M of New York City public agencies' tunnel, bridge, and marine work

LiRo Engineers, Inc.
A LiRo Group Company
Three Aerial Way, Syosset, NY 11791 Telephone: 516.938.5476 Facsimile: 516.938.4368

Our commitment to meeting the needs of public clients is unequivocal and backed by our **Principal-In-Charge, Luis Tormenta, P.E.** As a former Commissioner for the New York City Department of Design and Construction, Mr. Tormenta has successfully managed a diverse range of complex, critical construction involving buildings, institutional facilities and infrastructure within the Metropolitan area including the $6.5B East Side Access and the $2B #7 Line Extension. In that role, he was also a client utilizing on-call contracts and has the unique experience with these types of services both as client and provider.

I, **Michael Burton, P.E.**, am the proposed **Project/Contract Manager.** A recognized industry leader, and Engineering News-Record Award for Excellence Recipient for my role in the 9/11 Recovery Effort at Ground Zero, I have managed some of the nation's largest public and private capital program portfolios. In my current and past roles as Senior Vice President and National Operations Manager, I have been responsible for $100B of design and construction work in aviation, bridge, highway, transit and infrastructure programs. Relevant and significant projects include: Atlanta-Hartsfield Airport ($6.7B), Fort Lauderdale Airport ($1.5B), East Side Access ($6.5B), TransBay Transit Center ($4.1B), Biloxi Bay Bridge ($338M), and Bay St. Louis Bridge ($267M).

Supplementing LiRo's significant resources are construction professionals from the following firms: **Systra Engineering, PMA Consultants, LLC, (MBE), Hirani Engineering and Land Surveying, PC (MBE), KS Engineering, PC (MBE/DBE), Works-In-Progress Associates, LLC (WBE), and DY Consultants (MBE).** Representative projects that LiRo team members have completed or are currently involved with for the Authority include:

- World Trade Center PATH Terminal
- Environmental Health and Safety Inspections at:
  - George Washington Bridge
  - JFK, Newark, LaGuardia, Stewart airports' various terminal renovations
  - Port Authority Bus Terminal
  - Ports of Newark and Elizabeth
- JFK Airport/AirTrain
- Professional Electronic Engineering Services for:
  - Jamaica Station
  - JFK and Newark Airports
  - Corbin Street
  - Lincoln Tunnel
- Assisted the Authority in the development of application of Risk Assessment Analysis, and improved project management tools, reports, and analytics

We believe that the LiRo team members have demonstrated our capabilities to deliver quality professional services for the Authority in a cost-effective manner. Our staff qualifications meet or exceed the requirements outlined in this RFP and if selected, LiRo will continue to prove our value to the Authority including our experience as:

- A major New York/New Jersey based firm presently managing capital construction projects associated with over $20B of investment in transportation, infrastructure and public buildings.
- A firm successfully serving PANYNJ under a 2006-2010 CM Call-In contract.
- A local firm focused on CM with over 500 personnel including a cadre of ACI, ICC, and NACE inspectors to meet the Authority's requirements.
- A firm intent on continuing its commitment to the Authority to provide high-quality, cost-effective services.

LiRo Engineers, Inc.

A LiRo Group Company

Three Aerial Way, Syosset, NY 11791 Telephone: 516.938.5476 Facsimile: 516.938.4368

We look forward to continuing our work for the Authority in the years ahead under this contract. I can be reached at 212.536.0280 or burtonm@liro.com should you wish to discuss our proposal in more detail or require additional information.

Very truly yours,

Michael Burton

Michael Burton, P.E.
Senior Vice President/National Operations Manager

Cc: Luis Tormenta, P.E., CEO

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ATTACHMENT B

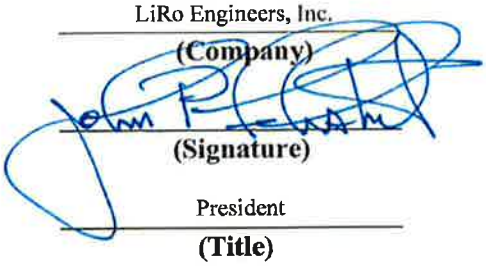
PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf,* not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

LiRo Engineers, Inc.
(Company)



(Signature)

President
(Title)

May 20, 2011
(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #24440)

1. Company Name (print or type):

   LiRo Engineers, Inc.

2. Business Address (to receive mail for this RFP):

   3 Aerial Way, Syosset, NY 11791

3. Business Telephone Number: (516) 938-5476

4. Business Fax Number: (516) 938-5491

5. Firm website: www.liro.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 04 / 28 / 1925

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

   See attached Affiliate Firms

9. Officer or Principal of Firm and Title:

   John Lekstutis, PE, President

10. Name, telephone number, and email address of contact for questions:
    John Lekstutis, PE, President, 516.938.5476, leksj@liro.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☑ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

AFFILIATE FIRMS

LiRo Engineers, Inc.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Architects + Planners, P.C.
EIN: [redacted]
Type of Business: For profit
111 Broadway – Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Program and Construction
Management, P.C.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: (516) 938-5476
Fax: (516) 938-5491

LiRo Consulting Engineer, P.C.
EIN: [redacted]
Type of Business: For profit
6 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Architects & Engineers West, P.C. (NJ)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Architects & Engineers, P.C.
(Connecticut)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Architects + Engineers, P.C
(Pennsylvania)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Program and Construction
Management, Inc. (California)
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: (516) 938-5476
Fax: (516) 938-5491

LiRo Constructors, Inc.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: (516) 938-5476
Fax: (516) 938-5491

FIRM QUALIFICATIONS

PROPOSER REQUIREMENTS

The LiRo Team

A. With offices in the tri-state area and combined resources of over 1,100 employees, The LiRo Team exceeds the requirements outlined in this request for proposal for the Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014. LiRo's New York and New Jersey Offices include:

Corporate Headquarters
LiRo Engineers, Inc.
LiRo Program & Construction Management, P.C.
3 Aerial Way
Syosset, New York 11791
Tel: 516-938-5476
Fax: 516-937-5421

Brooklyn Office
LiRo Engineers, Inc.
703 Lorimer Street
Brooklyn, NY 11211
Tel: 718-782-0267
Fax: 718-387-6754

New York City Office
LiRo Architects + Planners, P.C.
111 Broadway, Suite 501
New York, NY 10006
Tel: 212-563-0280
Fax: 212-563-1841

White Plains Office
LiRo Engineers, Inc.
202 Mamaroneck Avenue
White Plains, NY 10601
Tel: 914-285-0540
Fax: 914-285-0546

Queens Office
LiRo Program & Construction Management, P.C.
15-09 132nd Street
College Point, NY 11356
Tel: 718-445-5295
Fax: 718-445-5298

New Jersey Office
LiRo Architects & Engineers West, P.C.
20 Gibson Place, Suite 201
Freehold, NJ 07728
Tel: 732-409-6953
Fax: 732-409-6956

THE LIRO TEAM'S RESOURCES	
Licensed Engineers/Architects	120
Construction Managers	55
Inspectors	112
Resident Engineers/Asst. RE's	241

B. The LiRo Team's Certificates of Authorization to practice Professional Engineering in the states of New York and/or New Jersey are at the end of this section.

C. The LiRo Team's Construction Inspection staff are experienced in performing construction inspection services in the following disciplines: Civil, Structural, Electrical and Mechanical Engineering; and their respective certifications as required by this RFP are listed below. The total number of our team's licensed engineers/architects are demonstrated in the table of LiRo Team's Resources in Section A.

1. Engineer/Architects Licensed in New York and/or New Jersey (10 Minimum)	
Employee Name	**Employee Title**
1. James Ahrens, PE	Vice President
2. Michael Bailey, PE	Sr. Vice President
3. Gilbert Balog, AIA	Sr. Vice President
4. Michael Burton, PE	Sr. Vice President/National Operations Manager
5. Raymond Busch III, PE	Associate Vice President
6. Philip Camilleri, RA	Construction Manager
7. Jerrold Cohen, AIA	Vice President
8. James Pagano, PE	Resident Engineer
9. Nancy Silver, AIA	Architect/Sr. Project Manager
10. Richard Schmalz, PE	Vice President
11. Luis Tormenta, PE	CEO/Vice Chairman
12. Vikas Wagh, PE	Vice President
2. ACI Concrete Construction Special Inspectors (10 Minimum)	
1. John Eskridge	Inspector, Chief
2. Gajendran Ganesan, LEED AP	Engineer/Senior Inspector
3. Mekh Gurung	Inspector
4. Paul Lagrassa	Inspector
5. John Linnane, PE	Resident Engineer
6. Roger Lopez	Inspector
7. Giuseppe Mannino	Inspector
8. Sid Ramnarain	Inspector
9. Pankaj Raval	Inspector
10. Mohammad Shaikhji	Inspector
3. ICC Certified as Structural Steel and Bolting Inspectors (3 Minimum)	
1. Gajendran Ganesan, LEED AP	Engineer/Senior Inspector
2. Roy Goldman	Resident Engineer
3. Mekh Gurung	Inspector
4. Jonathan Hernandez	Office Engineer
5. Kyaw Maung	Inspector
4. NACE Level I Coatings Certified (1 Minimum)	
Employee Name	**Employee Title**
1. Robert Roy	Resident Engineer
2. Angelo Serelis	Inspector

NEW YORK STATE EDUCATION DEPARTMENT

EACH CORPORATION LAWFULLY PRACTICING THE PROFESSION INDICATED HEREON MUST CONSPICUOUSLY DISPLAY THIS CERTIFICATE IN ITS PRINCIPAL OFFICE AT ALL TIMES AS AUTHORITY TO PRACTICE DURING THE CURRENT PERIOD
(In the event of a change of address return this certificate for correction)

THIS IS TO CERTIFY THAT

LIRO ENGINEERS INC
ATTN DONALD J RASSIGER
3 AERIAL WAY
SYOSSET NY 11791-0000

HAVING MET THE STATUTORY REQUIREMENTS OF THE STATE OF NEW YORK IS REGISTERED FOR THE PRACTICE OF PROFESSIONAL ENGINEERING

Triennium Ends: October 31, 2012

Serial No. [redacted]

Signature of Chief Executive Officier

PRESIDENT OF THE UNIVERSITY
AND INTERIM COMMISSIONER OF EDUCATION

Read instructions on reverse side

State of New Jersey

Division of Consumer Affairs

State Board of Professional Engineers and Land Surveyors

THIS CERTIFIES THAT

LIRO ENGINEERS, INC.
3 AERIAL WAY
Syosset NY 11791

Has met the requirements of the State Board of Professional Engineers and Land Surveyors and is hereby issued a

CERTIFICATE OF AUTHORIZATION

to offer the following services

Engineering&Building Design Service	08/16/2010	08/31/2012

Person in Responsible Charge JOHN P LEKSTUTIS

For the names of other Responsible Charge Licensees, go to: http://www.njconsumeraffairs.com/pels/certrpt.pdf

Date: August 19, 2010
Certificate No. 24GA28070100
Expiration Date: 08/31/2012

Arthur Russo

Executive Director

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Anthony Shorris
Executive Director

Certified

by

Small Business Programs

Tristate Aviation

d/b/a DY Consultants

Certificate PA-700

This certificate acknowledges that the above named firm is certified as a **Small Business Enterprise (Architectural and Engineering Program).** This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions. Please reference the above number on all correspondence directed to this office.

Lash Green
General Manager
Certified: January 12, 2007

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: January 11, 2012

Form: 6/10/93

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Anthony Shorris
Executive Director

Certified

by

Small Business Programs

Tristate Aviation

d/b/a DY Consultants

Certificate PA-700

This certificate acknowledges that the above named firm is certified as a **Minority-owned Business Enterprise.** This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
General Manager
Certified: January 12, 2007

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: January 11, 2012

Form: 6/10/93

THE PORT AUTHORITY OF NY & NJ

VIA E-MAIL

May 11, 2010

Mr. Dennis Yap, P.E.
President
Tristate Aviation, Inc.
D/B/A DY Consultants
One Expressway Plaza, Suite 208
Roslyn Heights, NY 11577

Dear Mr. Yap:

This letter confirms that the Office of Business & Job Opportunity received your DBE recertification package on February 19, 2010 for review. However, because of the overwhelming demand for certification we are experiencing delays in processing applications.

For the status of your file you may contact us at either (212) 435-7808 or *cwallace@panynj.gov*. If more information is needed to help us with the review someone will be in touch with you. Otherwise, we will notify you of our final decision. All communication will be in writing.

On September 29, 2006 Tristate Aviation, Inc. was DBE approved and will remain certified until we complete our review and make a determination.

Sincerely,

Cedric O. Wallace

for Rosemary Jenkins-Varela
Manager, Certification Unit
Office of Business & Job Opportunity

233 Park Avenue South
New York, NY 10003
T: 212 435 7000

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

HIRANI ENGINEERING AND LAND SURVEYING PC
30 JERICHO EXECUTIVE PLAZA
SUITE 200C
JERICHO, NY 11753-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0006452

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
1784

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

HIRANI ENGINEERING AND LAND SURVEYING PC
30 JERICHO EXECUTIVE PLAZA
SUITE 200C
JERICHO, NY 11753-0000

TO PROVIDE LAND SURVEYING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 07/01/2008 TO 06/30/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0005582

RICHARD P MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

Empire State Development

March 11, 2009

File #45674

Mr. Jitendra S. Hirani, President
Hirani Engineering and Land Surveying
30 Jerichi Executive Plaza, Suite 20
Jericho, NY 11753

Dear Mr. Hirani,

On behalf of New York State Department of Economic Development, Division of Minority and Women's Business Development (DMWBD) has completed its review of your verification form for State Certification as Minority Business Enterprise has determined that your firm continues to meet eligibility requirements for certification, pursuant to Executive Law, Article 15-A.

We are pleased to inform you that the firm of **Hirani Engineering and Land Surveying** will continue to be granted status as a **Minority-Owned Business Enterprise.** Your business will continue to be listed in the State's Directory of Certified Businesses. Certification status is not intended to imply that the State of New York guarantees your company's capability to perform on state contracts, nor does it imply that your company is guaranteed any State business.

Be advised that your certification expires **3 years from the date of this letter** or unless you are contacted by this office for Verification or Recertification. Please remember that any changes in your company that affect ownership, managerial and/or operational control, must be reported to this Office within thirty (30) days of such changes: including changes to company name, business address, telephone numbers, principal products/services, and bonding capacity. At such time as it is necessary for your company to be recertified, you will be notified by this office.

If your certification is questioned by any public or private entity, please direct the inquiry to this office for clarification.

Thank you for your cooperation. On behalf of the State of New York, I wish you luck in your business endeavors, particularly those involving State agencies.

Sincerely,

Scott Munson
Associate Certification Analyst

Cc: Fran Genovesi
Veena Bathija

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

KS ENGINEERS PC
494 BROAD STREET
4TH FLOOR
NEWARK, NJ 07102-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 03/01/2009 TO 02/29/2012.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0006453

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

THE PORT AUTHORITY OF NY & NJ

March 15, 2010

Mr. Kamal Shahid
President
KS Engieers, P.C.
494 Broad Street, 4th Floor
Newark, NJ 07102

RE: **MINORITY-OWNED BUSINESS ENTERPRISE CERTIFICATION**
TYPE: **ARCHITECTUAL & ENGINEERING**

Dear Mr. Shahid:

We have completed our review of your qualifications for certification as a **Minority-owned Business Enterprise (MBE)**, and we are pleased to inform you that your application has been approved. The references you submitted for **KS Engieers, P.C.** have been reviewed and are satisfactory. Your firm has been included on our roster of eligible **MBEs** for contracts with the Port Authority of New York and New Jersey.

Please be advised that the Port Authority's Office of Business & Job Opportunity periodically reviews all certifications and reserves the right to decertify any previously certified firm that no longer meets the Port Authority's guidelines for **MBE** designation.

Additionally, any **MBE** whose business incurs changes in any substantial manner must notify the Office of Business & Job Opportunity within thirty days of that change. These changes include, but are not limited to, a change of officers, directors, location, corporate name, or financial condition. Failure to advise of these changes may result in our removing the firm from our roster of eligible **MBEs**. If you have any questions regarding your certification, please feel free to call Weicong Mao at (212) 435-7816.

Sincerely,

Lash Green
Director
Office of Business & Job Opportunity

LG/LG

Enclosure: Certificate
Registration Notice

233 Park Avenue South
New York, NY 10003
T: 212 435 7000

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

by

Office of Business & Job Opportunity

KS Engineers, P.C.

Certificate PA-20373

This certificate acknowledges that the above named firm is certified as a **Minority-owned Business Enterprise.** This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10,1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: 3/15/2010

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: 3/14/2015

Form: 6/10/93

New York City Department of Small Business Services

Division of Economic and Financial Opportunity

MBE CERTIFICATE

PMA Consultants LLC

This certificate acknowledges that this company has met the criteria as established by the M/WBE Program at the New York City Department of Small Business Services and therefore is certified as a Minority-owned Business Enterprise (MBE).

Certificate Number: 50166 - 72007

Expires on: 6/30/2012

Michael R. Bloomberg, Mayor

Robert W. Walsh, Commissioner

Alfred O. Milton, Associate Director Certification

RMJ-10/04

JON S. CORZINE
Governor

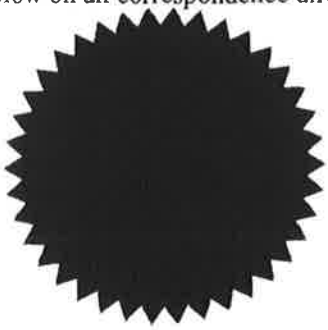
KEVIN J. DRENNAN
Executive Director

CERTIFIED

by the
NEW JERSEY COMMERCE COMMISSION
OFFICE OF BUSINESS SERVICES
under the
Small Business Set-Aside Act
and
Women and Minority Certification Program

This certificate acknowledges **PMA CONSULTANTS LLC** is a **MBE** owned and controlled company, which has met the criteria established by New Jersey N.J.A.C.12A:11-1.1 et.seq.

This certification will remain in effect for one year from this date of this notice. Not more than 20 days before or 10 days after the expiration of this initial certification notice you must submit an **Annual Verfication Statement** attesting that the ownership and control of the business, on which this certification is granted, has not changed. This office must be notified within 20 days of any material changes in the business which affect ownership and control. **Failure to do so will result in an immediate revocation of this certification and/or imposition of other sanctions.** You will not be required to submit another Unifed Certification Application for a period of 5 years. Please reference the certification number below on all correspondence directed to this office.



Donald Newman
Senior Manager

Certificate Number: 43465-22

Issued: August 27 2008

Expiration: August 26, 2013

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Kenneth J. Ringler, Jr.
Executive Director

Certified

by

Small Business Programs

PMA Consultants LLC

Certificate PA-20749

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
General Manager
Certified: September 7, 2005

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: September 6, 2010

Form: 6/10/93

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

SYSTRA ENGINEERING INC
150 CLOVE ROAD
7TH FLOOR
LITTLE FALLS, NJ 07424-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2009 TO 12/31/2011.

FRANK MUNOZ
ASSOCIATE COMMISSIONER
OFFICE OF THE PROFESSIONS

CERTIFICATE NUMBER
0006320

RICHARD P. MILLS
PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

State of New Jersey

Division of Consumer Affairs

State Board of Professional Engineers and Land Surveyors

THIS CERTIFIES THAT

SYSTRA CONSULTING, INC.
150 CLOVE ROAD, 7TH FL.
Little Falls NJ 07424

Has met the requirements of the State Board of Professional Engineers and Land Surveyors and is hereby issued a

CERTIFICATE OF AUTHORIZATION

to offer the following services

Engineering 09/01/2010 08/31/2012

Person in Responsible Charge Joseph Bonsignore

For the names of other Responsible Charge Licensees, go to: http://www.njconsumeraffairs.com/pels/certrpt.pdf

Date: September 22, 2010
Certificate No. 24GA28050700
Expiration Date: 08/31/2012

Arthur Russo

Executive Director

Empire State Development

March 30, 2009

File ID #:11773

DEBRA INWALD
A1 WORKS-IN-PROGRESS ASSOCIATES LLC
33 RECTOR STREET 14TH FLOOR
NEW YORK, NY 10006

Dear DEBRA INWALD:

On behalf of New York State Department of Economic Development, Division of Minority and Women's Business Development (DMWBD) has completed its review of your verification form for State Certification as a Woman-Owned Business Enterprise and has determined that your firm continues to meet eligibility requirements for certification, pursuant to Executive Law, Article 15-A..

We are pleased to inform you that the firm of A1 WORKS-IN-PROGRESS ASSOCIATES LLC will continue to be granted status as a Woman-Owned Business Enterprise. Your business will continue to be listed in the State's Directory of Certified Businesses. Certification status is not intended to imply that the State of New York guarantees your company's capability to perform on state contracts, nor does it imply that your company is guaranteed any State business.

Be advised that your certification expires 3 years from the date of this letter or unless you are contacted by this Office for verification or recertification. Please remember that any changes in your company that affect ownership, managerial and/or operational control, must be reported to this Office within thirty (30) days of such changes; including changes to company name, business address, telephone numbers, principal products/services, and bonding capacity. At such time as it is necessary for your company to be recertified, you will be notified by this office.

If your certification is questioned by any public or private entity, please direct the inquiry to this Office for clarification.

Thank you for your cooperation. On behalf of the State of New York, I wish you luck in your business endeavors, particularly those involving State agencies.

Sincerely,

Michael H. Jones-Bey
Director

Cc: Fran Genovesi

New York City Department of Small Business Services

Division of Economic and Financial Opportunity

[redacted]

A 1 Works in Progress Associates, LLC

d/b/a 'Works In Progress Associates

This certificate acknowledges that this company has met the criteria as established by the M/WBE Program at the New York City Department of Small Business Services and therefore is certified as a Woman-owned Business Enterprise (WBE).

Certificate Number: 22333 - 122008

Expires on: 12/31/2013

Michael R. Bloomberg, Mayor

Robert W. Walsh, Commissioner

Alfred O. Milton, Associate Director Certification

RMJ-2/05

MULTIPLIER & COST ANALYSIS

Multiplier

Provided herein, is the multiplier for the LiRo Team, including all of its components as requested in the Submission Requirements of the RFP. Please note that the entire LiRo Team will be utilizing the same multiplier.

LiRo Engineers, Inc.'s Team multiplier is **2.02.**

Multiplier Components:	
Direct Project Payroll	1.00
Overhead & Payroll Burden	
- Vacation & Sick Pay	0.09
- Holiday Pay	0.06
- Payroll Taxes	0.10
- Employee Fringe Benefits	0.09
- Workers' Compensation	0.01
- Indirect & Adm. Salaries	0.30
- Legal, Acct'g & Consultants	0.04
- Rent & Utilities	0.03
- Cleaning & Maintenance	0.01
- Office Supplies & Service	0.01
- Telephone	0.01
- Auto & Travel	0.03
- Professional Development	0.01
- Professional Liability Insurance	0.01
- Other Insurance	0.02
- Equip. Rental & Field Supplies	0.01
- Business Taxes	0.01
- Depreciation & Amortization	0.02
Total Overhead	0.87
Overhead + Direct Project Labor	1.87
Profit	0.15

TOTAL MULTIPLIER: 2.02

Cost Analysis

Our Team's Cost Analysis / Billing Rate Schedule for this 'Call-In' Assignment is included in the following pages. This Rate Schedule shows the billing rates of all the available proposed team members, including job titles for architectural, engineering and other technical personnel who may be assigned to the anticipated tasks.

Performance of Expert Professional Construction Management Services on a "Call-In" Basis During 2011- 2014

LiRo Engineers, Inc.
A LiRo Group Company

THE PORT AUTHORITY
OF NEW YORK & NEW JERSEY

Principal-In Charge
Luis Tormenta, P.E.*

Project/Contract Manager
Michael Burton, P.E.*

Additional Resources

G. Balog, A.I.A.*
M. Beck
E. Bifulco, P.E.
T. Bourque
R. Della Ratta, Jr.
L. DePrima, P.E.
A. Frangas
T. Gibbons, Jr., R.L.A.
H. Goldman
O. Gomez, E.I.T.
C. Guardia, Jr., P.E.*
P. Hawkins
K. Holmstrom, P.E.*
P. LaGrassa[1]
R. Lorusso
S. Patane
J. Petrie*
E. Pollack
J. Proios
H. Rahemi
J. Rotella
N. Silver, A.I.A.*
M. Singh
R. Soldano
E. Strada
E. Tancredi
R. Wilson, P.E.
C. Zanoni
Systra USA Subconsultants

Contract Administrators

P. Argiro
M. Asquith
A. Bevers
R. Bryson
C. Cafarelli*
A. Campagna
E. Frangas
G. Koehler
J. Massa
PMA Subconsultants

Schedulers

D. Bradley
M. Elie-Pierre
M. Iannuzzi, E.I.T.
P. Kalmus
G. Psillos
PMA Subconsultants

Cost Estimators

R. Barsky
W. Curran
E. Frysztacki, CCE, P.E.
G. Gifford
G. Graceffa
K. Mattera
A. Paladino, P.E.
PMA Subconsultants
Systra USA Subconsultants

Resident Engineers

A. Achouri, P.E.
C. Avino
M. Belling, P.E.
M. Bendetti, P.E.
Larry Blond, P.E.
M.Bonasia, E.I.T.
D. Bornkamp, Jr. P.E.
A. Caggiano
V. Chirilla
J. Cohen, A.I.A.
T. Colabella
L. Comunelli
S. Connena
R. Cuming, P.E.
N. Cusumano
A. Dolce, R.A.
J. Eckhoff
J. Eskridge[1]
J. Fox, E.I.T.
F. Franco, R.A.
R. Goldman, P.E.[4]
D. Hall
D. Haritonides, P.E.
J. Hendrickson, P.E.
A. Krebs-Fogel
J. Linnane, P.E. [1]
M. Mascaro
J. Newnom
M. Piccirillo
B. Radafshar, E.I.T.
R. Salimeni
E. Sartoris
A. Shaw, P.E., PLS
P. Singh
R. Tilelli
M. Vatovec
L. Venechanos
W. Wall
G. Williams
Hirani Subconsultants
PMA Subconsultants
Systra USA Subconsultants

Construction Inspectors

J. Albergo
M. Byrnes, C.I.H.
J. Calpin*
R. Calvert
J. Capone
R. Cich
J. Dawson
A. Elias[1]
B. Fogel
G. Ganesan[2]
T. Gargano*
J. Gaspari, E.I.T.
R. Gebhardt
C. Giuseppone[4]
M. Gurung[2]
D. Heins
J. Hernandez[4]
L. James
J. Khachmanian
J. Kiel
J. Kobetitsch
T. Kowalski
R. Lopez[1]
P. Madhusudan
G. Mannino[1,*]
K. Maung[4]
A. Mosser
V. Mutarelli
G. Nestoros
M. Olk
T. Pollack
S. Ramnarain[1]
C. Randall
P. Raval[1]
D. Riccio
R. Roy[3]
C. Russo
J. Russo
G. Sanchez
D. Santos
A. Serelis[3,*]
M. Shaikhji[1]
C. Tomlinson
M. Trotta*
D. Vena
E. Yeates
P. Zinger
PMA Subconsultants
Hirani Subconsultants
KS Subconsultants
WPA Subconsultants
DY Subconsultants

Project Managers

J. Ahrens, P.E.*
M. Bailey, P.E.
T. Bowers, P.E.
R. Busch, III, P.E.
P. Camilleri, P.E.
D. Owen, P.E.
J. Pagano, P.E.*
P. Salerno, P.E.
R. Schmalz, P.E.*
V. Valdemira
C. Villa, P.E.
V. Wagh, P.E.

New York/New Jersey Construction Management Resources

Resident/Assistant Resident Engineers	241
Inspectors	112
Construction Managers	55
Project Managers/Engineers/Architects/ Environmental/Other Specialists	96
Contract Administrators	30
Schedulers	26
Cost Estimators	15

[1]ACI Certification
[2]ACI&ICC
[3]NACE
[4]ICC
*PA Experience

LiRo Engineers, Inc.
DY Consultants
PMA Consultants, LLC
Hirani Eng. & Land Surveyors
Systra USA Engineers
KS Engineers
Works-In-Progress Associates, LLC

LIRO KEY PERSONNEL

Luis Tormenta, P.E.

PROJECT EXECUTIVE

EDUCATION	B.S., Civil Engineering, Manhattan College, 1982
REGISTRATION / CERTIFICATIONS	Board Member - ACE Mentor Program Professional Engineer, NY Chi Epsilon (Civil Engineer Honor Society) Professional Engineer, NY
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	20

A highly accomplished leader in the region's design and construction industry, Mr. Tormenta has over 30 years experience and has lead many of New York City's complex construction projects and the administration of several public capital programs. The founding Commissioner of the New York City Department of Design and Construction (DDC), Mr. Tormenta was appointed by Mayor Rudolph W. Giuliani to create and manage the "super construction agency." As Commissioner of DDC, he was responsible for New York City's building and infrastructure capital improvement program valued at $4B.

As LiRo's current CEO, Mr. Tormenta is responsible for the overall strategic direction and management of The LiRo Group, with a focus on maintaining high quality service standards while increasing market share and expanding services regionally. Mr. Tormenta prides himself as a skilled hands-on manager and, on selective projects, is directly involved in the management and oversight of LiRo's work. He has led many successful CM project teams responsible for large-scale, high-profile and emergency public projects. His knowledge of the New York Metropolitan design and construction market has been invaluable to many of LiRo's clients.

With more than 23 years of experience managing a diverse range of public facility and infrastructure projects, Mr. Tormenta shares his knowledge teaching graduate level construction management for the Executive 21 Graduate Program at Brooklyn Polytechnic Institute as an adjunct professor. Representative projects include:

PANYNJ CM Call-In Contract 2006-2010, Project Executive: Oversight responsibilities for various projects under this call-in contract. Significant projects under this contract included Terminal 5 at JFK Airport, an elevated connector to the AirTrain, and a new 1500 space, 6-level parking garage. The project also involves the construction of an elevated Arrivals Roadway, new Hydrant Fuel System, Baggage Handling System, 15"-17" concrete apron pavement, and connection to the historic Saarinen Terminal. (PANYNJ, $900M, 2007-2009)

Lower Manhattan Infrastructure Recovery Coordinator, Project Executive: After the events of 9/11 in New York City, LiRo was assigned to the coordination of the extensive amount of electric, telecommunications, steam, gas and subway work that was being performed 24/7 in the vicinity of the WTC. LiRo's responsibility had been expanded since July 2002 to include the coordination of all infrastructure work in Manhattan below Canal Street. LiRo coordinated construction activities in the region with all utilities, public agencies and private owners. (NYCDDC)

New York City Housing Authority, Project Executive: This project was a $265M construction program to rehabilitate and construct new facilities in the New York City region. All construction contracts were bid and negotiated by LiRo. (2004-present)

New York City Department of Design and Construction, Project Executive: $500 million dollars of construction work where construction contracts were directly held by LiRo:

- GRVC Jail Addition ($110M)
- NYC Fire Training Academy ($55M)
- EMS Station Program ($75M)

- Yankee and Shea Stadium Reconstruction ($15M)
- Transportation Facilities ($15M)
  (2000-Present)

Dormitory Authority State of New York, Project Executive: $150M in construction projects including:

- City College of Architecture ($55M)
- Office of Chief Medical Examiner ($15M)
- Bernard Fineson Hospital ($50M)
  (2000 - Present)
- NYS Civil Court ($22M)
- Bronx Psychiatric Center ($50M)

Broadway Street Improvement Project, Project Executive: This project was a $10M reconstruction and beautification of Broadway from Park Place to Water Street. (Alliance for Downtown New York, 2003-2005)

Commissioner, NYC Department of Design and Construction (DDC): Mr. Tormenta was appointed by Mayor Rudolph W. Giuliani to create and manage the "super construction agency" with an annual operating budget of over $86M and a capital budget in excess of $3B, representing over 1,200 projects and 1,400 employees. He was charged with the delivery of New York City's buildings and infrastructure capital programs, including facilities for city government and public functions, roadways, sewers, water mains and schools. He was also responsible for developing the organizational structure and operating methodology for the agency. Some key achievements included:

- Integrated the design and construction operations of three independent agencies into a cohesive operating organization – DGS, DEP, and DOT.
- Reduced project delivery time frames and increased annual productivity.
- Automated the majority of the business practices and established a computerized project management and geographical information system.
- Created a comprehensive training program for agency staff.
- Instituted agency performance measurement standards.
- Established and nurtured a client service philosophy.
- Implemented new project delivery system focused on schedule, quality and budget.

Assistant Commissioner, NYC Department of General Services: Mr. Tormenta was responsible for managing the Bureau of Construction and Program Management with a capital portfolio of over 700 projects valued in excess of $2.7B, an annual operating budget over $25M, and a staff of 300+. Some key achievements included recasting the Division into a program management client service organization and reducing project backlog through "bundling," Design/Build and CM/Build project delivery methods.

Employment History:

The LiRo Group (2000 to Present)
Chief Executive Officer/ Vice Chairman
New York City Department of Design and Construction (1995-1999)
Commissioner
New York City Department of General Services (1992-1995)
Assistant Commissioner

Michael Burton, P.E.

PROGRAM/PROJECT CONTRACT MANAGER

Mr. Burton is a recognized industry leader who has managed some of the nation's largest public and private capital program portfolios. He has served as Senior Vice President and National Operations Manager responsible for $100B of design and construction work in aviation, bridge, highway, transit and infrastructure programs. As Executive Deputy Commissioner at the NYC Department of Design and Construction (DDC), he was responsible for the capital programs for the majority of New York City's agencies. At DDC, Mr. Burton was responsible for a capital construction portfolio of $4.1B, consisting of over 900 buildings, roadway, water and sewer mains projects managed by 1,300 employees spanning the Giuliani and Bloomberg administrations. One of his significant public sector accomplishments was his management of the World Trade Center 9/11 Recovery, the largest peacetime mobilization of the design and construction industries in U.S. history, for which he received the Engineering News-Record's Award of Excellence, the industry's highest award.

EDUCATION	Ph.D., honoris causa, Manhattan College, M.B.A., Fordham University BE, Manhattan College
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	2
YEARS WITH OTHER FIRMS	19

His New York City project portfolio totals approximately $6.2B in the following sectors:

- Infrastructure $10B
- Dept. of Environmental Protection (Sewers) $995M
- Transportation/Highways $1.5B
- Education $954M
- Underground Storage Tanks $174M
- Transit $6.5B

Senior Vice President and National Operations Manager, The LiRo Group (2009 to present): Responsible for high-profile projects on East Coast and West Coast including serving as *Senior Management Consultant* to Los Angeles Unified School District's $12B K-12 Capital Program, and *Project Executive* for CUNY Baruch College's $170M Field Building renovation and Southern Connecticut University's new $50M Laboratory Building.

Senior Vice President and CM/PM National Operations Manager (2002 to 2008): Responsible for the operations of a national 1,400-person construction division with a portfolio valued at more than $100B of design and construction projects. Additionally, Mr. Burton managed the firm's New York engineering and architectural operations. Significant projects include: Atlanta-Hartsfield Airport ($6.7B), Logan International Airport($1B), Fort Lauderdale Airport ($1.5B), TransBay Transit Center ($4.1B), East Side Access ($6.5B), Bay St. Louis Bridge ($267M), Biloxi Bay Bridge ($338M), Harvard University Laboratory ($1B), and McGill University Health Center ($1.8B).

Executive Deputy Commissioner, New York City Department of Design and Construction: Responsible for the day-to-day operations of agency that designs and builds the majority of New York City's public buildings, roads, water and sewer projects with annual budget exceeding $1.1B in 2002. Managed a staff of 1,300 design and construction professionals who executed a portfolio of design and construction projects valued at over $4.1B. Planned and implemented initiatives to execute Mayor Giuliani's mandate to create a more efficient capital construction program. Acted as project executive and on-site project manager for several high-profile emergency projects, including management of the World Trade Center Recovery, starting on 9/11 ($550M). Other significant projects include: Mayor/City Council Schools Program ($644M), Rikers Island Facilities ($420M) and Safe Streets Program ($177M).

Infrastructure accomplishments resulted in 2,708 lane miles milled, 537 lane miles of roadway, 638 miles of water mains, 440 miles of reconstructed sewers, and 8,500 new sewer connections ($1.6B).

Projects (Selected)

Notable New York City Projects:

· Columbia University Capital Program, $1.4B
· Mayor/Council Schools Program, $750M
· Rikers Island New Buildings & Fire/Life Safety Upgrades, $320M

Aviation Projects:

· Hartsfield-Jackson Atlanta Int'l Airport, $6.7B
· Fort Lauderdale Airport, $1.5B
· Logan International Airport, $1B
· O'Hare International Airport, $495M
· Baton Rouge Airport, $205M

Bridges/Roadway Projects:

· Biloxi Bay Bridge, $338M
· Bay St. Louis Bridge, $267M
· Robert Moses Causeway, $38M

Rail/Port Projects:

· TransBay Transit Center, $4.1B
· NJ Transit East End Concourse, $110M
· Port Imperial Ferry Terminal, $35M
· NYC Transit 74th Street/Roosevelt Avenue Station, $115M

World Trade Center: World Trade Center 9/11 Recovery, $550M

Awards

Engineering News-Record - Award of Excellence
New York Building Congress - George A. Fox Award for Public Service
American Council of Engineering Companies (ACEC) - President's Award
American Society of Civil Engineers - Construction Management Award

Boards/Memberships

Member of Mayor Bloomberg's Construction Cost Panel
Board of Directors, NY Building Congress 2003 - 2008
Chairman, Public Buildings Committee, NY Building Congress, 2003 - 2007
Chairman, Infrastructure Committee, NY Building Congress, 2007 - 2008

Media Recognition

CNN, Public Broadcasting Service (PBS), The New York Times, Engineering News-Record, New York Construction Magazine, Atlantic Monthly, Great Projects Film Company, *American Ground: Unbuilding the World Trade Center* by William Langewiesche

James J. Ahrens, P.E.
PROJECT MANAGER

Mr. Ahrens has been providing ***Engineering Design and Construction Management*** Services for over 35 years. He is currently Vice President in the Construction Management Division of the firm involved in providing CM Services and Resident Engineering support. His diverse responsibilities include Project Management for both ***new building construction and renovation projects***. Mr. Ahrens has been Project Manager and Resident Engineer for a wide variety of civil/structural projects related to municipal buildings, community centers; highways, roadways, and bridges; sewer and water main replacement; pump stations; airport terminals; parking garage; pipelines and petroleum storage tanks; power generation plants; golf courses; high rise building and other various types of facilities.

EDUCATION	Graduate Studies, Polytechnic Institute of New York B.C.E., Structural Engineering, Villanova University
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Past President NYSSPE, Nassau Chapter 2001-2003 NYC Site Safety Manager Certification OSHA Safety and Health Training - 30-hour 29 CFR/OSHA Safety OSHA 10 Hour Safety Course
YEARS WITH THIS FIRM	22
YEARS WITH OTHER FIRMS	17

Mr. Ahrens has also been involved in coordination of ***OSHA Safety seminars*** related to construction industry standards, and lead abatement for LiRo personnel. He is also certified as a ***NYC Site Safety Manager*** and is well versed in the safety requirements of the NYC Building Code, specifically Article 19 related to the protection of the public and property. His ***commitment to quality construction management and site safety*** is just one of the reasons that LiRo has maintained a solid reputation over the years with our clients.

Representative Projects:

Construction of North Hempstead Community Center, Westbury, NY, Project Manager – This $24 million Platinum LEED project involves Construction Management and Resident Engineering Inspection for a new 60,000 sf Community Center. The project includes a gymnasium/auditorium with performance stage, a computer lounge, computer training center, teen space, senior center, café, reading room, multi-purpose community rooms, fitness center, dance studio, emergency management center, television studio, and administration space. It also incorporates a Geothermal Closed-Loop System for heating and cooling, solar wall for hot water heat, and light wells for sub-grade illumination. The building will include an Energy Performance Monitoring System and electric vehicle recharging stations. (Town of North Hempstead, $24m, 2010-2012)

Construction of JetBlue Airlines Terminal 5 & Parking Garage at JFK Airport, Resident Engineer - Project involves resident engineering and quality assurance oversight for a 625,000 sf passenger terminal building with 26 gates, an elevated connector to the AirTrain, and a new 1500 space, 6-level parking garage. The project also involves the construction of an elevated Arrivals Roadway, new Hydrant Fuel System, Baggage Handling System, 15"-17" concrete apron pavement, and connection to the historic Saarinen Terminal. (PANYNJ, $900m, 2007-2009)

Renovation of MTA/NYCT Bus Depots, Queens and Bronx, Project Manager – These projects involve the renovation of roofing and ventilation systems at 2 NYCT Bus Depots. In addition, the Queens Bus Depot also requires the raising/jacking of over 16,000 sf of roof to provide additional clearance for bus maintenance operations. The major challenge associated with these projects is to perform the renovations in facilities the operate 24 hours a day/ 7 days a week. Construction costs are approximately $4m and $7m. (MTA/NYCT, 2010-present)

Improvements to Yankee Stadium and Shea Stadium, Site Safety Manager- Project involves multiple contracts related to structural improvements to concrete walls throughout both stadiums, escalator repairs and rehabilitation, HVAC upgrades, cooling tower support modifications, parking garage structural repairs and fire

sprinkler upgrades, stairway replacement in Parking Garages 3 & 8 at Yankee Stadium, and painting of steel superstructure. (NYCDDC, 2006)

Modernization of the Oceanside/Bayside Apartments, Far Rockaway, Site Safety Manager, 11/2005 to Present - This project involved the upgrade and improvements to over 30 high-rise apartment buildings. Work included façade rehabilitation, parapet wall reconstruction, electrical distribution improvements, construction of new Day Care Center, and renovation of Senior Citizens Center. (NYCHA, $50M, 2006-2007)

Improvements to the MacArthur Resource Recovery Facility, Project Manager, 4/2003 to 1/2006 - Construction management and engineering support services related to the $15 million Plant Upgrade Project at the MacArthur Resource Recovery Facility to comply with the new USEPA Emissions Guidelines. Work included installation of new scrubbers, construction of Lime Prep Building, Compressor Building, Electrical Distribution Building, and all associated equipment and appurtenances within these structures. Work also included replacement of the Forced Draft Fans, Induced Draft Fans, and Reverse Air Fans. New phase includes roadway design for access to plant back end. (Islip Resource Recovery Agency, 2003-2006)

Rehabilitation of the Central Heating Plant, Grasslands Reservation, Valhalla, Quality Assurance Engineer - This project involved the upgrade of boilers which heat the offices, courthouses and prison, as well as the construction of a new steel framed building addition to house them. This multi-prime contract also involved asbestos removal in connection with steam pipes and installation of those pipes, all within the prison. (Westchester DPW)

Reconstruction of Taconic State Parkway Phase IV, Westchester, NY, Project Director - This project involved the construction of two concrete arch bridges over the Parkway and Route 9A. Approximately 1.2 miles of road was widened and realigned. Drainage and safety improvements were also performed. (NYSDOT, $12M, EIC: J. Lambertini, 1994-1996)

Reconstruction of Van Wyck Expressway and Four Bridges of the Long Island Expressway, Queens, NY, Project Manager - Full and partial depth repairs were made with calcium concrete. The roadway was overlayed with a HD asphalt wearing course. The rehabilitation of four steel bridges over the Long Island Expressway. All bearings were replaced. Repairs were made to the piers, abutments, girders, and stringers. A new deck was then overlayed. All work was done at night. This was Region 11 first A & B contract. (NYSDOT, $15M, EIC: Robert Carbone, 1994-1995)

Reconstruction of Jericho Turnpike (Route 25), Syosset, NY, Project Manager - This project involved the widening and realignment of three miles of Route 25, from Route 106/107 to Route 135. The existing pavement required full and partial depth repairs. Eight large concrete retaining walls were constructed. The highlight of the project was the replacement of an active Long Island Rail Road Bridge. A new 180-foot long, 800-ton bridge was constructed alongside the existing bridge. In one weekend, the existing bridge was demolished and the new bridge was rolled in place. Extensive CPM scheduling was required. (NYSDOT, $35M, EIC: Byron Alford, P.E., 1993-1995)

Hazen Street Combined Sewers, Project Manager - This project involved construction of sewer overflow, reconstruction of streets, reconstruction of public park including four baseball fields, installation of water mains, and utility relocation. (NYCDEP, $14M)

Long Island Expressway HOV Lane Exits 49-57, Project Manager - All bridges were widened, drainage was improved, and the roadway was realigned. This project also involved INFORM system tie-ins, pavement construction and striping, night/weekend work, traffic maintenance and protection. (NYSDOT, $23M)

Painting of 67 bridges in Nassau and Suffolk Counties, NY, Project Manager - This project involved Class A containment, lead exposure regulations, and maintenance and protection of traffic. Many of these bridges are under the Long Island Expressway. (NYSDOT, $8M)

Michael Bailey, P.E.
PROJECT MANAGER

Mr. Bailey has over 20 years of experience managing infrastructure and building projects. He holds a BS in Civil Engineering from Lehigh University and presently manages LiRo's Resident Engineering Inspection group. He is responsible for all of the firm's roadway, bridge, rail and utility projects. In addition, he has managed large building and MEP projects for selected clients. Mr. Bailey has managed projects valued up to $2.5B in construction. He has also developed one of the region's most successful "on-call" construction management groups.

In addition to the management of the REI division, he is responsible for proposal preparation and resource allocation within his division. A testament to his management capabilities can be seen in the number of repeat contracts he has generated in the past fifteen years. Prior to joining LiRo, Mr. Bailey served as a design engineer, resident engineer and construction superintendent where he was responsible for bridge designs, storm/sanitary sewer and water distribution system designs, highway/ roadway designs, as well as several large development site plans. Highlights of award-winning projects in which Mr. Bailey serves or has served as Project Executive or Project Manager include:

EDUCATION	B.S.C.E., Civil Engineering, Lehigh University, 1984
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA Safety Trained Confined Space Entry Certification Troubleshooting Exterior Masonry Walls Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Brick Masonry-Inspections and Quality Control Certification, NY
YEARS WITH THIS FIRM	20
YEARS WITH OTHER FIRMS	6

- Triborough Bridge Deck Replacement on the Wards and Randall's Island Viaduct (TB-64B) Project Manager. (MTA-TBTA, $272M)
- Triborough Bridge Redecking and Cabling (TB-64A), Project Manager. (MTA -TBTA, $150M)
- Queens Midtown Tunnel - Construction Administration and Inspection Services for the Rehabilitation of the Roadway Drainage System (QM-10), Project Manager. (MTA -TBTA, $6M)
- High Line Reconstruction, New York, NY, Project Executive (NYCEDC, $125M)

On-Call Construction Management Services, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Project Manager - This project involved on-call construction management and associated services at various TBTA facilities throughout New York City. Specific projects included roadway paving at various facilities, vent and damper replacement at Brooklyn Battery Tunnel, roadway paving at the Triborough Bridge, paint removal at various facilities, cable oiling at the Verrazano Bridge. ($20M)

On-Call Construction Management Services, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Project Manager - This project involved on-call construction management and associated services at various TBTA facilities throughout New York City. (TBTA, $10M) Specific projects included:

- Reconstruction of exit ramp and new potable water system on the Henry Hudson Parkway
- E-Z Pass installation at the Henry Hudson Bridge Toll Plaza. Concrete spall removal inspection at the Henry Hudson Bridge
- Demolition of cinder bins at the Verrazano-Narrows Bridge
- Construction of salt storage facilities at the Verrazano-Narrows Bridge
- Steel inspection and replacement at the Throgs Neck Bridge
- Paint chip clean-up at the Triborough Bridge
- Roadway repairs at various facilities
- Installation of VMS systems at the Throgs Neck Bridge
- Netting installation at the Triborough Bridge

On-Call Construction Management and Associated Services, Long Island Rail Road, Project Manager - This multi-year, as-needed services contract required a wide array of personnel from inspectors to P.E.-licensed resident engineers. Mr. Bailey provided quality personnel to the LIRR for a variety of projects. He handled all coordination with the LIRR and managed LiRo corporate quality assurance for the project. Projects included in this on-call contract were:

- High Level Platforms, Package 1, $5M
- Scheduling for the Herricks Road Grade Crossing Elimination, $35M
- Construction of Simulator Facility at HMC, $4M
- High Level Platforms, Package 2, $3.1M
- Richmond Hill Car Wash Facility and Welfare Building, Electrical Inspection, $6M
- Modifications to Tank Systems and Wall Structures at Jamaica Station and Morris Park Yard, $3M
- Renovation of Nine Bridges on the Port Jefferson Branch, $4M
- High Level Platforms, Package 4, $4M
- Forest Hills Station Renovation, 4.7M
- Babylon Welfare Facility, $2M
- Speonk Diesel Yard, Resident Engineer, $7M
- Fleet Acceptance Truck, Project Engineer, $2M
- Bayside Station Renovation, Resident Engineer, $5M

NYSDOT, Region 11 Construction Inspection Term Agreement, Project Manager. This project involved Construction Inspection Services under a Term Agreement for various projects located in Region 11 (New York, Queens, Bronx, Kings and Richmond Counties). Services included Inspection of highway rehabilitation/reconstruction for asphalt and concrete paving including joints & surface preparation; drainage improvements or reconstruction; roadway lighting improvements or reinstallation; replacement & installation of signs & sign structure; maintenance or installation of safety appurtenances such as guide rails, median barrier, fencing etc.; maintenance or improvement of roadside landscaping; cleaning & filling pavement cracks and occasional roadway emergency work, highway resurfacing, crack sealing, intersection improvement, signal system installation, pavement marking or other routine construction contracts. Additional services included inspection of bridge rehabilitation/ reconstruction work for steel super structures including bearing, railings, scuppers, down spouts etc.; repairs or replacement of bridge deck including joints; replacement of lighting, signs; repairs to bridge abutment walls & reconstruction of adjacent landscaping; occasional bridge emergency work, bridge rehabilitation, bridge cleaning, bridge painting, bridge drainage cleaning. (NYSDOT, $170M, 2003-2005)

Thomas Bowers, P.E.
PROJECT MANAGER

Since 1980, Mr. Bowers has been involved in major bridge and infrastructure projects within the New York Metropolitan area totaling over $2B. He has been in charge of many of the highest profile construction projects undertaken in the City of New York. These include the No. 7 Line Subway Extension, multiple projects on Rt. 9A in Manhattan, the FDR Drive, and Queensboro Bridge. He has managed multiple contractors and consultants on each of these major undertakings. Unique to each of the projects was the intense level of interagency coordination and community interface involved. Mr. Bowers has deep personal relationships with many agency and community leaders and is well respected by all. These include the PANY/NJ, the US Army Corps of Engineers, the US Coast Guard, as well as the NYCDEP, NYCDDC, NYCDOT, NYC Parks Department as well as many local community boards.

EDUCATION	B.S., Civil Engineering, Michigan Techonological University, 1980
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, MI
YEARS WITH THIS FIRM	3
YEARS WITH OTHER FIRMS	27

The wide variety of the projects on which he has participated, as well as the scope and magnitude of the projects, gives Mr. Bowers a unique perspective on how to ensure that project goals are realized. His knowledge of the construction industry, practices, and requirements is unmatched.
Representative projects include:

Queensboro Bridge Reconstruction - Manhattan/Queens, Engineer-In-Charge - This project replaced the structural steel and roadway deck of the lower inner roadways; extensive steel repairs to the truss structures, relocation of historical kiosks in Manhattan and painting of the structure from the upper roadway to the ground level. After the existing deck was removed and access was available, an inspection of the steel below the roadway and within the truss steel was performed; repairs identified, detailed and forwarded to the contractor for installation. The structure was also painted from the upper level roadway to the ground. As the painting progressed, the project participated in the development of the OSHA lead removal requirements that were incorporated into the OSHA regulations (29CFR1926.62). Other work included the repair of over 500 structural flags on the outer roadways. All work completed while 160,000 vehicles crossed the structure on an average day. ($183M, NYSDOT)

No. 7 Subway Line Extension, Project Engineer/Quality Control Manager- Mr. Bowers has been supervising all Quality Control activities on construction of the MTACC 7 Line extension construction. This project comprises a $ 2 billion construction contract to construct the running tunnels and build a large cavern station on the west side of Manhattan. He manages inspectors who perform an essential part of the quality compliance for the project. He ensures that the Contractor is in compliance with contract requirements with regard to quality and enforcing any corrective actions required. He attends progress meetings and is responsible for leading all discussions relative to quality compliance. He provides comprehensive documentation for the permanent project records. The two new 4,700-foot-long tunnels will stretch west and south from Times Square to a new station at the Jacob J. Javits Convention Center on West 34th Street and 11th Avenue, and end at West 25th St. and 11th Ave. for storage of trains beyond the station. (MTACC, $2B)

NYSDOT, FDR Drive Reconstruction E 53rd Street to E 64th Street, Engineer-In-Charge - This was a highly complex project that included the demolition of the middle deck section of a three deck structure under live traffic. The job was scheduled to be completed in 9 separate stages including the construction of an outboard Temporary Detour Road (ODR) on the East River. The ODR included the installation of over 100 foot long drilled piles requiring exploratory drilling with variable top of rock conditions, and outer casing tubes. The job was performed by the use of rotary eccentric drills equipped with a down the hole hammer. In addition, the project included large pile cap girders, four (4) million pounds of new structural steel frame, one kilometer of pre cast concrete deck slab, new parapet walls, asphalt overlay, a noise shield to protect the residents living in this area, lighting, and the modification of two entrance ramps. In addition, the project required the installation of a tubular fender system that was built for the first time in the United States. It consisted of a one kilometer long tubing structure, eleven feet in diameter. The system was held by 13 floating dolphins anchored to the bottom of the river by a system of large iron chains that enabled flexibility to the fender in case of a collision. Upon the completion of the ODR, Northbound traffic was transferred to the new structure during one weekend Stage. This complex undertaking required the complete closure of the FDR with extensive coordination with all City Agencies. This Stage was completed in record time and ahead of schedule. It received the praise of the NYCDOT for its execution, timing and savings to the NYC motorists. (NYSDOT, $157M)

Route 9A Intrepid Bridge, Manhattan, Engineer-In-Charge - The Intrepid Pedestrian Bridge was part of the Route 9A Reconstruction project between Battery Park and 59th Street. The bridge crosses 12th Avenue between 45th and 46th Street. In order for the tour groups to have direct access to the museum, a bus layover area was constructed east of 12th Ave. The 300-ft pedestrian bridges' main span is cable-stayed. From a center pier, six sets of cables suspend the steel box beam super structure above 12th Avenue. (NYSDOT, $8M)

Route 9A - W. 25th to W. 40th Streets (Segment 6), Manhattan, Engineer-In-Charge - This project was a reconstruction of Route 9A, Segment 6. Extensive drainage and tide gate work was performed to eliminate flooding that was common in this area. Existing tide gates were renovated and new ones were installed. This work required extensive dewatering and grouting schemes to perform the tide gate reconstruction, as well as a relocation of Long Island Railroad West Side Yard drainage facilities to accommodate tide gate installation. Prior to the installation of a 50 year European pavement system, new gas and water mains, telephone ducts, relocation of Con Edison oil-o-static lines and new electric ducts were installed. In order to keep the traffic flowing during major exhibitions, including the NY Auto and Boat Shows, coordination with the Javits Center was required. Traffic coordination was also required with New York Waterways, World Yacht Tours and the W. 30th St. Heliport, to accommodate their facilities, as well as keep the traffic flowing on the West Side Highway. (NYSDOT, $48M)

Raymond Busch III, P.E.
PROJECT MANAGER

EDUCATION	B.S., Mechanical Engineering, New York Institute of Technology, 1987 A.A.S., Engineering, Suffolk Community College, 1984
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hour Occupational Safety & Health Training OSHA 10 Hour Safety Training Course OSHA Competent Person for Excavation LIRR Roadway Worker Protection
YEARS WITH THIS FIRM	23
YEARS WITH OTHER FIRMS	3

Since 1984, Mr. Busch has worked on transit projects in the New York area including the $6.5B East Side Access. He has extensive experience as a Resident Engineer on large-scale municipal construction projects. These include major railroad projects and sewage treatment plants. Mr. Busch has overseen all phases of construction including the civil, structural, mechanical, electrical and architectural disciplines. He has been responsible for supervision of field personnel, implementation of specifications in accordance with contract documents, review and submittal of payment requisitions and change orders, permit review and documentation, project scheduling, as well as documentation and quality control. Some of his projects have been accomplished under NYSDEC consent orders. He has extensive experience on Wick's Law multi-prime contracts.

MTA Capital Construction – East Side Access Program, Construction Manager - The primary purpose of East Side Access is to bring the LIRR to the east side of Manhattan into Grand Central Terminal. Mr. Busch is Deputy CM for the work on the Harold Structures I Phase of the project. The project includes; seven miles of tunneling in Manhattan and Queens, emerging into one of the busiest rail interlockings and multi-track main lines in the country. The new excavation will connect the existing 63rd Street tunnel under the East River, in a one-mile dig and blasting effort that will remove nearly 400,000 cu yd of rock. The project also includes construction of five ventilation buildings, a new transportation terminal 135 feet below GCT, a new passenger station at Sunnyside Queens, train storage facilities, 50,000 feet of track, a reconfigured Harold Interlocking and systems components including signals, communications, power and security. (MTACC, $6.5B)

Resident Engineer for the LIRR Ronkonkoma Yard Train Wash Facility - This facility consists of a 200 ft by 50 ft single building structure containing a Wash Bay and two-story Wash System Support Bays. The footing, foundation, lower level support bay and train wash slab are constructed of reinforced cast in place concrete.

Coordination was required with the LIRR Force Account Departments and the Local Utility Company's prior to and during the construction of the Train Wash Facility.

Coordination with Key Span Energy was required to relocate gas lines while the design and relocation of 13.8 KVA underground feeders was required with the Long Island Power Authority.

Coordination with the F/A Signal and Communication departments was required to reroute existing signal and communication systems that were within the footprint of the new car wash structure. (LIRR, $4.7M, 2001)

Resident Engineer for the Renovation of the LIRR Oyster Bay Yard, Oyster Bay, NY - The Oyster Bay yard previously provided six tracks for storage and was used for brake show replacement and interior cleaning services. This improvement project provided the Long Island Rail Road with seven tracks for storage and high-level platforms for interior cleaning services. In addition, hotel power was supplied to each of the lay-up tracks.

The Long Island Rail Road undertook this yard renovation program to accommodate the new diesel locomotives, bi-level passenger cars, and diesel-electric dual-mode locomotives. (LIRR, $15M)

Speonk Yard Improvement Project, Resident Engineer - The major components of this project included the installation of over 7,500 ft of track utilizing concrete ties with a fast clip fastening system; two main track switches; nine #8 turnouts; six full-depth rubber roadway crossings. Over 1050 ft of track collection pans were installed at all locomotive lay-up locations to support equipment operations in the new yard. The track pans are connected to two oil-water separation and carbon filtration systems with double walled PVC/CPVC piping. The lay-up of new equipment also required the support of a 2000 amp and 3000 amp electric service building for the distribution of 74V DC/480 V AC power systems. Work also included the installation of sanitary and storm sewer piping with catch basins and leaching basins. Contaminated soil and ballast were removed from the site in compliance with all local, state, and federal regulations. (Long Island Rail Road, $7.9M)

MTA East Side Access - Construction Management Services for Arch Street Yard and Shop, Resident Engineer - The Arch St. Yard and Shop is located on approximately twelve acres in Long Island City, New York. This Design/Build project included the design and construction of the following major elements: Maintenance Equipment Shop; Power Substation Building; Engineering Support Building; Extraordinary Interior Cleaning Platform and Storage Building; Trackwork and Third Rail; and extensive site utilities. The shop and yard was initially used as a testing and acceptance facility for the LIRR's new M-7 train cars and will service as an inspection, maintenance and cleaning facility upon commencement of ESA revenue service in 2010. The Design Build contract was awarded for $75M with contract duration of 810 ccd's for completion.

A unique aspect of this project lies within the Design/Build delivery system. In order to facilitate project completion within the required time frame, the building was built, in effect, from the outside in. The project required daily coordination, meetings, managed by LiRo, with the LIRR, the designer and the contractor. (MTA, $75M)

Nassau County Government Operations Center, Project Manager- LiRo in a Joint Venture with Bovis Lend Lease is providing comprehensive construction management services for the Theodore Roosevelt Government Operations Building. The Theodore Roosevelt Executive and Legislature Building at 1550 Franklin Ave in Garden City , NY will be completely renovated. The original building was constructed in 1916 and was the first public building to be constructed using reinforced concrete. The building is listed on the State Register of Historic Places and is currently approximately 135,000 gsf. Later additions to the building will be demolished so the final footprint will house approximately 85,000 gsf of space. In addition, a 28,000 gsf annex will be connected to the Old Courthouse building to house the new mechanical plant and Legislature chamber. The $36 million project is the result of an extensive evaluation of the County's requirements and the building's condition. (NCDPW)

Philip Camilleri, R.A.

PROJECT MANAGER

Mr. Camilleri is experienced in all phases of construction: architectural design; preparation of contract drawings; drafting contract clauses; organizing construction staging and phasing; construction/project management and contract administration. He also has extensive knowledge of construction methods and practices. Mr. Camilleri, known as a team player, and for his negotiating skills, is adept at analyzing complex issues, and developing feasible solutions or mitigations. In addition, he has specialized in major rail transportation projects in New York City.

EDUCATION	Bachelor of Architecture, City College of New York, 1985 Bachelor of Science, City College of New York, 1984 Associate in Applied Science, New York Technical College, 1981
REGISTRATION / CERTIFICATIONS	Registered Architect, NY
YEARS WITH THIS FIRM	2
YEARS WITH OTHER FIRMS	25

Representative projects include:

No. 7 Line Subway Line Extension Program and Construction Management Services, New York City's Number 7 Subway Line, known as the Flushing Line, is the system's busiest, linking Queens to Times Square. The new 7,000-foot-long tunnel stretches west and south from Times Square to the Jacob J. Javits Convention Center on West 34th Street and 11th Avenue. LiRo is providing program and construction management for the Number 7 Subway Line Extension. (PANYNJ, $2.3B)

World Trade Center Transportation Hub, New York. Resident Engineer, Part of the World Trade Center Reconstruction, the Transportation Hub, when completed, will provide the underground interconnection between PATH and NYC transit systems, under West Street, to the World Financial Center, and to the towers and the Memorial Museum that will occupy part of the 16 acre WTC site. The "Oculus", designed by Santiago Calatrava, located on Church Street, will be the most prominent feature of the Hub. Mr. Camilleri served was Resident Engineer for the "East-West Connector," which is the first part of the Calatrava structure to be built. Mr. Camilleri performed the following tasks: participated in preparation of the work package documents, including steel detailing and specifications, and in bidding and award activities; responsible during construction for ensuring the quality and safety of the work performed by the contractor, while adhering to cost and schedule constraints; worked in close coordination with the adjacent ongoing construction of the Freedom Tower and Memorial Museum. The work is now substantially complete. He was also responsible for other work packages, including escalators for the Temporary PATH Station, and the pre-purchase of major MEP equipment. As part of "Pre-Construction" services, he was responsible for developing the phasing/staging Scheme, to be implemented in the PATH Station (which is to remain in operation throughout construction). He drafted the contract clauses governing the work in the field, as necessary, to conform to the various planned and/or implemented contracting strategies and changing conditions. Mr. Camilleri performed constructability reviews of the Hub design, with emphasis on structural, phasing, staging, and schedule aspects. He participated in consultations with Santiago Calatrava; strongly recommended the suggestion to strategically locate additional permanent columns, and followed through until the change was actually implemented the redesign resulted in a significant reduction of steel tonnage.. He participated in the procurement of the steel contract of over $300M; work is now underway, and also helped prepare the contract for the balance of the WTC Hub work. (PANYNJ, $2-3B)

Air Train Terminal at Jamaica Station, Construction of the intermodal transfer terminal connecting the new JFK Air Train with Long Island Rail Road, New York City Transit, and surface transportation. The work was accomplished around and within the always-operational and landmark LIRR Jamaica

Station. Work included: construction of a "portal" bridge, spanning over and connecting the LlRR platforms; complete reconstruction of the LlRR Jamaica Station; and the creation of a direct connecting path to the underground subway station at Sutphin/Archer.
2001-2006: Mr. Camilleri managed the construction of the LlRR and NYCT areas, working directly under with the PANYNJ Engineer-of-Construction. He ensured that construction is in compliance with contract. Other tasks included: supervised inspection staff during daytime, nighttime, and round-the-clock weekends during a four year period; maintained safety, and was the lead person responsible for coordinating the efforts of the various entities involved; provided oversight and direction to contractor; created and managed the process of planning, scheduling and executing field activities within the LlRR operating environment; organized and chaired weekly work-plans and rolling-schedule meetings. evaluated contractor's construction execution Plans; reviewed progress and schedules; approved monthly payments, negotiated changes and helped administer cost controls. He was also generally responsible for resolving all technical and contractual issues arising in the execution of the work.
2000-2001: Mr. Camilleri was the sole assistant to the Bechtel PM during completion of Contract Documents (by PAl and through the RFP/Bidding and Award process.) His tasks included: participated in constructability review; helped develop project schedule (Primavera), construction staging plan, and general and supplementary conditions; performed technical review of architectural contract drawings; collated and checked data; organized, and presented PANYNJ engineer's estimate; developed estimates for deferred design work valued at $34M; participated in analysis of proposals, including schedule, staging, constructability, and cost components; developed program, and designed offices in Jamaica for the Port Authority's Engineer of Construction and staff. (PANYNJ and LIRR, $385M)

Penn Station Improvements Project, This project involved the rehabilitation of the LIRR portions of the underground Penn Station, and construction of a new Entrance Pavilion at street level. Work included the creation of new and improved passenger areas, restoration of stairs, new escalators and elevators, a new ticket office, new commercial spaces, marble walls, granite floors, and artwork by Andrew Leicester and Maya Lin. Mr. Camilleri was responsible for ensuring that the architectural work-in-progress is in compliance with contract documents and design intent. Prepared design and construction documents for changes ranging from construction details to space planning and fumishings for LlRR facilities. Mr. Camilleri generated and administered the punch list and project-completion documents. He also reviewed progress, scheduling, and payments, and coordinated with the owner, architect, and contractor. (LIRR, $89M)

Park Avenue Viaduct Reconstruction. Harlem New York, This project required the restoration of the historic, landmark 1898 Railway Station at 125th Street and Park Avenue, the station was essentially in ruins, with only portions of the outer walls deemed salvageable. The structure was completely gutted and rebuilt. The project was recognized with the following awards:
- AlA New York State: Award of Merit 2001
- New York Landmarks Conservancy: Lucy G. Moses Preservation Award 2000,
- New York Construction News: Best of 2000 Award of Merit for a Restoration Project.

Mr. Camilleri was also responsible for the restoration of the 125th Street Station. He guided the architect through a comprehensive revision of the contract documents, to encompass the restoration work actually needed due to the severe deterioration of the station. Mr. Camilleri helped negotiate resulting changes, and .developed a Detailed-Construction-Schedule (Primavera), that integrated the station work with the activities of the phased viaduct reconstruction. Other tasks included: organized and chaired bi-weekly architectural issues meeting with the owner, architect, engineers, and contractor; played the key role in developing solutions to technical problems; participated in the review of shop drawings and RFI's; monitored progress, inspected the work, and provided necessary field direction during construction; reviewed monthly payments during construction; collected data, developed spreadsheets and wrote text for the Historical Cost Report. (Metro North Rail Road, $72M)

Douglas Owen, P.E.
PROJECT MANAGER/BRIDGES

EDUCATION	B.S., Mechanical/Civil Engineering, Temple University, 1982
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hour Occupational Safety & Health Training CPM Scheduling Class Formal MPT Training - NYSDOT
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	12

Mr. Owen has diverse and extensive construction experience as a Project Manager and Resident Engineer on more than $400M of bridge and highway construction projects. He has been responsible for construction inspection and documentation, office management and record keeping, field staff management, off-site plant inspection and Quality Assurance, project meetings, and consultant contract budget monitoring. Mr. Owen's duties have also included project change order cost estimates and evaluation, value engineering reviews, construction CPM schedule monitoring, and final contract computations and close out documentation. Assignments which are representative of Mr. Owen's experience include the following:

Construction Management and Inspection Services for Structural Retrofits at the Bronx-Whitestone Bridge New York, NY, Resident Engineer - Construction of retrofits to the towers, main cables, suspender ropes, and anchorages of this major suspension bridge. The scope of this project included: Strengthening the exterior and interior of the bridge towers; Relocating and installing new electrical elements; Installing protective armor for the main cables; Installing protective armor for the suspender ropes; Installing new structures and security barriers within and around the anchorages and tower pedestals; and extensive maintenance and protection of traffic that was required to minimize delays to the travelling public. Mr. Owen coordinated the contractor's operations with the facility and other major projects at the site on a daily basis, and also managed the off-site plant inspection for the structural steel and armor components. He performed plant inspections to review the fabricators procedures and element production at all phases: prototype, production and post production. (MTA CCC, $41M)

Construction Management and Inspection Services for Structural Retrofits at the Throgs Neck Bridge New York, NY, Resident Engineer - Construction of retrofits to the towers, main cables, suspender ropes, and anchorages of this major suspension bridge. The scope of this project included: Strengthening the exterior and interior of the bridge towers; Relocating and installing new electrical elements; Installing protective armor for the main cables; Installing protective armor for the suspender ropes; Installing new structures and security barriers within and around the anchorages; and extensive maintenance and protection of traffic that was required to minimize delays to the travelling public. Mr. Owen coordinated the contractor's operations with the facility and other major projects at the site on a daily basis. Mr. Owen also managed the off-site plant inspection for the structural steel and armor components. He performed plant inspections to review the fabricators procedures and element production at all phases: prototype, production and post production. (MTA CCC, $42M)

Construction Management & Inspection Services for TN-87B, Anchorage & Tower Protection at the Throgs Neck Bridge New York, NY, Resident Engineer - This project includes the following components: Rehabilitation of the main tower fenders at the water level by repairing or

replacing steel and timber members and cleaning and painting of steel fender frame. The Bronx anchorage fender will be modified to accommodate mooring fenders and working and access platforms for NYFD fire boats. The existing damaged timber pile dolphins at the Queens anchorage will be removed and replaced with new fiber reinforced composite plastic pile dolphins. (MTA- TBTA, $18M)

Replacement of Steinway Street Bridge over the Grand Central Parkway, Resident Engineer. This project for NYCDOT - Division of Roadway Bridges involved construction inspection for the reconstruction of two rigid frame arch structures over the Grand Central Parkway in Astoria, NY. The project included the demolition of the existing concrete rigid frame arch structures; erection of new steel frame posts and arches, structural steel painting; pouring of encasement abutments and new poured-in-place concrete deck slabs and sidewalks; galvanized steel bridge railing & fencing; permanent soldier pile and lagging sheeting with grouted tie-back anchors; the installation and removal of two temporary ACROW truss bridges; and extensive MPT detour scenarios. To replicate as closely as possible the original rigid frame arch, the new structures consist of three section steel frames which sit upon the original foundations and at a skew of 29 degrees to the roadway alignment. The foundations were modified to accept the new anchor bolts. Because of the very limited site, Mr. Owen worked with the contractor and NYCDOT to devise erection schemes which utilized nighttime operations requiring full one-way shutdowns of the GCP to maximize nightly production and minimize community disruption. The demolition of the existing structures was performed utilizing traffic crossovers east and west of Steinway Street on the Grand Central Parkway. During each stage of the contract the GCP traffic was diverted over two weekends to the opposite side, and a structure was removed by dropping the bridge onto the parkway. Prior to weekend demolition operations, extensive coordination with NYCDOT Office of Construction Management Coordination (OCMC) was required. Mr. Owen managed weekly coordination meetings that were held with OCMC and numerous other City agencies and Community Boards to coordinate the demolition operation and its affects on the surrounding neighborhood and affected roadways. LiRo was responsible for the implementation of a motorist advanced warning system through the use of 33 Variable Message Boards stationed along major highways throughout the five boroughs and neighboring counties. Project elements also included; drainage systems; underground and bridge supported utilities (water main, gas, telephone and NYC DEP & FDNY communications); traffic signals; and intersection and safety improvements. (NYCDOT, $18.4M)

Reconstruction of the Long Island Expressway, Queens County, New York, Resident Engineer - LiRo provided construction management, design during construction and construction inspection services for the reconstruction of Route I-495 (Long Island Expressway) from Van Dam Street to the Grand Central Parkway. The project involved the rehabilitation of seven miles of heavily congested urban expressway. Work included full-depth concrete pavement, construction and rehabilitation of 27 bridges, installation and use of TSM/ITS, CPM scheduling, A+B bidding, night work**, and** extensive public outreach. LiRo provided a full-time Project Management team as well as a full inspection staff of over 20 individuals to oversee this project. As the Resident Engineer, Mr. Owen was responsible for all aspects of the project. LiRo also provided Value Engineering review and schedule impact reviews of the contractor's proposed changes, most of which were time related issues. Mr. Owen also worked closely with the NYCDOT OCMC to coordinate the project's MPT staging and construction activities to minimize impacts to the traveling public and nearby communities. The challenge of this project was compounded by staggering traffic volumes and a narrow construction corridor. This project also required extensive work at the Brooklyn-Queens Expressway interchange. (NYSDOT, $190M)

Construction Inspection Services on an As-Needed Basis, New York, NY, Resident Engineer. This project involved on-call construction inspection services and included associated services at various MTA B&T facilities throughout New York City. Mr. Owen's assignments were located at the Henry Hudson Bridge which spans the Harlem River. Specific projects included *Upper Level Deck Bearing Replacement, Dyckman Street Bridge Steel Access Platforms, and Concrete Repairs at Skewbacks.*

James Pagano, P.E.
PROJECT MANAGER/TRANSIT

Mr. Pagano is a Professional Engineer, with more than 30 years of construction experience on numerous, large-scale projects involving railroad terminals, rail infrastructure, bridges, roadways, systems and buildings. His numerous rail projects include the AirTrain for the Port Authority an his projects total over $1B. He has extensive experience managing complex construction activities that require coordination with multiple contractors and construction trades. Mr. Pagano thoroughly understands the complexities of working in and around active railroad operations, as evidenced by his railroad construction experience. He has excellent working relationships with LIRR Operations and Force Account Personnel. He has also coordinated railroad work with NYC Department of Environmental Protection, (NYCDEP), Con Edison, the NYC Department of Transportation (NYCDOT), and its Office of Construction Management Coordination (OCMC). Mr. Pagano is an assertive, results-driven construction manager.

EDUCATION	BA/Civil Engineering, Pennsylvania State University, 1977 AAS/Civil Engineering, Nassau Community College, 1975 Construction Claims Elements of Railway Signaling Labor Relations Diversity Management Roadbed and Rails Maintenance and Inspection Railroad Tracks Design Analysis
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY/NJ/CT/PA Certified Code Compliance Officer,NY Dupont Safety Training
YEARS WITH THIS FIRM	4
YEARS WITH OTHER FIRMS	28

Mr. Pagano's extensive rail experience includes the following components:

Rail Terminals and Tunnels: Mr. Pagano has completed construction projects in Penn Station, Atlantic Terminal and Jamaica Air Train including; track level platforms and finishes; signal and communication systems; escalators and elevators; station lighting; fire suppression systems; waterproofing; drainage systems; and emergency generators. In the Atlantic Tunnels, he managed the installation of new track, switches, tunnel drainage system, as well as tunnel leak repair and tunnel power upgrades, including transformer replacements.

Rail Systems: His experience includes 25 miles of 2,200v signal power, motor generators, signal huts, block tower construction, traction power substations, communication systems, public address systems, generators, and grade crossing construction.

Track, Switches and Third Rail: As Principal Engineer, Mr. Pagano was responsible for the LIRR Track Program, which installed all track components in direct fixation, concrete ties and wood tie environments. He also worked on signature rail projects, such as the Main Line Electrification and the Amityville, Copiague and Lindenhurst Viaduct Direct Fixation Project. His track experience includes the replacement of track, switches and yard leads in F Interlocking for the LIRR, which included AMTRAK coordination in and around Sunnyside Yard. These endeavors represent $500M in track construction.

Renovation of Penn Station NYC, Project Manager – The project scope included the complete renovation of the interior station space, consisting of enlarged corridors, new architectural finishes, utility relocation and replacement, and the installation of a complete new HVAC system for the entire

station. Track level improvements included new platforms, communications systems, terminal lighting and ventilation systems. A new, glass tower 34th Street entrance was included in the renovation, which required coordination with the NYCDOT and DOB.. Other elements included station artwork and communication systems installations, and concession build-out. All work had to be coordinated and scheduled in multiple phases, to allow for station operation and train service. (MTA-LIRR $90M)

PortAuthority (PA) Jamaica-JFK Airport AirTrain and Reconstruction of LIRR's Jamaica Station, Mechanical, Electrical and Utility Inspection, Principal Engineer - Mr. Pagano was responsible for numerous aspects of this project, including supervision of construction inspection of the electrical, data communications, mechanical and plumbing elements. Mr. Pagano was directly responsible for the following construction tasks. ($385M)

- Track construction, including the waterproofing of the bridge deck, resurfacing of track, and communications systems.
- Coordination of the PA/LIRR Engineering team, for new platform electrical and gas services.
- Reviewed plans with LIRR B & B Department EL & P Department. Reviewed construction and inspection reports.
  Coordinating all LIRR force account activities, in support of the project schedule and construction.

MTA LIRR Atlantic Terminal and Tunnel Construction - Mr. Pagano provided construction inspection services for this major station terminal improvement project, which included the following elements:

- Replacement of Station Platforms
- Masonry Elements
- Lighting
- Waiting Rooms
- Stairways
- Ticket Selling Facility
- Restrooms
- Escalators & Elevators
- Terminal Entrance

Tunnel elements included drainage pump systems, waterproofing tunnel walls, electrical systems, and track systems, including switches and third rail.

MTA – LIRR "F" Interlocking Rehabilitation, Principal Engineer. Mr. Pagano was responsible for the $55M "F" Interlocking Rehabilitation Project, which included the installation of over 2,500 ft of track, utilizing concrete ties with a fast clip fastening system, main track switches, and yard turnouts. Re-surfacing of all rail and switches was also required. He was also responsible for coordinating this work with AMTRAK and LIRR Operations personnel. This work was highly sensitive to the movement of daily trains in and out of Sunnyside Yards. (MTA – LIRR $55M)

MTA – LIRR "A', "C" and "JO" Interlocking Rehabilitation Principal Engineer. Mr. Pagano was responsible for the rehabilitation of the interlockings in Penn Station and West Side Storage Yard which included the replacement of rail, switches, signal cable, and third rail. Re-surfacing of all rail and switches was also required. He was also responsible for coordinating this work with AMTRAK and LIRR Operations personnel. This work was highly sensitive to the daily train movement in and out of Penn Station. (MTA – LIRR $50M)

MTA - Long Island Rail Road, Main Line Electrification Improvements, Nassau & Suffolk County, NY, Project Manager- This five year, $160M project involved the electrification and signal system modernization of 25 miles of LIRR track on the mainline branch. This was a major network expansion project for the LIRR. Mr. Pagano duties included constructability and design reviews of the entire project, including pre-cast concrete double-wall retaining walls: 6 walls, totaling 1,000' (3ft to 20ft high), and was responsible for the supervision and inspection of the double wall installation. ($160M)

Philip Salerno, P.E.
PROJECT MANAGER/BRIDGES

EDUCATION	MS/Civil Engineering, NJ Institute of Technology, 1982 BE/Civil Engineering, City College of New York, 1975
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	2
YEARS WITH OTHER FIRMS	33

Mr. Pagano is a Professional Engineer, with more than 30 years of construction experience on numerous, large-scale projects involving railroad terminals, rail infrastructure, bridges, roadways, systems and buildings. His numerous rail projects include the AirTrain for the Port Authority an his projects total over $1B. He has extensive experience managing complex construction activities that require coordination with multiple contractors and construction trades. Mr. Pagano thoroughly understands the complexities of working in and around active railroad operations, as evidenced by his railroad construction experience. He has excellent working relationships with LIRR Operations and Force Account Personnel. He has also coordinated railroad work with NYC Department of Environmental Protection, (NYCDEP), Con Edison, the NYC Department of Transportation (NYCDOT), and its Office of Construction Management Coordination (OCMC). Mr. Pagano is an assertive, results-driven construction manager.

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Richard Schmalz, P.E.

PROJECT MANAGER/TRANSIT, HIGHWAY, BRIDGES

Richard Schmalz has over 40 years of transportation engineering experience on over $2B projects for highways, streets, bridges, and multi-modal and rail facilities in New York City and on Long Island. His experience includes projects over $300M including Atlantic Yards and the AirTrain. He also worked for over 30 years at the NYS Dept. of Transportation, where he served as Project Director in the coordination of the Route 9A (West Street) post-9/11 reconstruction project, valued at $300M. This experience has provided Mr. Schmalz with a comprehensive perspective on all stages of project development. His extensive experience balancing the needs and project demands of private contractors as well as local, state, and federal authorities, gives him a wide base of knowledge that enables him to successfully complete the most challenging projects.

EDUCATION	MS/Environmental Engineering, SUNY Stony Brook, 1983 BE/Civil Engineering, The Cooper Union, 1969
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	<1
YEARS WITH OTHER FIRMS	40

Atlantic Yards (Vanderbilt) Rail Yard Replacement— Project Manager - Mr. Schmalz managed the design and construction services of a replacement rail yard, that will allow for the construction of the 18,000 seat Brooklyn Arena, the future home of the Nets NBA team and additional development, consisting of 16 skyscrapers with hotel, office and retail space; 6,400 apartments; and 8 acres of open space. The replacement rail yard is on an 8-acre site, located between Atlantic Avenue, Pacific Street, 6th Avenue and Vanderbilt Avenue. Mr. Schmalz's responsibilities include management of a multi-disciplined team, which included professionals who provided civil; structural; mechanical, electrical, and plumbing (MEP); ventilation; track & signal; traction power; and facilities design and engineering expertise. This project requires close coordination with the Long Island Rail Road and utility companies, so that the construction can be performed within the tight envelope of the rail yard, without interruption to rail operations. Parsons Brinckerhoff is a member of the multi-consultant team working on the project. (Forest City Ratner Companies, $250M)

Staten Island Expressway (I-278) Access Improvements, Clove Road to Fingerboard Road, Staten Island, New York– Civil Group Director - Mr. Schmalz provided civil technical oversight and management for ramp modifications to improve traffic flow; roadway widening and reconstruction; bridge replacement and widening; the installation of retaining walls, noise barriers, and a new lighting system; and ITS improvements. (NYSDOT, $90M,)

Staten Island Expressway (I-278) Bus Lane Extension, Victory Boulevard to Clove Road, Staten Island, New York— Civil Group Director – Mr. Schmalz provided civil technical oversight and management for the provision of auxiliary lanes; extension of the existing bus lane to the west; improvement of substandard features; pavement resurfacing/ reconstruction; bridge superstructure replacement; the installation of retaining walls and noise barriers; ITS upgrade; and the installation of new lighting. (NYSDOT, $80M)

Verrazano-Narrows Bridge Toll Plaza Reconstruction, Staten Island, New York— Civil Group Director – Mr. Schmalz provided civil technical support for design of modifications to the west approach to the bridge, coordinated with NYSDOT's project to the west. The construction of three bridges and high retaining walls; modifications to toll plaza pavement; extensive construction; and MPT stages were required. (NYSDOT, $60M)

New Hempstead Road (County Route 80), Palisades Interstate Parkway to Main Street, Rockland County, New York— Project Manager – Mr. Schmalz managed the reconstruction of two miles of a two-lane arterial road to improve safety, restore pavement conditions, and improve intersections and traffic flow. (Rockland County Highway Department, $27M)

New York State Dept. of Transportation-- Project Director for Route 9A Reconstruction, Manhattan, New York (2002 – 2006) - Mr. Schmalz served as the New York State Department of Transportation's (NYSDOT) primary contact for Lower Manhattan's post-9/11 reconstruction efforts. He was responsible for the planning, design, and reconstruction of Route 9A (West Street) in Lower Manhattan; improvements to Route 9A up to 59th Street; and for the NYC Dept. of Transportation's (NYCDOT) federally funded reconstruction/resurfacing of the network of Lower Manhattan streets that were damaged by the World Trade Center (WTC) clean-up efforts.

Mr. Schmalz coordinated with the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Port Authority of New York and New Jersey (PANYNJ), Lower Manhattan Development Corporation (LMDC), Metropolitan Transportation Authority (MTA), New York City Transit (NYCT), New York City Department of Transportation (NYCDOT), and the Lower Manhattan Construction Command Center (LMCCC) on concepts for the reconstruction of the WTC site, and Lower Manhattan. The program's transportation facilities, with a total estimated construction value of $10B, included the Brooklyn-Battery Tunnel (BBT) for NYCT; the PATH system for PANYNJ; the New York City street system (including Route 9A), and the WTC Memorial. Mr. Schmalz specifically developed Route 9A alternatives, compatible with WTC reconstruction, resulting in two build alternatives: a 1,500-foot depressed roadway (short bypass tunnel) with a cost of $1B; and an at-grade, eight-lane roadway with a cost of over $300M.

Civil Group Director (1998 – 2002) – Mr. Schmalz supervised the New York City engineering staff and managed several major infrastructure and transportation projects.

- **JFK AirTrain, New York City— Project Manager** – Mr. Schmalz managed the design of civil elements, including: alignment and profile for the guide way, drainage, utility relocations, as well as traffic management and maintenance and protection of traffic (MPT) plan development for facilities on JFK Airport property, and along the Van Wyck Expressway (VWE). He was responsible for the coordination/management, and technical efforts, of eight sub-consultants, and prime consultant's staff, for the project's design-build-operate-maintain (DBOM) contractors. This included assuring product delivery to scope, schedule, budget and quality (QA/QC) by the project team as well as agency NYCDOT, NYCEDC, NYSDOT, and utility coordination to allow construction operations to advance. The project consisted of 8.1 miles (13 kilometers) of track, and ten stations, linking airport terminals to the New York City Transit (NYCT) subway system at Howard Beach and the Long Island Rail Road (LIRR) at Jamaica Station, via an aerial guide way in the median of the VWE. (PANYNJ, $1.9B, 1998 – 2001)
- **Expansion of Port Jervis Yard, Port Jervis, New York—Project Manager** – Mr. Schmalz managed the rail yard expansion/improvement project for the Metro-North Railroad. At the completion of design, a contract assignment was made to a contractor, for design-build (D-B) and construction support services. (MTA Metro-North Railroad, $500K, 2000 – 2001)
- **Cross Harbor Freight Study, Draft Environmental Impact Statement (DEIS), New York/New Jersey— Deputy Project Manager** – Mr. Schmalz was responsible for all engineering functions and the management of sub-consultants, for surveying; tunnel engineering; ventilation; geotechnical engineering; rail; civil; and traffic elements of alternatives development. This effort for the NYCEDC included the development of alternatives for a tunnel under New York Harbor, from New Jersey to Brooklyn, along two major alignments — one from Greenfield, New Jersey to the Brooklyn Army Terminal, and one from New Jersey through Staten Island to Brooklyn. The preparation of a Draft Environmental Impact Statement was another element of this project. (NYCEDC, $3B, 2001 – 2002)

Vincent N. Valdemira, Sr.

PROJECT MANAGER/TRANSIT

EDUCATION	Bachelor of Professional Studies, Transportation Finance, SUNY Empire State College, 1986 Certificate, Management of Federal Transit Projects, Rutgers State University
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	32

Mr. Valdemira has more than 35 years of diversified experience in developing and managing major capital improvement programs. He served as Director of Capital Program Management for the MTA-Long Island Rail Road (LIRR) and was involved with project/program management for almost every rail agency in New York City. He has extensive experience managing major projects, like the $6.5B East Side Access, as well as operating in railroad environments including the LIRR Infrastructure Improvements to Support a New Diesel Fleet and capacity improvements to facilitate efficient rail operations. Mr. Valdemira also developed procedures and guidelines for the LIRR Project Management Group.

Mr. Valdemira has also managed major improvement projects for rail and vehicular tunnels and bridges and was instrumental in the planning of the PANYNJ/MTA AirTrain Project at Jamaica Station. He has managed the development and construction of more than $4 Billion in projects. He also took part in developing corporate strategies and business plans, coordinating the plans with the LIRR Operating Departments and MTA agencies. He possesses extensive experience and knowledge of interagency coordination, logistics, phasing, and rail operations.

New Jersey Transit On-Call Construction Management Services, Project Manager - LiRo is currently performing On-Call CM services for the NJT. Mr. Valdemira is responsible for all aspects of project management for this contract, interfacing with the NJT Construction Program Manager and the individual project managers for each assignment. The following are the tasks LiRo has been assigned since the contract start in 2006.

- Estimating Services for the Newark Bridge Rehabilitation
- Resident Engineering Services for the Hoboken Pedestrian Bridge Construction
- Resident Engineering and Inspection Services for the HX Drawbridge
- Resident Engineering Services for the West End Avenue Soil Remediation
- Resident Engineering Services for Bergen County Grade Separation
- Scheduling Services for the Newark Bridge Rehabilitation

Reactivation of the Staten Island Railroad, NYC EDC, Project Manager - The project entailed the re-construction of Arlington Rail Yard and Cut-East, replacement of track along the seven-mile North Line and Travis Branch and construction of a new wye connector between the North Line and the Travis Branch. The Travis Branch was extended 6,500 feet to the south. The branch provides a connection to the new Department of Sanitation transfer facility at Fresh Kills. A major component of this project was the replacement of two existing timber trestles with new bridges. In addition, a new twin arch culvert was installed near the project's southern terminus. Three existing bridges required extensive underpinning due to the installation of new retaining walls. These structures as well as the

structural underpinning were the project's most challenging components and required the most expertise. LiRo's responsibilities consisted of the following activities.

- Construction Supervision and Inspection
- Coordinating USCG and NYS DEC permits
- Monitoring the contractors' activities
- Contract Document Review to identify long lead procurement items and special conditions
- Expediting and tracking of shop drawing submittals
- Providing project controls support to monitor a baseline schedule and construction progress
- Developing, coordinating, and maintaining work plans for each work element

(NYC EDC, $40M, 2005)

Metro-North Hudson Line Stations Rehabilitation and Restoration of Historic Yonkers - This project is a $70M design/build effort that includes complete station facility replacements. Included were station buildings, passenger platforms, canopies, stairways, overpasses, parking facilities and retaining walls. In addition, all stations must be brought into ADA compliance. LiRo provided Construction Management services at several Metro North Stations including Greystone, Glenwood, Ludlow, Riverdale, Spuyten Duyvil, Marble Hill, University Heights, and Morris Heights. The scope of work and service includes:

- Platforms were demolished and replaced
- Overpasses were constructed incorporated ADA compliant elevators, ramps and stairways
- New canopies, enclosures, and windbreak were constructed
- Retaining walls were repaired and rehabilitated

(MTA-Metro North, 2001-2005, $70M)

Yankee Stadium Redevelopment, Project Manager - Rail Transportation Coordinator - Mr. Valdemira is responsible for coordinating the activities of the construction contractors with Metro North's operations personnel. In addition he will coordinate the activities of this contract with those project activities scheduled for the construction of the new Metro North Passenger Station at Yankee Stadium. Where construction may impede train operations it is the primary focus of Mr. Valdemira to communicate with MNR ensuring that any impacts are minimal and properly coordinated as part of scheduled track outages or for the usage of flag personnel provided by MNR. (NYCEDC, $144M)

MTA - Metro-North Railroad, Superstructure Replacement of the Bridge Street Bridge, Project Manager - The Bridge Street Bridge is a through-girder girder bridge spanning approximately 60 ft over four Metro-North Railroad (MNR) tracks. It was built in 1913 and has suffered serious deterioration. The bridge is the sole means of access to the business and recreation facilities located along the Hudson River waterfront in Irvington. For these reasons, access will be maintained during construction. The new bridge was constructed with ten 27"x48" pre-stressed concrete box girders. A 6" concrete deck will be placed over the beams. The new bridge has a 32 ft roadway width and two 7'4" sidewalks. The new bridge also features increased track clearance. LiRo provided construction supervision and inspection services for the replacement of the bridge. (MTA-Metro North, $2.5M)

Carlos C. Villa, P.E.

PROJECT MANAGER/TRANSIT

EDUCATION	AAS/Civil Engineering, New York City Community College, 1960
REGISTRATION/CERTIFICATION	Professional Engineer, NY
YEARS WITH THIS FIRM	2
YEARS WITH OTHER FIRMS	42

Mr. Villa has more than 30 years of diversified experience in managing major rail transit projects at MTA New York City Transit (NYCT). At NYCT he served as a Capital Programs Project Manager for 11 years and served for more than 20 years in the Track and Structures Department in positions of increasing responsibility with projects valued at over $6B. He also served as Resident Engineer for East Side Access for the Rail work in the Harold Interlocking area. He has been responsible for a broad range of Capital Improvements which involved extensive coordination with rail operations departments and force account construction personnel. These projects include rail yards, maintenance facilities, tunnels, rail terminals, drainage systems and employee facilities. He worked closely with the NYCT force account units to successfully coordinate their construction activities in concert with the third party contractor activities. Mr. Villa has extensive experience coordinating projects which require track outages, flag protection and provisions for alternate work spaces while construction is underway. He has been responsible for oversight of all phases of construction including the civil, structural, mechanical, electrical and architectural disciplines.

In addition to his extensive rail transit experience Mr. Villa for the past 10 years has been a consultant Resident Engineer on large municipal projects. In this capacity he has served as Resident Engineer on projects such as:

- Construction of W. 66th Street Bridge
- over Amtrak
- Rehabilitation of 3 Vehicular Tunnels for NYCDOT
- Clermont Construction of Sanitary and
- Storm Sewers and Water Mains
- Reconstruction of East 45th, 55th, and 87th Streets, Brooklyn

MTA Capital Construction – East Side Access Program, Resident Engineer - The primary purpose of East Side Access is to bring the LIRR to the east side of Manhattan into Grand Central Terminal. Mr. Busch is Deputy CM for the work on the Harold Structures I Phase of the project. The project includes; seven miles of tunneling in Manhattan and Queens, emerging into one of the busiest rail interlockings and multi-track main lines in the country. The new excavation will connect the existing 63rd Street tunnel under the East River, in a one-mile dig and blasting effort that will remove nearly 400,000 cu yd of rock. The project also includes construction of five ventilation buildings, a new transportation terminal 135 feet below GCT, a new passenger station at Sunnyside Queens, train storage facilities, 50,000 feet of track, a reconfigured Harold Interlocking and systems components including signals, communications, power and security. (MTACC, $6.5B)

MTA – LIRR Long Island City Yard Improvements, Resident Engineer - Long Island City Yard functions as a daytime storage facility for LIRR rolling storage that utilizes the Hunterspoint Avenue

Station. Mr. Villa is providing Resident Engineering Services for the work at Long Island City Yard which includes some major construction elements:

- Demolition of existing tracks, drip pans, pavement, underground piping and above ground utilities, and site clearance.
- Excavation and removal of contaminated soil
- Installation of new tracks
- Construction of a 2-car high level passenger platform
- Construction of 2 services platforms between the tracks to facilitate the cleaning of cars (one platform to service two trains).
- Installation of new AC power service and lighting to facilitate working between trains at night
- Installation of underground conduits for future third Rail power
- Installation of underground conduit for future 480V AC wayside power
- Installation of new fueling piping to tie-in to existing new fueling system
- Installation of sanitary and storm drainage systems

(MTA – LIRR, $10M)

NYCT Yards Construction, Project Manager - Mr. Villa was responsible for the following Capital Improvements at NYCT Yards.

- Train Wash Drainage Improvements at Pelham Yards
- Loop track and third rail installation at various yards
- Installation of water service and distribution at system-wide yards
- Yard Facilities Improvements, including roofs, windows, motorized doors, boilers, water distribution, and rest rooms
- Yard security fences at various yards including 38th Yard, Brooklyn and Westchester Yard

MTA NYCT - Culver Line Structure Rehabilitation, Project Manager - This $50 million four-year project included repair and/or replacement of thru-span track girders, concrete mezzanine roof slabs, waterproofing, Type II modified and Type III track, rocker pins, seat brackets, chemical grouting, lighting on 13 stations, electrical services and five pump rooms with discharge lines to NYC sewers.

MTA NYCT - Jamaica Line Rehabilitation, Myrtle Avenue and Broadway, Project Manager - This $22 million project included repair and/or replacement of top and bottom flange angles, column bases, pre-cast and poured-in-place concrete platform slabs and track work.

MTA NYCT - Replacement of Platform Canopies and Lighting, Myrtle Avenue Line, Project Manager - This $8 million, seven-station project included electrical distribution rooms, repair of column bases, steel framing, canopy roofs, and removal of asbestos and lead paint. Work included station lighting and Con Edison services.

MTA NYCT - Replacement of Pumping Facilities, Broadway and Nassau Lines, Project Manager - This $6 million project included replacement of pumps, piping, valves, sewer connections and new electrical service at six locations. This improvement required the relocation of NYC water mains.

MTA NYCT - Police Quarters, Metropolitan Avenue Station, Project Manager - This $7 million project included toilets, piping, and ejector to NYC sewer, air conditioning, heating, lighting, telephones, and architectural construction for new employee quarters.

Vikas Wagh, P.E.

PROJECT MANAGER

Mr. Wagh has over 30 years experience in analysis and design of highways, bridges, buildings and transit facilities. He has performed numerous value engineering studies and constructability reviews for engineering projects of all types. Mr. Wagh has won awards for innovations in engineering and has presented and published many papers. He was the President of Wagh Engineers, PC for 10 years. Relevant project experience includes:

EDUCATION	B.E., Civil Engineering, University of Poona, India, 1976 M.S., Civil Engineering, University of Cincinnati, 1981 Graduate Courses in Business Administration, University of Pittsburgh, 1984
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, NJ Professional Engineer, PA Professional Engineer, MD Professional Engineer, OH Professional Engineer, DE American Society of Civil Engineers (ASCE)
YEARS WITH THIS FIRM	5
YEARS WITH OTHER FIRMS	29

Roosevelt Island Tramway Modernization, New York – Mr. Wagh is the Program Director for the Roosevelt Island Operating Corporation (RIOC). This 18-million-dollar Design-Build Contract was awarded to Pomagalski (Poma) of Grenoble, France. Currently, the project is under construction and is scheduled to complete by August 31, 2010. The Roosevelt Island Tramway (Tram) was commissioned in 1976. The original Tram system equipment was supplied by Von Roll Ltd. Located in Berne, Switzerland through their American partner VSL Corporation. The Tram installation is a bi-cable system of the double reversible type with two carriers traveling back and forth between terminals on two stationary paths. Each path consists of two track ropes whereby the carriages supporting the cabins travel along the path in a controlled motion by moving haul rope. Each carriage is connected to a concrete counterweight by a counter rope. The counterweight is located at the Manhattan terminal and the haul rope drive machinery is located at the Roosevelt Island terminal. (RIOC, 2008 – present, $18M)

East River Bridges in New York, NYCDOT: Director of East River Bridges, Design Division. Managed the ten year rehabilitation program for the four East River Bridges, namely Brooklyn Bridge, Manhattan Bridge, Williamsburg Bridge and Queensboro Bridge. The rehabilitation program involved design of a series of construction contracts for each one of the four bridges. The total cost of rehabilitation was approximately 1.4 billion dollars. East River Bridges presented various conditions that are unique to long span truss and suspension bridges. The development of these contracts required in-depth inspection of the several areas and components of these bridges. The projects involved deck replacements while maintaining traffic, seismic risk assessment of suspension bridges and truss bridges, suspension cable anchorage eyebars rehabilitation, cable strands replacement, cable rehabilitation including opening the cables with wedges, oiling, rewrapping with steel wires, neoprene wraps, etc., replacement of suspenders and cable bands, replacement of grid decks with closed rib steel orthotropic deck, various types of fatigue cracking details and their retrofits, pin and hanger connections, stiffening truss tie-downs, primary truss members consisting of eye bars, etc.

Tappan Zee Bridge/I-287 Corridor Environmental Impact Study, Project Manager - Project Manager for LiRo's efforts in developing the base maps including establishing the ROW lines and developing a database of highway and bridge inventory for the 33 miles of Thruway corridor (including the Tappan Zee Bridge) database for major utilities in the same corridor. Mr. Wagh also participated in the development of the new bridge crossing alternatives. (New York State Thruway Authority)

Tappan Zee Bridge/I287 Corridor Environmental Impact Study, New York State Thruway Authority, New York: Project Manager for Wagh Engineers, P.C. effort on this project. WEPC was assisted in the In-Depth Inspection of the bridge by providing one Team Leader and two Assistant Team Leaders. He performed Load Rating Analysis and Seismic Analysis and conceptual retrofit designs of all deck truss spans of this 3.1 mile long bridge. Studied the combined bridge and tunnel alternates for the replacement of the existing bridge. Cut and cover and bored tunnels were being suggested in the approach areas. (7/02 to 5/05)

Tappan Zee Bridge, Westchester County, NY, NYSTA: Project Manager for the rehabilitation of this 3.1 mile long bridge over the Hudson River between Tarrytown and Nyack consisting of 1.5 mile trestle spans, 19-250 foot deck truss spans and a 2,400 foot three-span cantilever through truss. The project involved inspection, rating analysis, seismic risk assessment and deck replacement. The design involved modifications to the bridge to accommodate new wider deck and retrofit work for live loads and wind loads. The seismic risk assessment work involved site specific seismicity investigation and response spectra and time history analyses using three-dimensional computer models. This project also included a comprehensive study to determine the most appropriate means for replacing the existing deck considering constructability, durability and traffic control. (4/94 to 12/95)

Walt Whitman Bridge Corridor Reconstruction, Contract No. 3, DRPA: Project Manager for the rehabilitation of the 10,000 + foot long bridge. The project included inspection, rating, preliminary and final design services for the rehabilitation of the main suspension spans and widening and redecking of approaches. The project also included construction staging, replacement and widening of the deck slab on the approaches, suspended spans deck repairs, overlay replacement, suspender collar retrofit, barrier replacement, fatigue investigation, and other structural modifications. The work also included seismic retrofit measures such as bearing replacement of the approach beam, girder and truss spans. The redecking was designed to be constructed in seven (7) construction stages to allow six (6) traffic lanes to be maintained during peak hours. The project included complete replacement and upgrade of the electrical system that supports roadway lighting, navigational and aviation lights and lane use signals. The Suspender Collar retrofit work consisted of modifying the existing suspender collar assemblies from panel point 65 to 65' on the north and south sides of the center suspended span (46 total collars). The work included removal of the existing collars, replacement of the zinc lining with a polyurethane liner, realigning of the collar and re-installation. (10/94 to 12/95)

ACI INSPECTORS

John Eskridge, N-IV
RESIDENT ENGINEER

Since 1974, Mr. Eskridge has been involved in the construction inspection and administration of civil engineering projects. Projects include highway and bridge construction, installation of storm and sanitary sewers, concrete and asphalt pavement operations on city streets and site improvements, including landscaping and irrigation. He has extensive experience in utility installation and coordination. His project experience includes:

EDUCATION	Construction Technology, SUNY at Farmingdale
REGISTRATION / CERTIFICATIONS	ACI Concrete Construction Special Inspector ACI Concrete Field Testing Technician - Grade I NICET IV - Highway Construction Welding Inspection Issues Seminar SSPC C-1 Certified, NY Portland Cement 40 Hour Concrete Pavement Construction Permit-Required Confined Space Entry Course - 29CFR/OSHA OSHA 10 Hour Occupational Safety & Health Training Formal MPT Training - NYSDOT Confined Space Entry Certification Advanced Practice of Concrete Construction & Specifications
YEARS WITH THIS FIRM	22
YEARS WITH OTHER FIRMS	13

LIRR Rehabilitation of Amott Drainage Culvert, Resident Engineer - The project consists of adding a 72 inch diameter culvert to augment the existing culvert. Rehabilitation of the existing culvert includes repair/replacement of the spillway, inlet structure, drainage pipes and outfall piping. The work included coordination with railroad departments such as Electric Traction Power, Maintenance of Way and Rail Operations. The major items of work include the following:

- Construction of a catch basin at the LIRR Substation to receive: a) flow from the existing 15 inch diameter steel pipes, b) flow from the LIRR substation swale.
- Modify/extend the LIRR substation swale to carry swale flow to the new catch basin.
- Construct a stair sluice at the LIRR substation.
- Demolish portions of the existing stair sluice at the LIRR substation and fill/stabilize the eroded area of the adjacent embankment.
- Provide and install a precast concrete trough at the bottom of embankment from the proposed stair sluice at the LIRR substation over a distance of approximately 350 ft. on the south side of the ROW.
- Provide and install a 42 inch diameter reinforced concrete pipe over a distance of approximately 750 ft. on the south side of the ROW.
- Provide and install a 72 inch reinforced concrete carrier pipe inside of the 96 inch steel jacked under both tracks at Amott Culvert and grout in place.
- Construct new head and wing walls at Culvert at Amott Culvert.

Parkway, PIN XM97.51 D015486- This project involved the repair and painting of 37 bridges on or spanning the Grand Central Parkway in Queens, NY. The bridges required a wide variety of repairs including those to steel, joints, concrete decks, drainage system and scuppers, masonry veneers, as well as paving and complete bridge painting utilizing full Class Containment. The bridges ranged in size from a three span pedestrian overpass to a 28 span viaduct ten lane wide and included the Clearview Expressway/Grand Central Parkway interchange. Work was performed on a 24/7 basis. Multiple change orders were processed. (NYSDOT, $29M)

Reconstruction and Widening of Merrick Road, Rt. 27A, Freeport, NY, Resident Engineer - This project involved the widening, repaving, and resignalization of a 5 lane roadway in an urban area. The project included the realignment of a major intersection, Mill Road. New drainage, curb and sidewalk were installed. The entire intersection was paved with asphalt. The project also included extensive utility upgrades for gas, electric, and telephone service. MPT was critical due to the high traffic volumes running through the project corridor. The major portion of the work was performed at night and required nightly lane closures. All traffic control and MPT was done in accordance with NYSDOT standards and requirements. (Nassau County DPW, $3M, 2006)

When and Where Marine Structural Repairs, Directed within the Five Boroughs (Tasks 1 & 3), Chief Inspector - This contract called for when and where repairs for waterway bridges throughout New York City. Due to the time-critical nature of the work, there was little advance notice of the general defects discovered by condition inspection teams. LiRo prepared specific designs for work on a fast-track basis, as well as applications for DEC/Corps of Engineer and Coast Guard Permits. We performed Construction Inspection and site engineering services as an integral part of a combined team that was closely integrated with NYCDOT. (NYCDOT, $10M)

Reconstruction of Glen Cove Road at Northern Boulevard (RT 25A), Greenvale NY - This project involved the widening and realignment of a major intersection. New turning lanes were constructed. The project included the installation of a new drainage system, concrete curb installation, Superpave asphalt paving, stripping, traffic system resignalization, and extensive utility upgrades. Due to the heavy traffic volumes MPT was critical and the majority of the work was done a night. The project was for the Nassau County DPW but was all done according to NYSDOT specification due to the extensive work on Northern Blvd. The project also required extensive coordination between the NCDPW and the NYSDOT. (NCDPW, $3M, 2005)

Resurfacing of the Wantagh State Parkway from the Southern State Parkway to the Northern State Parkway (D015384), Levittown, NY, Chief Inspector - This project involved the complete resurfacing of 9.8 km of the Wantagh State Parkway in Nassau County, NY. All existing asphalt pavement was milled. Full and partial depth pavement repairs were made. Over 300 drainage structures were modified. The existing concrete curb was milled and replaced with new modified curb. Extensive electrical work was also performed including 5000 lf of conduit, numerous pull boxes, and electrical appurtenances rewired to support the INFORM system. A unique aspect of the project was that full nighttime closures of the Parkway were required each night. The closures were coordinated with the NYSDOT, INFORM, the contractor, as well as local municipalities. NYS Troopers provided closure protection. Extensive signage was required for detours within a 5-mile radius of the project. (NYSDOT, $16.2M)

Long Island Expressway Reconstruction, Queens County, NY, Chief Inspector - This project for NYSDOT involved the ***replacement of 18 bridges, the rehabilitation of 7 others***, and the reconstruction of 7 miles of highway. The project also included the construction of 5 noise walls and the construction of 12 retaining walls. A major component of the project was a complete ITS system including facilities such as VMS boards, closed circuit cameras, ranging radar detectors, highway advisory radio, central office facilities and many others. Project specifics included 31,000 sm of "European" concrete pavement, superstructure deck replacement with "Inverset" structural spans, "Superpave" asphalt overlays, modification or replacement of over 700 drainage structures, and replacement of 35 overhead sign structures. (NYSDOT, $200M)

Gajendran Ganesan, LEED AP
CONSTRUCTION INSPECTOR

Mr. Ganesan has over 17 years of experience in civil and structural engineering projects, both locally and globally. His work includes construction inspection, bridge inspection, structural detailing, project management and drainage inspection. He is familiar with many computer programs including Microstation, AutoCAD, Microsoft Office and Microsoft Project. His experience includes work on the following projects:

EDUCATION	B.S., Civil Engineering, University of Madras, India, 1991 M.S., Construction Management, Columbia University, 2010
REGISTRATION / CERTIFICATIONS	ACI Concrete Construction Special Inspector ACI Concrete Field Testing Technician - Grade I LEED Certified Professional ICC Certification Structural Steel & Bolting Inspector
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	12

Deck Replacement on the Randall's Island and Ward's Island Viaduct at the Triboro Bridge (RFK Bridge), Senior Inspector. This project is the TBTA's largest bridge project to date and involves the reconstruction of the Wards/Randall's Island Viaduct, new coatings, bearing replacement on the Queen's Approach and Bronx Truss, construction of new ramps, access road construction on Randall's Island and widening of the Queens to Manhattan Ramp. The existing deck (over 480,000 SF) replaced with composite units of structural steel cross beams and post tensioned precast concrete. The Ward's/ Randall's Island Viaducts receive new armored joints, rosphalt overlay, side and median barrier, improved storm drainage and new steel and cast in place (post-tensioned) brackets and stringers for the widening of the existing roadway. Over 22 million pounds of new structural steel installed.

Four Bridges on Raritan Valley Line, Civil Engineer - Performed field utility inventory and traffic sign inventory. Designed the M&PT for the rehabilitation of 4 adjacent bridges, including preparation of detour plan. (NJ Transit)

Ramp Construction - Two new on and off ramps constructed in conjunction with a 5000 LF surface road on Ward's Island. The majority of the ramps are elevated and a portion built with new retaining walls. Ramps construction include new foundations on piles, new columns, new steel girders, reinforced cast in place deck slabs, and new side barriers. The existing pedestrian walkways eliminated and replaced by one new pedestrian ramp. A portion of the ramp cantilevered with cast in place concrete brackets and a steel grid concrete deck. The remaining portion built with retaining walls and concrete walkway down to grade level. In addition a new stair tower will be constructed on the pedestrian walkway with new piers and columns. The Queens to Manhattan Ramp widened to allow for three lanes to access Manhattan. A portion of the existing roadway deck removed and construction of new foundations on piles, new columns, new girders, and reinforced cast in place deck slab constructed.

Bearing Replacement - Approximately 740 bearings replaced on the Queens Viaduct, Ward's / Randall's Island Viaducts, Queens to Manhattan Ramp and the Bronx Truss.
(MTA, $282M, 2009)

Countywide Resurfacing in Nassau County, Construction Inspector. Responsible for the daily activities and coordinated with contractor's workforce to insure that work was being performed as per specification. Upon completion of work, roadway was resurfaced with binder and top asphalt. (Nassau County DPW, $10M, 2005)

Tappan Zee Bridge, Special Interim Inspection, Assistant Team Leader. Performed special inspection of bridge superstructure element rated 3 and less Prepared flag reports and inspection reports. (NYS Thruway Authority, 2005)

Florence Avenue Reconstruction, Part I, Civil Engineer. This project involved design and construction inspection services for Florence Avenue in the Town of Oyster Bay (Town of Oyster Bay, $400K, 2007)

Terminal Area - Emergency Access Road at Westchester County Airport/ Airport Security - Vehicle Access Checkpoint, Westchester, NY, Civil Engineer. This project involved conceptual design alternatives in connection with engineering services for vehicle access security checkpoints and terminal area emergency and Egress Road. (Westchester County DPW, $373K, 2006)

Riva Pointe Condominiums, Pier H, Lincoln Harbor, Weehawken, NJ, Structural Detailer. This project involved structural analysis and performed construction support services, resolves design and construction changes due to field conditions and developed resolutions for new six story high condominium complex building. (Riva Pointe Development, LLC, $33M, 2004)

Widening and Rehabilitation of CR83, North Ocean Avenue Bridge over I-495, Suffolk County, NY, Structural Detailer. Assisted in the designing of the extension for substructure and superstructure as well as construction stages and preparation construction drawings. (Suffolk County DPW)

Route 9A: Segment 1, BPU Roof Extension, Assistant Team Leader - Performed detailed inspection survey on two 407 ft long retaining walls. Using photo software technology in conjunction with Microstation, created custom drawings for use by other disciplines to rehabilitate these walls. (NYSDOT, $18M, 2002)

Broadway Bridge over Harlem River, Assistant Team Leader - Performed in-depth inspection for the Broadway Bridge. Responsibilities included the inspection of the trusses of the two towers, the trusses of the lift span, the machinery room framing at both towers, the roadway framing of the north tower over Metro North Railroad and the north abutment. Also prepared bridge general plan, elevations and detailed cross-sections to be used as part of the BRPR report and preliminary plans. (NYCDOT)

Tappan Zee Bridge/I287 Corridor Environmental Impact Study - CADD Drafter for the EIS sketches. Prepared the plan, elevation and sections for structural steel repairs, existing conditions, replacement bridge concepts, etc. Also assisted in preparation of reports on existing conditions, rehabilitation and preservation options for the bridge. (NYSTA)

Site Survey, Land Transport Authority (LTA), Singapore, Civil Engineer - Performed survey to determine the feasibility for providing bus shelters and link-ways to the schools in Marine Parade GRC. Also performed site study and elevation for providing bus shelters and link-ways in the Sembawang GRC.

Proposed Maxwell Road Underpass, LTA, Singapore, Construction Inspector - Performed site inspection, materials testing, coordination with site staff and relevant authorities for getting approval prior to commencement of work.

Mekh Gurung
CONSTRUCTION INSPECTOR

Mr. Gurung has over 12 years of construction related experience. He has significant experience working with public agencies such as NYCSCA, DASNY and the NYCDDC, performing such duties as preparing daily inspection reports and comparing construction progress with approved plans, specifications and submittals to verify the contractor's work.

EDUCATION	Civil Engineering, Tribhuwan University, Pokhara, Nepal, 1996 Building Construction Technology, Institute of Design and Construction, 2009
REGISTRATION / CERTIFICATIONS	ACI Concrete Construction Special Inspector ACI Concrete Field Testing Technician - Grade I ICC Certification Structural Steel & Bolting Inspector Hilti Fire Stopping Certification NYC Department of Buildings 4-Hr Supported Scaffold User C OSHA - Construction Safety & Health Certification
YEARS WITH OTHER FIRMS	11

Nassau Community College - Tower Elevator Upgrades, Inspector – Mr. Gurung is providing coordination and inspection services for the rehabilitation of three elevators in the campus buildings. (Nassau Community College, $1M)

City of Long Beach-Drill/Tank, Inspector. Mr. Gurung provided inspection services for structural repairs to an elevated tank for the City of Long Beach. He ensured that all work for the repairs were in conformance with the plans and specifications. He provided field coordination with the contractor during construction and reviewed and approved the contractor's schedule. In addition, he conducted progress meeting with the contractor and the City of Long Beach. He also reviewed and prepared change orders, as well as invoices and payment applications. (City of Long Beach, 2009)

Previous Experience

Velez Organization, Elmhurst, NY – August 2008 – May 2010 - Mr. Gurung has performed as Assistant Superintendent on various projects, which include:

Yankee Stadium City work Projects - Building J– This LEEDs Gold Certificate renovation included an area of over 25,000 sf. Mr. Gurung's responsibilities included:

- Performing the inspection of daily construction progress for all trades and preparing daily and monthly report
- Supervising installation of foundation, concrete slab, structural steel rehabilitation, masonry work, EPDM roof, green roof, underground utilities, HVAC, plumbing, electrical, fire alarm, security and communications systems to ensure that work is in compliance with the plans and specification
- Witnessing the various tests such as fire proofing, concrete, compaction, welding, hydro test for plumbing, sprinkler & HVAC systems, air balance test for HVAC system, leak detection system on roof etc.
- Preparing weekly look ahead schedule
- Reviewing the submittals
- Coordinating between A/E and subcontractors
- Reviewing and preparing change order documents
- Participating in weekly progress meeting
- Assisting LEEDs and commissioning agents
- Taking daily construction progress photographs

- Performing safety inspections
- Scheduling quality control inspection with testing lab

This project was completed on -time and budget. (NYCEDC, $ 15M)

Future Tech Consultants of New York, Inc. - July 2005-August 2008 -With this firm, Mr. Gurung performed as a Field Inspector for various public agency projects. This included NYC SCA, DASNY, NYC DDC, Giants Stadium and many private projects. His duties included:

· Performing technical inspection of Contractor's work for steel reinforcement, concrete, masonry, fire proofing, fire stopping, mortar, grout, welding, bolting, metal decking, shear studs etc.
· Performing inspection of backfilling, compaction and take the soil density test
· Comparing actual construction with approved plans, specifications and submittals to verify the contractor's work
· Performing test for concrete, fire proofing, mortar and grout and collect the samples
· Preparing the daily inspection report

Pokhara Sub-Metropolitan, Newroad, Pokhara, Kaski, Nepal, Overseer – Mr. Gurung's responsibilities included:

· Reviewing plans submitted to Municipality for approval
· Performing technical inspection of construction work throughout the city to determine if construction work is being done safely and in conformance with approved applications, plans, specification and in accordance with City Code
· Performing technical inspection in response to complaints received by City alleging that existing buildings are in violation of City Code and Zoning Resolution
· Preparing the inspection reports and issue violations and summonses for non-compliance

Kalika Construction, Kathmandu, Nepal - Assistant Project Manager - Mr. Gurung's responsibilities involved various technical and administrative work. This included:

· Management of the submittals, RFI's, change order log
· Preparation of the daily report of work progress
· Preparation of monthly requisition and submit to the owner for approval
· Updating the project schedule
· Receiving the materials and record keeping

Paul LaGrassa, N-III
INSPECTOR

Mr. LaGrassa has 18 years of experience as a highway construction inspector on state, county and town projects, performing inspection on various types of highway including: concrete construction, sewer line installation, asphalt paving, base repair, drainage installation and highway safety improvements.

EDUCATION	B.S., Engineering Science, SUNY Farmingdale, 1979
REGISTRATION / CERTIFICATIONS	ACI Concrete Construction Special Inspector ACI Concrete Field Testing Technician - Grade I OSHA 10 Hour Occupational Safety & Health Training OSHA 10 Hour Construction & Safety Training OSHA 10-hr Training Course NYSDOT MP&T Certificate NICET IV
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	15

Some of Mr. LaGrassa's projects include:

Long Island Expressway Reconstruction, Van Dam Street to Grand Central Parkway, Queens, NY, Chief Inspector - Mr. LaGrassa reconciled and confirmed numerous extended overhead packages submitted by the contractor. (NYSDOT, Area Supervisor, B. Ogurek, 718-482-4808)

Cross Island Parkway/Long Island Expressway Interchange (Exits 29-32), Senior Inspector - LiRo provided construction inspection services for the rehabilitation of the Long Island Expressway/Cross Island Parkway Interchange. This project included the construction and/or rehabilitation of 14 bridges, widening and resurfacing of the Long Island Expressway, local NYC roadway and utility rehabilitation, extensive park/wetland mitigation work, noise and retaining wall construction, and other incidental work. The most complex construction was the replacement of the mainline bridge over the Cross Island Parkway. This bridge was replaced in two stages and requires construction of a temporary structure to maintain three through travel lanes on the Expressway in each direction at all times (NYSDOT, $160M)

Jamaica Avenue Reconstruction (127th Street to Sutphin Boulevard), Office Engineer - This was a high profile project in an area that is both commercial and residential. Major utility facilities were relocated to accommodate watermains, sewers, and drainage. Close coordination with two community boards (Q-9 and Q-13), merchants, and property owners was necessary to minimize disruption due to construction and interruption of water service. Jamaica Hospital was constructing a new parking garage adjacent to this project and special coordination was required there as well. (NYCDDC, $9M, E.I.C. L. Wong, 1999-2000)

Veteran's Highway and Lincoln Avenue Reconstruction, Office Engineer - This project required the construction of a complete new drainage system on a extremely high volume state highway. New concrete pipe, up to 36 inches in diameter, was installed along the roadway. New drainage structures and a large recharge basin were installed. Extensive upgrades of utility systems were performed. The existing roadway was reconstructed. MPT was paramount due to the heavy traffic volume. (NYSDOT, $2.5M, EIC: C. Cuiffo)

Road Reconstruction in North New Hyde Park, Resident Engineer - This project involved the reconstruction/rehabilitation of 1 mile of road in a residential neighborhood. Main roads were reconstructed with full depth asphalt and minor roads were overlayed. Integral curb and gutter was installed throughout the area. Sidewalk repairs and drainage improvements were also performed. (Town of North Hempstead DPW, $1.1M, Contact: G. Anderson, 1995-1996)

Van Wyck Expressway Rehabilitation for NYSDOT, Chief Inspector - Installation of full and partial depth pavement repairs using highearly strength concrete. Performed air entrainment and slump tests and prepared test cylinders. Inspected asphalt overlay using HD asphalt mix. Monitored maintenance and protection of traffic and ensured that moveable concrete barrier was properly set. Installed loop detectors, conduit, and associated

electronics for INFORM variable message sign system. This project was the first "A+B Contract" for the NYSDOT in Region 11. (NYSDOT, $14M, EIC: B. Carbone)

Integrated Motorist Information System on I-495, Northern State Parkway and Southern State Parkway, Chief Inspector - Installation of traffic loops detectors, electrical conduit, electronic information signs, and communication equipment. Coordinated electrical contractors, utility companies and excavation crews. Monitored proper maintenance and protection of traffic procedures. Maintained daily job records including design changes, labor, equipment and extra work. (NYSDOT, $10M)

Meade Avenue Reconstruction, Bethpage, Chief Inspector - Arranging detours, coordinating setup with local authorities and monitoring all safety procedures along with supervising the removal and replacement of curb and gutter, catch basins, sidewalk and driveway aprons. Performed concrete field tests including slump and air. Inspected asphalt paving using automatic grade control. (NCDPW, $2M)

Site Work, Roadway Improvements, Parking Facilities and Drainage Upgrades at the John Flanagan Center, Huntington, Chief Inspector - Inspected installation of drainage structures, light pole foundations, metal railings, under drains, concrete curb and sidewalk. Obtained certifications and checked for laboratory stamps or tags in material deliveries. Inspected roadway widening and the installation of a new road. Performed layout and stakeout for a parking lot with elevations obtained from contract drawings. Directed placement of traffic signs and pavement markings. Supervised planting to control erosion on steep slopes. Clearing and grubbing was accomplished while maintaining various trees and shrubs. All subsoils were checked visually and analyzed by a laboratory to determine if they met specifications. (Town of Huntington, $1.5 M)

NYNEX Communication Towers, Valley Stream, Chief Inspector - Inspected installation of steel piles including a test pile. Checked piles for proper alignment, took blow counts and made a pile log. Supervised installation of steel reinforcement around piles and placement of concrete footings. Inspected the installation of concrete piers for the adjacent power and communications building, as well as the prefabricated building. All equipment and electrical installations were then tested. (NYNEX, $3M)

Huntington Paving Program, Chief Inspector - Asphalt paving of local and secondary roads. Determined limits of paving, and calculated the required tonnage; directed cleaning and tree trimming crews; monitored temperature, quality and yield of asphalt. Checked pavement with straight edge to verify cross slope was within acceptable limits. Maintained daily records of equipment, manpower, street diagrams, and quantities.

Sewer and Betterment Projects, Syosset and Westbury, Chief Inspector - Inspected sanitary sewer installation including mainline pipe, house connections and compaction.

John Linnane, P.E.
RESIDENT ENGINEER

Since 1986, Mr. Linnane has specialized in the supervision of large-scale infrastructure construction projects within the New York Metropolitan area. He has served as Resident Engineer and Chief Inspector on a number of projects for NYSDOT, NYS Thruway Authority, NYCDOT, Port Authority of New York and New Jersey and Nassau County DPW.

EDUCATION	B.S.C.E., Civil Engineering, Manhattan College, 1986
REGISTRATION / CERTIFICATIONS	ACI Concrete Construction Special Inspector ACI Concrete Field Testing Technician - Grade I Professional Engineer, NY Professional Engineer, NY Auto CAD I & II Seminar Auto CAD 3D Modeling Seminar
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	8

Some of his projects include:

Intrepid Pedestrian Bridge, Resident Engineer - The Intrepid Pedestrian Bridge was part of the Route 9A Reconstruction project between Battery Park and 59th Street. The Intrepid Pedestrian Bridge crosses 12th Avenue between 45th and 46th Street. A bus layover area was constructed east of 12th Avenue so that tour groups have direct access to the museum. The 300-ft, pedestrian bridge's main span is cable-stayed. From a center pier, six sets of cables suspend the steel box beam super structure above 12th Avenue. (NYSDOT, $9M)

Holland Tunnel Deck Replacement, New York, NY, Senior Inspector - Roadway reconstruction and deck replacement, drainage improvements. Responsible for the placement of reinforced concrete with all associated testing and supervision. (NYSDOT, $8M)

CI Services for Brooklyn ATM's, Gowanus-Prospect Expressway ITS, Phase,1 ITS Improvements, Resident Engineer- This project included the installation of an Intelligent Transportation System (ITS) along the Gowanus Expressway corridor between the Brooklyn Battery Tunnel and Verrazano Narrows Bridge. ITS is a communication network that provides the capability of monitoring and controlling traffic from a central station. This project included daytime and nighttime operations. For the nighttime operations, the contractor was required to submit a detailed Nighttime Lighting Plan in accordance with the NYSDOT Standard Specifications. (NYSDOT, $8M, 2011)

Installation of an ATMS on the Long Island Expressway, Resident Engineer - This project included the installation of an Intelligent Transportation System (ITS) along the LIE corridor between the Queens Midtown Toll Plaza and Main Street Flushing. The ITS is a modern communication network system that provides the capability of monitoring and controlling the traffic network from a central station. This project included daytime and nighttime operations. Project specifics included:
Installation of ITS system including receivers, transmitters, camera assemblies, controllers, radar detectors, fiber optic cables, etc. In addition, it required the installation of server and other ITS equipment at the JTOC station. At the completion of the network, a system integration was performed.Installation of electrical and utility boxes, junction boxes and various sizes and types of conduit and conductor cable.Installation of overhead sign structures, VMS signs and illuminated sign panels.Installation of corrugated beam guide railings and chain link fence.Extensive landscaping work including planting of trees and shrubs, vegetation protection, pruning, clearing and grubbing etc.Full depth concrete deck repairs on viaducts.(NYSDOT, $26M)

Emergency Repairs to the Belt Parkway Bridge over Paerdegat Basin, Brooklyn, NY, Resident Engineer - This contract called for providing an alternate support system for the loading, formerly carried by a pier-column, that had been severely damaged by a recent barge hit and was no longer functional. A strict incentive/disincentive provision was included for this work because traffic has already been channelized into narrow lanes, and disruption of this major arterial highway for construction operations has to be kept to an absolute minimum. One other task included in the work was the installation of a special movable median barrier powered by electricity,

with the capability of creating an opening which will be used in emergency situation to turn around over-weight vehicle to prevent them from traversing the bridge, and for emergency traffic detours. Other tasks included installation of major signage and the installation of heavy duty pier protection fender system to preclude damage to the channel pier-columns in the future. (NYCDOT, $14M, 2004)

Route 9A, Segment 7, Resident Engineer - LiRo provided construction inspection services for the reconstruction of Route 9A (12th Avenue) from 40th Street to 59th Street. The entire roadway sandwich was reconstructed. Major components of the utility infrastructure were also being upgraded. A four-span continuous ramp (steel with a concrete deck) was added to the Westside Highway. The substructure is founded on bored-in-place piles. Existing tidegates were renovated and new ones installed. The utility work included roadway drainage, 20-inch watermains, gas mains, and ECS (telephone) ducts. Traffic signals and street lighting as well as Intelligent Transportation Systems were being installed. Specific work items included the installation of fiber optic cables, pole mounted CCTV cameras, electrical cabinets and sign structures. In the midst of this construction, LiRo maintained traffic flow on the highway. An additional turning lane was added at 42nd Street. The traffic maintenance was compounded by the presence of the Circle Line, the Intrepid Museum, the Passenger Ship Terminal, and a convention center, all of which requires separate plans to address traffic concerns. The reconstruction of the Con Ed Oil/Steam Tunnel requires extensive dewatering and grouting schemes to perform the work. (NYSDOT, $85M)

NYCDOT Contract No. HBE1023, Emergency Installation of Center Median New Guide Rails on the Mill Basin Bridge, Brooklyn, NY, Resident Engineer - This contract called for the installation of a special movable bridge railing system on a double leaf bascule bridge carrying the Belt Parkway over the Mill Basin. This installation was designed to prevent future vehicular head-on collisions that had been occurring at an alarming frequency. The contract therefore had stringent incentive/disincentive provisions. LiRo was a pro-active major partner in assuring that the other participants remained focused on keeping the work going, and ultimately to be completed early. (NYCDOT, $3M)

Reconstruction of Route 110, Suffolk County, NY, Office Engineer - Roadway reconstruction, drainage improvements, and safety improvements. Responsible for the takeoff and ordering of materials to be incorporated into the project. Performed layout and survey for sidewalk, roadways (concrete & asphalt), and drainage. (NYSDOT, $12M, EIC: Nunzio Cusamano, 1987-1988)

Columbus Avenue Reconstruction Project, 85th Street to 110th Street, Assistant Resident Engineer - This project was done under two contracts: Contract I from W. 59th Street to W. 86th Street and Contract II from W. 86th Street to W. 110th Street. Total distance was 2.5 miles. This reconstruction included:

- New roadway consisting of 10" concrete base an a 3" asphaltic concrete wearing course Rehabilitation of sewers including sewer replacement, insituform lining, and gunniting of sewers ranging in size from 18" to 72"New drainage facilities including several hundred catch basins and 12" DIP Chutes New and replacement water mains including a total of six miles of water mains from 12" to 48" in diameter. The 48" main was constructed of welded steel pipe and ran a distance of approximately two miles.

- New street signs Installation of new gas mains New electrical feeders New curb (steel faced concrete and granite)New street lights and traffic signals

- New tree plantings

All of the above work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day service. (NYCDOT, $85M,)

Reconstruction of Hutchinson River Parkway, Westchester, NY, Senior Inspector - Roadway and bridge reconstruction, median replacement, drainage improvements, realignment and widening. Responsible for the placement of reinforced concrete with all associated testing and supervision. (NYSDOT, $32M)

Roger Lopez
INSPECTOR

Mr. Lopez' inspection experience has included visual inspections of reinforcing concrete and bottom of footing prior to concrete placement; testing (slump, air content and temperature); sampling concrete in conformance with ACI standards; inspection of backfills with moisture-density gauge for structural sub-grades; monitored asphalt operation and testing from sub-base to top surface; performed pile driving and concrete plant inspection for 500+ cubic yards batched. These activities were tested and inspected following projects drawings and specifications.

EDUCATION	B.S., Engineering Technology, New Jersey Institute of Technology, 2003
REGISTRATION / CERTIFICATIONS	American Concrete Institute Level II – Concrete Construction Special Inspector American Concrete Institute Level I Certificate NJ SAT TCC 10-Hour OSHA NYC DOB 4 Hour Supported Scaffold User NICET I (Soil & Asphalt) NICET II (Concrete) DCA (Concrete Placement and Reinforced Concrete) Troxler Nuclear Density Gauge Operation
YEARS WITH THIS FIRM	<1
YEARS WITH OTHER FIRMS	10

He has performed and managed inspection on over 200 construction projects in New York City, Central and North Jersey.

Representative Projects:

Grand Central Terminal Station, NY – Tested and molded concrete for sidewalks above subway along Park Ave. in compliance with NYSDOT and MTA specs.

Hamilton Avenue Marine Transfer Station, Brooklyn, NY – Inspected reinforcing steel, tested soil backfill and concrete for structure following contract documents and DOB code.

North Shore Marine Transfer Station, Flushing, NY – Inspected reinforcing steel for 2-level pier deck and ramps complying NYCDOB specs and client drawings.

270 Park Avenue, New York, NY – Tested concrete for renovations in various phases of the project.

Fulton Street Station, New York, NY - Inspected and tested concrete and asphalt for curbs and sidewalks according to drawings NYSDOT and MTA specs.

Barclays Center, Brooklyn, NY – In change of inspection crew in massive concrete pours.

Astoria Energy Phase II, Astoria, NY – Inspected, 800-million-dollar power plant, reinforcing steel for grout piles, and concrete, tested and sampled grout and concrete, checked subgrades for bearing capacity in soil.

11 Times Square, New York, NY - Supervised concrete placement and testing for slab floors and sidewalks. Sampled mortar and checked reinforcing steel for concrete masonry walls and checked cementitious fireproofing material for decks, columns and beams.

Fayson Lakes Dam, Kinnelon, NJ - Supervised construction activity and tested soil compaction, reinforced concrete and asphalt for dam, roadway and bridge located in Lakeside Trail.

Red Bull Park, Harrison, NJ - Inspected and tested soil backfill for conduits and foundations. Tested concrete and checked rebar for mezzanine levels.

New Meadowlands Stadium, East Rutherford, NJ - Responsible for Inspection of light pole pile driving, reinforcing steel, utility installation and asphalt placement and tested soil backfill for utilities and concrete.

Bergen Mall, Paramus, NJ - Inspected rebar and concrete form placement for lower level wall and tested and sampled concrete.

PNCT, Port Newark, NJ - Tested hot mix asphalt compaction for container area using nuclear methods.

Millburn Middle School, Millburn, NJ - Recommended undercuts for bottom of footing, checked backfill for bearing capacity allowance, inspected reinforcing steel and tested and sampled concrete for footings.

Warren County College, Washington, NJ - Recommended soil suitable and satisfactory for backfill and Inspected backfill for new classroom facility outside lower level wall.

APM Terminals, Port Elizabeth, NJ - Inspected rebar and concrete pour for repairs at the container crane area directed by Port Authority and tested soil moisture and density for rail track using nuclear methods.

West Morris Central High School, Chester, NJ - Responsible for site and building work inspection for an auditorium and gymnasium addition. Witnessed sanitary and storm lines installation, verified footing subgrade conformed to designed allowable bearing capacity. Inspected reinforcing steel for concrete and CMU walls. Tested and sampled concrete for footings, walls and slabs. Monitored CMU placement and sampled mortar and grout for compressive strength testing.

Applegarth Elementary School, Monroe, NJ - Inspected bottom of footing and reinforcing steel prior to concrete placement, tested and sampled concrete for footing and wind walls at loading dock.

KTR Warehouse, Allentown, NJ - Tested and casted in specimens concrete for 400+ Cubic yards of concrete.

Barnegat Middle School, Barnegat, NJ - Inspected bottom of building footings and backfill for new auditorium and classroom additions.

John Gregorio Towers, Linden, NJ - Recommended backfill material to replace unsuitable soil for footing, slab and parking subgrades. Monitored and tested backfill for building and site work. Monitored rebar and CMU placement from ground to the 7th floor. Tested and sampled concrete mortar and grout depending on the specs requirements.

Union County Juvenile, Linden, NJ - Inspected rebar for slabs-on-deck and reinforced CMU walls. Inspected and sampled concrete, mortar and grout and witnessed protection of these in extreme weathers.

Giuseppe Mannino, N-III
INSPECTOR

Mr. Manino has worked as a construction inspector for over ten years and was a self-employed masonry and concrete contractor since 1989. He is well-versed in all phases of residential and commercial construction.

EDUCATION	B.A., Aircraft and Powerplant Mechanics, SUNY Farmingdale, 1994
REGISTRATION / CERTIFICATIONS	ACI Concrete Construction Special Inspector, ACI Concrete Field Tesing Technician - Grade I, Troubleshooting Exterior Masonry Walls Certificate, NY OSHA 10 Hour Safety Course NICET III Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall C, NY Brick Masonry-Inspections and Quality Control Cert, NY
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	17

Relevant project experience includes:

John F. Kennedy International Airport Terminal 5/6 Redevelopment Project, Sr. Inspector- Due to JetBlue Airways exceeding the capacity of its current terminal at JFK, an area behind the existing Terminal 5 has been designated for the development of a new 26 gate terminal building (625,000 sf) including connectors to the Airtrain, a new parking garage and the historical Saarinen building. The construction activities are being performed in a cost-effective and customer-friendly fashion. The terminal is operating at a minimum IATA Level of Service C.

Mr. Mannino was responsible for the following:

- Audit and Field Inspection, Flexible and Rigid Concrete and Asphalt Paving for Apron and Taxiline Pavement),DIP Watermain,Jet Fuel Distribution and Hydrant System,Storm and Sanitary Sewers,Reinforcing Steel,Linestripping
- Mechanically Stabilized Earth (MSE) ,Structural Steel and Concrete Ramps
- Post-Tensioned Precast Concrete Roadway
- CMU Exterior Walls and Fire Rated Interior Walls
- Quality Assurance,Audit of Terrazzo flooring and Tile Installation
- Testing,Record-keeping of Fire,Smoke Dampners for Life Safety Inspection
- Management ,Recording,Audit,and Resolution of all Concrete,Soil,Asphalt,Masonry PANYNJ Controlled Inspections
- Monitoring of Testing Labs Field Personnel Performing Materials Testing
- Extensive Daily Coordination and Scheduling with General Contractor,Sub-Contractors ,JFK-PAPD, Security,Airtrain,Airside and Landside Operations,Maintenance,Quality Assurance,and Materials divisions
- Scheduling PANYNJ Inspections,MPT,Commisioning of Traffic Signals,Entrance ,Exit,Central Terminal Access Roadway Opening

(PANYNJ, $800M)

World Trade Center, Construction Inspection for Emergency Roadway Milling and Paving, Inspector - This was one of LiRo's most unique and difficult projects. LiRo had been working at Ground Zero since September 17, 2001. On April 16, 2002, we were given an assignment by the New York City Department of Design and Construction to provide construction inspection services for the milling and repaving of 61 lane miles of streets in the Trade Center area. This project was performed under the auspices of FEMA and the FHWA. The project commenced on Monday, April 22, 2002 and was completed by June 1, 2002. Work was performed seven days per week, primarily at night. The work consisted of milling 1-1/2" of asphalt roadway, adjustment of street hardware, miscellaneous roadway repairs, and placement of a 1-1/2" asphalt concrete roadway surface. The operation was staggering. Approximately 200 men, four milling crews, three paving crews, and over 50 trucks were utilized each night. Asphalt production averaged nearly 2,500 tons per night on tight lower Manhattan streets. Weekly estimates averaged $2.1 million. LiRo had up to 18 inspectors on this project. Extensive

coordination with local community boards was essential. (NYCDDC, $14M, 2002)

World Trade Center Recovery and Removal, New York, NY, Inspector: Immediately after 9/11, Tully was assigned to the rescue/recovery/clean-up efforts at the World Trade Center. As one of the four contractors at the site, Tully was responsible for the areas at WTC Buildings 4 and 5, as well as the South Tower (Building 2). LiRo provided on-site structural engineering to Tully from mid-September 2001 to the completion of the clean-up in July 2002 (Tully Construction, $150M)

Toll Plaza Rehabilitation at the Henry Hudson Bridge (Project HH-83), Inspector - This project involved full and partial depth pavement repairs to the concrete toll plaza area. MPT was critical due to the fact that this facility generates revenue 24 hours a day. All construction was completed in stages to minimize adverse effects on traffic. All concrete places was rapid set. After repairs were completed, the entire plaza area received a microsilica overlay. Other work included joint repairs, protective deck shielding, and lighting installation. (TBTA, $14M)

Remediation of Petroleum Contaminated Sites at Various Locations, Inspector- The primary goals of the program is the identification and upgrade/conversion of heating oil tanks which are presently not in compliance with applicable regulations and the identification and remediation of sites where petroleum spills have contaminated soil or groundwater. LiRo is conducting predesign investigations to evaluate the regulatory compliance status of the tanks and also determine the feasibility of conversion of the fuel oil systems to natural gas. The initial evaluation is documented in a predesign report with descriptions of the options for bringing the systems into compliance (including energy conversion) and a recommended alternative. During the predesign stage LiRo is also overseeing tank tightness testing of the systems. A key issue for this project is the sensitivity of the sites to the loss of their heat or hot water source. LiRo has put in place several measures to insure the loss of heat or hot water source is avoided. Those measures include scheduling, use of open service/unit price contracts and insuring temporary oil tanks are available. After approval of the design recommendation, plans and specifications for the selected alternative are developed, bids are solicited, and fueling system construction is complete. At sites where spills are found, LiRo will submit to NYSDEC a Site Specific Investigation Plan (SSIP) describing site characteristics and corrective action investigation requirements. Once the SSIP is approved by NYSDEC, LiRo will carry out the investigation as detailed in the SSIP and prepare a Site Specific Investigation Summary and Remedial Plan (ISRP). (NYCDDC, $25M)

Broadway Streetscape Improvement Program, New York, NY, Superintendent: This $10 Million streetscape improvement project in Lower Manhattan involved sidewalk, curb and street lighting replacement along Broadway form Murray Street South to Battery Place and Stone Street. More specifically, the work included:

- Replacement of sidewalks with pigmented concrete to match bluestone
- Pavement milling
- Installation of 12" wide granite curb/ADA handicapped ramps
- Utility relocations
- Installation of new street light foundations
- Traffic signal upgrade
- Sidewalk vault repair

This project was awarded "Project of the Year" by Construction Management Association of America (CMAA) (April 2005). (Alliance for Downtown New York, $10M)

County-wide Resurfacing, Various Locations, Nassau County, NY., Inspector. This $10M project involved resurfacing of County roads at various locations. Specific work items included:

- Pavement milling
- Full and partial depth concrete repairs
- Full and partial depth asphalt repairs
- Asphalt paving
- Concrete curb construction
- Sidewalk construction
- Pavement markings
- Maintenance and Protection of Traffic
- Field Surveying

Work was performed day and night. Locations include Merrick Ave., Plainview Rd., Peninsula Blvd., Old County Rd., Merrick Rd., Grand Ave., Jerusalem Ave., Nassau Rd., Front St., and Newbridge Rd.

Sid Ramnarain
INSPECTOR

REGISTRATION / CERTIFICATIONS	American Concrete Institute Level II - Concrete Construction Special Inspector American Concrete Institute Level I Certificate
YEARS WITH THIS FIRM	<1
YEARS WITH OTHER FIRMS	12

Mr. Ramnarain's role as an Inspector with varying degrees of responsibilities have included the following tasks:

- Verifies that all materials sampling and testing are performed as required
- Inspects all aspects of work including dimensions, connections, embeds, finishes, etc. Includes when conditions change, a new phase of work starts, new workers, equipment or procedures are implemented, or any other change to work or job conditions takes place
- Verbally report all deviations to the contractor and the project inspector immediately
- Provides written daily reports and keeps a log of deviations including status and resolution

Representative Projects:
An experienced Concrete Field Technician with over 12 years of experience, Mr. Ramnarain has demonstrated his knowledge and ability to properly perform and record the results of seven basic field tests on freshly mixed concrete. He is a Certified ACI Concrete Construction Special Inspector. Typical responsibilities on his projects are:

- Performed all aspects of concrete sampling and testing. This included obtaining the temperature and slump, testing air content by either the Pressure Method or Volumetric Method, testing unit weight and yield of freshly mixed concrete
- Conducted concrete product inspections, mix design analysis, and recordkeeping per Quality Control Program requirements
- Made and cured concrete test specimens in the Field
- Obtained Core samples testing for compression strength
- Complete knowledge of cutting, capping and testing cylinders
- Trained new hires in all aspects of concrete testing procedures
- Occasionally drove company vehicle to pick up and deliver cylinders to Lab for testing

Pankaj Raval
INSPECTOR

Mr. Raval has been in the construcion industry for over 25 years. He has held positions as Field Inspector, Site Supervisor, and Construction Supervisor on significant New York area projects. He has worked as a field inspector on the #7 Subway Extension, the World Trade Center towers and the Jacob Javits Center.

His public sector experience working on projects for the Port Authority of New York and New Jersey (PANYNJ), NYC Department of Environmental Protection (DEP), NYC School Construction Authority (SCA), and NYC Department of Design and Construction (DDC).

EDUCATION	BS/Engineering Technology, NJ Institute of Technology, 2003
REGISTRATION / CERTIFICATIONS	American Concrete Institute Level II – Concrete Construction Special Inspector American Concrete Institute Level I Certificate
YEARS WITH THIS FIRM	<1
YEARS WITH OTHER FIRMS	28

Typical tasks that he has performed on these and other projects are listed below.

Field Inspector:

- Field concrete testing and water content of concrete by microwave drying oven (AASHTO T318) at different jobs
- Checking that the rebar's were placed in accordance with contract documents
- Concrete batch plant inspection
- Review drawings

Site Supervisor:

- Supervised about. 150 laborers in the construction of irrigation canals which included reinforced concrete and grade preparation
- Supervised for excavation and laying of sewer and drinking water pipelines, with the fixtures like union, coupling, sluice valve, air valve etc.
- Prepared payment estimates for unit price items to be submitted to the local government office

Site Supervisor:

- Checking water content for different types of aggregates like stones and sand.
- Checking RCC pipes and joints
- Review drawings and rebar check

Construction Supervisor:

Supervised approximately 200 laborers in the construction of water supply, wastewater and storm sewer projects for commercial and residential projects to include asphalt highways and municipal developments.

Mohammad Shaikhji
INSPECTOR

Mr. Shaikhji has over 35 years of construction-related experience. He has worked in various capacities as inspector on multi-million dollar projects on roadways and bridge projects. He has worked on projects for local public transportation agencies as well as the federal government on assignments abroad, including roadway projects for the U.S. Army Corps of Engineers.

EDUCATION	Civil Engineering, Bombay Technical Education Board
REGISTRATION / CERTIFICATIONS	American Concrete Institute Level II – Concrete Construction Special Inspector American Concrete Institute Level I Certificate NICET IV NJ SAT Traffic Control Certificate Traffic Awareness Certificate
YEARS WITH THIS FIRM	<1
YEARS WITH OTHER FIRMS	39

Typical tasks that he has performed on these and other projects are listed below.

Senior Construction Inspector: Worked on $70 million project on I-295 from Exit 45 to Exit 57 in Burlington NJ.

Senior Construction Inspector: Worked on project restoring Philadelphia streets, i.e Market Street from street #34 to #40 and Point Breeze Street. Work included inspection of dismantling old curbs and sidewalk slabs and replacing them by sparkling concrete slabs and special brick pavement. Inspection duties were to review that work is done per plans and specifications, measurement of quantities of work done before monthly pay estimate, quality assurance and supervision of junior inspectors.

Construction Inspector: Following duties were performed on resurfacing project of 78W and 78E for the Delaware Bridge Commission.

- Inspection of laying 1" thick mix for preventing reflection cracks
- Inspection includes but not limited to checking of alignment, laying, compaction, density and mix composition.

Construction Inspector: Inspection of 2" thick intermediate and 2" thick surface (Super pave mix) course including but not limited to checking temperature, thickness, compaction, density tests, extraction test, air void measurements and quantity laid etc. Inspection of grouting work through bore holes to stabilize moving rigid pavements and keeping record of grout volume. Inspection of stitching of cracked slabs and keeping record of quantities. Inspection of dismantling and repouring slabs which has failed specific tests for settlement under load.Updating record for completion of project e.g. "As Built Drawings' and "Extra Quantities" by checking all 187 items of Contact Documents. Inspection of road side curbs and storm water drainage structures on Rt I-80.

Sr. Construction Inspector: Supervision of NJDOT Long Life Road Marking Project of central New Jersey state roads, including inspection of thermo plastic and epoxy road marking as per specifications and plans. Traffic Control according to Manual on Uniform Traffic Control devices to carry out road marking safely.

- Measuring thickness of thermoplastic, epoxy lines and symbols.
- Measuring retro reflectivity of markings according to specifications.
- Inspection of fixing of one way and two way reflectors.

ICC

Gajendran Ganesan, LEED AP
CONSTRUCTION INSPECTOR

Mr. Ganesan has over 17 years of experience in civil and structural engineering projects, both locally and globally. His work includes construction inspection, bridge inspection, structural detailing, project management and drainage inspection. He is familiar with many computer programs including Microstation, AutoCAD, Microsoft Office and Microsoft Project. His experience includes work on the following projects:

EDUCATION	B.S., Civil Engineering, University of Madras, India, 1991 M.S., Construction Management, Columbia University, 2010
REGISTRATION / CERTIFICATIONS	ACI Concrete Construction Special Inspector ACI Concrete Field Testing Technician - Grade I LEED Certified Professional ICC Certification Structural Steel & Bolting Inspector
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	12

Deck Replacement on the Randall's Island and Ward's Island Viaduct at the Triboro Bridge (RFK Bridge), Senior Inspector. This project is the TBTA's largest bridge project to date and involves the reconstruction of the Wards/Randall's Island Viaduct, new coatings, bearing replacement on the Queen's Approach and Bronx Truss, construction of new ramps, access road construction on Randall's Island and widening of the Queens to Manhattan Ramp. The existing deck (over 480,000 SF) replaced with composite units of structural steel cross beams and post tensioned precast concrete. The Ward's/ Randall's Island Viaducts receive new armored joints, rosphalt overlay, side and median barrier, improved storm drainage and new steel and cast in place (post-tensioned) brackets and stringers for the widening of the existing roadway. Over 22 million pounds of new structural steel installed.

Four Bridges on Raritan Valley Line, Civil Engineer - Performed field utility inventory and traffic sign inventory. Designed the M&PT for the rehabilitation of 4 adjacent bridges, including preparation of detour plan. (NJ Transit)

Ramp Construction - Two new on and off ramps constructed in conjunction with a 5000 LF surface road on Ward's Island. The majority of the ramps are elevated and a portion built with new retaining walls. Ramps construction include new foundations on piles, new columns, new steel girders, reinforced cast in place deck slabs, and new side barriers. The existing pedestrian walkways eliminated and replaced by one new pedestrian ramp. A portion of the ramp cantilevered with cast in place concrete brackets and a steel grid concrete deck. The remaining portion built with retaining walls and concrete walkway down to grade level. In addition a new stair tower will be constructed on the pedestrian walkway with new piers and columns. The Queens to Manhattan Ramp widened to allow for three lanes to access Manhattan. A portion of the existing roadway deck removed and construction of new foundations on piles, new columns, new girders, and reinforced cast in place deck slab constructed.

Bearing Replacement - Approximately 740 bearings replaced on the Queens Viaduct, Ward's / Randall's Island Viaducts, Queens to Manhattan Ramp and the Bronx Truss.
(MTA, $282M, 2009)

Countywide Resurfacing in Nassau County, Construction Inspector. Responsible for the daily activities and coordinated with contractor's workforce to insure that work was being performed as per specification. Upon completion of work, roadway was resurfaced with binder and top asphalt. (Nassau County DPW, $10M, 2005)

Tappan Zee Bridge, Special Interim Inspection, Assistant Team Leader. Performed special inspection of bridge superstructure element rated 3 and less Prepared flag reports and inspection reports. (NYS Thruway Authority, 2005)

Florence Avenue Reconstruction, Part I, Civil Engineer. This project involved design and construction inspection services for Florence Avenue in the Town of Oyster Bay (Town of Oyster Bay, $400K, 2007)

Terminal Area - Emergency Access Road at Westchester County Airport/ Airport Security - Vehicle Access Checkpoint, Westchester, NY, Civil Engineer. This project involved conceptual design alternatives in connection with engineering services for vehicle access security checkpoints and terminal area emergency and Egress Road. (Westchester County DPW, $373K, 2006)

Riva Pointe Condominiums, Pier H, Lincoln Harbor, Weehawken, NJ, Structural Detailer. This project involved structural analysis and performed construction support services, resolves design and construction changes due to field conditions and developed resolutions for new six story high condominium complex building. (Riva Pointe Development, LLC, $33M, 2004)

Widening and Rehabilitation of CR83, North Ocean Avenue Bridge over I-495, Suffolk County, NY, Structural Detailer. Assisted in the designing of the extension for substructure and superstructure as well as construction stages and preparation construction drawings. (Suffolk County DPW)

Route 9A: Segment 1, BPU Roof Extension, Assistant Team Leader - Performed detailed inspection survey on two 407 ft long retaining walls. Using photo software technology in conjunction with Microstation, created custom drawings for use by other disciplines to rehabilitate these walls. (NYSDOT, $18M, 2002)

Broadway Bridge over Harlem River, Assistant Team Leader - Performed in-depth inspection for the Broadway Bridge. Responsibilities included the inspection of the trusses of the two towers, the trusses of the lift span, the machinery room framing at both towers, the roadway framing of the north tower over Metro North Railroad and the north abutment. Also prepared bridge general plan, elevations and detailed cross-sections to be used as part of the BRPR report and preliminary plans. (NYCDOT)

Tappan Zee Bridge/I287 Corridor Environmental Impact Study - CADD Drafter for the EIS sketches. Prepared the plan, elevation and sections for structural steel repairs, existing conditions, replacement bridge concepts, etc. Also assisted in preparation of reports on existing conditions, rehabilitation and preservation options for the bridge. (NYSTA)

Site Survey, Land Transport Authority (LTA), Singapore, Civil Engineer - Performed survey to determine the feasibility for providing bus shelters and link-ways to the schools in Marine Parade GRC. Also performed site study and elevation for providing bus shelters and link-ways in the Sembawang GRC.

Proposed Maxwell Road Underpass, LTA, Singapore, Construction Inspector - Performed site inspection, materials testing, coordination with site staff and relevant authorities for getting approval prior to commencement of work.

Roy Goldman, PE, PMP
RESIDENT ENGINEER

Mr. Goldman has 24 years of construction inspection and engineering design experience primarily on street reconstruction for the NYCDDC, and highway construction for the NYSDOT. His site work experience includes trunk main, water main, drainage, and high voltage installations. Mr. Goldman has extensive experience with change orders and cost estimates for construction work.

EDUCATION	M.E., Civil Engineering, City College of New York, 1983 B.E., Civil Engineering, City College of New York, 1979 B.A., Accounting, Queens College, 2002 B.A., History, Lehman College, 1976
REGISTRATION / CERTIFICATIONS	ICC Certified Structural Steel and Bolting Inspector OSHA 40 Hour Hazardous Material Certification Safety and Health Training - 29 CFR/OSHA Formal MPT Training - NYSDOT, NY Lead Awareness Certificate OSHA 10 Hour Training Course NYSDOT - Traffic Control Training Seminar OSHA 10 Hour Occupational Safety & Health Training Professional Engineer, NY Project Management Professional, NY
YEARS WITH THIS FIRM	17
YEARS WITH OTHER FIRMS	12

Barclay Street Reconstruction, Resident Engineer - This project involved the full reconstruction of Barclay Street from West Broadway to Broadway in Lower Manhattan. The existing roadway was removed and replaced with a new concrete and asphalt composite roadway. Specific items of work included:

- New 9" concrete road base with 3" asphalt concrete overlay
- Installation of 1175 lf of granite curb
- Catch basin and chute installations
- New concrete sidewalks
- Sidewalk vault repair
- Pavement markings, signage and landscaping
- Extensive coordination with the utilities and new 35 story residential building constructed on project street

- Due to the sensitive nature of this project, LiRo worked very closely with the local community board, city agencies, and politicians. A community construction liaison was assigned to the project. Numerous meetings were held to inform and aid residents and merchants to minimize any disruption caused by the project. (NYCDDC, $1M)

Murray Street Reconstruction - West Street to Broadway, Resident Engineer - LiRo providedconstruction management, inspection, community relations and coordination services on Murray Street from West Street to Broadway. The scope included installing new catch basins to improve roadway drainage, new roadway base and asphalt including bus pads, new decorative street lighting and traffic signals as well as full curb and sidewalk restoration. This project used 7,500 sq. yards of asphalt, 2,300 ft of steel faced curb, 44,000 sf of sidewalk, 10 new catch basins and 2,000 cubic yards of concrete base. (NYCDDC, $1M)

Route 9A, Segment 7, Resident Engineer - LiRo provided construction inspection services for the reconstruction of Route 9A (12th Avenue) from 40th Street to 59th Street. The entire roadway sandwich was reconstructed. Major components of the utility infrastructure were also being upgraded. A four-span continuous ramp (steel with a concrete deck) was added to the Westside Highway. The substructure is founded on bored-in-place piles. Existing tidegates were renovated and new ones installed. The utility work included roadway drainage, 20-inch water mains, gas mains, and ECS (telephone) ducts. Traffic signals and street lighting as well as Intelligent

Transportation Systems were being installed. Specific work items included the installation of fiber optic cables, pole mounted CCTV cameras, electrical cabinets and sign structures. In the midst of this construction, LiRo maintained traffic flow on the highway. An additional turning lane was added at 42nd Street. The traffic maintenance was compounded by the presence of the Circle Line, the Intrepid Museum, the Passenger Ship Terminal, and a convention center, all of which requires separate plans to address traffic concerns. The reconstruction of the Con Ed Oil/Steam Tunnel requires extensive dewatering and grouting schemes to perform the work. (NYSDOT, $80M)

Resident Engineer for the Reconstruction of Route 9A, Segment 4, NYSDOT, $35M - This project involved the removal and replacement of 1 km of an urban highway on the West side of Manhattan. The roadway was realigned both vertically and horizontally. The existing roadway was removed to a depth of over 4½ ft. The roadway was replaced with a 50 year "European Type" un reinforced concrete pavement. Work items included:

- 4,000 lf of 20" water main
- 2,000 lf of 12" gas main
- 100 catch basins and new 24" drainage system.
- Rehabilitation and gunniting of 2,000 lf of sanitary sewers ranging in size from 3 ft to 5 ft. diameter.
- Construction of 3, cast-in-place concrete storm sewer tide gate chambers.
- Installation of new primary and secondary high voltage feeder system.
- Installation of 9 new telephone duct banks and system upgrades.
- Installation of new traffic signals and control systems as well as street lighting.

The most critical aspect of this project were the coordination and interference issues revolving around the massive utility upgrades. This section of roadway was constructed in an extremely vocal community. Work was performed under an accelerated A & B bidding schedule. (EIC: T. Bowers, P.E.)

Reconstruction of Gun Hill Road Bridge, Bronx, NY, Resident Engineer. This project involved the removal and replacement of the eight-lane wide Gun Hill Road Bridge over Metro-North Rail Road. The project was performed in three separate demolition and construction phases. The new bridge is a single-span steel structure with a concrete deck. Extensive utilities including a 36" water main cross the bridge and were replaces. The project also required major coordination with Metro-North. MPT was also imperative and was coordinated with the community. (NYCDOT, $14M)

Resident Engineer for the Van Wyck Expressway and Reconstruction of Four Bridges over the LIE - Project involved four miles of highway rehabilitation and reconstruction of four bridges over the LIE in Queens. It was one of the first utilizations of an A +B Contract in the New York area. The majority of work was performed at night with one direction of the Van Wyck closed and traffic detoured into a "contra-flow" lane on the other side using a moveable barrier system. The asphalt was cored nightly with payment/rejection is based on core density. Loop detectors, lighting, control cabinets and sign structures were installed. The bridge portion of the project involved bearing and joint rehabilitation on four bridges over the LIE, as well as extensive community interaction for short term closure of Kissena Boulevard to shorten overall construction impact on the community. (NYSDOT, $14M)

Resident Engineer for the Reconstruction of Mosholu Parkway- This project included the demolition of two single span truss bridges, one over Metro North Railroad and the other over Webster Avenue. The demolition of the bridge over four tracks of the MNRR was performed partially during the day under flag protection, with the floor beam and main truss members being removed at night during a scheduled track shutdown. Steel erection was performed at night. (NYSDOT, $4M)

Additionally, Mr. Goldman teaches FE (EIT) and PE classes for the Professional Engineer's license.

Mekh Gurung
CONSTRUCTION INSPECTOR

Mr. Gurung has over 12 years of construction related experience. He has significant experience working with public agencies such as NYCSCA, DASNY and the NYCDDC, performing such duties as preparing daily inspection reports and comparing construction progress with approved plans, specifications and submittals to verify the contractor's work.

EDUCATION	Civil Engineering, Tribhuwan University, Pokhara, Nepal, 1996 Building Construction Technology, Institute of Design and Construction, 2009
REGISTRATION / CERTIFICATIONS	ACI Concrete Construction Special Inspector ACI Concrete Field Testing Technician - Grade I ICC Certification Structural Steel & Bolting Inspector Hilti Fire Stopping Certification NYC Department of Buildings 4-Hr Supported Scaffold User C OSHA - Construction Safety & Health Certification
YEARS WITH OTHER FIRMS	11

Nassau Community College - Tower Elevator Upgrades, Inspector – Mr. Gurung is providing coordination and inspection services for the rehabilitation of three elevators in the campus buildings. (Nassau Community College, $1M)

City of Long Beach-Drill/Tank, Inspector. Mr. Gurung provided inspection services for structural repairs to an elevated tank for the City of Long Beach. He ensured that all work for the repairs were in conformance with the plans and specifications. He provided field coordination with the contractor during construction and reviewed and approved the contractor's schedule. In addition, he conducted progress meeting with the contractor and the City of Long Beach. He also reviewed and prepared change orders, as well as invoices and payment applications. (City of Long Beach, 2009)

Previous Experience

Velez Organization, Elmhurst, NY – August 2008 – May 2010 - Mr. Gurung has performed as Assistant Superintendent on various projects, which include:

Yankee Stadium City work Projects - Building J– This LEEDs Gold Certificate renovation included an area of over 25,000 sf. Mr. Gurung's responsibilities included:

- Performing the inspection of daily construction progress for all trades and preparing daily and monthly report
- Supervising installation of foundation, concrete slab, structural steel rehabilitation, masonry work, EPDM roof, green roof, underground utilities, HVAC, plumbing, electrical, fire alarm, security and communications systems to ensure that work is in compliance with the plans and specification
- Witnessing the various tests such as fire proofing, concrete, compaction, welding, hydro test for plumbing, sprinkler & HVAC systems, air balance test for HVAC system, leak detection system on roof etc.
- Preparing weekly look ahead schedule
- Reviewing the submittals
- Coordinating between A/E and subcontractors
- Reviewing and preparing change order documents
- Participating in weekly progress meeting
- Assisting LEEDs and commissioning agents
- Taking daily construction progress photographs

- Performing safety inspections
- Scheduling quality control inspection with testing lab

This project was completed on -time and budget. (NYCEDC, $ 15M)

Future Tech Consultants of New York, Inc. - July 2005-August 2008 -With this firm, Mr. Gurung performed as a Field Inspector for various public agency projects. This included NYC SCA, DASNY, NYC DDC, Giants Stadium and many private projects. His duties included:

· Performing technical inspection of Contractor's work for steel reinforcement, concrete, masonry, fire proofing, fire stopping, mortar, grout, welding, bolting, metal decking, shear studs etc.
· Performing inspection of backfilling, compaction and take the soil density test
· Comparing actual construction with approved plans, specifications and submittals to verify the contractor's work
· Performing test for concrete, fire proofing, mortar and grout and collect the samples
· Preparing the daily inspection report

Pokhara Sub-Metropolitan, Newroad, Pokhara, Kaski, Nepal, Overseer – Mr. Gurung's responsibilities included:

· Reviewing plans submitted to Municipality for approval
· Performing technical inspection of construction work throughout the city to determine if construction work is being done safely and in conformance with approved applications, plans, specification and in accordance with City Code
· Performing technical inspection in response to complaints received by City alleging that existing buildings are in violation of City Code and Zoning Resolution
· Preparing the inspection reports and issue violations and summonses for non-compliance

Kalika Construction, Kathmandu, Nepal - Assistant Project Manager - Mr. Gurung's responsibilities involved various technical and administrative work. This included:

· Management of the submittals, RFI's, change order log
· Preparation of the daily report of work progress
· Preparation of monthly requisition and submit to the owner for approval
· Updating the project schedule
· Receiving the materials and record keeping

Jonathon Hernandez
INSPECTOR

Mr. Hernandez has served as inspector and office engineer on various public projects. Office engineer duties have included review and tracking of all shop drawings, RFI's and change orders. He is currently working involved with the rehabilitation of FDNY's Engine Company 80/Ladder 23 located in Manhattan. His responsibilities on this project included:

- Inspection of all facets of construction including: structural, general, plumbing, mechanical, electrical and fuel storage systems to ensure conformance with design documents.
- Coordinates the work of four prime contractor's with the Control Inspection firm to ensure compliance with DOB requirements.
- Enforce all safety guidelines outlined by OSHA.

EDUCATION	B.S., Civil Engineering, Minor in Engineering Design Carnegie Mellon University, 2010
REGISTRATION / CERTIFICATIONS	ICC Structural Steel and Bolting Inspector Spray Applied Fireproofing 10 Hr OSHA Safety Training Engineer in Training (EIT/FE)
YEARS WITH THIS FIRM	1
YEARS WITH OTHER FIRMS	4

Engine Company 80/Ladder 23, Inspector/Office Engineer - The rehabilitation of this Firehouse located in Manhattan included: structural repairs to floors damaged in a fire, all new plumbing, mechanical, fuel storage, electrical and FDNY communication systems. In order to meet an aggressive 12 month schedule, intense coordination was required to manage the four prime contractor's, as well as the FDNY's vendors and communications personnel. Significant challenges arose during renovation of this fire damaged building originally constructed in 1904. Conflicts such as bedrock was discovered in footings/foundation area resulted in a change in structural approach. Changes in fire rated assemblies and ductwork were made throughout the building. Other issues include incorporating new NYC Building codes such as Energy Code Compliance and Fuel Storage requirements. Engine 80/Ladder 23 was a $4.5 million project that was completed on schedule.

Engine Company 26, Inspector/Office Engineer - The renovation of this firehouse included five new bathrooms, new laundry room and general construction to common spaces. Coordination was necessary to ensure the active quarters were not disrupted. Construction involved implementing changes in order to meet new FDNY standards and ANSI requirements,

Kyaw Maung, E.I.T
INSPECTOR

Mr. Maung has more than three years of experience in structural engineering and construction inspection. During this time, he has developed excellent communication, time management, and organizational skills.

REGISTRATION / CERTIFICATIONS	ICC Structural Steel and Bolting Inspector ACI Concrete Field Testing Tech 1
YEARS WITH THIS FIRM	1
YEARS WITH OTHER FIRMS	1

Inspector/Engineer: Performed masonry and concrete inspection in many school construction projects in NYC.

Engineer: Performed design of steel and concrete structures in several projects. Prepared and developed drawings, specifications and quantity estimates. Reviewed steel and concrete shop drawings. Conducted field inspection for a concrete parking garage

Representative Projects:

- Liberty National Golf Clubhouse Jersey City, NJ
- New Meadowlands Stadium, East Rutherford, NJ
- Bronx Terminal Market, Bronx, NY
- Americas Data Center, Somerset, NJ
- Mina Zayed Waterfront Development, Abu Dhabi, UAE (2007-2009)

Previous Experience:
Engineering Intern/Thornton Tomasetti, Newark, NJ: Involved in several building design projects. Assisted senior engineers with CAD works and design calculations

Summer Intern/NYC Department of Design and Construction, New York, NY: Participated in the construction management team at the Queens Botanical Garden Project. Assisted Construction Project Managers with daily site inspections and monitoring of contract works Involved in the LEED certification process of the project

Summer Intern/Marine Structures Department, DMJM Harris, New York, NY: Participated in preliminary design processes on several marine structure projects. Assisted senior engineers with CAD works and design calculations Conducted some field surveys to collect data for design engineers

College Intern/ MTA New York City Transit, New York, NY: Provided ongoing support to the *2nd Avenue Subway Project.* Monitored and updated project filing system, and assisted in design management of the project

NACE

Robert Roy
RESIDENT ENGINEER

Mr. Roy has over 20 years of experience in the protective coatings and corrosion control field. This experience includes inspection, failure analysis, condition surveys, and coating related work in numerous industries. He is a NACE Certified Coating Inspector, and a certified SSPC Supervisor/ Competent Person for Deleading of Industrial Structures. He also has numerous other certifications and has been an Auditor for SSPC for QP1, QP2, QP3 and QP5 Compliance. Mr. Roy's relevant project experience includes:

REGISTRATION / CERTIFICATIONS	NACE Certified Coatings Inspector NACE Marine Coating Inspection Endorsement NACE Successful Coating & Lining of Concrete SSPC C-2- Specifying/Managing Coatings Projects SSPC C-3 Certified - Supervisor (Deleading)
YEARS WITH THIS FIRM	0
YEARS WITH OTHER FIRMS	0

Triborough Bridge Deck Replacement on the Wards and Randall's Island Viaduct (TB-64B), Assistant Resident Engineer - This project, valued at $282 million, is the TBTA's largest bridge project to date and involves the reconstruction of the Wards/Randall's Island Viaduct, new coatings, bearing replacement on the Queen's Approach and Bronx Truss, construction of new ramps, access road construction on Randall's Island and widening of the Queens to Manhattan Ramp. LiRo is the prime consultant on this joint venture project. Over 2 million square feet of existing steel will receive a new protective coating on the Queens & Ward's Island Anchorage, Triborough Bridge Main Span and the Ward's / Randall's Island Viaducts with a value of over $40 Million. Additional work includes new lighting, electrical upgrades and archeological monitoring of footing excavations.

Protective Coating Triboro Bridge, New York: Mr. Roy was working as the Resident Engineer on the TBM-367 project, the repainting of the Triboro Bridge Left Span Mr. Roy is responsible for the inspection activities during all construction operations associated with the project including surface preparation, coating application, MPT, containment and safety compliance. (MTA Bridges & Tunnels, $25M)

Protective Coating of the Queensboro Bridge, New York: Mr. Roy was the chief inspector for the Queensboro Bridge Protective Coating Project. This project included the abrasive blasting and painting of over 8 million square feet of steel, likely the largest painting project in the country. Mr. Roy is responsible for all inspection activities during existing coating removal and new coating application. (NYC DOT, $170M)

Tappan Zee Bridge, New York, New York: Mr. Roy provided inspection services, engineering support, monitoring of lead removal, containment & ventilation, for the application of exterior coatings. Three projects were conducted over two years: #97-13 (7 Spans) #97-46 (Tower Legs) 97-65 (Tower Legs) - approx. $15 M in blasting& painting work (3 mile long, long span suspension bridge).

Project Manager/ Senior Resident Coatings Specialist/ Chief Inspector 1985- 2003: Project Management, Contract Management, Quality Assurance/ Quality Control/ Inspection on behalf of several Engineering Companies, to meet SSPC, NACE, ISO & NORSOK standards, for coatings and linings. Enforce US & Canadian Federal, Provincial and State Regulations for environmental controls. Mr. Roy was also responsible for market research and preparation of industry analyses; Facility Audits, and Failure Analyses. Specifying and managing coatings projects.QP1/ QP2/ QP3/ QP5 SSPC Audits

Mr. Roy represented several companies in the marketing of chemical coatings, spray painting equipment and road maintenance items. Marketed and applied epoxy and polymer composites, industrial coatings, lubricants, and rust preventive coatings in the mining and pulp and paper industries.

Canadian National Railway/ Corrpro Corp. - Pont de Quebec, Quebec, Canada:
Provided project management, inspection services, engineering support, review of specification, failure analysis for the application of specialized bridge coatings (overcoat system), and lead removal by High Pressure & Ultra High Pressure Waterjetting. Specification & contract consultation. Includes monitoring of containment and ventilation. Legal consultation & report preparation for Contract Mediation and Resolution. The project cost was $60 Million. The Quebec Bridge is the longest cantilever, steel railway bridge in the world.

US Federal Highway Administration/ Corrpro, Ocean City, New Jersey: Assisted in preparation of documents regarding waterjetting for FHWA Study.

Connecticut DOT/ SG Pinney & Associates - various locations - Connecticut:
Provided inspection services, engineering support, monitoring of lead removal, containment & ventilation, for the application of exterior coatings for Br #3310(I84 over 12 lanes of Freeway); Br #760 (Rte 34). Provided legal & specification consultation to representatives from The Attorney General's Office & Engineering. Survey of 4 Bridges for contract conformity. Coating System evaluation (Br #3321, 3322, 3400C, & 3400D - I84). Conducted detailed coatings survey/ audit inspection for suitability to overcoat for Br #952.

New York Thruway Authority/ GPI/ Weidlinger Engineers - Tappan Zee Bridge, New York, New York: Provided inspection services, engineering support, monitoring of lead removal, containment & ventilation, for the application of exterior coatings. 3 Projects over 2 years: #97-13 (7 Spans) #97-46 (Tower Legs) 97-65 (Tower Legs) - approx. $15 M in blasting& painting work (3 mile long, long span suspension bridge)

Ministry of Transportation & Communication/ Delcan Corp, London, Ontario - Hwy 401 @ Iona/ CNRail Overpass: Provided project management, inspection services for lead removal & application of exterior coatings to 2 bridges.

Ministry of Transportation & Communications/ Delcan Corp, London, Ont. - Hwy 3 @ Hwy 19: Provided inspection services for application of exterior coatings to Big Otter Creek Bridge.

Ministry of Transportation & Communication/ Delcan Corp, London, Ontario - Hwy 401 @ West Lorne Overpass: Provided inspection services for blasting and application of exterior coatings to 2 overpass I beams.

Metro Transportation - Toronto, Ontario: Provided project management, inspection services, monitoring of lead removal, containment & ventilation, for the application of specialized exterior coatings for: 1) Don Road Br. Over the Don Valley Parkway (94); 2) Queen St & Adelaide St extensions @ the Don Valley Parkway (95); 3) Lawrence Avenue Bridge over the Don River (96) - Provided inspection services, monitoring of lead removal using robotic vacuum blasting equipment, for the application of exterior coatings for: 4)Queen St & Adelaide St extensions @ the Don Valley Parkway (95) - Provided project management, inspection services, monitoring of lead removal, for the application of exterior coatings for: 5) Humber River Bridge @ Gardiner Expressway.

Angelo Serelis
INSPECTOR

REGISTRATION / CERTIFICATIONS	NACE Level I Coatings ACI Concrete Field Testing Technician - Grade I, NY
YEARS WITH THIS FIRM	2
YEARS WITH OTHER FIRMS	13

Since the mid-90's Mr. Serelis has been employed as a Quality Control inspector/ Health & Safety specialist on various Heavy/Highway & Industrial Rehabilitation projects. The majority of the projects with which he was involved were elevated steel structure bridges that required removal of the existing lead-based paint and the re-application of protective coatings for corrosion protection.

Port Authority of New York & New Jersey Holland Tunnel Rehabilitation of Drainage Valves, Steel Duct Hatches and Electrical Work 1999-2003

- Coordination/Supervision of the following field operations as per Safe Work Procedures & Contract Specs
- Implemented Permit-required confined space regulations/procedures, respiratory protection, P.P.E.
- Fabricated & installed Hot-dipped Galvanized Steel duct hatches.
- Installated butterfly valves with actuators.
- Electrical work (explosion proof Junction boxes, etc.) to support valve actuators.

Bayonne Bridge; Installation of Protective steel shield Panels - Upper & Lower Port Authority of New York & New Jersey Tasks Included:

- Coordination/supervision of the following field operations as per approved Safe Work Procedures
- Implementation of OSHA Fall Protection Requirements, OSHA Lead Standard, SSPC Requirements.
    - Erected work cages at sides of bridge chords for access.
    - Removed lead based paint - Anticipated connection points SP-11.
    - Installed Bent plates - upper/lower chord of bridge.
    - Fabricated, SP-10 steel surface prep. & application of coating system.
    - Maintained & Protected Traffic procedures.

Holland Tunnel N/S Tube Leak Repairs Port Authority of New York & New Jersey1997-1998
Project Superintendent/Quality Control-Health & Safety Specialist - Coordinated/supervised the following field operations as per approved Safe Work Procedures.

- Implemented of Permit-required confined space regulations/procedures, respiratory protection, P.P.E.
- Survey/Stakeout Ring joint & Skin plate joint locations throughout north/south tubes where leakage is present.
- Removed overlaying concrete to expose affected panels.
- Replaced damaged/sheared structural bolts @ ring joint panels.
- Chemical Grouting operations throughout tunnel structure.

- Lead paint removal procedures & reapplication of protective coating system to prepared steel surfaces SP-11.

Queensboro Bridge Protective Coating in the Boroughs of Queens and Manhattan, NYC DOT,. Protective Coatings/Structural Inspector. 2008-2009. - Quality Assurance Function for the following Operations:

- Inspected SP-11 Power tool Cleaning Operations - Structural Steel Sections, Trusses, Box Beams, Lacing Bars, Wind Braces
- Inspected SP-15 Power tool Cleaning 2 Roadway/Walkway Steel Curbs
- Inspected SP-12 Water Jetting (Ultra) - Bridge Travellers 1-5
- Inspected Subsequent Protective Coating Applications to meet NYCDOT requirements
- Touched up painting, Punch List items oversight
- Structural Inspections during platform removals, Outriggers, Dust Collector Duct removals, and associated hardware

Subway Tunnel Lighting & Rehabilitation of 7 Stations-G-Line, Brooklyn, New York City Transit Authority 2004-2005 - General Superintendent/ Quality Control &Safety Officer, Coordinated/supervised the following field operations as per approved Safe Work Procedures:

- Designed and implementated site specific work procedures.
- Implemented 3rd rain protection, track safety procedures prior to start of work.
- Supervised & Quality Controled subcontractors (demo, lead abatement, painting, chemical grouting, structural steel, electrical)
- Scheduled, coordinated work crews during single rail operations alongside MTA representatives (engineers, flag persons)
- Oversight of Lead Based Paint Removal & Re-Coating of Vertical & Horizontal Support I-Beams at Track and Platform Locations
- Rapid-deployment Containment system utilized during Scheduled G.O track outages.

Deleading & Re-Coating of Rail Road Bridges, New Jersey Transit Corp, Quality Control/ Health & Safety Supervisor, 2001, 2002-2004

- De-leaded and Painted (4) Railroad Bridges, Harrison NJ
- De-leaded and Painted West Truss, Morris & Essex Rail Line, Jersey City NJ
- De-leaded and Painted Boonton Line M.P 38.61, Wayne NJ
- De-Leaded and Painted Morristown Line Bridge, Harrison NJ
- De-Leaded and Painted Railroad Bridge M.P 2.19-1 Westside Ave. Jersey City , NJ
- Ensured contractor set up MPT, Containment systems as required prior to blasting operations
- Checked for emissions during blasting operations-corrective actions performed when necessary
- Recorded environmental readings-humidity, dew point, substrate surface temps, as per contract specifications and SSPC QP1 & QP2 requirements
- Verified that surface preparation on blasted &/or Power tool cleaned sections met spec.
- Verified that required Anchor Profile was achieved.
- Verified that Coating application met spec.
- Quality control audited performed by SSPC on the above-mentioned projects. Outcome was positive

RESIDENT ENGINEERS

Aomar Achouri, P.E., P.T.O.E.

TRANSPORTATION ENGINEER

Mr. Achouri has an extensive background and education in traffic and civil engineering, both locally and globally. For LiRo, his responsibilities include capacity analysis, signal timing analysis and optimization, geometric analysis, Maintenance and Protection of Traffic and GIS data manipulation for clients such as NYSDOT, PANY/NJ, LMCCC and Nassau County DPW. Representative projects include:

EDUCATION	M.S., Civil and Transportation Engineering, The City College of New York, 2002 Advanced Studies Diploma, Civil Engineering, Ecole Normale Supericure de Paris France, 1994 B.C.E., Civil Engineering, Ecole Nationale Polytechnique d'Alger, Algeria, 1993
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, NJ Professional Traffic Operations Engineer
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	6

Comprehensive Traffic Study for Port Newark, Elizabeth, NJ, Traffic Engineer - Work included:

- Data collection and reduction
- Trip generation and travel demand forecasting
- Warrants analysis and signal design
- Develop Synchro model
- Capacity and level of service analysis
- Cost benefit analysis

(PANYNJ, 2003)

Intelligent Transportation System (ITS) in Lower Manhattan, NY, Project Manager-
The project consists of installing an integrated ITS System for Lower Manhattan, including subsystems for Wireless Traffic Monitoring Cameras, Traffic Sensors, Portable Variable message Signs, Transponder Readers, Highway Advisory Radio and a High-Speed Telecommunication Link. Mr. Achouri's responsibilities as Project Manager included the following; preconstruction meetings, document tracking and control, budget tracking, change order evaluations, contractor invoice review and recommendation, post installation equipment inspection, testing verification, substantial completion, and project closeout. (LMDC, $6M, 2007)

Reconstruction and Widening of Merrick Road, Rt. 27A, Freeport, NY, Chief Inspector - This project involved the widening, repaving, and resignalization of a 5 lane roadway in an urban area. The project included the realignment of a major intersection, Mill Road. New drainage, curb and sidewalk were installed. The entire intersection was paved with asphalt. The project also included extensive utility upgrades for gas, electric, and telephone service. MPT was critical due to the high traffic volumes running through the project corridor. The major portion of the work was performed at night and required nightly lane closures. All traffic control and MPT was done in accordance with NYSDOT standards and requirements. (Nassau County DPW, $3M, 2006)

Lower Manhattan Redevelopment Project, Traffic Engineer - Mr. Achouri's responsibilities included the following:

- Capacity and level of service analysis
- Signal timings plan design and optimization
- Maintenance and protection of traffic

- Accident and pedestrian flow analysis
- Geometric roadway design
- Simulation of traffic patterns and travel demand forecasting

(LMDC, 2005)

Neighborhood Traffic Studies, Transportation Engineer. LiRo conducted numerous neighborhood traffic safety studies (NTSS). The studies were targeted at specific neighborhoods and focused on what improvements were warranted to reduce the amount of accidents and address complaints from residents. To accomplish this LiRo collected all available accident and traffic data, sign and pavement ordinances, and supplemented the data with field volume and speed data. The results were arrayed to identify safety analysis/investigation issues. Each study request the assessment of the roadway networks operation from the Town/Village perspective.

Data analysis revealed discrepancies with existing signs, traffic signals, and pavement markings as well as any need for new signs, signals, and markings. In some locations, speed limit changes were also recommended. Maps showing existing and proposed conditions were developed. The results were delivered to the Town in report format and in a Map Info GIS database. (Town of Brookhaven, $120k, 2005)

Speed Sign and Impact Attenuators Study at JFK International Airport, Traffic Engineer - Work included the following:

- Located speed signs and impact attenuators on base map and noted their conditions and type
- Created a database
- Made recommendations to change damaged impact attenuators and improve signage visibility and effectiveness

(LMDC, 2004)

Canal Street Pedestrian and Vehicular Traffic Study, Traffic Engineer - Responsibilities included:

- Traffic volume and geometric data gathering
- Field observation and inventories
- Analysis of traffic operating conditions
- Evaluation of pedestrian crossing times at signalized intersections
- Develop new traffic signal timings to address deficient pedestrian crossing times
- Develop Synchro model

(LMDC, 2004)

Employment History:

The LiRo Group (2001 to Present)
Transportation Engineer
New York City Department of Transportation (1999 – 2000)
Transportation Engineer/Planner
Centre Scientifique et Technique du Batiment Paris, France. (1994 – 1995)
Junior Civil Engineer

Carl Avino
RESIDENT ENGINEER

Mr. Avino has been in the construction and construction management industry for over 30 years, many of which were spent as a general contractor. The unique combination of construction contracting, engineering, and construction management experience gives Mr. Avino the experience required to handle a wide variety of field situations. Most of Mr. Avino's experience has been with government agencies where he developed strong skills for accurate record keeping, following procurement procedures, considering safety issues, and constructing a project with the public's interest in mind.Recent project experience includes:

EDUCATION	B.S., Civil Engineer, Notre Dame, 1975
REGISTRATION / CERTIFICATIONS	OSHA Construction Safety & Health Training, NY
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	22

NYCDDC Stadia Projects, Resident Engineer at Yankee Stadium- LiRo was working at both Yankee and Shea Stadiums performing CM/Build services for which where Mr. Avino performed approximately 20 fire and life safety projects. Contractors he managed, primarily at Yankee Stadium, performed projects that included mechanical, ventilation and plumbing upgrades, structural repair and restoration, electrical and control system upgrades, escalator reconstruction and elevator code safety repairs. Of particular importance were complete repair and renovation of the Stadiums core heating system include burner and fire control management systems, boiler code repairs, hot water heater system replacements and restoration of the fuel oil supply system including pump replacements and emergency fuel oil storage tank remediation and repair work. In addition, several portions of the non-functioning HVAC and cooling tower systems were brought to full capacity via cooling tower renovations, condenser upgrades, air handler system revisions and condenser system piping repair and rebalancing. Heating, domestic water and fire sprinkler piping repairs were also provided under various projects while assigned at that location. All work was performed in full coordination with the City's Departmental Agencies and the seasonal requirements of the NYY's Major League Baseball schedule. Mr. Avino also performed all of the Final Billing and Contractual Close-out documentation for both Stadiums at the completion of his tenure in this Program. (NYCDDC, $50M).

New York City School Construction Authority - Emergency Response Management and Coordination Program, New York City - Assistant Resident Engineer - Under this contract LiRo managed and coordinated responses to emergencies, on the basis of a telephone call at any time during a twenty-four hour period and on any day Monday through Sunday. LiRo immediately mobilized trades, firms and materials for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public school in the five boroughs of New York City
LiRo's scope of work was extensive, varied widely and includes the expedited renovation and construction a new $18M, 55,000 sf high school within 90 days. Our categories of work, services, trades or equipment to be provided on an emergency basis include the design, administration, management and coordination of the work; development of construction estimates, solicitation of bids in accordance with Authority requirements and the law; providing general conditions including but not limited to testing and controlled inspections; remediation of hazardous materials; construction and demolition of the work in accordance with contract documents issues by the Authority. (NYCSCA, $108.7M)

Utility Upgrades, Bronx House of Detention for Men Resident Engineer - Install 2 -600 HP and 1- 250 HP Low Pressure Steam Boilers and 1-1,000 KW Emergency Standby Generator in a new 3 Story Boiler Room Extension. Also included were an upgrade to the electric service via installation of new utility service building and switchgear at the street elevation of the facility which was constructed under Historical Preservation guidelines. This project also included environmental work including tank removal and soil remediation, asbestos abatement,

3 new fuel oil storage tanks and associated pumping and piping supply for both steam and power systems including leak detection, site parking and drainage systems and the provision of new gas compressor station for the dual fuel operation of the new boiler system. In addition, fire suppression control system revisions were required to coordinate with the safety provisions of the new burner control and boiler management system furnished under this project. Temporary Boiler heating provisions and extensive site control and coordination issues were also considerations under this program. (NYCDDC, $20M, 2005)

Steam Tunnel Rehabilitation at Rikers Island, Resident Engineer - Repair of high, medium, and low pressure piping lines as part of a total renovation project of all expansion joint and valves for Rikers Island correctional facility. Seven miles of tunnels supply steam for heating and cooling. Project included extensive asbestos removal, new monitoring equipment and new plumbing work. (NYCDDC, $18M, 2004)

Relevant experience prior to joining the LiRo Group:
Construct 100,000 Gal. Elevated Water Storage Tank - NASA Wallops Flight Facility - Wallops Island,Virginia, 1997-1998
Construct Central Chilled Water Storage Facility at Brookhaven National Laboratories - Dept. of Energy , BNL, 1995-1996
Provide Two (2) 300KW Packaged Diesel Engine Generator Sets at Laurel Lake and Central Islip - Suffolk County Water Authority, 1996
Provide Standby Emergency Diesel Engine Generator at Melville and Central Islip DOT - NYS DGS, 1995-1996
Sitework for NEXRAD Doppler Weather Station at Brookhaven National Labs - UNYSIS, JSTARS and National Weather Service, 1995
Replace Jet Engine Compressed Air Start & Control System Boca Chica Naval Air Station, Key West Florida, U.S. Navy (1994-1995)
Construct Remote Aircraft Ordinance Loading Parking Apron - New River Marine Corps Air Base, USMC Camp Lejeune, North Carolina (1991-1992)
Replace HTHW Lines - Dover Air Force Base (Dept. of the Air Force, 1991-1992)

Repairs to Steam Piping Bldg. 20 to Drydock 1 and 2 - U.S. Naval Base Philadelphia, PA (NASA, 1989-1990)
Install Water Backflow Prevention Vaults - Stony Brook Health Science Center, Stony Brook, NY 1987-1988
Install 6,000 GPM Condenser Water Pumps - Central Heating Plant, Stony Brook Health Science Center, Stony Brook, NY 1985-1986

Replace Steam and Condensate Lines at U.S. Army Medical R & D Command - Fort Detrick, MD (U.S. Army, 1983-1985)

Repair Heating Systems at Four Facilities - Dover Air Force Base (Dept. of the Air Force, 1984-1985)

Heating Work, Alterations and Improvements to Heating Tunnels - Central Islip Psychiatric Center, NY (NYS Facilities Development Corp.)

New Steam Service Piping - VA Medical Center, Pittsburgh, PA (Veteran's Administration, 1984)

CTA Rehabilitation of Condensate Return System at Army Engine Plant - Stratford, CT (U.S. Army Corps of Engineers, 1982-1983)

Repairs to Steam and Condensate Lines to Hangar No. 5 at Bldg. 194 - Lakehurst, NJ (NAEC, 1981-1982)

CTA Repairs to Steam and Condensate Lines to Hangar No. 5 at Bldg. 194 -Lakehurst, NJ (NAEC, 1981-1982)

Michael Belling, P.E.

CIVIL SENIOR ENGINEER

Mr. Belling is a licensed Professional Engineer with experience in civil engineering, program/project management and construction inspection. He has experience interacting with City, State and Federal agencies regarding all aspects of construction. He is also experienced in utility work, relocation and highway design, including highway drainage design, traffic control (signing and striping), accident analysis, horizontal and vertical alignments and capacity analysis. Mr. Belling also has extended experience in environmental engineering, including bulk fuel storage system design and site remediation. His project experience includes:

EDUCATION	B.S., Civil Engineering, Manhattan College, 2000 M.S., Civil Engineering, Manhattan College, 2004
REGISTRATION / CERTIFICATIONS	Confined Space Entry Certification OSHA 10 Hour Occupational Safety & Health Training Professional Engineer, NY
YEARS WITH THIS FIRM	10

Construction Management and Inspection Services for Project VN-80A, Utility Relocation for the Upper Level Replacement of the Verrazano-Narrows Bridge (TBTA), Resident Engineer: LiRo served as the construction management consultant for the Triborough Bridge and Tunnel Authority for the VN-80A project. The project involved relocating the bridge's vital electric, communications and fire standpipe utilities, as well as new redundant circuits for upper level lighting, lower level lighting and 24-hour power. A new SCADA operating system is also being installed and integrated with the existing Quindar system. Some specific items of work include:

- Installation of conduit, steel channel hangers and pull boxes for 5kV, fiber optic and medium voltage cable
- Installation of fire standpipe branch lines and hose connections
- Installation of lighting and 24 hour circuits
- Installation and splicing of fiber optic cable, 5kV cable and medium voltage cable
- Removal of bridge telephone system and existing fire standpipe branch lines
- Installation of SCADA operating system, including interfacing with existing Quindar system
- Installation of SCADA cabinets and implementation and training of new control system
- Monitoring of cut over of existing systems (cameras, lighting, etc.) to newly installed cables
- Monitoring of end-to-end OTDR tests and other tests as specified

Maintenance and protection of traffic and coordinated lane closures were required for this installation on both the upper and lower level roadways. Coordination with facility personnel was of great importance, due to the fact that systems were required to be temporarily taken off-line during cut over. Security access management was also a vital part of this project, as there was extensive work required within the bridge towers and anchorages. Responsibilities also included the management of the contract with regard to submittals, project progress and safety meetings, as well as contractor payments and as-built drawing documentation. (November 2008 - Present)

Program Management for Lower Manhattan Development Corporation (LMDC) and Lower Manhattan Construction Command Center (LMCCC), Construction Coordinator: LiRo is serving as a Program Management consultant for the LMDC & LMCCC, whose responsibilities involve nearly all construction projects, both public and private, south of Canal Street, including all World Trade Center site development. The goal of this work is to provide a service which coordinates over 70 major projects with the community and all federal, state, and city agencies. Mr. Belling is also a member of the

LMCCC's Construction Permit Enforcement Taskforce (CPET). This group meets on a daily basis and is comprised of representatives from LMCCC, NYPD, NYCDOT, NYCDEP, NYCDOS, NYCDOB and the Alliance of Downtown New York. CPET's purpose is to provide a daily interface where all city agencies that issue and enforce construction permits can coordinate their efforts to ensure all federal, state and city regulations are followed. Public noise complaints, after hours construction work, illegal street closings, bus idling and unsafe working conditions are only a few of the issues reported to the appropriate agency at this meeting. (January 2007 - November 2008)

Replacement, Upgrade, Closure or Removal of Underground Heating Oil and Emergency Generator Fuel Storage Tanks for the New York City Fire Department, Design Engineer: This project involved the replacement, upgrade, closure or removal of heating oil and emergency generator fuel underground storage tanks at four FDNY Communication Center Facilities and two firehouses. Design responsibilities included developing design documents for bidding. Specific responsibilities included acquisition of site specific information, development of site plans and details, coordination of contract drawings, compilation and writing of contract specifications including determination of specific project scope for each site and manufacturer equipment investigation and determination. Post-bid award responsibilities include sub-contractor's submittal approval for operation plans and other required items requiring approvals. (NYCDDC, 1/00 - 1/07)

Replacement, Closure or Removal of Underground Lube Oil Storage Tanks with Installation of New Product Delivery Systems for the FDNY and NYC Department of Sanitation, New York, NY, Design Engineer - These projects involved the replacement of existing storage tanks for such fluids as motor oil, hoist oil, anti-freeze and transmission fluid. New air driven pumps and product delivery hose reels and nozzles were installed for these fluids. Sites included sanitation garages in New York City, which required 24-hour operation during construction. Design responsibilities included developing design documents for bidding. Specific responsibilities included acquisition of site-specific information, development of site plans and details, coordination of contract drawings, compilation and writing of contract specifications including determination of specific project scope for each site and manufacturer equipment investigation and determination. Post-bid award responsibilities include sub-contractor's submittal approval for operation plans and other required items requiring approvals. (NYCDDC, $82M, 2007)

Tappan Zee Bridge/I-287 Corridor Study, Senior Project Engineer: This project involved tasks supporting the Tappan Zee Bridge replacement and the I-287/I-87 corridor improvements reaching from Rye, in Westchester County, to Suffern, in Rockland County. This project also included Route 119 as well Metro North's Hudson, Harlem and New Haven rail road lines in Westchester County. Tasks involved complete highway right of way (ROW) delineation and base mapping for the entire corridor, highway and utility infrastructure photo inventory and contacting and coordinating with various utility facility owners to confirm locations of all utilities within the corridor.

Employment History:
The LiRo Group (2000 to Present)
Civil Engineer

Michael Bendetti, P.E.

ASSOCIATE VICE PRESIDENT

EDUCATION	B.E., Civil Engineering, The Cooper Union School of Engineering, 1988
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Primavera Expedition (Project Controls) OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	21
YEARS WITH OTHER FIRMS	1

Mr. Bendetti has over 19 years of construction management and design experience for major public works projects in the New York area. His experience includes courts, correctional facilities, maintenance facilities, buildings, pump stations, roadway reconstruction, and site improvement projects. Mr. Bendetti has managed projects from conceptual design through construction completion. Since 2003, he has worked extensively on projects for the Suffolk County Department of Public Works (SCDPW). Representative projects include:

Pre-Construction and Construction Support Services to SCDPW, Project Manager. During the pre-construction phase, Mr. Bendetti worked closely with the design teams, SCDPW, and LiRo's staff of engineers and architects to ensure quality, cost and schedule control. Pre-construction services include:

- Providing detailed constructability reviews of the contract documents. Develop reports which identify errors, omissions, conflicts, and missing work in the contract drawings and specifications. Identify aspects of the work which can be redesigned to reduce costs without affecting quality.
- Development of conceptual construction budgets and detailed cost estimates during design development.
- Extensive value engineering and development of project scope revisions to ensure budget compliance.
- Development of design schedules and preliminary construction schedules; analyze schedule impact for proposed design and construction changes.
- Development of phasing plans and site logistic plans.
- Assist in the development of Project Labor Agreements (PLA).
- Provided analyses of bids and award recommendations.

Specific Projects Mr. Bendetti has provided pre-construction services for SCDPW include:

- **Civil Court Complex in Riverhead, NY.** Multi- phase project Includes construction of a 96,000 sf addition, and renovations to four existing court buildings ($35M)
- **Yaphank Jail in Yaphank, NY.** Multi- phased program includes construction packages which will provide for over 200,000 sf of additional jail inmate housing and support spaces ($151M).
- **County Center Complex in Riverhead, NY.** Includes renovations to 200,000 sf of office space ($29M)
- Mr. Bendetti also provides construction support services for SCDPW, including project oversight with regard to schedule, cost (change orders and overall budget), quality, and construction progress meetings. In addition to the above projects, Mr. Bendetti provided construction support services for the following SCDPW projects:

- **Fire Training Center, Class "A" Burn Building, in Yaphank, NY.** Construction of a reinforced concrete building for the Suffolk County Fire Training Academy for use in fire simulations ($4M)
- **DWI Facility in Yaphank, NY.** Construction of a new 16,000 sf secure facility for the Suffolk County Sheriff's Office ($6M)

Since 2006, Mr. Bendetti has also been Project Manager providing construction management services to the NYC DDC Transportation Unit. Projects include:

New Sunrise Yard NYC DOT Maintenance Facility in Ozone Park, NY- This $20M project includes demolition of two one-story brick structures; abatement/ remediation of asbestos and contaminated soils associated with these structures and a subsurface fuel storage tank; construction of a new two- story steel framed building to house material storage, shops, drive- through vehicle maintenance, locker room, and administrative offices; and associated site improvements, including new fence, paved parking, green spaces and art wall. The project is designed to achieve a LEED Gold Certification.

Inmate Housing Addition at GRVC on Rikers Island (2002 to 2003) - This multi- phased project included construction of two new housing units (50,000 sf each), a 65,000 sf administrative building, a new addition for the locker room, and site security upgrades. During the preconstruction phase reviewed various housing options and analyzed costs associated with population and security level. Developed project packaging and phasing to meet budgetary and logistical requirements, and to minimize impact to ongoing facility operations. Performed extensive constructability and value engineering, and coordinated with NYC DDC and the owners (NYC Dept of Correction) to ensure budget compliance ($120M).

New Security Control Room and Perimeter Fence Upgrade, Rikers Island (2001-2005) - Construction of new central control room and upgrade of security features throughout the perimeter fencing surrounding Rikers Island. Extensive coordination required to prevent lapses in security while work progresses. ($6M)

New Locker Room Building at EMTC, Rikers Island (2001-2003) - This multi-phased project included construction of a new facility entry sallyport and parking lot ($2M) and a new 12,000 sf locker room building. During the preconstruction phase, developed phasing plans to integrate portions of the Fence Upgrade Project (see above), which were required prior to constructing the new locker building. Reviewed various building configurations and construction types to provide the required functions at the lowest cost. ($5M).

C141SERV-1- System wide Kitchen Renovation Program for Department of Corrections (1996-2001) - This multi- phased, multi packaged project was fast tracked and subject to court mandated start and completion dates. Project included a short term phase wherein $10M of temporary improvements was made at fifteen correctional facilities throughout the City of New York within a four month period. Also included complete renovations and new kitchen facilities at six jails (BKHDM, NIC, BXHDN, BCF, CIFM & QHDM). Extensive phasing and temporary construction was required to maintain facility operations during construction in occupied facilities ($60M).

Employment History:
The LiRo Group (1989 to Present)
Associate

Lawrence Blond, P.E.

SENIOR VICE PRESIDENT

EDUCATION	B.S.C.E., Civil Engineering, Rutgers University
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY 10-Hour Occupational Safety and Health Training Course, NY
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	14

Mr. Blond has been providing construction management and engineering services since 1979. His past experience has included program and project management, structural design and analysis, building inspection and evaluation, cost estimating, quality control and quality assurance for both public and private sector projects. He has both performed and managed the general administration of construction projects, including design and constructability reviews, field inspection, scheduling, cost control and value engineering.

Since joining LiRo he has been directly responsible for over a half a billion dollars of construction projects, many of which have involved high profile municipal projects with mandated completion dates. Mr. Blond is currently overseeing the Program and Construction Management Division of the LiRo Group, which has been steadily growing over the past five years. Senior Management oversight is a key to LiRo's success and Mr. Blond leads the way with his direct involvement with his staff, ongoing projects and our clients. Representative projects include:

FDNY Fire Training Academy at Randall's Island, Phase II, Project Executive - This NYCDDC CM/Build project included the construction of four new state-of-the-art training facilities for the FDNY and renovation of three additional fire academy buildings. The new construction included classroom training facilities, a burn building, an indoor mock-up of a New York City street, and a subway simulation building. In addition, a new state-of-the-art security system was installed for the facility. ($55M)

NYCDDC Fire Unit, Project Executive - This CM/Build program has included projects ranging from $2M to $12M of renovation and new construction of firehouse facilities. LiRo has completed $50M of work over the past three years and a total construction amount of $85M. (NYCDDC)

NYCDDC Stadia Projects, Project Executive - LiRo is working at both Yankee and Shea Stadiums performing CM/Build services. Approximately 30 fire, life, safety projects have been performed over the past two years including structural repairs, escalator repairs, and MEP upgrades. (NYCDDC, $50M)

Nassau County Government Operations Center, Project Executive- LiRo in a Joint Venture with Bovis Lend Lease is providing comprehensive construction management services for the Theodore Roosevelt Government Operations Building. The Theodore Roosevelt Executive and Legislature Building at 1550 Franklin Ave in Garden City, NY will be completely renovated. The original building was constructed in 1916 and was the first public building to be constructed using reinforced concrete. The building is listed on the State Register of Historic Places and is currently approximately 135,000 sf. Later additions to the building will be demolished so the final footprint will house approximately 85,000 sf of space. In addition, a 28,000 sf annex will be connected to the Old Courthouse building to house

the new mechanical plant and Legislature chamber. The $36 million project is the result of an extensive evaluation of the County's requirements and the building's condition. (NCDPW)

New York City Department of Sanitation Requirements Contract, Project Executive- This contract involved providing construction management services to the NYCDOS on an on-call basis. These services were provided to support the numerous projects that NYCDOS has in progress throughout the five boroughs of New York City. Nine projects have been performed over the past three years ranging from scheduling services to complete construction management assignments. (NYCDOS, $8.5M)

Battery Park City Authority, On-Call Owner's Representative Construction Management Services, Project Executive - LiRo provided construction management services on an On-Call/ Emergency Basis. The contract primarily involved any work that was required construction management services throughout all of Battery Park City. The design phase responsibilities included constructability reviews, cost estimating, CPM scheduling, code compliance review, site layout and construction phasing recommendations. The construction phase responsibilities included all essential CM services for the specific task or project at hand. Emergency response was essential to the tasks that may arise.

Battery Park City, Site 14/14B Park Reconstruction, Construction Management, Project Executive - LiRo provided construction management services for the construction of Site 14/14B, adjacent to the Museum of Jewish Heritage. The project primarily involved landscaping the property around the Museum of Jewish Heritage and its new addition. It involved new lighting systems, new irrigation systems, installation of paving material around the entire site, and landscaping, implementing BPC green guidelines. The property encompassed approximately 80,000 sf. LiRo maintained careful coordination of this project with the adjacent concurrent construction of the Museum addition.

Battery Park City, Site 23/24 Baseball Fields - Construction Management, Project Executive - LiRo provided construction management services for the renovation/construction of new ball fields at Battery Park City's Site 23/24. As CM, our emphasis was on the coordination of all contractors, developers, BPCA/BPCPC, quality control, budget control, construction direction and supervision, scheduling and the creation of verifiable as-built for all work. LiRo also integrated the expertise of landscape architects and turf specialists in each phase of the project, implemented BPC green guidelines.

Battery Park City, Community Center Construction Management Services, Project Executive - LiRo is providing Owner's Representative/ Construction Management services for a 60,000 sf community center/ball field maintenance facility in the base of two residential towers at Site 23/24 in Battery Park City. LiRo will oversee the creation of the community center/ball field maintenance facility from design development through completion of all construction and post-construction. This facility will house 2 swimming pools, an auditorium, a gym, classrooms, and exercise center/outdoor plaza, as well as a maintenance facility for the Battery Park City Parks Conservancy for the care of the two adjacent little league ball fields. Site 23/24 will be developed according to the mission of the Authority of furthering sustainability in urban development. The community center/ball field maintenance facility will be built in accordance with the Authority's Environmental Residential Guidelines and with the latest LEED for Commercial Interiors (CI) rating system, now version 2.0. It is anticipated that the facility will attain a Platinum rating, the highest possible level bestowed by the USGBC. ($30M)

Employment History:
The LiRo Group (1994 to Present)
Senior Vice President & General Manager

Michael P. Bonasia, LEED AP

RESIDENT ENGINEER

Mr. Bonasia has 20 years of construction management experience on major multi-million dollar metropolitan New York public projects. Mr. Bonasia's experience on these projects has involved management and coordination of multiple construction contractors, construction scheduling, cost estimating, change order negotiations and resolution of engineering and field changes.

Mr. Bonasia has been trained by OSHA certified teachers and the LIRR in worker safety training and has a thorough knowledge of LIRR operations, specifically with force account work. He has excellent written and oral communications skills and is proficient in all popular computer programs including Expedition and Primavera. Representative projects include:

EDUCATION	B.S., Electrical Engineering, New York Institute of Technology, 1988
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Training Course LEED Accredited Professional, US Green Building Council, NY
YEARS WITH THIS FIRM	14
YEARS WITH OTHER FIRMS	9

Program Mgmt. Services for: Perry Avenue, Tow Pound & DCAS Building projects at the Brooklyn Navy Yard - LiRo is currently serving as the Program Manager for the construction of the Perry Avenue Building and the NYPD Tow Pound Building at the Brooklyn Navy Yard. LiRo's involvement began during the Pre-construction (Design) Phase and will continue through the completion of construction. (Brooklyn Navy Yard Development Corporation, $32M, 2009)

Stony Brook Hospital Major Modernization Project, Stony brook, NY, Superintendent - This project included construction of a 65,000 sf Ambulatory Care Pavilion, consisting of outpatient cancer services and state-of-the-art medical equipment. The project was designed to comply with a Certification Level according to the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) Rating System. (SUNY, $187M)

Environmental Remediation and Demolition of the South West Brooklyn, Greenpoint, and Hamilton Avenue Incinerators, Resident Engineer - Responsible for preconstruction planning and construction oversight for the environmental abatement and demolition of three decommissioned incinerator facilities. Demolition was performed adjacent to a new structure and while surrounding businesses continued normal operations. Safety, dust/debris control and coordination were essential to the success of the project. Tasks included environmental monitoring, waste tracking, permitting, utility coordination, compliance with Federal, State and local regulation and health & safety regulations governing hazardous and contaminated waste. (NYCDOS, $9M, 2005)

Rikers Island - Reconstruction of Perimeter Alarms and Upgrades at SOD Control Room, Queens, NY, Resident Engineer - This project included installation of new perimeter alarm home runs which were compatible with the previous alarm devices and devices DDC plans to install in the future, as well as upgrades to SOD Control Room including new security equipment and associated furniture, general and electrical renovations, electrical service upgrade and installation of new A/C systems. (NYCDDC, $5.5M, 2004)

Rikers Island - Staff Locker Room Building, Queens, NY, Resident Engineer - LiRo provided Construction Management services under a DDC CM/Build Requirements Contract for a new staff locker room facility at the CIFM complex on Rikers Island. The scope of work for this project included a new 18,500 sf pre-engineered structure, an existing security fence relocation, new utility services and site work to accommodate 200 cars. (NYCDDC, $7M, 2003)

Long Island Rail Road, Hicksville Station Rehabilitation, Resident Engineer - This $2.5 million project included the demolition of the existing facility and the construction of new station building with more modern architecturally pleasing finishes. Work was done while maintaining LIRR daily operations. The new structure was constructed on the same site as the existing building and included an enlarged waiting room and ticket office. It is fully ADA compliant. The entire station plaza was repaved and staircases were upgraded at several access points. Specific work items included:

- Demolition of existing station building
- Construction of new station building with larger waiting room and ticket office areas
- New curbs and repaving of entire plaza area
- Two new vendor spaces within building
- New HVAC for both waiting room and ticket office
- New electrical service upgrade
- New plumbing
- New ADA compliant restroom facilities
- New police kiosk and two vendor kiosks
- Stair replacement

Hicksville station is one of the LIRR's busiest stations; it is a center hub as well as being a major transfer point for other branches. (Long Island Rail Road, $5M, Project Manager: Bud Merola, P.E., 2002)

LIRR Wayside Power, Queens, NY, Resident Engineer - This project included the installation of 480 VAC and 750 VDC Wayside power in an under-car cleaning (UCC) building at the LIRR Hillside Maintenance Facility. Responsibilities included managing LIRR force account personnel, monitoring construction progress, preparation of daily inspection reports, contractor coordination, contract conformance, quality assurance, site safety, and review of shop drawings. (LIRR, $1M, Project Manager: D. Horn/C. Gitlitz, 1999)

Bronx House of Detention, Bronx, NY, Resident Engineer - Included demolition and new construction of facility main kitchen; renovation of pantries, barber shops, and staff dining area; new construction of eight story elevator tower and site work; and installation of new fire/life safety systems. Responsibilities included management, administration and coordination of multiple contractors in accordance with a court-mandated schedule while maintaining daily operation of the facility. (NYC DDC, $21M)

Employment History:
The LiRo Group (1996 to Present)
Resident Engineer
O'Brien-Kreitzberg & Associates ((1989 - 1996)
Project Engineer
New York Telephone (1988 - 1989)
Technician
Phoenix Electrical Contracting, Co. (1988)
Estimator

Donald Bornkamp, Jr., P.E.

ASSOCIATE

EDUCATION	B.E., Civil/Environmental, Manhattan College, 1985
REGISTRATION / CERTIFICATIONS	Professional Engineer, VA Professional Engineer, NY Certified Code Enforcement Official, NY OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	12

Mr. Bornkamp has been providing engineering and operations management services since 1985 in the areas of construction management and project management. His experience includes NYCT bus depot construction, vehicle repair shop construction, general facilities construction, track construction, bridge & elevated subway inspection, underground storage tank replacement, retaining wall and bulkhead construction, utility installation, facility demolition, environmental remediation, productivity improvements, safety improvements, and organizational development. Representative projects include:

Construction of the Queens 14 Garage & Salt Shed, Project Manager - Responsible for design review, preconstruction planning and construction management for the $33 million, 72,000 sf service and storage building, accessory support structure (salt storage shed) and all utility services (sanitary & storm sewer, domestic water and fire mains, gas service and electric). Project required the coordination of four (4) prime contractors under Wick's Law requirements for the ground up construction of the storage & repair garage, locker facilities and office facilities.

Environmental Remediation and Demolition of the South West Brooklyn, Greenpoint and Hamilton Avenue Incinerators, Project Manager - Responsible for preconstruction planning and construction oversight for the environmental abatement and demolition of three decommissioned incinerator facilities. Tasks included environmental monitoring, waste tracking, permitting, utility coordination, compliance with Federal, State and local regulation and health & safety regulations governing hazardous and contaminated waste.

Renovation of James A. Thomas Center, Rikers Island, Project Manager - Responsible for design review, preconstruction planning and construction oversight for the $30 million structural renovation of the of an historic correctional facility (constructed 1933). Scope of work required the upgrade of the facility to present fire/life safety codes and existing court mandates for inmate occupancy. Tasks included demolition and replacement of several rooms requiring pile foundations, structural steel framing, replacement of HVAC systems, domestic hot and cold water systems, and installation and energizing for a new 5 kv feeder loop with three (3) new substations and emergency generators. Work required the removal of ACM following NYCDEP regulations and abatement and monitoring of lead contaminated areas.

Construction of Locker Facility at Rikers Island, Project Manager - Responsible for design review preconstruction planning and construction oversight for the $6M, 16,200 sf locker facility to resolve a union grievance between the Department of Correction and the Officers Union. Work required the installation of pile foundations, structural steel framing, installation of new gas, water and electrical services, installation of a 130' connecting corridor, men's and women's locker and shower facilities.

Randall's Island Fire Training Academy, Assistant Project Manager - LiRo provided complete construction management and inspection services for the New York City Fire Department's Fire Academy. This $35M project involved the construction of three new buildings, renovation of a fourth and construction of an outdoor training area at the Department's Fire Training Academy on Randall's Island. Building 11 involved the new construction of a four-story building containing classrooms, gymnasium, locker rooms, and cafeteria. This building featured a facade with brick, insulated metal panels and a curtain wall system and houses a boiler room. It also featured state-of-the-art audio-visual systems. Building 12 involved the new construction of a six-story training building. This building featured insulated metal panels and brick facade on the outside, and an indoor atrium configured to represent several different types of City buildings: brownstone, storefront, and commercial building. Building 5 consisted of a new multi-level training facility. This building featured an advanced computerized fire training system providing firefighters with realistic theatrical flames, intense heat, and obscured visibility. The building featured a brick facade, fire resistant interior spaces, and exterior features to enable access training such as cutting station and mock-up skylights. Building 2 involved the reconstruction of the existing multi-level live fire training burn facility. This facility was renovated to a smoke generator training facility.

System-Wide Kitchen Renovations at Rikers Island, Resident Engineer - Under the Cook-Serve Program, all kitchens, pantries, and serveries at correctional facilities throughout the City were reconstructed to allow food to be prepared and served on-site in accordance with court mandates. To accommodate the new equipment required for the program, the electrical and mechanical infrastructure of the kitchens (62,000 sf), pantries (7,500 sf), and related areas were expanded, and additional utility services were provided. The work was phased so that while some facilities undergo construction, they were provided food from nearby facilities. (NYCDDC, $50M)

MTA-New York City Transit, Department of Buses, Assistant Chief Facilities Officer - Managed a staff of 14 engineers and architects to support 20 facilities with a value of more than $2 billion. Responsible for project scope development and coordination for all capital and operating contracts impacting facilities. Responsibilities included:

- Planned, designed and implemented $3 million in fast track projects (6 month period) to accommodate the increased bus storage needs at Dept. of Buses facilities.
- Designed and implemented temporary connection and transfer station for subway to bus transfers for the Williamsburg Bridge shutdown. Project coordinated between NYCTA and NYCDOT.
- Developed TA Labor (Force Accounts) for all capital projects at Dept. of Buses facilities.
- Developed and implemented policies and procedures related to environmental compliance and NYS building code compliance.
- Improved efficiency of maintenance procedures for in-house maintenance staff.
- Prepared bus depot design guidelines for the construction of new facilities and renovation of existing facilities.
- Implemented new regulatory requirements for the USEPA AND NYSDEC as they apply to Department of Buses facilities.

Employment History:

The LiRo Group (1998 to Present)
Associate
MTA – New York City Transit (1984-1998)
Assistant Chief Facilities Officer

Anthony Caggiano
ASSOCIATE VICE PRESIDENT

Since joining LiRo, Mr. Caggiano has been involved in requirements contracts involving multisite, wicks law projects. Over the years, he has become an expert in managing and coordinating theses projects from design through construction. He possesses both the technical and communication skills required to create workable designs, coordinate and schedule with individual facilities, and package the overall project and inspect and document the construction. Over the past ten years, he has performed work at over 350 facilities including over 100 fire department facilities. Work has included tank removals and upgrades, gas conversions and emergency generator installations. This experience has given him intimate knowledge of the FDNY operations.

EDUCATION	B.S., Industrial Engineering, City College of New York, 1966
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training Troubleshooting Exterior Masonry Walls Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Brick Masonry-Inspections and Quality Control Certification, NY Confined Space Entry Certification CPM Scheduling Certification, NY Construction Management Certification Prep Course Risk Management Course, NY IFCI - Certified in UST Installation/Retrofitting PETCON Course - UST Closures IFCI - Certified in UST Decommissioning ASTM Course - E1739-RBCA Course for Integrated Environmental Solutions, NY PETCON Course - UST Installation
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	30

Representative projects include:

Project Manager/Assistant Project Manager for Four NYC Department of Design and Construction Petroleum Storage Tank Projects. These four projects with a total value of $70 million involved the construction management of replacement /upgrade/decommissioning of ASTs and USTs at over 300 city sites. Responsibilities included site investigation, design review, development of subcontractor RFPs subcontractor prequalification, bonding, insurance and VENDEX certification.

Duties also involved maintaining of schedules, utilizing Primavera, monthly status reports, shop drawing review, ISRP and SSIP review, requisition review, cost control, cost estimating, progress payment requests, punch lists, maintenance and warranty controls, change order processing and approvals. The project required close coordination with NYC Department of Design and Construction client agencies, subcontractor personnel, and field inspection on multisite, multicontractor construction.

Project Manager for Design and Construction Management for Installation of FDNY Emergency Generators, Citywide. Responsibilities included site investigation, design review, development of subcontractor RFB's, subcontractor pre-qualification, required insurances, bonds and vendex certification. Duties also included schedule maintenance, shop drawing review, requisition review, cost control, cost estimating, change order processing and approval, progress payment requests, substantial completion requests, punch lists, and maintenance and warranty controls. The project required close coordination with NYC, DDC, FDNY, subcontractor personnel, and field inspection on multi-site contractor construction.

Assistant Project Manager for Tank Upgrade and Fluid Distribution System Installation at NYC Department of Sanitation Central Repair Shop. Duties included participation in determining motor vehicle fluid system requirements, design and installation. The project included the location and subsequent removal and/or replacement and remediation of sixteen (16) USTs consistent with the relevant State, Federal and City requirements governing these tanks.

Assistant Project Manager for Tank Upgrade and Fluid Distribution System Installation at NYC Housing Authority. Duties included supervision of pre-design investigation, removal, replacement, and remediation of USTs on a multi-site project.

Employment History:
The LiRo Group (1994- Present)
Associate Vice President
Frequency Controls Products (1984-1994)
Director of Sales & Marketing
ADI Electronics (1975-1983)
Vice President & General Manager
Arrow Electronics (1978-1982)
Director
Servo Development Corp. & FEE Industries (1977-1981)
Vice President of Manufacturing
GAP Instrument Corp (1969-1976)
Director of Manufacturing
Otis Elevator Electronics (1964-1969)
Manufacturing Manager
Belock Instrument Corp. /Otis Elevator Electronics (1962-1964)
Manager of Estimating & Industrial Engineering
Belock Instrument Corp. (1958-1961)
Manager of Estimating

Viorel Chirila, N-IV

CHIEF INSPECTOR

Mr. Chirilla offers the ideal background for a bridge engineer. He has served as a field engineer for a major bridge construction contractor; a structural steel detailer for a bridge component fabricator; a bridge designer; and recently as an assistant resident engineer on a major bridge reconstruction project. This unusual combination of bridge design, inspection, fabrication, and construction experience gives Mr. Chirilla a comprehensive understanding of bridge construction programs. Mr. Chirilla's experience includes a broad range of bridge types, from historic cast-iron truss bridges to major suspension bridges. He also has worked extensively on every type of moveable bridge.

EDUCATION	B.S., Civil Engineering, Polytechnic Institute, Timifoara, Romania, 0
REGISTRATION / CERTIFICATIONS	N.I.C.E.T. Level III NICET IV - Civil Engineering Technician, VA NACE Certified NACE Coating Inspector I, NY NACE Coating Inspector II NACE Coating Inspector III Safety and Health Training - 29 CFR/OSHA Transportation Eng. Technology/Highway Construction
YEARS WITH THIS FIRM	14
YEARS WITH OTHER FIRMS	24

Triborough Bridge Deck Replacement on the Wards and Randall's Island Viaduct (TB-64B)- This project, valued at $272 million, is the TBTA's largest bridge project to date and involves the reconstruction of the Wards/Randall's Island Viaduct, new coatings, bearing replacement on the Queen's Approach and Bronx Truss, construction of new ramps, access road construction on Randall's Island and widening of the Queens to Manhattan Ramp. LiRo is the prime consultant on this joint venture project. (MTA-TBTA, $242 Million)

Triborough Bridge Redecking and Cabling (TB-64A), Assistant Resident Engineer- LiRo was part of a tri-venture of firms managing the deck replacement on the Triborough Bridge. The project consisted primarily of major rehabilitation on the suspended span and the Queens viaduct. Suspended Span - The existing deck (over 250,000 sf) was replaced with an orthotropic steel deck. The work also included replacement of the finger-type expansion joints with modular joints; safety barrier installation; drainage improvements; and at the anchorages, replacement of the existing deck with composite units of structural steel cross beams and precast concrete. The cable work included cable sleeve modifications at six locations and the replacement of 184 suspender ropes and fittings. Queens Viaduct - Work on the Queens Viaduct included replacement of over 165,000 sf of existing deck with composite units of structural steel cross beams and precast concrete. The Queens Viaduct received new armored joints, concrete overlay, side and median barriers, improved storm drainage, and new brackets and stringers for the widening of the roadway during construction. At the project's completion, the new structure was converted to a sidewalk. Additional work included sidewalk widening on the Queens approach, pin replacement at the Wards Island anchorage, new lighting and electrical upgrades on the viaduct and suspended spans, and lead abatement on structural steel throughout the project. (MTA Bridges and Tunnels, Project Manager: Tom Bach, $150M, 2004)

Tappan Zee Bridge - Rehabilitation of Substructure, Assistant Resident Engineer- This project involved construction inspection services for rehabilitation of the substructure of the 3.5-mile-long Tappan Zee Bridge are being provided to the New York State Thruway Authority under this contract. This project consists of primarily concrete repairs and sealing of the abutments, pier columns, pier caps, and pile caps of the entire bridge structure. The Tappan Zee Bridge spans the Hudson River. At this location, the River is brackish and experiences tidal fluctuations. Work will be accomplished from boats and barges with pile cap repairs scheduled to coincide with low tides. The entire project involves work over the Hudson River and, therefore, requires safety netting and environmental waterway protection. (NYSTA, $15M, 1999)

Tappan Zee Bridge Removal & Replacement of East Deck, Assistant Resident Engineer - Construction inspection services for removal and replacement of deteriorated deck sections on the east portion of the Tappan Zee Bridge for the New York State Thruway Authority. This contract consisted of primarily night work conducted between the hours of 8 pm and 6 am. Replacement was done using various types of panels including precast reinforced concrete panels, concrete filled steel-grid panels, and exodermic panels with the joints between panels filled with high-strength, rapid-set, non-shrink grout designed to attain a minimum of 3,000 psi within three hours of installation. The rapid set was required for the reopening of all lanes to traffic prior to 6 am each morning. Construction sequence is as follows:Daytime survey layout Daytime pre-drilling and pre-cutting steel for nighttime panel installation. Work was performed from underneath without any traffic interruption.8:00 pm lane closures followed by sawcutting and coring existing deck Rigging through the core holes and removal of existing deck by crane Inspection of existing steel and repairs as determined by the Resident Setting of the pre-cast panel and grouted in place to the adjacent panels with high early strength grout. Field test grout cube specimens at 60 minutes to verify 3,000 psi has been achieved.Re-open all lanes by 6:00 am
Throughout the project, extensive maintenance and protection of traffic surveillance involved multiple use of flashing arrowboards, advance warning signs, and delineation devices. The project involved work over a railroad and the Hudson River which required close coordination with NYS Troopers and the railroad in addition to required permits, safety netting, and environmental waterway protection. (TBTA, $23M, 1996)

Tappan Zee Bridge Removal & Replacement of West Deck, Rockland and Westchester Counties, NY, Assistant Resident Engineer - Construction inspection services for rehabilitation of the Tappan Zee Bridge for the New York State Thruway Authority. Rehabilitation of the deck on the west side trestle spans was the main focus of this project. The work consisted of strip, repair, seal, and overlay (SRSO) of more than 1.5 miles of bridge deck. Within this length, more than 0.75 miles of the deck in the median lane was replaced with "Inverset" units. The work was conducted at night between the hours of 8 pm and 6 am Rapid-set patching materials for repairs and rapid-set, non-shrink grout for filling of joints between Inverset units were being utilized because of the rigorous lane closure limitations that had to be adhered to. Other items of work included installation of supplemental superstructure steel required for the support of the Inverset units, repairs of concrete pedestals, replacement of fixed bearings, cleaning of expansion bearings, installation of new expansion joints, steel repairs to the fascia, and replacement of the wire guidance control system for the movable barrier machines. Extensive maintenance and protection of traffic surveillance involved multiple use of flashing arrowboards, advance warning signs, and delineation devices. The entire project involved work over the Hudson River and, therefore, required safety netting and environmental waterway protection. (NYSTA, $28M, 1997)

Route 5S Reconstruction in the Town of Poughkeepsie and LaGrange, NY, Chief Inspector - a $25 million NYSDOT project. Three miles of roadway reconstruction and widening as well as bridge demolition, reconstruction or rehabilitation. Extensive utilities relocation or reconstruction.

Interchange Reconstructions I-87, I-287, 17 59, Suffern, NY, Chief Inspector, for New York State Thruway Authority and NYSDOT a $100 million project, federally funded. Heavy construction.

Rehabilitation of 15 bridges along Interstate I-95, Senior Construction Engineer, between Stamford and Norwalk, Connecticut (a $25 million project for CT).

Selleck Bridge Rehabilitation, Senior Construction Engineer - Construction of a $2 million project for Stamford, CT.

Riverside Avenue Bridge, Greenwich, CT, Senior Construction Engineer - Rehabilitation construction of historical cast iron truss.

Charter Oak Bridge Construction, Hartford, CT, Senior Construction Engineer - (Senior Inspector) A $100 million, Federally funded bridge project for Connecticut DOT.
Other inspection experience includes:

Greenpoint Avenue Bridge - Structural and mechanical inspection for the construction of a new single-leaf bascule bridge in Brooklyn for New York City DOT. The focus of Mr. Chirilla's work was the main deck on top of the leaf and its connection to the approach spans.

Carlton Avenue Bridge over the Kennebeck River, Bath, ME - The Carlton Avenue Bridge is a double-deck vertical lift bridge: one deck for vehicle traffic, the other for rail. Mr. Chirilla was responsible for complete structural and mechanical inspection and rehabilitation of the bridge over a two-year period, with emphasis on the towers, sheaves, cables, and counterweights.

Beach Thoroughfare Swing Bridge, Atlantic City, NJ - This rail bridge swings 180 to allow for heavy boat traffic. Located between Atlantic City and Philadelphia, the bridge was rehabilitated after a long period of non-use. Mr. Chirilla was involved in the complete structural and mechanical inspection of the span, including the motors, center pier wheel, and control house.

Spuyten Duyvil Swing Bridge over Harlem River - Mr. Chirilla led the structural and mechanical inspection of this Metro-North Rail Bridge over the Harlem River. The bridge is located at the northernmost tip of Manhattan.

Design and rehabilitation of ten movable bridges in New Jersey - Mr. Chirilla was a structural/mechanical inspector for ten swing, bascule, and vertical lift bridges in New Jersey. Among these were the Route 1/9, Witman, Bellville, and Sayerville Bridges.

Designer/Bridge Inspector ExperienceRehabilitation of Brooklyn Bridge, (cable splaying and partial vertical truss replacement for New York City DOT).Rehabilitation design for four bridges on Merrit Parkway, CT.Rehabilitation design for Rainbow Bridge Niagara Falls and Canada.Design and Modernization of Toll Plazas for Queenston Lewiston Bridge and Whirlpool Bridge Niagara Falls, Canada.Estimator/structural steel detailer with Bernardini Iron Works Shop, Bronx, NY.

Other ProjectsNew York Transit Authority projects (modernization of subway station), for New York City DOT.Assistant Project Manager with Metralite Architectural Metal Fabricator & Erector, Flushing, NY.Public and/or residential building developments or rehabilitations (highrise building construction).Resident/Site Engineer with Construction Trust Company, Arad, Romania.Housing, industrial, and sport facilities construction.

Jerrold S. Cohen, AIA
VICE PRESIDENT

Mr. Cohen has over 25 years of experience in construction management and design services for public sector and institutional clients. He understands that the stewardship of these projects constitutes a public trust requiring the highest level of professional and technical responsiveness. Mr. Cohen's experience includes K-12 schools and higher education facilities, courts, housing, health care, laboratory and research facilities. He has demonstrated expertise in the leadership of high priority, complex construction programs with multiple stakeholders. Mr. Cohen is a proven client service oriented team builder, skilled in delineating objectives, effective decision-making, in pro-active coordination, budget management and project delivery. Representative projects include:

EDUCATION	M Arch, State University of New York at Buffalo, 1981 B.A., Environmental Studies, State University of New York at Stony Brook, 1973 Environmental Design, Parsons School of Art & Design
REGISTRATION / CERTIFICATIONS	Registered Architect, NY Const. Claims Arbitration & Mediation, American Arbitration Negotiation Strategies for Public Construction OSHA - 10 Hours Certificate Partnering Facilitation, American Arbitration Assoc. DART Project Delivery Systems, Design Build, AIA Scaffold Safety Engineering, Construction Safety, OSHA
YEARS WITH THIS FIRM	7
YEARS WITH OTHER FIRMS	20

CM/Build Requirements Contract for NYC Housing Authority, Project Executive - LiRo is currently performing work on a task order basis including renovating and/or constructing several community centers throughout New York City. Work includes new construction of a community center, various renovations and upgrades, and infrastructure renovations including electrical, HVAC, and plumbing. These properties all require that LiRo perform preconstruction and construction phase services. LiRo is responsible for prequalifying potential construction contractors, bidding the work and ultimately entering into contract with the construction contractors. These projects require careful coordination with community residents so interruptions of utilities, housing access, etc. are kept to an absolute minimum. (NYCHA, $250M)

New York City School Construction Authority, Construction Management Emergency Response Management and Coordination Program, New York City, Project Executive - Under multiple contracts LiRo's extensive scope of work varied widely, and included the highly expedited renovation and construction and major restructuring projects for five new high school ranging from approximately $15 to $30 million. These projects, including extensive reconstruction of school facilities, were completed within less than 90 days during the summer period when regular school sessions have ended, as compared to the typical 1 year or longer durations for comparable work. Work was accomplished using round-the clock shifts, 7 days per-week with minimal disruption to students and faculty engaged in school activities and to the surrounding neighborhoods. LiRo also immediately mobilized construction professionals, trade labor union personnel, contractors and/or material suppliers to arrest dangerous conditions or contain hazardous materials at public schools within the five boroughs of New York City. In this capacity, work was performed on a 24 hour-per day, 7 day-per-week basis.

Categories of work included the design administration; development of construction estimates, schedules, solicitation of bids in accordance with Authority requirements and the law; providing general conditions including but not limited to testing and controlled inspections; remediation of hazardous

materials; construction and demolition of the work in accordance with the SCA's Project labor Agreement (PLA) and contract documents issue by the Authority. Among the services that LiRo provided included: detailed construction cost estimates detailed CPM schedules cost and schedule controls and reporting bid and award of contracts management of all construction and hazardous remediation work and related activities general conditions work, including testing and controlled inspections To date LiRo has completed in excess of approximately $110 million under two successive contracts with the NYCSCA. (NYCSCA, $238M, 2004- on-going)

New York City School Construction Authority, Professional Staffing Services, Project Executive - LiRo, in JV, was selected under successive contracts to provide supplementary staffing to the New York City School Construction Authority. Assigned personnel responsibilities included the construction management administration and coordination of design and construction for rehabilitation, modernization and new school projects and campuses throughout New York City. Current assignments include providing Project Officers for both new school and school rehabilitation construction in the Bronx, Queens, Brooklyn and Manhattan. (NYSCSA, $29M, On-going)

Decontamination and Deconstruction of Fiterman Hall, Borough of Manhattan Community College, Project Executive - LiRo is currently serving as the Construction Manager Sub consultant to Pei Cobb Freed & Partners for the decontamination and demolition phases in anticipation of the rebuilding of Fiterman Hall, Borough of Manhattan Community College (BMCC). Services are provided on an ongoing work session review basis fully coordinated with Pei Cobb Freed personnel and with DASNY and CUNY project managers. This teamwork approach is structured to facilitate coordination amongst the multiple primary stakeholders, to minimize disputes, eliminate potential cost and schedule overruns, and to mitigate change orders, that may otherwise arise during construction. The project involves extensive New York City inter-agency coordination, particularly with LMCCC, LMDC, USEPA, NYCDEP, NYCDOT and the MTA. It also requires continual briefings and dissemination of process and update information to the local Community Board and the public. LiRo managed design investigations, providing site supervision and managing field contractor operations prior to and during the decontamination and deconstruction work. This includes interior and exterior environmental cleaning and removal of all building contents and components. All work is being conducted under special monitoring requirements applicable to the USEPA WTC Recovery Zone, and will occur within the jurisdiction of the USEPA WTC Recovery Program. Additionally being provided are preconstruction services, scheduling, contractor prequalification and bid packaging. (DASNY, $240M)

Westchester County Courthouse Renovations and Addition, Project Executive - This steel framed, twenty story building, was constructed in the early 1970's. It currently houses the offices of the district attorney, courtrooms and other miscellaneous county official offices. The project was made up of three major construction phases: 1) exterior renovation of the existing façade; 2) construction of an annex on the west face of the existing building; and 3) rehabilitation of the existing building interior. Extensive coordination and phasing was required in order to minimize the impact on the existing and continuing courthouse operations. (DASNY, $100M, 2005)

Employment History:

The LiRo Group (2003 - Present)
Vice President, Project Executive
NYCDDC (1997-2003)
Assistant Commissioner
Bonnie Roche Construction Services (1994-1997)
Construction Manager
Jerrold S. Cohen, A.I.A (1992-1997)
Consultant
Architecture for Health, Science & Commerce P.C. (1988-1992)
Associate and Project Manager
Hellmuth, Obata & Kassabaum, P.C. (1987-1988)
Director of Health Care Facilities
The Rosenfield Partnership (1982-1987)
Senior Associate and Project Manager

Todd Colabella, N-IV

CHIEF INSPECTOR

Since 1980, Mr. Colabella has worked in the construction inspection and administration field on a wide variety of highway, bridge, and heavy construction projects. He has served as Inspector, Chief Inspector, and Resident Engineer. Mr. Colabella's typical responsibilities include:

- Preparation of daily, weekly, and monthly reports
- Change order preparation and negotiation
- Job estimates
- Office engineering
- Payment preparation
- Construction inspection
- Contract coordination
- Coordination with the LIRR Force Account

EDUCATION	
REGISTRATION / CERTIFICATIONS	Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY LIRR Safety Training NICET Level IV NICET IV - Highway Construction OSHA 10 Hour Occupational Safety & Health Training OSHA 30 Hour COnstruction Safety and Health OSHA Safety Certificate Traffic Control Training - NYSDOT, Region 11 Transportation Eng. Technology/Highway Construction/Level IV Troubleshooting Exterior Masonry Walls Certification, NY
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	18

Replacement of Steinway Street Bridge over the Grand Central Parkway, Chief Inspector - This project for NYCDOT - Division of Roadway Bridges involved construction inspection for the reconstruction of two rigid frame arch structures over the Grand Central Parkway in Astoria, NY. The project included the demolition of the existing rigid frame arch structures; erection of new steel frame posts and arches, pouring of encasement abutments and new poured-in-place concrete deck slabs and sidewalks; bridge railing & fencing; permanent soldier pile and lagging sheeting with grouted tie-back anchors; the installation and removal of two temporary ACROW truss bridges; and extensive MPT detour scenarios. Project elements also included; drainage systems; underground and bridge supported utilities (water main, gas, telephone and NYC DEP & FDNY communications); traffic signals; and intersection and safety improvements. (NYCDOT, $18.4M)

Resurfacing of the Wantagh State Parkway from the Southern State Parkway to the Northern State Parkway, Chief Inspector - This project involved the complete resurfacing of 9.8 km of the Wantagh State Parkway in Nassau County, NY. This project required that Mr. Colabella coordinate nightly closures of the Parkway with the NYSDOT, NYS Troopers and the local community. All existing asphalt pavement was milled. Full and partial depth pavement repairs were made. Over 300 drainage structures were modified. The existing concrete curb was milled and replaced with new modified curb. Extensive electrical work was also performed including 5000 lf of conduit, numerous pull boxes, and electrical appurtenances rewired to support the INFORM system. (NYSDOT, $16.2M)

Long Island Expressway (I-495) HOV Lane, Exits 57-61, Long Island, NY, Chief Inspector - This project involved the construction of new High Occupancy Vehicle (HOV) lanes on the Long Island Expressway and the reconstruction of the LIE mainline pavement from Exits 57-61. A total of eight bridges were reconstructed and/or replaced. Construction encompassed three phases to allow for an unimpeded traffic flow.

Project specifics included:

- Drainage: Over 28,000 lf of RCP and PE pipe in sizes ranging from 15 in. to 42 in. diameter.
- Asphalt: Over 240,000 tons. All asphalt was placed in accordance with Superpave specifications.
- Sound Barrier: Precast concrete panels and posts were mounted on cast-in-place piers. 640,000 sf total.
- Concrete Curb: 12,000 lf.
- Concrete Median Barrier: 30,000 lf, all precast.
- Overhead Sign Structures: 38 total, including span and cantilever types.
- Water Main: Over 2000 lf.
- Extensive underground utility work.
- Other work elements included drainage structures, street lighting, INFORM upgrades, and the installation of Variable Message Signs (VMS). MPT on this project was of paramount importance due to the extremely high traffic volumes on the LIE. This project incorporated two A+B bid contracts. The project ran as many as three shifts. (NYSDOT, $95M)

Throgs Neck Bridge, New York, NY, Resident Engineer - Mr. Colabella was responsible for the inspection and coordination of installation and testing of a VMS system at the approaches to the Throgs Neck Bridge. This project included MPT with complete nighttime closure of the bridge. Project elements included: installation of new sign gantries across the northbound and southbound roadways; inspection of installation and erection of all structural attachments, electric, power, communications, and central computer control system; removal of the existing signs and support structures; erection of temporary work platforms on underside of the bridge at four locations; lead paint removal for the cantilevered attachment of new steel to the existing floor beams outside fascia girder; and painting utilizing a three-coat system. The assignment included a total of two structures and four signs. Two of the VMS are full color, and two are tricolor. Mr. Colabella attended progress meetings and generated contractor's estimates and change orders. (TBTA, $3M)

Long Island Expressway (I-495)/Seaford Oyster Bay Expressway Interchange and HOV Lane, Nassau County, NY, Chief Inspector - This interchange reconstruction project involved the construction of new High Occupancy Vehicle (HOV) lane on the Long Island Expressway between Exits 43-46. Mr. Colabella's responsibilities consisted of the inspection of all MPT, lane closures, implementation of detours, road closures, and signing for bridge demolition and erection over the LIE and Northern State Parkway; coordination with state and county police agencies regarding daily and weekend road closures; monitoring work zone traffic control; and inspection of various items and phases of construction involving concrete replacement, asphalt paving, structural steel (demolition and erection), pre-stressed concrete box beams, temporary structures, and electrical work. (NYSDOT, $120M)

Rehabilitation of 20 Bridges Throughout New York, NY, and Rehabilitation of 19 Bridges on Various New York State Highways, Office Engineer/Chief Inspector - Mr. Colabella was in charge of construction inspection for these projects. He assured compliance with plans and specifications; supervised five Inspectors; coordinated activities of subconsultants; and enforced maintenance and protection of traffic. The projects' elements consisted of concrete columns, cap beams, bridge seats, stems, backwalls, pedestals, portions of structural slabs, curbs, winter concrete, and vertical and overhead patch work; structural lifting operations for the replacement and/or resetting of fixed and expansion bearings, stringers, stiffeners, diaphragms, finger joints, and armored joint systems with compression seals; cleaning and painting of structural steel; epoxy coating for the protection of concrete repairs; and micro-silica concrete overlay. He supervised the concrete testing and checked shop drawings for acceptance of proper materials. (NYSDOT, $20M)

MacArthur Airport Taxiway "F" Construction, East Taxiway Overlay, and Terminal Apron Expansion For American Airlines, Resident Engineer/Inspector for C&S Engineers - Client: Federal Aviation Administration, Project Cost: $9M. This project consisted of the excavation, replacement and new construction of taxiways "E", "F" and Eastern Apron Expansion at Terminal building. It also involved the removal, regrading and resurfacing of intersection at Taxiway "E" and runway 15R-33L, approx. 80,000 tons of P-401 mix design. Project included: Saw & Seal Transverse joints in newly constructed asphalt pavement;

Monitoring all field testing and sampling supplied by testing agency; Assured flow, stability and air voids within proper ranges for P-401 asphalt mix design. As Inspector, Mr. Colabella performed layout of asphalt core sampling and testing by method of random sampling and utilizing standard deviation for payment purposes.

Project also involved:

- Shortened runway landing area on runway 6-24 due to construction activity of new Taxiway "F".
- Coordination and implementation of project duration closure of runway 15R-33L.
- Administrated NOTAMS (notice to air men) to flight services for any unusual activity within airport due to construction of this project (runway, taxiway closures, cranes on site for height restrictions outside safety zones, etc.).
- Provided daily coordination of all construction activities and movement of equipment with airport manager, airport construction manager and remained in constant communication with air traffic controllers in tower and fire rescue units.
- Scheduled all progress meetings and maintained all project records.
- Installed precast drainage system throughout airport.
- Checked and logged security clearances and daily passes for all employees of prime and sub contractor entering property.
- Project also consisted of new taxiway, runway lighting, lighted signage and electrical wiring and conduits from main building to project in field to meet new FAA codes.
- Coordinated all electrical splicing to be witnessed by FAA Representative.
- Constructed concrete electrical duct banks under taxiways for all electrical work.
- Installation of ground rods in newly constructed 300x150 concrete apron for American Airlines grounding of planes while refueling, overnight parking and de-icing.
- Constructed new de-icing facility and airport perimeter security fence.
- Inspected and insured proper layout of pavement markings on final asphalt overlay for compass calibration, holding areas and landing markings.

(Airport Manager- Tony Ciglia, Airport construction manager - Emery Dicey)

Bellmore Parking Improvements, LIRR Station, Office Engineer/Inspector - This project involved the complete demolition of an existing privately owned building and yard facility and the construction of a new 212 space parking facility. Prior to construction of the new parking facility, extensive site remediation work was required to remove petroleum-contaminated soils and catch basins. A new ADA compliant asphalt parking lot was constructed. Specific items of work included:

- Grading and clearing
- Drainage system installation
- Construction of new curbs and sidewalks
- Asphalt paving
- Lighting and electrical service upgrades (above and below ground)
- Landscaping, fencing and striping
- This politically sensitive project was completed on time and under budget. (LIRR, $800K).

Parking and Sight Improvements for the Speonk LIRR Station, Office Engineer/Inspector - This project involved the construction of a new 216 space parking facility to serve the Speonk train station. The work consisted of site clearing, excavation, grading, asphalt paving and drainage installation. New lighting as well as a new electrical service was installed. An 800 lf landscaped earth berm was installed along the tracks to mitigate community concerns regarding train noise and aesthetics. An existing parking facility will be upgraded with a new asphalt overlay and drainage upgrades. Additional activities included landscaping, the installation of park benches and bike racks. (LIRR, $1.2M)

Parking Improvements at the Smithtown and Farmingdale LIRR Stations, Office Engineer/Inspector - Smithtown: This project involved complete demolition and reconstruction of the parking facility. New asphalt paving, drainage improvements, landscaping and lighting were installed. (LIRR, $750K)

- *Farmingdale:* This project involved complete demolition, reconstruction and expansion of the parking facility. New asphalt, pavement, drainage improvements, curb, sidewalks, lighting, and landscaping were installed. (LIRR, $1M)

Various Construction Projects for NYSDOT, Nassau and Suffolk Counties, NY, Office Engineer/Chief Inspector - Mr. Colabella served as Chief Inspector providing inspection and coordination of inspection forces on the following major construction projects:

- Southern State Parkway Guide Rail and Safety Improvements, Nassau County
- Southern State Parkway Signs - Overhead, Cantilever, and Slip Impact Breakaways, Nassau County ($5M)
- Northern State Parkway Guide Rail and Median Barrier Replacement, Nassau County ($5M)
- Long Island Expressway (I-495) Service Road Construction, Suffolk County
- In his capacity as Chief Inspector, he supervised material testing and record sampling; maintained the testing equipment; and attended progress meetings and EEO meetings.

Various Construction Projects for the Nassau County Department of Public Works, New York, Office Engineer/Chief Inspector - As a Chief Inspector, Mr. Colabella has provided inspection services on construction assignments involving: sanitary sewers, highway drainage and culvert installation, asphalt and concrete paving, structural concrete, pile driving, excavation and embankment, guide railing, overhead sign structures, survey, installation of traffic control devices, and landscaping.

Sewer Inspector, Various Projects for Nassau County Department of Public Works - Mr. Colabella's responsibilities consisted of the inspection of sanitary sewers at various locations in Nassau County. Projects took place in Carle Place, Westbury, New Cassel, Hicksville, Levittown, Bethpage, Plainview and Woodbury. Work included:

- New sanitary sewer and manhole installation
- Sanitary sewer and manhole repair
- Insituform lining
- Videotaping

In addition to inspecting the work, Mr. Colabella responded to homeowner complaints relating to house connection settlements and damages and prepared punch lists.

Louis Comunelli, P.E.

SENIOR PROJECT MANAGER/ RESIDENT ENGINEER

Mr. Comunelli has had over 40 years of experience in the administration of major roadway and bridge reconstruction contracts. As the Director of the East River Bridge Construction Unit, he was responsible for managing reconstruction work on the Williamsburg, Manhattan and Queensboro Bridges. Prior to that assignment, Mr. Comunelli was a Project Manager on projects for the Connecticut Department of Transportation, the New Jersey Department of Transportation, the Westchester County Department of Public Works, the New York City Department of Environmental Protection and the New York City Department of Parks and Recreation. In prior Civil Service, he was the Engineer-in-Charge of two Manhattan Bridge rehabilitation contracts for NYSDOT and the NYCDOT Borough Engineer of construction for Manhattan and Staten Island.

EDUCATION	B.E., Civil Engineering, City College of New York, 1965
REGISTRATION / CERTIFICATIONS	American Engineering Alliance Board of Directors, NY Professional Engineer, NY Professional Engineer, NY Amtrack Track Safety Course Installation-Entire UST System Closure, NJ Metro-North Track and Safety Course Professional Engineer, NJ Professional Engineer, PA Professional Engineer, NY Subsurface Evaluation, Tank Testing & Corrosion Specialist, NJ
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	31

Specific experience includes:

Reconstruction of Gun Hill Road Bridge, Bronx, NY, Project Manager. LiRo is providing Resident Engineering Services for this project which entails the removal and replacement of the eight-lane wide Gun Hill Road Bridge over Metro-North Rail Road. The project was performed in three separate demolition and construction phases. The new bridge is a single-span steel structure with a concrete deck. Extensive utilities span across the bridge and were replaced including a 36" water main, electric power and communications lines.
This project also required major coordination with Metro-North Operations personnel and force account support departments. LiRo staff coordinated all of the third party construction activities with the MNRR operations representative within the required advanced notice. The staff is actively involved in requesting flag protection and track outages for the project, in addition to coordinating with the MNRR Force Account Departments who are providing Maintenance of Way support for track and Power Department support services.
LiRo ensures that all demolition and erection procedures are being followed according to the approved drawings. The manufacturer and the model numbers of the cranes are checked as well as the Approval and Operations Certificate issued by the NYC Department of Buildings. Counterweights are checked, the pick location is checked and the rigging is checked.
The fabrication of shields used in the demolition procedures is thoroughly checked. Lumber grade and dimensions, and fastener material and dimensions are checked, as well as the overall fabrication of the shields.

MPT and Traffic Signals
Due to field conditions, several aspects of the MPT had to be revised and traffic signals had to be relocated. LiRo staff responded to NYCDOT OCMC's request to install additional signs on the Bronx River Parkway, and to their request to close an exit ramp with concrete barriers. They coordinated the relocation of traffic signals, and the installation of temporary ones that were not called for in the contract documents. LiRo interacted closely with the NYCDOT Bureau of Traffic to affect these traffic signal relocations.

Community Relations
LiRo interacts with the community by informing them of the construction work through a Newsletter. In addition, LiRo updates the NYCDOT's web page for this project. LiRo personnel have met with local community leaders to explain the aspects of the project.
(NYCDOT, $14M)

Replacement of Steinway Street Bridge over the Grand Central Parkway, Project Manager. This project for NYCDOT - Division of Roadway Bridges involved construction inspection for the reconstruction of two rigid frame arch structures over the Grand Central Parkway in Astoria, NY. The project included the demolition of the existing rigid frame arch structures; erection of new steel frame posts and arches, pouring of encasement abutments and new poured-in-place concrete deck slabs and sidewalks; bridge railing & fencing; permanent soldier pile and lagging sheeting with grouted tie-back anchors; the installation and removal of two temporary ACROW truss bridges; and extensive MPT detour scenarios. Project elements also included; drainage systems; underground and bridge supported utilities (water main, gas, telephone and NYC DEP & FDNY communications); traffic signals; and intersection and safety improvements. (NYCDOT, $18.4M)

Rehabilitation of Bridge Joints on the Brooklyn-Queens Expressway Triple Cantilever Structure, Project Manager. LiRo provided Resident Engineering Inspection Services for contract HBKC1144, which was designed to correct leakage, structural defects, and traffic noise problems occurring at approximately 100 expansion joints. The joints were located on a reinforced concrete structure comprised of three cantilevered levels located in downtown Brooklyn.

Project specifics included:
All work was done at night in a 7-hour lane closure window
Concrete repairs were made to each side of the expansion joint, with the exact repair limits determined in the field.
A proprietary asphalt patching compound was utilized
Extensive MPT and community outreach.
(NYCDOT, $2M)

NYCDOT Contract Nos. HBCY093 and HBCY096, Marine Structural Repairs, Project Manager - These contracts called for when and where repairs for waterway bridges throughout New York City. Due to the time-critical nature of the work, there was little advance notice of the general defects discovered by condition inspection teams. LiRo prepared specific designs for work on a fast-track basis, as well as applications for DEC/Corps of Engineer and Coast Guard Permits. We performed Construction Inspection and site Engineering services as an integral part of a combined team that was closely integrated with NYCDOT. (NYCDOT, $10M)

NYCDOT Contract No. HBE1023, Emergency Installation of Center Median New Guide Rails on the Mill Basin Bridge, Brooklyn, Project Engineer - This contract called for the installation of a special movable bridge railing system on a double leaf bascule bridge carrying the Belt Parkway over the Mill Basin. This installation was designed to prevent future vehicular head-on collisions that had been occurring at an alarming frequency. The contract therefore had stringent incentive/disincentive provisions. LiRo was a pro-active major partner in assuring that the other participants remained focused on keeping the work going, and ultimately to be completed early. Among the items of work on this contract were:

Structural Concrete
Structural Steel, including very large members
Steel Bridge Railing
Corrugated Beam Guide Railing
Maintenance and Protection of Traffic on a high-speed parkway
Nighttime operations
Miscellaneous structural steel repairs
Environmental protection, containment, and disposal of contaminated waste
Special Hinged Barrier that moves as the bridge is opened

Re-balancing of the bridge leaf spans
Special FHWA crash testing
(NYCDOT, $3M)

Construction Inspection of the Brooklyn Bridge, Resident Engineer - Provided construction inspection services to Yonkers Contracting for an emergency redecking project on the Brooklyn Bridge. LiRo was asked to step in quickly to complete the work of another consultant on this contract. LiRo inspected the following construction items:

200 floorbeam repairs
Installing and sealing closure angles for steel barriers
Stringer shim repairs
Installation of temporary expansion joints at Franklin Square
Microsurfacing the Brooklyn-bound bridge deck
Concrete deck at the Brooklyn towers

LiRo also performed inspection of punchlist items prepared by the previous consultant, and provided office engineering and maintenance of time and material records. ($33M, 2001)

Williamsburg Bridge Cable Rehabilitation -Director of the NYCDOT East River Bridge Construction Unit, had direct supervision over the work of rehabilitating the four main suspension cables. The contract consisted of completely removing the existing cable wrapping on all four main cables, cleaning and repair of cable wires saturating them with linseed oil, applying red lead paste and rewrapping them with wire, and with an additional neoprene cable wrapping. New cable bands, suspender cables, anchorage roofs were installed. Because of the numerous bridge flags detected on this deteriorating structure, in addition to concrete and steel repairs, unusual measures were taken such as installing new reinforced concrete bridge decks in the approaches, directly on top of the deteriorating existing ones. They were designed to provide for safe maintenance of traffic until future contracts completely replace them. Because the full extent of repairs to the cables and other bridge elements was not known at the time of bidding, much change order work had to be done. A healthy working relationship was fostered among all the contract participants, the Contractor, the Construction Supervision Consultant, the Construction Support Consultant and NYCDOT, to achieve a successful and amicable completion of the work (1991-1996).

Williamsburg Bridge South Roadways -As Director of the NYCDOT East River Bridge Construction Unit, had general supervision for NYCDOT, over the contract to completely replace both Manhattan and Brooklyn Approaches of the South Roadways including new piles, foundations, piers and superstructure, and redecking of the Main Bridge with an orthotropic system. The accelerating deterioration of the bridge did not allow this contract to proceed until major concrete and steel flag repair were completed, including major replacement of grid deck on the north side, so that traffic could be maintained without incident for the time the entire south side would be closed. This work was speedily done due to the good cooperation of the Contractor, Consultant Supervision and Construction Support Consultants and NYCDOT, who were signatories to Partnering Agreement for the Project (1994 - 1996).

Manhattan Bridge Approaches - NYSDOT Engineer-in-Charge, for the replacement of the East Upper Roadway and installation of East Side elements for a lateral stiffening system in the side spans. This involved replacement of roadway decks, repair and replacement of existing roadway stringers, addition of a new line of stringers, installation of new subway stringer bearings, repair of subway stringers. A new Traffic Signalization System was installed for the Lower Roadway and Street Lighting for the entire East Upper Roadway. The work could not be accomplished as originally envisioned due to subsequent non-availability of the traveler track beams which forced alternate work methods, and infeasibility of performing work in the subway track areas during off-peak hour closures. Intense negotiations were carried out between the Contractor, NYSDOT and NYCT, which enabled the work to proceed. Although the contract was terminated after only the east side work was done, it was only through the cooperative efforts of those involved, the ability to recognize necessary changes and the speedy processing of those changes that enough of the work was accomplished so that the bridge could be re-opened (1985 - 1988).

Manhattan Bridge Re-anchoring of Cable C - NYSDOT Engineer-in-Charge for the relieving of main cable loading from seriously deteriorated eye bars for the Main Cable "C" in the Manhattan Anchorage. This involved the boring through the Anchorage concrete from the cable level to below ground level of four 32 1/4" diameter tubes, providing massive transfer girders and anchorage girders to receive the load from 19 cable strands which were removed from deteriorated eye bars. The remaining strands were redistributed among all the eye bars. Individual wires were repaired, and new drainage for the anchorage roof was provided. Reanchoring on such a scale had not been done before. To actually accomplish the work an Engineer from the Designer was on site at all times to give instant analysis and recommendations. A special incentive/disincentive clause was part of this contract. It worked out so well that the contractor collected the full incentive and performed excellent work. Close cooperation was the key to this success, and the ability of all participating organizations to act quickly once timely decisions were made (1987 - 1988).

Manhattan Bridge West Side - Director of NYCDOT East River Bridge Construction Unit, had general supervision over rehabilitation of entire west side of the bridge. The work included complete replacement of the West Upper Roadway approaches, installation of heavy lateral stiffening elements below the West Upper Roadway along the full width of the underside of the bridge in all suspended spans, tightening up all the elements of the stiffening system in the side spans, major repairs to stringers, floorbeams and stiffening truss gusset plates, installation of a new pedestrian walkway along the entire bridge, roadway lighting along the entire west upper roadway, and improvements on the traffic signalization system. The work on this contract continued where the previous Approach contract left off. The next east side contract would tighten up the lateral stiffening members on the main span, and that will button up the whole suspended portion of the bridge. As with all recent rehabilitation contracts, more work was discovered necessary after the contractor began demolition of decks, and rigged for miscellaneous repairs. It was decided to replace major elements rather than attempt numerous limited repairs. This tactic, in the long run would cost the public less in money and impact to traffic. For specific objectives, incentive/disincentive change order provisions were negotiated. This resulted in an early opening of the west upper roadway (1992 - 1996).

Queensboro Bridge Rehabilitation - Director of the NYCDOT East River Bridge Construction Unit, had general supervision of the replacement of the two lower outer roadways, major painting, relocation of major electrical feeders, rehabilitation of the maintenance traveler system, and renovation of shops located below the Manhattan Approach. Also included were concrete repairs to existing piers. This contract involved major participation of Con Edison who was a signatory to the Partnering Agreement, along with all the other Agencies involved. Scheduling of the electrical feeder relocations was insightfully proposed by the Contractor and Con Ed. The Construction Supervision and Construction Support Consultants and NYCDOT reacted quickly to ensure the success of the Contractor's work plan. Discovering of numerous red flag conditions by the NYSDOT Consultant doing a simultaneous biennial inspection threatened to greatly delay the progress of work, but good cooperation by all parties, and speedy flag repair work minimized the delay due to this cause (1995 - 1996).

1-95 Resurfacing in Connecticut - Project Manager for three CONNDOT contracts along I-95 in Darien, Southport and in Bridgeport. The work at Darien and at Southport consisted of major night time asphalt milling, resurfacing, installing asphalt curbs, drainage, concrete barriers, guide rails, rock excavation, installation of direct burial electrical cable for roadway lighting, seeding, and line striping. The Bridgeport contract, in addition to the above items, included partial and full depth night time bridge deck repairs utilizing hydro demolition, structural concrete repairs, bridge drainage, pressure relief joints and impact attenuators (1988 - 1991).

Rehabilitation of St. James Park, The Bronx - This work for the NYC Department of Parks and Recreation, consisted of re-grading, installation of drainage, asphalt walks, basketball courts, handball courts including concrete foundations, tennis courts, concrete bleachers and rehabilitation of stone walls and walks. The court areas were at the low point in the Park, and the area was normally wet. Temporary regrading and modification of drainage were effected during construction to dry the area so that the handball courts could be constructed on normal foundations.

Eleven Intersections in Bergen County - Project Manager for Construction Inspection Services for eleven high volume intersections in Bergen County, selected by NJDOT for physical improvements to ease the

movement of traffic through them. The work involved excavation, grading, paving, resurfacing, curbs, sidewalks, traffic signals and drainage. Maintenance and Protection of Traffic was especially difficult since these intersections were already busy, and no detour routes were feasible.

Sewers in Beach 27th Street, Etc., Far Rockaway - Project Manager for construction of new sewers on Beach 27th Street and four other streets in Far Rockaway, for the NYCDEP. The work involved deep trench excavations, shoring, pile driving, roadway excavation grading and paving. There was no formal roadway drainage plan, so LKI3 designed the roadway catch basin layout crowns and profiles to accommodate the sewers and the abutting property elevations.

Construction for Manhattan and Staten Island, Borough Engineer, 1979-1984 - Supervised all street NYCDOT contracts in both boroughs along with several bridge contracts. Staff consisted of City engineers and Inspectors, and consultant Engineer personnel. As borough Engineer, was also responsible for general direction of highway portion of projects administered by NYCDEP in Staten Island. Among the contracts directly supervised were the following:

First Avenue from 72nd Street to 125th Street - This involved the installation of a 48" diameter water main in the roadway, with necessary sewer and utility relocations, repaving with reinforced concrete pavement, drainage, traffic signals and street lighting.

125th Street from the FDR Drive to 5th Avenue and 125th Street from St. Nicholas Avenue to Riverside Drive - These two contracts involved the installation of 48" diameter water mains, removal of a concrete encased yoke system that supported abandoned trolley rails, excavating, grading, paving, sewer and utility relocations, drainage, traffic signals and street lighting. The full extent of the massive trolley yoke system was discovered during the first contract along with a abandoned turntable complex at Lexington Avenue. Together with the contractor, NYCDOT quickly agreed on major changes in the methods of work to demolish these obstacles.

Nassau Street Mall; Lower Manhattan - This was an experimental project to create an aesthetic urban mall in Nassau Street, near City Hall. The work involved excavating grading and paving with brick pavers over a concrete base, drainage, decorative street lights, and reconstruction of under sidewalk vault roofs which were in poor condition.

97th Street Bridge over ConRail at Park Avenue - The superstructure of this through girder bridge was completely replaced, along with the bearings and pads, the abutment walls were rehabilitated. A new concrete box girder superstructure was installed. Because of heavy ConRail usage and traffic on Park Avenue, speedy removals and installations were necessary.

Resurfacing Contracts - Resurfacing in Manhattan is characterized by night operations, speed and restoration of full roadways at the end of the work shift. This necessitated great flexibility, capability to make instant repairs to concrete base, and the setting of great numbers of roadway castings quickly, with coordinated slopes and elevations, without the benefit of surveyors.

NYCDOT Brooklyn (1967-1979) - Resident Engineer, then Section Engineer supervising several simultaneous contracts. As Resident Engineer, supervised:

Widening and Paying of Atlantic Avenue from Flatbush Avenue to Schenectady Avenue - The work consisted of relocating curbs, traffic signals, street lights and drainage structures, excavating, grading and paving installation of new traffic islands. The contract plans did not furnish elevations, so the Resident Engineer furnished line and grade.

Widening of Fourth Avenue - 17th to 25th and 33rd to 64th Streets - This work encompassed relocation of subway vent structures, curbs, traffic signals, street lights, and drainage structures, excavating, grading and paving, installation of new traffic islands.

As Section Engineer he supervised:

Three Linden Boulevard projects, from Remsen Street to South Conduit Avenue - This work included relocation of curbs, traffic signals, street lights and drainage structures, excavating grading and paving, installation of new traffic islands. Profiles and grades were given by the NYCDOT field forces.

Myrtle Avenue from Jay Street to Lewis Avenue - The work included relocation of curbs, traffic signals street lights, drainage structures, excavating, grading and paving. This project was sensitive requiring the Maintenance and Protection of Traffic had to be modified because the roadway was too narrow to efficiently and safely perform the excavation operation on one half, while the other was open to very heavy traffic. Several neighborhood groups had to be convinced that the change was necessary.

Bridge Painting - Manhattan Bridge Towers below roadway level, Williamsburg Bridge Towers above roadway level, Hamilton Avenue Bridge, and Greenpoint Avenue Bridge - The work on the Manhattan Bridge called for a commercial Blast Cleaning, the remaining bridges were power and hand tool cleaning.

Publications

Resident Engineer's Field Manual (Roadways) for NYCDOT

Stephen Conenna, P.E.

RESIDENT ENGINEER

Mr. Conenna has over 20 years of experience on nearly all aspects of heavy construction including inspection, construction management, and design on projects over $100 million. His comprehensive understanding of construction including project management, estimating, cost control and scheduling enable him to supervise large scale projects and proficiently negotiate claims and disputes. Mr. Conenna has direct experience running projects at multiple sites from the bidding stage through completion including planning, scheduling, management and close out.

EDUCATION	B.S., Civil Engineer, Columbia University, 1985
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	7
YEARS WITH OTHER FIRMS	20

Relevant experience includes:

West Side Highway Reconstruction, New York, NY, Construction Engineer - Worked with NYSDOT to assess and minimize construction risk to BPC during 4 years $120 million project. Analyzed construction plans, schedule and specifications. Conducted progress presentations to Battery Park City Board of Directors and community.(Battery Park City Authority)

Greenville Yards Railroad Relocation, Jersey City, NJ, Resident Engineer - Provided Jersey City Redevelopment Agency resident inspection services for the $10 million relocation of two Conrail rail lines including earthwork, track and drainage work. Responsible for field inspection services, approval of monthly payments, change order review, weekly progress reports and development of as-built buildings. Negotiated contractor claims, resolved disputes. (Jersey City Redevelopment Agency)

LaGuardia Airport Traffic Control Manual, New York, NY, Project Manager - Designed site specific traffic control plans, signage plans, specifications and operating procedures for safe roadway work zones within the airport facility. Supervised engineers and conducted site analysis, data collection, design, and CADD work. Complied with Federal and State Manual of Uniform Traffic Control Devises (MUTCD). (Port Authority of NY & NJ)

Queensboro Bridge Load Analysis, Bay Crane, New York, NY, Owner's Representative - Represented one of NYC's largest crane rental companies. Worked to gain NYCDOT approval for 100-ton crane to cross the Queensboro Bridge. Interacted with structural engineer. Made numerous presentations to NYCDOT.

NYC Health and Hospitals Corporation, Office of Facilities Development, New York, NY, Deputy Director - Mr. Conenna provided direct consulting services to the Assistant Vice President overseeing HHC's 5-year $1.1 Billion Capital Plan for providing contract, construction management services, engineering consulting, planning, budgeting and accounting services. In addition, Mr. Conenna managed numerous construction projects at Kings County Hospital Center including a new $153 million Behavior Health Facility Building. Mr. Conenna oversaw design and reconstruction of various Neonatal Intensive Care Units and Women's Option Centers throughout HHC. He also managed a corporate-wide project to develop a Simulation Learning Center in HHC. (NYCHHC, 2008)

Yankee Stadium City Works, Bronx, NY, Resident Engineer - Supervised numerous projects resulting from NY Yankees' decision to build a new stadium. Projects include construction of new public ball fields, waterfront development, building rehabilitation and Macombs Dam Overpass Bridge reconstruction. Provided construction management services including pre-construction design and scope review, bidding out and overseeing GC work, inter agency coordination with EDC, DOT and DEP, and coordination with designers. Supervised field inspection services, approved monthly payments, and wrote change orders. (NYCEDC, $90M, 2008)

Reconstruction of Apparatus Floors at Various FDNY Fire Houses, Resident Engineer - Mr. Conenna Supervised simultaneous reconstruction projects at various occupied and unoccupied fire houses for the FDNY. This included Squad Company 252 and Engine Company 218 in Brooklyn, and Engine Company 156 in Staten Island. Work included demolishing existing deteriorated structural steel and concrete decks, installing new structural steel and reinforced concrete apparatus floors, and site work. He coordinated and managed separate contracts with the general contractor, the electrical contractor, the plumbing contractor, and the heating/ventilation/air conditioning contractor - and rehabilitated each of these systems within every fire house. Two out of three fire houses were kept active during all phases of the project. Additionally, he interacted on a daily basis with FDNY Captains, DDC engineers, the design architect, and FDNY representatives. His other responsibilities included negotiating/approving change orders, shop drawings, progress schedules, payment requisitions, punch lists, and as-built drawings. He also chaired progress meetings and wrote minutes, and supervised the construction management staff including the project engineer, field inspector, and office engineer. (NYCDDC, 2006)

Park Terrace Gardens Window Replacement, New York, NY, Resident Engineer - LiRo was retained to provide full client Construction Management services for the replacement of over 3000 windows for Park Terrace Gardens, a residential coop in upper Manhattan. Preconstruction services included design and shop drawing review, asbestos and lead investigations, and monitoring of window mock-up installation. LiRo provided ongoing schedule and budget information and coordinated the final installation plan that allowed tenants safe, continued occupancy throughout the process. (EMG Corporation, $3.25M, 2006)

Reconstruction of Apparatus Floor and Quarters at EMS 23, Jacobi Hospital, Bronx, NY, Resident Engineer - Mr. Conenna supervised emergency reconstruction of an EMS ambulance and crisis response unit maintenance facility. Work included demolishing existing deteriorated structural steel and concrete deck, installing new structural steel and reinforced concrete apparatus floor, reconfiguring and reconstructing men's and women's living quarters and offices (including new gypsum board walls, ceilings, lighting, painting, flooring and electrical systems). The Station was kept active during all phases of the project. Additionally, he interacted on a daily basis with EMS Captains, DDC engineers, the structural design engineer, and FDNY representatives. His other responsibilities included negotiating/approving change orders, shop drawings, progress schedules, payment requisitions, punch lists, and as-built drawings. He also chaired progress meetings and wrote minutes. (NYCDDC and FDNY, 2005)

Richard Cuming, P.E.

ASSOCIATE VICE PRESIDENT

EDUCATION	B.S., Civil Engineering, Rutgers University, 1972
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10-hr Training Troubleshooting Exterior Masonry Walls Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Brick Masonry-Inspections and Quality Control Certification, NY OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	2
YEARS WITH OTHER FIRMS	18

Mr. Cuming has accumulated vast experience in the design, process evaluation, and construction management of buildings, major sewage treatment plants, pump stations, sanitary sewers, highways, and drainage facilities since the early 1970s. As a Project Manager and Resident Engineer, his responsibilities have typically included the construction management of large-scale municipal projects involving all of the major construction trades. Management tasks have included the supervision of all quality control procedures, inspection and resident engineering services, and CPM scheduling services. As a Project Engineer and Design Engineer, Mr. Cuming's responsibilities have included the preparation of preliminary feasibility studies and design reports, the formulation of contract plans and specifications, cost estimating, budgeting, and scheduling. His experience spans the full project range from inception to the completion of construction. Representative projects include:

CM Services For Meadowmere and Warnerville Sewers, PS, FM & Associated Facilities, Queens, NY, Project Manager - LiRo is currently providing CM services for the construction of sanitary sewers, a pump station, sewerage force main and related facilities for the Meadowmere/Warnerville communities in southeast Queens. The project requires the relocation of existing water mains and the replacement of existing storm drains. The construction of the 1 million gallon per day Pump Station is taking place a vacant parcel in close proximity to surrounding wetlands and will convey sewage generated from the area via 5,000 lf of dual 8" force main to an existing gravity sewer for treatment at New York City DEP's Jamaica WPCP. Included in the project is the installation of over 6,000 linear feet of 10" and 12" sanitary sewers in this presently unsewered area. (NYCDEP, $30M)

Hampton Bays Middle School, Hampton Bays, NY, Resident Engineer- This new Middle School building had two stories with a total of 142,000 square feet of floor area The project was designated to be the first LEED certified public school facility in New York State. The building was new from the ground up and consisted of classrooms, science classrooms and associated facilities, cafetorium, gymnasium, administrative areas, energy efficient HVAC systems, energy saving building components and materials, extensive use of recycled materials, full site work, etc.

Pre-construction phase included oversight of the preparation of construction cost estimates and development of overall project budget to insure project stayed within the School District's voter approved bond limit. In addition, Mr. Cuming was responsible for a detailed evaluation of construction bid proposals for all six (6) prime contracts. Held intens ive interviews with three lowest bidders for each prime contract to insure complete scope of work was included in each bid and to evaluate each contractor's capability of performing the work. He analyzed each contractor's past experience on similar projects, fiscal stability, bond and insurance ratings, etc, made recommendations to District regarding award of all contracts.

Construction phase included coordination of the work of all six (6) prime contractors, plus the work of their subcontractors and four (4) additional casework and equipment suppliers/installers. In addition responsibilities included coordination of the installation of all utility services and facilities with each respective utility company. Mr. Cuming acted as a direct liaison between the contractors and the District's project architect/ engineer. He monitored CPM scheduling for the project to insure that District target dates were met. He arranged for all required inspections of the work by outside agencies, including those by the local Fire Marshal, to insure the opening of sections of the building within the timeframe of the District's educational requirements and needs. Responsibilities also included management of controlled inspections required by the State Education Department and the overall assurance of quality control on the project. Monitored and insured that all contractors' work was in conformance with project plans and specifications. Mr. Cuming was also responsible for the review and processing of all contractor payments, negotiation of change orders and the processing of same through the District's architect. He advised the District's Administration and School Board in matters relating to the approval of all expenditures, including contractor payments and change orders.

Insured receipt of all proper documentation from the contractors related to LEED accreditation and coordinated with the District's LEED consultant. Worked in conjunction with the commissioning consultant (responsible for start-up of all mechanical equipment and insuring that the equipment functions within specified design parameters), including required coordination with the work of the prime contractors. Prepared incomplete work and punch lists for all contractors and insured that all items were completed. Mr. Cuming acted as a direct representative of the School Board and District Administration throughout the project. Prepared monthly progress reports and presented updates at all School Board meetings. ($42M, 2006-2008)

Rockaway Fire/EMS Station, Fire Department -City of New York, Project Manager/Resident Engineer - This project involved the construction of a new 20,000 sf building for the Fire Department at a cost of approximately $9 million. This unique facility is the first in the City to house both Fire Department and EMS functions under one roof and was completed on time and under budget. The structural steel, reinforced concrete and masonry structure was built on a pile foundation. (NYC DDC, $9M, 2004)

EMS Facilities Program Fire Department -City of New York, Project Manager/Resident Engineer - This project involved the construction of new buildings and the renovation of existing buildings designed to serve the EMS division of the Fire Department. Typically, multiple projects were managed concurrently under this program. (NYC DDC, $28M, 1999)

Bay Park Sewage Treatment Plant, Multiple Building Projects, Nassau County, New York, Resident Engineer - This project involved over $500 million in construction for the upgrade and expansion of the existing sewage treatment facility. The work involved multiple contracts over a 14-year period. Critical phases of this project were under NYSDEC consent order and were completed on or ahead of schedule. As Resident Engineer, Mr. Cuming was responsible for all facets of the project and quality control systems including resident engineering, inspection, and CPM scheduling. Significant individual projects successfully completed at the Bay Park Facility include:

Engine Generator Facility. A $47 million project involving the construction of a new reinforced concrete and structural steel building housing four new Cooper-Bessemer engine powered 3600 kw generators which now supply the full electrical demand of the entire treatment facility.

Plant Administration Building - $10 million project involving the major reconstruction of an existing structural steel, reinforced concrete and masonry structure used to house the administrative and personnel functions of the plant staff. all mechanical, plumbing and electrical systems were completely rebuilt under this project.

Sludge Dewatering Facility - $32 million project involving the construction of a new reinforced concrete and structural steel building housing 12 sludge dewatering presses, odor control and ventilation facilities, and all associated equipment. This project was completed in a total of only 11 months, ahead of the NYSDEC consent order schedule.

Central Warehouse Facilities - $7 million project involving the construction of two separate reinforced concrete, two-story warehouse structures used to house equipment, spare parts, and tools for plant maintenance personnel. These structures were built on a foundation of approximately 700 augured grout-injected piles.

Primary Treatment Facilities, Additions and Modifications - $38 million project including the construction of three new reinforced concrete primary settling tanks, the rehabilitation of five existing primary settling tanks, the construction of a new reinforced concrete odor control structure with an arched roof design, construction of a reinforced concrete primary pump station, and the construction of box culvert primary influent conduit and distribution structure.

Secondary Treatment Facilities, Additions and Modifications - $60 million project involving the construction of five new reinforced concrete final settling tanks and one new aeration tank; the rehabilitation/reconstruction of three final settling tanks and three aeration tanks; the construction of an effluent screening and disinfection building; the construction of a return activated pump station; and the construction and rehabilitation of various other minor structures. This project was mandated by a NYSDEC consent order. All work was required to comply with that order and to be completed on schedule.

Central Heating Facilities - $18 million project involving the structural renovation of an existing reinforced concrete and structural steel building which originally housed the plant's engine generators and aeration blowers. Four new 25 million BTU/Hour Cleaver-Brooks boilers and three new Trane 330-ton capacity absorption type water chillers, along with associated pumps, piping, and appurtenances, were installed within this structure.

Sludge Dewatering Facilities, Additions and Modifications - $24 million project involving the clean out and rehabilitation of four primary digester tanks, two secondary digester tanks, and two sludge storage tanks. This project also involved the enlargement of the existing sludge control building and construction of a new waste burner structure, MCC building, and travel access structure. Intricate phasing of contract work, especially removal of existing sludge digestion process piping and equipment with subsequent installation of new piping and equipment, was required in order to maintain existing plant sludge processing operations.

Mr. Cuming has worked on other projects including:

Hicksville Sewer Collection District, Nassau County, New York, Project Engineer - Preliminary design report and final contract design documents for sanitary sewers, interceptor sewers, and pump stations. (NCDPW, District III)

Construction of Interceptor Sewers and Road Improvements, Nassau County, New York, Resident Engineer (NCDPW, District III)

Interstate I-95, New Jersey, Design Engineer - Design Engineer responsible for roadway and drainage design. (NJDOT)

Nunzio Cusumano, N-IV

RESIDENT ENGINEER

Since 1960, Mr. Cusumano has worked in heavy construction holding positions from Inspector to Resident Engineer. He spent 34 years with the NYSDOT, 25 of those years as an Engineer-In-Charge. Projects under his direction have involved every aspect of highway construction including earthwork, drainage, traffic signalization, lighting, utility relocation, coordination with other agencies, asphalt and concrete pavements, bridge rehabilitation, traffic control and landscaping. Representative projects include:

EDUCATION	, Civil Engineering, City College of New York, 0
REGISTRATION / CERTIFICATIONS	Traffic Control Training 10-Hour Occupational Safety and Health Training Course NICET IV LIRR Safety Training
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	34

Reconstruction of Florence Avenue Area, Phase I, Resident Engineer - This project involved the design and complete reconstruction of approximately 1.5 miles of residential streets in Massapequa, NY. All roads within the project area were completely reconstructed utilizing in-place pavement recycling and an asphalt concrete overlay. The project also included new integral concrete curb and gutter. Grade control on the project was critical due to the extremely flat project area. A new roadway drainage system was installed and featured RCP in sizes from 18" to 24" dia. Over 42 catch basins were reconstructed and 10 new basins were installed. Several of the catch basins contained vortex chambers to contain oil and floatables prior to discharge into the areas waterways. Extensive coordination was required with the NYSDEC and all requirements of the storm water pollution prevention plan (SWPPP) were carefully monitored. The project also included new driveway aprons as well as sidewalk and landscaping repairs. (Town of Oyster Bay DPW, $2.2M)

Resurfacing of the Wantagh State Parkway from the Southern State Parkway to the Northern State Parkway (D015384), Levittown, NY, Resident Engineer - This project involved the complete resurfacing of 9.8 km of the Wantagh State Parkway in Nassau County, NY. All existing asphalt pavement was milled. Full and partial depth pavement repairs were made. Over 300 drainage structures were modified. The existing concrete curb was milled and replaced with new modified curb. Extensive electrical work was also performed including 5000 lf of conduit, numerous pull boxes, and electrical appurtenances rewired to support the INFORM system. A unique aspect of the project was that full nighttime closures of the Parkway were required each night. The closures were coordinated with the NYSDOT, INFORM, the contractor, as well as local municipalities. NYS Troopers provided closure protection. Extensive signage was required for detours within a 5-mile radius of the project. (NYSDOT, $16.2M)

Town of Oyster Bay Filter Building at Old Bethpage Park, Resident Engineer - This project involved the construction of a new 1,500 sf, 2 story masonry building to house a new pool filtration system. The building was constructed on a poured in place concrete foundation and had walls consisting of CMUs and brick. The roof was framed with steel joists.

The existing D.E. filtering system and chlorine and acid tanks were removed. The filtration system consisted of three high rate sand filters. The system also contained balancing tanks, a 3,000 gallon chlorine storage tank, acid injection system, numerous pumps, as well as an automated chemical injection system. Extensive piping and electrical conduit installation was required. The project was completed on a tight town mandated schedule to facilitate the pools opening for the summer season. (TOB, $1.2M, Richard Lenz, P.E., 2/02-9/02)

Village of Thomaston, Street Reconstruction, Resident Engineer - (Reference: Bob Stern, Mayor, 516-482-3110)

Long Island Expressway (I-495) HOV Lane, Exits 57-61, Long Island, New York, Assistant Resident Engineer - This project involved the construction of new High Occupancy Vehicle (HOV) lanes on the Long Island Expressway and the reconstruction of the LIE mainline pavement from Exits 57-61. A total of eight bridges were reconstructed and/or replaced. Construction encompassed three phases to allow for an unimpeded traffic flow.
Project specifics included:
Drainage: Over 28,000 lf of RCP and PE pipe in sizes ranging from 15 in. to 42 in. diameter.
Asphalt: Over 240,000 tons. All asphalt was placed in accordance with Superpave specifications.
Sound Barrier: Precast concrete panels and posts were mounted on cast-in-place piers. 640,000 sf total.
Concrete Curb: 12,000 lf.
Concrete Median Barrier: 30,000 lf, all precast.
Overhead Sign Structures: 38 total, including span and cantilever types.
Water Main: Over 2000 lf.
Extensive underground utility work.
Other work elements included drainage structures, street lighting, INFORM upgrades, and the installation of Variable Message Signs (VMS). MPT on this project was of paramount importance due to the extremely high traffic volumes on the LIE. This project incorporated two A+B bid contracts. The project ran as many as three shifts. (NYSDOT, EIC: Gary Moller, 1/98-12/01, $95M)

Construction of Parking Facility at Merrilon Avenue, Resident Engineer - This project called for the complete reconstruction of the parking facility at the Merrilon Avenue Station. The existing parking facility was demolished and replaced with a new 115 car facility in a two phase construction process. The station traffic was never disrupted. The new facility was constructed to NYSDOT specifications. Extensive community interface was required. (Long Island Rail Road, Project Manager: Lori Katzman and Sherol Blackman, $300K)

Road Reconstruction in Roslyn Heights, Resident Engineer - This project involved the complete reconstruction of approximately 2.5 miles of residential streets. Curbs, sidewalks, and drainage improvements were also performed. Extensive community liaison work was also required. (Town of North Hempstead DPW, $2.5M, 5/95 - 5/96)

Reconstruction of Route 106/107 and Bridge over Route 107 at Jericho Turnpike, Engineer-In-Charge - This project involved the reconstruction of steel and concrete bridge with latex concrete. Also included on this project were pavement repairs, asphalt paving, drainage improvements, curbs, sidewalks, and traffic signal control equipment. No daytime lane closures were allowed on the roadway. (NYSDOT, $5M)

Reconstruction of Route 25 in Jericho and Syosset, Engineer-In-Charge - This project involved the reconstruction and realignment of 1.5 miles of roadway. Also included on the project were concrete retaining walls, drainage improvements, watermains, sewer installation, overhead and underground utilities, landscaping and maintenance and protection of traffic. (NYSDOT, $18M)

Long Island Expressway North and South Service Roads in Huntington, Engineer-In-Charge - This project involved the construction of three miles of new roadway on both sides of the LIE from Deer Park Avenue to Route 110. Work on this project also included drainage, water mains, culverts, retaining walls, landscaping, signage, noise walls, community relations work and maintenance and protection of traffic. (NYSDOT, $18M)

Montauk Highway Roadway and Drainage Improvements, Engineer-In-Charge - Project involved the reconstruction of three miles of concrete and asphalt roadway. Also included bulkheads, sheet piling, drainage improvements, water and gas main installation, sewer upgrades, lighting, traffic signal installation, and M&PT. (NYSDOT, $8M)

Reconstruction of Route 110 from Conklin Avenue to Bayliss Road, Engineer-In-Charge - This project involved the widening, realignment and reconstruction for four miles of the heavily traveled Route 110 corridor. Work involved drainage upgrades, water and sewer installation, curb, sidewalk, landscaping, traffic signalization, pavement marking, M&PT and extensive community relations. (NYSDOT, $15M)

John J. Burns Park, Massapequa, NY - Survey, design, and construction inspection services for the construction of a new parking field, resurfacing of the main access road and existing parking areas, curb reconstruction, drainage and site lighting improvements, and other miscellaneous repairs. (Town of Oyster Bay DPW, $500K, 1995)

MTA - LIRR Construction of Parking Facility at Merrilon Avenue, Resident Engineer - This project called for the complete reconstruction of the parking facility at the Merrilon Avenue Station. The existing parking facility was demolished and replaced with a new 115 car facility in a two phase construction process. The station traffic was never disrupted. The new facility was constructed to NYSDOT specifications. Extensive community interface was required. (Long Island Rail Road, Project Manager: Lori Katzman and Sherol Blackman, $300K)

Anton R. Dolce, AIA

SENIOR ASSOCIATE

Mr. Dolce is an architect with 35 years of experience in design, construction management, facilities operations, and maintenance. His primary strength is in healthcare facilities: he has served as Director of Engineering, Director of Operations, Safety Officer, and Vice President of Facilities for three metro New York hospitals. His most recent assignment has been as Project Manager for Dormitory Authority of the State of New York projects. Representative projects include:

EDUCATION	B. Arch., Architecture, Arizona State University/College of Architecture B.S., Construction Management, Pratt Institute
REGISTRATION / CERTIFICATIONS	American Institute of Architects, NY Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Certified Code Enforcement Officer, NY OSHA - 10 Hours Certificate Troubleshooting Exterior Masonry Walls Certification, NY
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	29

Westchester County Medical Center, Project Manager - LiRo is providing construction management services for projects which include ICUs, an Emergency Room, a labor and delivery center, patient rooms, offices, and laboratories, as well as extensive infrastructure upgrades such as parking, IT centers, switchgear, and building envelope repair.

DASNY School of Architecture - Demolition and reconstruction of a 136,000 sf building to become the new School of Architecture. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including facade, interior and mechanical, electrical and plumbing systems. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus. This required the renovation of various locations at a cost of approximately $8M and was accomplished in one year. (DASNY)

Central Park Police Precinct -Project Manager. Mr. Dolce was the manager for the construction of a new police precinct in Central Park adjacent to the existing landmark precinct at the 82nd Transverse. This was a fast track project worth $5M and built in 6 months. (NYCDDC, $5M)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME) Construction Management Services, - LiRo managed the construction of the new Office of the Chief Medical Examiner (OCME) facility in Brooklyn. This is a state-of-the-art facility offering the staff and the public a safe and private environment. Shared between Kings County Medical Center and the OCME, the new facility contains space designated for NYPD investigators. It was designed to be sensitive to the surrounding community and hospital campus. LiRo's role was to provide comprehensive construction management services from design development through the completion of construction. This included the coordination of all construction operations and related vehicular traffic so that it does not interfere with local traffic or hospital campus operations. The 40,000 sf facility worth $17M was constructed in 28 months. (DASNY, $18M)

Kings County Hospital Center - Dialysis Unit, Project Manager- LiRo managed the construction of a new $6 million dialysis unit. The unit was built on an existing floor in the "C" building. A total renovation, including mechanical and electrical, was required, and the construction was adjacent to

occupied areas. LiRo worked closely with the KCHC construction management group, facilities and nursing staffs to ensure no disruption to their operations.

Kings County Hospital Center – Women's Option Unit, Project Manager - LiRo managed the construction of this new state-of-the-art clinical space. The project included the renovation of 9,000 sf of existing space on the fourth floor of the "E" building. The $1.7 million project opened during the summer of 2004.

James A. Thomas Center (JATC) Renovations at Rikers Island - Comprehensive construction management services were provided to the renovation of the James A. Thomas Center on Rikers Island (approximately 240,000 sf). The original construction of this high security facility dates back to 1933 and has a housing capacity of 1600 inmates. The program for renovation consisted of retrofitting existing spaces within the facility cell blocks, day rooms, showers, pantries, housing areas, mechanical rooms, electrical rooms, and common spaces. Part of the renovation program upgraded the electrical systems and domestic hot water distribution system. (NYCDDC, $25M, 1998 - 2001)

System Wide Kitchen Renovation Program for NYC Dept of Corrections - Mr. Dolce served as Project Manager for this $50M kitchen renovation program. This program involved the rehabilitation of six kitchens serving 6,000 inmates.

New York Methodist Hospital - For this 600-bed major teaching hospital, Mr. Dolce directed and managed a staff of 83 professionals, including biomedical engineering, with an annual construction budget of $25-30 million. He developed six off-site community health centers and was responsible for the operations and maintenance of 1.5 million sf of acute care and off-site facilities.

Vytra Healthcare - Mr. Dolce directed and managed a staff of 35 managed care professionals for this HMO. He was responsible for the design and construction of a 40,000 sf facility.

Long Beach Memorial Medical Center - Mr. Dolce was responsible for engineering, biomedical engineering, and operation of this 202-bed hospital and 200-bed nursing home facility. In addition, he was responsible for the construction of 200-bed nursing home and major additions to the hospital.

Employment History:
The LiRo Group (1999 to Present)
Senior Associate
New York Methodist Hospital (1997-1999)
Director of Engineering
Vitra Health Care (1995-1997)
Division Manager
Winthrop Hospital (1979-1995)
Vice president of Facilities
Long Beach Memorial Health Care Center (1974-1979)
Director of Facilities and Engineering

James Eckhoff, P.E.
SENIOR ASSOCIATE

Since 1989, Mr. Eckhoff has worked in the construction management field as Resident Engineer, Office Engineer and Chief Inspector on major bridge and highway reconstruction projects for the NYCDOT, NYSDOT in Regions 8 and 10, Long Island Rail Road, Port Authority of NY and NJ and the NY State Thruway Authority. Representative projects include:

EDUCATION	B.S.C.E., Civil Engineering, Manhattan College, Riverdale, NY, 1989
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	9

Traffic Engineering Services at NY & NJ Airports, Senior Associate- LiRo provided traffic engineering services on an as-needed basis. Assignments included projects at JFK Airport, JFK Air Train, Newark Airport, and LaGuardia Airport. (PANYNJ, $78M, 2008)

High Line Reconstruction, New York, NY, Resident Engineer - LiRo is providing construction management and inspection services for the transformation of an abandoned elevated rail line into an urban park. This project involves the conversion of a 1.5 mile abandoned elevated freight line into a linear public park that will serve as an open space with outstanding views. The project spans 20 city blocks from Gansevoort Street adjacent to the Gansevoort Market Historic District, north through the meatpacking district, and up to 30th Street where it wraps around the Hudson Rail Yards. The project will also provide 12 points to access the elevated structure and will generate pedestrian traffic in the area. Rentable event space will also be created. Upon its completion, the High Line will take an unused structure and transform it into a one of a kind linear park that will be a great benefit to the community and city. (NYCEDC, $125M)

Long Island Rail Road - Suffolk County Bridges, 5 Rehabilitation Projects, Resident Engineer - This project consisted of the rehabilitation of 5 bridges in Suffolk County. LiRo was responsible for the construction management of the project. The core of the project centered around two bridges that required an increase in loading capacity due to the weight of the fleet of railcars purchased by the Long Island Rail Road (LIRR). Construction at both locations required for the removal of the tracks and extensive coordination between the LIRR and the contractor. Project specifics include:

- Bridge deck waterproofing.
- Structural steel painting with epoxy paint and mastic system to minimize the need for extensive surface preparation and lead abatement required by conventional coating systems.
- Concrete repairs using shotcrete.
- Replacement of the existing steel bearing pads with elastomeric and multi-rotational pot bearings. In order to minimize the impact of replacing the pads on train schedule, the existing girders were jacked and supported on temporary shoring towers. The towers were designed to withstand E50 loading using AREA standards. Since these bridges spanned over high volume roadways, extensive maintenance and protection of traffic was required.
- Concrete cracks were repaired with a low pressure epoxy injection system.
- Installation of gabion retaining walls and rip rap for slope stability.

(MTA-Long Island Railroad, Jamaica, NY)

Long Island Rail Road - Nassau County Bridges, 12 Rehabilitation Projects, Resident Engineer - This project consisted of the rehabilitation of 12 bridges in Nassau County. LiRo was responsible for the construction management of the project. The bridges were located on the Long Island Rail Road's (LIRR) busiest lines, the Mainline and the Montauk Branch. The project was completed 4 months ahead of schedule and below the budgeted time allowed for fouling the tracks. Project specifics include:

- Bridge deck waterproofing.
- Structural steel painting with epoxy paint and mastic system to minimize the need for extensive surface preparation and lead abatement required by conventional coating systems.
- Concrete repairs using shotcrete.
- Replacement of the existing steel bearing pads with elastomeric and multi-rotational pot bearings. In order to minimize the impact of replacing the pads on train schedule, the existing girders were jacked and supported on temporary shoring towers. The towers were designed to withstand E50 loading using AREA standards. Since these bridges spanned over high volume roadways, extensive maintenance and protection of traffic was required.

(MTA-Long Island Railroad, Jamaica, NY)

Staten Island Ferry Emergency Reconstruction of Pier 1, Ferry Maintenance Facility, St. George, Staten Island, New York, Resident Engineer -The emergency reconstruction of Pier 1 was due to the ferryboat Andrew Barberi collision at the Ferry Maintenance Facility, Richmond, New York. The project consisted of restoring the pier back to its original condition prior to the collision. The impact of the collision collapsed approximately 1500 SF of the Southeast corner of the pier. In addition, during the underwater damage inspection of the pier divers also discovered excessive damage to other piles along the pier caused by marine borers, which were required to be posted. Work consisted of the following:

- Removal of the existing reinforced concrete deck slab.
- Removal of the supporting timber cap beams.
- Removal of the timber pier piles and bracing.
- Removal of the fender system including fender piles
- Removal of debris in the waterway to ensure safe navigation
- Installation of new greenheart timber piles.
- Posting of existing piles under the intact section of the pier damaged by marine borers
- Installation of greenheart timber bracing
- Installation of greenheart timber pile clamps, cap beams and splice/sister beams
- Installation of reinforced concrete deck
- Installation of steel bollard and cleats.

(NYCDOT, $1.4M, 2004)

Employment History:

The LiRo Group (1998 to Present)
Senior Associate
Savin Engineers (1998)
Chief Inspector
Gibbons, Esposito and Boyce, PC (1992-1997)
Chief Inspector/ Assistant Resident Engineer
George R. Lehan and Associates (1989 – 1992)
Structural Engineer

Joseph W. Fox
CONSTRUCTION MANAGER

Mr. Fox has over twenty years of experience in construction management, including administrative operations, project scheduling, and direction of construction activities. Projects have included rail yard construction, school reconstruction, industrial and office buildings, correctional institutions, power plants and infrastructure projects. His rehabilitation/ reconstruction experience includes code compliance requirements including ADA and Life Safety modifications.

EDUCATION	B.S., Civil Engineering, University of Maryland
YEARS WITH THIS FIRM	25
YEARS WITH OTHER FIRMS	14

Mr. Fox's typical responsibilities include project management, client liaison, CPM scheduling, directing the activities of field staff, coordination of subcontractors, processing shop drawings, negotiating change orders and overseeing cost control. Representative projects include:

Continental Airlines, Terminal Renovations at LaGuardia Airport, 1999-2000. Owner's representative for the renovation of ticketing and baggage handling. The work also involved extensive asbestos abatement. Critical to the project was the maintenance of continuous operations. This project represented the final phase of the overall modernization of the main terminal and was contracted in two parts: asbestos abatement and general construction. (PANY/NJ, $12M)

Sunrise Yard, NYC Department of Transportation Maintenance Facility, Ozone Park, NY, Construction Manager - Under this contract, LiRo is providing full construction management services. This project includes the demolition of two one-story brick structures; abatement/ remediation of asbestos and contaminated soils associated with these structures and a subsurface fuel storage tank; construction of a new two- story steel framed building to house material storage, shops, drive- through vehicle maintenance, locker room, and administrative offices; and associated site improvements, including new fence, paved parking, green spaces and an art wall. The project is designed to achieve a LEED Gold Certification. Unique to the project is the construction of a multimillion dollar art wall. The Art wall is 192' long and varies in elevation from 8' to 12'. The face of the art wall consists of close to 400 2'x2' panels with metal supports. Some of the material used in the design was from the demolition of the building itself and others were indigenous to the area to represent the earth strata. The art wall portion of the project required extensive coordination with the Public Design Commission (formerly known as the NYC Arts Commission). (NYCDDC, $20M, 2009)

Bond Street EMS Station, Brooklyn, NY, Inspector - As part of the On Call CM/Build Services for the NYCDDC Fire Unit, the Bond St. EMS Station project involved the complete gut and rehab of an existing building located at the corner of Bond Street and Carroll Street in Brooklyn, New York. The rebuilt structure now has an approximately 4,000 sq ft garage and an additional 3,900 sq ft space which houses a command center, locker and restroom area, lounge and fitness room. There is room for seven ambulances inside the building, and contains offices, a kitchen, conference rooms, personal decontamination area, and a truck decontamination area. (NYCDDC, $5.5M, 2006)

NYCSCA Emergency Response Management and Coordination Program. High School of Urban Assembly, Flatbush. LiRo managed and coordinated responses to the emergency needs of the NYCSCA. In this capacity, we stood ready to respond to emergencies on a 24 hour-per day, 7 day-per-

week basis. Predicated upon verbal authorization (a telephone call), we were prepared to immediately mobilize construction professionals, Trade Labor Union personnel, contractors and/or material suppliers to arrest dangerous conditions or contain hazardous materials at public schools within the five boroughs of New York City.

Columbia University - Schermerhorn Extension Window Replacement, Project Manager, 5/2002 - 9/2002. This project involved scheduling, procurement, and coordination activities for the renovation of the Schermerhorn Amex. (Columbia University, $3.5M, 5/02-9/02)

Bronx House of Detention for Men - Utility Upgrades, Project Manager - Upgrade to the electric system and install 3 new boilers. Project included asbestos abatement extensive mechanical and electrical renovations, overall project control to include scheduling, coordination of all work with the facility maintaining security and site access, etc. (NYCDDC, $20M, 10/02 - 2005)

Construction Manager, Shops and Yards Construction, 180th Street Bronx Subway Car Maintenance Facility- The 180th Street facility is a 600' by 150' subway car maintenance building located at NYCTA's 180th Street station. Mr. Fox was handpicked by NYCT' to expedite the construction of this project. The project was several years behind schedule when Mr. Fox began the assignment. Mr. Fox turned this troubled project around and gained beneficial occupancy within 18 months. This full-service facility houses six tracks and includes a full range of cleaning, maintenance, and repair equipment, including overhead cranes, lubrication systems, pitted and posted tracks, an elevated stinger electrification system, and a freight elevator. The facility also contains administrative offices and locker rooms for NYCTA personnel, and is equipped with a communications system and card-access security system. Mr. Fox's role was to help expedite the reconstruction of this facility. Extensive track and track signal work was required both inside and outside of the building. Tying the new track into the existing track signal and switch work was an essential component of construction. (NYCT $45M)

PS 98 School Modernization Project, Construction Manager - Responsible for all field work for renovation and restoration to this public school built in 1928. The Project included asbestos abatement of all floor tile and thermal insulation, kitchen, HVAC, electrical upgrading, and restoration of the facade to NYC Historical Preservation Standards. (NYCSCA, $14M)

Employment History:
The LiRo Group (1985 to Present)
Construction Manager

Frank Franco, AIA
VICE PRESIDENT

Mr. Franco is a registered architect with over 20 years of experience in the construction industry. His experience includes extensive construction management for both public and private agencies and institutions including NYCDDC, DASNY, NYCHHC, BPCA and PA. Mr. Franco also spent six years in the health care field as a Director of Facilities and Construction for NY Methodist Hospital, Brooklyn, NY.

EDUCATION	B.S., Architecture, New York Institute of Technology at Old Westbury, NY, 1983
REGISTRATION / CERTIFICATIONS	American Institute of Architects, NY NCARB Certified, NY OSHA - 10 Hours Certificate
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	19

Representative projects include:

CM/Build Requirements Contract for NYC Housing Authority, Program Manager - LiRo is currently performing work on a task order basis including renovating and/or constructing several community centers throughout New York City. Work includes new construction of a community center, various renovations and upgrades, and infrastructure renovations including electrical, HVAC, and plumbing. These properties all require that LiRo perform preconstruction and construction phase services LiRo is responsible for prequalifying potential construction contractors, bidding the work and ultimately entering into contract with the construction contractors. These projects require careful coordination with community residents so interruptions of utilities, housing access, etc. are kept to an absolute minimum.

Representative projects include:

- Betances Houses Community Center, $10 M
- Queensbridge Houses Community Center, $5 M
- 1162 Washington Avenue Community Center, $500K
- Bayview Houses Community Center, $12 M
- Marlboro Houses Community Center, $3 M
- Baruch Houses Community Center, $1M
- Edenwald Houses Community Center, $1M
- Linden Houses Community Center, $10M
- Ocean Bay Facade Restoration, $52M
- Albany Houses Electrical Upgrades, $4M
- B41st Boiler Replacement, $3M
- Throgg's Neck Houses Facade Restoration, $12M
- Exteriors Unit Roofing Replacement Program, 15 Projects, $75M

(NYCHA, $250M)

NYCHHC, CM Services Requirements Contract, Project Executive - Under this contract, LiRo is performing CM Services on an On Call Basis. Current task performed to date include:

- Kings County Hospital "T" Building, LIU School of Nursing ($4M)
- Kings County Hospital "D" Building, NICU Renovation ($2M)

- Kings County Hospital 9th Floor Urology and Surgical Suite. A 10,000 SF renovation to the 9th floor of the "E" Building ($4M)
- Harlem Hospital Ron Brown Ambulatory Care Building ($40M)
- Queens Hospital Center N Building, 3rd and 4th floor renovations and expansion ($4M)

(NYCHHC, $58M)

Westchester Medical Center, Valhalla, NY, Project Manager - LiRo was contracted to provide construction management services for numerous projects at Westchester Medical Center. Services include:

Pre-Construction Services

- Review construction documents for constructability
- Prepare preliminary estimates
- Review and select contractors for the bid process
- Prepare/package bid documents and solicit bids

Construction Services

- Execute contracts with all contractors
- File for all necessary Permits
- Maintain all logs (shop drawing, RFI, change orders, etc.)
- Provide daily construction supervision and inspection
- Provide a construction schedule

(Westchester Medical Center, $150M)

Battery Park City, Community Center Construction Management Services, Project Manager - LiRo is providing Owner's Representative/ Construction Management services for a 60,000 sf community center/ball field maintenance facility in the base of two residential towers at Site 23/24 in Battery Park City. LiRo will oversee the creation of the community center/ball field maintenance facility from design development through completion of all construction and post-construction. This facility will house two indoor swimming pools, an auditorium/theater, a gym and basketball court, classrooms, and exercise center/outdoor plaza, as well as a maintenance facility for the Battery Park City Parks Conservancy for the care of the two adjacent little league ball fields. Site 23/24 will be developed according to the mission of the Authority of furthering sustainability in urban development. The community center/ball field maintenance facility will be built in accordance with the Authority's Environmental Residential Guidelines and with the latest LEED for Commercial Interiors (CI) rating system, now version 2.0. It is anticipated that the facility will attain a Platinum rating, the highest possible level bestowed by the USGBC. (BPCA, $30M)

Employment History:

The LiRo Group (1999 to Present)
Vice President
New York Methodist Hospital (1993-1999)
Director of Facilities Management and Construction (1997-1999)
Assistant Director of Engineering (1996- 1997)
Project Manager (1993 - 1996)
Avis Rent a Car, (1992 - 1993)
Project Manager
Blum and FitzSimmons Architects (1990-1992
Architect/ Project Manager
Anthony J. Musso Architect (1980-1990)
Senior Associate Architect

David Hall, N-IV
ASSOCIATE

Mr. Hall has 30 years of experience in construction administration, management and inspection. His projects include hospitals, schools, municipal buildings, wastewater treatment facilities, roads, drainage, utilities, site work and property development. Mr. Hall has managed multi-million dollar, multi-prime municipal projects under consent orders, many of which required continuous operations during construction.

EDUCATION	Architectural Technology and Civil Engineering, New York Institute of Technology, 1978 Business Administration and Accounting, Wheeling College, 1973
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training NICET IV - Highway Construction
YEARS WITH THIS FIRM	21
YEARS WITH OTHER FIRMS	10

Representative projects include:

Stony Brook University Medical Center - Construction Management Services, Stony Brook, NY, Project Superintendent - This project consisted of various stages of construction with an overall cost of approximately $180 million. The overall scope of work took 7 years, due to the intricate phasing, that was required to keep the facility in operation throughout the entire construction duration. The job consists of 5 separate projects as follows:

- Patio Enclosure - This project had a contract value of $1.5 million and consisted of the enclosure of an outdoor sitting area and conversion into cafeteria setting and maintenance area, the project was completed 1 month early and on budget.
- Emergency Generator - This portion of the work consisted of the installation of a 2000kW generator to serve the future Heart Center Project as the backup power for all of their critical circuits. Included as part of the project were the construction of a combustion air penthouse and the alteration of the existing space including the construction of a new switch gear and control room, and the installation of all conduit and wiring from the physical plant to the new Heart center transfer switch. Cost of the work was $1.9 million.
- The Heart Center was the renovation of approximately 70,000 sf. The work entailed the construction of a new Orthopedic Department, a new Heart Center including the installation of 5 new single and bi-plane cath labs, and the creation of 14,000 sf of usable swing space, which is required for the future projects. The value for this portion of the work is $20.5 million. This work was completed as scheduled and on budget.
- ACP project consisted of a new 60,000 sf Cancer Treatment and Imaging facility as well as the extension of both the main loop road entrance to be tied into the main hospital entry road and the existing steam and electrical facilities to the new building. The estimated value of this work is $24 million.
- Major Modernization Project with a construction cost of $128 million. This project included the construction of 10 new OR suites and associated recovery, support and visitor spaces, a new OBGYN wing with its own operating suites, recovery, NICU and ancillary spaces, a totally new, as well as renovated Emergency Department, a new parking structure, a new Helipad, and the addition of a new lobby and renovation of the existing lobby from public into program space. The total square footage of this work is 225,000 sf of new spaces, 3 stories and a penthouse, and 180,000 sf existing space. This phase also included a great deal of infrastructure and site work including the development of an entirely new entry loop road. This project took 4+ years

because of the detailed phasing and commissioning that had to take place throughout its duration, in order to keep the hospital fully functional. (SUNY, $187M, 2009)

Fire Training Academy at Randall's Island, NY - The Fire Department of the City of New York has operated a Fire Training Academy on Randall's Island for over 25 years. This 27-acre waterfront facility sits between the DEP Wards Island Water Pollution Control Plant and NYC Park Department property. The current facility has nine buildings including both classrooms and hands-on training with simulated fires and smoke structures. (NYCDDC, $35M, 2003)

Housing, Classroom, and Dog Training Facility for Guide Dog Foundation, Project Manager - Mr. Hall has served as project manager for this new construction and renovation of spaces used for special training of guide dogs for the blind. Classroom and housing for training the blind in life skills. (Guide Dog Foundation, $7M, 2002)

United States Postal Service, On-Call Construction Management Services, Hoboken, N.J., Assistant Project Manager/Resident Engineer - Mr. Hall has been involved in all aspects of construction management and has managed several projects for this on-call construction management contract for services throughout New York City and Long Island. The assignments varied, ranging from the renovation of existing post offices to the construction of 2 completely new post offices. Multiple task orders were completed simultaneously under this contract. (USPS, $35M, 2000)

Neo-natal Intensive Care Unit, Harlem Hospital - Project Manager for complete gutting and construction of an intensive care unit for premature infants. The project included all architectural, mechanical, electrical, plumbing, and fire protection systems. An intense coordination effort was required, as the work was performed in around active patient areas. LiRo coordinated with NYSDOH, the NYC Building Department, Fire Department, and HICFA. (NYCHHC, $700K)

Nassau Community College Center & Classroom Building, Phase I - CPM Scheduling and Construction Management, General Superintendent- Construction Management for a 70,000sf College Center, a 95,000 sf Classroom building and demolition of a 50,000 sf Hangar, as well as asbestos abatement. The work included the installation of approximately 5000 lf of 18" Rickwill Piping from an existing Co-Gen plant to the new facility. Provided QA/QC inspection, cost control, and time control through a cost-loaded CPM schedule, change order estimating and negotiations, preparation of as-built drawings and testing of equipment. Issued monthly reports to describe time and cost status. (NCDPW, $35.5M, 1995)

Various Improvement Projects, Cedar Creek Water Pollution Control Plant , Superintendent of Construction - Building additions, expansions, modifications and rehabilitation, in order to upgrade the plant from 60 mgd to 75 mgd; a Consent Decree Program, which included the following: Generator Building Final Tanks Pelletization Building Influent Building Air Pollution Controls (NCDPW, $125M)

Employment History:
The LiRo Group (1989 to Present)
Associate

Drew Haritonides, P.E., LEED AP

RESIDENT ENGINEER

EDUCATION	B.E., Electrical Engineering, Maritime College, 1989
REGISTRATION / CERTIFICATIONS	ACI Concrete Field Testing Tech- Grade 1 OSHA 10 Hr: Construction Safety and Health Professional Engineer, NY Electrolysis Corrosion in Transit OSHA 10-hr Training Course Occupational Safety & Health Training OSHA 10 Hour Occupational Safety & Health Training LEED Accredited Professional, US Green Building Council
YEARS WITH THIS FIRM	7
YEARS WITH OTHER FIRMS	14

Since 1989, Mr. Haritonides has been providing construction inspection and design services on a variety of project types.

ITS Installation Along the Bronx River and Hutchinson River Parkways, Resident Engineer - This project involved the installation of an intelligent traffic system on the Bronx River Parkway between the Bruckner Expressway and the Westchester County Line at 233Rd St. and on the Hutchinson River Parkway between the Whitestone Bridge Toll Plaza and the Westchester County Line at the I-95 Exit.
Work under this project required the following:
· Directional boring at multiple locations under the six lane highway to route electrical and communications infrastructure from one side to the other as required by the contract.
· Installation of various types of electrical pull boxes (surface mount, structure mount and in ground).
· Installation of single span and cantilever sign structures with variable message signs and illuminated sign panels.
· Installation of conduits, which involved various types of trench excavation due to the fact that roadways have grass shoulders which are tree lined and portions of the work are within park land. In addition to the routine trenching operations, pneumatic excavation was required within tree drip lines. Excavation was done with compressed air to avoid damage to tree roots.
· Tree and vegetation protection and extensive landscaping work is required including vertical mulching, amending of existing topsoil and placing of new topsoil, planting a variety of major and minor deciduous trees and shrubs, reconstructing park pathways and the placement of concrete grid pavers.
· The placement of rapid hardening concrete was required at various locations on exit and entrance ramps to allow traffic by the end of the work day.
In addition, the project included daytime and nighttime work activities. Night activities require the submission and approval of a nighttime operations plan and detailed maintenance of traffic plan.
Contract work on this project involved direct or indirect involvement and coordination with the following agencies:
· New York City Department of Transportation
· New York City Police Department
· New York City Fire Department
· New York City Department of Parks and Recreation
· Amtrak Railroad
· Con Edison

(NYSDOT, $18M)
MTA-TBTA Projects AW-34, Resident Engineer - Project AW-34 resulted in the installation of security systems at Queens Midtown Tunnel (QMT), Verrazano Narrows Bridge (VN), Randall's Island (RI) and Two Broadway (2BWY).

Installed at each facility is an access control and alarm monitoring security system (ACAMS) enhancing established procedures and equipment. At the facility level, system operators and administrators perform the necessary functions from the Control Room to ensure that access to all areas, buildings, and rooms is properly controlled and alarm monitoring is accomplished.

The capability to monitor and control security cameras at the Facility was also implemented with this system.

Video may be viewed, controlled, recorded, and played back. The system also incorporates a stand-alone intercom system at each facility. The system enables remote oversight of each facility by senior personnel whereby operators may monitor or control any portion of the entire security system. This includes selectively viewing, controlling, and recording any video signal in the system. Specific items of work include installation of:

- Extensive computer systems
- Control room upgrades
- System consoles
- Physical security (gates, locks, card access)
- Magnetic locks
- Motion detectors
- Access Control System (ACS)
- Intrusion Detection System (IDS)
- Access Control and Alarm Monitoring Systems (ACAMS)
- Extensive communications system utilizing devices ranging from low speed data transfer, to Ethernet, to full motion video
- The communication medium includes fiber, copper, and wireless

(MTA-TBTA, $16M)

MTA-TBTA Projects AW-36, Resident Engineer - Video cameras and fiber optic cable were installed at the following TBTA facilities: Henry Hudson Bridge, Throgs Neck Bridge, Queens Midtown Tunnel, Verrazano-Narrows Bridge, and Marine Park Bridge. Items of work include:

- Installation of conduit, pullboxes and patch panels for fiber optic cable
- Installation of power feeds
- Removal of existing coaxial cable
- Installation and splicing of single-mode fiber optic cable
- Installation of camera poles and camera mounts
- Installation of fixed cameras and adjust for required views
- Installation of pan/tilt/zoom (PTZ) cameras and adjustment for stops
- Installation of fiber optic video transmitter/receiver pairs, connections to matrix switchers, digital video recorders, and other equipment required for video transmission, control, distribution, and recording
- Monitor end-to-end OTDR tests and other tests as specified.

All cameras installed will require power and video feeds. PTZ cameras will require the installation of a data circuit for camera control as well. MPT and coordinated lane closures will be required for the installation of many of the cameras. Coordination with facility personnel will be of great importance due to the fact that there will be modifications to the existing equipment in addition to the installation of the new equipment. (MTA-TBTA, $12M)

MTA-TBTA Projects AW-32, Resident Engineer - This project involved the installation of approximately 50 signs at the Queens Midtown Tunnel, Brooklyn Battery Tunnel, and Verrazano Bridge. Existing fixed signs were removed. The installation of the new electronic signs included new conduit, wiring, and electrical control systems in addition to civil work which included structural supports, excavation, and pavement repair. Lead paint and asbestos abatement was required prior to the demolition phase. The project also required extensive MPT due to restrictions on lane and toll booth closures. Work was performed day and night and required constant coordination with TBTA facility operations and law enforcement. Upon completion of all electronic signs, end to end tests of all equipment was performed.

Queens Midtown Tunnel - The majority of work was located atop the main roof canopy and included:

- Main Toll Plaza - This facility required the removal of two Variable Message Signs and their respective structures, the removal of three fixed signs and their respective structures, the installation of steel pedestals requiring roof penetrations, installation of twenty Rotating Prism Signs atop the canopy and the relocation of four

security cameras. This work included electrical and civil related items.

• This facility required lead paint removal that was incidental to accomplishing the following: the demolition of the existing signs, the routing of new conduits within toll booths, installation of new RPS supports to canopy, and the routing of new conduits on and through the Service Building boiler room.

Brooklyn Battery Tunnel - The majority of work was located atop the main roof canopy and included:

• The removal of two Variable Message Signs and their respective structures, removal of two cloth signs and two fixed signs and their respective structures, the installation of steel pedestals requiring roof penetrations, installation of nineteen Rotating Prism Signs atop the canopy and the relocation of three security cameras.
• The main canopy roof was completely replaced. In addition, the roof on the Sergeant's booth was completely replaced.
• This facility required the large scale phases asbestos abatement of the main canopy, satellite canopy, and Sergeant's booth roofing materials
• This facility required lead paint removal and was incidental to accomplishing the following: the demolition of the existing signs through-out; the routing of new conduits within all toll booths; the routing of new conduits along main canopy HVAC platform; installation of new RPS supports to all canopies; the demolition of plaza retaining wall railing; and the routing of new conduits on and through the Service Building electrical room.
• This work included electrical and civil related items.

All lane closures required for the removal or installation of project items required the use of maintenance and protection of traffic and were coordinated with facility personnel. (MTA-TBTA, $5M)

Resident Engineer, MTA Bridges and Tunnels -*QM-309 and QM-310,* - Owner's representative for the *Queens Service Building Upgrade* projects at the Queens Toll Plaza of the Queens Midtown Tunnel. *Approximate combined value $250K.* Work consisted of roof and parapet rehabilitation, and rehabilitation of the boiler system including new gas service, and all mechanical, electrical and structural appurtenances.

• Monitored work progress and adjusted project schedule accordingly.
• Presided over weekly progress meetings with Contractor.
• Work included rehabilitation of (2) HB Smith Mills 100hp boilers, including new burners, controls, mud drum replacement, steam drum nipple repair, asbestos abatement, new main steam valves, new motorized control valves.
• Coordinated with Manufacturer's representative to ensure proper operation of the boiler and all ancillary equipment including firing controls, safety permissive, feed water pumps, level controls, and vacuum system.
• Reviewed and approved all submittals including boiler components and controls.
• Installation of steam to hot water heat exchanger for making domestic hot water eliminating the need for electric hot water heaters during heating season - a significant savings.
• Arranged with Utility for new gas service to facility for new boilers complete with booster pump.
• Ensured Contractor's installation was in accordance with Utility specification.
• Installation of new glycol temperature control system to enable more efficient operation of the glycol heating system on the toll plaza.
• Complete removal existing and installation of a new 4000 square foot built-up roof system to mitigate leaks in the service building.
• Work included replacing existing parapet wall from roof up with new including all flashing and coping stones, and re-pointing of existing façade.
• Verified Contractor's monthly requisition and approving payment.
• Review and verification of project change orders including field conditions, latent conditions, scope changes, design errors and omissions.
• Review and verification of Contractor's claims for additional compensation, including pricing, man-hour estimates, and time extensions.

Resident Engineer, LIRR Capital Program Management - Owner's representative on various projects in Penn Station including: *Tunnel Lighting Upgradein East River Tunnels ($1.5M),* and *Reconstruction of JO Interlocking*

($3.4M). Responsibilities included monitoring all aspects of construction and ensuring installation according to specification, including:

- Monitoring work progress and adjusting project schedule accordingly with in-house scheduler.
- Coordinating Contractor's workforce with LIRR/Amtrak operations.
- Assisting LIRR Construction Manager preside over weekly progress meetings with Contractor.
- Arranging proper track outages including temporary third rail power reconfiguration to allow work to progress and minimize impact to operating railroads - Amtrak, LIRR, and NJT.
- Arranging for and verifying proper force account personnel for proper execution of work.
- Inspection of all work performed by the Contractor to ensure conformance with specification.
- Work included tunnel lighting system, track roadbed preparation and track installation, including third rail installation and third rail power reconfiguration.
- Developing the project payment breakdown with Contractor in accordance with the contract.
- Verifying Contractor's monthly requisition and approving payment.
- Review and verification of project change orders including field conditions, latent conditions, scope changes, design errors and omissions.
- Review and verification of Contractor's claims for additional compensation, including pricing, man-hour estimates, and time extensions.

Resident Engineer, New York State Armories, 1998 (Various Projects combined $10M)- NYS OGS/Division of Military and Naval Affairs: DMNA representative for all major maintenance and construction projects coordinating with the facilities the design and construction of all DMNA and OGS projects at (15) armory buildings in the five boroughs, Nassau and Suffolk counties. Responsibilities included:

- Investigating and troubleshooting building issues including mechanical, electrical, site lighting, plumbing, heating, boilers, fire alarm, fire protection, roofing, masonry, and structural systems.
- Designing, scope writing and specifying and pricing major maintenance and capital improvement work.
- Coordinating and prioritizing the needs at each building to allocate funding with the Division of Military and Naval Affairs in Albany.
- Estimating Contractor costs for budget forecasting.
- Design review of planned projects to verify intent, value engineer, and coordinate with existing and current work..
- Constructibility review of design documents to ensure intent and viability.
- Reviewing Contractor pricing.
- Purchasing Contractor services.
- Developing the project payment breakdown with Contractor in accordance with the contract.
- Verifying Contractor's monthly requisition and approving payment.
- Procuring specialty equipment and materials for in-house installation of lighting, pumps, water heaters, compressors, vehicle lifts, etc.
- Supervising and inspecting Contractor work for both DMNA and for OGS.
- Coordinating facility operation and maintenance with capital improvement work performed by NY State OGS and work performed by NY City agency tenants.
- Upgrading existing boilers to new dual fuel fired (oil and gas) systems, new feed pumps, main steam valves, motorized zone valves, hot water heaters, controls, etc.
- Installation of controllers and thermostats to support new remote monitoring software to enable tighter control of building comfort levels and significant energy savings.

Senior Engineer, Commissioning Authority - 330 Jay Street / 12 MetroTech Center (Kings County Courthouse - $35M)- Commissioning Agent and Electrical Engineer responsible to the project owner/developer on key points of project development including:

- Kings County Courthouse - A new 32-story combined use office building currently under construction in downtown Brooklyn for the supreme and family courts, with commercial space as well.
- Coordination of mechanical, electrical, and plumbing systems design with the operational issues of a multi-tenant facility.

• Verification of proper installation and operation of each system.
• Design review of planned projects to verify intent, value engineer, and coordinate with existing and current systems.
• Constructibility review of design documents to ensure intent and viability.
• Systems include, electrical distribution, lighting, lighting control, dimming system, lightning protection, surge suppression, emergency/stand-by generator and lighting, fire protection, fire alarm, telecommunications, CCTV/security/card access, cogeneration, heating, ventilation and air conditioning.
• Interfacing with building owner and building management during design and construction to verify that building systems such as security, card access and CCTV will operate as they expect. Review of building traffic patterns in conjunction with CCTV, security and card access layouts to verify meeting the intent. The courts have secured holding area floors with dedicated elevators, security systems and CCTV systems that must be coordinated with the rest of the building.
• Coordination and integration of all systems at the building management system.
• Coordination and integration of all metering systems, including metering software and user billing.
• Construction coordination.
• Coordination of utility service installations: gas electric, steam, and telephone.
• Owner representation at job site, including negotiating orders on contract.
• Ensuring installation meets specification requirements, including witnessing system tests.
• Commissioning specification and scope development.
• Developing and administering a commissioning plan for each system to document the design intent and to record for the owner's use relevant information to aid the owner in operating and maintaining each of the systems.

Resident Engineer, New York City Transit Capital Program Management (Various Projects, combined $53M): Construction activities included contracts involving Automatic Fare Collection (AFC) - Station Power Upgrades.

• The work included demolition of existing distribution systems, electric service upgrade, installation of additional electrical services, and installation and placing into service new equipment at multiple locations.
• Review and approval of temporary power plan for station work and specifically the automatic fare collection equipment and system, as well as the agent booth itself, ensuring proper systems shutdown and start-up procedures were employed.
• Resident Engineer duties included managing a team of inspectors, reviewing all contractor submittals, change orders and claims, as well as inspecting and coordinating all of the contractor's work with NYC Transit and Con Edison for multiple contractors at various sites throughout the system.
• Monitored work progress and adjusted project schedule accordingly with in-house scheduler.
• Responsibilities included managing both force account and contract budgets, including budgeting all support services, as well as reviewing contractor monthly requisitions, reviewing cost estimates prepared by staff and contractors and leading change order negotiations.
• Presided over weekly progress meetings with Contractor.
• Reported monthly to Senior Construction Manger and to CPM Directors on progress of construction, CPM schedule, contractor and force account budgets, change orders and claims using standardized report format with Expedition software.
• Review of Contractor claims for damages. Preparation with NYCT Legal of responses to Contractor claims for damages. Preparation of NYCT non-responsive and liquidated damage claims against Contractors.

Project Manager / Estimator, Kleinberg Electric, Inc.- Responsible for the overall management, equipment and material procurement, quality control and field inspection of electrical work, materials and procedures. Responsibilities included estimating and change order pricing for electrical distribution, transit signal and transit communications work, shop drawing layout, equipment approval, contract changes, payment, and final inspection and close out.

• Projects included:
o *Construction of Fulton Pier, NYCEDC*
o *Rehabilitation of Pumping Facilities - Pelham Line, NYCT ($1.2M)*

o *Roof Rehabilitation at Atlantic Avenue Station, NYCT($1.8M)*
o *Construction of Fresh Pond Bus Maintenance Facility, NYCT($32M)*
o *Construction of Signal Enclosures, NYCT($10.4M)*
• Performed complete take-offs of electrical systems including distribution, lighting systems, telephone, CCTV, fire alarm systems for procurement.
• Negotiated buy-outs of equipment and material based on job requirements and obtain volume pricing. Purchases include service vaults, switchgear, distribution equipment, and lighting, light poles, conduit, wire, manholes, lightning protection, telephone, CCTV, and heat tracing systems.
• Coordinated the electrical installation required for the work of other trades such as mechanical pumps, power to boilers, air handlers, as well as specialty equipment including vehicle lifts, tire mounting machines, drill presses, welders, space heaters, as well as floor and wall tiles, agent booths and turnstiles, etc.
• Design, pricing, approval from Owner, and implementation of temporary power plans as required for use during construction in an active subway station. Required plans include designs for temporary electrical distribution rooms (EDR's), temporary lighting (normal, emergency, and DC), and temporary egress while a particular area is being renovated.
• Prepared complete submittal packages of all material and equipment to be used on the project for approval by Owner.
• Layout for drafting all electrical installation including: AC power, lighting, DC traction power, telephone, CCTV
• Scheduled manpower for the project in accordance with project schedule.
• Monitored work progress and budget and adjusted work force accordingly.
• Prepared and submitted monthly requisitions for payment based on project progress.
• Prepared change order requests and claims for additional compensation based on site conditions, schedule delays, etc.

Project Manager, Impulse Enterprises of NY, Inc. - Project Manager for a general contracting company specializing in subway construction and rehabilitation. Managed the electrical aspects of multiple projects with similar duties as above. Direct contact with the owner on all aspects of the project.

• Performed complete take-offs of electrical systems including distribution, lighting systems, telephone, CCTV, fire alarm systems for procurement.
• Negotiated buy-outs of equipment and material based on job requirements and obtain volume pricing. Purchases included service vaults, switchgear, distribution equipment, and lighting, light poles, conduit, wire, manholes, lightning protection, telephone, CCTV, and heat tracing systems.
• Coordinated the electrical installation required for the work of other trades such as mechanical pumps, power to boilers, air handlers, as well as specialty equipment including vehicle lifts, tire mounting machines, drill presses, welders, space heaters, as well as floor and wall tiles, agent booths and turnstiles, etc.
• Design, pricing, approval from Owner, and implementation of temporary power plans as required for use during construction in an active subway station. Required plans include designs for temporary electrical distribution rooms (EDR's), temporary lighting (normal, emergency, and DC), and temporary egress while a particular area is being renovated.
• Prepared complete submittal packages of all material and equipment to be used on the project for approval by Owner.
• Layout for drafting all electrical installation including: AC power, lighting, DC traction power, telephone, CCTV
• Scheduled manpower for the project in accordance with project schedule.
• Monitored work progress and budget and adjusted work force accordingly.
• Prepared and submitted monthly requisitions for payment based on project progress.
• Prepared change order requests and claims for additional compensation based on site conditions, schedule delays, etc.
• Projects included:
o *Brooklyn Bridge Station Rehabilitation, NYCT($23M)*
o *Water Distribution System, Saint Albans Hospital, DVA/VA($550K)*
o *Rehabilitation of Mechanical Bridges, NYCDOT(1.5M)*
o *Improvements to Egress Doors, AMKC-Rikers Island, NYCDOC($700K)*
o *Rehabilitation of Six Stations on the Rockaway Line, NYCT($1.8M)*
o *Rehabilitation of Three Stations on the Dyre Avenue Line, NYCT($1.2M)*

o *Improvements to Roadway Lighting, Port Authority Bus Terminal, PANYNJ($2.3M)*
o *Expansion of Unionport Yard, Phase II, NYCT($12M)*
• Specific duties included layout and implementation of a magnetic door system in holding areas complete with control console and alarm at Rikers Island and purchasing and testing of bridge operating equipment including roadway signage, gates and alarms as well as bridge lift circuitry for NYCDOT.

Field Service Engineer, ABB Combustion Engineering - Responsible for the proper maintenance and repair of utility boilers and equipment, including inspection of processes, materials and workmanship to ensure the overall reliability of steam boilers and their associated equipment. Specialized in operation, maintenance and inspection of electrostatic precipitators. Customers included Cincinnati Gas and Electric, Kentucky Utilities, Virginia Electric Power Company, Westvaco Paper Company.

• Physically inspected economizer section, superheat section, and fire box section of coal fired utility and industrial boilers for areas of erosion and recommended to owner repairs to be made.
• Physically inspected electro-static precipitators and recommended to owner repairs to be made.
• Coordinated boiler outages on behalf of owner and monitored repairs made.
• Developed comprehensive report outlining all issues found, issues repaired and prioritizing repairs for next outage.

John L. Hendrickson, P.E.
RESIDENT ENGINEER

Mr. Hendrickson has over 46 years of experience in the design, construction, and constructability assessment of bridges in the New York metropolitan area. He worked for the NYCDOT for over 32 years rising to the position of Director of Component Rehabilitation for the Department's Bureau of Bridges. He has been involved in the design and construction of over 150 bridges having participated in capacities ranging from Field Surveyor to Chief Engineer.

EDUCATION	B.E., Civil Engineering, New York University, 1971
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training Professional Engineer, NY
YEARS WITH THIS FIRM	14
YEARS WITH OTHER FIRMS	35

Region 11 Construction Inspection Term Agreement- D015297, PIN S117.21. This project involved Construction Inspection Services under a Term Agreement for various projects located in Region 11 (New York, Queens, Bronx, Kings and Richmond Counties). Services included Inspection of highway rehabilitation/reconstruction for asphalt and concrete paving including joints & surface preparation; drainage improvements or reconstruction; roadway lighting improvements or reinstallation; replacement & installation of signs & sign structure; maintenance or installation of safety appurtenances such as guide rails, median barrier, fencing etc.; maintenance or improvement of roadside landscaping; cleaning & filling pavement cracks and occasional roadway emergency work, highway resurfacing, crack sealing, intersection improvement, signal system installation, pavement marking or other routine construction contracts. Additional services included inspection of bridge rehabilitation/ reconstruction work for steel super structures including bearing, railings, scuppers, down spouts etc.; repairs or replacement of bridge deck including joints; replacement of lighting, signs; repairs to bridge abutment walls & reconstruction of adjacent landscaping; occasional bridge emergency work, bridge rehabilitation, bridge cleaning, bridge painting, bridge drainage cleaning. (New York State Department of Transportation, $2.5M, 2009)

Maintenance Repairs/Painting of Bridges On or Spanning the Grand Central Parkway, PIN XM97.51 D015486- This project involved the repair and painting of 37 bridges on or spanning the Grand Central Parkway in Queens, NY. The bridges required a wide variety of repairs including those to steel, joints, concrete decks, drainage system and scuppers, masonry veneers, as well as paving and complete bridge painting utilizing full Class A Containment. The bridges ranged in size from a three span pedestrian overpass to a 28 span viaduct ten lane wide and included the Clearview Expressway/Grand Central Parkway interchange. Work was performed on a 24/7 basis. Multiple change orders were processed. (NYSDOT, $29M EIC: P.G. Patel, P.E.)

As-Needed Construction Inspection and Management Services (2005 - 2009), Triborough Bridge and Tunnel Authority Facilities, New York, NY, Resident Engineer. LiRo is providing on-call construction inspection services. The work includes highway and bridge construction, electrical and mechanical construction, building construction and renovation, asbestos and lead abatement, underground storage tank replacement, as well as estimating, scheduling, and shop drawing review. Work will be performed day and night at all TBTA facilities. (MTA-TBTA)

Construction of New Internal Security Dept. & GYM/Clerks Office Modular Structures at Cross Bay Bridge, Queens, Resident Engineer. This project involved the installation of two modular structures (made up of four sections), excavation and installation of concrete footings and piers, installation of utilities, (electric, water, waste water), installation of wooden decks, stairs and ramp, etc. This work was performed undo LiRo's On-Call Construction Inspection Contract. (MTA-TBTA, $30M, 2006)

Construction of New Salt Storage Domes, Brooklyn and, NY, Resident Engineer. This project involved the construction of new salt storage domes at the Cross Bay Bridge and the Marine Park Bridge. This project was performed under LiRo's On-Call Construction Inspection Contract. (MTA-TBTA, $700,000)

Installation of New Navigation Lights and Signs, Brooklyn, NY, Resident Engineer. This project involved the installation of new navigation lights at the Marine Parkway Bridge. This project was performed under LiRo's On-Call Construction Inspection Contract. (MTA-TBTA, $250,000)

Toll Plaza Rehabilitation, Brooklyn, NY, Resident Engineer. This project involved the renovation of toll lanes at the Marine Park Bridge. The lanes are being renovated with precast concrete panels. This project was performed under LiRo's On-Call Construction Inspection Contract. (MTA-TBTA, $300,000)

Long Island Expressway Reconstruction - Grand Central Pkwy to Van Dam Street, 7 Miles of Urban Highway, 27 Bridges, Resident Engineer- LiRo provided project management and design during construction and construction inspection services for the reconstruction of Route I-495 (Long Island Expressway) from Van Dam Street to the Grand Central Parkway. The project involved the rehabilitation of seven miles of heavily congested urban expressway. Work included full-depth concrete pavement, construction and rehabilitation of 27 bridges, installation and use of TSM/ITS, CPM scheduling, A+B bidding, night work, and extensive public outreach. LiRo provided a full-time Project Manager and two Assistant Project Managers, one full and one part-time, to oversee this project in addition to an inspection staff of over 20 individuals. Our full-time Assistant Project Manger was responsible for CPM Schedule monthly update review, analysis of logic changes and progress forecasting. The project included numerous tasks which are broken down into multiple stages in this very complex project. The CPM Schedule included over 3,500 activities and seven B-Clock tasks that have incentive/disincentive payments associated with them. LiRo also provided Value Engineering review and schedule impact reviews of contractor's proposed changes, most of which were time related issues. (NYSDOT, $170M, 1998-2004)

Design of Kennedy Avenue, Tompkins Place, Brown Avenue and Windsor Parkway- LiRo performed survey, civil and drainage design for approximately 1.5 miles of streets in the southern area of Baldwin. Work entailed complete line and grade topographics; a complete analysis of the existing drainage system including outfalls; design of improvements to the drainage system; pavement, sidewalk and curb design. Drainage improvements included combining existing undersized outlet lines into three new lines with tide backflow control chamber. Work involved study and development of storm water drainage master plan, environmental assessment and necessary permitting process. (Village of Hempstead DPW, $55k, 2003)

Seaford Avenue Area Phase II Improvements- LiRo performed comprehensive topographic survey, preliminary and final design and construction inspection for improvements to the Seaford Avenue, Phase II area of Massapequa, NY. This project included complete pavement reconstruction, installation of integral concrete curb and gutter, concrete driveway apron construction and replacement of damaged concrete sidewalks. (TOBDPW, $1.25M, 2004)

Searingtown Road Design and Reconstruction- This project involved the improvement of approximately 2.4 miles of residential roadway. Design work includes a complete survey of the entire site, detailed analysis of the existing drainage system, investigating of subsoil conditions, and a site condition survey of all pavements, curbs, sidewalks, and trees. Design then provided drainage improvements, a new pavement section, curb, sidewalk, driveway aprons and tree replacement, as well as an estimate of quantities, contract specifications and plans for bidding purposes. The project included a complete replacement of all curbs, driveways aprons and various sections of deteriorated or cracked sidewalk. The existing asphalt pavement and sub-base was recycled to provide a new sub-base under a new asphalt pavement section. Drainage improvements included providing new storm basins, storm manholes, storm pipe and rehabilitating existing structures where necessary. Incidental construction included restoration of lawn and utility strips and various types of driveways. (Town of Noth Hempstead Department of Public Works, $2.3M, 2004)

Reconstruction of the Long Island Expressway, Queens County, NY, Resident Engineer - The project

involved the rehabilitation of seven miles of heavily congested urban expressway. Work included full-depth concrete pavement, rehabilitation of 27 bridges, installation and use of TSM/ITS, CPM scheduling, A+B bidding, night work, and extensive public outreach. Staggering traffic volumes and a narrow construction corridor compounded the challenge of this project. This project also required extensive work at the Brooklyn-Queens Expressway interchange. The bridge reconstruction work included such activities as superstructure replacement of the 58th Street overpass with sixteen Inverset panels approximately 25 meters long, replacement of entire structures including piers and abutments, deck replacements, substructure repairs, pile driving, and extensive painting of the existing structures. As part of our work, we redesigned various temporary entrance/exit ramps to improve MPT. LiRo also provided complete design and construction documents for a multi-level retaining wall system comprised of pre-cast concrete posts and panels. Work elements included drainage structures, street lighting, a complete ITS system with cameras, raging radar devices, Highway Advisory Radio, and the installation of Variable Message Signs (VMS). MPT on this project was of paramount importance due to the extremely high traffic volumes on the Long Island Expressway. Mr. Hendrickson was directly responsible for the bridge rehabilitation work on this project and provided field adjusted designs for structural steel deck, abutment, foundation work and MPT. This work also included the strengthening of the built up girders of the four span bridge carrying the LIE over Queens Blvd, it's service road and ramp to the LIE. Work included the adding of additional cover plates, replacing rivets with HS belts, installing new cross and lateral bracing as well as bearings and gusset plate replacement. (NYSDOT, $170M)

Reconstruction of Route 9A, Segment 4, New York, NY, Resident Engineer - This project involved the removal and replacement of 1 km of an urban highway on the west side of Manhattan. The roadway was realigned both vertically and horizontally. The existing roadway was removed to a depth of over 4.5 ft. The roadway was replaced with a 50-year "European Type" unreinforced concrete pavement. The most critical aspect of this project was the coordination and interference issue revolving around the massive utility upgrades. This section of roadway was constructed in an extremely vocal community. Work was performed under an accelerated A+B bidding schedule. (NYSDOT, $45M)

Reconstruction of Smith Street, Brooklyn, NY, Resident Engineer - This project involved complete reconstruction of 2.5 miles of urban roadway. The assignment included the installation of a new concrete base and an asphalt wearing course, new 12 in. and 20 in. water mains, catch basins, Insituform sewer lining, new street lighting and traffic signals, and tree replacement. LiRo performed a survey of 146 sidewalk vaults. Masonry walls were installed within the existing vaults to seal them off from adjacent buildings. The vaults were then filled with sand. New sidewalks were subsequently installed. This work required a broad community outreach effort due to concerns of local residents. Other project elements included ADA surveying and extensive coordination with other City agencies and departments. (NYCDDC, $15M)

Bridge Design and Construction

New York City Department of Transportation - Bureau of Bridges - Director of Component Rehabilitation - Set up, established and staffed a unit of twelve engineers within the Bureau of Bridges. He was responsible for the management of capital construction and rehabilitation work on New York City Bridges. Bridge "Component Rehabilitation" is a Design/Build Concept, using the New York State Design & Construction Specifications. The unit was responsible for seeing a project from preliminary scope preparation, development of design documents to finalization of construction. Projects included the design of fender systems, deck rehabilitation and/or replacements, pier & abutment replacements, structural steel repairs or replacement, seismic retrofitting, etc.

Projects under this work included:

- Williamsburg Bridge
- Roosevelt Island Bridge
- Third Avenue Bridge over East River
- 145th Street Bridge over East River
- 13th Avenue Bridge in Brooklyn, NY
- Richman Valley Road over Staten Island Rail Transit

- Arthur Kill over Staten Island Rail Transit
- Moshulu Parkway over Bronx River
- Numerous other structures throughout City of New York

Mr. Hendrickson was responsible for the supervision, inspection, design and incorporation of numerous steel repairs on all of the above structures. On the Williamsburg Bridge, approximately $8M worth of repair needed to maintain the structure prior to reconstruction, (elimination of Red Flags), was performed. This included the replacement and/or strengthening of secondary members, rivets and gusset plate replacement and repairs to the grid floor system.

New York City Department of Transportation, Bureau of Highways, Manhattan Borough Engineer, Division of Construction - Directed a staff of engineers and inspectors for street and bridge construction. While in this capacity, Mr. Hendrickson was directly responsible for the performance of numerous steel repairs/rivet replacement and painting of many structures including:

- Elevated West Side Highway, 59th to 72nd Street over rail road yards
- Elevated West Side Highway, between 14th and 23rd Streets (Miller Highway)
- FDR Drive from 14th to 23rd Strees
- Willis Avenue Bridge

New York City Department of Transportation, Bureau of Highways, Structural Design Section Engineer -Duties included project scheduling, direction of personnel in preparing contract documents for Structural Capital projects. Permed engineering studies, reviewing and analyzing schematics and structural designs. In addition, he designed and reviewed shop drawings for various structural systems such as structural steel installations, concrete beams, concrete foundations, retaining walls, bulkheads and relieving platforms.

Highway Design

New York City Department of Transportation, Bureau of Highways, Chief Engineer, Division of Street Design - Mr. Hendrickson was responsible for program planning and establishing design and performance standards. He directed and reviewed the work of the Design, Specification Urban Design, Liaison, Drafting and Records Divisions.

Highway Construction

New York City Department of Transportation, Bureau of Highways, Deputy Assistant Commissioner, Roadway Construction - Administered and directed the engineering staff for the central construction office. Formulated guidelines for the supervision of construction projects by consultants and in-house staff. Directly negotiated with contractors to resolve major or complex scheduling conflicts and delays caused by unanticipated conditions and to establish additional compensation when warranted. Worked hand in hand with State, Federal, City, private utility and community boards and civil organization to resolve construction issues.

Allison Krebs-Fogel
RESIDENT ENGINEER

Ms. Fogel has significant experience with project management and electrical design for design and construction phases of multi-disciplined engineering projects. She is well versed in design coordination and construction coordination for multi prime projects. Representative projects include:

EDUCATION	Electrical Engineering, Worcester Polytechnic Institute
REGISTRATION / CERTIFICATIONS	OSHA 30 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	19

Rehabilitation of the FDNY R & T Building, Queens, NY, Electrical Inspector - This project consists of the renovation of a 2-story, Fire Department of the City of New York (FDNY) vehicle maintenance facility which is located in Long Island City (Queens), NY. This building serves as the primary repair and maintenance facility for the FDNY fire trucks and other vehicles; additionally, it contains the offices of the Building Maintenance Division and may eventually house the administrative back-up Command Center for the FDNY. The FDNY's objective in carrying out this work is to make the building safe and to bring it up to a state of optimal functional usability, both now and for many years into the future.
The basic scope of work encompassed by this project includes four (4) distinct items of work, as follows:

- Electrical Service: The upgrade of the electrical service to include replacement of all of the existing switchgear panels.
- Emergency generators: Installation of two (2) new emergency generators, to be located in a new emergency generator room. These generators will have the capability of providing full power to the entire building in case of a power outage.
- New Boilers: Removal and replacement of three (3) existing new boilers.
- Air-conditioning: A new central air-conditioning system will be installed to service this area.

Throughout construction, the building has remained operational 24 hours per day, seven (7) days per week. (NYC DDC, $9M, 2009)

New York City Housing Authority, Multi-Site Change Order Cost Estimating and Negotiation Services, Inspector/Constructability Review - LiRo provided change order cost estimating and negotiation services, on an as-needed basis, for work located at various NYCHA sites throughout New York City. These services were provided for work associated with the modernization and expansion of existing NYCHA facilities. Areas included architectural/structural and mechanical / electrical / plumbing / fire protection / special systems (MEP) design. (NYCHA, $100M, 2004)

Construction Management Services in Connection with Emergency Management and Coordination, Inspector - LiRo provided construction management services on an emergency response basis for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public schools in the five boroughs of New York City. Work under this contract included asbestos abatement/monitoring/testing, carpenters, cranes, electricians, general roofing, masons, plumbers, roofing and waterproofing, and scaffolds.

Bronx High School of Visual Arts (Mercy), Bronx, NY, Electrical Inspector - Gut renovation of Mercy College that was transformed into Bronx High School of Visual Arts (NYCSCA, $15M, 2004)

Previous experience includes:

High School at Roger Ludlow Site, Fairfield, CT, Electrical Design Engineer - Partial renovation of converting a middle school to a high school. Work included power, lighting, and fire alarm upgrades. ($5M, 2002-2004)

Community Synagogue of Rye, Rye, NY, Electrical Design Engineer - New addition to the synagogue. Work included power, lighting, and fire alarm upgrades. (2003-2004)
Yonkers P.S. 10, Yonkers, NY, Electrical Design Engineer - Partial renovation to the school. Work included power, lighting, and fire alarm upgrades, as well as the addition of an elevator. (2003-2004)

Wesleyan University, Middletown, CT, Electrical Design Engineer - Renovation of the Zilkha art gallery. Work included power, lighting, and fire alarm upgrades. (2003)

UBS Paine Webber, Weehawken, NJ, Electrical Design Engineer - Various projects located at three offices. Work included power, lighting, and fire alarm upgrades. (2001-2003)

Ridgewood Savings Bank, Long Island and Queens, NY, Electrical Design Engineer - Partial and total renovations to branch offices. Work included power, lighting, and fire alarm upgrades. (2001-2003)

The Fire Department of the City of New York, Project Manager - Total renovations of various fire houses located in the Bronx and Queens. (1998-2002)

Merrill Lynch, Project Manager - Upgrades of power, data, and communications in offices around the United States of America, working in conjunction with Forest Electric. (1996-1998)

New York Psychiatric Institute, New York, NY, Electrical Design Engineer - During construction of this new building, Ms. Fogel provided electrical design services for power, lighting, and fire alarm. (1990-1992)

Manhattan Psychiatric Center: Space Conditioning and Humanization, New York, NY, Electrical Design Engineer - Project involved the total rehabilitation of 1.5 million square feet, including power, lighting, and fire alarm. The estimated construction cost was $187M. (1986-1988)

Fort Drum United States Army Corps of Engineers, Watertown, NY, Electrical Design Engineer - Design of roadway lighting. ($72M, 1985-1986)
Atlantic City Convention Center/Railway Station, Electrical Design Engineer - Design of lighting throughout the facility. (1985)

Employment History:
The LiRo Group (2004 to Present)
Resident Engineer
Atkinson Koven Feinberg Engineers (1997 – 2004)
Electrical Designer
STV (1984 – 1996)
Electrical Designer

Michael Mascaro
ASSOCIATE VICE PRESIDENT

EDUCATION	B.S., Architecture, New York Institute of Technology
REGISTRATION / CERTIFICATIONS	ACI Flatwork Finisher and Technician OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	11

Mr. Mascaro has been in the construction industry since 1988. During this period Mr. Mascaro has served in a number of capacities:
As project manager and resident engineer for public works and private developments As cost estimator and scheduler for large building projects As inspector for a testing laboratory, supervising steel, concrete, masonry, and soils testing Having worked his way up from the bottom of the industry, Mr. Mascaro has an in-depth knowledge of construction elements and management processes. In particular, Mr. Mascaro has been involved with the NYCDDC and the CM/Build form of contract. Mr. Mascaro is familiar with the various elements of the CM/Build contract or prequalification, VENDEX, bidding requirements, change order processes, LBE requirements, etc. In addition, Mr. Mascaro can effectively deal with subcontractors in terms of performance and documentation. Mr. Mascaro is currently program manager of LiRo's Fire Unit Requirements contract with the NYCDDC which total contract value is $150M. For the past four years, he has managed over ten projects from design through construction. Representative projects include:

Program Management Services for Rehabilitation and New Firehouse/Emergency Medical Service Stations, Program Manager - Mr. Mascaro provided services for the design and construction of the rehabilitation and construction of new Firehouses and EMS stations. Program included 15 sites across NYC for which LiRo provided pre-construction & construction services. Included review of design documents, cost estimating, preparation of bid documents, management of construction and closeout. This was a complex, multisite, multimillion dollar program subject to Wicks Law and which required coordination of multiple prime contractors across the sites. (NYCDDC, $150M)

Randall's Island Phase I&II, Project Manager - Mr. Mascaro served as Project Manager during the Pre-construction, Construction and closeout phases of these projects. Project included the construction of a new Subway Simulator Building and building expansions for an Existing Apparatus Maintenance garage and the vital existing Mask Service Building. All work in existing buildings was completed under full occupancy and while maintaining complete FDNY operations. Mr. Mascaro also managed the completion and closeout of Buildings 11, 12, 5 and 2. (NYCDDC, $60M)

EMS #20 at Jacobi Medical Center, Bronx New York- Mr. Mascaro acted as Project manager for this project which included the structural replacement of the Apparatus floor and construction of new offices, lounge and locker facilities. This work was completed under "Emergency Status" and during full occupancy and operation by the FDNY. In addition to FDNY requirements Mr. Mascaro coordinated all work with the Jacobi Hospital Campus. This included Site Safety, Noise/Dust control, and

development of an agreed upon Staging and phasing plan. These plans were required in order to not impact the hospital campus.

Engine Company #277 Ladder #112, Brooklyn NY- As project manager Mr. Mascaro managed the pre-construction, demolition and is managing the construction phase of this project. Due to the adjacent NYC intermediate school, the project required demolition to be completed during school closing and coordination with the facility during all phases of construction. The award winning façade and structure required close coordination with the subcontractors and Consultants while completing the building envelope.

Engine Company #6 & #81 - Mr. Mascaro managed these projects from design to completion. These projects included the complete reconstruction of a 4 story firehouse in lower Manhattan and rehabilitation of a 4 story firehouse in the Bronx. Work included Select structural replacement, new electrical and mechanical systems/upgrades and the installation of all FDNY required systems (Neederman, FDNY Communications, Housewatch, etc.). Work in the Bronx was completed in a fully occupied firehouse requiring coordination and phasing to be completed with the FDNY.

Engine Company #201- Mr. Mascaro is acting as Project Manager for the project. The project requires the preparation of swing space, demolition of existing and erection of new 12,000 sf firehouse. Due to community requirements a swing space was prepared which include all FDNY operational requirements prior to the demolition of this firehouse. This site is located on a main Brooklyn thoroughfare and is adjacent to a MTA subway tunnel. The demolition, foundation and structural work will all be monitored so as to not impact the MTA and the adjoining buildings. The project will include all required FDNY systems.

Rikers Island CIFM Locker Room Building at Rikers Island, Resident Engineer - Mr. Mascaro was involved with all aspects of this 20,000 sf project from design through construction. He developed and presented construction phasing and staging schemes to the Department of Corrections for their approval. This CM/Build project required that Mr. Mascaro follow all contract guidelines as well as the New York City Procurement Policy Board rules. (NYCDDC, $5M)

System-wide Kitchen Renovation Program for Department of Corrections - Mr. Mascaro maintained project controls and project schedules. He was involved with bid packaging, bidding, and change orders. (NYCDDC, $50M)

Employment History:
The LiRo Group (1992-1996) (2003 to Present)
Project Controls/Associate Vice President
The Stegla Group (2002-2003)
Project Manager
C&L Contracting Corp. (2000-2002)
Project Manager
Tishman (1999-2000)
Project Manager
Raytheon (1998-1999)
Project Controls
JA Jones (1996-1998)
Project Controls/Asst. PM
Stallone Testing Laboratories (1990-1992)
Controlled Inspector

John Newnom
RESIDENT ENGINEER

Mr. Newnom has over 35 years experience in construction as a foreman and supervisor. He has developed good relations with his employees and is effective working alone or as a cooperative team member. Representative projects include:

EDUCATION	Associates Degree, Yankton College, 1968 United States Army, 1966
REGISTRATION / CERTIFICATIONS	OSHA 30 Hour Occupational Safety & Health Training OSHA - 10 Hours Certificate
YEARS WITH THIS FIRM	5
YEARS WITH OTHER FIRMS	34

New York City School Construction Authority - Emergency Response Management and Coordination Program, New York City, Resident Engineer- Under this contract LiRo managed and coordinated responses to emergencies, on the basis of a telephone call at any time during a twenty-four hour period and on any day Monday through Sunday. LiRo immediately mobilized trades, people or firms and materials for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public schools in the five boroughs of New York City. Some of the work was performed in occupied schools. Accordingly, LiRo used best efforts to insure that all such work was performed in a safe and secure manner with minimum disruption to students and school personnel.

LiRo's scope of work was extensive, varied widely and included the expedited renovation and construction a new $18M, 55,000 sf high school within 90 days. Our categories of work, services, trades or equipment to be provided on an emergency basis include the design, administration, management and coordination of the work; development of construction estimates, solicitation of bids in accordance with Authority requirements and the law; providing general conditions including but not limited to testing and controlled inspections; remediation of hazardous materials; construction and demolition of the work in accordance with contract documents issued by the Authority.

LiRo was also required to supplement the manpower of general contractors or takeover the general contractor's work on an Authority project. In connection with such direction, LiRo was expected to provide the Authority with an assessment, on an expedited basis, providing the status of the work in place, and the resources required to complete the work within the period specified by the contract.
Under this contract, Mr. Newnom was assigned to the following projects:

George Washington HS: Installation of temporary boilers and complete rehabilitation of two high pressure boilers and boiler room. - Cost $6M

Taft High School: A complete restructuring, consisted of science labs, class rooms and a full clinic.
Cost $10.3M

Queen of Angels: Conversion of the catholic school to public school included class rooms, play ground and a cafeteria. - Cost $2M

PS-151X/PS156X: Electrical service upgrade including the main distribution boards and installation of 533 A/C units throughout the two schools. - Cost $4.7M

Gompers High School: Installation of two temporary boilers and two fuel oil storage tanks. The project included all filing and obtain permit from DOB and FDNY. - Cost $1.9M

PS-362X: Fire stopping, carpentry work including hardware installation, HVAC trouble shoot and start up. - Cost $1.2M

PS132X: Removal of unstable glazed block partitions and collapsed slab and install new. The work included removal of all utilities and devises and reinstall after the wall installation. - Cost $2M

Manhattan Center for Math & Science: Complete gut and rehabilitation of walkway, driveway, parking area and retaining wall and fence. - Cost $2M

Casita Maria/Bronx Studio: Installation of curtain wall and windows. Fabricate and installed new store front, miscellaneous carpentry and electrical work. - Cost $1.5M

PS-151Q: Relocated and installed two (2) Transportable Classroom units. The work involved full foundation site work, filing and obtain DOB and FDNY approval. - Cost 1.5M

PS-277X: Performed leak test to discover the facade leakage and the repair masonry brick and terracotta façade. Cost $155K

PS-274K: Performed probes, removed and replaced brick façade. - Cost $188K

IS-194X: On this new building (built by others) LiRo removed all the plastic weep holes and filled with matching mortar, repointed all the horizontal joints and coping stones to repair all the leaks. Cost $292K

PS-03/PS-303: Installation of new windows, repair existing brick façade and interior work. -
Cost $3.6M

PS-15Q: Performed brick façade and coping stone repair repaired. - Cost $353K

Employment History:
The LiRo Group (2005 to Present)
Resident Engineer
McNeil Sales & Service (1998-2005)
Superintendent
Lehigh Valley Refractory (1992-1998)
Supervisor
C.J. Vander Beck & Sons (1988-1992)
Supervisor

Michael L. Piccirillo
ASSISTANT PROJECT MANAGER

Mr. Piccirillo has extensive experience in construction management and project management working for private construction corporations. He also has experience performing home inspection services throughout New York and New Jersey and in home renovations including electrical projects, plumbing, masonry, mechanical projects, and carpentry work. Representative projects include:

EDUCATION	B.S., Biology, Fairleigh Dickinson University, 1977
REGISTRATION / CERTIFICATIONS	OSHA, NJ Supervisor Specialized Training Course OSHA 10 Hour Occupational Safety & Health Training OSHA 30 Hour Occupational Safety & Health Training, NY
YEARS WITH THIS FIRM	8
YEARS WITH OTHER FIRMS	18

Battery Park City Authority, On-Call Owner's Representative Construction Management Services, New York, NY, Resident Engineer - LiRo provided construction management services on an On-Call/ Emergency Basis. The contract primarily involved any work that was required construction management services throughout all of Battery Park City. The design phase responsibilities included constructability reviews, cost estimating, CPM scheduling, code compliance review, site layout and construction phasing recommendations. The construction phase responsibilities included all essential CM services for the specific task or project at hand. Emergency response was essential to the tasks that may arise. (BPCA, $3M, 2004)

Decontamination and Deconstruction of Fiterman Hall, Borough of Manhattan Community College, New York, NY, Superintendent - LiRo is currently serving as the Construction Manager sub consultant to Pei Cobb Freed & Partners for the decontamination and demolition phases in anticipation of the rebuilding of Fiterman Hall, Borough of Manhattan Community College (BMCC). Services are provided on an ongoing work session review basis fully coordinated with Pei Cobb Freed personnel and with DASNY and CUNY project managers. This teamwork approach is structured to facilitate coordination amongst the multiple primary stakeholders, to minimize disputes, eliminate potential cost and schedule overruns, and to mitigate change orders, that may otherwise arise during construction.

The project involves extensive New York City inter-agency coordination, particularly with LMCCC, LMDC, USEPA, NYCDEP, NYCDOT and the MTA. It also requires continual briefings and dissemination of process and update information to the local Community Board and the public.
LiRo is managing design investigations, providing site supervision and managing field contractor operations prior to and during the decontamination and deconstruction work. This includes interior and exterior environmental cleaning and removal of all building contents and components. All work is being conducted under special monitoring requirements applicable to the USEPA WTC Recovery Zone, and will occur within the jurisdiction of the USEPA WTC Recovery Program.
Additionally being provided are preconstruction services, scheduling, contractor prequalification and bid packaging. (DASNY, $160M, 2009)

Battery Park City, Site 14/14B Park Reconstruction, Construction Management, New York, NY, Resident Engineer - LiRo provided construction management services for the construction of Site 14/14B, adjacent to the Museum of Jewish Heritage. The project primarily involved landscaping the property around the Museum of Jewish Heritage and its new addition. It involved new lighting systems, new irrigation systems, installation of paving material around the entire site, and landscaping,

implementing BPC green guidelines. The property encompassed approximately 80,000 sf. LiRo maintained careful coordination of this project with the adjacent concurrent construction of the Museum addition. (BPCA, $9M, 2004)

Battery Park City, Site 23/24 Baseball Fields, Construction Management, New York, NY, Resident Engineer - LiRo provided construction management services for the renovation/construction of new ball fields at Battery Park City's Site 23/24. As CM, our emphasis was on the coordination of all contractors, developers, BPCA/BPCPC, quality control, budget control, construction direction and supervision, scheduling and the creation of verifiable as-builts for all work. LiRo also integrated the expertise of landscape architects and turf specialists in each phase of the project, implemented BPC green guidelines. (BPCA, $6M, 2004)

Emergency Medical Stations (EMS), Providing CM/Build construction management services for the new emergency medical stations throughout New York City, - Responsibilities included investigation of existing facilities, design reviews, estimating, preparation of construction documents, preparation of bid packages, construction observations and coordination of all work necessary and required for the renovation of existing sites and construction of new EMS sites. (NYC DDC$27.8 M)
Previous Experience:

NYC Board of Education Public Schools, Project Manager/Asst. Project Manager - Overall site supervision of four NYC Board of Education Public Schools. Each location averaged approximately 1.5 million dollars. Contracts included re-roofing, window installations and repairs, HVAC system upgrade and replacements, plumbing, electrical, general construction (all types), special waterproofing applications, and a variety of concrete and masonry restoration projects. Coordination of field activities and total project management, including owner liaison and negotiations. Prepared closeout documentation for PMS entire schools program of twelve schools. Additionally responsible for daily record keeping, contract changes, estimating, design review, requisitioning and quality control inspections, weekly and monthly project status reports. (1998-2001)

Senior Project Manager/Construction Inspector - Managed large, diverse municipal and commercial construction projects; Executed contract design and schedule site activities; Approved and processed contractor payments; Coordinated with construction and design subcontractors and government and client agencies; Prepared sub-contractor agreements. (1994-1998)

Employment History:
The LiRo Group (2002 to Present)
Assistant Project Manager
NYC Board of Education Public Schools (1998-2001)
Project Manager/Asst. Project Manager

Bijan Radafshar
ASSOCIATE VICE PRESIDENT

EDUCATION	B.S., Civil Engineering, New Jersey Institute of Technology, 1980
REGISTRATION / CERTIFICATIONS	OSHA - Construction Safety & Health Certification, NY OSHA 30 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	18
YEARS WITH OTHER FIRMS	12

Mr. Radafshar has over 30 years experience in progressive construction management, having worked as a field engineer, scheduling engineer, estimator and project manager. Among the clients that he has worked with are: Dormitory Authority of the State of New York, NYS Facilities Development Corp., NYS Office of Mental Health, NYC Department of Design and Construction, NYC Department of Sanitation, NYC School Construction Authority, Merrill Lynch and Nassau County D.P.W.

Mr. Radafshar's experience includes all aspects of construction management for both public and private agencies. Mr. Radafshar's experience includes contractor coordination, scheduling, estimating, contract development, change order negotiation, securing permits, obtaining certificates of occupancy, etc. Mr. Radafshar has been successful in motivating contractors in order to bring projects to timely completion in accordance with the construction documents and owner requirements. The project types where Mr. Radafshar has been responsible for contractor activity include court-mandated renovations at high security occupied correctional facilities throughout New York City, construction of the new Cohalan Court Complex and Merrill Lynch World Headquarters at Battery Park City. Mr. Radafshar is experienced with coordinating the activities of contractors on a Wick's Law project where the Project Manager must sometimes act as a referee and resolve conflicts and disputes. Mr. Radafshar has extensive knowledge of construction cost estimating as well as an ability to accurately estimate time and manpower requirements. This has allowed Mr. Radafshar to anticipate project costs, negotiate change orders and direct or convince contractors to increase their manpower levels in order to maintain schedule. Representative projects include:

New York City School Construction Authority - Emergency Response Management and Coordination Program, New York City - Sr. General Superintendent - Under this contract LiRo managed and coordinated responses to emergencies, on the basis of a telephone call at any time during a twenty-four hour period and on any day Monday through Sunday. LiRo immediately mobilized trades, firms and materials for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public school in the five boroughs of New York City. LiRo's scope of work was extensive, varied widely and included the expedited renovation and restructuring of 7 schools with the approximate value for each project was between $6M to $28M. Our categories of work, services, trades or equipment to be provided on an emergency basis include the design, administration, management and coordination of the work; development of construction estimates, solicitation of bids in accordance with Authority requirements and the law; providing general conditions including but not limited to

testing and controlled inspections; remediation of hazardous materials; construction and demolition of the work in accordance with contract documents issues by the Authority. (NYCSCA, $108.7M, 2008)

George R. Vierno Center, 448 Bed Jail Facility - As Project Manager coordinated removal of contaminated soil and installation of piling & foundation and methane system for a $140M high security jail on Rikers Island. Due to shortfall of funding this project was redesigned to dormitory and total beds were increased to 823 beds. (NYCDDC, $20M, 2004)

System Wide Kitchen Renovation Program for N.Y.C. Department of Corrections - This project involved the complete gut/rehabilitation of 5 existing kitchens and construction of a new kitchen with all related services at six correctional facilities in New York City which served more than 6,000 inmates and 1,000 staff members' three meals per day. The facilities were occupied throughout the process therefore phasing and maintenance of security were major issues. Access and egress at each facility required advance planning and appropriate notice. In addition, the project was under a court-mandated schedule. Long lead kitchen equipment and security equipment were ordered early and tracked aggressively. (NYCDDC, $60M, 2004)

Electrical Service Upgrade at Queens House of Detention, New York City, Project Manager - The project consisted of installation of a new electrical service building, coordination with Con Edison in order to bring new feeders and terminate at the property line manhole. In addition, installed a new emergency generator for a 100% backup contingency. The work was performed while the facility was occupied. LiRo was responsible to coordinate and minimize interruptions to both the jail and the adjacent courthouse. (NYCDDC, $5M, 2002)

Powerhouse Masonry Facade Repair & Roof Replacement, Rikers Island New York City, Project Manager - the project consisted of repairing of the collapsed powerhouse wall, re-pointing of the remaining facade and replacing 12,000 sf of roofing. (NYCDDC, $1M, 2002)

Elevator Upgrade & Fire Life Safety Signoff by Fire Department, Bronx House of Detention New York City, Project Manager - the project consisted of full gut/rehabilitation of 4 existing elevators and installation of a new Fire Alarm Panel and associated devices and incorporating all existing panels to report to one panel for NYCFD final inspection & sign-off. (NYCDDC, $1M, 2001)

Columbus Avenue Rehabilitation from Lincoln Center to 110th Street, New York City, Scheduling Coordinator - As scheduling coordinator for the rehabilitation of this high profile and high traffic volume, prepared and maintained CPM schedule in order to maintain traffic and minimize interruption to the daily activities. (NYCDOT, $85M, 1996)

Employment History:

The LiRo Group (1992 to Present)
Associate Vice President
O'brien Kreitzberg & Associates (1987-1992)
Project Manager
Olympia & York (1983-1987)
Project Manager
DJA & Associates (1982-1983)
Resident Engineer

Roberto Salimeni
CONSTRUCTION INSPECTOR

Mr. Salimeni has over 20 years of construction experience, and has an in-depth knowledge of construction elements and management processes. Mr. Salimeni has a variety of facility construction supervision experience, many projects requiring continuous operations during construction. Representative projects include:

EDUCATION	Liberal Arts, College of Staten Island Associate of Architectural Engineering, Architecture, Institute of Design & Construction
REGISTRATION / CERTIFICATIONS	OSHA 10-hr Training Course
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	9

Fort Totten FDNY Facilities, Superintendent - This project included the construction of an EMS training course, Campus Security Upgrades and the rehabilitation of five existing "Landmark Status" buildings. The EMS training course was constructed on a retired Military housing complex adjacent to a NYPD facility. This course required the demolition of three existing structures which included extensive asbestos removal and DEC coordination for the removal, of several fuel oil systems. The installation of new site utilities were phased and coordinated, in order to not impact the operations of the NYPD. This 40,000 sf site also included the installation of "stadium" lighting to allow daylight conditions at all times. Totten Campus security was upgraded with a new central station, and new systems at 15 existing buildings. All systems were tied into the FDNY fiber optic network. Building rehabilitation included field investigations and scope development to assist the consultant during "Landmark" design development and approval. Construction included restoration of slate roofs, brick restoration, replacement of "Landmark" windows and Architectural woodwork. (NYCDDC, 2009)

Toilet Rehab Bid Package 1 & 2, New York, - Toilet renovations in ten (10) firehouses throughout the five boroughs. Provided construction services for bathroom gut rehabs throughout Brooklyn, Queens, Staten Island, and NYC. Work also included:

- adjacent building finishes while working in occupied firehouses;
- general construction, electrical, HVAC, and plumbing;
- phases, maintaining at least two bathrooms in operation at all times;
- supervision, coordination, change order processing, negotiation, & closeout.

(NYC DDC, $3M, 2009)

Apparatus Floor Replacement FL04 - Superintendent - LiRo has managed the "Fire Program" for the NYC Department of Design and Construction. This work included the rehabilitation of Firehouses throughout the five boroughs. Mr. Salimeni provided construction services for the rehabilitation of four firehouses located throughout Brooklyn and Staten Island. This $3 million project included major structural renovations at each site followed by building finishes. Construction phase work included construction inspection and coordination within the occupied firehouses along with contract change review/negotiations and project closeout. (NYCDDC, 2007)

Engine Company #6, Asst. Superintendent - The complete reconstruction of a lower Manhattan Firehouse. This project consisted of a complete "gut rehab" including new mechanical and electrical systems, FDNY communications and selected structural replacement. Mr. Salimeni's responsibilities included field inspection of all "Wicks Law" contracts and preparation of daily reports and inspection of

materials. Mr. Salimeni was also responsible for change order review, negotiation and preparation. (2006)

Springfield Gardens EMS & Kings County Hospital EMS, NY, Asst. Superintendent - Construction supervision, inspections and change orders. (2005)

Kings County Hospital Center - Women's Option Unit, Superintendent - LiRo managed the construction of this new state-of-the-art clinical space. The project included the renovation of 9,000 sf of existing space on the fourth floor of the "E" building. The $1.7 million project opened during the summer of 2004.

Kings County Hospital Center - Dialysis Unit, Superintendent - LiRo managed the construction of a new $6 million dialysis unit. The unit was built on an existing floor in the "C" building. A total renovation, including mechanical and electrical, was required, and the construction was adjacent to occupied areas. LiRo worked closely with the KCHC construction management group, facilities and nursing staffs to ensure no disruption to their operations. (2003)

Brooklyn House of Detention for Men, Second Means of Egress; Fire, Life and Safety Improvements, Inspector - Mr. Salimeni was the general construction inspector on the construction of two new 11 story exterior stair towers and renovations throughout the building related to access, egress, fire alarms, etc. He supervised various construction trades and processed change orders. (NYCDDC, $17M)

New York Methodist Hospital, Resident Engineer - Mr. Salimeni performed both pre-construction and construction services for four projects. Preconstruction services included constructability review, estimating, contractor prequalification, bid document preparation and bid solicitation. Construction phase services included contract execution, permitting, daily construction supervision and inspection, maintenance of all logs (shop drawings, RFIs, change orders), scheduling, monthly reports, leading progress meetings, change order control, contractor requisition review, and project close-out.
The projects included:

- Primary Care Facility, Brooklyn ($4M)
- Operating Room, Manhattan ($1.75M)
- Resident Housing, Brooklyn ($4M)
- Ambulatory Receiving, Manhattan ($1.75M)
- Dyker Heights Family Medical Center, Brooklyn ($4M)
- South Brooklyn Family Clinic, Brooklyn ($6M)

Employment History:
The LiRo Group (1998 to Present)
Inspector
Gluckman & Schire-Chianetta Architects (1996-1998)
Draftsman
Nottingham Construction (1990-1996)
Self employed, home improvement interior work.

Edward A. Sartoris
PROJECT MANAGER

Mr. Sartoris is a construction manager with an extensive background in rehabilitation projects and restoration. He has successfully worked on numerous projects for NYCDDC, DASNY, NYCT, NYSOGS, NYSCA and several other city and state agencies. He is adept in working in occupied facilities.
Representative projects include:

EDUCATION	B.S., Structural Design and Construction Engineering Technology, New York Institute of Technology, 1991
REGISTRATION / CERTIFICATIONS	ACI Certification for Slump Testing Air Compressor/Spray Equipment Asbestos Handler Asbestos Supervisor Bridge Painting Inspection Certificate from S.G. Certified by Lehighton Associates Facility Fire Marshall Lead Awareness Certified Lead Awareness Instructor NYCTA ED&TPD Certificates OSHA 30 Hour Occupational Safety & Health Training OSHA 316 Course OSHA 40 Penney & Associates Propane Fuels/High Pressure Gases Site Safety Lic. #7 Store and Use Compressed Gas F19/21 Torch Use/Fire Guard Track Safety Instructor Yard Hydrant/Sprinkler
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	15

NYCSCA Mentor Program, New York, NY, Project Manager - LiRo, in Joint Venture, is serving as the School Construction Authority's Mentor Program Construction Manager, ensuring that construction projects awarded through the Mentor Program are completed safely, qualitatively, timely and within budget in accordance with the SCA's requirements. Services under this assignment include a wide range of projects and all facets of construction, firm management, and emergent contractor development. LiRo's work involves managing key components of the Mentor Program, including construction management, construction and firm capacity building services. Specific services include construction supervision, field inspection, scheduling, change order management, closeout, and also assistance with loan acquisition and payment processing. Mr. Sartoris is associate project manager of this project. LiRo is currently managing over 50 concurrent projects totaling over $15M. Due to the nature of the Mentor Program and the emergent contractors, projects are limited to $750,000K each.

Westchester County Courthouse Phase 3 Tower, Project Manager - The LiRo Group was retained by Westchester County to provide both design and construction management services for this $23 million interior renovation project. The program consisted of a combination of partial and complete renovations to 18 floors of the 20 story courthouse tower, including mechanical, electrical, telecommunications, fire alarm and security upgrades, ADA compliance throughout, new courtroom layouts and finishes, and all adjunct facilities to service New York State's civil courts and the County's Department of Probation. In order to meet the County's construction schedule, all work was designed around an intricate staging program that LiRo devised to maintain the County's requirements that the building remain fully operational throughout construction. Construction documents were completed in nine months from the date of design award and the project underwent construction on time and under budget. Construction was completed during the summer of 2007. (Westchester County DPW, $23M)

Construction Management Services in Connection with Emergency Management and Coordination, Assistant Project Manager - Under multiple contracts LiRo's extensive scope of work varied widely, and includes the highly expedited renovation and construction and major restructuring projects for five new high school ranging from approximately $15 to $30 million. These projects, including extensive gut renovation of school facilities, were completed within less than 90 days, as

compared to the typical 1 year or longer durations for comparable work. Work is accomplished using round-the clock shifts, 7 days per-week with minimal disruption to students and faculty engaged in school activities and to the surrounding neighborhoods. To date LiRo has completed in excess of $125 million under two successive contracts with the NYCSCA. Our categories of work, services, trades or equipment to be provided on an emergency basis included: Design, administration, management and coordination of the work Development of construction estimates, solicitation of bids in accordance with authority requirements and the law Provide general conditions including but not limited to testing and controlled inspections Remediation of hazardous materials Construction and demolition of the work in accordance with contract documents issues by the NYCSCA. (NYCSCA, $178M)

Home Crest Health Clinic and Crown Heights Health Clinic, and Washington Heights Health Clinic, Project Manager - Installation of Elevators ($1.2M each) at Crown Heights and Home Crest. Façade repair of multi-storied health clinic. Repointing, spandrel beams repaired and waterproofing of parapet walls throughout.

Bellevue Hospital, Chief Medical Examiner's Office, Project Manager - Renovation ($6M)
Bellevue Annex (Second Avenue Clinic), Project Manager - Demolition, Asbestos Abatement, Re-insulation of Ductwork in Basement, First and Second Floors, Modernization of All Sprinkler Lines; New Loading Bay Ramp (500 Yds Concrete) ($1.9M)

Reconstruction of $32M capital project at Yankee Stadium station, and $27M project at 7 stations on the Broadway line in Brooklyn, Project Superintendent - Supervised, planned, and coordinated all tasks. Developed safety plans and theft deterrent practices which resulted in major cost saving allowance in theft ridden area. Coordinated with NYCT to allow smooth transition and round the clock work force to accomplish completion by opening day. Acted as a safety superintendent on Broadway line and coordinated all night work - as well as all logistics associated with NYCT for work trains, flagging, and schedules. Responsible for all scheduling, implementation, and record keeping for employee training and classes directly related to industry standards.

Coney Island Hospital, Assistant Project Manager (Design Phase) - Modernization, Electrical Upgrade, New Curtain Walls ($15M)

Employment History:
The LiRo Group (2004 to Present)
Project Manager
New York City Transit Authority (1985-2004)
General Superintendent

Arthur D. Shaw, Jr., P.E., L.S.

RESIDENT ENGINEER/SENIOR INSPECTOR

Mr. Shaw has many years of expertise in the engineering industry. His vast experience includes private consulting work for civil engineering firms, land surveying, and CPM scheduling. He is experienced in the design and management of heavy construction projects on highways, bridges, and sewage treatment plants and commercial buildings.

He has acquired a rare combination of claims expertise having worked directly for contractors in the private sector as well as having been employed by public agencies.

Mr. Shaw can oversee a project as an owner's representative or as a construction manager in charge of a full field staff since his personal experience includes:

- Contractor Coordination
- Cost Estimating

EDUCATION	B.C.E., Civil Engineering, Polytechnic Institute of New York, 1951
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training OSHA 10 Hour Training Course ACI Grade I Land Surveyor, NY Professional Engineer, NY
YEARS WITH THIS FIRM	14
YEARS WITH OTHER FIRMS	40

- Change Order Analysis/Negotiation
- Construction Management
- Quality Control Inspection

Mr. Shaw is mentioned in the Who's Who in Finance and Industry. He is a former Instructor at the Polytechnic Institute of Brooklyn.

Highlights of his experience with LiRo include the following projects:

Concrete Quality Assurance Services for Capital Projects, New York City Department of Sanitation - LiRo was part of the BK JV team selected as it's Quality Assurance Consultants to undertake concrete and asphalt quality control testing and quality assurance services for all of DEP's construction projects. Mr. Shaw served as area engineer for various NYCDEP water supply and sewage projects throughout New York City. (2000-2006)

Underground Tank Removal, New York City Department of Sanitation - Removal of old storage tanks and installation of new tanks at New York City Department of Sanitation Garages. New tanks were supported on reinforced concrete foundations and closed end concrete filled steel piles.

Murray Hill Station Renovations, United States Postal Service - Recently, Mr. Shaw served as Resident Engineer for a multi-site on-call contract with the United States Postal Service. Mr. Shaw managed five projects totaling $5 million. Renovations within this Postal Facility involved renovation of mail sorting floors, installation of a new five story interior stair, emergency generator, air conditioning system and facade restoration. The work at this facility was phased in such a way that operations were not interrupted. Located at the Manhattan entrance to the Midtown Tunnel required a concentrated planning efforts for deliveries, facade work and roof top equipment rigging. ($5M)

Specific Responsibilities:

- Contractor Coordination
- Schedule Analysis
- Cost Analysis

- Chair Meetings/Prepare Minutes
- Liaison with Postal Officials
- Inspection of electrical, mechanical and concrete work as it was installed

Jones Beach Theater Modifications, Long Island, NY, Resident Engineer - Mr. Shaw was the Resident Engineer for a 4000-seat addition and related modifications to the Jones Beach Theater. The Theater is one of Long Island's most popular summer attractions. Since time was of the essence to ensure project completion by the spring of 1998, he also monitored the contractor's compliance with the approved schedule. In addition, Mr. Shaw assisted and advised the New York State Office of Parks, Recreation, and Historic Preservation regarding contractor payments, change orders, certification of construction completion, and punch list close-out. (NYSOPRH P, 1998)

Martin Luther King Federal Court House, Newark, NJ, As-Built CPM Analyst for Claims Purposes - Claim support services for the contractor and a bonding company in connection with the claim for additional costs at the Court House. (1997-1998)

Nassau Community College, Uniondale, NY, Claims Analyst - Claims analysis and litigation support services at the State Supreme Court, State Appellate Court, and Federal Court levels. The general contractor as well as their bonding company were defaulted. (NCDPW, 1996-1998)

Mr. Shaw previously worked for general contractors on heavy construction projects as their field engineer:

Lizza & Sons - Route 17, Newburgh, New York and many NYSDOT highway projects in Nassau and Suffolk Counties

Brookfield Construction Co. - Approaches to George Washington Bridge's new lower level.

Tully & Dinapoli, Inc. - Sections of the Long Island Expressway, foundations and track work for gantry cranes at the Brooklyn Navy Yard. Responsibilities included: construction, layout, form work design, supervision of earth work operations, concrete paving and retaining wall work. Mr. Shaw worked with the General Contractor, Turner Construction, to Fast Track complete this project. The major elements of construction were the precast concrete seating sections and structural steel work supported on reinforced concrete footings and piles.

Prior to joining LiRo, Mr. Shaw was a consultant to the law firm of Berman, Paley, Goldstein and Kannry on numerous construction lawsuits such as:

Renovation of D.O.S. Pier at the Hudson River and 59th Street, New York, NY - Corbetta Construction Co., Inc. claim against the City of New York. ($6M Claim)

Construction of Hamilton Avenue Arterial, White Plains, NY - Briar Construction claim against the New York State Department of Transportation. ($6M Claim)

Hoboken Sewage Treatment Plant, NJ - General contractor's claim against CNA and Lawler, Matusky, and Skelly Engineers in connection to their design and construction supervision of this project. (Approximately $20M Claim)

<u>Additional claims that Mr. Shaw participated in include:</u>

- Route 17, Newburgh, NY, Lizza & Sons, Inc. vs NYSDOT
- Long Island Expressway (I-495), NY, Contracts 66-1 and 67-2, Lizza & Sons, Inc. vs NYSDOT
- Deer Park Avenue Reconstruction, Suffolk County, NY, Lizza & Sons, Inc. vs NYSDOT
- Riverside Drive Reconstruction, New York, NY, Willets Point Contracting vs NYCDOT
- 8th Avenue Reconstruction, New York, NY, Willets Point Contracting vs NYCDOT

- Sewage Plant, Milford, CT, Association of Constructors vs City of Milford
- Power Plant, Ravenswood, NY, Lansing Construction Co. vs Con Edison
- Public School, Bronx, NY, Worth Construction vs Gale Daniels
- Office Building at 60 Wall Street, New York, NY, H. Sand & Co. vs Morgan Guarantee
- Hotel Casino, Atlantic City, NJ, Playboy vs. Morse Diesel/Frank McBride

Prem Singh, N-IV

RESIDENT ENGINEER, ASSISTANT/ CHIEF INSPECTOR

Mr. Singh has over 30 years of experience in the field of construction inspection field both in the United States and in the West Indies. His experience is primarily in the areas of highway and sewer reconstruction projects, but also includes some structural bridge and building work. Representative projects include:

EDUCATION	H.Y.D., Civil Engineering, University of Guyana, 1975 Road Construction Course-TAMS Engineers of USA, 1980
REGISTRATION / CERTIFICATIONS	Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY CPM Scheduling Certification, NY NICET IV - Highway Construction, NY NYCDDC Concrete Field Testing & Training Certification, NY OSHA 10 Hour Occupational Safety & Health Training SSPC C-1 Certified, NY Troubleshooting Exterior Masonry Walls Certification, NY
YEARS WITH THIS FIRM	23
YEARS WITH OTHER FIRMS	13

Engineered Resurfacing South of Canal Street, Manhattan, Chief Inspector - This three-year project involved the resurfacing and reconstruction of 44 streets in lower Manhattan. Work on individual streets ranged from full depth reconstruction to milling and resurfacing. Work was performed on some of the busiest streets in Manhattan including Broadway, Greenwich Street, John Street and Beaver Street. Work was performed both day and night. This project also included an intensive community liaison effort to help keep residents and businesses apprised of the work status. The construction cost to the NYCDDC for this project was relatively modest at approximately $4 million. The utility relocation costs, however, exceeded $40 million, greatly increasing the scope and complexity of the project. (NYCDDC, $44M)

World Trade Center - Lower Manhattan Roadway Milling and Paving Project, Assistant Resident Engineer - This was one of LiRo's most unique and difficult projects. LiRo had been working at Ground Zero since September 17, 2001. On April 16, 2002, we were given an assignment by the New York City Department of Design and Construction to provide construction inspection services for the milling and repaving of 61 lane miles of streets in the Trade Center area. This project was performed under the auspices of FEMA and the FHWA. The project commenced on Monday, April 22, 2002 and was completed by June 7, 2002. Work was performed at night. The work consisted of milling 1-1/2" of asphalt roadway, adjustment of street hardware, miscellaneous roadway repairs, and placement of a 1-1/2" asphalt concrete roadway surface. The operation was staggering. Approximately 150 men, multiple milling, paving and chipping crews, and over 50 trucks were utilized each night. Asphalt production averaged nearly 1,200 tons per night on tight lower Manhattan streets. LiRo had up to 16 inspectors on this project. Extensive coordination with local community boards was essential. (NYCDDC, 2002, $14M)

Reconstruction of Jamaica Avenue, Chief Inspector - This high profile project was located in a combined residential/commercial area. The work included 10,000 lf of water main; 1,500 lf of sanitary sewer; 1,100 lf of storm sewer up to 24" in diameter; 1,400 lf of storm sewer 30" - 36" in diameter. Roadway widening involved 10,000 lf of curb; 130,000 sf of sidewalk; 15 reinforced concrete bus pads; 3" asphalt on a 6-inch concrete base; an urban park; catch basins and connections. There was extensive

scheduling and community outreach, especially with regard to operations at Jamaica Hospital. Maintenance and protection of traffic was a major consideration for the contractor and for the inspection staff. (NYCDDC, $9M, 2000)

Greenwich Street Reconstruction - Liberty to Rector Streets, Manhattan, NY, Chief Inspector - The scope of the project included installing new sewer lines, new catch basins, subway vents, water services, manholes as well as sidewalks, curbs and roadways on the east and west side of this six block stretch. This work was critical due to the age of the infrastructure as well as the damage it withstood during the collapse of the World Trade Center. The subway vent work conducted was vital due to the re-opening of the Rector Street subway station.

This project used 3,400 square yards of asphalt, 900 cubic yards of concrete base, 1,600 lf of new steel curbs, 800 lf of new and rehabilitated sewers, 900 lf of new water mains as well as new traffic signals and decorative street lighting. (NYSDDC, $2.1M)

Rehabilitation at TBTA Facilities, Resident Engineer - These projects included pothole repair, milling and paving, pavement marking and striping, and concrete work (slab and grade) at toll plazas and approaches. (TBTA, $14M, 2000)

Paving at Various Facilities (GFM - 398), Resident Engineer - This multi-year project involved asphalt and concrete paving at all TBTA facilities. All work was performed by a single contractor and a requirements type contract. Specific work activities included asphalt milling and paving full and partial depth calcium chloride concrete repairs, application of waterproofing membranes emergency pothole repair, and pavement marking. Work was done primarily on nights and weekends. This project required extensive MPT and coordination with various facility engineers and managers. (TBTA, $10M, Project Manager: I. Shapiro, 2002)

Rust Street Reconstruction, Chief Inspector- This project involved resident engineering inspection for the reconstruction of Rust Street in Queens from Flushing Avenue to Maspeth Avenue, and on Grand Avenue from 57th Street to 58 Place. The half-mile stretch of urban roadway was widened and repaved with a 3-inch asphaltic concrete wearing course on an 8-inch concrete base and 6inch sub base course. New steel faced concrete curbs and concrete sidewalk, new traffic signals, and street lighting were also provided.

- Rust Street is adjacent to LIRR tracks, which run atop an embankment for the entire project length. The construction of a retaining wall for the embankment was a key component of the project.
- Coordination with the numerous City agencies (DOT, DEP, Transit Authority, Police, Fire, and Sanitation), utilities (Con Ed, NY Telephone, Empire City Subway), the Community Board, and local business was required.
- All of the above work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day service.

Employment History:
The LiRo Group (1987 to Present)
Resident Engineer

Ralph Tilleli
SENIOR ASSOCIATE

EDUCATION	B.S., Civil Engineering, University of Delaware, 1959
REGISTRATION / CERTIFICATIONS	Civil Engineering Society, NY Licensed Site Safety Manager, NY Licensed Site Safety Manager Notary Public, NY
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	42

Mr. Tilleli has been working in the construction industry for more than forty years. He has extensive experience in demolition work as well as the erection of high-rise buildings in New York City. He has had vast exposure to the unique construction conditions which exist in New York City including: unusual subsurface conditions, highly congested construction jobsites, and maintaining harmonious working relationships with the numerous trade labor unions. One of Mr. Tilleli's greatest attributes is his ability to communicate effectively with all parties involved in a construction project. He does this by developing strong personal relationships while maintaining leadership and firm project control.

A key component of Mr. Tilleli's demolition experience is his familiarity with scaffolding. He has directly supervised the erection, maintenance, relocation and dismantling of scaffolding ranging up to heights of seven building stories.

As a Licensed Safety Engineer, Mr. Tilleli is well-versed on required safety precautions, particularly when performing demolition work. Representative projects include:

DASNY School of Architecture, Project Manager - Demolition and reconstruction of a 136,000 sf building to become the new School of Architecture building. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including façade, interior and mechanical, electrical and plumbing systems. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus. This required the renovation of various locations at a cost of approximately $8M and was accomplished in one year. (DASNY, $48M)

CUNY/DASNY - City College of New York, Shepard Hall, Great Hall, Senior Project Manager - This complex restoration project included the removal of existing floor fill and replacement with reinforced concrete; installation of new limestone flooring and steps leading to stage area (approx. 40,000 sf); the removal of existing ceiling panels approximately 60 ft. high and replacement with new fabric panels; and asbestos abatement. Phasing/coordination were a key factor, as was the maintenance of school operations throughout construction. ($1.75M, 1997)

CUNY/DASNY - The College of Staten Island, NY - Responsible for the management of the construction of a new, $360 million campus which consisted of renovation of existing buildings and the construction of six new buildings on an area of 204 acres and 1,235,937 GSF. The campus was the largest single phase project in the history of the City University of New York (CUNY) and the Dormitory Authority State of New York (DASNY).

CUNY/DASNY - New York City Technical College, Brooklyn, NY - Construction manager responsible for management of the construction and renovation of seven buildings within an eight-block area--a $45.5 million project budget. Project included a new 10-story atrium sandwiched between three existing buildings. Approximately 11,000 students in attendance were never interrupted as work progressed in a timely manner.

CUNY/DASNY - The College of Insurance, New York, NY - Construction manager responsible for the construction of a 12-story reinforced concrete building which included four upper floors as student dormitory rooms and a seven-story atrium, all enclosed by exterior precast walls at perimeter of building. The unique feature of this construction was the stepped balconies from the second to seventh floors. This was a $25 million project.

Telephone Building, New York, NY - Construction superintendent for the construction of a 22-story building with 16' floor heights. For this construction, the concrete batch plant was located in the building itself. Walls were reinforced concrete designed to withstand atomic attack. The building was designed to be self-sufficient, including a water well beneath the building.

Bronx Lebanon Hospital, Bronx, NY - Rehabilitative work included foundations and reinforced concrete superstructure. Construction managed the installation which was adjacent to a fully functioning operating room. The construction site was tight, requiring sidewalk bridges and overhead construction trailers.

Brookdale Hospital, Brooklyn, NY - Assistant superintendent for the structural steel construction of a new six-story building between two existing buildings. Included the replacement of an existing egg-shaped sewer sandwiched between existing buildings.

East Harlem Hospital, New York, NY - Construction superintendent for a new 28-story hospital. This project required deep excavation and blasting of hard rock adjacent to existing, fully functioning hospitals.

Jewish Home for the Aged, Brighton Beach, Brooklyn, NY - Responsible for management and coordination of all subcontractors for construction of a 12-story, reinforced concrete structure with brick exterior used as senior citizen housing.

Bishop Boardman Senior Citizen Housing, Brooklyn, NY - Supervised construction of five-story/50,000 sf masonry wall bearing building and coordinated subcontractors through all phases of construction. (NYS Division of Housing and Community Renewal)

Employment History:

The LiRo Group (2001 to Present)
Senior Associate
TDX (1979-2000)
Partner/ Project Manager
Walsh Construction (1976-1979)
Assistant Project Manager
Gotham Construction (1971-1976)
Superintendent
Euclid Contracting Co. (1946-1971)
Superintendent

Euclin Contracting Co. (1946-1971)
Superintendent

Michael Vatovec
SUPERINTENDENT

Mr. Vatovec has over 20 years of experience in the construction and facility maintenance industry. More specifically, he has extensive experience with NYC Transit subways and NYC Transit buses. His background is in electrical construction. In addition, he has been responsible for the oversight and direction of teams of maintenance personnel. His responsibilities include overseeing the contract work including Electrical, Fire protection systems, Communication systems, plumbing and elevator construction. This includes insuring that contractors comply with all design and specification requirements. Additionally,

EDUCATION	Ralph R. McKee Vocational & Technical High School
REGISTRATION / CERTIFICATIONS	Fall Protections/OSHA Comprehensive Safety Dupont Safety Management Audit Training OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	20

Mr. Vatovec is responsible for construction record keeping relating to time, materials, and payments to contractors. Representative projects include:

Bronx New Family Intake Center, NY, Superintendent - Construction of a seven-story office building to house the Department of Homeless Services. This Fifty Million Dollar project has an estimated completion date of August 2010. (NYCDDC, $38M)

Bernard Fineson: Hillside Campus Replacement Facility, General Superintendent - Twelve acre development includes all site, and civil work, for the construction of eight residential buildings, and one Program Building, totaling 160,000 square feet of living, office, class room, and medical areas. (DASNY, $80M)

New Jersey School Construction Corporation Program Management for Professional Staffing, Trenton, NJ, Project Officer, - Assisted NJSCC in program management of a NJ State Supreme Court mandated statewide school design and construction initiative. Assigned for the Newark School District under Hudson County with a construction budget allocated at $500 Million. Major responsibilities included overseeing the design consultants and the program Management Firm (PMF) ensuring that the program goals were met both in design and construction phases. (NJSCC, $25M, 2007)

Brooklyn House of Detention for Men, Resident Engineer - Renovation and Expansion, work included construction of a new inmate visit center, and complete demolition, and reconstruction of medical services area. Mr. Vatovec supervised all construction activities among the prime contractors and supervised LiRo inspectors. (NYCDDC, $19M, 2004)

Rikers Island James A. Thomas Center (JATC) Renovations, Resident Engineer - Renovation of James A. Thomas Center Correctional Facility. Included upgrade of HVAC Systems, Normal & Emergency Electrical Distribution, and Fire Alarm Replacement. (DDC, $25M, 2004)

NYC Transit (Dept. of Buses), Manhattan, NY, Manager Facility Operations & Construction - Responsible for facility operation requirements including the formulation of policies and procedures for four bus depots. Planned, developed and represented New York City Transit on construction projects for building upgrades and renovations including the replacement of underground storage tank systems, in-ground hydraulic lifts, dual fuel HVAC systems, asbestos and lead abatement projects, window, and roof replacements.

Employment History:
The LiRo Group (2001 to Present)
Superintendent
New York City Transit (1968-2001)
Manager Electrical Department

Leonard Venechanos
SENIOR PROJECT MANAGER

Mr. Venechanos has over 30 years of construction management and design experience. His specific experience includes large public projects which are subject to Wicks Law and require construction phasing, coordination and security. These projects have included both renovations and new construction.

Mr. Venechanos managed major public capital improvement projects for New York City Department of Correction since for 20 years. In that time Mr. Venechanos was responsible for projects ranging in size from $14 million to $336 million. Mr. Venechanos has been responsible for coordinating both design and construction phases of various projects. It was his responsibility to ensure that the owner was provided with a design which reflects the pre-described scope and that the completed construction was in accordance with those design documents. Representative projects include:

EDUCATION	B.S., School of Architecture, City College of New York, 1977
REGISTRATION / CERTIFICATIONS	Fire and Safety Response Suicide Prevention Infectious Disease Control Hazardous Materials Handling Chemical Agent Utilization
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	21

Westchester Medical Center, Valhalla, NY, Assistant Project Manager - This renovation and addition project addressed the following specific areas of work:

- New Emergency Department Addition- including patient/visitors waiting administrator's area, triage and connecting corridor.
- Renovation of Emergency Department- including new adult and pediatric exam rooms, nurse's station, fast track and pharmacy.
- Renovation of the Labor and Delivery Suite- the replacement of all finishes and systems for patient rooms, pharmacy, nurse's station, on- call residents and operating rooms.
- Renovation of the Oncology Suite- provides 44 new patient beds, including isolation rooms, pharmacy, nurse's station, on-call suites and staff and patient lounges.
- Renovation of Pediatric Hospital- providing 8 additional pediatric beds
- Renovation of On-Call Residence's- providing new finishes and systems for resident's facilities serving multiple medical disciplines.
- Renovation of the Medical Intensive Care Unit- including 22 new patient beds, finishes, systems. Functional areas include pharmacy, on-call residences, nurse's station, administrative functions and visitor's waiting areas.
- Renovation of the Neonatal Intensive Care Unit- including all finishes and support functions for 5 new neonatal beds.

(Westchester Medical Center, $125M)

Jail Replacement Facility at Yaphank Correctional Facility, Yaphank, NY, Design Review - LiRo was contracted by Suffolk County Department of Public Works for Construction Management Services during pre-construction and construction phases of the new Yaphank Jail Facility. The project involves the construction of an addition to the existing facility and the renovation of the existing structure. It will provide housing for 1265 inmates as well as the infrastructure and support facilities

necessary for the proper processing, care and feeding of the inmate population. Included in the project will be state of the art staff, administrative, health care and support facilities that provide the county with efficient and cost effective management and staffing. (Suffolk County Department of Public Works, $150M)

Bridgeport Schools Repair and Replacement Project, Bridgeport, CT - LiRo is providing construction management services for 20 schools in Bridgeport CT. The project includes various repair work from pavers, window replacement, masonry repair, HVAC upgrade and toilet room upgrades. (Bridgeport School District, $10M, 2008)

Westchester County Courthouse Phase 3 Tower, Westchester, NY, Assistant Project Manager - The LiRo Group was retained by Westchester County to provide both design and construction management services for this $23 million interior renovation project. The program consisted of a combination of partial and complete renovations to 18 floors of the 20-story courthouse tower, including mechanical, electrical, telecommunications, fire alarm and security upgrades, ADA compliance throughout, new courtroom layouts and finishes, and all adjunct facilities to service New York State's civil courts and the County's Department of Probation. In order to meet the County's construction schedule, all work was designed around an intricate staging program that LiRo devised to maintain the County's requirements that the building remain fully operational throughout construction. Construction documents were completed in nine months from the date of design award and the project is currently under construction, on time and under budget. The contract also included architecture. (Westchester County Department of Public Works, $23M, 2007)

Westchester County Norwood E. Jackson Correctional Facility, Westchester, NY, Assistant Project Manager - The project includes a demolition and asbestos abatement phase, along with a swing space phase. The project is currently in its third phase which is comprised of two new penitentiary buildings and renovation work. (Westchester County Department of Public Works, $45M, 2005)

Westchester County Courthouse Renovation and Addition, Westchester, NY, Liaison Engineer - This project consisted of the renovation and addition to the Westchester County Courthouse. This steel framed, 20-story building was constructed in the early 1970's. It currently houses the offices of the district attorney, courtrooms and other miscellaneous county official offices. (Westchester County Department of Public Works, $100M, 2005)

Heckscher Theater Renovation - Renovation of a community-based theater originally built in 1921. The renovations included a new ventilation and air conditioning system in the theater and adjacent art gallery. In addition, the theater received new seating, carpeting, stage rigging, curtains, painting, and other finishes. A fire alarm upgrade was part of the renovations. All renovations were performed while other areas of the build remained open. The theater renovations required special care in order to maintain the integrity of the original building elements such as ornate plaster ceilings and wall murals. (NYCDDC, $3M, 2001)

Employment History:

The LiRo Group (1999 to Present)
Senior Project Manager
NYC Department of Correction (1980-2000)
Project Manager (1980-1990)
Director of Design and Construction (1990-2000)

William Wall
ASSISTANT PROJECT MANAGER

Mr. Wall has over 35 years of experience in Supervision and Management of Construction Projects. His expertise includes working from a lead carpenter foreman and estimator to superintendent on multimillion dollar projects. This varied experience complements LiRo's Construction Management approach in that Mr. Wall's knowledge of cost control, cost tracking, estimating, scheduling, QA/QC inspection, on-site management, and supervision of multiple contractors and trades is exactly what our Resident Engineers must possess. Mr. Wall was Project Superintendent on multiple high rise, residential, and commercial projects including renovations and expansion of existing facilities for a major Long Island contractor. His responsibilities included supervision of all contractor and trades, negotiations of subcontracts and change orders, requisitions, problem solving, and project close-outs including fire-life-safety/inspections, TCO's and CO's. Representative projects include:

EDUCATION	Business Management, Nassau Community College B.S. (Pending), Civil Engineering, Manhattan College Construction Management, SUNY at Farmingdale
REGISTRATION / CERTIFICATIONS	10-Hour Occupational Safety and Health Training Course Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Troubleshooting Exterior Masonry Walls Certification, NY
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	14
YEARS SELF EMPLOYED	9

HHC Emergency Power Generators, New York City, Assistant Project Manager - The scope of work for this contract consisted of demolition and reconstruction of outdated Emergency Power Systems at six hospital trauma centers and various other smaller hospital facilities located in the New York City area. The contract required LiRo to prepare cost estimates for the various types of work in the projects. Typical elements of work for these projects included: Emergency Generators, paralleling switchgear, remote radiators for generator cooling systems, power distribution panels, underground fuel oil storage systems and conduit & wire distribution to all associated equipment. (DASNY, $121M)

Improvements to the County Center Building - Phase II, Riverhead County Center - Riverhead, NY. LiRo is providing project management services for improvements to the County Center Building in Riverhead, NY. This project provides for major renovations of the 140,600 sf building including:

- 10,000 sf Records Storage Addition
- MEP Demolition, Replacement and Upgrading
- Escalator Demolition/Elevator Installation
- Asbestos Survey/Investigation/Mitigation as necessary
- Building Façade Removal and Replacement
- Security Enhancements (including Card Reader System)

On this project LiRo was responsible for developing a Project Labor Agreement. This included preparing a feasibility study, development of the agreement, negotiating terms of the agreement and implementing the agreement during construction. In addition, LiRo performed constructability reviews,

provided cost estimates and developed phasing plans during the development of the contract documents.

During construction LiRo was responsible for providing and updating the coordinated schedule based on input from the prime contractors. In addition, LiRo maintained project controls including the shop drawing log, RFI log, proposal/change order logs and meeting minutes. Our project management responsibility of schedule, controls and the project labor agreement provided the County staff with all the tools they needed to successfully complete the project. (Suffolk County Department of Public Works, $34M, 2007)

NYC Department of Sanitation, Manhattan 5 Garage & Repair Facility, Project Superintendent - Provided construction management services for the construction of a new garage and repair shop located adjacent to Gansevoort Incinerator. The new structure is a two-story building with approximately 15,000 sf of usable space. The project had four prime contractors and a total cost of approximately $6M. The first floor consists of six maintenance bays for vehicle repair (4) and for building maintenance (2). Also included are offices and storage space for operative personnel. The second floor includes locker rooms, lunch rooms and toilet facilities for four different types of personnel being housed at this site. The building contains heat mechanical equipment for four air changes per hour. Also included are a fluid dispensing system, security monitoring systems, underground drainage/oil separators, underground storage tanks (UST) and public address systems. (NYC DOS, $6M, 2005)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME) Construction Management Services, Project Superintendent - LiRo managed the construction of the new Office of the Chief Medical Examiner (OCME) facility in Brooklyn. This is a state-of-the-art facility offering the staff and the public a safe and private environment. Shared between Kings County Medical Center and the OCME, the new facility contains space designated for NYPD investigators. It was designed to be sensitive to the surrounding community and hospital campus. LiRo's role was to provide comprehensive construction management services from design development through the completion of construction. This included the coordination of all construction operations and related vehicular traffic so that it did not interfere with local traffic or hospital campus operations. The 40,000 sf facility worth $17M was constructed in 28 months. (DASNY, $18M, 2004)

New York Methodist Hospital, Dyker Heights Dialysis Center, Project Superintendent-
LiRo was the Construction Manager involved in the gut / renovation of 21,000 square feet including new electrical service, boiler, HVAC, elevator, exam rooms, administrative space and 21 chair dialysis suite. This project was a fast track, revenue producing facility, with a cost of $3,000,000.

Employment History:
The LiRo Group (1998 to Present)
Assistant Project Manager
4- Wall Construction (1990-1998)
Owner
Riccardi Construction (1985-1990)
Lead Carpenter/ Foreman
Gemma Construction (1983-1985)
Supervisor
John J. Kassner & Associates Consulting (1981-1983)
Field Inspector

Glenn Williams
RESIDENT ENGINEER

Mr. Williams has over 30 years experience in construction industry in the capacities of project manager and project superintendent. Working for the gammut of federal, state, city and local agencies, he has provided expert on-site construction supervision for numerous high profile projects. Representative projects include:

EDUCATION	B.S., Construction Technology, New York Institute of Technology B. A., N.C.A.R.B. Accredited Professional Degree Program, New York Institute of Technology
REGISTRATION / CERTIFICATIONS	Construction Specifications Institute OSHA Certification
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	29

Queens Garage 14, Queens, NY, Construction Management Services, Resident Superintendent - LiRo provided construction management services for the new construction of the Queens 14 Garage, Repair Facility and Salt Garage in Far Rockaway Queens, New York. This new project comprised of 80,000 square feet of Administrative Offices, Garages and specialized Repair Facilities. The new construction was successfully scheduled simultaneously in conjunction with the existing ongoing 24 hours emergency response facility and is located on an environmentally sensitive 9 acre waterfront parcel surrounded by protected wetlands. (NYCDOS, $35M)

Bernard Fineson Developmental Center Hillside Campus Replacement Facility, Construction Management Services, Resident Superintendent - LiRo provided design and construction management services for the Bernard Fineson Developmental Center. The Project includes construction of eight buildings serving 120 developmentally disabled and medically frail consumers in addition to a Program/Administration Building. The new construction for the resident building consists of six one story residences for medically frail consumers and two two-story residences for multiple disability consumers. The building program spaces comprise a total of 72,600 gross square feet. During this project a 3-story baseball stadium, laundry building, and bakery were demolished. Work included asbestos abatement and removal of hazardous materials. There is close coordination around existing operational utility tunnels. (DASNY, $104M, 2009)

Brooklyn Garages 1 and 4, Brooklyn, NY, Construction Management Services, Resident Superintendent - LiRo provided construction management services for the construction of the Brooklyn 1 and 4 Garages on Varick Avenue in Brooklyn, NY. In addition LiRo provided CPM scheduling services under another contract with the NYCDOS. This new facility encompassed two central sanitation garages and a Borough office with a total of 235,000 sf. Extensive schedule services were required because contaminated soil was discovered on-site after construction started. $5.5M of soil remediation was required as well as coordination with municipal agencies, environmental contractors, and dump sites. Construction of the 235,000 square foot facilities covered 2 square city blocks with a connecting bridge spanning a vehicular roadway. The project included two personnel buildings, two vehicle-truck repair facilities, two long-span garages and a separate Con Edison transformer substation. (NYCDOS, $76M, 2006)

Randall's Island Fire Training Academy, Queens, NY, Construction Management Services, Superintendent - The Fire Department of the City of New York has operated a Fire Training Academy on Randall's Island for over 25 years. This 27-acre waterfront facility ("The Rock") sits between the DEP Wards Island Water Pollution Control Plant and NYC Park Department property. Previously, the

facility had nine buildings including both classrooms and hands-on training with simulated fires and smoke structures. This $30 million, two-year program involved four facilities and two external trainers. (NYCDDC, $35M, 2004)

Employment History:
The LiRo Group (2001 to Present)
Resident Engineer
Gemma Construction and Development (1993-2001)
Construction Manager
Design and Development Associates (1988-1993)
Principal Partner
Zafutto Construction (1984-1988)
Field Superintendent
Glick Construction (1979-1984)
Field Superintendent

CONTRACT ADMINISTRATORS

Patrick Argiro
OFFICE ENGINEER

Mr. Argiro has served as Office Engineer on major bridge and highway reconstruction projects. His projects have involved duties such as preparing of daily reports; shop drawing review; cost and quality control; client liaison; inspection and coordination of contractor's work; preparation of payment requisitions; surveying; preparation of final drawings.

EDUCATION	B.A., Business Management, Cambridge State University, 2000
REGISTRATION / CERTIFICATIONS	Certificate in Fiber Optic Training (FIS Training) Hazardous Communication Certified
YEARS WITH THIS FIRM	8
YEARS WITH OTHER FIRMS	0

Construction Management and Inspection Services for Project VN-80A, Utility Relocation for the Upper Level Replacement of the Verrazano-Narrows Bridge (TBTA), Office Engineer - LiRo served as the construction management consultant for the Triborough Bridge and Tunnel Authority for the VN-80A project. The project involved relocating the bridge's vital electric, communications and fire standpipe utilities, as well as new redundant circuits for upper level lighting, lower level lighting and 24-hour power. A new SCADA operating system is also being installed and integrated with the existing Quindar system. Some specific items of work include:

- Installation of conduit, steel channel hangers and pull boxes for 5kV, fiber optic and medium voltage cable
- Installation of fire standpipe branch lines and hose connections
- Installation of lighting and 24 hour circuits
- Installation and splicing of fiber optic cable, 5kV cable and medium voltage cable
- Removal of bridge telephone system and existing fire standpipe branch lines
- Installation of SCADA operating system, including interfacing with existing Quindar system
- Installation of SCADA cabinets and implementation and training of new control system
- Monitoring of cut over of existing systems (cameras, lighting, etc.) to newly installed cables
- Monitoring of end-to-end OTDR tests and other tests as specified

Maintenance and protection of traffic and coordinated lane closures were required for this installation on both the upper and lower level roadways. Coordination with facility personnel was of great importance, due to the fact that systems were required to be temporarily taken off-line during cut over. Security access management was also a vital part of this project, as there was extensive work required within the bridge towers and anchorages. Responsibilities also included the management of the contract with regard to submittals, project progress and safety meetings, as well as contractor payments and as-built drawing documentation. (MTA, $1.9M, 2010)

Ocean Bay Apartments Upgrades, NY, Office Engineer - LiRo provided CM/Build Services for $60M in improvements. This multi-prime, multi-contract project involved a new senior center, a day care center, façade repairs on 7 high-rise buildings, new electrical services for 21 buildings, lobby renovations and egress stair towers at 4 high-rise apartment buildings. (NYCHA)

Manhattan Civil Court Infrastructure Upgrade, NY, Office Engineer - LiRo provided construction management services for this $16M renovation. The project involved new electrical, mechanical and plumbing system upgrades. Façade repair and renovation were also a major project activity. In addition concrete sidewalks and interior structural work was performed. The project involved two 8-hour shifts, seven days a week to complete the tasks involved in an occupied facility. Mr. Argiro was responsible for all project documentation and controls. Expedition software was utilized for all project documentation. (DASNY, 2001-2004)

Engine Company #6, Beekman Street, New York, NY, Office Engineer - The project scope encompassed a $3M gut rehab for this Lower Manhattan fire house. Work included apparatus floor replacement. This was a Wicks Law project. (NYCDDC, 2004)

Previous Experience:

Cablevision Systems Inc., Hicksville, NY, Project Engineer - While serving as a Project Engineer Mr. Argiro was responsible for the design and planning of Outside Plant infrastructure. He secured Rights of Way,

easements, entrance agreements and permits. Mr. Argiro was also responsible for maintaining the inventory database.

Adesta Communications, Somerset, NJ, Project Engineer - Mr. Argiro maintained all field documents. Performed inspection of all cable placement. Coordinated between owner and contractor. Developed daily / weekly reports and schedules. Maintained cost reports to keep status of project for the owners review.

Total Communications, Melbourne, FL, Project Inspector -Insured on-site contractors performed job duties according to plans and specifications. Mr. Argiro monitored EMT conduit and innerduct installations along Amtrak shafts and tunnels. Provided documentation for as-builts. He also performed on-site inspection of directional boring across the Passaic River in New Jersey.

Gemma Construction Inc, Hicksville, NY, Construction Manager -As an on-site construction manager Mr. Argiro inspected various firehouses and sanitation site renovations performed for New York City's Department of Design and Construction. Mr. Argiro adhered to contract documents, conducted site safety meetings and maintained (OSHA) safety regulations. He documented all field driven changes and maintained construction schedule. Mr. Argiro supervised on-site construction of multiple projects in various boroughs of New York City. He developed monthly job activity reports and the monthly financial status reports.

Gemcom Telecommunications, Hickville, NY, Construction Inspector - Mr. Argiro's prepared daily reports of contractor's progress. He acted as quality control inspector for Metro Media Fiber Network. Mr. Argiro supervised conduit installation, rod and roping, cable placement and splicing.

Prior to this Mr. Argiro was a member of the United States Air Force.

Michael J. Asquith
INSPECTOR

Mr. Asquith has experience in the field of emergency generator installation and operations. In addition Mr. Asquith has maintained project schedules, coordinated project activities, supervised contractors, and reviewed contract documentation. Representative projects include:

EDUCATION	B.S., Computer Networking and Security, Skidmore College, 0
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	14
YEARS WITH OTHER FIRMS	0

Yankee Stadium City Work Redevelopment, Bronx, NY,
Document Controller / Inspector - LiRo is responsible for providing construction management services for the design and construction work that is required of the City of New York as part of the Yankee Stadium Agreement. To date LiRo has performed:
1) Demolition of several building at the Bronx Terminal Market
2) Removal of contaminated soils at the Bronx Terminal Market site
3) Installation of turf baseball fields and additional recreational facilities at two sites in the adjacent neighborhood
4) Restoration of retaining walls along 161st Street including baseball logos in time for the April 2009 baseball season
5) New sidewalk bridge for McCombs Dam approach
6) Installation of a 20" water main around the new Yankee Stadium
7) Installation of new 36" combined sewer from 157th Street and onto the Major Deegan service road, as well as a 24" sewer along Ruppert Place.
LiRo is presently in the process of restoring the waterfront bulkhead along the site in preparation of the construction of 16 new tennis courts and a waterfront park which will include the renovation of an historic on-site building.
LiRo subcontracts with construction subcontractors, design consultants and vendors as needed to complete the construction work required by the contract. LiRo is assisting the NYCEDC during the design phase, by value engineering the work, as well as estimating the construction cost at each design phase.
LiRo coordinates and sequences the work to meet the contract milestones using P3 for scheduling and Prolog for database. LiRo developed a job specific Safety, Quality and Procedure Manuals to ensure that subcontractors work in a safe environment and perform the work in accordance to the contract document.
Some of the duties Mr. Asquith performed as document controller are as follows:
· Maintaining all reports pertaining to the various phases of the project
· Document control using prolog for database
· Tracking all subcontractor reports, import & disposal ticket quantities, submittals, RFI's, invoicing
· Progress photos
· Assist in preparation of monthly reports
(NYCEDC, $144M)

CM/Build Requirements Contract for NYC Housing Authority, Betances Houses Community Center Renovation, Bronx, NY, Office Engineer - The project consisted of the renovation of two existing buildings; a one story boxing gym with a full cellar, and a Community Center located on the first floor of an adjacent residential tower. This property required that LiRo perform pre-construction & construction phase services. The renovation work included all required hazmat removals, selective demolition, concrete work, façade restoration/masonry repair and cleaning, new exterior glass blocks partial façade, structural steel, finish carpentry, kitchen cabinets and countertops, metal siding, built-up roofing, new skylight, standing seam roof, metal doors and frames, aluminum entrances and windows, aluminum windows, electrical locking system, gypsum wallboards, ceramic tiles, quarry tile, VCT flooring, painting, mailboxes and key keeper, toilet and bath accessories, refuse compactors & kitchen appliances. ***This project received an Award of Merit from the 2008 AIA New York State Design Awards.*** (NYCHA, 2007, $10M)

NYC School Construction Authority Project, New York, NY, Office Engineer - This on-call contract required 24 hour/7day availability to respond to emergencies at any NYC Public Schools. The work involved the immediate mobilization of contractors and consultants to respond and eliminate hazardous or dangerous conditions at the schools. Completed projects have included masonry repairs, scaffolding, asbestos abatement, marine dockage, and interior/exterior renovations.
During this project LiRo was responsible for development of work plans, specifications, budgets, coordination with New York City SCA personnel, architects/engineers, consultants and contractors.
During the construction phase, LiRo was responsible for scheduling and performance of the work. Supervision of all work activities was monitored, and inspected in the filed by LiRo personnel. Regular job meetings were held to review progress, health & safety concerns, quality control, and resolve conflicts. Some of the duties he performed are as follows:
Maintaining all reports pertaining to projects, such as daily reports, progress reports and logs.
Maintaining record documents of project quantities installed and correlate with contractor payments.
Reviewing contractor invoices for submission to NYCSCA.
(NYC SCA, $70M, 2007)
NYC Emergency Generator Project, New York, NY, Office Engineer - This project consisted of emergency generator installation, start-up and testing at over fifty FDNY facilities.
During this project LiRo was responsible for maintaining quality control of contractor installations, enforcement of onsite health and safety plans, coordination with city inspectors, and interface with city employees working at the sites. Some of the duties he performed are as follows:
Supervise field operations with Contractor to facilitate contract specifications.
Quality control supervision involving electrical work.
Enforcement of health and safety regulations at construction sites.
Maintaining all reports pertaining to projects, such as daily reports, progress reports and logs.
Maintain record documents of project quantities installed and correlate with contractor payments.
Documentation of weekly and monthly progress meetings.
(NYC DDC, $5.3M, 2006)

Audrey Bevers
COST CONTROLLER

EDUCATION	A.A.S., Business, Queensborough Community College, 2003
REGISTRATION / CERTIFICATIONS	
YEARS WITH THIS FIRM	13
YEARS WITH OTHER FIRMS	0

Ms. Bevers is a Cost Controller/Office Engineer with experience in the construction industry. She has been actively involved with Wicks Law projects for NYC agencies including extensive work on NYCDDC CM/Build projects. Over the past eleven years with LiRo Ms Bevers has been responsible for project controls, recordkeeping and cost control on a number of multi - million dollar multiple prime construction projects. Ms. Bevers's typical responsibilities have included: Coordinating meetings, site visits, testing, etc. Generating project meeting minutes Coordinating safety and controlled inspections Reviewing all contractor submissions and processing with A/E Creating and updating logs for Contractor Submittals, Requests for Information (RFI's), Architects Supplemental Information (ASI's) and Change Orders Developing and maintaining unique Field Office record keeping systems Purchasing all field equipment and supplies Review and process all subcontractor invoices Her project experience includes:

New Family Intake Center, Bronx, NY, Office Engineer -
Park Slope Armory Revitalization, Drill Floor Renovation, Brooklyn, NY, Office Engineer - LiRo is providing construction management services for this old military armory that is being converted into an indoor sports facility. The building is an historic landmark, over 110 years old. LiRo is overseeing two contracts: one for life safety for NYCDHS, and one for the sports facility for NYCDDC. (NYCDDC / NYCDHS, $15M, 2008)

NYCDDC Stadia Projects, Capital Improvements of Shea Stadium, Office Engineer - Project involvesmultiple contracts related to structural improvements to concrete walls throughout Shea Stadium, escalator repairs and rehabilitation, HVAC upgrades, cooling tower support modifications, parking garage structural repairs and fire sprinkler upgrades, and painting of steel superstructure. (NYCDDC, $50M).
NYCSCA Emergency Response Program, All Boroughs, Office Engineer - Ms Bevers maintained project records, processed subcontractor shop drawings and payment requisitions. The work on this program was performed on an as needed emergency basis that required staff to respond quickly.

Rikers Island, Systemwide Kitchen Renovation, Queens, NY, Cost Controls - Ms. Bevers was responsible for preparing Construction payment requisition for numerous DDC projects for NYC DOC. Ms. Bevers prepared all documentation, analyses project costs and budgets, and coordinated with LiRo Project Manager and Resident Engineer, Contractors and Client personnel to ensure that accurate costs were developed and payments were expedited. At various times there were 12 prime contractors active on this program performing work simultaneously. (NYCDDC, $60M)
Projects Ms. Bevers has worked on include:
GRVC 448 Bed Cell Addition ($87.5M)
System wide Kitchen Renovation ($63.2M)
Bronx Reno ($12.8M)
CIFM Locker Room ($5.8M)
Perimeter Alarm ($5.5M)
JATC ($3.9M)

Queens Electrical Upgrade ($3.7M)
CIFM Fence Relocation ($2.1M)
Bronx Elevator ($702K)
Bronx/Brooklyn F/L/S ($604K)
Power House ($331K)

Richard Bryson
INSPECTOR

EDUCATION	
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Troubleshooting Exterior Masonry Walls Certification, NY Primavera Expedition (Project Controls)
YEARS WITH THIS FIRM	14
YEARS WITH OTHER FIRMS	11

As Office Engineer, Field Inspector and as Asst. Resident Engineer, Mr. Bryson's typical responsibilities have included developing and maintaining unique Field Office record keeping systems specific to each Project's requirements, as well as maintaining all aspects of a Field Office Trailer. In these roles, he created and updated all project logs in spreadsheet format for Contractor Shop Drawing Submittals, Payments, Change Orders, Sub-Contractor and vendor approvals. Mr. Bryson's responsibilities also included de-watering and drilled pile operations, concrete cylinder tracking, project permits and Requests for Information (RFI's). He was instrumental in reviewing all contractor submissions for completeness and accuracy, and submittal to clients, architects and engineers for approval. He coordinated safety and controlled inspections and all construction activities between all trades and facility operations. Mr. Bryson also monitored daily work progress and safety procedures and wrote accurate and detailed daily work progress reports.

Warnerville Pump Station, Jamaica, NY, Office Engineer - Under contract with NYCDEP, LiRo is currently providing CM services for the construction of sanitary sewers, a pump station, force main and related facilities for the Meadowmere/Warnerville communities in southeast Queens. The project requires the relocation of existing water mains and the replacement of existing storm drains. The construction of the IMGD Pump Station is taking place a vacant parcel in close proximity to surrounding wetlands and will convey sewage generated from the area via 5,000 lf of dual 8" force main to an existing gravity sewer at 149th Street and Brookville Blvd. for treatment at the Jamaica WPCP. Included in the project is the installation of over 6,000 lf of 10" and 12" sanitary sewers in this presently unsewered area.
This water quality abatement project is in an extremely low lying area and is adjacent to wetlands and tributary waters of Jamaica Bay. As a result, extensive dewatering is required for both the pump station construction and sanitary sewer installation.
Moist soil conditions require the pump station to be constructed using drilled concrete filled helical piles for stability and buoyancy control.
Extensive community involvement and interaction with LiRo will be required since sewer installation in the narrow street will require temporary closures during construction and steel cover plates to allow residential access as needed and continuous ingress and egress by emergency vehicles and equipment.
Wetlands mitigation and remediation around the Brookville Blvd force main route is a key component of the project with continuous interface with NYSDEC and NYCDPR relative to regulatory and permitting issues.
To reduce traffic congestion issues, microtunelling and horizontal directional drilling will be performed at selected locations and traffic intersections with the associated MPT requirements.

Key Features
· Construction of IMGD Pump Station
· Installation of 5,000 LF Dual 8" Force Mains
· Installation of 6,000 LF of Sewer Lines

· Extensive wetlands remediation
· Microtunelling and horizontal directional drilling
· Close community coordination
· Consent order compliance
(NYCDEP, $30M, 2006 - 2009)

Yankee Stadium Capital Improvements, Bronx, NY, Field Inspector - Capital Improvements Project involving the renovation of existing HVAC Systems, Structural and Façade repairs, Waterproofing, Boiler Upgrades, AG & UG Drainage repairs, Steel Stair replacements and Escalator and Elevator rehabilitations. (NYCDDC / PARKS, 2005 - 2006)

Bayview Community Center, Bronx, NY, Office Engineer - As part of our NYCHA On Call Construction Management project, LiRo constructed a new two-story community center, of stone and brick cladding over concrete block and steel framing, skylights, and aluminum metal roof, housing classrooms, a gymnasium and locker rooms, a lobby and entryways, as well as associated site work, including the replacement of the parking lot, underground drainage, existing trees, walks, and site appurtenances and a new amphitheatre.
Electrical work included the furnishing and installation of all lighting, power, motors and electrical controls, security system, fire alarm system and emergency backup systems. HVAC work included furnishing and installation of all heating and cooling units, associated ductwork and controls. Plumbing work included the furnishing and installation of all piping, pumps, and appurtenances for domestic water, sanitary systems, fire suppression systems and storm water. (NYCHA, $12M, 2004)

Rikers Island GRVC Addition, Queens, NY, Field Inspector - Services included management, coordination, and monitoring of the design process and subcontract all construction in accordance with a CM/Build form of contract. The project also included upgrade of the existing kitchen and laundry facility, locker room facility, and commissary at the George R. Vierno Center. (NYCDDC, $85M, 2001 - 2003)

Westchester County Penitentiary, Valhalla, NY, Field Inspector - The Penitentiary Housing Replacement Facility project at Norwood E. Jackson Correctional Center, located in Valhalla, New York was developed by the Westchester County Department of Public Works. The scope of the building project included renovation of existing spaces and the demolition of existing building to allow for the construction of the new facility. New housing units replaced the three-story buildings. Construction activities included the construction of two new buildings, the renovation of H-Block, and E-Block, the demolition of the one-story modular building and site improvements. (WCDPW, $14M, 2001)

Brooklyn House of Detention for Men, Brooklyn, NY, Assistant Resident Engineer - The additions of a one-story administrative wing and new inmate receiving area and the renovations to the first and second floors including HVAC, electrical and mechanical upgrades, and lead and asbestos abatement of an operating, high security correctional facility. (NYCDDC, $19M, 2000)

Brooklyn House of Detention for Men - Fire, Life, Safety Improvements, Brooklyn, NY, Inspector - The New York City Department of Design and Construction contracted with LiRo to perform construction management services under a CM/Build requirement contract for fire, life, and safety improvements. (NYCDDC, $12M, 1999 - 2000)

Riker's Island Powerhouse Building, Queens, NY, Field Inspector - Restoration Project involving Masonry Façade Repairs and Roof Replacement. (NYCDDC, 1998 - 1999)

Queens House of Detention, Queens, NY, Inspector - The expansion program consists of an 8-story, 500-inmate maximum security facility. There was limited site space available for contractor staging in this tightly constrained site. Carefully phased construction was imperative to accommodate the relocation of existing facilities and personnel. LiRo was required to manage and coordinate numerous contractors on two separate construction projects. (NYCDDC, $7M, 1997 - 1998)

Hempstead District Court Alterations, Hempstead, NY, Inspector - Located in a three-story building in downtown Hempstead, the District Court is an extremely busy public building. On a typical day, a visitor to the building would find arraignments and trials in over 25 courtrooms; some 75 to 100 prisoners in the detention area; hundreds of jurors, spectators, and visitors; and the ongoing operations of the Nassau County Police, Sheriff's Office, District Attorney, and Assistant District Attorneys. (NCDPW, $3M, 1997)

Nassau Community College Center & Classroom Building, Phase I, Hempstead, NY, Inspector - Nassau Community College's Classroom Building and new College Center was built on the site of an existing aircraft hangar complex. At the Mitchel Field site, where Lindbergh started his historical transatlantic flight, the student activities building (College Center Building) includes multimedia studios, a food court and various club rooms. The Classroom Building houses 87 faculty and department head offices. These departments include art, social studies, commercial photography, and human resources. (NCDPW, $35.5M, 1996 - 1997)

Riker's Island Kitchen Renovations Phase 1 - Short Term, Queens, NY, Field Inspector
Demolition and renovation of existing Serving Pantries at various Riker's Island Prison Facilities. (NYCDDC 1996)
Previous Experience:

SPERRY / UNISYS Corporation, Great Neck, NY, Quality Control / Assurance Inspector -
Responsible for the inspection and final acceptance testing of various Radar and Fire Control Systems, from sub-assemblies to completed Systems.
(U.S. Dept. of the Navy, 1983 - 1995)
The various Systems Programs included:
- Trident II Submarine Radar and Fire Control Systems Program
- MK 92 Frigate Radar and Fire Control Systems Program
- Harpoon Guided Missile Fire Control Systems Program
- North Warning / Short Range Radar Systems Program
- Aegis Radar Defense Systems Program

Caren M. Cafarelli

ASST. OFFICE ENGINEER

EDUCATION	A.A.S., Construction Management Engineering Technology (Pending), Farmingdale Sate University, 0
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Safety Course
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	0

Ms. Cafarelli has served in construction field offices as well as in the main corporate office. Her roles at LiRo include Administrative Assistant, Purchasing Agent and Assistant Office Engineer. Some of her field office responsibilities have been:
The use of spreadsheet and database software for the purpose of preparing various logs, quantity tabulations and payment requisitions.Recording quantity survey information from Inspectors' daily reports and entered information into the CEES program for monthly tabulation of quantities on unit price construction projects. Utilizing NYSDOT MURK System (Manual of Uniform Record Keeping) for document control and filing.

Ms. Cafarelli previous experience includes five years as an Office Engineer at the northern California branch of a cellular construction company. She was responsible for all phases of office management in this role. Duties included the preparation of job bids, change orders, purchase orders, lien releases as well as invoicing and accounts payable. Daily reports prepared by Ms. Cafarelli were sent to the corporate office detailing all job activity at the branch. In addition, she performed human resource tasks which included the handling of new hire and termination paper work and payroll calculations for all branch employees.

JFK Airport JetBlue Project Terminal 5, Inspection. LiRo provides inspections and quality assurance of the construction of a new 27-gate terminal at JFK airport for JetBlue in front of the TWA landmark Saarinan Building. Her primary tasks include field inspections at JFK airport JetBlue - Terminal 5 underground hydrant fuel system with associated hydrant fueling pump out/vent boxes, fueling pits, isolation boxes and valves, surge suppressor stations, pipe and box installation as well as pipe layout, review and all associated testing (hydrostatic, pneumatic, holiday testing and flush out procedures). Other inspections include underground piping for stormwater, sanitary systems inside the terminal building slab and installation of manholes and associated piping for drainage and sanitary lift station. (PANYNJ, $750M)

Stony Brook University Hospital and Medical Center - Construction Management Services, Technical Typist. This project consists of various stages of construction with an anticipated overall cost of $170 Million. The overall scope of work is anticipated to take 7 years, due to the intricate phasing, that will be required to keep the facility in operation throughout the entire construction duration. (Gilbane for SUNY Stony Brook, $170M, 2009)

V.C.P. CM/Build Requirements Contract (Central Park Police Precinct). Technical Typist. LiRo performed construction management and design to the Central Park Police Precinct Temporary Building. (New York City Department of Design & Construction, $5.8M, 2002)

Bay Park WPCP - Administrative Construction Support, Technical Typist. LiRo provided administrative support services for a 2-year period on an as-needed basis. (Nassau County Department of Public Works, 2002,

$779K)

Cross Island Parkway/Long Island Expressway Interchange (Exits 29-32). Technical Typist. LiRo provided construction inspection services for the rehabilitation of the Long Island Expressway/Cross Island Parkway Interchange. This project included the construction and/or rehabilitation of 14 bridges, widening and resurfacing of the Long Island Expressway, local NYC roadway and utility rehabilitation, extensive park/wetland mitigation work, noise and retaining wall construction, and other incidental work. (NYSDOT, $160M)

Long Island Expressway HOV Lane, Exits 57-61, Technical Typist. This project included the construction of new High Occupancy Vehicle (HOV) lanes on the Long Island Expressway and the reconstruction of the LIE mainline pavement from Exits 57-61. A total of eight bridges were reconstructed and/or replaced. Construction encompassed three phases to allow for an unimpeded traffic flow. Over 240,000 tons of asphalt was placed. (NYSDOT, $95M)

Skills
Word Perfect, Microsoft Word, Microsoft Office, Microsoft Excel, Lotus, Quattro Pro, CEES, CAD.

Anthony Campagna
PROJECT CONTROLLER

Mr. Campagna has worked in Construction Management since 2000. His responsibilities include hands on project management from bid opening to project closeout. Mr. Campagna is responsible for extensive communication and coordination with public agencies as well as direct contact with multiple construction firms. Mr. Campagna also is responsible for; review and approval of contractor payment requisitions, change order review and negotiation, issue tracking, schedule review and overall coordination between trades and owners.

EDUCATION	B.A., English, SUNY at Albany, 1995
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training Primavera Expedition (Project Controls)
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	5

Representative projects include:

Westchester Medical Center, Valhalla, NY, Assistant Project Manager - Liro was contracted to provide construction management services for numerous projects at Westchester Medical Center. Services include:

Pre-Construction Services

- Review construction documents for constructibility
- Prepare preliminary estimates
- Review and select contractors for the bid process
- Prepare/package bid documents and solicit bids
-
- **Construction Services**
- Execute contracts with all contractors
- File for all necessary Permits
- Maintain all logs (shop drawing, RFI, change orders, etc.)
- Provide daily construction supervision and inspection
- Provide a construction schedule
- Complete daily and monthly reports
- Hold weekly project meetings and generate minutes
- Review, negotiate, and facilitate change orders
- Review contractor requisitions and provide payment schedules.
- (Westchester Medical Center, $150M)

Battery Park City Authority ****WHICH PROJECT?????*

CM/Build Requirements Contract for NYC Housing Authority,
Bayview Houses Community Center, Assistant Project Manager - Mr. Campagna was responsible for the day to day project coordination and issue resolution. Mr. Campagna also was responsible for; review and approval of contractor payment requisitions, change order review and negotiation, issue tracking, schedule review and overall coordination between trades and owners.
Under this contract, LiRo performed work on a task order basis. We were in the design or construction phases of renovating and/or constructing community centers and several other renovation projects throughout New York

City. These properties all required that LiRo perform pre-construction and construction phase services. (NYCHA, $12M, 2007)

CM/Build Requirements Contract for NYC Housing Authority,
Marlboro Houses Community Center, Assistant Project Manager - Mr. Campagna was responsible for the day to day project coordination and issue resolution. Mr. Campagna also was responsible for; review and approval of contractor payment requisitions, change order review and negotiation, issue tracking, schedule review and overall coordination between trades and owners.
Under this contract, LiRo performed work on a task order basis. We were in the design or construction phases of renovating and/or constructing community centers and several other renovation projects throughout New York City. These properties all required that LiRo perform pre-construction and construction phase services. (NYCHA, $5M, 2007)

Emergency CM Services - Special Projects, Lehman High School, Assistant Project Manager - As part of the Emergency Response Management Coordination Program, this project at Lehman High School in the Bronx consisted of restructuring of approximately 28,000 SF of space, included new Science Labs, new Clinic and upgrading of existing classrooms. Among the services that LiRo provided on this project and other CM Emergency projects were the following:

- Developed detailed construction cost estimates & CPM schedules
- Solicited bids and awarded contracts in accordance with Authority requirements
- Managed and coordinated all construction work
- Provided general conditions including testing and controlled inspections
- Remediated hazardous materials
- Maintained cost controls for all time & materials contract work

(NYCSCA, $11M)

Bronx House of Detention for Men - Utility Upgrades and Facility Renovations, Assistant Resident Engineer - LiRo provided all preconstruction, bid phase and construction phase services typical of NYCDDC CM/Build contracts.
This project included a major expansion of the existing mechanical/electrical infrastructure, including new steam boilers, electrical service, and emergency generator housed in three new additions to the existing facility.
The project also included a three-story addition at the building's main entrance to house administrative staff, security control room, and renovation of the existing inmate cells and reconstruction of the facility clinic.
(New York City Department of Design & Construction, $21M, 2005)

Rikers Island - Repair to Perimeter Security Alarms and New Control Room, Project Controls - LiRo provided comprehensive construction management services for the repair of the Rikers Island Perimeter Security Fence and construction of a new centralized control room. The project included testing and repair of all security devices along four miles of perimeter fencing, replacement of power and data cabling from all perimeter zones to the new control room and construction of a new control room utilizing state of the art computer and video monitoring.
Security systems included CCTV, microwave detection, and vibration sensing. The testing, repairs and control room switchover were coordinated and phased so that interruptions of service are kept to a minimum.
(New York City Department of Corrections, $5.4M, 2004)

Rikers Island - James A. Thomas Center (JATC) Renovations, Project Controls - LiRo provided comprehensive construction management services to the renovation of the James A. Thomas Center on Rikers Island (approximately 240,000 sf). The original construction of this high security facility dates back to 1933 and

has a housing capacity of 1,600 inmates. The program for renovation consisted of retrofitting existing spaces within the facility cellblocks, day rooms, showers, pantries, housing areas, mechanical rooms, electrical rooms, and common spaces. Part of the renovation program upgraded the electrical systems and domestic hot water distribution system.
Some challenges to overcome included limited access, restrictions on construction staging space as well as unexpected security lock downs which prevented movement inside and outside of the facility. Through careful planning and coordination, LiRo was successful in minimizing disruptions to the facility operation while maintaining the project schedule.
The housing units are each three tiers high and contain between 150 and 300 inmates. Adjacent to each housing unit is a day room area which will be demolished and converted into a pantry, day room, and shower. Ventilation at each housing unit was upgraded.
Peculiar to the construction of these new areas was that the interior floor slabs had settled severely and require removal and replacement with a structural slab system. The system that has been chosen involved the installation of mini-pipe piles filled with concrete with a structural grade slab.
(New York City Department of Design & Construction, $25M, 2004)

Rikers Island - James A. Thomas Center (JATC) Renovations, Project Controls - LiRo provided comprehensive construction management services to the renovation of the James A. Thomas Center on Rikers Island (approximately 240,000 sf). The original construction of this high security facility dates back to 1933 and has a housing capacity of 1,600 inmates. The program for renovation consisted of retrofitting existing spaces within the facility cellblocks, day rooms, showers, pantries, housing areas, mechanical rooms, electrical rooms, and common spaces. Part of the renovation program upgraded the electrical systems and domestic hot water distribution system.
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(New York City Department of Design & Construction, $25M, 2004)

Rikers Island - Restoration of Steam Utility Tunnels, Project Controls - LiRo provided CM services for the restoration and rehabilitation of over 7 miles of steam utility lines (high, medium, and low pressure) and associated conveyance tunnels on Rikers Island. Included in the project were asbestos abatement of over 40,000 lf of piping and reinsulation, replacement of all expansion joints and valve trap assemblies, a new 14-inch high pressure steam line, structural repairs to the tunnels and pipe supports, new concrete mechanical vaults adjacent to the tunnels, and electrical and plumbing upgrades throughout the tunnels including an equipment monitoring system.
The construction work for this project involved the Wicks Law requirements and the coordination of trades in a confined environment under the escort of the Department of Correction. The Steam service provided heat, hot water, and steam for cooking and laundry equipment for 17,000 inmates.
(New York City Department of Design & Construction, $18M, 2004)

Rikers Island - Staff Locker Room Building at EMTC, Queens, NY, Project Controls - LiRo provided Construction Management services under a DDC CM/Build Requirements Contract for a new staff locker room facility at the Eric M. Taylor Center (EMTC) on Rikers Island. The scope of work for this project included a new 18,500 sf pre-engineered structure, an existing security fence relocation, new utility services and site work to accommodate parking for 200 vehicles.
LiRo was actively involved in coordination with consultants to provide preconstruction services regarding cost

estimating, scheduling phasing schemes, and bidding. These activities helped reduce cost, developed time saving measures and phasing plans to assist in multi bid package fast track project.
The building contains locker space for approximately 350 correction officers. In addition, the layout accommodates separate spaces for male and female, officers and captains. A 180-ft long connecting corridor was designed to connect this building to the main jail. Construction of this building required the relocation of approximately 1,000 lf of security fencing and related sensors, alarms, etc. The building was placed on a structural slab bearing on steel pipe piles.
LiRo was responsible for bidding and entering into contracts with construction subcontractors. This was done in accordance with the New York City Procurement Policy Board rules.
(New York City Department of Design & Construction, $7M, 2003)

Rikers Island - CIFM Security Fence Relocation, Assistant Resident Engineer - LiRo provided Construction Management services under a DDC CM/Build Requirements Contract for a new staff locker room facility at the CIFM complex on Rikers Island. The scope of work for this project included a new 18,500 sf pre-engineered structure, an existing security fence relocation, new utility services and site work to accommodate 200 cars.
LiRo was actively involved in coordination with consultants to provide preconstruction services regarding cost estimating, scheduling phasing schemes, and bidding. These activities helped reduce cost, developed time saving measures and phasing plans to assist in multi-bid package fast track project.
LiRo was responsible for bidding and entering into contracts with construction subcontractors. This was done in accordance with the New York City Procurement Policy Board rules.
(New York City Department of Design & Construction, $1.9M, 2002)

Andrew Frangas
OFFICE ENGINEER

Mr. Frangas has over 18 years of profession construction management experience. He is knowledgeable in preparing and managing monthly billing requisitions, auditing contractor requisitions and change orders for client submissions, maintaining billing summaries, contract dollar management, obtaining client approvals for rate increases, contract value changes, meeting with clients to resolve all billing and financial issues, preparation of project financial closeouts and adherence to client contract management guidelines and procedures. Clients include: NYC DDC, NYC DEP, NYC SCA, NYC DOS, Dormitory Authority of State of NY, Nassau County DPW, Suffolk County DPW, NYC Health and Hospitals Corporation

EDUCATION	, Sociology / Business Management, Queens College, 1996
REGISTRATION / CERTIFICATIONS	
YEARS WITH THIS FIRM	20
YEARS WITH OTHER FIRMS	0

United States Postal Service, On-Call Construction Management Services - Mr. Frangas served as Resident Engineer and as an assistant to some Postal Service Contracting Officer Representatives in Hoboken. Mr. Frangas managed the JFK Airmail Facility paint project totaling $1.2 million and has been involved in all aspects of construction management, field inspection, scheduling, project meetings, and contractor/Postal facility coordination.

New York City School Construction Authority - Professional Staffing Services, Assistant Project Manager and Accountant - LiRo was selected to provide supplementary staffing to the New York City School Construction Authority. Assigned personnel responsibilities included the construction management administration and coordination of design and construction for rehabilitation, modernization and new school projects and campuses throughout New York City. Current assignments include providing Project Officers for both new school and school rehabilitation construction in the Bronx, Queens, Brooklyn and Manhattan. (NYSCSA, $29M, On-going)

FDNY Emergency Generators, Project Controls - This project consisted of emergency generator installation, start-up and testing at over fifty FDNY facilities. LiRo was responsible for design services including conducting predesign investigations to determine the optimum location for generator installation. Major concerns included determining site voltage loads, noise and venting control. Based on the results of predesign investigation, the generators were either installed in firehouse basements or outside yards. Indoor locations required the design of piping systems and day tanks installation for automatic fueling from the existing firehouse motor fuel tank.

LiRo visited each site and met with FDNY personnel to plan the location of the generators and review the construction impact to the facility. LiRo provided construction services for all aspects of the program including the development of bidder qualifications, shop drawing review, technical inspection, change orders, claims and closeouts.

During this project LiRo was responsible for maintaining quality control of contractor installations consistent with design parameters and client agency guidelines, enforcement of on-site health and safety plans, coordination with city inspectors, and interface with city employees working at the sites.

Coordination and scheduling of construction activities were carefully monitored to ensure efficient installation and minimal impact on the facilities.

Project Highlights:Prequalification of contractors Design and design review Bidding/Issue contracts Plan filing with NYCDOB/FDNY Inspection Startup and testing Coordination with fifty firehouses Construction at active FDNY facility without interfering with ongoing operations Construction Management of multiple project sites (New York City Department of Design and Construction, $2.3M, 2006)

Remediation at 60 Sites for the NYCDDC, Soil and Groundwater Remediation - Inspection for the construction of remediation systems, which included the installation of ground water and soil vapor extraction wells that are piped through a series of excavation trenches to multi-phase, soil vapor or pump and treat systems. The multi-phase systems were inspected for the proper installation of liquid ring pumps, phase separators, oil water separators, carbon filters, air strippers, transfer pumps, blowers and a host of sensors connected to a remote communication device for system monitoring. Inspection of bioremediation installations included geoprobe borings and the injection of a bioslurry with oxygen releasing compounds or a bio mix with active hydrocarbon digesting bacteria. Inspection of the excavation soils for disposal followed by spraying a bioslurry before backfilling. (NYCDDC, $23M, 1998-2002)

NYC Petroleum Storage Tank Project - This project included the closure of gasoline underground storage tanks (USTs), the upgrade of aboveground diesel tanks and the installation of replacement USTs with tanks varying in size from 275 gallons to 4000 gallons. These sites had all involved the installation of dispensing systems and electromechanical tank gauging systems.

During this project LiRo was responsible for maintaining quality control of contractor installations, enforcement of onsite health and safety plans, coordination with city inspectors, and interface with city employees working at the sites. Some of the duties he performed are as follows:

- Supervised field operations with Contractor to facilitate contract specifications.
- Quality control supervision involving tank work.
- Enforcement of health and safety regulations at construction sites.
- Maintaining all reports pertaining to projects, such as daily reports, progress reports and logs.Maintained record documents of project quantities installed and correlate with contractor payments

George Koehler
OFFICE ENGINEER

Project Experience includes:

EDUCATION	B.S., Political Science, Brooklyn College, 1976
REGISTRATION / CERTIFICATIONS	
YEARS WITH THIS FIRM	5
YEARS WITH OTHER FIRMS	29

CM/Build Requirements Contract for NYC Housing Authority, Queensbridge Houses Community Center - Office Engineer - Under this contract, LiRo performed work on a task order basis. We were in the design or construction phases of renovating and/or constructing community centers and several other renovation projects throughout New York City. These properties all required that LiRo perform pre-construction and construction phase services. (NYCHA, $5M)

New York City School Construction Authority - Emergency Response Management and Coordination Program, New York City - Under this contract LiRo managed and coordinated responses to emergencies, on the basis of a telephone call at any time during a twenty-four hour period and on any day Monday through Sunday. LiRo immediately mobilized trades, people or firms and materials for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public school in the five boroughs of New York City. Some of the work was performed in occupied schools. Accordingly, LiRo used its best efforts to insure that all such work was performed in a safe and secure manner with minimum disruption to students and school personnel.

LiRo's scope of work was extensive, varied widely and included the expedited renovation and construction a new $18M, 55,000 sf high school within 90 days. Our categories of work, services, trades or equipment to be provided on an emergency basis include the design, administration, management and coordination of the work; development of construction estimates, solicitation of bids in accordance with Authority requirements and the law; providing general conditions including but not limited to testing and controlled inspections; remediation of hazardous materials; construction and demolition of the work in accordance with contract documents issued by the Authority.

LiRo was also required to supplement the manpower of general contractors or takeover the general contractor's work on an Authority project. In connection with such direction, LiRo was expected to provide the Authority with an assessment, on an expedited basis, provide the status of the work in place, and the resources required to complete the work within the period specified by the contract.(6/2005 - 6/07) (NYCSCA, $108.7M)

Del Architects + Planners, P.C. - Director of Administration - Was the Business Manager, Personnel Administrator and Facility Manager for a twenty-five employee architectural firm. Reported to C.O.O. of parent engineering firm. Duties included supervision of secretarial/support staff, administration of benefits program and recruitment for technical and support positions. Responsible for lease negotiations and purchasing. Reporting to C.F.O. was responsible for generating DDC, DASNY, State and City agencies and private client invoices. Payroll, budgeting, AP, AR, and financial reporting utilizing SEMA4 software. Assisted with marketing research and proposal preparation. (2000-2003)

Castro-Blanco, Piscioneri & Associates - Office Manager - Personnel Manager and Facilities Manager of a fifty employee architectural firm. Duties included overseeing all areas of the operation of the office including secretarial staff, plan desk, messengers and cleaning staff. Responsible for negotiation and administration of benefits programs, leases, equipment, etc. Handled recruitment of technical and support staff. Oversaw all purchasing, space planning and office maintenance. Assisted CFO with payroll, budgeting, accounts payable, accounts receivable and financial projection reports. (1985-2000)

Columbia University, Health Science Division - Consultant/Office Manager - Professional services for the department of Dermatology and Institute of Nutrition. Financial liaisons with internal and external auditors for

both school and hospital. Supervised staff in system operations for billing and collection. Initiated conversion of patient billing record keeping to computer operation for two outpatient offices, inpatient service, ambulatory clinic, and diagnostic laboratory for total of 50,000 patient encounters per annum. Maintained 25 departmental accounts and donor gift records. Selected computer vendor service. Manager for an eight-physician dermatology and photo treatment outpatient facility. (1981-1985)

Columbia University, Health Science Division - Personnel Coordinator - Handled recruitment, benefits administration, compensation and personnel information systems. Other duties included interviewing, drafting job descriptions, counseling, orientation of new employees and processing insurance. (1978-1981)

Joseph Massa
FINANCIAL ADMINISTRATOR

EDUCATION	B.S., Accounting, C.W. Post, 1983
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training NYC DOB- Certificate of Training, NY
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	0

Mr. Massa has been responsible for the seamless execution of managing Pre-construction, Construction and Close-out phases of construction, Change order review and negotiation, the contractor prequalification process, Tier III subcontractor approval and monthly reporting submissions, contract preparation, Task Order preparation, Coordinating contractual requirements associated with contractors for all NYCHA projects, implementing NYCHA's Primavera P3 e/c scheduling system, change order's tracking and implementation, sub-consultant bid solicitation for Controlled Inspections and Air Monitoring, reviewing and preparing Monthly Equal Opportunity Reports, Expedition data entry, NYCHA Apprenticeship Program updates and administration, Vendex review and submittal, 90 Day Vendor Name Change updates, Contractor qualification updates, MBE/WBE/SBE Demographic Reports.

As an Assistant Project Manager, Mr. Massa has also written, negotiated and administered subcontract agreements. More specifically he is responsible for the development and implementation of the procedures for contractor pre-qualification and selection, competitive bidding, MBE, WBE and LBE participation programs and managing contract compliance throughout the project.

CM/Build Requirements Contract for NYC Housing Authority, Assistant Project Manager- Mr. Massa's responsibilities include managing the contractor prequalification process for NYCHA, over-seeing estimates, constructability review and schedule, Bid and Award, change order review and negotiation, preparing budgets, contracts and schedule management, REP coordination, abatement coordination, construction oversight and closeout.

Under this contract, LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of roofing facade repair projects, boiler room upgrades and electrical system upgrades throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services. LiRo is responsible for pre-qualifying prime contractors, bid administration for the projects and ultimately entering into contract with the lowest responsible prime contractor. (NYCHA, $250M, 2005-2009) Ocean Bay Houses, 2004 to Present Masonry Restoration, Installation of new stair towers, Day Care and Senior Center expansions, roof replacements and renovation of 64 E-Line apartments. ($70M)

Edenwald Houses, Steam Line replacements and bathroom renovations in 1900 apartments. ($45M)

LaGuardia Houses, Roof Replacement and masonry restorations. ($6M)

Straus Houses, Roof Replacement and masonry restorations. ($8M)

Ocean Hill Houses, Roof Replacement and masonry restorations. ($5M)

Claremont Houses, Masonry repairs and boiler replacements. ($6M)

Tapscott Houses, Roof Replacements. ($7M)
1162 Washington Avenue CC, 2005 to Present- Community Center Renovation, Bid preparation and review, contract preparation and review, coordination pre-start meeting, coordinate P3 e/c schedule, solicited controlled inspection bid, Tier III subcontractor approval, assisted in change order processing. (NYCHA, $540K)

Betances Community Center, 2005 to Present- Community Center Renovation/Expansion, Bid preparation and review, contract preparation and review, coordination pre-start meeting, coordinate P3 e/c schedule, solicited controlled inspection bid, Tier III subcontractor approval, assisted in change order processing. (NYCHA, $11MK)

Queensbridge Community Center, 2005 to Present- Community Center Renovation, Bid preparation and review, contract preparation and review, coordination pre-start meeting, coordinate P3 e/c schedule, solicited controlled inspection and air monitoring bid, Tier III subcontractor approval, assisted in change order processing. (NYCHA, $4M)

Marlboro Houses, 2005 to Present- Community Center Renovation, Bid preparation and review, contract preparation and review, coordination pre-start meeting, coordinate P3 e/c schedule, solicited controlled inspection bid, Tier III subcontractor approval, assisted in change order processing. (NYCHA, $4.5M)

Bayview Houses CC, 2005 to Present- Bid preparation and review, coordination pre-start meeting.

Linden Houses CC, 2005 to Present- Bid preparation and review, contract preparation. (NYCHA, $14M)

Randolph Houses Rehabilitation, 2005 to Present- Bid preparation and review, contract preparation. (NYCHA, $24M)

Baruch Houses CC, 2005 to Present- Community Center Renovation, Bid preparation and review, contract preparation and review, coordination pre-start meeting, coordinate P3 e/c schedule, Tier III subcontractor approval. (NYCHA, $1M)

Edenwald Houses CC, 2005 to Present- Community Center Renovation, Bid preparation and review, contract preparation and review, coordination pre-start meeting, coordinate P3 e/c schedule, Tier III subcontractor approval. (NYCHA, $1.2M)

Ocean BayHope VI, 2004 to Present- Exterior and Lobby work, Electrical Upgrade, Daycare & Senior Centre renovation and expansion, coordination pre-start meeting, coordinate P3 e/c schedule, Tier III subcontractor approval, solicited controlled inspection and air monitoring bid, Task Order review and preparation, prepared reports for NYCHA submission to HUD, assisted in change order processing, Community/Resident meetings, coordinated with NYCHA Poetas/Schedules of Values/Oracle values. (NYCHA, $60M)

Albany Houses, Electrical upgrade, 2006 to Present- Bid preparation and review. (NYCHA, $6M)

DASNY
Fiterman Hall, 2005 to Present- Deconstruction of Fiterman Hall, Contractor Prequalification, and review bids. (DASNY $20M)

HHC Emergency Power Generators, New York, NY, Assistant Project Manager - The scope of work for this contract consisted of demolition and reconstruction of outdated Emergency Power Systems at six hospital trauma centers and various other smaller hospital facilities located in the New York City area. The contract required LiRo to prepare cost estimates for the various types of work in the projects. Typical elements of work for these projects included: Emergency Generators, paralleling switchgear, remote radiators for generator cooling systems, power distribution panels, underground fuel oil storage systems and conduit & wire distribution to all associated equipment. (DASNY, $59M)

DDC
GRVC-832 Cell Addition, 2005 to Present- Contractor Prequalification. (DDC/DOC $125M)

School Construction Authority, 2005 to Present- Contractor prequalification, contract preparation and review. Managed Special SCA audit of Projects.

NYCEDCYankee Stadium City Work Contract, Assistant Project Manager- Mr. Massa's responsibilities include managing the contractor prequalification process, preparing budget, contract and schedule management, close-out and construction start up coordination with LiRo staff and contractors. ($140M)

ParkTerrace Gardens Window Replacement, Assistant Project Manager- LiRo Program and Construction Management was retained in 2005 to provide full client Construction Management services for the replacement of over 3000 windows for Park Terrace Gardens, a residential coop in upper Manhattan. Preconstruction services included design and shop drawing review, asbestos and lead investigations, and monitoring of window mock-up installation. LiRo provided ongoing schedule and budget information and coordinated the final installation plan that allowed tenants safe, continued occupancy throughout the process. The project budget was approximately $2,500,000, with an additional $750,000 for asbestos removal. Completed in September of 2006. (EMG Corporation, $3.25M, 2006)

Prior experience includes:

Vivendi Universal Games, Inc., National Account Manager - Responsibilities included presentation and sales of new titles, development of marketing and advertising plans, and control of inventory. Accounts included Mecca Electronics and AllianceCorner, two leading distributors in the New York Tri-State area.

- Surpassed total 2003 year end sales figure in first half of 2004 for AllianceCorner.
- Increased first half sales by 20% for Mecca Electronics.
- Consistently sold in back list titles and closeouts.

Co-Sales Manager and Retail Sales Representative

- Organized and managed East Coast Retail Team.
- Trained new sales associates in the field to distribute, merchandise, shelve and check pricing on VUG titles at retail.
- Acted as key conduit between Corporate Management to Retail Sales Team.
- Implemented a National Account Manager Communication report to educate Corporate on field data and compliance issues and to advise the retail team on all corporate initiatives.
- Created a "Why to Buy" report on all new title releases which generated concise consumer feedback that was delivered to retail store managers and employees.

Retail Sales Representative

- Won National Retail Sales contest two years in a row. (2003 & 2004)
- Distributed, shelved, merchandised and priced of all VUG titles in retail stores.
- Conducted product knowledge sessions to in store employees and at district manager level.
- Spearheaded the development of POP/POS displays in retail stores.
- Managed in-store presence for promotions and event marketing for new movie tie-in releases.
- Worked closely with Regional managers and District managers to enhance retailer relationships.

Robert Bartholomew Ltd. / The Sands PointGeneral Manager and National Sales Director - Oversaw all aspects of management, sales, manufacturing and product development for wholesale and retail businesses.

- Management Responsibilities - Identified volume generating and cost efficient business opportunities. Managed 20 employees including office associates and factory workers. Trained sales staff and bookkeepers.

- Sales Responsibilities - One of two partners responsible for all corporate revenue and retail sales.

- Manufacturing and Product Development Responsibilities - Oversaw production of 10,000 handcrafted pieces a year. Inspired jewelry design based on trend forecasting and customer demand while determining pricing structure. Imported stones, pearls and diamonds after spearheading negotiation process with vendors. Purchased all supplies for production.

National Sales Manager/Treasurer - Managed sales team of four, account base of 1,000 and revenue of $2.5 million. Shifted daily focus to top 75 accounts that generated over 70% of revenue. Identified and solicited new customers. Continued general accounting management.

Regional Sales Manager/Treasurer - Expanded personal existing account base to 150 by adding chain and department stores. Identified and solicited new customers. Continued management of general accounting.

Sales Associate/Treasurer - Converted dormant customers into revenue generating accounts. Serviced and grew existing specialty store accounts. Identified and solicited new customers. Managed payroll, accounts receivables, accounts payable and all financial statements.

INSPECTORS

James Albergo, N-II
INSPECTOR

Mr. Albergo has over 20 years of construction experience. Since 1999, Mr. Albergo has provided construction inspection services on a wide variety of projects for MNR, the NYCEDC, the NYSDOT, and the NYCDDC. Prior to joining LiRo, Mr. Albergo worked as a union carpenter on a variety of building projects. He is a meticulous record keeper with excellent communication skills. Representative projects include:

EDUCATION	
REGISTRATION / CERTIFICATIONS	NICET-II Railway Worker Protection Training
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	10

Reactivation of the Staten Island Railroad, NYC EDC, Inspector - The project entailed the re-construction of Arlington Rail Yard and Cut-East, replacement of track along the seven-mile North Line and Travis Branch and construction of a new wye connector between the North Line and the Travis Branch. The Travis Branch was extended 6,500 feet to the south. The branch now provides a connection to the new Department of Sanitation transfer facility at Fresh Kills. A major component of this project was the replacement of two existing timber trestles with new bridges. In addition, a new precast concrete, twin arch culvert was installed near the project's southern terminus. Three existing bridges required extensive underpinning due to the installation of new retaining walls. These structures, as well as the structural underpinning, was the project's most challenging components and required the most expertise.
LiRo's responsibilities consisted of the following activities:

- Construction Supervision and Inspection
- Coordinated USCG and NYS DEC permits
- Monitoring the contractors' activities
- Contract Document Review to identify long lead procurement items and special conditions
- Expediting and tracking of shop drawing submittals
- Providing project controls support to monitor a baseline schedule and construction progress
- Develop coordinated and maintain work plans for each work element
- (NYC EDC, $40M)

Metro-North Hudson Line Station Rehabilitation and Restoration of Historic Yonkers Station, Construction Inspector - This project was a $70M design/build effort that included complete platform replacements, precast concrete pedestrian bridges, parking improvements, station building improvements and the restoration of historic Yonkers Station. The original high-level platforms, constructed in the 1970's to accommodate new electric cars, had deteriorated to the point where they require replacement. Other areas requiring replacement included canopies, stairways, overpasses, and retaining walls. In addition, all stations must be brought into ADA compliance. LiRo provided Construction Management services at several Metro North Stations including Greystone, Glenwood, Ludlow, Riverdale, Spuyten Duyvil, Marble Hill, University Heights, and Morris Heights. (MTA - Metro-North Railroad, $70M)

QM-80 Exhaust Fan Replacement at the Queens Midtown Tunnel, Inspector - LiRo is providingconstruction management services for the replacement of twenty-three (23) tunnel ventilation exhaust fans in both the Queens Ventilation Building and the Manhattan Ventilation Building. The project includes the relocation of Programmable Motor Protectors and performance of lead/asbestos abatement. It requires meticulous coordination of construction while allowing for 24-hour continuous operation. (MTA-TBTA, $20 M, 2003-Present)

NYSDOT Construction Term Agreement, Inspector- Mr. Albergo served as a Construction Inspector for a broad range of maintenance and reconstruction projects under this term agreement. Typical projects included landscaping, fencing, guide rail installation, and median installation. NYSDOT's evaluation of Mr. Albergo for this assignment characterized him as *"a bright spot. He has a strong desire to learn new construction operations and be actively involved. Jim Albergo completes all assignments on time and is very thorough."* (NYSDOT, $6M)

New York City Department Design & Construction, Remediation of Petroleum Impacted Sites, Design, Construction and Construction Management, Inspector - Mr. Albergo provided construction management representative responsible for all of the activities in the removal and replacement of a Fuel Storage and Dispensing Facility. Project specifics included:

- Excavation and Excavation support
- Removal and Replacement of Underground Tanks
- Sub-grade and Controlled Backfill
- Installation Fuel Control Systems
- Installation of Mechanical Equipment
- Systems Testing
- (NYCDDC, $6M)
- Mr. Albergo's experience in building construction spans 14 years and includes a broad range of public and commercial facilities: courts, hospitals, police facilities, laboratories, and offices. His work has included:
- Building construction
- Building facades
- New interior construction and
- Interior renovations

Cohalan Court Complex, Central Islip, NY - Construction of a $90M courthouse. Interior metal stud framing and dry wall installation, core-board shaft construction.

Suffolk County Police Forensic Laboratory Addition, Veterans Highway - A two-story addition. Metal stud framing, insulation, dry-wall construction. Suspended ceiling construction.

Brookhaven National Laboratory, Laboratory Addition, Brookhaven, NY - Two-story addition. Metal stud framing, insulation, and dry wall construction.

Computer Associates, Islandia, NY - Installation of thermo-fiber insulation throughout building perimeter.

Pilgrim State Hospital, Central Islip, NY - Renovation of an 8-story building including metal stud framing, drywall installation, installation of doors and core-board shaft construction.

Good Samaritan Hospital, MRI Center - Construction of a single-story building including interior and exterior metal stud framing.

Franklin General Hospital Addition, Franklin Square, NY - Building addition includinginterior metal stud framing and dry wall installation.

JFK International Airport, American Airlines Terminal - Heavy gauge metal stud framing around building perimeter. Dry wall construction. Framing of changing room for asbestos abatement workers.

400 Garden City, (Roosevelt Field) - Construction of a new 6-story office building. Focus was on facade construction. Installed prefabricated exterior panels on building exterior. Interior metal stud framing and dry wall installation.

Brookhaven Offices, Medford, NY - Construction of multiple single-story office building. Focus of work was construction of architectural treatments for roofing. Interior metal stud framing and dry wall installation. (NYCDDC, $3M)

Michael D. Byrnes, CIH, CSP

CERTIFIED INDUSTRIAL HYGIENIST/SAFETY PROFESSIONAL

Mr. Byrnes has 25 years' experience in the construction management field with an extensive emphasis on environmental remediation issues. He has extensive experience in asbestos; lead, indoor air quality, and laboratory analysis. As a Certified Safety Professional, Mr. Byrnes specializes in protecting workers, the public, property, and the environment by identifying, evaluating, and controlling hazards. As a Certified Industrial Hygienist, Mr. Byrnes is responsible for the management, planning and staging all aspects of asbestos abatement projects from the initial building survey, through design and preparation of bidding documents and technical specifications, evaluation of bid submittals and contractor selection, monitoring of the abatement project and oversight of the abatement contractor's activities, and post-project close-out.

EDUCATION	B.S., Chemical Engineering, 1984
REGISTRATION / CERTIFICATIONS	OSHA 500 OSHA 510- Occupational Safety & Health Standards, NY OSHA 30 Hour Occupational Safety & Health Training, NY OSHA 10 Hour Occupational Safety & Health Training Certified Safety Professional Certified Safety Professional Hazardous Waste Operations & Emergency Response OSHA - 10 Hours Certificate American Board of Industrial Hygiene Certified Industrial Hygienist NYSDOL Asbestos Inspector, NY OSHA Confined Space Entry Training NYSDOL Asbestos Project Monitor, NY NYSDOL Asbestos Project Designer NYSDOL Asbestos Air Sampling Technician, NY NYSDOL Asbestos Certificate, NY MTA Track Safety Training SSPC C-3 Certified NIOSH 582 Certification NYCDEP Certified Asbestos Investigator, NY NYSDOL Management Planner OSHA 40 Hour HAZWOPER
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	17

Representative projects include:

New York City School Construction Authority, NY – Field Inspector during disinfection of newly installed water piping in association with plumbing alterations, new additions, and new construction for various projects in association a New York City School Construction Authority (NYCSCA) hazardous materials management contract. Duties included: pre-disinfection site visits to determine if necessary interior of exterior piping is installed, and shut off valves are located at transition points between newly installed and existing piping in order to prevent chlorination of existing lines; review of Disinfection Water Quality Testing Plans (DWQTP) to determine compliance with NYCSCA and other applicable standards, codes and recommendations; field oversight of disinfection operations to ensure that approved DWQTP and other applicable codes, standards and recommendations are adhered to, including determination of proper chlorine concentration for disinfection is obtained, proper holding time of disinfectant in piping, and ample flushing following holding time to determine diminution of chlorination levels to less than 1 part per million, as required by applicable codes and NYCSCA standards; and witness sampling for total coliform/E-Coli bacteria, and heterotrophic plate counts (HPC) is performed, not less than 24-hours following ample flushing. Representative disinfection projects included: New Utrecht High School – new addition; PS 234K – new construction, disinfection of newly installed interior piping from service main interior double control valve to fixtures and drinking fountains; PS 265K – new construction, disinfection of two new service mains from exterior box valve to interior of building; PS 13Q (1) – disinfection of newly installed service mains from exterior box valve to interior double control valves; PS 13Q (2) – disinfection of newly installed hot and cold water pipes from service mains interior double control valves to newly installed fixtures. Performed pre-disinfection walk-throughs, to determine if proposed DWQTP and disinfection can proceed, at the following schools: August Martin High School, Queens, new interior piping and fixtures; Mott

Haven Complex, Bronx, new construction of charter school, three high schools, auditorium and gymnasium facilities, including exterior service main connections from street, interior hot and cold water piping and fixtures; Manhattan Academy, Manhattan, new interior hot and cold water piping, and fixtures on 7th floor of leased space for new school at 26 Broadway; Manhattan School of Math, Science and Engineering at the City University of New York, new hot and water piping and fixtures for new science labs, bathrooms and drinking fountains; and walk through and review of DWQTP for East NY Family Academy, new hot and cold water piping associated with kitchen modernization.

Remediation and Disposal of Contaminated Paint – Various Sites – New York City Department of Environmental Protection - LiRo is currently serving as the Construction Manager consultant to the New York City Department of Environmental Protection (NYCDEP) for the remediation and disposal of contaminated paint at various NYCDEP facilities located throughout Westchester County, and the Catskill and Delaware Watersheds. The project involves the removal and disposal of paint contaminated with lead, mercury, and PCBs, from various building and equipment surfaces, and the re-painting of those surfaces required by NYCDEP. LiRo will facilitate coordination of Contractor with NYCDEP personnel, and local authorities at the various facilities.

Pre-construction services consist of reviewing NYCDEP Contract requirements, and assisting NYCDEP is finalizing Contract Technical Specifications. Services also consist of developing Health and Safety Plans (HASP) to address hazards that will be encountered during the paint remediation operations.

Resident engineering services will include reviewing Contractor submittal packages, Contract schedules, coordinating site activities so as to make the least impact on NYCDEP operations and site specific requirements, managing progress meetings, reviewing Contractor payment requisitions, and coordinating with Contractor and NYCDEP for disposal of hazardous materials, during the course of the site work. Services will also include overseeing field supervision, Contractor compliance with Contract Specifications, NYCDEP specific health and safety requirements, applicable regulations, codes and standards.

Decontamination and Deconstruction of Fiterman Hall - Borough of Manhattan Community College, Superintendent - LiRo served as the Construction Manager sub-consultant to Pei Cobb Freed & Partners for the decontamination and demolition phases prior to the rebuilding of Fiterman Hall, Borough of Manhattan Community College (BMCC). Services were provided on an ongoing work session review basis fully coordinated with Pei Cobb Freed personnel and with DASNY and CUNY project managers. This teamwork approach was structured to facilitate coordination amongst the multiple primary stakeholders, to minimize disputes, eliminate potential cost and schedule overruns, and to mitigate change orders, that may otherwise arise during construction.

The project involved extensive New York City inter-agency coordination, particularly with USEPA, NYSDOL, MTA, NYCDEP, NYCDOB, LMCCC, LMDC, and NYCDOT. It also requires continual briefings and dissemination of process and update information to the local Community Board and the public.

LiRo managed design investigations, provided site supervision and managed field contractor operations prior to and during the decontamination and deconstruction work. This included interior and exterior environmental cleaning and removal of all building contents and components. All work was being conducted under special monitoring requirements applicable to the USEPA WTC Recovery Zone, and will occur within the jurisdiction of the USEPA WTC Recovery Program.

Additionally provided were preconstruction services, scheduling, contractor prequalification and bid packaging.

The former Fiterman Hall, 30 West Broadway, was built in 1959 as a 15-story office building with 300,000 square feet. It was donated to the community college in 1993 by the philanthropists Miles and Shirley Fiterman, and was being renovated as an academic center in 2001. The $65 million project was only seven weeks from completion on Sept. 11, 2001, when 7 World Trade Center collapsed across Barclay Street, tearing away whole parts of Fiterman Hall, setting fires inside, and piling up rubble against the façade.

Environmental Abatement and Demolition of Incinerator Buildings, Including Furnaces, Pollution Control Equipment, and Incinerator Stacks - Resident Engineer for the Gansevoort, Greenpoint, Southwest

Brooklyn, Hamilton Avenue, and South Shore Incinerator projects for the New York City Department of Sanitation (NYSDOS). Performed inspection services overseeing the performance of the general and sub-contractor's activities; liaison with NYCDOS as to progress work schedules. Oversight during the environmental phase of the work consisted of ensuring Contractor's compliance with local, state and federal environmental statutes; proper segregation, characterization, and disposal of wastes generated during environmental cleanup activities (e.g., asbestos, hazardous, demolition debris, etc.); and ensuring proper abatement techniques and safe work practices were utilized to provide worker safety and protection to the surrounding environment (air monitoring, containment barriers, wet abatement methods, respiratory and other personal protective equipment, and fall protection). Tracked the waste generated during the environmental phases of the work from point of containment at the site to receipt of completed waste manifest form from the landfill accepting the waste, and assisted NYCDOS in the preparation of quarterly hazardous waste activity reports to New York State.

The Greenpoint, Gansevoort, and South Shore Incinerator projects (Capital Project Number S132/336) consisted of the environmental abatement and dismantlement of four expansion chambers and two 200-foot high incinerator stacks. The South Shore Incinerator project additionally included the environmental cleanup and dismantlement of one electrostatic precipitator. The Greenpoint Incinerator project also included the environmental cleanup and dismantlement of four gas conditioning towers, and four electrostatic precipitators.

The Southwest Brooklyn Incinerator (Capital Project Number S216/399) consisted of the environmental abatement and cleanup of the entire incinerator building including four gas conditioning towers, and four electrostatic precipitators, four furnaces, four expansion chambers, and two 200-foot high incinerator stacks.

NYCDOS Capital Project Number S216/400 consisted of the environmental cleanup and abatement phase of the entire interior of the Greenpoint Avenue Incinerator building and the entirety of the Hamilton Avenue Incinerator building, which included four expansion chambers and two 200-foot high incinerator stacks.

MTA/NYCT Asbestos and Environmental Consulting Services, NY - Project Manager for several consulting contracts with MTA New York City Transit totaling over $4,500,000. The Contract involved the coordination of site facility surveys and asbestos abatement design specifications and preparation of New York State Department of Labor site specific variances (SSV). The Contract also involved the management of project monitoring services for the asbestos abatement phase of the work, including evaluation of abatement contractor's work practices to ensure compliance with applicable federal, state and local regulations and standards, and the Contract documents. Prepared final reports, which included evaluation of post-abatement submittals and payment applications.

Indoor Air Quality and Industrial Hygiene Survey, Confidential Client, New York, NY - Performed an in-depth indoor air quality investigation on ground level office space in response to carbon monoxide detectors being alarmed, and employee complaints of headaches, and difficulty breathing. Evaluated the HVAC system serving the ground floor office space, interviewed employees, and collected data for temperature, relative humidity and CO2 levels. During the study, discovered elevated carbon dioxide levels, and possible infiltration of carbon monoxide into the space. The HVAC system was also observed to be supplying an inadequate amount of fresh air for the current occupancy. Issued a report recommending air handling system should be altered to allow adequate fresh air to be supplied to the space. The system was one that would allow fresh air to be ducted into a mixing chamber, where the proportion of fresh air taken in can be controlled. It was also recommended that the air distribution should be continuous, ensuring the introduction of an adequate and continuous supply of fresh air is introduced to dilute any contaminants, which may be entrained into, or originating within the spaces.

NYCDOS Demolition of Incinerator, New York, NY - Prepared a site-specific health and safety plan (HASP) to be utilized by demolition contractor during the environmental cleanup and demolition of the former 57th Street New York City Department of Sanitation Incinerator and Garage Buildings. The HASP addressed site-specific worker safety and environmental hazards and concerns that will be encountered during the demolition. Specific concerns addressed by the HASP included: hazard communication; respiratory protection; confined space entry; cleaning metals and asbestos-contaminated ash and debris from incinerator components, furnaces, ducts and flues; removal of asbestos-containing materials; removal of transformers and hydraulic equipment

containing PCB oils; removal of lead-based paint; removal of underground storage tanks and related soil cleanup; dust and noise control; proper use of protective equipment; and emergency response and community planning.

Federal Reserve Bank of New York (FRBNY), New York, NY - Temporary full-time assignment to the FRBNY (5/96-2/97) and developed the FRBNY asbestos Operations and Maintenance (O&M) program, awareness training for building staff, developed work permit system for renovations and alterations. Developed facility-wide ACM database to be used by Building Services personnel for easy access to locations, quantities and conditions of ACM for compliance with OSHA's Hazard Communications Standards. Following full time assignment to FRBNY, managed all aspects of asbestos abatement projects in conjunction with FRBNY's building modernization program. Coordinated building surveys and report for pre-design planning. Operated in concert with design Architect/Engineer and developed asbestos abatement designs and specifications as part of general bidding documents. Managed project monitoring for asbestos abatement phase of the work, including evaluation of abatement contractor submittals, on-site supervision and air monitoring, evaluation of post-abatement submittals, and payment application.

Laboratory Director, WKP Laboratories, Inc. - Supervised day to day operations for the laboratory, developed laboratory QA/QC program for lead, established NYS DOH ELAP laboratory accreditation for lead. Developed Standard Operating Procedures (SOPs) for compliance with laboratory health and safety regulations, implemented employee training and medical surveillance, and respirator fit test programs.

Asbestos Certification Course Instructor, New York University School of Continuing Education, New York, NY - New York State Department of Health Certified Instructor of asbestos certification courses NYS Department of Labor (NYSDOL) and USEPA AHERA certification programs. Prepared training manuals, visual aids, and course examinations for all nine NYSDOL asbestos certification categories. Provided course lectures and hands-on instructions for both the initial and refresher asbestos certification courses.

New York City School Construction Authority, NY - Project Manager for asbestos abatement projects for a New York City School Construction Authority (NYCSCA) contract. Interacted and coordinated site activities with NYCSCA, the abatement contractor, and governing regulatory agencies. Managed the asbestos abatement project monitoring, including evaluation of abatement contractor's work practices to ensure compliance with applicable federal, state and local regulations and standards, and the Contract documents and the preparation of final reports.

Fordham University, Lincoln Center Campus, New York, NY - Performed an in-depth indoor air quality investigation on the ninth floor administrative offices in response to Building Manager's request after receiving employee complaints. Evaluated the building's HVAC system, interviewed workers on the floor as to the nature if the complaints. The nature of the complaints was temperature related, and the floor was serviced by a dual duct system which fed into mixing boxes. Each office had a thermostat, which controlled a manifold in a mixing box. It was discovered that the manifold was not responding to the thermostatic controls, and in approximately 25% of the offices, the wall-mounted thermostats were blocked by office furniture.

AT&T, Asbestos Consulting Services, NY - Project Manager for various projects at various AT&T owned and operated throughout the New York Tri-State region. The services involved the design and management of asbestos abatement projects, from initial building surveys to on-site construction management of projects including preparation of plans and specifications, bid analysis, contract administration, estimates, operation and maintenance programs, and developing emergency response actions and asbestos management plans.

Bronx Lebanon Hospital Center (BLHC), Bronx, NY - Coordinated the BLHC's asbestos Operations and Maintenance (O&M) program with the BLHC's Safety Director. Coordination activities included the developing a work permit system for renovations and alterations, performing periodic asbestos air monitoring to evaluate airborne fiber levels in mechanical spaces of the BLHC where asbestos-containing materials were known to be present. In addition, coordinated building surveys and reports, developed asbestos abatement designs and specifications, and managed project monitoring for asbestos abatement phase of the work, including evaluation of abatement contractor submittals, on-site supervision and air monitoring, evaluation of post-abatement submittals, and payment application.

Gerard Calpin
VICE PRESIDENT

Mr. Calpin has over 25 years of experience in the protective coatings and corrosion control field. This experience includes inspection, failure analysis, condition surveys, and coating related work in numerous industries. He has been responsible for oversight and inspection of lead paint removal and has provided lead awareness training to inspection personnel. His work has involved a wide range of facilities, including bridges; nuclear, fossil fuel, and cogeneration power plants; petrochemical plants; and wastewater facilities. In addition, Mr. Calpin has related experience in cathodic protection testing, surveys and pipeline, tanks, and equipment design. He is a NACE Certified Coating Inspector, an ANSI Level III Nuclear Coating Inspector, and a certified SSPC Supervisor/ Competent Person for Deleading of Industrial Structures. Mr. Calpin's relevant project experience includes:

EDUCATION	Civil Engineering Courses, Pennsylvania State University, 0
REGISTRATION / CERTIFICATIONS	SSPC-C3 Supervisor/ Competent Person Work Shop Instructor SSPC C3 - Supervisor/Competent Person for Deleading of Indus, PA NACE Certified Inspector Member for ASTM D33 Committee for Coating Related Standards FHWA/ NHI Bridge Painting Materials & Inspection Instructor ASTM - Nuclear Coating Specialist ANSI Level III Certified - Nuclear Power Plants
YEARS WITH THIS FIRM	1
YEARS WITH OTHER FIRMS	25

Protective Coating of the Queensboro Bridge, New York: Project Manager for resident engineering inspection and environmental monitoring of the Queensboro Bridge Project. This bridge painting project was likely the largest of its kind in the Country at $170 Million. Work included review and monitoring of contractor operations, including cleaning, surface preparation, and application of protective coating. Work also included testing and monitoring of hazardous waste evaluation, containment, and disposal procedures. Client: NYCDOT; 2004-2009 Protective Coating of the Triboro Bridge, New York: Mr. Calpin was the Project Manager on the TBM-367 project, the repainting of the Triboro Bridge Lift Span, a $25 Million construction project. Work included surface preparation, coating application, MPT, containment and safety compliance. Client: MTA Bridges & Tunnels; 2006-2009 Protective Coating of Tobin Memorial Bridge, Boston: Project Manager for four Phases for the protective coating services on the Tobin Bridge. The project provided for the preparation of contract documents, construction support serrvices and the Resident Engineering and Inspection Services. Work involved abrasive blast cleaning and coating of 4 phases with a total construction cost of approximately $25 Million. Client: MA Port Authority; 2006 - 2009 Tobin Memorial Bridge, Boston, MA: Senior Project Manager for condition assessment and development of project specifications and bid documents for the Everett Street on-ramp. Work also included resident engineering and inspection, ambient air monitoring and engineering support during construction. Client: MA Port Authority (Massport); 1999 Protective Coating and Structural Steel Repairs for the Henry Hudson Bridge, New York: Project Manager for resident engineering and inspection and environmental services for the $25 million lead paint removal and repainting of the Henry Hudson Bridge. Work included structural steel repairs and the monitoring of all work associated with abrasive blasting and repainting. Work also involved overseeing structural steel repairs, including identifying any members requiring additional repair after blasting. Client: MTA Bridges and Tunnels; 2002-2004 Protective Coating of the Triboro Bridge, New York: Project Manager for resident engineering and inspection and environmental services for the $18 million lead paint removal and repainting of the Triboro Bridge under TBM-350. Work included abrasive blasting and recoating of all existing elements while protecting newly installed components associated with the redecking work. Client: MTA Bridges and Tunnels; 2004-2005 _ Protective Coating of the Washington and Pulaski Bridges, New York: Project Manager for resident engineering inspection and environmental monitoring of the $13 million protective coating of the Washington and Pulaski bridges. Work included review and monitoring of contractor preparations

and operations, including cleaning, surface preparation, and application of protective coating.. Client: NYCDOT; 2001-2003. Protective Coating of East 149th Street/ Woodlawn Avenue Bridges over Metro North and Broadway Bridge over Harlem River, New York: Project Manager for resident engineering inspection and environmental monitoring services for the $8 million protective coating of three New York City bridges. The 149th Street and Woodlawn bridges required hand and power tool cleaning and overcoating. Work included review and monitoring of contractor preparations and operations, including cleaning, surface preparation, and application of protective coating. Also provided testing and monitoring of hazardous waste evaluation, containment, and disposal procedures. Work on the Broadway Bridge included abrasive blasting to remove lead paint and recoating with a conventional zinc/ epoxy/ urethane system. Areas adjacent to the active MTA rail line require careful coordination so as not to interfere with train service. Client: NYCDOT; 2001-2002 George Washington Bridge, New York, NY: Project Manager for the $10 million repainting of the lower portion of the New York Tower. Work involved the removal of lead-based paint by abrasive blasting and recoating with zinc/epoxy/urethane system. Client: Port Authority of NY/ NJ; 1996 Outerbridge Crossing, Staten Island, NY: Project Manager for the $15 million repainting of the main truss. Work involved removal of lead-based paint by abrasive blasting and recoating with zinc/ epoxy urethane system. Client: Port Authority of NY/ NJ; 1996-1997 Goethals Bridge, Staten Island, NY: Project Manager for the $14 million repainting of structural steel on the main through truss. Work involved the removal of lead-based paint by abrasive blasting and recoating with zinc/ epoxy urethane system. Client: Port Authority of NY/ NJ; 1998-1999 Manhattan Bridge, Brooklyn and Manhattan, NY: Project Manager for the $60 million inspection of the repainting of the south side of the structure. Work involved removal of lead-based paint by abrasive blasting and recoating with a moisture cured urethane system. Client: NYCDOT; 1999-2000 Castleton on Hudson Bridge, Albany, NY: Project Manager for resident engineering and inspection of the $14 million repainting of the main truss. Work involved removal of lead-based paint by abrasive blasting and recoating with zinc/ epoxy urethane system. Client: NYS Thruway Authority; 1997-1999 Catskill Bridge, Leeds, NY: Project Manager for resident engineering and inspection of the $7 million repainting of the entire structure. Work involved the removal of lead-based paint by abrasive blasting and recoating with zinc/ epoxy urethane system. Client: NYS Thruway Authority; 1999 Katerskill Bridge, Leeds, NY: Project Manager for resident engineering and inspection of the $8 million repainting of the entire structure. Work involved removal of lead-based paint by abrasive blasting and recoating with zinc/ epoxy urethane system. Client: NYS Thruway Authority; 1999 Tappan Zee Bridge, Tarrytown, NY: Project Manager/ Technical Advisor for three separate painting contracts totaling $30 million over a five year period. Work involved removal of lead-based paint by abrasive blasting and recoating. Performed work under a subconsultant agreement. Client: NYS Thruway Authority; 1994-1998 Verrazano Narrows, Bronx Whitestone, Triboro, Throgs Neck, and Henry Hudson Bridges, NY: Resident Engineer for the $18 million Contract GFM-338, which included maintenance painting and complete recoating of all TBTA bridge structures. Also responsible for material testing for other TBTA projects (BW-10 and VN-29) on the Verrazano Narrows and Bronx Whitestone bridges. Client: MTA Bridges and Tunnels; 1994-1995 18 Bridges in the Buffalo Division of the NYS Thruway Authority, NY: Project Manager/ Technical Advisor for $15 million inspection of the repainting of 18 bridges in the Buffalo region. Work involved removal of lead-based paint by power tool cleaning and abrasive blasting and recoating with various paint systems. Client: NYS Thruway Authority; Construction cost: $15 million; 1998-1999

Richard Calvert

RESIDENT ENGINEER/SENIOR INSPECTOR

Mr. Calvert has worked on many public works projects responsible for contract management and administration, inspection, QA/QC procedures and enforcement, in conformance with established procedures and policies. He has been responsible for preparation, review and approval of contractor payment breakdowns, monthly requisitions, change orders, progress reports and job correspondence.

EDUCATION	A.A.S., Union College, 1971 , Union County Technical Institute, 1975 , Lincoln AC & Refrigeration, 0
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Construction & Safety Training
YEARS WITH THIS FIRM	24
YEARS WITH OTHER FIRMS	4

Yankee Stadium Redevelopment, Bronx, New York, Resident Engineer / Senior Inspector - LiRo is responsible for providing construction management services for the design and construction work that is required of the City of New York as part of the Yankee Stadium Agreement. To date LiRo has performed:

1) Demolition of several building at the Bronx Terminal Market
2) Removal of contaminated soils at the Bronx Terminal Market site
3) Installation of turf baseball fields and additional recreational facilities at two sites in the adjacent neighborhood
4) Restoration of retaining walls along 161st Street including baseball logos in time for the April 2009 baseball season
5) New sidewalk bridge for McCombs Dam approach
6) Streetscape improvements

LiRo is presently working on the installation of new water mains for Yankee Stadium and future sewer lines. At the Bronx Terminal Market, we are in the process of restoring the waterfront bulkhead along the site in preparation of the construction of new tennis courts and park which will include the renovation of an historic on-site building.

LiRo subcontracts with construction subcontractors, design consultants and vendors as needed to complete the construction work required by the contract. LiRo is assisting the NYCEDC during the design phase, by value engineering the work, as well as estimating the construction cost at each design phase.

LiRo coordinates and sequences the work to meet the contract milestones using P3 for scheduling and Prolog for database. LiRo developed a job specific Safety, Quality and Procedure Manuals to ensure that subcontractors work in a safe environment and perform the work in accordance to the contract document. (NYCEDC, $90M)

FDNY Engine 201, New York, NY, Inspector - A CM/Build Contract which includes the demolition of an existing single bay firehouse and construction of a new steel framed, 12,000 sf masonry firehouse. Due to community requirements a swing space was prepared which include all FDNY operational requirements prior to the demolition of this firehouse. This site is located on a main Brooklyn thoroughfare and is adjacent to a MTA subway tunnel. The demolition, foundation and structural work will all be monitored so as to not impact the MTA and the adjoining buildings. The project will include all required FDNY systems. (NYCDDC, $10M, 2007)

U.S. Postal Service On-Call Construction Management Services, Site Coordinator. LiRo provided construction management services to the U.S. Postal Service under an indefinite quantity contract. The contract demanded both construction management and engineering/architectural expertise, with complete CADD

capabilities. The work, which was performed for the New York Facilities Service Office, encompassed Post Office construction projects in the New York area. LiRo's specific responsibilities included:

Design Consultation, Coordination, Estimating, Coordination Drawings
Project Management, Coordination, Scheduling and Progress Surveillance
Construction Planning and Cost Estimating
Surveillance of Quality Control and Inspection of Construction
Contract Document Interpretation
Administration of Project Documents and Records
Claims Analysis and Defense

(U.S. Postal Service, $59M, 2005)

Manhattan 5 Garage and Repair Shop- LiRo provided construction management services for the construction of a new garage and repair shop located adjacent to Gansevoort Incinerator. The new structure is a two-story building with approximately 15,000 sf of usable space. The project has four prime contractors and contains six maintenance bays for vehicle repair (4) and for building maintenance (2). Also included are offices and storage space for operative personnel, locker rooms, lunch rooms and toilet facilities. Building systems include a fluid dispensing system, security montoring systems, underground drainage/oil separators, underground storage tanks (UST) and public address. Mr. Calvert was responsible for the coordination of trades, logistics, change orders, and monthly meetings. (NYCDOS, $6M, 2005)

Brooklyn House of Detention for Men, Additions and Renovations - Construction administration of project including a 4-story addition to the existing detention facility (44,000 sf,) renovation of the existing medical and dental facilities, and modifications to the administration offices. (NYCDDC, $19M, 2004)

Rikers Island Adolescent Reception Center - Facade reconstruction, including administration and coordination of multi-prime contracts. (NYC DDC, $18.4M, 1999)

Reconstruction P.S. 98, Manhattan, NYC School Construction Authority - Renovation of classrooms, gymnasiums, auditorium, cafeteria and kitchen facilities as well as extensive exterior masonry, roofing and site work improvements. (NYCSCA, $15M, 1998)

Nassau Community College Expansion - Nassau Community College's Classroom Building and new College Center was built on the site of an existing aircraft hangar complex. At the Mitchel Field site, where Lindbergh started his historical transatlantic flight, the student activities building (College Center Building) includes multimedia studios, a food court and various club rooms. The Classroom Building houses 87 faculty and department head offices. These departments include art, social studies, commercial photography, and human resources.
The new college center construction required:
Demolition of a 55,000 sf block and brick steel-framed aircraft hangar building, a 6,000 sf wood frame building and a 2,000 sf brick and concrete generating steam building;
The construction of two new buildings: a 115,000 sf, 3-story Classroom Building and a 90,000 sf, 3-story College Center.
The new construction complies with all applicable codes, including new ADA requirements. Five prime contractors were coordinated by LiRo to perform general construction, HVAC, plumbing, fire protection and electrical work.
The major building elements on this project are concrete foundations, structural steel framing, block and brick facade, HVAC systems (double duct), hydraulic elevators and high voltage electrical supply with emergency generator backup. Since the site was the old Mitchell Field airfield built prior to WWI asbestos abatement, soil remediation and fuel tank removal were necessary preceding construction. LiRo coordinated and monitored the efforts of the asbestos abatement contractor and tank removal contractor.
Our role as Construction Manager was to provide QA/QC inspection, cost control, and time control through a cost-loaded CPM schedule, change order estimating and negotiations, preparation of as-built drawings and testing of equipment. LiRo issued monthly reports to describe time and cost status.

This project became a major CM undertaking when the General Contractor was defaulted and, subsequently, the Contractor's bonding company was defaulted. LiRo provided General Conditions until the completion contract was awarded. LiRo is providing expert testimony and preparing the courts claim against the defaulted bonding company and General Contractor for all state and federal court actions. (Nassau County Department of Public Works, $35.5M, 1995)

Bay Park Water Pollution Control Plant - Assistant resident engineer monitoring the renovation of the facilities sewer maintenance building. (Nassau County DPW, $2M, 1993)

Police Department, Midtown North Precinct - LiRo provided design and construction support services for the complete alteration, reconstruction and modernization of three buildings at Midtown North Police Precinct, New York, New York. LiRo's responsibility included field survey and analysis of existing conditions, design services including civil, architectural, structural, mechanical, electrical and plumbing designs for a complete renovation and modernization of the existing facilities, preparation of contract bid documents for the proposed alterations and modernization of three buildings. The project included demolition of the existing interior spaces including concrete floor slabs, and mechanical and electrical systems. New partitions, doors, flooring, ceilings, windows, built-up roofing, sound proofing, insulation, lighting, HVAC systems, and an elevator were provided. Buildings A and C consisted of administrative offices for various levels of police and community activities as well as locker rooms, shower facilities, handicapped facilities, and sleeping quarters. A new elevator was installed in Building C. Building B consisted of temporary holding/correctional facilities for the precinct.
LiRo developed a phased construction plan which required the contractor to work in specific areas of each building at certain times to permit and maintain full 24 hour operation of the facilities during the alterations and reconstruction period. Construction was completed in 1992.
Unusual Features/Problems Encountered:
In order to allow the function of these buildings to continue uninterrupted throughout the construction period, a program of staged removal and reconstruction was developed.
Since one building did not have an elevator, LiRo designed a new passenger elevator and structural shaft in the existing four-story structure.
All steel frames were analyzed and reinforced where required. Existing structural slab was replaced with a lightweight slab and composite metal deck in order to reduce dead load on the structural members, thereby increasing live load capacity. (NYCDDC, $4M, 1992)

Brooklyn House of Detention for Men - Facade reconstruction for Local Law 10 compliance. (NYCDGS, $5M, 1986)

Brooklyn House of Detention for Men - Reconstruction of laundry facilities, involving administration and coordination of multi-prime contracts. (NYC DDC, $2.1M, 1985)

Rikers Island - Additions to and renovation of laundry facilities, involving administration and coordination of multi-prime contracts. (NYCDDC, $2M, 1985)

Rikers Island Women's Correctional Institute - 372 cell addition, involving administration and coordination of multi-prime contracts.

Central Repair Shop, Woodside, Queens - resident engineer for rehab involving administration and coordination of multi-prime contracts.(NYCDOS, $5M)

Brooklyn Municipal Building - Interior renovation and installation of new plumbing facilities, involving administration and coordination of multi-prime contracts. (NYCDGS)

New York Hospital - Renovation projects involving inspection of all HVAC upgrades.

New York Telephone - Facilities upgrade involving inspection of all HVAC upgrades.

Cedar Creek Water Pollution Control Plant - Facilities upgrade involving administration and inspection of multi-prime contracts.

Joseph Capone
SENIOR INSPECTOR

Mr. Capone has over 30 years experience in construction inspection and engineering design. Twenty years of employment with the New York City Department of Correction, Engineering Division, responsible for inspection of contractor installations, evaluation of proposals, performing economic and technical feasibility studies as well as design, drafting and preparation of specifications. Mr. Capone was involved in projects at all of the city's correctional institutions.

EDUCATION	, Construction Technology, New York City Community College, 0
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Training Course
YEARS WITH THIS FIRM	18
YEARS WITH OTHER FIRMS	20

construction management of commercial property development and design detailing of steel reinforcing for concrete foundations, beams, and slabs.

Mr. Capone's experience includes

New York City School Construction Authority - Emergency Response Management and Coordination Program, New York City - Sr. Inspector - Under this contract LiRo managed and coordinated responses to emergencies, on the basis of a telephone call at any time during a twenty-four hour period and on any day Monday through Sunday. LiRo immediately mobilized trades, firms and materials for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public school in the five boroughs of New York City

LiRo's scope of work was extensive, varied widely and included the expedited renovation and construction a new $18M, 55,000 sf high school within 90 days. Our categories of work, services, trades or equipment to be provided on an emergency basis include the design, administration, management and coordination of the work; development of construction estimates, solicitation of bids in accordance with Authority requirements and the law; providing general conditions including but not limited to testing and controlled inspections; remediation of hazardous materials; construction and demolition of the work in accordance with contract documents issues by the Authority. (NYCSCA, $108.7M)

DASNY School of Architecture, Urban Design and Landscape Architecture (SAUDLA) - Demolition and reconstruction of a 136,000 sf building to become the new School of Architecture, Urban Design and Landscape Architecture (SAUDLA) building. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including façade, interior and mechanical, electrical and plumbing systems. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus. This required the renovation of various locations at a cost of approximately $8M and was accomplished in one year.

Queens House of Detention, Inspector - The expansion program consisted of an 8-story, 500-inmate maximum security facility. There was limited site space available for contractor staging in this tightly constrained site. Carefully phased construction was imperative to accommodate the relocation of existing facilities and personnel. LiRo was required to manage and coordinate numerous contractors on two separate construction projects. The project included construction of temporary feeding facilities, asbestos abatement, reconstruction of an 8,000-sf kitchen, a 2,000-sf cold/dry storage, four serving areas, elevator rehabilitation, and new electrical service. (NYCDDC, $7M, 1999)

Rikers Island Kitchen Rethermalization Project - Construction management for kitchen rehabilitation at seven locations on Rikers Island. (NYC Department of General Services, $30M)

Cohalan Court Complex -This 500,000 sf court complex houses Suffolk County court rooms, judges chambers, holding cells, administrative areas, public spaces, and mechanical and electrical rooms. The complex consists of one nine-story office building, one seven-story court building, and two four-story court buildings. Services included inspection, scheduling, testing, equipment turnover, and punch list generation. (DASNY, $90M, 5/91-12/92)

Nassau Community College Expansion Program - This project involved the administrative and technical management for the demolition of a 55,000 sf building and the construction of two new buildings: a 115,000 sf three-story classroom building and 90,000 sf three-story college center. The new construction complied with all applicable codes including new ADA requirements. Coordination of operations of five prime contractors was also required. (NCDPW, $35M)

Rikers Island Building Additions (C114M89-3) -This three-phased involved the construction of three 22,000 sf, two-story buildings to provide increased inmate housing, commissary, and dining area. (NYCDDC, $17M)

Rikers Island Visitor's Center (C114-LL) - This project involved the addition of a two-story, 22,000 sf building which included a commissary, visitor processing area, and contact visit area (NYCDDC, $4M).

Rikers Island Inmate Housing (C114MC73-1-2) - This two-story addition to the George Motchan Center provided an additional100 beds per floor.

Rikers Island Retherm Kitchen Pilot Program, Resident Engineer - This project involved a 200-bed addition; the demolition and renovation of existing serveries; and oversight for the installation of all road service equipment. Mr. Capone's responsibilities also included detailed inspection of building construction activities involving:

- Concrete foundations
- Steel framing
- Single and multi-ply roofing systems
- Site drainage
- Mechanical/electrical installations

Raymond Cich
SR. CADD OPERATOR

Mr. Cich has 14 years of experience as a Construction Inspector and Senior CADD Operator/Manager on various construction and design projects involving roadway, structures, wastewater and environmental issues.

EDUCATION	
REGISTRATION / CERTIFICATIONS	NYSDOL Project Monitor NYSDOL Asbestos Air Sampling Technician ACI Concrete Field Testing Technician - Grade I NICET-III
YEARS WITH THIS FIRM	2
YEARS WITH OTHER FIRMS	0

NYCDDC UST Program, NY - SeniorCADD Operator responsible for contract drawings for NYCDDC Underground Storage Tanks Facilities. Scope of work includes identifying existing conditions, compiling investigative data and drafting final design of the corrective action that was performed at the site.

NYCT Asbestos Consultant Services Contract, NY - Senior CADD Operator responsible for the preparation of the contract documents and assurance that the contract documents adhered to NYCT standards. Project involves abatement of asbestos at various sites throughout New York City.

NYCDOS Incinerator/Garage Demolition, NY - Senior CADD Operator responsible for preparing contract bid documents for the removal and remediation/disposal of hazardous and nonhazardous materials of various NYCDOS incinerator/garage facilities that are slated for demolition.

SUCF UST Program, NY - Senior CADD Operator responsible for drafting of the contract documents. Project investigation and remediation of underground storage tanks for various emergency generators throughout the University of Buffalo, North Campus.

NYS Office of General Services, NY - Senior CADD Operator responsible for the preparation of the contract drawings. Project involves abatement of asbestos at the Taconic DDSO Campus, Sing Sing Correctional Facility, and the Office of Mental Retardation and Developmental Disabilities.

JetBlue Airways Corporation, NY - Senior CADD Operator responsible for the preparation of the contract drawings and assurance that the contract drawings adhere to standards. Responsible for surveyor's adherence to scope of work. Project involves architectural, abatement of asbestos, and environmental drawings for buildings 81, 179, 183, and 207 at JFK International Airport.

ECDEP Wastewater Projects, NY - CADD Operator and Inspector for the alterations and modifications performed on a force main, the Borden Road overflow retention facility (ORF), and the construction of the Bowmansville/Warner Road Pump Stations. Pump stations consisted of a dry well and wet well of concrete construction, submersible pumps, comminutors, variable frequency drives, odor control systems and emergency generators. Construction involved rock excavation, HV, electrical, sewer paving, and miscellaneous site work.

TDX Heating Oil Tanks, NY - Senior CADD Operator responsible for the preparation of the contract drawings and assurance that the contract drawings adhere to standards. Project consisted of investigation, upgrade, replacement, or closure of underground heating oil tanks at over 100 sites in the five boroughs of New York City.

AFG Heating Oil Tanks, NY - Senior CADD Operator responsible for the preparation of the contract drawings and assurance that the contract drawings adhere to standards. Project includes investigation, upgrade, replacement, or closure of underground heating oil tanks at over 100 sites in the five boroughs of New York City.

NJ Department of Treasury UST Program, NJ - Field Technician andCADD Operator responsible for providing drafting services and technical services. Specifically, soil sampling, site surveys and testing of underground storage tanks for leakage. The study consisted of more than 1,300 underground fuel storage tanks at 281 facilities throughout the state of New Jersey for consolidation purposes and compliance with federal regulations.

Williamsville Waterline Improvements, NY - Designer/CADD Operator responsible for providing design and drafting services for a 60,000 lf waterline improvement project which involved replacing the watermain, hydrants, and valves.

Kings Highway Sanitary Sewer, Amherst, NY - Inspector responsible for providing inspection services for the slip lining of approximately 20,000 L.F. of sanitary sewer in a residential area.

NYSTA Expansion Project, NY - Team Leader for technicians on the $46.5 million NYSTA Expansion Project. Job consisted of five mainline (I-90) bridge expansions and six bridge rehabilitations. Assisted engineering staff in the coordination and production of contract drawings and documents. All drawings created using AutoCAD Version 12. Also responsible for the implementation and creation of drafting standards and the standardization of AutoCAD procedures. Responsible for organizing, backing up, and storing all computer related files. Project consisted of an additional lane in each direction using the INVERSET method while maintaining traffic. Involved in all aspects of design and drafting, including, but not limited to: sheet layout, reinforcing design and detailing, earthwork, topography, and proposed expansion of substructures and superstructures.

NYSDOT Youngmann Highway, NY - Construction Inspector for the resurfacing of 10 miles of six-lane expressway and 10 miles of ramps along with extensive guardrail replacement while maintaining traffic throughout all construction phases. Construction was in accordance with NYSDOT specifications.

Chautauqua Bridge 818, NY - CADD Operator responsible for assisting Engineering staff in the design and preparation of contract documents such as: sheet layout, CAD drafting, preliminary and final design, cross sections, profiles, earthwork calculations, and quantity take offs.

Cattaraugus Bridge 27, NY - CADD Operator responsible for assisting Engineering staff in the design and preparation of contract documents such as: sheet layout, CAD drafting, preliminary and final design, cross sections, profiles, earthwork calculations, and quantity take offs.

ECDPW North Forest Road Reconstruction, NY - CADD Operator responsible for assisting in the design of the realignment and reconstruction of North Forest Road in Amherst, NY, for the Erie County Department of Public Works.

South Park Avenue, NY - CADD Operator/ Inspector responsible for assisting in the design and inspection of 2.1 miles of full-depth roadway reconstruction from right-of-way to right-of-way. Project included installation of sidewalk, curb, street lighting, and reconfiguration of drainage.

State College of NY - CADD Operator responsible for assisting in the design of a parking lot to facilitate approximately 65 parking spaces while not losing any aesthetic value.

Erie County - Department of Sewerage - Senior CADD Operator responsible for consultant's compliance to Drafting standards and the production of all in-house contract documents. Also technical support for all civil engineering projects, including surveying, inspection and data collection and organization.

NYSDOT - Materials Inspector at various concrete and asphalt plants, responsible for quality control of the material and adherence to the state standards and specifications.

NYCHA Heating Oil Tanks, NY - Senior CADD Operator responsible for the preparation of the contract drawings and assurance that the contract drawings adhere to standards. Project consisted of investigation,

upgrade, replacement, or closure of underground heating oil tanks at seven NYCHA sites.

GM Access Road Project, NY - Senior CADD Operator responsible for the preparation of the contract drawings and assurance that the contract drawings adhere to standards. Project was full depth construction of HS-25 concrete Delivery Access Road in an abandoned Railroad Right of Way to General Motors Plan Expansion.

NYCDOS Manhattan 6, 8, and 8A, NY - Senior CADD Operator responsible for the preparation of the contract drawings and assurance that the contract drawings adhere to standards. Project consisted of site investigations, dismantlement, and demolition of the 4-story facility originally built as a DOS incinerator and subsequently modified as a garage for three sanitation districts.

Jean M. Dawson, N-II
INSPECTOR

Ms. Dawson is a Civil Engineering Technician with eight years of experience in the civil field. Ms. Dawson has been involved in construction inspection and sampling of construction materials.

Some of the various projects Ms. Dawson has been directly involved with are provided below:

EDUCATION	A.A.S., Civil Engineering, Erie Community College, 1995
REGISTRATION / CERTIFICATIONS	NICET III - Highway Construction SSPC C-5 Certified SSPC C-3 Certified SSPC C-1 Certified Association for Bridge Construction and Design (ABCD) - WNY National Association Of Women in Construction (NAWIC) - Buff
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	1

Peace Bridge Traffic Study, NY: Project Engineer responsible for conducting traffic counts at various intersections near the Peace Bridge as part of the Peace Bridge Traffic Study.

NYCDDC UST Program, NY: Design Engineer for the removal and installation of underground petroleum storage tank systems at nine NYCDOS fueling sites. Fueling systems included hoist oil, motor oil and waste oil, double-walled underground storage tanks ranging in size from 1,000 - 3,000 gallons. Design included installation of double-walled tanks, piping, leak detection systems and inventory control systems. Project included system designs and shop drawing review.

NYCDDC Remediation Program, NY: Design Engineer for various remediation systems, such as multi-phase extraction, soil vapor extraction, and bio-mediation, using oxygen release compound (ORC) and a bacterial nutrient mix (Bioblends) at various NYCDDC sites. Project included site investigation, construction plans, design specifications, cost estimates, and shop drawing review.

Erie County DPW Program Management Services, NY: Field Inspector for ongoing $30 million capital program initiative to plan, design, and construct multiple culvert, highway, and bridge restoration projects throughout the County. As Field Inspector, responsible for performing roadway and culvert inspections, preparing reports, and assisting in preparation of plans and specifications for various design and construction projects on an accelerated schedule.

I-190 Niagara Section, Tonawanda Project, NY (1998): Construction Inspector Trainee for all phases of construction inspection and material testing. Responsibilities involved overseeing the general contractor and several subcontractors performing work such as drainage, embankment, backfilling, concrete structures, asphalt and concrete pavement and guide rail installation. Other duties included daily inspection reports, construction material testing, construction survey, payroll/wage rate interviews and updating Record Drawings.

NYCDDC Heating Oil UST Program, NY: Design Engineer for the permanent closure, upgrade, and/or replacement of underground fuel oil systems at various City-owned agencies. Project included site assessment, records review, tightness testing, regulatory audit of all state and federal regulations, development of tank system alternatives, site-specific evaluation and recommendations, and site-specific cost analysis of recommended alternatives. Design included permanent closure , upgrade, and/or installation of single-walled ASTs in a fire rated containment room, single-walled ASTs encased in concrete, single-walled diked ASTs or double-walled USTs, piping, leak detection systems, and inventory control systems.

New York State Department of Transportation (NYSDOT) CI Bridge Painting Inspection EIC - Bob Schaller (2002): NICET Level II inspector for (6) various bridges in Chautauqua County. Project included

installation and maintenance of Class A containment system for paint removal, field cleaning utilizing an abrasive commercial blast method and painting (spray prohibited - brush and roller). Inspection consisted of checking air flows (cross-draft and down-draft) inside the containment prior to blasting operation, watching for visible emissions from the containment or equipment once blasting began and once the steel was cleaned, surface profile taken and visual inspection made. Prior to the application of paint (4 full coats, plus a stripe coat) temperature of steel and paint itself was taken to assure accordance with specifications. Once painting began, wet film thicknesses (WFT) and dry film thicknesses (DFT) were taken. Maintenance and protection of traffic was enforced and checked daily in accordance with specifications utilizing signage, cones, attenuator trucks, flashing arrow boards and flagmen when necessary. Air monitoring was also performed by independent contractor, however, overseen by inspector and correspondences between contractor and monitor were relayed through inspector.

Erie County Department of Public Works: Civil Engineer for design phase of The Rehabilitation of Maple Street (CR241), from Main Street (SR 20A) to Jamison Road (CR925) through the Towns of Aurora and Elma and the Village of East Aurora (2.56 miles). Assisted in providing a scope summary report, coordinating and conducting a Public Information Meeting and preparation of contract plans and specification and an engineers estimate. The work to be performed in the rehabilitation will consist of resurfacing, shoulder reconstruction, drainage improvements and some cold milling. Full depth reconstruction and utility work will be included within the village.

Erie County Department of Public Works: Civil Engineer for design phase of The Rehabilitation of North French Road (CR299) from Sweet Home Road (CR 301) to Transit Road (SR 78) in the Town of Amherst (4.88 miles). Assisted in providing a scope summary report, coordinating and conducting a Public Information Meeting and preparation of contract plans and specification and an engineers estimate. The work to be performed in the rehabilitation will consist of resurfacing, drainage improvements and safety improvements.

New York State Department of Transportation (Route 240 Bridge over Cazenovia Creek) EIC - Bob Schaller (2002): NICET Level II for structural painting. Responsibilities included, checking coating thickness (wet and dry film thickness), surface coverage, drying times, application rates and humidity utilizing sling sychrometer. All work was checked for conformance of specifications in accordance with the Structural Steel Painting Council (SSPC).

NYSDOT Construction Inspection Services, Asphalt Concrete Reconstruction on Route 39 in the Town of Collins, D259611, EIC - Tim Krauza (2004): NICET Level III inspector for all phases of construction inspection and material testing. Responsibilities involved overseeing the general contractor and several subcontractors performing work such as drainage, embankment, excavation, backfilling, concrete gutter curb, asphalt pavement, signs. guide rail installation, and daily MPT. Other duties included daily inspection reports, construction material testing, construction survey, payroll/wage rate interviews, office engineering work and updating Record Drawings.

NYSDOT CI Bridge Painting Inspection EIC - Charles Whetstone (2004): NICET Level II inspector for various bridges in Chautauqua and Cattaraugus County. Project included installation and maintenance of Class A containment system for paint removal, field cleaning utilizing an abrasive commercial blast method and painting. Inspection consisted of checking air flows (cross-draft and down-draft) inside the containment prior to blasting operation, watching for visible emissions from the containment or equipment once blasting began and once the steel was cleaned, surface profile taken and visual inspection made. Prior to the application of paint (4 full coats, plus a stripe coat) temperature of steel and paint itself was taken to assure accordance with specifications. Once painting began, wet film thicknesses (WFT) and dry film thicknesses (DFT) were taken. Maintenance and protection of traffic was enforced and checked daily in accordance with specifications utilizing signage, cones, attenuator trucks, flashing arrow boards and flagmen when necessary. Air monitoring was also performed by independent contractor, however, overseen by inspector and correspondences between contractor and monitor were relayed through inspector.

NYSDOT Rehabilitation of Day Road Bridge over Erie Canal in the Town of Lockport BIN 4454100, D258914, EIC Nancy Busch (2002): NICET Level II inspector for structural painting within the contract.

Project included installation and maintenance of Class A containment system for paint removal, field cleaning utilizing an abrasive commercial blast method and painting. Inspection consisted of checking air flows (cross-draft and down-draft) inside the containment prior to blasting operation, watching for visible emissions from the containment or equipment once blasting began and once the steel was cleaned, surface profile taken and visual inspection made. Prior to the application of paint (4 full coats, plus a stripe coat) temperature of steel and paint itself was taken to assure accordance with specifications. Once painting began, wet film thicknesses (WFT) and dry film thicknesses (DFT) were taken. Maintenance and protection of traffic was enforced and checked daily in accordance with specifications utilizing signage, cones, attenuator trucks, flashing arrow boards and flagmen when necessary. Air monitoring was also performed by independent contractor, however, overseen by inspector and correspondences between contractor and monitor were relayed through inspector.

NYSDOT Bridge Rehabilitation on Southern Tier Expresswway (I-86)/Culvert Replacement on Indian Hill Road in the Towns of Gowanda and Salamanca, Cattaraugus County, D259633, EIC - Carl Reiss (2004): NICET Level III inspector for structural painting within the contract. Project included installation and maintenance of Class A containment system for paint removal, field cleaning utilizing an abrasive commercial blast method and painting. Inspection consisted of checking air flows (cross-draft and down-draft) inside the containment prior to blasting operation, watching for visible emissions from the containment or equipment once blasting began and once the steel was cleaned, surface profile taken and visual inspection made. Prior to the application of paint (4 full coats, plus a stripe coat) temperature of steel and paint itself was taken to assure accordance with specifications. Once painting began, wet film thicknesses (WFT) and dry film thicknesses (DFT) were taken. Maintenance and protection of traffic was enforced and checked daily in accordance with specifications utilizing signage, cones, attenuator trucks, flashing arrow boards and flagmen when necessary. Air monitoring was also performed by independent contractor, however, overseen by inspector and correspondences between contractor and monitor were relayed through inspector. Due to the fact that the bridge was within the Seneca Nation Indian (SNI) Reservation, A SNI inspector was also involved in overseeing daily operation. Coordination on a daily basis with inspector was of utmost importance.

NYSDOT CI Bridge Painting on Route 219, Inspection; EIC - Charles Whetstone (2005): NICET Level III inspector for various bridges in Erie County. Project included installation and maintenance of Class A containment system for paint removal, field cleaning utilizing an abrasive commercial blast method and painting. Inspection consisted of checking air flows (cross-draft and down-draft) inside the containment prior to blasting operation, watching for visible emissions from the containment or equipment once blasting began and once the steel was cleaned, surface profile taken, CSN testing for salts performed and visual inspection made. Prior to the application of paint (3 full coats, plus a stripe coat) temperature of steel and paint itself was taken to assure accordance with specifications. Once painting began, wet film thicknesses (WFT) and dry film thicknesses (DFT) were taken. Maintenance and protection of traffic was enforced and checked daily in accordance with specifications utilizing signage, cones, attenuator trucks, flashing arrow boards and flagmen when necessary. Air monitoring was also performed by independent contractor, however, overseen by inspector and correspondences between contractor and monitor were relayed through inspector.

NYSDOT CI Bridge Painting on Route 33, Inspection; EIC - Charles Whetstone, D260013 (2006):NICET Level III inspector for various bridges in Erie County. Project included installation and maintenance of Class A containment system for paint removal, field cleaning utilizing an abrasive, near white, blast method and painting utilizing a zinc epoxy painting system. Inspection consisted of checking air flows (cross-draft and down-draft) inside the containment prior to blasting operation, watching for visible emissions from the containment or equipment once blasting began and once the steel was cleaned, surface profile taken and visual inspection made. Prior to the application of paint (3 full coats, plus a stripe coat) temperature of steel and paint itself was taken to assure accordance with specifications. Once painting began, wet film thicknesses (WFT) and dry film thicknesses (DFT) were taken. Maintenance and protection of traffic was enforced and checked daily in accordance with specifications utilizing signage, cones, attenuator trucks, flashing arrow boards and flagmen when necessary. Air monitoring was also performed by independent contractor, however, overseen by inspector and correspondences between contractor and monitor were relayed through inspector.

NYSDOT CI Bridge Painting, Inspection; EIC - Charles Whetstone, D260014 (2006): NICET Level III inspector for various bridges in Erie County. Project included installation and maintenance of Class A

containment system for paint removal, field cleaning utilizing an abrasive, near white, blast method and painting utilizing a zinc epoxy painting system. Inspection consisted of checking air flows (cross-draft and down-draft) inside the containment prior to blasting operation, watching for visible emissions from the containment or equipment once blasting began and once the steel was cleaned, surface profile taken and visual inspection made. Prior to the application of paint (3 full coats, plus a stripe coat) temperature of steel and paint itself was taken to assure accordance with specifications. Once painting began, wet film thicknesses (WFT) and dry film thicknesses (DFT) were taken. Maintenance and protection of traffic was enforced and checked daily in accordance with specifications utilizing signage, cones, attenuator trucks, flashing arrow boards and flagmen when necessary. Air monitoring was also performed by independent contractor, however, overseen by inspector and correspondences between contractor and monitor were relayed through inspector.

Alan Elias
RESIDENT ENGINEER

Alan Elias has more than 30 years of construction management, construction trade, and aerospace manufacturing experience. He is involved in all areas of a project's lifecycle, including design reviews, constructability reviews, scheduling, cost management, change order negotiations, estimating, quality control, quality assurance, monitoring, and document control. He is proficient in such delivery systems as design-build, multi-prime, and general construction. He has managed all types of assignments, including schools, fueling facilities, correctional facilities, waterfront, modular facilities, and recreational.Alan gained his first 15 years experience as a carpenter and a class "A" machinist. He is a graduate mechanical engineer with diversified experience in civil, mechanical, electrical, architectural, and structural construction. Representative projects include:

EDUCATION	Associate of Applied Science, Major in Mechanical Engineering Technology, SUNY Farmingdale, 1991 Certification as Construction Documents Technologi, 1999 Certification in Medical Laboratory Technology, 1976
REGISTRATION / CERTIFICATIONS	ACI Concrete Field Tesing Technician - Grade I OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	2
YEARS WITH OTHER FIRMS	0

New York School Construction Authority Emergency Construction Program, Assistant Project Superintendent - As Assistant Project Superintendant, Mr. Elias manages the construction activities of the various trades, not limited to mechanical, electrical, plumbing, civil, and architectural. These activities are performed on an emergency basis, and executed to avoid disturbance to the schools' ongoing operations, while ensuring the safety and security of students, faculty, and the community. Coordination efforts, with SCA senior project officers, project officers, school directors and personnel, tradesmen, and neighboring residents are conducted as required. Responsibilities also include monitoring quality control, adequate manpower to complete required tasks within time restraints, and documentation of events to assure proper billing. (NYC SCA, $70,000,000)

Previous Experience:

GREYHAWK North America
April 2005 - July 2008

NYCDDC Remediation Project, Various, NY ($26,000,000) - Mr. Elias is an integral member of the project team responsible for managing the design, installations, and operations, of the petroleum remediation systems (e.g. groundwater and soil vapor extraction systems) and for maintaining weekly monitoring of all 90 sites. Alan serves as Resident Engineer and is the primary point of contact for the subcontractors at various locations insuring that proper operation and maintenance procedures are carried out. Alan was involved in the bid a procurement of 15 contracts of subcontractors and for coordinating with various state and city agencies in order to bring these petroleum-contaminated sites into compliance with NYSDEC and NYCDDC. Careful coordination is required to minimize the impact of the work on occupants of the facilities due to the fact that many of them have little or no down-time, maintaining operations 24 hours a day, 7 days a week.

Nassau County Building Consolidation Program, Nassau County, NY ($160,000,000) - Mr. Elias was part of the program management team for Nassau County's building and real estate consolidation program where dozens of county government buildings were merged into five separate "county centers," grouped by function, and parking area developed with extensive drainage systems to accommodate. Responsibilities were not limited to performing monitoring activities over contractual operations to insure document compliance, quality control, adequate manpower and progress to maintain project schedules, quantitative surveys and calculations to insure proper billing, time and material activities, and claims avoidance.

Stop and Shop, Supervisor; Larry Wiener, Manager of Maintenance - As a Field Maintenance Supervisor, managed twenty one stores in Suffolk and eastern Nassau Counties, duties include inspection of stores for proper operation of equipment and interior/exterior appearance on scheduled basis to determine what services and repairs are required to maintain Company standards; to issue appropriate orders and instructions to contractors to perform services while insuring there is no disruption to the ongoing of normal daily operations. To provide technical advice and supervision required by contractors and office support to solve problems and follow policies; to deal directly with District Managers and Store Managers to evaluate requests for various services having significant effect on the operating budget; to review vendor invoices for discrepancies in billing; to communicate with Store Managers, District Managers and various departments such as Operations, Safety, Environmental, and Construction to schedule and coordinate service and repairs, to interact with the Construction Dept. as a member of a cornerstone team on new store construction and major remodels. (July 2004 - April 2005)

GREYHAWK North America, Supervisor; Gus Xenakis, Project Executive

August 1998 - July 2004

Mamaroneck Public Schools, Mamaroneck, NY, Project Engineer ($60,000,000) - GREYHAWK served as Project Engineer for Mamaroneck's district-wide school construction program. The project included a new three-story addition at the high school as well as alterations such as a new 8,000 s.f. multi-media library, a new 3,000 s.f. tiered instruction classroom, a new principal's office, new athletic department offices and a renovated 10,000 s.f. state-of-the-art kitchen/cafeteria complete with restaurant-style brick oven where Wick's Law requirements were adhered to, as there were multiple prime contractors with multiple subcontractors. Responsibilities were not limited to supervising activities over contractual operations to insure document compliance, quality control, adequate manpower and progress to maintain project schedules, quantitative surveys and calculations to insure proper billing, Development and maintenance of a photographic archive and documentation of the progressive construction activities. Because the schools were active and occupied, portions of the work was performed after hours to avoid disruption to students and faculty, as well as the surrounding community.

Brooklyn House of Detention, Brooklyn, NY, Project Manager- Served as Assistant Project Manager for the Department of Design and Construction for the bid and procurement of an exterior facade renovation, and Local Law 11 repairs project at the Brooklyn House of Detention.

Farmingdale Union Free School District, NY, Construction Manager - Served as Construction Manager where renovations and additions at Farmingdale were performed at multiple schools throughout the district, as follows: At Albany Avenue Elementary School, four kindergarten classrooms were added; parking lots and walkways were reconstructed; the fire alarm, security system, and masonry were reconstructed; and all exterior doors, roofing, and gym bleachers were replaced. At Stanley Saltzman East Memorial Elementary School, seven classrooms and a new elevator were added; roofing, exterior doors, the fire alarm, and security system were all replaced; a field irrigation system was installed; and parking lots and walkways were reconstructed. At Farmingdale High School, the auditorium and lecture hall were reconstructed; gym bleachers, lights, and the ceiling were replaced; the gym was painted; and tennis courts were reconstructed. At Weldon Howitt East Middle School, the security system and fire alarm were reconstructed. Alan's duties included coordinating activities of the various construction trades, acting as owners representative, resolving "in the field" discrepancies, administering contract documents, review of payment applications, generating project status reports and project photo archive, and acted as liaison between district administrators, architect and contractors.

Brentwood UFSD Additions and Renovations, Brentwood, NY ($128,000,000) - GREYHAWK provided oversight during the expansion, renovation, and new construction projects at 18 sites within the Brentwood school district. All work was being performed under Wick's Law requirements. Alan's duties were not limited to monitoring and documenting the construction activities, generating completion status charts and insuring that adequate manpower was provided to maintain the construction schedule.

Cold Spring Harbor Central School District, NY - This project entailed detailed pre-bond referendum studies, condition assessments, and planning for the Cold Spring Harbor School District's $40 million rebuilding program. Mr. Elias performed comprehensive condition assessments at four schools to determine the scope of renovation work to be completed, assisted in the preparation of cost estimates, and helped to articulate and define Cold Spring Harbor Central School District's modernization program leading to a successful bond referendum re-vote in March 2001.

Connetquot School District, NY, Project Engineer - As project engineer the scope of work for this assignment included providing new athletic fields and new classrooms, and overseeing extensive site work and internal renovations. Construction activities were planned and executed to avoid disturbance to the schools' ongoing operations, while ensuring the safety and security of students, faculty, and the community. In addition,

Alan acted as liaison between the various trades, School Administration, and Architect, coordinated the activities of the multiple prime Contracts, reviewed payment applications, while monitoring costs and schedule.

Valley Stream Central School District, NY - Acted as the school district's on-site construction manager for this $50-million construction program. The scope of work included classroom additions; renovating music, science, and other specialty areas; new parking lots; rehabilitating athletic fields; boiler replacements; installing technology wiring; replacing tanks, bleachers, athletic fields, tennis courts, and windows; and ADA compliance work. Work has been performed at: North Junior/Senior High School, South Junior/Senior High School, Ross High School, and Central Senior High School. Alan insured the project activities adhered to the contract documents, maintained quality control, school activities were not disrupted, adequate manpower was provided to maintain project schedule, coordinated with Architect/Engineers and directed the multiple prime contracts as necessary, documented construction activities and progress, review and authorization of progress payments.

Firemans Fund Insurance Company - Served as a key member on the surety team tasked with the responsibility for oversight and monitoring of 20 mechanical and general construction projects, for which a single contractor has defaulted to the client, (the surety). The projects include 5 educational facilities, 2 police facilities, 3 medical facilities, 1 wastewater treatment facility, and 9 municipal & federal facilities. Duties included investigations for validity of payment bond claims, prepared work completed estimates and other documents used to administer the completion of the projects.

O'Brien Kreitzberg and Associates, Erie Basin Vehicle Evidence Facility, NY, Supervisor - Served as project engineer for this 20 acre evidence vehicle facility for the New York Police Department. The facility consists of a .5 mile jetty, a vehicle warehouse, a small bridge, an administration building with the associated HVAC, plumbing, utility, and electrical installations, constructing an 1,800 space parking lot, a public esplanade for pedestrian and bicycle traffic, and over a mile of waterfront and dock reconstruction with sheet piling, tie back system and marine bulkheads. Duties include monitoring field activities, time and material activities, quality control, cost status and insuring that the contract documents are adhered to, generating and maintaining project records, review of payment applications, processing and maintaining RFI and submittal Logs, acted as liaison between contractor, Architect/Engineer and Owner, generating daily and weekly activity reports, maintaining as built schedules. (October 1989 - August 1998)

Riker's Island Kitchen Renovation, Queens, NY, Project Manager - Served as project engineer on a $61.6 million court-mandated system-wide kitchen renovation project for the City of New York Department of Corrections. The project consisted of a new 40,000 sf kitchen facility with a 15,000 meal-per-day capacity, a 32,000 sf renovated kitchen facility, new food delivery systems, new freight elevators, and other kitchen renovation work within four active correctional facilities. Coordinated the activities of the various construction trades and the operations of the active facilities, monitored construction activities, quality control, and cost status while administering the contract documents, reviewed payment applications, maintained RFI and submittal logs, generated project documentation for claims avoidance.

Underground Storage Tank Rehabilitation, NY, Project Engineer - Served as project engineer on this $20 million project, bringing the city's fueling facilities in line with current regulations. In addition to installing new fuel tanks, the project encompassed tank replacements, tank lining, new piping, fueling pumps, canopies, asphalt, islands, and landscaping. Remediation systems were also installed to remedy existing contamination.Alan enforced the contract documents, monitored project schedule, generated and maintained submittal and RFI logs, reviewed payment applications, and acted as liaison between Architect, Engineer and Contractor.

New York City Department of Design and Construction, School Projects, NY, Project Engineer - Served as project engineer on a city-wide $7.5 million improvement program. Performed detailed quantitative studies to monitor the time and cost status of major new and modernization construction projects. Also recommended corrective action where required on selected school design and construction projects.

Riker's Island Correctional Facility, NY, Inspector - Served as inspector on this $82.5 million court-ordered construction project, which took place under extremely restricted site conditions. Maintained the project schedule; monitored mechanical, electrical, architectural, and structural quality in the field; ensured that the project met contract design and code requirements; prepared documents for claims avoidance and defense; and assembled daily logs and project records. Coordinated the facility and contractors in conjunction with several city agencies to make sure that construction adhered to the strict security requirements of the job site.

Bernard Jeffrey Fogel
SENIOR PROJECT MANAGER

An expert in educational facility projects, Mr. Fogel is highly experienced in project management for both design and construction. For five years he served as Chief of Construction for the City University of New York, the nation's leading urban public university, serving more than 400,000 students at 20 colleges in New York City. In this capacity, he led implementation of a 5-year capital program including all science and laboratory programs valued at more than $1B.Mr. Fogel's experience includes a broad range of major, multi-disciplinary projects and programs, from the design and construction of new buildings by signature architects to emergency repair and reconstruction projects, where planning and scheduling of construction without interfering with ongoing operations was paramount. He is adept in project control, administration, coordination, and client relations. Representative projects include:

EDUCATION	B.S., Civil Engineering, Pennsylvania State University, 1983 A.A.S., Architectural Engineering, Pennsylvania State University, 1981
REGISTRATION / CERTIFICATIONS	Engineer-in-Training, PA Basic Code Enforcement Training Certification
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	18

City University of New York, Chief of Construction - Mr. Fogel supervised and provided overall coordination of all construction activities at the City University of New York, the nation's leading urban public university, serving more than 400,000 students at 20 colleges in New York City. In this capacity, he led the implementation of a five-year capital program valued at more than $1B. Projects included new construction of multi-million dollar facilities, total renovations, gut rehabilitations, upgrades of campuses and infrastructures, and emergency repair projects. Averages of 150 projects were ongoing at any one time, with individual projects as large as $500M.

- ***Queens College, Renovation of Science Lab*** - This renovation project involved an upgrade to existing science labs, and included new exhaust hoods, fans, and new fixtures for dispensing gas and compressed air service. The project was phased, limiting the number of classrooms being renovated to allow classes to continue. ($2M)
- ***Baruch College Academic Complex*** - This new 17-story urban classroom building features a 10-story atrium, a pool and gymnasium in three below-grade stories, a 500-seat auditorium, recital hall, student center, and theater. Designed by Kohn Pedersen Fox, the building has a unique curved profile and a staggered truss system. The design and construction were completed under a fast-track schedule. ($450M)
- ***Queens College, Building B*** - This project entailed a total gut rehabilitation of a four-story building down to its structural members, and completely renovating all classroom and support space within. ($70M)
- ***City College*** - Historic facades were reconstructed at Compton Goethals Hall, Shepherd Hall, and Harris Hall. The facades were carefully designed and constructed with historic components, including Manhattan schist and City seals.
- ***Lehman College*** - The lower floors of this elevated mid-rise building were enclosed to provide space for a new computer lab.

- ***Baruch College*** - A 4-story expansion was added to the existing library, including all building systems. The brick façade of the expansion was matched to the original structure.
- ***Brooklyn College*** - A major reconstruction and expansion of the chilled water system provided for new campus-wide water service at this urban campus.

Bernard Fineson Developmental Center Hillside Campus Replacement Facility, Project Manager - Mr. Fogel led design and construction management services for the Bernard Fineson Developmental Center. The Project includes construction of eight buildings serving 120 developmentally disabled and medically frail consumers in addition to a Program/Administration Building. The new construction for the resident building consists of six one story residences for medically frail consumers and two two-story residences for multiple disability consumers. The building program spaces comprise a total of 66,600 gross square feet. During this project a 3-story baseball stadium, laundry building, and bakery were demolished. Work included asbestos abatement and removal of hazardous materials. There is close coordination around existing operational utility tunnels. (DASNY, $80M)

Renovation of Fiterman Hall - The Borough of Manhattan Community College undertook the renovation of a mid-rise office in building in Lower Manhattan prior to September 11, 2001. The project included developing swing space on the upper floors of the building while renovation was completed on the lower floors. Elements included asbestos abatement, floor reinforcement, and new infrastructure, all maintaining a partially occupied building. (DASNY, $70M)

Westchester County Courthouse Phase 3 Tower, Project Manager - LiRo was retained by Westchester County to provide both design and construction management services for this $23 million interior renovation project. The program consisted of a combination of partial and complete renovations to 18 floors of the 20 story courthouse tower, including mechanical, electrical, telecommunications, fire alarm and security upgrades, ADA compliance throughout, new courtroom layouts and finishes, and all adjunct facilities to service New York State's civil courts and the County's Department of Probation. In order to meet the County's construction schedule, all work was designed around an intricate staging program that Mr. Fogel helped devise to maintain the County's requirements that the building remain fully operational throughout construction. Construction documents were completed in nine months from the date of design award and the project was completed, on time and under budget. (Westchester County DPW, $23M, 2007)

Westchester County Norwood E. Jackson Correctional Facility, Senior Project Manager - The project included a demolition and asbestos abatement phase, along with a swing space phase. The project's third phase was comprised of two new penitentiary buildings and renovation work. Project was completed on time and under budget. Project received "Project of the year for 2005" from the Westchester/Putnam Chapter of the New York State Society of Professional Engineers. (Westchester County DPW, $45M, 2005)

Employment History:

The LiRo Group (2001 to Present)
Senior Project Manager
City University of New York (1996-2001)
Chief of Construction
York Hunter (1994-1996)
Senior Project Manager
Facilities Development Corporation (1988-1994)
Regional Construction Manager
STV (1983-1988)
Project Manager

Thomas Gargano, N-III
SENIOR INSPECTOR

Mr. Gargano has been a construction inspector since 1988. He has worked on tank installation, roadway and highway reconstruction, drainage improvement, sewer and water main installation, street lighting, and traffic signalization projects. Mr. Gargano has been resident inspector at sites where USTs have been installed and closed.

EDUCATION	
REGISTRATION / CERTIFICATIONS	Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Construction Management Certification Prep Course, MO NICET III - Highway Construction NICET Level IV NYCDDC Concrete Field Testing & Training Certification NYCDOT Concrete Testing Certification OSHA 10 Hour Safety Course OSHA Safety Certificate PETCON Course - UST Installation Troubleshooting Exterior Masonry Walls Certification, NY
YEARS WITH THIS FIRM	22
YEARS WITH OTHER FIRMS	4

Broadway Streetscape Improvement Program- Project Management Services, Inspector - This streetscape improvement project in Lower Manhattan involves sidewalk, curb and street lighting replacement along Broadway form Murray Street South to Battery Place and Stone Street. More specifically, the work includes:

- Replacement of sidewalks with pigmented concrete to match bluestone
- Pavement milling
- Installation of 12" wide granite curb/ADA handicapped ramps
- Utility relocations
- Installation of new street light foundations
- Traffic signal upgrade
- Sidewalk vault repair

Murray Street Reconstruction - West Street to Broadway, Chief Inspector - LiRo is providingconstruction management, inspection, community relations and coordination services on Murray Street from West Street to Broadway. The scope includes installing new catch basins to improve roadway drainage, new roadway base and asphalt including bus pads, new decorative street lighting and traffic signals as well as full curb and sidewalk restoration. This project used 7,500 sq. yards of asphalt, 2,300 ft of steel faced curb, 44,000 sf of sidewalk, 10 new catch basins and 2,000 cubic yards of concrete base. (NYCDDC, $1M)

World Trade Center - Lower Manhattan Roadway Milling and Paving Project, Inspector - This was one of LiRo's most unique and difficult projects. LiRo had been working at Ground Zero since September 17, 2001. On April 16, 2002, we were given an assignment by the New York City Department of Design and Construction to provide construction inspection services for the milling and repaving of 61 lane miles of streets in the Trade Center area. This project was performed under the auspices of FEMA and the FHWA. The project commenced on Monday, April 22, 2002 and was completed by June 7, 2002. Work was performed at night. The work consisted of milling 1-1/2" of asphalt roadway, adjustment of street hardware, miscellaneous roadway repairs, and placement of a 1-1/2" asphalt concrete roadway surface. The operation was staggering. Approximately 150 men, multiple milling, paving and chipping crews, and over 50 trucks were utilized each night. Asphalt production averaged nearly 1,200 tons per night on tight lower Manhattan streets. LiRo had up to 16 inspectors on this project. Extensive coordination with local community boards was essential. (NYCDDC, $14M)

Reconstruction of Smith Street, New York, NY, Senior Inspector - This project involved complete reconstruction of 2.5 miles of urban roadway. The assignment included the installation of a new concrete base and an asphalt wearing course, new 12 in. and 20 in. water mains, catch basins, Insituform sewer lining, new street lighting and traffic signals, and tree replacement. LiRo performed a survey of 146 sidewalk vaults. Masonry walls were installed within the existing vaults to seal them off from adjacent buildings. The vaults were then filled with sand. New sidewalks were subsequently installed. This work required a broad community outreach effort due to concerns of local residents. Other project elements included ADA surveying and extensive coordination with other city agencies and departments. (NYCDOT, $12M)

Construction of Storm and Sanitary Sewers, Clark Avenue, Staten Island, NY, Senior Inspector - Construction of storm sewers, sanitary sewers, water mains, and complete reconstruction of Clark Avenue. Catch basins were installed throughout the area. The sanitary sewers were in excess of 50 ft deep. Four 50-ft deep, 16 ft diameter chambers were cast-in-place. Sewers were installed with the Herrenknecht microtunneling system. The storm sewers ranged in size from 15 in. to 84 in. diameter and included five cast-in-place junction chambers. Vibration and settlement monitoring was performed due to the sewers proximity to the 200-year-old Richmondtown Historic Preservation. Site maintenance was extremely important due to the 50 ft excavation depths. (NYCDEP, $12M)

Traffic Signal Installations for Nassau County, Inspector. This project involved the construction inspection of various traffic signal installations in Nassau County, according to NYSDOT specifications. Locations include:

- Lynbrook: 25 intersections with signals, interconnect cable, and minor intersection improvements.
- Port Washington: 30 intersections with signals, interconnect cable, and minor intersection improvements.
- Old Country Road, Plainview to Mineola: Fiber optic trunk cable installation. First County use of fiber optics for traffic signals.
- Westbury to Massapequa, various roads: Copper cable trunk cable installation.

(NCDPW, $11M, 1999-2001)

Construction of Storm and Sanitary Sewers in Richmond Ave., Staten Island, NY, Inspector - Installation of 5,100 lf of 12" sanitary sewers, 6,200 lf of 30" storm sewer, and 900 lf of 2' x 4' box culvert storm sewer. Including installation of 1,200 lf of 48" trunk water main, roadway reconstruction, and maintenance and protection of traffic. (NYCDEP, $7.5M)

Replacement of Sanitary Sewers, Community Board 6, Inspector - Installation of 26 blocks of 12" diameter sanitary sewer. Roads were restored with concrete base and asphalt top course. Reconstruction of seven streets in a historical district with cobblestone streets and blackstone sidewalks. Maintenance and protection of traffic was critical due to the neighborhoods' narrow streets. (NYCDEP, $8.5M)

Sidewalk Repair in 9 Community Boards in Brooklyn, NY, Inspector - Project involved the repair and replacement of all broken s.w. Survey of broken s.w., contractors payments, bililng for NYC County Clerks Office for resident billings and all areas wiith MPT. (NYCDOT, $6.5M)

Ft. Hamilton Parkway and Seventh Avenue Reconstruction from Maine Avenue to 9th Street, Inspector - State and federally funded Westway Trade-In project was a model project for the NYCDOT involving complete reconstruction of two miles of roadway, including curbs and sidewalks, and 1,000 lf of sewer reconstruction, including installation of 1,200 lf of 72" diameter welded steel water trunk main and 6,000 lf of distribution piping. Drainage improvements, landscaping, and maintenance and protection of traffic were also involved. (Monitored by the FHA and the NYSDOT, $12M)

Paving at Various Facilities (GFM - 398), Inspector - This multi-year project involved asphalt and concrete paving at all TBTA facilities. All work was performed by a single contractor and a requirements type contract. Specific work activities included asphalt milling and paving full and partial depth calcium chloride concrete repairs, application of waterproofing membranes emergency pothole repair, and pavement marking. Work was

done primarily on nights and weekends. This project required extensive MPT and coordination with various facility engineers and managers. (TBTA, $10M)

IF NEEDED:
Work History
LiRo – 1985 – present

References
East SideAccess
MTA/ESA
Rober Ogierri, P.E.
2 Broadway
New York, NY 10004
[redacted]
2008-2015

TBTA On-Call
MTA-TBTA
Igor Shapiro, PE
RobertMoses Building
Randall's Island
New York, NY 10085
[redacted]
2004-2006

Broadway Streetscape Improvement Program Alliance for Downtown NY
Suzanne O'Keefe
VP - Design
120 Broadway, Ste 3340
New York, NY 10271
[redacted]
2003-2004

James Gaspari
SENIOR ASSOCIATE

EDUCATION	B.S., Mechanical Engineering, Hofstra University, 1993 J.D., Touro School of Law, 2000
REGISTRATION / CERTIFICATIONS	CPM Scheduling Certification, NY New York State Appellate Court 2nd Division OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	0

Mr. Gaspari brings experience on more than $700M in construction projects, including more than $200M in educational facilities. He has extensive experience building higher educational projects in occupied campus environments. He recently completed the CUNY School of Architecture, a 136,000 square foot academic building with labs built on an occupied campus with 17,000 students and faculty. Mr. Gaspari has also built several other higher education projects, including a 95,000 square foot facility and a 70,000 square foot facility for Nassau Community College. These projects were built on an active campus with 21,000 students. Mr. Gaspari knows the intricacies of working around students in a safe, effective manner that minimizes disruption to the campus while finishing the project within budget. Mr. Gaspari is also a CPM scheduler and is OSHA certified. Representative projects include:

School of Architecture, Project Manager - LiRo provided construction management services for the demolition and reconstruction of a 136,000 sf building into the new School of Architecture, Urban Design and Landscape Architecture (SAUDLA) building. After complete gutting, the existing building structure was extensively renovated highlighted by a multi-level atrium and roof top amphitheater. Designed by Raphael Vinoly, the building was transformed into a modern education facility with classrooms, exhibition rooms, design/workshop studios, computer labs and common areas. Construction was within a very active college campus requiring protection for the student and faculty population. Extensive site work was also required integrating the building with the existing rock outcropping and vegetation. (DASNY, $52M, 2008)

Park Terrace Garden Window Replacement, Project Manager- LiRo Program and Construction Management was retained to provide full client Construction Management services for the replacement of over 3000 windows for Park Terrace Gardens, a residential coop in upper Manhattan. Preconstruction services included design and shop drawing review, asbestos and lead investigations, and monitoring of window mock-up installation. LiRo provided ongoing schedule and budget information and coordinated the final installation plan that allowed tenants safe, continued occupancy throughout the process. The project budget was approximately $2,500,000, with an additional $750,000 for asbestos removal. (EMG Corporation, $3.25M, 2006)

Brooklyn House of Detention for Men - Base Building Renovation, Project Manager - The project was the addition to and renovation of the existing maximum security BKDC facility. The project included site and landscaping work, asbestos abatement, the removal and relocation of existing temporary modular buildings, the demolition of existing partitions, stairs, floor slabs and exterior walls, the construction of 16,669 square feet of new building area and remodeling of 22,765 square feet of existing building area. This work took place on the cellar, first and second floor levels. In addition, the project included renovation of shower rooms on floors three through ten (3 - 10), waterproofing and

repair of an existing tunnel, and reconstruction of existing windows at the tenth floor. Work was performed in six separate phases, each of which included demolition of existing facilities, asbestos abatement, construction of new facilities, relocation of existing furniture, equipment, associated power/signal feeds and hook-ups, etc. to provide a fully operational new area. Construction and maintenance of temporary security partitions was included in the work of each phase. (NYCDDC, $16M)

Brooklyn House of Detention for Men - Fire, Life, Safety Improvements, Project Manager - Work included the installation of a new emergency generator to supplement the existing generator. General construction work included the modification of interior partitions to bring them in compliance with current code criteria. In addition to the partition renovations, existing doors were replaced with fire-rated door assemblies. A new smoke purge system was installed to meet new code requirements. As part of the smoke purge system new motorized damper assemblies were installed in the existing ducts and interlocked into a new smoke purge control system. The contract work also included the upgrading of the existing sprinkler system and associated control devices. Hazardous material removals including asbestos abatement and lead abatement were required and continued to be a concern during the staging of the construction work due to the age of the facility. (NYCDDC, $2M, 2003)

Program Management Services for New Emergency Medical Service Stations, Resident Engineer - LiRo provided services for the design and construction of new EMS stations to speed ambulance response times. The project included 30 sites across NYC for which LiRo provided pre-construction services which included review of design documents and cost estimating of drawings. This was a complex, multi-site, multi-million dollar project subject to Wicks Law. Coordination of multiple prime contractors across the sites and providing QA/QC inspections at out of state fabrication plants was necessary throughout construction (NYC DDC, $29M, 2000).

System Wide Kitchen Renovation Program, Inspection - This program required that kitchen facilities, feeding lines, and supporting services at 15 correctional facilities throughout Rikers Island, Queens, Brooklyn, Manhattan, and the Bronx be upgraded in accordance with a court-mandated schedule while maintaining DOC operations, feeding schedules, and food quality during construction. Mr. Gaspari performed inspections of kitchen equipment to ensure compliance with the project specifications. (NYCDOC, $50M, 1995)

Nassau Community College, Office Engineer / Inspection - This project called for the construction of a new college center on the site of an existing aircraft hangar building. It required: Demolition of a 55,000 sf block and brick frame aircraft hangar building, a 6,000 sf wood frame building and a 2,000 sf brick and concrete steam building; The construction of two new buildings: a 95,000 sf 3-story Classroom Building and a 70,000 sf, 3-story College Center. The project included cast-in-place concrete caisson footings, structural steel framing, and extensive masonry work. Mr. Gaspari's duties included shop drawing review, change order control, estimating, payment requisitions, and construction inspection. His inspection work focused on the footings, concrete block and brick work, electrical conduit, and gas connections. (NCDPW, $36M, 1995)

Employment History:
The LiRo Group (1994 to Present)
Senior Associate

Robert Gebhard, N-III
SENIOR INSPECTOR

Mr. Gebhard has over 15 years of experience in the engineering and construction inspection field. His expertise is in highways and infrastructure projects. Specific experience includes infrastructure master plans, PIL studies, roadway and sidewalk reconstruction, and utility work. Clients have included both NY City and NY State Departments of Transportation, and the Nassau County Department of Public Works. Projects include:

EDUCATION	A.A.S., Civil Engineering Technology, SUNY at Farmingdale, 1988
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training OSHA 10 Hour Training Course Advanced Practice of Concrete Construction & Specifications OSHA Safety Certificate NICET III
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	5

County-wide Resurfacing, Various Locations, Nassau County, NY., Senior Inspector. This project involved resurfacing of County roads at various locations. Specific work items included:

- Pavement milling
- Full and partial depth concrete repairs
- Full and partial depth asphalt repairs
- Asphalt paving
- Concrete curb construction
- Sidewalk construction
- Pavement markings
- Maintenance and Protection of Traffic
- Field Surveying

Work was performed day and night. Work locations include Merrick Avenue, Plainview Road, Peninsula Blvd, Old County Road, Merrick Road, Grand Avenue, Jerusalem Avenue, Nassau Road, Front Street, and Newbridge Road. (NCDPW, $10M)

Engineered Resurfacing South of Canal Street, Inspector - This three-year project involved the resurfacing and reconstruction of 44 streets in lower Manhattan. Work on individual streets ranged from full depth reconstruction to milling and resurfacing. Work was performed on some of the busiest streets in Manhattan including Broadway, Greenwich Street, John Street and Beaver Street. Work was performed both day and night. This project also included an intensive community liaison effort to help keep residents and businesses apprised of the work status. The construction cost to the NYCDDC for this project was relatively modest at approximately $4 million. The utility relocation costs, however, exceeded $40 million, greatly increasing the scope and complexity of the project. (NYCDDC, $44M)

Diocese of Rockville Centre Pastoral Center, Resident Engineer - LiRo provided construction management services for the 20,000 sf building expansion for the St. Agnes Parish Center in Rockville Center, NY. The Parish serves both Rockville Centre and is the seat for the Diocese of Rockville Centre encompassing Nassau and Suffolk Counties on Long Island, New York. The new Parish Activity Center serves as an ancillary facility for the Parish, providing spaces for meetings and Parish events.

Components of the project managed by LiRo included demolition of foundations, removal of unsuitable soil, relocation of utilities, drainage systems, support of existing structures, installation of structural steel, structural concrete, masonry, HVAC, electrical, elevator, slate roof, and specialty lead glass windows. The project required stringent coordination with facility and construction personnel, and surrounding communities. Mr. Gebhard's

duties included resident engineering activities, inspection of work activities, project coordination with Parish activities, liaison to Parish, development of reports and Parish press releases, and daily interface with owner and architect. (Diocese of Rockville Center, $5.5M, 2003-2004)

Wantagh and Seaford Station Rehabilitation Construction, Office Engineer/Inspector - This project involved the complete removal and replacement of two active LIRR stations on the Babylon branch. The scope of work at both building was identical. Specific work included:

- Demolition of existing stations.
- Lead and asbestos abatement.
- Construction of new concrete block and brick stations.
- Installation of new terrazzo and tile floors.
- Installation of new walls, ceilings, windows and doors.
- Installation of new mechanical, electrical, plumbing and HVAC systems.
- All new interior finishes.
- Construction of new vendor kiosks.
- Exterior concrete flatwork.

Temporary trailers were installed prior to demolition to minimize inconvenience to the customers. (LIRR, $1.2M, 9/01 to 9/02, Project Manager: John Fruehauf)

Traffic Signal Installations for Nassau County, Inspector. This project involved the construction inspection of various traffic signal installations in Nassau County, according to NYSDOT specifications. Locations include:

- Lynbrook: 25 intersections with signals, interconnect cable, and minor intersection improvements.
- Port Washington: 30 intersections with signals, interconnect cable, and minor intersection improvements.
- Old Country Road, Plainview to Mineola: Fiber optic trunk cable installation. First County use of fiber optics for traffic signals.
- Westbury to Massapequa, various roads: Copper cable trunk cable installation.

(NCDPW, $11M, 1999-2001)

Station Improvements at Port Jefferson and Riverhead Stations, Civil Inspector/Office Engineer - This project involved the complete renovation of two active LIRR stations.

Port Jefferson -The existing station building was completely gutted and rehabilitated. Building work included:

- Lead and Asbestos Abatement
- Interior demolition
- Installation of new walls, floors, and ceilings, windows and doors
- Installation of all new electrical, mechanical, and HVAC systems
- Masonry restoration
- All new interior finishes

Site work included the construction of two new asphalt concrete parking lots (259 cars) and the renovation of two existing parking lots (320 cars). A new 1600 lf x 20' high wood sound wall was installed on the south side of the tracks.

Site work included:

- Clearing and grubbing
- Drainage system installation
- Grading and asphalt paving
- Fence, signage and guiderail installation
- Lighting

- Landscaping
- Curb, sidewalk and ornamental railing installation

All work was phased to minimize any impacts to the public. (Long Island Rail Road, $4M, Project Manager: John Fruehauf, [redacted]

Riverhead - The existing station building was completely gutted and rehabilitated. Building work included:

- Lead and Asbestos Abatement
- Interior demolition
- Installation of new walls, floors, and ceilings, windows and doors
- Installation of all new electrical, mechanical, and HVAC systems
- Masonry restoration
- All new interior finishes
- Lighting
- Landscaping
- Curb, sidewalk and ornamental railing installation

All work was phased to minimize any impacts to the public. (Long Island Rail Road, $1M, Project Manager: John Fruehauf, [redacted]

Long Island Expressway (I-495) HOV Lane, Exits 57-61, Long Island, New York, Sr. Inspector - This project involved the construction of new High Occupancy Vehicle (HOV) lanes on the Long Island Expressway and the reconstruction of the LIE mainline pavement from Exits 57-61. A total of eight bridges were reconstructed and/or replaced. Construction encompassed three phases to allow for an unimpeded traffic flow.

Project specifics included:

- Drainage: Over 28,000 lf of RCP and PE pipe in sizes ranging from 15 in. to 42 in. diameter.
- Asphalt: Over 240,000 tons. All asphalt was placed in accordance with Superpave specifications.
- Sound Barrier: Precast concrete panels and posts were mounted on cast-in-place piers. 640,000 sf total.
- Concrete Curb: 12,000 lf.
- Concrete Median Barrier: 30,000 lf, all precast.
- Overhead Sign Structures: 38 total, including span and cantilever types.
- Water Main: Over 2000 lf.
- Extensive underground utility work.

Other work elements included drainage structures, street lighting, INFORM upgrades, and the installation of Variable Message Signs (VMS). MPT on this project was of paramount importance due to the extremely high traffic volumes on the LIE. This project incorporated two A+B bid contracts. The project ran as many as three shifts. (NYSDOT, $95M, EIC: Gary Moller, 1/98-12/01)

Route 24 Reconstruction, Nassau Boulevard to Front Street, Town of Hempstead, New York, Senior Inspector - This project involved pavement rehabilitation, safety improvements, and turning lane construction on a heavily traveled portion of Route 24 in the Towns of West Hempstead, Elmont, and Uniondale. The existing asphalt over concrete pavement was milled in preparation for calcium concrete pavement repairs and a new asphalt overlay. Safety improvements included the realignment of a major intersection and resignalization of nine additional intersections. A new 100-car, off-street parking lot was also constructed with a drainage system and street lights. All work on this project was performed at night due to high traffic volumes on Route 24. (NYSDOT, $4M, EIC: Bruce Ogurek, 10/95-11/96)

Senior Inspector for the Installation and Upgrading of Traffic Signals in Nassau County, Chief Inspector/Office Engineer - This project consisted of 4 separate contracts.
1. Installation of 7 miles of fiber optic trunk conduit complete with modems.
2. Installation of 100 miles of copper communication cable with pullboxes, risers, controller cabinets and power

connections.
3. Re-signalization of 20 intersections in Port Washington, Floral Park and Elmont.
4. Re-signalization of 17 intersections in Lynbrook, Nassau County Department of Public Works, Signal Operations. (NCDPW, $15M, Project Manager: P. O'Donnell)

New York City Sidewalk Reconstruction - Assisted office engineer in project coordination. Assessed field construction feasibility including sidewalk condition inventories.

New York State Department of Transportation Priority Investigation Location Accident Reduction - Accident source document reduction, AutoCAD-drawn collision diagrams, and benefit/cost analysis for planned recommendations.

New York City Department of Transportation Planning Design Investigation - Utility hardware inventory, utility survey plotting, and pavement condition inventory.

Town of Fallsburg Infrastructure Master Plan - Pavement condition inventory for over 150 miles of town roadway. Performed traffic field data collection and capacity analysis using highway capacity software. Obtained accident histories Prepared AutoCAD-drawn collision diagrams, accident spot maps and Netsim computer program data coding. Worked with a field survey crew performing boundary, construction, and topographic surveys.

IF NEEDED:
Work History
LiRo – 1984 – present
References
LIRR – On-Call Construction Projects
MTA-LIRR
Eric Denker, Director of CPO
Jamaica Station
Jamaica, NY 11435
[redacted]
1999-2004

LIE HOV Lane, Exits 57-61
NYSDOT
Gary Moller, Engineer-in-Charge
250 Veterans Memorial Highway
Hauppauge, NY 11758
[redacted]
1998-2001

Station Improvements at Port Jefferson and Riverhead Stations
MTA-LIRR
John Fruehauf, Project Manager
JamaicaStation
Jamaica, NY 11435
[redacted]
1999-2001

Christopher Guiseppone
INSPECTOR

Mr. Guiseppone has worked in the construction field for twenty-five years and is familiar with virtually all aspects of the industry. In his current position, he is responsible for supervising multiple facade restoration, masonry and modernization projects simultaneously. He has also worked with Elite Restoration from 1994 through 2001 supervising various restoration projects. In another earlier position, his responsibilities included supervision of the ground-up construction of a New York City Fire Department Firehouse/EMS and Paramedics Station--which was the first building of its kind in New York City. He worked with various agencies throughout his career including the Board of Education, the School Construction Authority, the Department of Design and Construction and the New York City Housing Authority. He has supervised projects of all sizes, large and small.

REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training, NY OSHA 30 Hour Occupational Safety & Health Training, NY OSHA Class 40 Hour Certified Construction Management Classes offered through NYU Bricklayers and Allied Craftsmen Apprentice Program Site Safety Manager Certification and License
YEARS WITH THIS FIRM	2
YEARS WITH OTHER FIRMS	15

As a superintendent, Mr. Guiseppone's is responsible to: supervise field construction of various projects; supervise laborers, bricklayers, carpenters, roofers; organize, plan, and schedule projects to ensure work is completed on a timely basis, within budget, and to quality specified; coordinate with plumbers, electricians, HVAC, carpenters and various subcontractors and supply houses verifying bid pricing; coordinate with architects and engineers to ensure that project adheres to details, specifications and timing requirements; review plans and specs and coordinate, direct, and monitor the activities of subcontractors, suppliers, direct labor and material; prepare and submit any necessary RFIs; review and process change orders; handle job labor relations; oversee and ensure compliance with comprehensive project safety & security program in accordance with OSHA regulations; prepare daily report logs; responsible for photographing, developing and labeling project photos reflecting all phases of project on a regular basis; review and approve all subcontractor and vendor payment applications; participate in the timely review of monthly payment requisition; review and approve change orders. Sample projects with the LiRo Group include:

Kings County Hospital, A/B/C Buildings Facade & Roof Renovations, Brooklyn, NY (HHC, $25M)
Throgs Neck Housing Projects
Riverbank State Park (New York State Department of Parks, Recreation, Historic Preservation)

Previous Experience:
Kay Waterproofing, New York, NY, Project Manager - Supervise multiple construction projects simultaneously from inception (including bid takeoff) through completion within established time frame and within design and construction budgets; responsible for planning, organizing and controlling projects; responsible for conducting quality inspections of facades and roof; supervising sub-contractors and staff; preparing cost estimates; responsible for creating and updating project schedules; compiling

and submitting of billing statements; preparing building condition surveys and reports; conducting leak investigations and water tests; preparation and submission of RFIs and change orders; liaising with architects, engineers, clients; coordinating personnel placement and project scheduling; procuring materials and adhering to safety guidelines; responsible for compliance of site safety as well as inspections of rigging and various types of scaffolding and hoists. (2006-2008)

McKissack Joint Venture, New York, NY, NYC School Construction Authority Emergency and Mentor Programs, Project Manager/Project Superintendent - Supervised multiple projects simultaneously; supervise all phases of construction, including electricians, laborers, bricklayers, carpenters, roofers, HVAC, plumbers, etc.; assign, manage, maintain, schedule, coordinate and monitor the start, finalizing and closing of various New York City School Construction Authority projects in both the Mentor and Emergency programs; ensure projects are completed on a timely basis, within budget, and to quality specified; coordinate with New York City School Construction Authority project officers and safety officers; schedule and coordinate the inspection process; liaise with architects and engineers to ensure that project adheres to details, specifications and timing requirements; review blueprints and construction documents; coordinate with contractors on construction issues; resolve technical questions on site; prepare and process RFIs; prepare reports as required; provide quality control/ quality assurance recommendations and implementation plans; liaise with various union contractors addressing any issues which might arise; participate in weekly foreman, progress and superintendent meetings and prepare and distribute minutes of these meetings; manage and maintain OSHA safety and housekeeping procedures (2004-2006)

Brickens Construction, Yonkers, NY - Project Manager/Project Superintendent - Supervise field construction of various projects simultaneously including all aspects of ground-up construction of New York City Fire Department firehouse as well as general restoration and modernization projects; supervise laborers, bricklayers, carpenters, roofers; organize, plan, and schedule projects to ensure work is completed on a timely basis, within budget, and to quality specified; coordinate with plumbers, electricians, HVAC and fuel tank contractors; coordinate with Fire Department officials, DDC, CM, DEP, local utility companies, subcontractors and supply houses; coordinate with architects and engineers to ensure that project adheres to details, specifications and timing requirements; responsible for material vendor pricing & procurement; review plans and specs and coordinate, direct, and monitor the activities of subcontractors, suppliers, direct labor and material; prepare and submit any necessary RFIs; review and process change orders; handle job labor relations; act as liaison between company and unions handling and resolving any problems which might arise; establish and enforce a comprehensive project safety & security program in accordance with OSHA regulations; prepare daily report logs; responsible for photographing, developing and labeling project photos reflecting all phases of project on a monthly basis; compile take-offs and review bid documents; review and approve all subcontractor and vendor payment applications; participate in the timely preparation of monthly payment requisition; review and approve change orders. (2001-2004)

Elite Restoration, Long Island City, NY, Project Manager/Lead Job Superintendent - Responsible for supervising various projects simultaneously, including masonry, roofing, windows, general restoration and modernization projects ranging from $100,000- $5 million including, but not limited to, projects with SCA, DDC, HUD and NYCHA; direct the work of all company construction site employees; supervise scaffold rigging crew on both three point suspended scaffolds and delta outrigging systems; assess and appraise employee work performance, taking remedial/corrective action if necessary; identify and implement work processes that result in more efficient and productive building operations; identify and implement construction practices that reduce cost; lead company safety efforts by establishing site safety standards; hold site employees accountable for safe work sites; act as liaison between company and unions handling and resolving any problems which might arise. (1994-2001)

Donald Heins
INSPECTOR

Mr. Heins has over 35 years of design and construction inspection experience. Field related assignments include those of Inspector, Office Engineer, and Resident Engineer. Office assignments have included layout, design drafting, and as-built preparation.

EDUCATION	, Brooklyn Technical High School, 0 , Academy of Aeronautics, 0
REGISTRATION / CERTIFICATIONS	NICET III Equivalent
YEARS WITH THIS FIRM	18
YEARS WITH OTHER FIRMS	20

Village of Massapequa Park, Roadway Improvement Project, Resident Engineer - This $2M project involved the reconstruction of numerous streets within the Village. Work items included:

- Full depth pavement removal and replacement
- Full and partial depth pavement repairs
- Mix-in-place road recycling
- Curb and sidewalk installation
- Storm drainage and catch basin installation

Mr. Heins' responsibilities included:

- Field inspection
- Preparation of contractor payments
- Correspondence
- Utility coordination
- Community liaison

Paving at Various Facilities (GFM - 398), Inspector - This multi-year project involved asphalt and concrete paving at all TBTA facilities. All work was performed by a single contractor and a requirements type contract. Specific work activities included asphalt milling and paving full and partial depth calcium chloride concrete repairs, application of waterproofing membranes emergency pothole repair, and pavement marking. Work was done primarily on nights and weekends. This project required extensive MPT and coordination with various facility engineers and managers. (TBTA, Project Manager: I. Shapiro, 2001 - 2002, $10M)

Town of Brookhaven, On-Call Engineering Services, Office Engineer/Chief Inspector - Provided engineering services in connection with the Town's Capital Program. Measured work done by contractors; prepared pavement requisitions; supported the Town of Brookhaven traffic staff in conducting neighborhood traffic studies; analyzed roadways and geologic features as applied to traffic; developed a consortium for transportation professionals to prepare a Traffic Calming Procedure manual for the Town. (Town of Brookhaven, $500,000)

Henry Hudson Bridge Toll Booth Renovation, Resident Engineer - This project involved toll booth renovations at the Henry Hudson Parkway Toll Plaza. The existing booths were gutted; new architectural finishes were installed as well as new mechanical and electrical systems. (TBTA, $1M)

Responsibilities included:

- Field inspection
- Verification of contract quantities
- Preparation of contractor payments
- Correspondence

- TBTA/Contractor/DOT coordination

Installation of Best Route Signs at Various Locations for the Triborough Bridge and Tunnel Authority, Resident Engineer - This $1.5M project involved the installation of electronic directional signs along with all associated structural supports and electrical wiring. Responsibilities included:

- Field inspection
- Verification of contract quantities
- Preparation of contractor payments
- Correspondence
- TBTA/Contractor/DOT coordination

Mill Road Installation of Sanitary and Storm Sewers, Staten Island, Office Engineer - Night work was necessary as a part of this contract. Work items included:

- the installation of 2,000 lf of 13' x 5.5' reinforced concrete box sewer with access manholes and a chamber
- 1,900 lf of 10" and 24" sanitary sewers with both drop pipe and standard manholes
- relocation of 2,100 lf of 8", 12", and 20" water mains, catch basins, and chute connections
- permanent restoration which includes 2,200 c.y. of 6" concrete base; 12,000 s.y. of asphaltic concrete wearing course; 1,600 lf of curb; and 5,600 sf of sidewalks

Mr. Heins was responsible for the preparation of contractor payments, T&M backup, change order preparation and correspondence filing in accordance with MURK procedures. (NYCDDC, $12M)

Hazen Street Construction of Combined Sewers, Queens, Office Engineer - Involved the construction of a 35-ft-deep, 6 ft x 12 ft combined sewer overflow. The sewer was constructed with both precast and cast-in-place concrete through a residential/commercial street and park. The project also included the installation of 12 in. and 20 in. water mains on concrete piers, utility relocation, roadway and sidewalk reconstruction, construction of an outfall structure in a steel cofferdam, and reconstruction of four baseball fields with fencing and dugouts. Close relationships with the community and commercial establishments minimized disruption.

209th Street Construction of Storm and Sanitary Sewers, Bayside, Queens, Inspector/Office Engineer - This project involved the installation storm sewers up to 48" in diameter and sanitary sewers up to 24" in diameter. Trenches were over 15 ft deep and were supported with wood lagging and Krings sheeting. New catch basins with hoods and hangars were placed throughout the area. The project also involved 12" and 20" water main replacement, gas main installation, and complete road reconstruction including installation of a concrete base and asphalt wearing course. Several cast-in-place storm sewer chambers were also constructed. The project was located in a residential community. Bayside High School, a large public school, is situated within the project area. Extensive coordination with school officials as well as tight control of maintenance and protection of pedestrian and vehicular traffic was required. (NYCDEP, $4M)

Columbus Avenue Reconstruction, As-Built Preparation - This project was done under two contracts: Contract I from W. 59th Street to W. 86th Street and Contract II from W. 86th Street to W. 110th Street. Total distance was 2.5 miles. This reconstruction included:

- New roadway consisting of 10" concrete base an a 3" asphaltic concrete wearing course
- Rehabilitation of sewers including sewer replacement, insituform lining, and gunniting of sewers ranging in size from 18" to 72"
- New drainage facilities including several hundred catch basins and 12" DIP Chutes
- New and replacement watermains including a total of six miles of watermains from 12" to 48" in diameter. The 48" main was constructed of welded steel pipe and ran a distance of approximately two miles.
- New street signs
- Installation of new gas mains
- New electrical feeders

- New curb (steel faced concrete and granite)
- New street lights and traffic signals
- New tree plantings

All of the above work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day service. (NYCDOT, 9/93 - 5/96, $85M)

In addition to the above field assignments, Mr. Heins is an expert draftsman and has prepared as-builts for dozens of New York City infrastructure projects. Specific projects include:

Willowbrook Road Sewer Construction, Staten Island - Review and drafting of as-built drawing. ($12M)

Combined Sewers in Hazen Street, Queens - Review and drafting of as-built drawing. ($12M)

209th Street Bayside Installation of Storm and Sanitary Sewers - Review and drafting of as-built drawing. ($4M)

Sutphin Boulevard. Construction, Queens, NYCDOT- Review and drafting of as-built drawings ($2M)

Farmers Boulevard, Queens, NYC DOT- Review and drafting of as-built drawing. ($14M)

Fort Hamilton Parkway, Brooklyn, NYC DOT- Review and drafting of as-built drawings. ($18M)

Frederick Douglas Boulevard, Manhattan, NYC DOT- Review and drafting of as-built drawings. ($14M)

90th Avenue, Queens, NYC DOT- Review and drafting of as-built drawings. ($8M)

Clarke Avenue Sewer Reconstruction, Staten Island, NYC DEP- Review and drafting of as-built drawings. ($10M)

Northern Blvd., Queens, NYC DOT- Review and drafting of as-built drawings, ($18M)

Massapequa Park Sewage Pump Stations, Nassau County DPW - Drafting of structures and mechanical systems for $3 million renovation of 3 pump stations.

Glen Head Community Center, Town of Oyster Bay, DPW - Review and drafting of details associated with built-up roofing renovation of single story building.

Wightman House Renovation, Town of Oyster Bay - Drafting of details associated with replacement of wood shingled roof on historic building.

Street Improvement and Reconstruction, Town of Hempstead - Involving drainage, sewers, water mains, street lighting, traffic signalization, tree planting, maintenance and protection of traffic.

Drawings for John Burns Park Roadway Reconstruction and Drainage Improvements for Town of Oyster Bay.

Replacement of gas service mains for LILCO, various locations, with associated site work.

Town of North Hempstead, Road Reconstruction and Improvements - Review of drainage plans and details, sewers, water mains, street lighting, traffic signals, tree planting, maintenance and protection of traffic.

Inspection of Manhole and Sewer Lines, Baldwin Sewers, Nassau County DPW.

Road Reconstruction and Improvements, National and Magnolia Boulevards, City of Long Beach - Review of drainage plans and involving sewers, water mains, street lighting, traffic signals, tree planting, maintenance and protection of traffic.

Road Reconstruction and Drainage Improvements, City of New York - Coordination with agencies, community groups, sewers, water mains, street lighting, traffic signals, tree planting, maintenance and protection of traffic.

Linus James, N-III
INSPECTOR, SENIOR

Mr. James has over 12 years experience in construction inspection. Project experience includes:

EDUCATION	A.A.S., Civil Engineering Technology, New York City of Technology, 1996 Bachelors Degree, Facilities Management, Construction Management, New York City College of Technology, 2003
REGISTRATION / CERTIFICATIONS	ACI Concrete Field Testing Technician - Grade I NICET I - Bridge Safety Inspection NICET III - Highway Construction
YEARS WITH THIS FIRM	5
YEARS WITH OTHER FIRMS	10

Maintenance Repairs/Painting of Bridges On or Spanning the Grand Central Parkway, PIN XM97.51 D015486- This project involved the repair and painting of 37 bridges on or spanning the Grand Central Parkway in Queens, NY. The bridges required a wide variety of repairs including those to steel, joints, concrete decks, drainage system and scuppers, masonry veneers, as well as paving and complete bridge painting utilizing full Class A Containment. The bridges ranged in size from a three span pedestrian overpass to a 28 span viaduct ten lane wide and included the Clearview Expressway/Grand Central Parkway interchange. Work was performed on a 24/7 basis. Multiple change orders were processed. (NYSDOT, $29M EIC: P.G. Patel, P.E.)

Construction Inspection Services on an As-Needed Basis for NYSDOT Region 11, Bridge Maintenance and Repairs, Various Locations, NY, Senior Construction Inspector. This project involved bridge maintenance and repairs during a two year period at various locations in Region 11. Specific work items included:

- Maintenance and Protection of Traffic
- Joint repairs - armored and armorless
- Pedestal repairs
- Full and partial depth concrete deck repairs
- Concrete spall repairs on abutments
- Striping
- Asphalt milling and resurfacing
- Miscellaneous structural steel repairs
- Deck reinforcing steel repairs
- Installation of new stell staircases
- Clearing and grubbing
- Abrasive blasting

Work locations included:

- Brooklyn Queens Expressway between Metropolitan Avenue and the LIE, Brooklyn
- 158th Street at the Henry Hudson Parkway (Rt. 9A), Manhattan
- Harlem River Drive elevated section, Manhattan
- Nassau Expressway, Queens
- Major Deegan Expressway over 233rd Street, Bronx
- FDR Drive over 96th Street, Manhattan

(NYSDOT, EIC Thomas George, P.E., $60M)

Long Island Expressway Capacity Improvements Exits 32-37, Senior Construction Inspector - (NYSDOT)

Nine Bridges Rehabilitation & Maintenance Project at the Van Wyck Expressway, Construction Inspector - (NYSDOT 2001 - 2002) - 17 months

Pre Design Inspection at various railroad overpasses, Construction Inspector - (Metro North Railroad 2001)

14 Bridge Rehabilitation Project in the Bronx, Construction Inspector - Project included work at the Bronx River Parkway, Bruckner Expressway, Throgs Neck Expressway, and Moshulo Parkway (NYSDOT)

178th Street Pedestrian Bridge over Metro North Railroad, Construction Inspector - Work included demolition and reconstruction. (NYCDOT, 1999)
Assistant Team Leader

LaGuardia Airport Parking Garage Condition Inspection, Construction Inspector
(NY/NJ Port Authority, 1999)

Tri-borough Bridge Biennial Inspection, Construction Inspector (1998 - 1999)

The aforementioned projects contained the following project elements:

- Steel reinforcement/concrete placement at bridge abutments, back walls, pedestals, wing walls, bridge deck and approach slab.
- Bridge girder and bearing removal/replacement
- Lead paint removal/disposal and field structural steel painting
- Vertical and overhead concrete patches
- Armored joints with compression seal removal/replacement
- Retrofitting of new down spouts to existing scuppers
- Sign Structure assembly/erection and sign panel installation
- High strength bolt tightening with skidmore/torque wrench
- Curb, sidewalk & driveway removal/replacement
- Foundation pile installation
- Excavation-sheeting - steel sheet pile/tie back & timber lagging
- Masonry stone work
- Concrete barrier pre-cast/cast in place
- Noise wall installation
- Removal/resetting of corrugated beam guide railing
- Impact attenuator installment
- Excavation/Backfill [suitable material selection/compaction]
- Chain link fence installation
- Asphalt pavement and roadway marking
- Catch basin, manhole & pipe installation
- Erosion Control/landscaping
- Site safety - Fall protection, M.P.T. & Crane Lifting Operation

John Khachmanian, P.E.

ASSOCIATE VICE PRESIDENT

Mr. Khachmanian has over twenty-three years of construction experience as a Project Manager, Resident Engineer, and Office Engineer on a variety of large scale construction projects throughout the New York Metropolitan area including two large scale multi-million dollar reconstruction projects: Columbus Avenue, the City's largest roadway project, and 8th Avenue/Central Park West. He is currently a Senior Associate and a Project Executive. He helps run the highway Construction Division. His experience includes the responsibility of planning and scheduling of all capital projects to meet the Agency's Key Performance Indicators such as project budgets, on-time completion and quality performance. Mr. Khachmanian's responsibilities also include conducting field visits to ensure compliance with construction guidelines, and standard specifications as dictated by contract documents and City regulations. He is involved in the preparation of technical proposals, project staffing, supervision of construction, coordination of trades, negotiation of change orders and construction cost estimating.

EDUCATION	B.S., Civil Engineering, Polytechnic University of New York, 0 B.S., Mechanical Engineering, Polytechnic Institute of New York, 0
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY ACI Concrete Field Testing Technician - Grade I American Engineering Alliance (AEA) American Society of Civil Engineers (ASCE) American Institute of Aeronautical and Astronautics American Society of Mechanical Engineers (ASME) 10-Hour Occupational Safety and Health Training Course
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	10

Resident Engineering Inspection Services for the Reconstruction of Retaining Wall, Citywide, Project Executive/ Manager - This project involves Resident Engineering Inspection Services for a wide variety of retaining walls and roadway reconstruction projects. Specific responsibilities include administering contracts; managing the cost and schedule control system; ensuring implementation of procedures to track correspondence, requests for information, submittals and change orders; conducting controlled inspections; and verifying that the resources required for special services such as estimating, environmental engineering, marine engineering, geotechnical engineering, and claims evaluation are available. (NYCDDC, $25M)

Resident Engineering Requirements Contract, Borough of Staten Island, Project Executive/ Manager - This project involves Resident Engineering Inspection Services for a wide variety of utility and roadway reconstruction projects. Specific responsibilities include construction administration and inspection, management, coordination and administration of the Project, so that the required construction work is properly executed, completed in a timely fashion and conforms to the requirements of the construction contract and to good construction practices. The projects all required extensive MPT. Work was performed both day and night. (NYCDDC, $150M)

Engineered Resurfacing South of Canal Street, Manhattan, Project Manager -This two-year project involved the resurfacing and reconstruction of 41 streets in lower Manhattan. Work on individual streets ranged from full depth reconstruction to milling and resurfacing. Work was performed on some of the busiest streets in Manhattan including Broadway, Greenwich Street, John Street and Beaver Street. Work was performed both day and night. This project also included an intensive community liaison effort to help keep residents and businesses apprised of the work status. The construction cost to the NYCDDC for this project was relatively modest at

approximately $4 million. The utility relocation costs, however, exceeded $40 million, greatly increasing the scope and complexity of the project. (NYCDDC, $44M)

As-Built Drawings Conversion to CAD files for the NYCDDC, Project Executive/Manager - This project involved the conversion of up to 300 existing sewer as-built maps to CAD files. All work was performed under a NYCDDC Engineering Services Agreement. The New York City Department of Design and Construction (DDC) manage a large number of capital projects. One of the client agencies, DEP Sewers, requested that the DDC decrease the quantity of outstanding, uncompleted As-Built Drawings. This request was prompted by the fact that DEP Sewers is revising and modernizing their method of storage and retrieval. DDC took a proactive approach to reduce the backlog. LiRo was required to perform the following tasks to produce the As-Built Drawings:Research project files to gather all pertinent information required to produce accurate As-Built Drawings.Retrieve project files from various city locations.Provide survey crew to verify data and retrieve missing information.Verify information on the marketing up drawings.Transfer as-built data to CAD files, which accurately reflect the completed construction.Print out and deliver electronic versions of As-Built Record Drawings.

LiRo was instrumental in the development and streamlining of this process. We assisted the DDC in determining the most practical format and style for the As-Built Record Drawings. LiRo has worked with the NYCDDC to establish new standard As-Built specifications. The specifications included but were not limited to traffic patterns, street lighting, water mains, and sewers. (NYCDDC, $1M)

Installation of pedestrian ramps throughout Staten Island, Project Executive / Manager - This one year project is for the installation of pedestrian ramps at designated locations within the borough of Staten Island. Locations being done are in Community Board #1, & 2. The work includes replacement of corners that do not have pedestrian ramps with 7" concrete on compacted stone base with expansion joints. Embedded therein are pre-molded detectable warning units (non-slip truncated domes). In addition, steel faced concrete curbs 18" deep are installed along with 4" concrete sidewalks and asphalt roadway resurfacing as required. Maintenance and Protection of Traffic is checked on a daily basis. Caulking of joints, welding and painting steel curbs, topsoil and seed are also part of this contract. (NYCDDC, $4M)

Construction Inspection Services on an As-Needed Basis, Triborough Bridge and Tunnel Authority, Installation of VMS Signs at the Verrazano Narrows Bridge, Resident Engineer - This project consisted of the installation of a Variable Message Sign on the east side of I-278, the Staten Island Expressway. Work includes removal and installation of the steel posts and gantry structure; removal and installation of the reinforced concrete piers and footings; furnishing and installing a complete, operational Variable Message Sign; furnishing and installing a pad mounted sign control cabinet; furnishing and installing a central control computer. Ancillary work required for the VMS system installation included providing electric power and communication systems to the VMS. Communications between the central computer and the VMS will be by cellular telephone. All work was accomplished while maintaining vehicular traffic throughout the project in addition to maintaining access for emergency services. (TBTA, $1M)

Inspection Services of Underground Utilities, Downtown Manhattan, Project Manager - This project involves Resident Engineering inspection services performed on a requirements basis for various infrastructure construction projects in the Borough of Manhattan, Downtown area. LiRo is providing services to protect all existing underground utility connections, fiber optics, telephone lines, and watermain for Brookfield Properties. Brookfield Properties manages several buildings within Battery Park City including those housing Merrill Lynch and American Express. This contract includes:Installation of high pressure gas and steam services Installation of 20" DIP Storm Sewer Installation of 12" ESVP Sanitary Sewer and modifying existing manholes Installation of various size watermains Construction of a tunnel connecting the world Trade center to the World Financial Center, crossing Rt. 9A.
(Brookfield Properties, $2M)

Columbus Avenue Reconstruction, Assistant Resident Engineer - This project was done under two contracts: Contract I from W. 59th Street to W. 86th Street and Contract II from W. 86th Street to W. 110th Street. Total distance was 2.5 miles. This reconstruction included:New roadway consisting of 10" concrete base

and a 3" asphaltic concrete course.Rehabilitation of sewers including sewer replacement, insituform lining, and gunniting of sewers ranging in size from 18" to 72".New drainage facilities including several hundred catch basins and 12" Chutes.New and replacement water mains including a total of six miles of water mains from 12" to 48" in diameter. The 48" main was constructed of welded steel pipe and ran a distance of approximately two miles.New street signs.Installation of new gas mains.New electrical feeders.New curb (steel faced concrete and granite).New street lights and traffic signals.New tree plantings.

All of the above work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day service. (NYCDOT, $85M)

Reconstruction of 8th Avenue and CPW from W. 42nd Street to W. 77th Street, Assistant Resident Engineer - This reconstruction included replacement of water mains ductile iron pipe ranging from 6" to 20" in diameter and steel pipe ranging from 24" to 48" in diameter.
Other aspects of the project included:Reconstruction of sewers.Roadway reconstruction moving composite asphalt and concrete.Curb replacement with both granite and steel faced.Sidewalk replacement using distinctive materials and designs as well as pigmented and standard concrete.Removal of yokes and "EL" footings.Coordination with utilities during replacement of gas main and enhancement of steam main.

The contract was partially funded by the Federal Government and the work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day services. (NYCDOT, $33M)

Reconstruction of Stuyvesant, Brooklyn, Project Manager - LiRo provided Resident Engineering Inspection Services for the Reconstruction of Stuyvesant Avenue from Fulton Street to Broadway (1.2 miles) in the Borough of Brooklyn. The project area was primarily residential in nature with the inclusion of a three-block historic district. Maintenance and protection of traffic on this project was critical. The project area encompassed several schools and religious institutions. LiRo provided extensive liaison services to maintain the community as a partner in the project. This project involved the replacement of the concrete road base and asphalt, installation of new concrete sidewalks, placement of new granite, concrete and steel faced curb, watermain replacement and combined sewer along with new street lights and traffic signals. (NYCDDC, $9M)

John J. Kiel
OFFICE ENGINEER

Mr. Kiel has extensive experience in highway, bridge and rail transit construction management. Assignments involved new construction, rehabilitation of existing structures and roadways, and electrical / electronic systems installation projects. Mr. Kiel has extensive experience in modern PCC and "superpave" roadway construction. His duties have included complex MPT, community liaison, drainage and utility construction, landscaping, signage, and lighting. He is also experienced in implementation of Critical Path Method (CPM) scheduling, and preparing / maintaining all estimates, reports, books, records, etc., for construction contracts.

EDUCATION	A.A.S., Construction Technology, Erie Community College, 1977
REGISTRATION / CERTIFICATIONS	NICET FHWA-Design & Operation of Work Zone Traffic Control OSHA, Lead Paint Removal and Safety Training Symmetry Systems Inc. Microstation 'J' Training ACI Concrete Field Testing Technician - Grade I
YEARS WITH THIS FIRM	5
YEARS WITH OTHER FIRMS	25

Some of the various projects Mr. Kiel has been directly involved with are provided below:

Resident Engineer(RE) / Office Engineer(OE) / Senior Inspector(SI) / Inspector(I) - Construction Inspection services for:

(OE / SI) NYSTA Project TAN 04-38B / D213471 - Structural Steel Rehabilitation of the South Grand Island Bridges.

(OE / SI) NYSTA Project TAN 01-32B / D213044 - Structural Steel Rehabilitation of the North Grand Island Bridges.

(RE / OE / SI) NYSTA Project TAB 99-20B / D212664 - Replacement of the Route 65 (Clover Street) Bridge over the I-90 mainline Thruway.

(OE / SI) NYSTA Project TAB 97-83 / D212448 - Reconstruction of Exit 54 (Route 400) Interchange including Replacement and / or rehabilitation of two bridges.

(OE / SI) NYSTA Project TAB 97-56B / D212387 - Rehabilitation of the Crittenden Road Bridge over the I-90 Mainline Thruway.

(OE) NYSTA Project TAB 97-62 / D212396 - Median Safety Improvements, I-90 M.P. 378 to 417, including upgrading drainage, side slopes and guide rail / barrier protection. .

(OE) - NYSTA Project TAB 95-45B / D212214 - widening and scour protection of I-90 Mainline thruway bridges over Buffalo River and Cazenovia Creek. This project included full containment removal of lead based paint on the I-90 bridge over Cazenovia Creek.

(OE) NYSTA Project TAB 97-44B / D212212 - Replacement of the Henry Street Bridge over the I-90 Mainline Thruway.

(RE / OE / SI) NYSTA Project TAB 93-47S / D211929 - Installation of permanent Variable Message Signs on 1-90 and 1-190. Included furnishing, installing & testing of four overhead L.E.D. remote controlled signs with ground structures, electric and communications connections.

(RE / OE / SI) NYSTA Project TAB 92-8B / D211648 - Rehabilitation of the Genesee Street Bridge over Interstate 1-90.

(SI) NYSTA Project TAN 92-87 / D211784 - I-190 Niagara Section Reconstruction M.P. N6 (Porter Ave) to N11 (Ontario Street). New PCC pavement

(RE / OE / SI) NYSTA Project TAB 90-12E / D211334 - Electrical Rehabilitation of the North & South Grand Island Bridges and Toll Facilities.

(SI) Buffalo & Fort Erie Peace Bridge - Three rehabilitation projects including bridge deck repairs / Latex Modified Concrete overlay, sidewalks and expansion joints.

(OE) - NYSDOT Project - Reconstruction of Bailey Avenue / Clinton Street in City of Buffalo.
(OE) - NYSDOT Project - Rehabilitation of the NY Route 33 (Kensington Expressway) to Scajaquada Expressway Interchange bridge Structure.
(OE) - NYSDOT Project - Rehabilitation of the Kensington Avenue Bridge over the Scajaquada Expressway.
(OE / SI) - NFTA Project - Train Control and Communications Systems installations for the Buffalo Light Rail Rapid Transit Project.
(I)- NYSTA (3) Projects - Reconstruction of the I-90 Mainline M.P. 419(Williamsville) to 430 (Lackawana).

Joseph Kobetitsch
MECHANICAL INSPECTOR

Mr. Kobetitsch has over 40 years of experience performing construction and inspection tasks for various general contractors. His experience includes:

EDUCATION	., Manhattan Aviation H.S., 1959
REGISTRATION / CERTIFICATIONS	Lincoln Electric Seminar Miller Electric Seminar OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	39

NYCSCA Emergency Response Management and Coordination Program, Inspector - LiRo was hired to manage and coordinate responses to the emergency needs of the NYCSCA. In this capacity, we stand ready to respond to emergencies on a 24-hour-per-day/7-day-per-week basis. Predicated upon verbal authorization (a telephone call), we are prepared to immediately mobilize construction professionals, Trade Labor Union personnel, contractors and/or material suppliers to arrest dangerous conditions or contain hazardous materials at public schools within the five boroughs of New York City. (NYCSCA, $108.7M, 2007)

Steam Tunnel Project, Rikers Island, Mechanical Inspector - For this project, Mr. Kobetitsch performed inspection of high, medium, and low pressure piping lines as part of a total renovation project of all expansion joint and valves for Rikers Island. This system is comprised of seven miles of tunnels that supply steam for heating and cooling. This project included extensive asbestos removal, new monitoring equipment, new plumbing work, and ventilation units and coordination with steam generation facilities and power plants. (DDC, $18M)

JATC Renovation, Rikers Island, Mechanical Inspector - Work for this project required the removal of 70-year-old schedule 80 steam and condensate return piping from the entire facility. New schedule 80 pipe was re-installed for both systems running from the underground steam tunnels to the 3rd floor attic. All condensate pumps were replaced with new vacuum condensate pumps. In the jai day rooms, all new branch steam piping was installed to feed new forced air heating systems. Work required the installation of ductwork, HV units, and automated control systems.

Bay Park Wastewater Treatment Plant - Mr. Kobetitsch was responsible for the installation of lube oil engines to four diesel engines. This work included installation of expansion joints and valves.

Powerwell Construction (1983-1994)
As a mechanical contractor owning his own business, Mr. Kobetitsch performed the following jobs for general contractors and as a prime contractor:

- **Fueling station, Floyd Bennet Field** - For this project, Mr. Kobetitsch supervised the fitting and welding fuel lines (stainless steel) as per specs and contract drawings.
- **Chilled water pump station, Brookhaven Labs** - Mr. Kobetitsch oversaw the installation of 36" underground pipe. Work included the fabrication and installation of all components for the pump house as per specs and contractor drawings. Other work Mr. Kobetitsch oversaw included welding, fitting, rigging, and testing pipe.
- **Plum Island Tank Farm** - For this project, Mr. Kobetitsch supervised the fabrication and installation of piping for oil lines to the power plant, as well as the return lines.
- **Water Treatment Plant, Hazelton, PA** - Mr. Kobetitsch oversaw the installation of all hot and cold water systems (bathrooms, sinks, bowls), as well as an underground sanitary system, roof drain system, gas lines for boiler and rooftop HVAC units utilizing copper and steel pipes.
- **McGuire Air Force Base** - Work for this project involved installation and fabrication of 18" main line (stainless steel) from pump house to airfield fueling stations (40,000 ft for approximately 18 stations). In addition, all piping was welded and 100% x-rayed.

- **Aldavista Sewage Treatment Plant, VA** - Mr. Kobetitsch furnished an installed a new aeration system for primary treatment tanks at the new facility. Work included new compressors, spiral welded galvanized piping exterior to the tanks, and stainless steel piping inside the tanks.
- **Textron, Stratford, CT -** For this project for the U.S. military, Mr. Kobetitsch installed a heat exchanger and stainless steel breeding system in the test silos for turbine and jet engine bench testing. System was used for testing new military engines for tanks and helicopters.
- **Hanscom Air Force Base, Boston, MA** - Mr. Kobetitsch was the supervisor for this project. Work included the removal and replacement of all piping to the boilers (make up water, steam headers and associated piping fuel gas lines). He oversaw the removal and subsequent installation of 1,000 feet of piping on chillers and replaced all associated pumps and equipment. ($12M)

Tubco (1960-1983) Pipe fabrication for petrochemical and nuclear industry. Also fabricated for sewage treatment plants in U.S. and abroad. Projects included Newtown Creek during the original construction in the 1960's. Also fabricated all chilled water piping for the World Trade Center. Mr. Kobetitsch started as a pipe fitter and eventually became a foreman. His work included fabrication of all stainless steel high pressure piping for cooling loops in various nuclear plants for clients such as Bechtel, G.B. Ebasco, Stone & Webster, and Burns & Roe. One of Mr. Kobetitsch's key responsibilities was quality control. He developed qualification standards for personnel and certification. He was also responsible for certification of all shop welds using x-ray, ultra-sonic testing, mag-partical and dye penetration. Other duties included field installation of piping systems in nuclear/fossil fuel plants, and material traceability records for all stock.

Tomasz Kowalski, N-III

INSPECTOR

Mr. Kowalski has over 22 years experience as an inspector and field engineer in the construction industry. He has worked as an inspector and a structural engineer on a variety of projects.

Mr. Kowalski's experience includes:

Deck Replacement on the Randall's Island and Ward's Island Viaduct at the Triborough Bridge. (TB-64B). Inspector. This project, valued at $272 million, is the TBTA's largest bridge project to date and involves the reconstruction of the Wards/Randall's Island Viaduct, new coatings, bearing replacement on the Queen's Approach and Bronx Truss, construction of new ramps, access road construction on Randall's Island and widening of the Queens to Manhattan Ramp. LiRo is the prime consultant on this joint venture project.

Ward's / Randall's Island Viaducts - The existing deck (over 480,000 SF) will be replaced with composite units of structural steel cross beams and post tensioned precast concrete. The Ward's/ Randall's Island Viaducts will receive new armored joints, rosphalt overlay, side and median barrier, improved storm drainage and new steel and cast in place (post-tensioned) brackets and stringers for the widening of the existing roadway. Over 22 million pounds of new structural steel will be installed.

EDUCATION	M.S., Civil Engineering, Lublin Technical University, Lublin Poland, 1979 , Accounting with Computer Applications Program, New York Institute of Business Technology, 1999 , Computer Course (DOS, Windows, Word Perfect, MS Word, Greenpoint Business Institute, 1996 , Fuel Burning Equipment Operator, ACI Environmental Training Institute, 1993
REGISTRATION / CERTIFICATIONS	Temporary Traffic Control and Work Zone Safety Sem Proper Flagging Procedures in the Work Area Semina ACI Concrete Sampling & Testing Procedures NICET III Equivalent ACI Concrete Field Tesing Technician - Grade I Troubleshooting Exterior Masonry Walls Certificate, NY OSHA 10 Hour Training Course Brick Veneer and Metal Stud Backup Exterior Wall C, NY Brick Masonry-Inspections and Quality Control Cert, NY OSHA 10 Hour Occupational Safety & Health Training NICET II - Transp. Eng. Technology/Highway Constru OSHA 30 Hour Occupational Safety & Health Training NYCDDC Concrete Certificate, NY
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	18

Ramp Construction - Two new on and off ramps will be constructed in conjunction with a 5000 LF surface road on Ward's Island. The majority of the ramps are elevated and a portion will be built with new retaining walls. Ramps construction will include new foundations on piles, new columns, new steel girders, reinforced cast in place deck slabs, and new side barriers. The existing pedestrian walkways will be eliminated and replaced by one new pedestrian ramp. A portion of the ramp will be cantilevered with cast in place concrete brackets and a steel grid concrete deck. The remaining portion will be built with retaining walls and concrete walkway down to grade level. In addition a new stair tower will be constructed on the pedestrian walkway with new piers and columns.

The Queens to Manhattan Ramp will be widened to allow for three lanes to access Manhattan. A portion of the existing roadway deck will be removed and construction of new foundations on piles, new columns, new girders, and reinforced cast in place deck slab constructed.

Bearing Replacement - Approximately 740 bearings will be replaced on the Queens Viaduct, Ward's / Randall's Island Viaducts, Queens to Manhattan Ramp and the Bronx Truss.

Coatings - Over 2 million square feet of existing steel will receive a new protective coating on the Queens & Ward's Island Anchorage, Triborough Bridge Main Span and the Ward's / Randall's Island Viaducts. Additional work includes new lighting, electrical upgrades and archeological monitoring of footing excavations. (MTA-TBTA, $272M)

Stuyvesant Avenue Reconstruction, Inspector - LiRo provided Resident Engineering Inspection Services for the Reconstruction of Stuyvesant Avenue from Fulton Street to Broadway (1.2 miles) in the Borough of Brooklyn. The project area was primarily residential in nature with the inclusion of a three-block historic district.

The project specifics included:

Distribution Water Mains 8,455 Linear Ft.
Hydrants 27
Combined Sewer 4,435 Linear Ft.
Manholes/Chambers 63
Catch Basins 117
Curbs 13,520 Linear Ft.
Sidewalks 166,800 Sq. Ft.
Pedestrian Ramps 25 Corners
Roadway Reconstruction 30,000 Sq. Yd.
Traffic Lights
Street Lighting
Trees 100

Maintenance and protection of traffic on this project was critical. The project area encompassed several schools and religious institutions. LiRo provided extensive liaison services to maintain the community as a partner in the project. (NYCDDC, $9M)

Construction Inspection Services on an As-Needed Basis, 2004 - 2007, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Inspector - This project involved on-call construction inspection services and included associated services at various TBTA facilities throughout New York City. The work included highway and bridge construction, electrical and mechanical construction, building construction and renovation, asbestos and lead abatement, underground storage tank replacement, as well as estimating, scheduling and shop drawing review. Work was performed day and night at all TBTA facilities. Specific projects include:

· **GFM 451 - Pothole Repairs at Various Facilities, Resident Engineer.** (MTA-TBTA, $4.8M)

· **GFM 418 - Pothole Repairs at Various Facilities, Resident Engineer.** (MTA-TBTA, $750K)

· **GFM 421 - Miscellaneous Roadway Repairs, Resident Engineer.** (MTA -TBTA, $15M)

Long Island Expressway (LIE), Construction Management and Inspection of 27 Bridges - Mr. Kowalski served as a bridge inspector on this project. LiRo provided project management, design, and inspection services for the reconstruction of Route I-495 (LIE) from Van Dam Street to the Grand Central Parkway. The project involved the rehabilitation of seven miles of heavily congested urban expressway and the reconstruction of 27 bridges. The bridge reconstruction work involved such tasks as widening the Queens Boulevard Bridge, and replacement of superstructures and parts of substructures for six major bridges over the LIE. This included superstructure replacement of the 58th Street overpass with sixteen Inverset panels measuring approximately 25 meters. Other work included replacement of entire structures (including piers and abutments), deck replacements, substructure repairs, pile driving, and extensive painting of many existing structures.

Triborough Bridge Redecking and Cabling (TB-64A), Inspector. LiRo was part of a tri-venture of firms managing the deck replacement on the Triborough Bridge. The project consisted primarily of major rehabilitation on the suspended span and the Queens viaduct. Suspended Span - The existing deck (over 250,000 sf) was replaced with an orthotropic steel deck. The work also included replacement of the finger-type expansion joints with modular joints; safety barrier installation; drainage improvements; and at the anchorages, replacement of the existing deck with composite units of structural steel cross beams and precast concrete. The cable work included cable sleeve modifications at six locations and the replacement of 184 suspender ropes and fittings. Queens Viaduct - Work on the Queens Viaduct included replacement of over 165,000 sf of existing deck with composite units of structural steel cross beams and precast concrete. The Queens Viaduct received new armored joints,

concrete overlay, side and median barriers, improved storm drainage, and new brackets and stringers for the widening of the roadway during construction. At the project's completion, the new structure was converted to a sidewalk. Additional work included sidewalk widening on the Queens approach, pin replacement at the Wards Island anchorage, new lighting and electrical upgrades on the viaduct and suspended spans, and lead abatement on structural steel throughout the project. (MTA Bridges and Tunnels, Project Manager: Tom Bach, 2004, $150M)

Senior Structural Engineer - Responsibilities included quality control, scheduling, and preparation of quantity estimate, shop drawings, and specification for structural products. Also managed and coordinated with other companies and vendors for a variety of structural projects.

Engineer in Charge - Responsibilities included planning and managing the construction of buildings from beginning to completion, supervision of construction sites (including surveying), quality control for steel, concrete and wood structures, and managing a team of workers and subcontractors. Projects included a multi-building complex for the Lublin Theater and Opera, garages for the Lublin Sewer and Water Company, a complex of warehouses for the Police Headquarters in Lublin, and reconstruction of the Agricultural Equipment Factory in Lublin.

Construction Site Supervisor - Responsibilities included erection of steel structures, installation of precast structural elements, placing foundations, installation of new facades, construction of roads and parking lots, and managing a team of workers.

Skills:
MS Word, Excel
Peachtree
Speaks fluent Polish and Russian

Aaron Mosser
INSPECTOR

Mr. Mosser has been providing construction inspection services since 2000. He has been involved in roadway reconstruction projects in various locations on Long Island and New York City. Mr. Mosser's projects have involved duties such as preparing daily inspection reports, change orders, various record keeping, creating and updating payment books, maintaining material acceptance records, and final closeout packages.

EDUCATION	AAS, Computer Design, Suffolk County Community College, 0
REGISTRATION / CERTIFICATIONS	NYCDDC Concrete Field Testing & Training Certification, NY Troubleshooting Exterior Masonry Walls Certificate, NY Brick Masonry-Inpsection and Quality Control Cert., NY 10-Hour Occupational Safety and Health Training Course
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	0

NYCDDC, Engineered Resurfacing South of Canal Street, Manhattan, Office Engineer - This three-year project involved the resurfacing and reconstruction of 44 streets in lower Manhattan. Work on individual streets ranged from full depth reconstruction to milling and resurfacing. Work was performed on some of the busiest streets in Manhattan including Broadway, Greenwich Street, John Street and Beaver Street. Work was performed both day and night. This project also included an intensive community liaison effort to help keep residents and businesses apprised of the work status. The construction cost to the NYCDDC for this project was relatively modest at approximately $4 million. The utility relocation costs, however, exceeded $40 million, greatly increasing the scope and complexity of the project. (NYCDDC, $44M)

Inspection Services of Underground Utilities, Downtown Manhattan, Inspector - This project involves Resident Engineering inspection services performed on a requirements basis for various infrastructure construction projects in the Borough of Manhattan, Downtown area. LiRo is providing services to protect all existing underground utility connections, fiber optics, telephone lines, and watermain for Brookfield Properties. Brookfield Properties manages several buildings within Battery Park City including those housing Merrill Lynch and American Express. This contract includes:

- Installation of high pressure gas services
- Installation of a steam service
- Installation of 20" DIP Storm Sewer
- Modification of existing Sanitary manholes
- Installation of 12" ESVP Sanitary Sewer
- Installation of various size watermains
- Construction of a tunnel that connects the world Trade center to the World Financial Center, crossing Rt. 9A.

(Brookfield Properties, Michael Bosso, $2M, 2006 - Present)

Broadway Streetscape Improvement Program- Project Management Services, Inspector - This streetscape improvement project in Lower Manhattan involved sidewalk, curb and street lighting replacement along Broadway form Murray Street South to Battery Place and Stone Street. More specifically, the work included:

- Replacement of sidewalks with pigmented concrete to match bluestone
- Pavement milling
- Installation of 12" wide granite curb/ADA handicapped ramps
- Utility relocations
- Installation of new street light foundations
- Traffic signal upgrade
- Sidewalk vault repair

Greenwich Street Reconstruction - Liberty to Rector Streets, Manhattan, NY, Inspector - The scope of the project included installing new sewer lines, new catch basins, subway vents, water services, manholes as well as sidewalks, curbs and roadways on the east and west side of this six block stretch. This work was critical due to the age of the infrastructure as well as the damage it withstood during the collapse of the World Trade Center. The subway vent work conducted was vital due to the re-opening of the Rector Street subway station.

This project used 3,400 square yards of asphalt, 900 cubic yards of concrete base, 1,600 lf of new steel curbs, 800 lf of new and rehabilitated sewers, 900 lf of new water mains as well as new traffic signals and decorative street lighting. (NYCDDC, $2.1M)

World Trade Center - Lower Manhattan Roadway Milling and Paving Project, Inspector - This was one of LiRo's most unique and difficult projects. LiRo has been working at Ground Zero since September 17, 2001. On April 16, 2002, we were given an assignment by the New York City Department of Design and Construction to provide construction inspection services for the milling and repaving of 61 lane miles of streets in the Trade Center area. This project was performed under the auspices of FEMA and the FHWA. The project commenced on Monday, April 22, 2002 and was completed by June 7, 2002. Work was performed at night. The work consisted of milling 1-1/2" of asphalt roadway, adjustment of street hardware, miscellaneous roadway repairs, and placement of a 1-1/2" asphalt concrete roadway surface. The operation was staggering. Approximately 150 men, multiple milling, paving and chipping crews, and over 50 trucks were utilized each night. Asphalt production averaged nearly 1,200 tons per night on tight lower Manhattan streets. LiRo had up to 16 inspectors on this project. Extensive coordination with local community boards was essential. (NYCDDC, $6M, 2002)

Paving at Various Facilities (GFM - 398), Inspector - This multi-year project involved asphalt and concrete paving at all TBTA facilities. All work was performed by a single contractor and a requirements type contract. Specific work activities included asphalt milling and paving full and partial depth calcium chloride concrete repairs, application of waterproofing membranes emergency pothole repair, and pavement marking. Work was done primarily on nights and weekends. This project required extensive MPT and coordination with various facility engineers and managers. (TBTA, $10M, 2002)

Newbridge Road Rehabilitation - Sunrise Highway to Bellmore Avenue, Construction Inspector - Rehabilitation of this busy 2-lane artery through residential and commercial areas included new storm sewer, sanitary sewer, and catch basin installations. Upon completion of this phase, curbs, sidewalks, and the roadway were restored. Coordination with local gas and water utilities as well as with local residents and business owners was required. (NCDPW, $6.5M, 2002)

Mr. Mosser was involved in various aspects of the project including:

- Inspection and installation of 48" RCP to 18" RCP
- Installation of concrete sidewalks, aprons, curbs, curb gutters, and valley gutters
- Preparation of fine grading
- Slump and cylinder testing
- Inspection of retaining wall construction, fencing, and driveway restoration
- Review of as-built drawings and final measurements
- Final asphalt paving for the project

Vincent Mutarelli, N-III
CONSTRUCTION INSPECTOR

EDUCATION	Civil Engineering Course, Nassau Community College, 0
REGISTRATION / CERTIFICATIONS	AWS Certified Welder D11 NICET - Level III NICET- Level II OSHA 10 Hour Occupational Safety & Health Training OSHA 30 Hour Occupational Safety & Health Training OSHA 40 hr. Hazardous Waste Operations & Emergency Welding Procedure Specification Number LISS-2002-1
YEARS WITH THIS FIRM	7
YEARS WITH OTHER FIRMS	23

Since 1980 Mr. Mutarelli has worked on a wide variety of construction projects. He has specialized in structural and paving projects.

Prior to joining LiRo, Mr. Mutarelli provided fabrication and installation services for all types of structural systems. He is fully proficient and licensed to perform MIG, TIG, and ARC welding. Mr. Mutarelli has supervised up to 5 additional welders. He has extensive experience in fabricating, structural beams and shapes, columns, expansion joints, railing, stairs, and various other steel components. He fabricated these items directly from steel detailers blueprints. Upon completion of fabrication, Mr. Mutarelli went to the project site and installed these components. Installation included rigging, lifting, field welding, bolt-ups and final alignment. He is fully proficient in various types of shoring and rigging. Mr. Mutarelli also has experience in recommending tools, equipment, and procedures for both welding and rigging.

CI Services for Brooklyn ATM's, Gowanus-Prospect Expressway ITS, Phase,1 ITS Improvements, Sr. Inspector- This project included the installation of an Intelligent Transportation System (ITS) along the Gowanus Expressway corridor between the Brooklyn Battery Tunnel and Verrazano Narrows Bridge. ITS is a communication network that provides the capability of monitoring and controlling traffic from a central station. This project included daytime and nighttime operations. For the nighttime operations, the contractor was required to submit a detailed Nighttime Lighting Plan in accordance with the NYSDOT Standard Specifications.

Project specifics included:

- Installation of ITS system included: receivers, transmitters, camera assemblies, controllers, radar detectors, fiber optic cables, etc. In addition, it required the installation of a server and other ITS equipment at the JTOC station. At the completion of the system hardware installation, a system integration was performed.
- Installation of electrical and utility boxes, conduit, and conductors to support new equipment.
- Installation of drilled shaft foundations for new Camera Poles.
- Installation of corrugated beam guide railing and chain link fence.
- Extensive landscaping work including planting of trees and shrubs, vegetation protection, pruning, clearing and grubbing, etc.
- Full depth concrete pavement repairs to complete trench restorations.

(NYSDOT, $8M, 2009-2011)

MTA - LIRR West Side Storage Yard Overbuild, Construction Inspector
The Project Sites are bound by 30th Street on the south and 33rd Street on the North, 12th Avenue on the west and 9th Avenue on the east. The Project Site consists of two Projects, Brookfield Properties Overbuild and the West Side Storage Yard Overbuild.

Mr. Mutarelli is providing construction inspection services as part of LiRo's role in providing construction management services in support of the overbuild. The following activities are being managed and reported on:

West Side Storage Yard Overbuild
• Survey Work
• Geo-technical and rock boring on WSSY lay-up Tracks
• Drilling and installation of caissons
• Installation of steel beams over WSSY lay-up tracks

Brookfield Properties Overbuild
• Drilling and installation of caissons
• Installation of protection barrier between Lead Track No. 4 and the north retaining wall in Brookfield Properties Overbuild
• Installation of steel beams over WSSY lead tracks
• Installation of deck over lead tracks resulting in enclosed train shed
Installation of utilities in new train shed area that includes lighting and standpipe

Specialty CM Services - Route 25A over Hempstead Harbor (Roslyn Viaduct), Inspector - LiRo is providing specialty construction management services on this project, which involves the construction of a new segmental concrete viaduct. The viaduct is erected as two separated structures in parallel and then joined together with closure pairs and transverse reinforcement. Precast concrete piers are erected and post tensioned. In addition to the viaduct there is a significant amount of roadway construction. Approach roadways are being reconstructed and grades in some cases are raised up to 2.5 m. The new roadway consists of a 425 mm thick composite pavement (superpave asphalt over concrete). The final configuration will be 3 lanes in each direction. Roadway work includes extensive retaining structures (poured concrete, crib walls, and gabions) many pile supported, tiebacks, drainage installation, water mains, utility relocations, temporary and permanent street lighting and traffic signals as well as extensive landscaping. CPM scheduling, shop drawing tracking and review, as well as community liaison services, are also imperative on the project. (NYSDOT, $127M)

Triborough Bridge Redecking and Cabling (TB-64A), Inspector. LiRo was part of a tri-venture of firms managing the deck replacement on the Triborough Bridge. The project consisted primarily of major rehabilitation on the suspended span and the Queens viaduct. Suspended Span - The existing deck (over 250,000 square feet) was replaced with an orthotropic steel deck. The work also included replacement of the finger-type expansion joints with modular joints; safety barrier installation; drainage improvements; and at the anchorages, replacement of the existing deck with composite units of structural steel cross beams and precast concrete. The cable work included cable sleeve modifications at six locations and the replacement of 184 suspender ropes and fittings. Queens Viaduct - Work on the Queens Viaduct included replacement of over 165,000 sf of existing deck with composite units of structural steel cross beams and precast concrete. The Queens Viaduct received new armored joints, concrete overlay, side and median barriers, improved storm drainage, and new brackets and stringers for the widening of the roadway during construction. At the project's completion, the new structure was converted to a sidewalk. Additional work included sidewalk widening on the Queens approach, pin replacement at the Wards Island anchorage, new lighting and electrical upgrades on the viaduct and suspended spans, and lead abatement on structural steel throughout the project. (MTA Bridges and Tunnels, Project Manager: Tom Bach, $150M)

Bridge Maintenance and Repairs, Various Locations, NYSDOT Region 11, Inspector. This project involved bridge maintenance and repairs during a two year period at various locations in Region 11. Specific work items included:

- Maintenance and Protection of Traffic
- Joint repairs - armored and armor-less
- Pedestal repairs

- Full and partial depth concrete deck repairs
- Concrete spall repairs on abutments
- Striping
- Asphalt milling and resurfacing
- Miscellaneous structural steel repairs
- Deck reinforcing steel repairs
- Installation of new steel staircases
- Clearing and grubbing
- Abrasive blasting
- Work locations included:
- Brooklyn Queens Expressway between Metropolitan Avenue and the LIE, Brooklyn
- 158th Street at the Henry Hudson Parkway (Rt. 9A), Manhattan
- Harlem River Drive elevated section, Manhattan
- Nassau Expressway, Queens
- Major Deegan Expressway over 233rd Street, Bronx
- FDR Drive over 96th Street, Manhattan
- (NYSDOT, $60M, EIC Thomas George, P.E.)

Rehabilitation of Bridge Joints on the Brooklyn-Queens Expressway Triple Cantilever Structure, Inspector. LiRo provided Resident Engineering Inspection Services for contract HBKC1144, which was designed to correct leakage, structural defects, and traffic noise problems occurring at approximately 100 expansion joints. The joints were located on a reinforced concrete structure comprised of three cantilevered levels located in downtown Brooklyn. Project specifics included:

- All work was done at night in a 7-hour lane closure window
- Concrete repairs were made to each side of the expansion joint, with the exact repair limits determined in the field.
- A proprietary asphalt patching compound was utilized
- Extensive MPT and community outreach.
- (NYCDOT, $2M)

County-wide Resurfacing, Various Locations, Nassau County, NY. Inspector. This project involved resurfacing of County roads at various locations. Specific work items included:

- Pavement milling
- Full and partial depth concrete repairs
- Full and partial depth asphalt repairs
- Asphalt paving
- Concrete curb construction
- Sidewalk construction
- Pavement markings
- Maintenance and Protection of Traffic
- Field Surveying

Work was performed day and night. Work locations included Merrick Avenue, Plainview Road, Peninsula Blvd, Old County Road, Merrick Road, Grand Avenue, Jerusalem Avenue, Nassau Road, Front Street, and Newbridge Road. (NCDPW, $10M)

Centereach Directional Drilling Project, Inspector - Project involved directional drilling for 6" PVC with three 14,000-volt cables. Project involved coordination between NYSDOT and Keyspan. Asphalt pavement restoration in accordance with NYSDOT standards was required. (NYSDOT, $800K)

Boston Post Road Repair, Inspector - Inspected repairs of deteriorated timber bulkheads and concrete retaining walls. . (NYCDOT, $400K)

Route 25A Repair in Oyster Bay Cove, Inspector - Liaison between Keyspan and NYSDOT. Repaired ½ mile of asphalt shoulder and gutter in accordance with NYSDOT standards. MPT was of prime importance. (NYSDOT, $300K)

Rigger and installer for steel components, TBTA Project BB-24, Rehabilitation of the Roadway Drainage System at the Brooklyn Battery Tunnel - Responsibilities included:

- Coordinated delivery and lifting of equipment
- Equipment shake-out (separated delivered components and arranged by work location)
- Coordinated manpower and equipment required for installation
- Rigged and installed structural beams, stairs, and catwalks.
- Performed final alignment.
- Performed walk-through ensuring all connections aligned, completed and properly torqued.

Fabrication, rigger, installer, and welder for numerous building projects - Responsibilities included:

- Sent out plans to steel detailer
- Fabricated structural components per plan
- Performed extensive shop welding (MIG, TIG, and ARC.)
- Prefabricated components in shop
- Coordinated material delivery to site
- Arranged lifting equipment
- Lifted and set steel components. Shoring was required on numerous occasions.
- Performed component installation and erection
- Performed final alignment
- Performed find project walk-through.

Projects included:

- 6 Boulder Creek Steakhouse Restaurants - columns, beams, steel bar joists and decking, A/C dunnage support.
- 12 Sbarro Restaurants - columns, beams, steel bar joists and decking, A/C dunnage support.
- 20 Chase Banks (throughout the New York Metropolitan area), both new facilities and renovations
- NYU University, fabricated and installed structural steel mezzanines
- 3 Duane Read Pharmacies

Rockaway Turnpike Reconstruction - Study, Design and Construction Inspection Services for Widening and Safety Improvements- This project involved survey and mapping, pavement condition inspection, collection of data including traffic counts as well as traffic and intersection capacity analyses and preparation of a Pavement Evaluation and Treatment Selection report. Other project requirements were safety analyses including HAL/PIL studies, collision diagrams and safety benefits evaluations, arterial analyses, speed and delay studies. (NCDPW, $7.1M)

When and Where Marine Structural Repairs, Directed within the Five Boroughs (Tasks 1 & 3), Inspector - This contract called for when and where repairs for waterway bridges throughout New York City. Due to the time-critical nature of the work, there was little advance notice of the general defects discovered by condition inspection teams. LiRo prepared specific designs for work on a fast-track basis, as well as applications for DEC/Corps of Engineer and Coast Guard Permits. We performed Construction Inspection and site engineering services as an integral part of a combined team that was closely integrated with NYCDOT. (NYCDOT, $10M)

Removal of Toll Booths at Brooklyn Battery Tunnel, Inspector - This project included MPT and coordination with TBTA police. Responsibilities included ensuring safe demolition and removal of existing tollbooths. Area was repaired with concrete base course and asphalt overlay. (MTA-TBTA $185K)

Removal and Replacement of Lighting Fixtures at Battery Parking Garage, Inspector - (MTA-TBTA $280) Mr. Mutarelli has on ongoing concern for worker safety and has had no lost-time accidents on his projects for the past 23 years.

George Nestoros
OFFICE ENGINEER/INSPECTOR

Mr. Nestoros has been performing construction management services for the past six years. His responsibilities have included field inspection, document control, coordination of contractors cost and schedule tracking. He has experience working for both the construction manager and for the contractor, both on public and private projects. Mr. Nestoros also has extensive computer experience including Expedition, proj-x and prolog.

EDUCATION	, St. Johns University, Jamaica, NY, 0
REGISTRATION / CERTIFICATIONS	
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	7

Battery Park City Authority, On-Call Owner's Representative Construction Management Services, Inspector - LiRo provided construction management services on an On-Call/ Emergency Basis. The contract primarily involved any work that was required construction management services throughout all of Battery Park City. The design phase responsibilities included constructibility reviews, cost estimating, CPM scheduling, code compliance review, site layout and construction phasing recommendations. The construction phase responsibilities included all essential CM services for the specific task or project at hand. Emergency response was essential to the tasks that may arise. Mr. Nestoros' assignments included the Battery Park Maintenance Facility.

Battery Park City, Site 14/14B Park Reconstruction, Construction Management, Office Engineer/Inspector - LiRo provided construction management services for the construction of Site 14/14B, adjacent to the Museum of Jewish Heritage. The project primarily involved landscaping the property around the Museum of Jewish Heritage and its new addition. It involved new lighting systems, new irrigation systems, installation of paving material around the entire site, and landscaping, implementing BPC green guidelines. The property encompassed approximately 80,000 sf. LiRo maintained careful coordination of this project with the adjacent concurrent construction of the Museum addition.

Stony Brook University Hospital - Renovation on 2 floors, 45,000 sf, patient, surgery and examination rooms. Assisted in project administration site safety, tracking of construction activity and punchlists.($16M)

SUNY Farmingdale, Long Island, NY - Renovation of 60,000 sf building converting into college classrooms and office space. Responsibilities included supervision and coordination of construction activity and maintenance of all project documentation. ($0.9M)

Monroe College, New Rochelle, NY - Complete renovation of apartment units. Duties included scheduling with tenants and owner to perform construction of this occupied facility.

Forest Laboratories, Commack, NY - Responsibilities included the coordination of all preconstruction activity including scope development, bidding and award. ($37M, 1999-2002)

The Ross School, East Hampton, NY - Project included a master plan study for fifty small buildings including residence halls, classroom buildings, laboratories, wellness center dining facility, library and site work for a private chartered school. ($68M)

Fairfield Mansion, Sagaponack, NY - 120,000 sf of new construction on sixty-five acres. Project consisted of 12 high-end buildings including sitework and auxiliary buildings. Assisted in the coordination of architectural and engineering disciplines as required by projects parameters from scope through design development. ($200M)

Capital Improvement Program, Project Smart Schools and Queens Mentor Program for the NYC School Construction Authority.

Coordination of construction phasing including all project administration, scheduling and tracking of activity, field inspection and punchlist work.

Prior to these projects Mr. Nestoros spent three years managing a 95-unit apartment complex and four years as an assistant superintendent for a dry wall and extermination company.

United States Air Force - Sergent/Munitions Systems Specialist - Crew Chief 1987-1991

Clayton Randall, N-IV
CHIEF INSPECTOR

Mr. Randall has more than 27 years experience providing construction inspection services on major civil and structural projects. He has served as an Assistant Resident Engineer or Chief Inspector on some of the most complex projects in the region. Mr. Randall's experience includes extensive work on bridge and highway projects as well as on waterfront/marine projects. He is highly computer literate and also has extensive estimating capabilities. He develops a thorough understanding of the requirements of his clients and is a highly regarded professional.

EDUCATION	A.A.S., Structural Engineering, College of Technology, O
REGISTRATION / CERTIFICATIONS	NICET IV OSHA 40 Hour Hazardous Material Certification Portland Cement 40 Hour Concrete Pavement Construction Formal MPT Training - NYSDOT, NY SAT - Society of Asphalt Technologists, Inc. NJ Society of Asphalt Paving Construction Technologists
YEARS WITH THIS FIRM	14
YEARS WITH OTHER FIRMS	15

New Jersey Transit - Station Improvements to Hoboken Terminal, Assistant Resident Engineer - Mr. Randall is providing resident engineering and construction inspection services for the project. Improvements to the NJT terminal at Hoboken NJ are being undertaken to facilitate passenger movement. A new pedestrian bridge is being constructed over Long Slip Canal. Extensive coordination with the Army Corp of Engineers is required and daily coordination with New Jersey Transit Operations personnel. The key project components are as follows:

- Excavation and excavation support (sheet piling)
- Pile driving and sheet pile containment
- Structural improvements to the terminal
- Precast Concrete Decking
- New electrical system
- Bridge Lighting
- New bulkhead
- Concrete repairs
- Maintenance and protection of traffic

(New Jersey Transit, $10M)

Whitestone Expressway Bridge Replacement, Chief Inspector - This project with a cost of about $180M involves removal of 76 spans of the superstructure including the Northbound Whitestone Expressway (Bascule Bridge) over the Flushing River, with replacement of new superstructure and substructure. Additionally, this project will also improve the roadway surface with a new asphalt overlay. Specific improvement activities under this reconstruction project include:
Rehabilitating Southbound Van Wyck Expressway Ramp Structure.
Constructing new Northbound Van Wyck Expressway Ramp Structure to the Northbound Whitestone Expressway. This ramp reconstruction work will be conducted in four stages
Rehabilitating the Northbound and Southbound Whitestone Expressway from Linden Place to 3rd Avenue.
Replacing the Northbound Astoria Boulevard Approach/Whitestone Expressway Structure (Bascule Bridge).
Constructing a new Linden Place Exit Ramp Structure.
The project involves large spans continuous steel structures, box girders and plate girders, on CIP pile supported foundations with concrete piers and hammerhead. (NYSDOT, $180M)

Reconstruction of Route 9A, Segment 7, Chief Inspector -Mr. Randall provided construction inspection services for the reconstruction of Route 9A (12th Avenue) from 40th Street to 59th Street. The entire roadway sandwich was reconstructed. Major components of the utility infrastructure were also upgraded. A four-span continuous ram (steel with a concrete deck was added to the Miller (Westside) Highway). The substructure is founded on bored-in-place piles. Existing tide-gates were renovated and new ones were built. The utility work included roadway drainage, 20-inch watermains, gas mains, and ECS (telephone) ducts. Traffic signals and street lighting as well as Intelligent Transportation Systems were installed.
The Intrepid Pedestrian Bridge was constructed as part of the Route 9A Reconstruction project. The bridge crosses 12th Avenue between 45th and 46th Street. A bus layover area was being constructed east of 12th Avenue so that tour groups have direct access to the museum. The 300 ft pedestrian bridge's main span is cable-stayed. From a center pier, six sets of cables suspend a steel box beam super structure above 12th Avenue. A concrete deck was installed as well. The bridge was the first asymmetrical cable stayed bridge in New York. (NYSDOT, $90M)

Reconstruction of Route 9A, Segment 4, Chief Inspector - This project involved the removal and replacement of 1 km of an urban highway on the West side of Manhattan. The roadway was realigned both vertically and horizontally. The existing roadway was removed to a depth of over 4.5 feet. The roadway was replaced with a 50 year "European Type" unreinforced concrete pavement. Work items included:
4,000 lf of 20" water main
2,000 lf of 12" gas main
100 catch basins and new 24" drainage system.
Rehabilitation and gunniting of 2000 lf of sanitary sewers ranging in size from 3 ft to 5 ft. diameter.
Construction of 3, cast-in-place concrete storm sewer tide gate chambers.
Installation of new primary and secondary high voltage feeder system.
Installation of 9 new telephone duct banks and system upgrades.
Installation of new traffic signals and control systems as well as street lighting.
The most critical aspect of this project was the coordination and interference issues revolving around the massive utility upgrades. This section of roadway was constructed in an extremely vocal community. Work was performed under an accelerated A & B bidding schedule. (NYSDOT $35M)

Reconstruction of Jericho Turnpike (Route 25), Syosset, Senior Inspector - This project involved the widening and realignment of 3 miles of Route 25. The existing pavement required full and partial depth repairs. Eight large concrete retaining walls were constructed. The highlight of the project was the replacement of an active Long Island Rail Road Bridge. A new 180 foot long, 800 ton bridge was constructed alongside the existing bridge. In one weekend, the existing bridge was demolished and the new bridge was rolled in place. Extensive CPM scheduling was required. (NYSDOT, $35M)

LIE/SOBE Interchange Project, Senior Inspector - This project was the most costly and most complex highway project ever done on Long Island. The project included construction of 2 new bridges, demolition and replacement of 3 bridges and major widening and alteration of 4 bridges. All was accomplished with no lane closures on mainline during daily business and rush hours. There was around the clock construction including weekends with all traffic shifting and lane closures on nights and weekends. The project also included a major public relations effort and community input and participation. This was one of the first major partnering projects. (NYSDOT $100M)

Triborough Bridge Rehabilitation,Construction Inspector - Mr. Randall served as Construction Inspector supervising removal and replacement of bridge deck, armored joints and scuppers. He monitored concrete repairs of spalled piers and pedestals and installation of new 30" storm drains. (TBTA, $7M)

14th Street Rehabilitation, Construction Inspector - Construction Inspector for supervising concrete base and asphalt paving, drainage, watermain (48" trunk), demolition of existing roadway, granite curb installation. (NYCDOT, $23M)
National Water Commission, Jamaica, West Indies - Design and construction of watermain development projects, data collection, surveys, alignment design, roadway construction, pumping station facilities and

Daniel Riccio, N-IV

INSPECTOR, CHIEF

Mr. Riccio has over 30 years of heavy construction experience. He has served primarily as a Resident Engineer or Chief Inspector on both highway and building projects. Mr. Riccio is a NYSDDC Certified Asbestos Inspector and has served as the Resident Engineer on several large remediation contracts. He is thoroughly familiar with NYSDOT MURK record keeping guidelines. Mr. Riccio is proficient in LOTUS and Word.

His typical project responsibilities include construction inspection, quantity tabulation, preparation of contractor payments, project correspondence, assembly of materials certifications, and the documentation of T&M records.

Projects representative of his experience include:

EDUCATION	, New York Institute of Technology, 0
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training OSHA 10 Hr: Construction Safety and Health OSHA 10 Hour Training Course Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Brick Masonry-Inspections and Quality Control Certification, NY Troubleshooting Exterior Masonry Walls Certification, NY NYSDOT, Region 10 - Soil Sampling and Testing, NY Advanced Practice of Concrete Construction & Specifications NICET IV - Highway Engineering Certified Asbestos Inspector, NYSDOL Welding Inspection Issues Seminar ACI Concrete Field Technician Grade I
YEARS WITH THIS FIRM	25
YEARS WITH OTHER FIRMS	9

ITS Installation Along the Bronx River and Hutchinson River Parkways, Chief Inspector - This project involved the installation of an intelligent traffic system on the Bronx River Parkway between the Bruckner Expressway and the Westchester County Line at 233Rd St. and on the Hutchinson River Parkway between the Whitestone Bridge Toll Plaza and the Westchester County Line at the I-95 Exit.

Work under this project required the following:
Directional boring at multiple locations under the six lane highway to route electrical and communications infrastructure from one side to the other as required by the contract.
Installation of various types of electrical pull boxes (surface mount, structure mount and in ground).
Installation of single span and cantilever sign structures with variable message signs and illuminated sign panels.
Installation of conduits, which involved various types of trench excavation due to the fact that roadways have grass shoulders which are tree lined and portions of the work are within park land. In addition to the routine trenching operations, pneumatic excavation was required within tree drip lines. Excavation was done with compressed air to avoid damage to tree roots. Tree and vegetation protection and extensive landscaping work is required including vertical mulching, amending of existing topsoil and placing of new topsoil, planting a variety of major and minor deciduous trees and shrubs, reconstructing park pathways and the placement of concrete grid pavers. The placement of rapid hardening concrete was required at various locations on exit and entrance ramps to allow traffic by the end of the work day.

In addition, the project included daytime and nighttime work activities. Night activities require the submission and approval of a nighttime operations plan and detailed maintenance of traffic plan.

Contract work on this project involved direct or indirect involvement and coordination with the following agencies:
New York City Department of Transportation New York City Police Department New York City Fire Department New York City Department of Parks and Recreation Amtrak Railroad Con Edison

(NYSDOT, $18M)

MTA-TBTA Projects AW-32, Chief Inspector - This project involved the installation of approximately 50 signs at the Queens Midtown Tunnel, Brooklyn Battery Tunnel, and Verrazano Bridge. Existing fixed signs were removed. The installation of the new electronic signs included new conduit, wiring, and electrical control systems in addition to civil work which included structural supports, excavation, and pavement repair. Lead paint and asbestos abatement was required prior to the demolition phase. The project also required extensive MPT due to restrictions on lane and toll booth closures. Work was performed day and night and required constant coordination with TBTA facility operations and law enforcement. Upon completion of all electronic signs, end to end tests of all equipment was performed.

Queens Midtown Tunnel - The majority of work was located atop the main roof canopy and included:Main Toll Plaza - This facility required the removal of two Variable Message Signs and their respective structures, the removal of three fixed signs and their respective structures, the installation of steel pedestals requiring roof penetrations, installation of twenty Rotating Prism Signs atop the canopy and the relocation of four security cameras. This work included electrical and civil related items. This facility required lead paint removal that was incidental to accomplishing the following: the demolition of the existing signs, the routing of new conduits within toll booths, installation of new RPS supports to canopy, and the routing of new conduits on and through the Service Building boiler room.

Brooklyn Battery Tunnel - The majority of work was located atop the main roof canopy and included:The removal of two Variable Message Signs and their respective structures, removal of two cloth signs and two fixed signs and their respective structures, the installation of steel pedestals requiring roof penetrations, installation of nineteen Rotating Prism Signs atop the canopy and the relocation of three security cameras.The main canopy roof was completely replaced. In addition, the roof on the Sergeant's booth was completely replaced.This facility required the large scale phases asbestos abatement of the main canopy, satellite canopy, and Sergeant's booth roofing materials This facility required lead paint removal and was incidental to accomplishing the following: the demolition of the existing signs through-out; the routing of new conduits within all toll booths; the routing of new conduits along main canopy HVAC platform; installation of new RPS supports to all canopies; the demolition of plaza retaining wall railing; and the routing of new conduits on and through the Service Building electrical room.This work included electrical and civil related items.All lane closures required for the removal or installation of project items required the use of maintenance and protection of traffic and were coordinated with facility personnel. (MTA-TBTA, $5M)

MTA-TBTA Projects AW-34, Chief Inspector - Project AW-34 resulted in the installation of security systems at Queens Midtown Tunnel (QMT), Verrazano Narrows Bridge (VN), Randall's Island (RI) and Two Broadway (2BWY).

Installed at each facility is an access control and alarm monitoring security system (ACAMS) enhancing established procedures and equipment. At the facility level, system operators and administrators perform the necessary functions from the Control Room to ensure that access to all areas, buildings, and rooms is properly controlled and alarm monitoring is accomplished.
The capability to monitor and control security cameras at the Facility was also implemented with this system. Video may be viewed, controlled, recorded, and played back. The system also incorporates a stand-alone intercom system at each facility. The system enables remote oversight of each facility by senior personnel whereby operators may monitor or control any portion of the entire security system. This includes selectively viewing, controlling, and recording any video signal in the system. Specific items of work include installation of:
Extensive computer systems Control room upgrades System consoles Physical security (gates, locks, card access)Magnetic locks Motion detectors Access Control System (ACS)Intrusion Detection System (IDS)Access Control and Alarm Monitoring Systems (ACAMS)Extensive communications system utilizing devices ranging from low speed data transfer, to Ethernet, to full motion video The communication medium includes fiber, copper, and wireless
(MTA-TBTA, $16M)

MTA-TBTA Projects AW-36, Chief Inspector - Video cameras and fiber optic cable were installed at the following TBTA facilities: Henry Hudson Bridge, Throgs Neck Bridge, Queens Midtown Tunnel, Verrazano-Narrows Bridge, and Marine Park Bridge. Items of work include:
Installation of conduit, pullboxes and patch panels for fiber optic cable Installation of power feeds Removal of existing coaxial cable Installation and splicing of single-mode fiber optic cable Installation of camera poles and camera mounts Installation of fixed cameras and adjust for required views Installation of pan/tilt/zoom (PTZ) cameras and adjustment for stops Installation of fiber optic video transmitter/receiver pairs, connections to matrix switchers, digital video recorders, and other equipment required for video transmission, control, distribution, and recording Monitor end-to-end OTDR tests and other tests as specified.

All cameras installed will require power and video feeds. PTZ cameras will require the installation of a data circuit for camera control as well. MPT and coordinated lane closures will be required for the installation of many of the cameras. Coordination with facility personnel will be of great importance due to the fact that there will be modifications to the existing equipment in addition to the installation of the new equipment. (MTA-TBTA, $12M)

Nassau County Community Revitalization 2006. Chief Inspector. LiRo provided inspection services for design improvements to seven retail/ commercial areas in Nassau County. The improvements were of a streetscape nature and consisted of creating attractive sidewalks, installing decorative street lighting, establishing plantings and providing various amenities such as coordinated planters, benches, trash receptacles and signing. (NCDPW, $1M)

Construction Administration Inspection Services for Security Systems at Various Facilities (Project AW-34). Chief Inspector. Systems were installed at: Verrazano-Narrows Bridge, Queens Midtown Tunnel, Robert Moses Building, and 2 Broadway. Specific items of work included installation of: Extensive computer systems, Control room upgrades, System consoles, Physical security (gates, locks, card access), Magnetic locks, Motion detectors Access Control System (ACS), Intrusion Detection System (IDS), Access Control and Alarm Monitoring Systems (ACAMS), Extensive communications system utilizing devices ranging from low speed data transfer, to Ethernet, to full motion video. The communication medium included fiber, copper, and wireless.

MTA-TBTA Projects AW-32, AW-34, AW-36 and AW-80A/B, Various Locations, NY. 2003 - 2006. Project Manager. This project consisted of providing Construction Administration and Inspection Services for construction contracts including: Installation of Rotating Prism Signs at all Facilities, Installation of Security Systems at various Facilities, CCTV and Fiber Optic Upgrade - Authority Wide, Installation of Variable Speed Limit Signs at Various Facilities, Installation of Variable Message Signs at Various Facilities. (MTA-TBTA, $60M)

As-Needed Construction Management Services (2001 - 2004), Project Manager - This project involved construction inspection and management services on an as-needed basis at all TBTA facilities. Specific projects included:
Roadway repairs and paving at all facilities (GFM-398)Roof repairs at Throgs Neck Bridge Service Building Cleaning and deleading of lower struts at the Verrazano Narrows Bridge Brooklyn Battery Plaza rehabilitation at the Brooklyn Battery Tunnel (BBM-332)Main canopy roof HVAC duct replacement at the Brooklyn Battery Tunnel Repairs to Kaypock Street electrical vault Red flag repairs at Throgs Neck Bridge Oiling of strands and eyebars at the Verrazano Narrows Bridge Gasoline tank repairs at the Henry Hudson Bridge Installation of discharge recovery system at the Henry Hudson Bridge
(MTA Bridges and Tunnels, Project Manager: Igor Shapiro, P.E., $30M)

Brooklyn Battery Tunnel - Construction Administration and Inspection Services for the Rehabilitation of the Roadway Drainage System and Related Work (BB-24), Chief Inspector - This project involved the rehabilitation of the tunnel's roadway drainage system. The work was performed at three locations: Brooklyn Plaza; Manhattan Plaza; Mid-River Pump Station and the Governors Island Ventilation Building.

The project called for the replacement of the main drainage pumps as well as the stripper pumps at all pump stations. The main pumps were 10" diameter, spilt casing centrifugal pumps powered by 50HP 3 phase electric motors, and were used to remove runoff from the sumps to a common header pipe. The stripper pumps were 2"

diameter centrifugal pumps and were used to remove any remaining water after the primary pumps lose their prime. Confined Space work as well as Permit Confined Space was performed. Specific work items included: Replacement of all switchgear, MCC's, circuit breakers and wiring for the pumps.Lead and asbestos abatement Concrete and structural steel repair Installation of new lighting and unit heaters Replacement of liquid level controllers, piping and piping supports, piping insulation Concrete repair of the drainage sumps.
(Project Manager: Earl Walcott, MTA Bridges and Tunnels, $4M, 2003)

Liaison Inspection, Installation of New High Pressure (350 psi) Gas Main - This project involved the installation of five miles of 12" through 36" diameter high pressure welded steel gas main in NYSDOT right-of-ways along the LIE service road between exits 68 and 69. Numerous pipes were jacked under NYSDOT R.O.W. Mr. Riccio's responsibilities included coordination between KeySpan, NYSDOT and the contractor, preparation of daily reports, and monitoring the contractor's compliance with NYSDOT permits for MPT, backfill/compaction and restoration. (KeySpan Energy, 2001)

Chief Inspector, Installation of New Toll Booth at the Triborough Bridge (Project TBM-335) - Construction activities included field investigations to ascertain location of buried island conduits; alter island to conform to contract plans - curbs, concrete and asphalt; review toll booth construction at manufacturer's plant and resolve manufacturer's questions; install new toll booth; coordinate issues with ISD, Amtec, maintenance operations and BTOs; HVAC and electrical work to conform with plans; compliance with MPT plan and health & safety requirements. Administrative duties included monthly job meeting minutes; daily discussions with the TBTA and contractor regarding job problems; processing shop drawings; reviewing shop drawings for conformance; drafting letters to contractor for owner's use; preparing change order estimates; filing of contract documents.

Chief Inspector, Installation of Rotating Prism, VMS and Fixed Signs at the Triborough Bridge (Project AW-32) - Construction activities included removal of existing signs; field survey of existing sign supports and hole locations; shop drawings of sign supports and review of conformance to existing conditions; electrical control wiring and push buttons to control sign messages; additional toll booth base angles anchored to island concrete for stability of plaza roof signs; lead abatement as required; compliance with MPT and health & safety requirements. Administrative duties included monthly job meeting minutes; daily discussions with the TBTA and contractor regarding job problems; processing shop drawings; reviewing shop drawings for conformance; drafting letters to contractor for owner's use; preparing change order estimates; filing of contract documents.

Installation of Toll Booth at Bronx-Whitestone Bridge, Resident Engineer - This project involved the electrical/HVAC work necessary to add a toll booth that accepts E-Z Pass. MP&T and safety were priorities. Some underground work was necessary and coordination with TBTA representatives. (TBTA, $700K, 1999-2000)

Materials Testing at the Clearview Precast Concrete Company, Chief Inspector - Mr. Riccio was responsible for the fabrication of all types of precast and prestressed concrete products including beams, barriers, pipes, and subsurface structures. Many items were fabricated via automated shotcrete machines.

Reconstruction of Roadways in the Village of Thomaston, Resident Engineer - This project involved the reconstruction of approximately 15 miles (nearly the entire village) of streets within the Village of Thomaston. Approximately 80% of these roads were recycled in-place and 20% were full-depth replacement. Work included extensive water, gas, electric, and sewer utility relocations.

Approximately four miles of new storm sewers from 8" diameter to 30" diameter were installed. All streets received new Belgian block curbing. Driveway aprons, sidewalks, and landscaping restoration was done as required. The rebuilt were topped with 1.5" of asphalt concrete. In addition to the responsibilities of a Resident Engineer, Mr. Riccio handled all community relations and interfaced with the Mayor of Village ($6M, 1997-1999).

Long Island Expressway (I-495) HOV Lane, Exits 57-61, Long Island, New York, Chief Inspector -This project involved the construction of new High Occupancy Vehicle (HOV) lanes on the Long Island Expressway and the reconstruction of the LIE mainline pavement from Exits 57-61. A total of eight bridges were reconstructed and/or replaced. Construction encompassed three phases to allow for an unimpeded traffic flow.

Project specifics included:Drainage: Over 28,000 lf of RCP and PE pipe in sizes ranging from 15 in. to 42 in. diameter. Asphalt: Over 240,000 tons. All asphalt was placed in accordance with Superpave specifications.Sound Barrier: Precast concrete panels and posts were mounted on cast-in-place piers. 640,000 sf total.Concrete Curb: 12,000 lf.Concrete Median Barrier: 30,000 lf, all precast.Overhead Sign Structures: 38 total, including span and cantilever types.Water Main: Over 2000 lf.Extensive underground utility work.

Other work elements included drainage structures, street lighting, INFORM upgrades, and the installation of Variable Message Signs (VMS). MPT on this project was of paramount importance due to the extremely high traffic volumes on the LIE. This project incorporated two A+B bid contracts. The project ran as many as three shifts. (NYSDOT, EIC: Gary Moller, $95M, 1998-2001)

Reconstruction of Columbus Avenue, Chief Inspector - This project was done under two contracts: Contract I from W. 59th Street to W. 86th Street and Contract II from W. 86th Street to W. 110th Street. Total distance was 2.5 miles. This reconstruction included:
New roadway consisting of 10" concrete base an a 3" asphaltic concrete wearing course Rehabilitation of sewers including sewer replacement, insituform lining, and gunniting of sewers ranging in size from 18" to 72"New drainage facilities including several hundred catch basins and 12" DIP Chutes New and replacement watermains including a total of six miles of watermains from 12" to 48" in diameter. The 48" main was constructed of welded steel pipe and ran a distance of approximately two miles.New street signs Installation of new gas mains New electrical feeders New curb (steel faced concrete and granite)New street lights and traffic signals New tree plantings

All of the above work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day service. (NYCDOT, $85M, 1993-1996)

Construction of Combined Sewers in Hazen Street, Queens, New York, Chief Inspector - Construction of a 35-foot-deep, 6 ft x 12 ft combined sewer overflow. The sewer was constructed with both precast and cast-in-place concrete through a residential/commercial street and park. The project also included the installation of 12 in. and 20 in. water mains on concrete piers, utility relocation, roadway and sidewalk reconstruction, construction of an outfall structure in a steel cofferdam, and reconstruction of four baseball fields with fencing and dugouts. Close relationships with the community and commercial establishments minimized disruption. (NYCDEP, $12M, EIC: Suresh Patel, 1990-1993)

Bay Park Sewage Treatment Plant, Effluent Pump Station - Addition of one new and replacement of three existing effluent pumps, valves, piping and mechanical equipment. New HVAC, plumbing and hoisting equipment. (NCDPW, $6.6M)

Bay Park Sewage Treatment Plant Phase II,Grit and Screening Buildings, Lead Inspector - Construction of two new buildings for the removal of grit and screening from the raw sewage flow. Three new grit tanks, screws, conveyors, piping, hangers, plumbing and HVAC equipment. Heat recovery, odor control, pumps and auxiliary mechanical equipment. The buildings were constructed of heavily reinforced cast-in-place concrete. Much of the concrete was pumped into place. (NCDPW)

Mr. Riccio also has a great deal of experience as an Inspector of buildings and as an Asbestos Inspector overseeing the removal of asbestos and other hazardous material on projects:

Resident Engineer for Asbestos Abatement at Nassau County Medical Center involving removal of asbestos and replacing with fiberglass insulation within several buildings of the complex.

Resident Engineer for Asbestos Abatement at Bailey's Arboretum in Brookville, Nassau County.

Resident Engineer for Asbestos Abatement at Nassau County Museum of Art, Roslyn, NY.

Carl Russo
PROJECT ENGINEER

Mr. Russo has worked as Project Engineer on various construction projects. His experience profile includes building services, plant renovation and lighting equipment. Related project experience includes:

EDUCATION	Associates Degree, Electrical Technology, New York City Community College, 1973
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	32

FH 239, New York, NY, Inspector / Office Engineer - This fire house was completely renovated and enlarged. All of this was done while we were able to keep the front stone and brick work looking like it did when the building was built, around 116 years ago. The front wall had to be sandwiched between two I beams when a new, longer lentil had to be installed for a new over head door. The fire house was sandwiched between two buildings, the bottom walls had to be underpinned. A state-of-the-art kitchen was installed, and a two story total glass curtain wall that is just breathe taking. Even though the property is only 25 x 100 feet, this fire house has everything that a larger fire house has, plus! (NYC DDC)

Bond Street EMS Station, Brooklyn, NY, Inspector - This is one of the largest EMS stations built to date with 8,100 sf and room for seven ambulances inside the building. The building also contained locker rooms, offices, kitchen, gym, conference rooms, personnel decontamination area and truck decontamination area. (NYCDDC, $5M, 2006)

Springfield Gardens EMS Facility, Queens, NY, Inspector - This building was built following the demolition of a vehicle repair shop. An existing garage required demolition and a new steel-framed building was constructed. The new building was built on a pile foundation. During construction it was discovered that the water table was higher than expected. Well points were drilled, and a dewatering system was put in place and operated during the construction of the foundation. The building included three vehicle bays with FDNY systems and underground fuel tank. (NYCDDC, $3M, 2005)

Rockaway EMS Station, Queens, NY, Inspector - This work included construction of a new 19,958 sf, multi-story structural steel frame, reinforced concrete and masonry building constructed on a pile-supported foundation with reinforces concrete pile caps and grade beams. The proposed structure was to be built on a site in Far Rockaway. Additional work included the removal of an existing reinforced concrete foundation and other demolition debris, the removal of site stored construction materials, the furnishing and installation of an underground fuel tank and fuel dispensing system, site utilities including storm water detention tanks, architectural and other site fencing, paved parking areas, other miscellaneous site work and landscaping and the furnishing and installation of complete plumbing, HVAC and electrical systems. (NYC DDC, $9M, 2004)

James A. Thomas Center Renovations at Rikers Island, Queens, NY, Inspector - The renovation of this 240,000 sf, circa 1933 penitentiary on Rikers Island included new electrical service upgrades, modifications to the security, fire alarm and communication systems. In addition, there were extensive mechanical renovations. Mr. Russo was the inspector in charge of the electrical system. (NYC DDC, $25M, 2004)

Queens House of Detention, Project Engineer - The expansion program consisted of an 8-story, 500-inmate maximum security facility. Carefully phased construction was imperative to accommodate the relocation of existing facilities and personnel. The project included construction of temporary feeding facilities, asbestos abatement, and reconstruction of an 8,000-sf kitchen, a 2000-sf cold/dry storage, four serving areas, elevator rehabilitation, and new electrical service. (NYC DDC, $7M)

Employment History:

The LiRo Group (2001 to Present)
Project Engineer
Gilston Electrical Corp. (2000-2000)
Electrical Warehouse Manager
MTA/New York City Transit Authority Building Services (1989-1999)
Facilities Manager/Superintendent
New York City Transit Authority –Plant and Equipment (1985-1989)
Deputy Superintendent
New York City Transit Authority –Lighting Department (1984-1985)
Deputy Superintendent
New York City Transit Authority –Plant and Equipment (1977-1984)
Line Supervisor
New York City Transit Authority –Plant and Equipment (1968-1977)
Light Maintainer

Joseph Russo, N-IV
CHIEF INSPECTOR

Mr. Russo has 25 years experience as Chief Inspector on various projects involving roadways, drainage, and maintenance and protection of traffic.

EDUCATION	Mechanical Drafting, Mechanics Institute, 1966 Plumbing and Fire Protection, New York University, 1976
REGISTRATION / CERTIFICATIONS	NICET IV - Highway Construction, NY CPM Scheduling Certification, NY Confined Space Entry Certification Safety and Health Training - 29 CFR/OSHA CPM Scheduling for Construction Projects Seminar Concrete Construction Seminar OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	13
YEARS WITH OTHER FIRMS	19

Relevant projects include:

ATMS on the Long Island Expressway (D015387), Senior Inspector. This project included the installation of an Intelligent Transportation System (ITS) along the Long Island Expressway corridor between the Queens Midtown Toll Plaza and Main Street Flushing. ITS is a modern communication network system that provides the capability of monitoring and controlling the traffic network from a central station.

This project included daytime and nighttime operations. For the nighttime operations, the contractor was required to submit for review and approval a detailed Nighttime Lighting Plan in accordance with the NYSDOT Standard Specifications.

Project specifics included:

- Installation of ITS system including receivers, transmitters, camera assemblies, controllers, radar detectors, fiber optic cables, etc. In addition, it required the installation of server and other ITS equipment at the JTOC station, At the completion of the network, a system integration was performed.
- Installation of electrical and utility boxes, junction boxes and various sizes and types of conduit and conductor cable.
- Installation of overhead sign structures, VMS signs and illuminated sign panels.
- Installation of corrugated beam guide railing and chain link fence.
- Extensive landscaping work including planting of trees and shrubs, vegetation protection, pruning, clearing and grubbing, etc.
- Full depth concrete deck repairs on viaducts.

In addition, the completion of contract work required the direct or indirect involvement and coordination with many City and local agencies. (NYSDOT, $27M, 2005-2007)

Long Island Expressway Reconstruction, Queens County, NY, Chief Inspector: ITS & Electrical Systems - This project for NSYDOT involved the replacement of 18 bridges, the rehabilitation of 7 others, and the reconstruction of 7 miles of highway. The project also included the construction of 5 noise walls and the construction of 12 retaining walls. A major component of the project was a complete ITS system including facilities such as VMS boards, closed circuit cameras, ranging radar detectors, highway advisory radio, central office facilities and many others. Project specifies included 31,000 sm of "European" concrete pavement, superstructure deck replacement with "Inverset" structural spans, "Superpave" asphalt overlays, modification or replacement of 35 overhead sign structures.

Mr. Russo performed office engineers functions for the ITS items of work. Duties included the supervision and inspection of the complete ITS (Intelligent Transit System) from the Midtown Tunnel to Exit 23 of the Long Island Expressway. Items included VMS boards, cameras, radar detectors, HAR (Highway Advisory Radio) stations, mini hubs, etc. Street lighting and traffic signal work were also supervised and inspected. (NYSDOT $170M)

Rehabilitation of the East & West sides of Old Slip Street and Park Rehabilitation at Police Museum, Chief Inspector- Duties included the supervision and inspection of the excavation of the east and west side of Old Slip Street. Existing utilites were exposed for relocation and or repair. Sub-base material, asphalt and new granite curb were replaced at the park area. New trees were planted, seats were added and all brick work was repaired.

Long Island Expressway (I-495) Midtown Tunnel Improvements, Senior Inspector/Chief Inspector - Duties included the supervision and inspection of the complete ITS (Intelligent Transit System) from the Midtown Tunnel to Exit 23 of the Long Island Expressway. Items included VMS boards, cameras, radar detectors, HAR (Highway Advisory Radio) stations, mini hubs, etc. Street lighting and traffic signal work were also supervised and inspected. Assisted in chief inspection duties. (6/99-4/04)

Long Island Expressway (I-495) HOV Lane, Exits 57-61, Long Island, NY, Chief Inspector - This project involved the construction of new High Occupancy Vehicle (HOV) lanes on the Long Island Expressway and the reconstruction of the LIE mainline pavement from Exits 57-61. A total of eight bridges were reconstructed and/or replaced. Construction encompassed three phases to allow for an unimpeded traffic flow.

Project specifics included:

- Drainage: Over 28,000 lf of RCP and PE pipe in sizes ranging from 15 in. to 42 in. diameter.
- Asphalt: Over 240,000 tons. All asphalt was placed in accordance with Superpave specifications.
- Sound Barrier: Precast concrete panels and posts were mounted on cast-in-place piers. 640,000 sf total.
- Concrete Curb: 12,000 lf.
- Concrete Median Barrier: 30,000 lf, all precast.
- Overhead Sign Structures: 38 total, including span and cantilever types.
- Water Main: Over 2000 lf.
- Extensive underground utility work.

Other work elements included drainage structures, street lighting, INFORM upgrades, and the installation of Variable Message Signs (VMS). MPT on this project was of paramount importance due to the extremely high traffic volumes on the LIE. This project incorporated two A+B bid contracts. The project ran as many as three shifts. (NYSDOT, EIC: Gary Moller, 1/98-12/01, $95M)

Long Island Expressway (I-495) Exits 57-61 - Inspection of street lighting system between exits 57 and 61, both eastbound and westbound, Inform System which includes electrical cabinets, components, fiber optic cable, cameras, etc., concrete and asphalt paving, installation of guide rail, and other related duties in the contract. (8/97-6/99)

MTA-Long Island Rail Road Parking Lot, Chief Inspector/Resident Engineer - Supervised the demolition of eight multiple story buildings. Project included foundations for a new Town of Hempstead and LIRR commuter parking lot, new meter system, installation of new drainage system, street lighting, concrete sidewalk and curbs, asphalt paving and other related work. (MTA LIRR, $6M, 1996-1997)

LIE/SOBE Interchange Improvements, Nassau County, NY, Senior Inspector - This project entailed extensive maintenance and protection of traffic. (NYSDOT, $90M, 1996-1997).

Seaford-Oyster Bay Expressway Improvements, Town of Oyster Bay, NY, Senior Inspector - Inspected drainage, pavement repairs, roadway widening and bridge deck rehabilitation. (NYSDOT, $17.3M, 1996)

Long Island Expressway (I-495) Exits 42-46, Senior Inspector - Inspection of the complete street lighting and traffic signal systems. Inspected the installation of concrete barriers, roadway, asphalt paving, excavation and grade work including bridge deck concrete pours. Assisted in chief inspector duties when needed. (3/95-8/96)

Southern State Parkway Rehabilitation Project, Senior Inspector - Duties included the inspection of grade

work, concrete roadway sections, asphalt paving, installation of concrete barriers, street lighting and other related work. (3/94-3/95)

Hutchinson River Parkway Bridge over Hutchinson River, Bronx County, NY, Senior Inspector - Rehabilitation of a bascule bridge over the Hutchinson River. Duties included the inspection of the removal and reinstallation of machine room motors, brake system and related equipment, conduit installation, cable pulls, control room equipment, override system, locking mechanism and other related work.

Mechanical: Removal and replacement of all existing trunnion assemblies, replacement of all open gearing, shafting, couplings, bearings, brake system, electric motors and machinery supports, removal and replacement of lock machinery

Electrical: Installation of conduit and wiring to supply all systems including gate house and motor rooms, navigation lights, bridge span lighting, new submarine cable placement and other related items.

Architectural: Rehabilitation of existing gatehouse renovation of operators house, new HVAC system, hot and cold water system, new sewer and sanitary tie-ins, new windows, doors, stonework, brickwork to all piers and abutments. (NYSDOT)

Metro-North Commuter Rail Road, Hudson River Line Improvements, Bronx, New York, Senior Inspector - Project consisted of track bed improvements and related construction at various locations along 26 miles of the Hudson River line from Glenwood to Spyten Duyvil. Duties included inspection of drainage improvements including but not limited to the installation of precast concrete channels, headwalls and outfalls into the Hudson River, jacking of a 42" diameter concrete drainage pipe under the track bed during normal train service, inspection of concrete modular wall extension and gabion wall construction, survey line and grade to locate existing drainage outfalls for monitoring purposes. Responsibilities included preparation of daily inspector's report and quantity calculations for progress payments. (12/90-3/91)

Nassau Expressway, East Burnside Avenue to Atlantic Beach Bridge, Nassau County, New York, Senior Inspector - Project involved the construction of approximately 2 miles of a new signalized 4-lane divided highway in the vicinity of environmentally sensitive wetlands. The project met NYSDOT and federal standards for highway and bridge construction as well as environmental protection. Inspection duties covered clearing and grubbing, construction of super elevated roadway embankment sections, compaction and backfilling operations, installation of various drainage appurtenances including a 6' x 8' precast concrete box culvert, installation of a 48" diameter concrete lined steel water main including cathodic protection, blow-off manholes and monitoring stations. Responsibilities included preparation of daily inspector's report, quantity calculations for progress payments, and preparation of "a-built" drawings. Ensured compliance with DOT specs. (NYSDOT, 3/88-12/90)

Cross Island Parkway Improvements, Queens, New York, Senior Inspector - Project involved safety and drainage improvements to a 10 mile section of a 6 lane limited access divided highway. Duties included inspection of construction of 10 miles of new concrete median barrier, both precast and slip formed, including the installation of median lighting stanchions on the barrier, installation of guide and bridge rails, installation of breakaway foundations for roadside signage, and roadway reconstruction including demolition and disposal, asphalt and concrete milling operations, reconstruction of asphalt concrete roadways and reinforced concrete roadways. (NYSDOT, 3/86-3/88)

Long Island Rail Road, Main Line Improvements, Suffolk County, NY, Senior Inspector - This five year, $160M project involved the electrification and signal system modernization of 25 miles of LIRR track on the mainline branch. This was a major network expansion project for the LIRR. Project specifics included:

- 25 miles of new track and track bed
- Installation of new 750V DC third rail
- Installation of new computerized signal system
- Installation of new computerized communication system
- Installation of 12 overhead gantry signal structures

- Construction of a new 10-track yard at Ronkonkoma
- Construction of seven new power substations
- Installation of SCADA system

Jones Beach State Park, Nassau County, New York, New York, Inspector - Project consisted of the rehabilitation of various areas at the Jones Beach State Park. Duties performed at this time included the inspection of partial reconstruction for 3 separate parking lots with a combined capacity of 4,500 vehicles including demolition and disposal and reconstruction on unreinforced concrete based asphalt pavements, related drainage improvements, cast in place concrete curbs, sidewalks and driveway aprons, lighting for parking lots/walkways and along the boardwalk; landscape restoration of environmentally sensitive dune areas, inspection of the reconstruction of 4 fishing piers including demolition and disposal, relocation of existing water main, pile driving operations and maintenance dredging; inspection of improvements to 2 bath houses including demolition, disposal and reconstruction of concrete walkways, landscaping, repointing of brick and masonry, tile roofing and interior plumbing improvements. Responsibilities included preparation of daily inspector's report and quality calculations for progress payments. (3/82-3/85)

Piping Designer - Design of piping systems for various piers and loading docks. Services were fire water and potable water. Design of pump house piping, design of piping systems for chemical building and water treatment plant. (Field trips included.) Periodic inspection of above during construction.

Piping Designer - Surveyed 68 manholes to determine the modifications needed to upgrade existing steam and condensate system. Supervised sample testing for the presence of asbestos insulation on piping at Brookhaven Laboratory, Long Island.

Drydock, Newport News, PA, Piping Designer - Duties included design of piping systems for drydock. Facilities were river water, cooling water, propone, argon, air caustic chemical piping, etc. Field trips were made for locations of service stations and the removal of existing facilities.

Graving dock for offshore power systems, Jacksonville, FL, Piping Designer - Developed construction drawings for air, water and welding gas systems. Worked with Engineer for design and development of solid waste disposal systems, oil gas and water piping for incinerator and burners. Work accomplished in the field with Engineer and field crews.

LNG Plant Expansion, Piping Designer - Duties included piping detailing, schematics and diagrams for main steam, auxiliary steam, cooling water, condensate and turbine oil systems, detailing of utilities such as plant air, portable water and sanitary systems.

In addition, Mr. Russo has designed piping systems for fossil power plants. Services were cooling water, service water, steam, condensate, fuel oil, boiler feed, etc. The modification and expansion of existing power plants, field trips were made to accomplish the above.

Genaro Sanchez, Jr., N-III

INSPECTOR, SENIOR

Since 1986, Mr. Sanchez has provided services in the construction inspection of large scale infrastructure projects in the New York Metropolitan area. Mr. Sanchez's projects include:

EDUCATION	H.S. Diploma, 0 Fashion Institute of Technology, 0
REGISTRATION / CERTIFICATIONS	ACI Concrete Field Testing Technician - Grade I Formal MPT Training - NYSDOT NICET III, Highway Construction NICET III - Transportation Engineering Technology: Hwy Const Proper Flagging Procedures in the Work Area Seminar Temporary Traffic Control and Work Zone Safety Seminar
YEARS WITH THIS FIRM	15
YEARS WITH OTHER FIRMS	10

Engineered Resurfacing South of Canal Street, Senior Inspector - This three-year project involved the resurfacing and reconstruction of 44 streets in lower Manhattan. Work on individual streets ranged from full depth reconstruction to milling and resurfacing. Work was performed on some of the busiest streets in Manhattan including Broadway, Greenwich Street, John Street and Beaver Street. Work was performed both day and night. This project also included an intensive community liaison effort to help keep residents and businesses apprised of the work status. The construction cost to the NYCDDC for this project was relatively modest at approximately $4 million. The utility relocation costs, however, exceeded $40 million, greatly increasing the scope and complexity of the project. (NYCDDC, $44M)

Columbus Avenue Reconstruction, Senior Inspector - This project was done under two contracts: Contract I from W. 59th Street to W. 86th Street and Contract II from W. 86th Street to W. 110th Street. Total distance was 2.5 miles. This reconstruction included:

- New roadway consisting of 10" concrete base and a 3" asphaltic concrete wearing course
- Rehabilitation of sewers including sewer replacement, insituform lining, and gunniting of sewers ranging in size from 18" to 72"
- New drainage facilities including several hundred catch basins and 12" DIP Chutes
- New and replacement water mains including a total of six miles of water mains from 12" to 48" in diameter. The 48" main was constructed of welded steel pipe and ran a distance of approximately two miles.
- New street signs
- Installation of new gas mains
- New electrical feeders
- New curb (steel faced concrete and granite)
- New street lights and traffic signals
- New tree plantings

Route 9A Reconstruction, Segment 7, Senior Inspector - LiRo provided construction inspection services for the reconstruction of Route 9A (12th Avenue) from 40th Street to 59th Street. The entire roadway sandwich is being reconstructed. Major components of the utility infrastructure are also being upgraded. Mr. Sanchez worked on the installation of 5,300 lf of 20" water main, along with the associated valves, hydrants and house connections. His responsibilities included drawing of field cards, writing daily inspector reports, ensuring that the water main layout complied with the plans, DDC requirements and regulations, evaluating test-pit reports, coordinating the work of the water main installation with other utilities, and ensuring field compliance of materials used for the water main construction.

A four-span continuous ramp (steel with a concrete deck) is being added to the Westside Highway). The

substructure is founded on bored-in-place piles. Existing tidegates are being renovated and new ones are being built. The utility work includes roadway drainage, 20-inch water mains, gas mains, and ECS (telephone) ducts. Traffic signals and street lighting as well as Intelligent Transportation Systems are being installed.
In the midst of this construction, the traffic flow on the highway is being maintained. An additional turning lane was added at 42nd Street. The traffic maintenance is compounded by the presence of the Circle Line, the Intrepid Museum, the Passenger Ship Terminal, and a newly opened convention center, all of which required separate plans to address traffic concerns. Specific contract quantities include concrete pavement (17,000 cm); excavation (96,000 cm); drainage pipe (2,500 m); water main (2,000 m).

East 163rd Street Reconstruction between Third and Prospect Avenues, Bronx, Senior Inspector - Drainage operations, sheeted excavations, installation of DIP, ESVP and manholes and catch basins, backfill of drainage, coordination of utility interference, concrete for sidewalks, roadway pavement and steel faced curb, water main installation, asphalt placement, maintenance of site including implementation of MPT and enforcing "site maintenance" requirements. (NYCDDC)

All of the above work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day service. (NYCDOT, $85M)

Mr. Sanchez served as inspector on the following NYSDOT projects:

Cross Island Parkway/Long Island Expressway Interchange (Exits 29-32), Senior Inspector - LiRo is providing construction inspection services for the rehabilitation of the Long Island Expressway/Cross Island Parkway Interchange. This project includes the construction and/or rehabilitation of 14 bridges, widening and resurfacing of the Long Island Expressway, local NYC roadway and utility rehabilitation, extensive park/wetland mitigation work, noise and retaining wall construction, and other incidental work.

The most complex construction is the replacement of the mainline bridge over the Cross Island Parkway. This bridge will be replaced in two stages and requires construction of a temporary structure to maintain three through travel lanes on the Expressway in each direction at all times. (NYSDOT, $150M)

Suffern Interchange - Soil erosion and water pollution control, hazardous waste control, excavations, embankments, grading, concrete for rigid pavement, asphalt concrete pavement, electrical and utilities.

Ashford Avenue Bridge over NYS Thruway and Saw Mill River - Major rehab of bridge components, including replacement of deck slab, deck joints and bearing, micro-silica overlay, abutment and pier rehab, utility relocation, and painting structural steel.

Mosholu Parkway Reconstruction - Steel erection, deck placement, bridge joints and bearings, concrete placement for abutments, concrete pavement, landscaping heavy post blocked-out guide railing.

Major Deegan Expressway Bridge crossing Lincoln Avenue, Bronx and Long Island Expressway Bridge crossing Grand Central Parkway, Queens - Replacing existing pins, hangers, deck joints, and bridge bearings, pavement striping, painting structural steel and asphalt placement.

Long Island Expressway Collector Distributor Roadways, Queens - Field testing of concrete and asphalt, soil testing for compaction and sieve analysis, structural concrete for retaining walls, abutments, structural desk slabs and concrete pavement on grade.

David Santos, N-II

INSPECTOR

Mr. Santos has several years of experience as Office Engineer in building, highway and bridge projects. His projects have involved duties such as preparing of daily reports; shop drawing review; cost and quality control; client liaison; inspection and coordination of contractor's work; preparation of payment requisitions; surveying; preparation of final drawings. Representative projects include:

EDUCATION	
REGISTRATION / CERTIFICATIONS	JUMP Program ACI Concrete Field Testing Technician - Grade I NICET II OSHA 10 Hour Occupational Safety & Health Training OSHA 10 Hour Safety Training Course OSHA 30 Occupational Safety and Health Training Course, NY
YEARS WITH THIS FIRM	4
YEARS WITH OTHER FIRMS	0

DASNY/HHC Emergency Power Upgrade Project, New York, NY, Construction Management Services, Office Engineer - LiRo provided Construction Management services for the upgrade of Emergency Power Systems at seven New York City Hospitals. Mr. Santos worked as a Field Representative at the Bellevue Hospital, Elmhurst Hospital, and Harlem Hospital sites. In coordination with The Dormitory Authority of the State of New York and The Health & Hospitals Commission, LiRo oversaw the installation of: Four (4) new 725kw generators and One (1) 1,500kw generator at Bellevue Hospital; One (1) new 1,500kw generator, one (1) new 600kw generator, removal of a 350kw generator and a 600kw generator, and installation of a new 12,000-gallon diesel UST at Elmhurst Hospital; Replacement of three (3) 350kw existing generators with four (4) 1,000kw generators, construction of a new emergency equipment room, installation of a new 375kw generator, and installation of a 1,000-gallon diesel AST at Harlem Hospital; (DASNY, $59M, 2008-2010)

Maintenance Repairs/Painting of Bridges On or Spanning the Grand Central Parkway, PIN XM97.51 D015486- This project involved the repair and painting of 37 bridges on or spanning the Grand Central Parkway in Queens, NY. The bridges required a wide variety of repairs including those to steel, joints, concrete decks, drainage system and scuppers, masonry veneers, as well as paving and complete bridge painting utilizing full Class A Containment. The bridges ranged in size from a three span pedestrian overpass to a 28 span viaduct ten lane wide and included the Clear view Expressway/Grand Central Parkway interchange. Work was performed on a 24/7 basis. Multiple change orders were processed. Specific work activities included:

<u>Drainage Items:</u> Cleaning and repair of pipes, scuppers, and drainage troughs; Retro fitting down spouts.

<u>Concrete and Asphalt Items:</u> Repairs to piers and abutments utilizing class D concrete; Repairs to concrete block, stone, and granite pavers; Spall repairs to columns, piers, and retaining walls; Concrete deck repairs; Crack sealing with epoxy injection; Removal of existing asphalt overlay; Asphalt repaving; Installation of thermoplastic striping.

<u>Joint Items:</u> Removal of existing compression seals; Joint cleaning; Installation of new compression seals

<u>Steel Items:</u> Repair of stringer webs; Removal and replacement of cross frames; Removal and installation of new diaphragms; Repairs to damaged vertical bearing stiffeners; Miscellaneous steel repairs as needed; Repairs to cracked welds between sole plates and stiffeners; Performed structural lifting operations

Painting: Provided Class A and B containment system for paint removal; Field cleaned and painted structures, curbs, and railings (all cleaning to SP-10); Removal and disposal of contaminated material; Application of three coat epoxy system.

(NYSDOT, $29M EIC: P.G. Patel, P.E.)

MTA - LIRR West Side Storage Yard Overbuild, Construction Inspector - The Project Sites are bound by 30th Street on the south and 33rd Street on the North, 12th Avenue on the west and 9th Avenue on the east. The Project Site consists of two Projects, Brookfield Properties Overbuild and the West Side Storage Yard Overbuild.

Mr. Santos provided construction inspection services as part of LiRo's role in providing construction management services in support of the overbuild. The following activities are being managed and reported on:

West Side Storage Yard Overbuild
- Survey Work
- Geo-technical and rock boring on WSSY lay-up Tracks
- Drilling and installation of caissons
- Installation of steel beams over WSSY lay-up tracks

Brookfield Properties Overbuild
- Drilling and installation of caissons
- Installation of protection barrier between Lead Track No. 4 and the north retaining wall in Brookfield Properties Overbuild
- Installation of steel beams over WSSY lead tracks
- Installation of deck over lead tracks resulting in enclosed train shed
- Installation of utilities in new train shed area that includes lighting and standpipe

MTA - LIRR ACL Direct Fixation Fastener Replacement Program, Inspector
The scope of the work of the ACL Project primarily consists of the installation of new Railroad supplied direct fixation fasteners on the Amityville-Copiague-Lindenhurst viaducts, located in the communities of the same name, on LIRR's Babylon Branch in Suffolk County, NY; and includes plinth work, and some viaduct repairs ranging from patching to full-depth deck replacement.

The Construction work that LiRo is managing includes the following elements:
- Project mobilization and submittals
- Roadway Worker Protection training for Contractor's on-track employees
- Pre-construction survey of existing track alignment
- Install temporary track bearings and gauge supports to maintain rail traffic during construction
- Remove and store viaduct guard rails
- Repair deteriorated portions of the ACL Viaducts bridge decks
- Enlarge/repair/replace cracked and broken concrete plinths
- Core track plinths and install new anchor inserts using epoxy
- Test new inserts under tensile and torsional loading prior to installing new fasteners
- Replace existing fasteners with new fasteners
- Restore viaduct guard rails
- Remove and dispose of existing fasteners and hardware
- Final site clean-up, record documents submittals, demobilization and closeout

(MTA - LIRR, $30M)

Colin Tomlinson, N-III
SENIOR INSPECTOR

Since 1982, Mr. Tomlinson has participated on projects involving reconstruction of roadways, sidewalks, street lighting, sewers and water mains, as well as material testing. His projects include:

EDUCATION	A.A.S., Construction, 1986 West Indies-Certificate, College of Arts, Sciences and Technology, 1982
REGISTRATION / CERTIFICATIONS	Advanced Practice of Concrete Construction & Specifications CPM Scheduling Certification, NY NACE Coating Inspector I NICET III - Highway Construction NYCDDC Concrete Certificate OSHA 10 Hour Occupational Safety & Health Training SSPC C-1 Certified, NY Welding Inspection Issues Seminar
YEARS WITH THIS FIRM	21
YEARS WITH OTHER FIRMS	4

Stuyvesant Avenue Reconstruction, Chief Inspector - LiRo provided Resident Engineering Inspection Services for the Reconstruction of Stuyvesant Avenue from Fulton Street to Broadway (1.2 miles) in the Borough of Brooklyn. The project area was primarily residential in nature with the inclusion of a three-block historic district. Maintenance and protection of traffic on this project was critical. The project area encompassed several schools and religious institutions. LiRo provided extensive liaison services to maintain the community as a partner in the project. (NYCDDC, $9M)

Deck Replacement on the Randall's Island and Ward's Island Viaduct at the Triborough Bridge. (TB-64B). Senior Inspector. This project, valued at $272 million, is the TBTA's largest bridge project to date and involves the reconstruction of the Wards/Randall's Island Viaduct, new coatings, bearing replacement on the Queen's Approach and Bronx Truss, construction of new ramps, access road construction on Randall's Island and widening of the Queens to Manhattan Ramp. LiRo is the prime consultant on this joint venture project.

Ward's / Randall's Island Viaducts - The existing deck (over 480,000 SF) will be replaced with composite units of structural steel cross beams and post tensioned precast concrete. The Ward's/ Randall's Island Viaducts will receive new armored joints, rosphalt overlay, side and median barrier, improved storm drainage and new steel and cast in place (post-tensioned) brackets and stringers for the widening of the existing roadway. Over 22 million pounds of new structural steel will be installed.

Ramp Construction - Two new on and off ramps will be constructed in conjunction with a 5000 LF surface road on Ward's Island. The majority of the ramps are elevated and a portion will be built with new retaining walls. Ramps construction will include new foundations on piles, new columns, new steel girders, reinforced cast in place deck slabs, and new side barriers. The existing pedestrian walkways will be eliminated and replaced by one new pedestrian ramp. A portion of the ramp will be cantilevered with cast in place concrete brackets and a steel grid concrete deck. The remaining portion will be built with retaining walls and concrete walkway down to grade level. In addition a new stair tower will be constructed on the pedestrian walkway with new piers and columns.
The Queens to Manhattan Ramp will be widened to allow for three lanes to access Manhattan. A portion of the existing roadway deck will be removed and construction of new foundations on piles, new columns, new girders, and reinforced cast in place deck slab constructed.

Bearing Replacement - Approximately 740 bearings will be replaced on the Queens Viaduct, Ward's / Randall's Island Viaducts, Queens to Manhattan Ramp and the Bronx Truss.

Coatings - Over 2 million square feet of existing steel will receive a new protective coating on the Queens & Ward's Island Anchorage, Triborough Bridge Main Span and the Ward's / Randall's Island Viaducts. Additional work includes new lighting, electrical upgrades and archeological monitoring of footing excavations. (MTA-TBTA, $272M)

Triborough Bridge Redecking and Cabling (TB-64A), Senior Inspector. LiRo was part of a tri-venture of firms managing the deck replacement on the Triborough Bridge. The project consisted primarily of major rehabilitation on the suspended span and the Queens viaduct. Suspended Span - The existing deck (over 250,000 sf) was replaced with an orthotropic steel deck. The work also included replacement of the finger-type expansion joints with modular joints; safety barrier installation; drainage improvements; and at the anchorages, replacement of the existing deck with composite units of structural steel cross beams and precast concrete. The cable work included cable sleeve modifications at six locations and the replacement of 184 suspender ropes and fittings. Queens Viaduct - Work on the Queens Viaduct included replacement of over 165,000 sf of existing deck with composite units of structural steel cross beams and precast concrete. The Queens Viaduct received new armored joints, concrete overlay, side and median barriers, improved storm drainage, and new brackets and stringers for the widening of the roadway during construction. At the project's completion, the new structure was converted to a sidewalk. Additional work included sidewalk widening on the Queens approach, pin replacement at the Wards Island anchorage, new lighting and electrical upgrades on the viaduct and suspended spans, and lead abatement on structural steel throughout the project. (MTA Bridges and Tunnels, Project Manager: Tom Bach, $150M, 2004)

Construction Inspection Services on an As-Needed Basis, 2004 - 2007, Triborough Bridge and Tunnel Authority Facilities, New York, NY, Inspector. This project involved on-call construction inspection services and included associated services at various TBTA facilities throughout New York City. The work included highway and bridge construction, electrical and mechanical construction, building construction and renovation, asbestos and lead abatement, underground storage tank replacement, as well as estimating, scheduling and shop drawing review. Work was performed day and night at all TBTA facilities. Specific projects include:

- GFM 451 - Pothole Repairs at Various Facilities, Inspector. (MTA-TBTA, $4.8M)
- GFM 418 - Pothole Repairs at Various Facilities, Inspector. (MTA-TBTA, $750K)
- GFM 421 - Miscellaneous Roadway Repairs, Inspector. (MTA -TBTA, $15M)

Paving at Various Facilities (GFM - 398), Inspector - This multi-year project, as part of the Construction Inspection Services on an As-Needed Basis, 2001 - 2004, involved asphalt and concrete paving at all TBTA facilities. All work was performed by a single contractor and a requirements type contract. Specific work activities included asphalt milling and paving full and partial depth calcium chloride concrete repairs, application of waterproofing membranes emergency pothole repair, and pavement marking. Work was done primarily on nights and weekends. This project required extensive MPT and coordination with various facility engineers and managers. (TBTA, $13M)

Inspector for Oiling of strands and Eyebars in the Verrazano Bridge - This project involved the oiling of the main suspension cable strands and eyebars in the anchorages of the Verrazano Bridge. The strands were separated using wooden wedges and coated with linseed oil. Project responsibilities included ensured contractor compliance with applicable OSHA regulations regarding handling and storage of hazardous materials; monitored contractor handling and separation of the main suspension cables; prepared daily, weekly, and monthly progress reports with regard to project status and contractor's performance; monitored contractor's compliance with M.U.T.C.O. with various maintenance and protection schemes. (TBTA, Project Manager: John Zunino).

Michael Trotta
RESIDENT ENGINEER

Mr. Trotta has over 35 years of experience in the field of construction inspection, specifically with industrial buildings, rail yards, drainage systems, pumping stations, sewer plant process systems (civil and mechanical) and demolition of steel and concrete structures. Mr. Trotta also has extensive surveying capabilities, having spent 8 years as a surveyor. Mr. Trotta has extensive experience with concrete, structural steel erection, as well as site and utility work.

EDUCATION	
REGISTRATION / CERTIFICATIONS	OSHA Safety Certificate Drainage Installation with PE Pipe Basics of CPM Scheduling Advanced Practice of Concrete Construction Analysis and Interpretation of Concrete Specificat OSHA 10 Hour Safety Course
YEARS WITH THIS FIRM	22
YEARS WITH OTHER FIRMS	15

Construction of JetBlue Airlines Terminal 5 at JFK Airport, MEP Inspector - Project involved resident engineering and quality assurance oversight for a 625,000 sf passenger terminal building with 26 gates, an elevated connector to the AirTrain, and a new 1500 space, 6-level parking garage. The project also involved the construction of an elevated Arrivals Roadway, new Hydrant Fuel System, Baggage Handling System, 15"-17" concrete apron pavement, and connection to the historic Saarinen Terminal. A fire standpipe system was installed in both the garage and passenger terminal. (PANYNJ, $900M, 2006-present)
Mr. Trotta was responsible for the following:
-Audit and Field Inspection, Flexible and Rigid Concrete and Asphalt Paving for Apron and Taxi line Pavement),
-DIP Watermain, Jet Fuel Distribution and Hydrant System, Storm and Sanitary Sewers, Reinforcing Steel, Linestripping
-Fire Standpipe system installation
-Mechanically Stabilized Earth (MSE) ,Structural Steel and Concrete Ramps
-Post-Tensioned Precast Concrete Roadway
-CMU Exterior Walls and Fire Rated Interior Walls
-Quality Assurance, Audit of Terrazzo flooring and Tile Installation
-Testing, Record-keeping of Fire, Smoke Dampers for Life Safety Inspection
-Management, Recording, Audit, and Resolution of all Concrete, Soil, Asphalt, Masonry PANYNJ Controlled Inspections
-Monitoring of Testing Labs Field Personnel Performing Materials Testing
-Extensive Daily Coordination and Scheduling with General Contractor, Sub-Contractors , JFK-PAPD, Security,
-Airtrain, Airside and Landside Operations, Maintenance, Quality Assurance, and Materials divisions

Field of Dreams Park, Resident Engineer - The Field of Dreams project, located in Massapequa, NY, is a multi-use sports facility for the Town of Oyster Bay. The park consists of two full-size multi-purpose fields measuring 180' x 360', and a half field measuring 180' x 180'. Each field was to contain its own set of bleachers, a wire-less electronic score board, field-lighting and irrigation. In addition to these sports fields, there were to be a restroom facility, utility building, basketball court, two separate playgrounds for children ages two through five and five through 12, on-site parking for 128 cars, and extensive landscaping. Site amenities included entrance walls and gates, site lighting, drinking fountains, decorative and utilitarian fences, relocation of electrical services from above ground to underground, sewer connections, curbing and sidewalk for exterior road and drainage for on-site and off-site locations. LiRo was responsible for the design and construction inspections for this project from conception to completion. (Town of Oyster Bay, $4M)

Construction of Traction Power AC/DC Substations at LIRR locations at Island Park, Resident Engineer - In an effort to support the arrival of new electric fleet equipment (M7 Bombardier Coaches) system-

wide improvement to the traction power infrastructure of the LIRR was required. This project consisted of new traction power substation equipment installed as designed including the following elements:
-Block Enclosed Buildings
-New AC Switchgear
-Rectifier Transformers
-Rectifiers
-New DC Switchgear
-Battery System
-Control Cabinets
-Lighting
-Fire & Intrusion Alarm Systems
-Heating and Ventilation Systems
-Duct banks
-Reactor pads
-Positive/Negative Dead Rail Indication Cables
(LIRR $15M)

Construction of a New Employee Facility at the LIRR's Oyster Bay Yard, Resident Engineer - This project consisted of the construction of a new 2800 sf concrete block and steel building. The facility was built to accommodate M of E and Transportation Department personnel. Building specifics included the following:
Construction of two complete kitchens, four locker rooms, and two bathrooms
Installation of new communication equipment.
Installation of a new electrical room.
Construction of new mechanical systems.
Installed all new utilities: sewer, water, electrical service, and gas.
Site work including parking lots, curb and sidewalk.
(LIRR, $1.2M)

Paving at Various Facilities (GFM - 398), Inspector - This multi-year project involved asphalt and concrete paving at all TBTA facilities. A single contractor and a requirements type contract performed all work. Specific work activities included asphalt milling and paving full and partial depth calcium chloride concrete repairs, application of waterproofing membranes emergency pothole repair, and pavement marking. Work was done primarily on nights and weekends. This project required extensive MPT and coordination with various facility engineers and managers. (TBTA, $10M)

Renovation of the LIRR Oyster Bay Yard, Oyster Bay, NY, Chief Civil/Mechanical Inspector - The Long Island Rail Road undertook this yard renovation program to accommodate the new diesel locomotives, bi-level passenger cars, and diesel-electric dual-mode locomotives. The yard improvements included the following key features:
Removal and disposal of contaminated ballast and unsuitable soil.
Seven tracks and associated turnouts for lay-up of trains. These tracks total over 7,400 lf of new track to accommodate both the new and existing diesel operations.
Construction of a new north (passing) siding track, opposite the new high-level platform.
1,250 lf of track collection pans.
An oil-water separation and carbon filtration system with large diameter double-walled piping, to convey and process storm water from the track collection pans.
An electric service building to house 74 volt DC system, 3000 amp, 480v / 277v 4 wire switchgear and associated distribution systems.
Concrete encased electric duct banks, 480v wayside power receptacles and three 1,500 KVA transformers.
New modular structure employee facility on reinforced concrete footings.
Four reinforced concrete train maintenance platforms.
Paved walkways and roads.
Site lighting to facilitate train maintenance operations and to improve site security.
Installation of back-flow prevention device, ductile iron water mains, yard hydrants, sanitary and storm drain piping, catch basins, and leaching basins.

Installation of an 8-ft high chain link site perimeter security fence.
Mr. Trotta's responsibilities at Oyster Bay included:
Oversight and inspection of contractor's work to verify conformance with contract documents.
Administration of the construction contract to ensure all required submittals and deliverables are received and reviewed and was in conformance with the contract documents.
Preparation of change order documentation.
Attended all required progress meetings.
Reviewed schedule payment updates to ensure conformance with the contract documents and actual progress.
(LIRR, $15M)

Improvements to Sludge Digestion Facilities, Bay Park Sewage Treatment Plant - New waste gas burner structure, MCC Building, tunnel access structure and the enlargement of sludge control building. The project also included the rehabilitation of four digester tanks and the demolition, removal and relocation of equipment. (NCDPW, $15M)

Central Warehouse Facilities, Bay Park Sewage Treatment Plant, Resident Engineer - Construction of two reinforced concrete buildings, mechanical and HVAC equipment (NCDPW,$7M)

Primary Improvements, Bay Park Sewage Treatment Plant Phase IVD, Chief Inspector - Construction of four new primary treatment tanks, new odor control and effluent buildings, new pump station, new piping, pumps and mechanical equipment. Demolition, removal and replacement of auxiliary process equipment. (NCDPW$34M)

Miscellaneous Odor Control Plant, Resident Engineer - New addition to screening building for housing of odor control equipment serving existing final tank area. (NCDPW, $2M)

Raw Sewage Pumps, Bay Park Sewage Treatment Plant, Resident Engineer - Rehabilitation of five raw sewage pumps, motors and auxiliary mechanical equipment. Also included was the replacement of overhead crane, new screening buckets and monorail hoist. (NCDPW$2.3M)

Final Tanks, Bay Park Sewage Treatment Plant Phase III A, Chief Inspector, - Construction of new final settling tanks, collection equipment, aeration tank and plant process mechanical equipment. Also included was a new return sludge pumping station, multiple piping systems, supports, overhead crane, HVAC equipment. The project also included aeration tank diffusers, HVAC equipment, plumbing and screening buildings. (NCDPW, $49,925,870)

Southwest Sludge Dewatering Facility, Bay Park Sewage Treatment Plant, Chief Inspector, -
Construction of a new reinforced concrete building, installation of 12 sludge dewatering presses, conveyors, pumps, piping and various mechanical equipment. The project also included the installation of heat recovery, odor control and chemical storage equipment, and a truck loading scale. (NCDPW, $25.3M)

Central Heating, Bay Park Sewage Treatment Plant, Resident Engineer - Demolition and removal of existing diesel generators and auxiliary equipment for conversion of old main building to new central heating/cooling facility. (NCDPW, $989,000)

Effluent Pump Station, Bay Park Sewage Treatment Plant, Chief Inspector - Addition of one new and replacement of three existing effluent pumps, valves, piping and mechanical equipment. New HVAC, plumbing and hoisting equipment was installed. (NCDPW, $6.6M)

Sludge Thickening, Bay Park Sewage Treatment Plant Phase IV B, Chief Inspector - Rehabilitation of six sludge thickening tanks; demolition, removal and installation of new process equipment consisting of piping, pumps and auxiliary mechanical installations.
(NCDPW, $8.7M)

Fire Protection Building, Bay Park Sewage Treatment Plant Phase IV A, Chief Inspector, - Erection of a new reinforced concrete building, water storage tank and two diesel driven fire protection water pumps. Installation of HVAC, service water and seal water equipment. (NCDPW, $3.2M)

Diesel Generator Building, Bay Park Sewage Treatment Plant Phase III C, Inspector- Construction of a new cogeneration plant for the production of electrical power and heating hot water. Directly involved with work for erection of new concrete and steel structure, four diesel generators (5000 HP engines, 3600 KW generators each) auxiliary equipment including piping, pumps and assorted mechanical equipment, new heat recovery silencers, air handling units, plumbing, overhead cranes, gas compressors, control panels and instrumentation. (NCDPW, $40M)

Grit and Screening Buildings, Bay Park Sewage Treatment Plant Phase II, NCDPW, Inspector - Construction of two new buildings for the removal of grit and screening from the raw sewage flow. Three new grit tanks, screws, conveyors, piping, hangers, plumbing and HVAC equipment. Heat recovery, odor control, pumps and auxiliary mechanical equipment.

Engine Emissions Control, Bay Park Sewage Treatment Plant, Inspector - Modifications to existing diesel generators and installation of new equipment to reduce harmful engine emissions. (NCDPW,$3,865,000)

Operations and Administration Building, Bay Park Sewage Treatment Plant Phase I, NCDPW, Inspector - Construction of a new plant operations and administration building, fluidized bed reactor and associated mechanical equipment. Three new emergency diesel generators, process air blowers, heat recovery and HVAC systems, multiple piping systems and supports, controls and instrumentation. Ductwork, boiler, underground fuel storage.

Daniel Vena, N-III
INSPECTOR

Mr. Vena has 23 years of experience in the inspection of large-scale infrastructure construction projects within the New York Metropolitan area. He has performed professional services for projects for MTA, TBTA, NYSDOT, NYCDOT, MTA-NYCT, NYCDDC, Nassau County DPW and Suffolk County DPW.

EDUCATION	
REGISTRATION / CERTIFICATIONS	NICET III, NY OSHA Safety Course-Site Safety
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	7

Construction Inspection on an As-Needed Basis (2004-2007), Henry Hudson Bridge Spall Repairs and Structural Steel Replacement, New York, Inspector.

Reactivation of Staten Island Rail Road, Staten Island, NY, Inspector - Field inspection work included tubular steel piles for bridges over water, box culverts with steel piles, rail road construction, stress welding, field welding, nightime operations, concrete modular grade crossings, thermal rail heating, dynamic compaction, prepared payment for EDC, T-Wall construction, drainage of 24" concrete pipe, water main construction DEP, 12" and 24" ductile iron pipe DIP, and hydrant service installation (MTA-SIRR).

NYCDOT Contract No. HBE1023, Emergency Installation of Center Median New Guide Rails on the Mill Basin Bridge, Brooklyn, Construction Inspection - This contract called for the installation of a special movable bridge railing system on a double leaf bascule bridge carrying the Belt Parkway over the Mill Basin. This installation was designed to prevent future vehicular head-on collisions that had been occurring at an alarming frequency. The contract therefore had stringent incentive/disincentive provisions. LiRo was a pro-active major partner in assuring that the other participants remained focused on keeping the work going, and ultimately to be completed early. Among the items of work on this contract were:

- Structural Concrete
- Structural Steel, including very large members
- Steel Bridge Railing
- Corrugated Beam Guide Railing
- Maintenance and Protection of Traffic on a high-speed parkway
- Nighttime operations
- Miscellaneous structural steel repairs
- Environmental protection, containment, and disposal of contaminated waste
- Special Hinged Barrier that moves as the bridge is opened
- Re-balancing of the bridge leaf spans
- Special FHWA crash testing

(NYCDOT, $3M, 2003)

Emergency Repairs to the Belt Parkway Bridge over Paerdegat Basin, Brooklyn, NY, Inspector - This contract called for providing an alternate support system for the loading, formerly carried by a pier-column, that had been severely damaged by a recent barge hit and was no longer functional. A strict incentive/disincentive provision was included for this work because traffic has already been channelized into narrow lanes, and disruption of this major arterial highway for construction operations has to be kept to an absolute minimum. One other task included in the work was the installation of a special movable median barrier powered by electricity, with the capability of creating an opening which will be used in emergency situation to turn around over-weight

vehicle to prevent them from traversing the bridge, and for emergency traffic detours. Other tasks included installation of major signage and the installation of heavy duty pier protection fender system to preclude damage to the channel pier-columns in the future.

Among the items of work on this contract included:

- Structural concrete
- Major structural steel girders
- Concrete over-filled steel grid deck
- Movable steel beam guide railing
- Signs, foundations gautries and posts
- Installation of electric motors, conduits and cables
- Parkway land remediation
- Steel cased concrete piles
- Wooden piles
- Timber fendering system
- Maintenance and protection of traffic on a high speed parkway
- Nighttime operations
- Environmental protection, protection of trees and shrubs
- Restoration of parkland

(NYCDOT, $14M, 2004)

Randall's Island Fire Training Academy, Construction Management, Inspector - The Fire Department of the City of New York has operated a Fire Training Academy on Randall's Island for over 25 years. This 27-acre waterfront facility ("The Rock") sits between the DEP Wards Island Water Pollution Control Plant and NYC Park Department property. Previously, the facility had nine buildings including both classrooms and hands-on training with simulated fires and smoke structures. This $35 million, two year program involved four facilities and two external trainers. (NYCDDC, $35M, 2003)

Columbus Avenue Reconstruction Project, 85th Street to 110th Street, Inspector - This project was done under two contracts: Contract I from W. 59th Street to W. 86th Street and Contract II from W. 86th Street to W. 110th Street. Total distance was 2.5 miles. This reconstruction included:

- New roadway consisting of 10" concrete base an a 3" asphaltic concrete wearing course
- Rehabilitation of sewers including sewer replacement, insituform lining, and gunniting of sewers ranging in size from 18" to 72"
- New drainage facilities including several hundred catch basins and 12" DIP Chutes
- New and replacement water mains including a total of six miles of water mains from 12" to 48" in diameter. The 48" main was constructed of welded steel pipe and ran a distance of approximately two miles.
- New street signs
- Installation of new gas mains
- New electrical feeders
- New curb (steel faced concrete and granite)
- New street lights and traffic signals
- New tree plantings

(NYCDOT)

All of the above work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day service. (NYCDOT, $85M, 1993 - 1996)

Mr. Vena also performed Construction Management and Inspection work on these projects:

Nassau County Sewer Project Town of Hempstead Video/Lamping Lines

New York City Subway-MTA Interior Construction Inspection

New York State DOT-Highways Bridge, Roadway, Drainage Construction Inspection

Resurfacing project Houston Street, Essex Street, New York City-DOTRoadways-Curb, Roadway, Sidewalk, Bus Stop, Center Mall, Landscaping Construction Inspection (Take Offs, As Builts)

Suffolk County Department of Public Works, Parks Department, Construction Inspection Contractor Evaluation Reports, Direct responsibility for daily construction reporting.

Nassau County DOT, Highways Resurfacing Project Town of Hempstead, Construction Management Daily reports and As Built Drawings

Nassau County Surveying Project Town of Hempstead

Suffolk County Department of Public Works, Parks Department Building Reconstruction project - Provided the town with all construction activity reports.

Edward Yeates
SENIOR INSPECTOR

Mr. Yeates has been involved in the construction industry for nearly 40 years. His primary area of expertise is civil/structural work. In this capacity he has served as a civil/structural inspector, chief technical officer as well as structural engineer and designer.Specific experience includes:

EDUCATION	M.E., Civil/Structural Engineering, University of Wisconsin, 1977 Diploma, Structural Engineering, Willesden College of Technology (London), 1968
REGISTRATION / CERTIFICATIONS	
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	36

CM Services For Meadowmere and Warnerville Sewers, PS, FM & Associated Facilities - Inspector - Under contract with NYCDEP, LiRo is currently providing CM services for the construction of sanitary sewers, a pump station, force main and related facilities for the Meadowmere/Warnerville communities in southeast Queens. (NYCDEP, $32.6M)

CM/Build Requirements Contract for NYC Housing Authority, Marlboro Houses Community Center, Inspector - Under this contract, LiRo performed work on a task order basis. We were in the design or construction phases of renovating and/or constructing community centers and several other renovation projects throughout New York City. These properties all required that LiRo perform pre-construction and construction phase services. (NYCHA, $5M)

NYCSCA Emergency Response Management and Coordination Program, High School of Urban Assembly, Flatbush - LiRo managed and coordinated responses to the emergency needs of the NYCSCA. In this capacity, we stood ready to respond to emergencies on a 24 hour-per day, 7 day-per-week basis. Predicated upon verbal authorization (a telephone call), we were prepared to immediately mobilize construction professionals, Trade Labor Union personnel, contractors and/or material suppliers to arrest dangerous conditions or contain hazardous materials at public schools within the five boroughs of New York City. (NYCSCA, $108.7M)

Indefinite Quantity Inspection Services (CM-1145), Senior Inspector - Mr. Yeates worked as civil structural field inspector on major subway station reconstruction projects undertaken by the MTA - New York City Transit Authority. His last field assignment was on the 161st Street Station Rehabilitation Project in the Bronx. This $30 million project included work at both the IND and IRT stations and involved rehabilitation of platforms, tiling, tunnel lighting rooms, communication rooms, electrical distribution rooms (EDRs) as well as token booths. Among Mr. Yeates' duties were the following:
Field inspection of cast-in-place concrete, structural steel, metal roofing, wind screens, architectural work and structural demolition work.
Implementing project controls through the use of primavera expedition.
Logging and tracking additional work orders, submittals and requests for information.
Preparing job meeting minutes.
Maintaining project shop drawing logs.
Preparing daily inspection reports.
Opening and closing general orders.
Serving as liaison with flagmen and command center.
As a structural engineer/designer, Mr. Yeates was responsible for design and drafting of plans of commercial and industrial buildings in structural steel, reinforced concrete and pre-stressed concrete, He also prepared site surveys and designs for railway bridges.

NYC Transit Authority, Queens Plaza Station Rehabilitation, Civil Structural Engineering Field Inspector - Mr. Yeates was responsible for supervision of civil engineering construction work on major subway

station rehabilitation and reconstruction. Other duties included collection of construction data, management, and compiling reports. (NYC Transit Authority, $25M)

Ministry of Works and Transport, Port of Spain, Trinidad, Chief Technical Officer/Chief Engineer/Civil Engineer - Mr. Yeates was responsible for hydrology, design, and supervision of construction and maintenance of hydraulic works and coastal protective works. Other duties included design and construction of residential/commercial buildings, roads, bridges, and culverts.

Kilborn Engineering, Toronto, Structural Designer - Responsible for design and drafting of plans for commercial/industrial buildings and bridges made from structural steel, reinforced concrete, and pre-stressed concrete.

Reid Crowther & Partners, Toronto, Structural Engineer - Responsibilities included design and commercial/industrial buildings made from structural steel and reinforced concrete.

British Railways Bridges Section, London - Responsibilities included site surveys, design/construction of railway bridges made from structural steel, reinforced concrete, and pre-stressed concrete.

Ministry of Housing and Local Government, London - Responsibilities included structural drafting of plans for residential development projects.

Paul Zinger
ENGINEER

Mr. Zinger is a graduate engineer with NYCT experience. He was Project Inspector for the construction of a 2-story breaker house building at the NYCT 180th Street Yard Facility. He is adept at coordinating with transit agencies and other project stakeholders. Mr. Zinger is currently assigned to the Sutphin Blvd Underpass rehabilitation project at Jamaica Station where he coordinates with the LIRR Operations Personnel on a daily basis. Mr. Zinger has experience on structural rehabilitation projects. He is currently coordinating construction activities with LIRR, utility companies and various city and state agencies.

EDUCATION	B.S., Facilities Engineering, SUNY Maritime, 2005
REGISTRATION / CERTIFICATIONS	30 Hour OSHA Certification Course ACI Concrete Field Testing Technician - Grade I, NY MTA Track Safety Certified
YEARS WITH THIS FIRM	1
YEARS WITH OTHER FIRMS	5

Greater Jamaica Development Corporation, Inspector – Mr. Zinger provides inspection and office engineering duties for the project. He coordinates the daily construction activities with LIRR, NYCDOT and Utility Companies.

The project consists of the construction of retail areas under the Sutphin Blvd Underpass of the LIRR at Jamaica Station. The area extends along the eastern portion of the Sutphin Boulevard-LIRR underpass from the south to the north fascias of the bridge structure and from the face of the east bridge abutment to the Sutphin Boulevard curb line.

The project also includes an upgrade to the existing LIRR areas and electrical systems, including a reorganization of the LIRR platform services. The improvements for this project include:

- Construction of a temporary 3-bay loading dock
- Demolition of existing LIRR loading bays
- Modification of service elevators to LIRR platforms and construction of a new service corridor on the eastern edge of area
- A new service corridor will provide access to the relocated loading dock, new commissary, locker rooms and toilet facilities
- The sidewalk will be rebuilt along the entire length of the project
- A new suspended ceiling and lighting will be constructed over the sidewalk area
- A concrete bus pad will be constructed in the Sutphin Blvd. roadbed to accommodate the bus lines servicing the area.
- Approximately 5,500 square feet of retail space will be constructed fronting the new sidewalk

NYCTA Contract No. S- 32725 - E 180th St Yard Signal System Modernization, Inspector/Project Engineer - The scope of this $25,000,000 project included:

- Circuit Breaker House #213 - Construction of 2 story concrete building for housing new circuit breakers used for 3rd rail power.Bronx Park East Relay Room - Construction of 2 story steel building for new signals on the #5 line. Unionport Battery Room - Construction of 1 story block and brick building for use as a signal workshop.Rehabilitation Signal Crew Quarters - Demolition and Reconstruction of workshop and crew rooms for signals department.Cable Bridge - Construction of 800' steel bridge used for crossing new signal cables over live active tracks.Signal Platforms - Installation of steel platforms over active tracks for new signal equipment.B Ducts - Excavation for new 3rd rail power conduits.Signal Trenching - Excavation for new signal cables.Signal Pedestals - Construction of new concrete pedestals for signal equipment. Flyover Modifications - Repairs to column base plates and foundations; replacement of columns and stringers.

As Inspector /Project Engineer, Mr. Zinger's primary responsibility was to ensure that all work was completed in accordance with New York City Transit Authority Specifications and Contract Drawings. He was also responsible for coordination with sub contractors for trades including iron workers, carpenters, masons, and electricians; material take-offs and acquisitions; quality control including supervising field tests of concrete, soil, and bolt torque verification; developing Safe and Quality Work Plans; preparing daily reports including man-hours, work performed and cost to complete; tracking of drawing submittals; interfacing with New York City Transit Authority Capital Program Managers. Mr. Zinger reported directly to the Project Manager. (NYCTA, $25M, 2009)

South Ferry Co. Inc,**Engineer/Deckhand -** Routine maintenance of diesel propulsion systems. Mr. Zinger was responsible proper loading of the vessel and safety of passengers and cargo. (2007)

SUNY Maritime, T/S EMPIRE STATE VI, Third Assistant Cadet Engineer – Mr. Zinger was responsible for the supervision of day-to-day operations within the Engineering Department, oversight of disciplinary activities, liaison between licensed ships officers and cadet crew, worked with Senior Engine Training Officer.

Military Sealift Command, USNS PATUXENT T-AO 201, Engine Midshipman, Virginia Beach, VA – Mr. Zinger monitored and operated cargo control console for transferring fuel during underway replenishments, performed day work including design, fabrication and testing of engine room equipment.(2004)

ESTIMATORS

Robert Barsky
VICE PRESIDENT - CPM SCHEDULER

Mr. Barsky has been providing construction and project management services since 1979. He is a Vice President with the firm and is presently serving as our Director of Project Controls. Under Mr. Barsky's guidance and leadership, LiRo's CPM scheduling and estimating staffs have grown to be one of the largest and most accomplished in the New York metropolitan area.

Most recently, Mr. Barsky has been LiRo's Contract/Project Manager for the New York City Transit Authority's Indefinite Quantity Scheduling & Technical Support contracts. His duties have involved close interaction with the Program/Project Schedule Control personnel as well as in-house construction managers in NYCT's Capital Program Management Department. Under Mr. Barsky's direction, 19 CPM schedulers and 15 construction inspectors have been provided to NYCTA to meet their specific needs and demands. The foregoing has involved the matching and placing of project personnel within NYCTA program areas, such as: Shops, Yards & Busses; Stations; New Routes; Electrical; and Environmental/HAZMAT.

Mr. Barsky has also recently served as LiRo's Project Manager for the Randall's Island Sports Foundation's Field Development Project. The project involves the development of 67 athletic fields as well as supporting infrastructure at both Randall's and Wards Islands. The estimated construction cost for this 3-year project is $98M. Mr. Barsky's duties on this project have included participating in bi-weekly design team meetings, developing detailed construction cost estimates throughout all phases of design, estimating the cost of construction alternatives, creating projected construction cash flow reports, preparing CPM schedules for the proposed construction program and developing construction phasing programs to coordinate the construction work with the field demands of the Parks Department and School Athletic Programs. Additionally, he has provided recommendations regarding bid packaging, bid phasing and letting of the contract work.

In his capacity as a CPM scheduler, Mr. Barsky has developed master program schedules, developed detailed baseline CPM schedules, updated detailed CPM schedules, prepared periodic narrative reports which detail project status, documented reasons for gain or loss of time and proposed means/methods for recovery of any lost time. He has also provided resource and cost loading of CPM schedule activities and has generated and analyzed resource and cash flow projection curves and histograms.

Mr. Barsky has also served as an expert witness, providing testimony regarding delay claims. In this capacity, he has evaluated original construction schedules, considered the impacts of delays upon construction, identified and assessed critical paths, prepared narrative reports and graphical exhibits and assisted in resolving and settling matters in dispute.

Mr. Barsky has given seminars and lectures regarding scheduling, delay analyses and claims mitigation to numerous municipal agencies. Additionally, he has provided scheduling and management services to these agencies, which include the NYC Transit Authority, NYC Department of Environmental Protection, NYC Department of Design and Construction, NYC Department of Sanitation, NY State Dormitory Authority, NY State Facilities Development Corporation, Passaic Valley Sewerage Commissioners and the counties of Nassau, Suffolk and Westchester.

Representative projects are as follows:

EDUCATION	B.S.C.E., Civil Engineering, Lafayette College, 1979
REGISTRATION / CERTIFICATIONS	Primavera Expedition (Project Controls) Primavera Project Planner (CPM Scheduling) Engineer-in-Training, PA Engineer-in-Training, NY
YEARS WITH THIS FIRM	20
YEARS WITH OTHER FIRMS	10

Program Management Services for Brooklyn Navy Yard Development Corporation, Brooklyn, NY: LiRo is currently serving as the Program Manager for the construction of the Perry Avenue Building, NYPD Tow Pound Facility and NYC DCAS Building at the Brooklyn Navy Yard. For this assignment, Mr. Barsky is serving as LiRo's Executive-in-Charge. LiRo's involvement began during the pre-construction (design) phase and continued through the completion of construction. Our responsibilities during pre-construction included:

- Review of design documents and presentation of recommendations
- Value engineering
- Estimating
- Constructability reviews

LiRo's pre-construction efforts helped to reduce the overall building costs and provide a more efficient design. Additionally, LiRo advised the owner (BNYDC) of the various types of construction management contracts that were available. We helped guide their selection into using a CM/Build contract and participated in the procurement/selection of a construction manager. During the construction phase of the project, LiRo performed the following services:

- Ensure CM compliance with contract documents
- Review CM's cost requisitions
- Review CPM schedules
- Review project budget and compare with actual expenditures
- Provide recommendations regarding change orders/requests for time extensions

(Brooklyn Navy Yard Development Corporation)

New York City Housing Authority CM/Build Requirements Contracts (Two Contracts: 2004-2007 & 2005-2008), New York, NY, Project Controls Manager: Under these contracts, LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of renovating and/or constructing numerous community centers, performing upgrades of building systems and facade/roofing restoration at several housing projects throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services. (NYCHA, $250M)

School of Architecture, Urban Design and Landscape Architecture (SAUDLA): LiRo provided construction management services for demolition and extensive reconstruction of a 136,000 sf building into the new SAUDLA building. The building frame of structural concrete still remains and the balance of the building

was demolished and rebuilt, including façade, interior and mechanical, electrical and plumbing systems. (2009, $60M)

Bridgeport Schools Repair and Replacement Project, Bridgeport, CT: Construction management services for 20 schools in Bridgeport, CT. The projects include various repair work from pavers, window replacement, masonry repair, HVAC upgrade and bathroom upgrades. (Bridgeport Department of Education, $10M)

New York City Department of Sanitation Requirements Contract, New York, NY, Administrative Project Manager: This contract involved providing construction management services to the NYCDOS on an on-call basis. These services were provided to support the numerous projects that NYCDOS has in progress throughout the five boroughs of New York City. Nine projects have been performed over the past three years ranging from scheduling services to complete construction management assignments. (NYCDOS, $8.5M)

New York City Transit Authority, On-Call Technical Inspection Contract (CM-1145), New York, NY, Project Manager: LiRo was contracted to render support services to NYCTA in connection with technical inspection, monitoring and oversight responsibilities under the supervision of the construction managers of the NYCTA. Locations of work are within the five boroughs of New York City. Program areas include new routes, stations, structures and environmental. Duties performed by LiRo personnel include inspection of field construction work; preparation of progress estimates and payments, processing additional work orders (AWOs), interaction with NYCTA flagmen, review of shop drawings, as-built drawings and manuals, constructibility reviews, phasing plan reviews, cost estimating, CPM scheduling, safety inspection, review of contractors quality control program and value engineering. (NYCTA, $5M, 2005)

New York City Transit Authority - CPM Scheduling Support Services, Indefinite Quantity Contract (CM-1117R), New York, NY, Project Manager: LiRo provided in-house program and project schedule control support for the design and construction of MTA New York City Transit's Capital Program. On an as-needed basis, LiRo's schedulers assisted the construction managers of MTA NYC Transit's major program areas, providing cost estimating and scheduling services to help them control and monitor their projects more efficiently. Four major program areas were supported: station; new routes; shops, yards and buses; and electrical and signals. The specific services provided included the development of CPM schedules, schedule review and reporting, cost estimating and delay claim analysis. Scheduling services were provided at various stages of the project life cycle, from planning and design through construction and closeout. (NYCTA, $3.6M, 2003)

Nassau County Department of Public Works, Mitchel Park Construction for the 1998 Goodwill Games, Uniondale, NY, Project Manager: In preparation for the 1998 Goodwill Games, Nassau County developed improvements to Mitchel Park in two phases. Phase I included the design and construction of a central support facility, grandstand, sportsplex central building, electric/water service, track, portable bleachers, softball field sportsplex and public address system. Phase II included new playing fields and ancillary facilities constructed after the 1998 Goodwill Games. Recognizing the need to speed development of this project, the county designated LiRo to ensure that the project was constructed on time and resulted in a world-class facility with Olympic requirements that serves both the Goodwill Games and the county's requirements into the future.This project included storm and sanitary sewers, building construction, electrical work, basic surveying and general office work. (NCDPW, $18M, 1997)

Plant Construction (Waste Water/Power)

- North River WPCP Project, NYCDEP
- Red Hook WPCP Project, NYCDEP
- Bay Park STP, Nassau County DPW
- Cedar Creek WPCP, Nassau County DPW
- Inwood STP, Nassau County DPW
- Cogeneration Facility, JFK International Airport, KIAC
- Install 250,000 PPH Steam Generating Boiler, Pensacola Naval Air Station, US Navy, South Div.
- Sludge Incinerator Erection, LeMay Waste Water Treatment Plant, St. Louis, Mo.
- Bridgeport Resource Recovery Plant, Bridgeport, CT
- Garages and Maintenance Facilities

· Rockville Centre Bus Garage/Vehicle Maintenance Shop, Nassau County DPW
· Mitchel Field Bus Garage/Vehicle Maintenance Shop, Nassau County DPW
· 180th Street Vehicle Maintenance Facility, NYC Transit Authority

Courthouse/Correctional Facilities
· Westchester County Courthouse, Westchester County DPW
· Cohalan Courthouse Complex, NYS Dormitory Authority
· Martin Luther King Jr. Courthouse, Newark, NJ, GSA
· System-wide Kitchen Renovation Program, NYC DOC & DDC

Medical Facilities
· Kings Park Psychiatric Center, NYS Facilities Development Corporation
· Suffolk County Skilled Nursing Home, Suffolk County DPW
· Emergency Medical Stations Program, NYC Department of Design & Construction

Other
· Fire Protection Facility, Portsmouth Naval Shipyard (NH), US Navy
· Bronx General Post Office, US Postal Service
· Construction of Connecticut Route 8, New Haven, CT, Connecticut DOT
· East Haven Road Construction, East Haven, CT, Connecticut DOT

Mr. Barsky has conducted seminars on CPM scheduling, analysis of delay & impact claims, claims mitigation and utilization of Primavera (P3) CPM scheduling software.

William Curran
ESTIMATOR

Mr. Curran has approximately 16 years of construction experience on a wide variety of types of construction projects. These projects range from structural, airport, and heavy construction projects to environmental work at water pollution control facilities. Mr. Curran has served as an estimator, construction inspector, project engineer, and office engineer on numerous projects throughout the New York Metropolitan area.

EDUCATION	B.S., Mechanical Engineering, New York Institute of Technology
REGISTRATION/ CERTIFICATIONS	Primavera Expedition (Project Controls)
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	6

His responsibilities have included: Performing constructability reviews of contract documents

- Preparing detailed cost estimates
- Negotiating and coordinating change order work
- Inspecting field work for quality control compliance
- Preparing daily inspection reports, meeting minutes, and project correspondence
- Reviewing contract plans and specifications
- Reviewing and processing contractor/subcontractor payments
- Reviewing shop drawings
- Reviewing project CPM schedules
- Resolving contractors' claims for delay and associated damages

Representative projects include:

New York City Housing Authority CM/Build Requirements Contracts (Two Contracts: 2004-2007 & 2005-2008), Estimator / Design Review / Constructability Review / Value Engineering - Under these contracts, LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of renovating and/or constructing numerous community centers, performing upgrades of building systems and facade/roofing restoration at several housing projects throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services. (NYCHA, $250M)

Department of Homeless Services, Estimator and Plan Reviewer - Mr. Curran has performed detailed budget estimates, change order estimates and constructability reviews for various DHS projects.

- Jackson Family Residence
- Jerome Avenue
- Help USA - Supportive Employment Center

CUNY School of Architecture, NY, NY, Estimator and Plan Reviewer - This New York State Dormitory Authority project involved the total renovation of the existing City College "Y" building into the future School of Architecture. Mr. Curran performed detailed budget estimates and constructability reviews for each of the schematic design, design development and construction document phases. (DASNY, $40M, 2008)

FDNY Fire Training Academy at Randall's Island, Phase II, Estimator - This New York City DDC project involved the renovation of two (2) existing buildings and construction of a new building at

the FDNY facility at Randall's Island. Mr. Curran performed detailed budget estimates during the pre-bid phase of the project. (NYCDDC, $10.5M, 2005)

James A. Thomas Center (JATC) Renovations at Rikers Island, Estimator - Comprehensive construction management services were provided to the renovation of the James A. Thomas Center on Rikers Island (approximately 240,000 sf). The original construction of this high security facility dates back to 1933 and has a housing capacity of 1600 inmates. The program for renovation consisted of retrofitting existing spaces within the facility cell blocks, day rooms, showers, pantries, housing areas, mechanical rooms, electrical rooms, and common spaces. Part of the renovation program upgraded the electrical systems and domestic hot water distribution system. (NYCDDC, $25M, 2004)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME) Construction Management Services, Estimator - LiRo managed the construction of the new Office of the Chief Medical Examiner (OCME) facility in Brooklyn, completed in 28 months. This state-of-the-art 40,000-s.f. facility offers the staff and the public a safe and private environment that is shared between Kings County Medical Center, the OCME, and NYPD investigators. It was designed to be sensitive to the surrounding community and hospital campus. LiRo provided comprehensive construction management services from design development through the completion of construction including the coordination of all construction operations and related vehicular traffic to avoid interference with local traffic or hospital campus operations. (DASNY, $18M, 2004)

Steam Tunnel Renovations at Rikers Island, Long Island City, NY, Project Engineer/ Inspector - This project involved the renovation of existing steam tunnels from the central power plant to the various facilities at Rikers Island. Work included removal and replacement of existing steam piping expansion joints, valves, supports, condensate pumping stations and the modification of existing and addition of new steam and condensate piping. Also included in this work were the repair of existing concrete tunnel walls and the addition of new concrete vent houses. (NYCDDC, $19M, 2004)

Manhattan Civil Court, Construction Management Services, Estimator - This project called for an extensive reconstruction of the building's infrastructure and exterior to be completed within 12 months, while building and court operations continued without interruption. Key elements included electrical, mechanical/HVAC, plumbing, fire protection, fire alarm and life safety, HVAC controls and building management systems, DAD compliance for building, entrances and bathrooms, facade and parapet walls, structural and waterproofing, security systems. LiRo's construction management services for this facility included design reviews for constructability; cost estimating; scheduling; development of phasing and staging plans; trade coordination; construction inspection. (DASNY, $16M, 2003)

Bridgeport Schools Repair and Replacement Project, Estimator - LiRo is providing construction management services for 20 schools in Bridgeport CT. The project includes various repair work from pavers, window replacement, masonry repair, HVAC upgrade and toilet room upgrades. (Bridgeport School District, $10M, 2008)

Employment History:
The LiRo Group (1998-present)
Estimator/Constructability Reviewer
Durr Mechanical Construction (1997-1998)
Project Manager/Asst. Project Manager
H. Sand & Co./Slattery/Skanska (1993-1997)
Project Engineer

Edward Frysztacki, C.C.E., P.E.

ASSOCIATE

Mr. Frysztacki has a rare combination of talents: he is an experienced structural engineer, an expert CPM scheduler, and an excellent cost estimator. He has been performing these duties since 1977. His experience includes highways and bridges, grading and drainage, sewage treatment plants, pumping stations, and building design, including the structural, civil, mechanical, and electrical trades. Relevant project experience includes:

EDUCATION	B.S.C.E., Geotechnical Engineering, University of Toronto, 1977
REGISTRATION/ CERTIFICATIONS	Professional Engineer, NY Certified Cost Engineer, NY Professional Engineer, NJ Primavera Expedition (Project Controls) Troubleshooting Exterior Masonry Walls Certification, NY Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY
YEARS WITH THIS FIRM	19
YEARS WITH OTHER FIRMS	14

Program Mgmt. Services for: Perry, Tow pound & DECAS Bldgs at the Brooklyn Navy Yard - LiRo is currently serving as the Program Manager for the construction of the Perry Avenue Building and the NYPD Tow Pound Building at the Brooklyn Navy Yard. LiRo's involvement began during the Pre-construction (Design) Phase and will continue through the completion of construction. Our responsibilities during preconstruction included:

- Review design documents, provide recommendations
- Value engineering
- Estimating
- Constructability reviews
- LiRo's Pre-Construction efforts helped to reduce the overall building costs and provide a more efficient design. Additionally, LiRo advised the owner (BNYDC) of the various types of construction management contracts that were available. We helped guide their selection into using a CM/Build contract and participated in the procurement/selection of a Construction Manager. During the Construction Phase of the project, LiRo is performing the following services:
- Ensure CM compliance with contract documents
- Review CM's cost requisitions
- Review CPM schedules
- Review project budget and compare with actual expenditures
- Provide recommendations regarding change orders/requests for time extensions

(Brooklyn Navy Yard Development Corporation)

New York City Housing Authority CM/Build Requirements Contracts (Two Contracts: 2004-2007 & 2005-2008), Design Review / Constructability Review / Value Engineering - Under these contracts, LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of renovating and/or constructing numerous community centers, performing upgrades of building systems and facade/roofing restoration at several housing projects throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services. (NYCHA, $250M)

DASNY School of Architecture, Urban Design and Landscape Architecture (SAUDLA) - Demolition and reconstruction of a 136,000 sf building to become the new School of Architecture, Urban Design and Landscape Architecture (SAUDLA) building. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including façade,

interior and mechanical, electrical and plumbing systems. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus. This required the renovation of various locations at a cost of approximately $8M and was accomplished in one year.

FDNY Fire Training Academy at Randall's Island, Phase II, Estimator - This New York City DDC project involved the renovation of two (2) existing buildings and construction of a new building at the FDNY facility at Randall's Island. ($7.5M)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME) Construction Management Services, - LiRo managed the construction of the new Office of the Chief Medical Examiner (OCME) facility in Brooklyn. This is a state-of-the-art facility offering the staff and the public a safe and private environment. Shared between Kings County Medical Center and the OCME, the new facility contains space designated for NYPD investigators. It was designed to be sensitive to the surrounding community and hospital campus. LiRo's role was to provide comprehensive construction management services from design development through the completion of construction. This included the coordination of all construction operations and related vehicular traffic so that it does not interfere with local traffic or hospital campus operations. The 40,000 sf facility worth $17M was constructed in 28 months. (DASNY, $18M)

Bay Park Water Pollution Control Plant in Nassau County, NY, CPM Scheduling - Included pump stations and other sewage treatment structures. Projects included construction of various concrete process control structures (e.g. refurbishing of 5 mainline sewage pumps which serve the plant) and supplementary plant operations buildings. CPM scheduling detailed procurement and installation of state of the art computerized instrumentation systems. (NCDPW, $80M)

West 158th Street Maintenance and Repair Facility, Preconstruction Review/Estimator - This project involved the construction of a NYCDOT Maintenance and repair facility beneath the Riverside Drive in Upper Manhattan. In the design phase, Mr. Frysztacki was part of the estimate and document review team. (NYCDOT, $12M)

Cedar Creek Water Pollution Control Plant in Nassau County, NY, CPM Scheduling - Projects included construction of various concrete process control structures and supplementary plant operations buildings. CPM scheduling detailed procurement and installation of state of the art computerized instrumentation systems. (NCDPW, $20M)

Department of Homeless Services On Call Services, Design Review/Estimator - Provided construction management services to the Department of Homeless Services under a requirements contract. The contract demanded both construction management and engineering/architectural expertise. He managed over a dozen projects at numerous homeless shelters. Responsibilities included design review, coordination, estimating, and assessment; award coordination, analysis, and recommendations; project management and coordination; project scheduling and progress surveillance; construction planning; cost estimating verification; surveillance of quality control and inspection of construction; contract document interpretation; administration of project documents and records; claims analysis and defense. Projects included roof and window replacement, mechanical and boiler replacement, facade repair and general renovation. (NYCDHS, 1999 - 2000, $13M)

Employment History:
The LiRo Group (1991-present)
Associate, Sr. CPM Scheduler/ Chief Estimator

George Gifford
SCHEDULER

Mr. Gifford has more than 17 years of experience in the CPM scheduling, cost estimating, planning and maintaining of progress schedules for major civil public works projects including renovation / rehabilitation projects, such as municipal office buildings, courthouses, hospitals, schools and construction of new facilities.

In addition, Mr. Gifford has experience in large environmental remediation and decommissioning projects including removal and replacement of aboveground /underground storage tanks and product distribution systems, contaminated ground water remediation systems and large contaminated soil removal / disposal projects for both public and private concerns. Representative projects include:

EDUCATION	B.S., Business Management, State University of New York at Plattsburgh
YEARS WITH THIS FIRM	7
YEARS WITH OTHER FIRMS	12

NYCDOT, Rehabilitation of 11th Avenue Viaduct, Scheduler - LiRo is providing Resident Engineering and Construction Management services to the NYC Department of Transportation in connection with the rehabilitation of the 11th Avenue viaduct. The viaduct is located between 29th Street and 34th Street on the west side of Manhattan. The viaduct spans the active West Side Rail Yard which is operated by MTA - Long Island Rail Road. The construction work scope includes replacement of: bridge decking, concrete pier heads, spalled concrete, sidewalks, fencing and street lighting. To prevent any interruption to the rail service, it was necessary to construct a protective shield beneath the viaduct prior to the commencement of any other construction work. Scheduling duties included: review of contractor's baseline CPM schedule, review of contractor's monthly CPM schedule updates, preparation of written reports, responses to schedule-related issues and analysis of impact/delay claims. (NYCDOT, $25M)

Battery Park City, Community Center Construction Management Services, Scheduler - LiRo is providing Owner's Representative/ Construction Management services for a 60,000 sf community center/ball field maintenance facility in the base of two residential towers at Site 23/24 in Battery Park City. LiRo will oversee the creation of the community center/ball field maintenance facility from design development through completion of all construction and post-construction.

This facility will house 2 swimming pools, an auditorium, a gym, classrooms, and exercise center/outdoor plaza, as well as a maintenance facility for the Battery Park City Parks Conservancy for the care of the two adjacent little league ball fields. Site 23/24 will be developed according to the mission of the Authority of furthering sustainability in urban development. The community center/ball field maintenance facility will be built in accordance with the Authority's Environmental Residential Guidelines and with the latest LEED for Commercial Interiors (CI) rating system, now version 2.0. It is anticipated that the facility will attain a Platinum rating, the highest possible level bestowed by the USGBC. (BPCA, $30M, 2010)

Westchester County Courthouse Phase 3 Tower - The LiRo Group was retained by Westchester County to provide both design and construction management services for this $23 million interior renovation project. The program consisted of a combination of partial and complete renovations to 18 floors of the 20 story courthouse tower, including mechanical, electrical, telecommunications, fire alarm and security upgrades, ADA compliance throughout, new courtroom layouts and finishes, and all adjunct facilities to service New York State's civil courts and the County's Department of Probation. In order to meet the County's construction schedule, all work was designed around an intricate staging program that LiRo devised to maintain the County's requirements that the building remain fully operational throughout construction. Construction documents were completed in nine months from the date of design award and the project is currently under construction, on time and under budget. (Westchester County DPW, $23M, 2007)

Mercy High School, Bronx, NY - Gut renovation of Mercy College that was transformed into Bronx High School of Visual Arts (NYCSCA, $15M, 2004)

Yaphank Residential Juvenile Detention Center, Yaphank, NY, Architectural and Engineering Design Services - LiRo was retained to design and build this new 32 bed juvenile detention center complete with housing, intake, medical, educational, food service, administrative, visiting, indoor gymnasium and outdoor baseball and soccer fields and courtyard recreation areas. The project design was completed in the spring of 2003. (SCDPW, $10M, 2003).

Taft High School - As part of the Emergency Response Management Coordination Program, this project at William Taft High School in the Bronx consisted of restructuring of approximately 28,000 sf of space, included new Science Labs, new Clinic and upgrading of existing classrooms. Liro developed detailed construction cost estimates & CPM schedules, solicited bids and awarded contracts in accordance with Authority requirements, and managed and coordinated all construction work. Also, LiRo provided general conditions including testing and controlled inspections, remediated hazardous materials, and maintained cost controls for all time & materials contract work. (NYCSCA, $11M)

Bridgeport Schools Repair and Replacement Project, Scheduler - LiRo is providing construction management services for 20 schools in Bridgeport CT. The project includes various repair work from pavers, window replacement, masonry repair, HVAC upgrade and toilet room upgrades. (Bridgeport School District, $10M, 2008)

Employment History:

The LiRo Group (2005 to Present)
Scheduler
Fenley & Nicol Environmental, Inc (1997-1999)
Estimator
Environmental Products & Services, Inc. (1994-1997)
Project Manager/Estimator
CDM Federal Programs Corporation (1992-1994)
Global Positioning System Technician
Unicorn International Consultants (1991-1992)
Project Manager/Damage Assessor
Marcor of DC, Inc (1989-1991)
Project Manager/Estimator

Giovanni L. Graceffa
PROJECT ENGINEER/ESTIMATOR

Mr. Graceffa has over 20 years of construction experience on a wide variety of types of construction projects. These projects include: rail, transportation, airports, schools, universities, laboratories, hospitals, prisons, housing projects, libraries, museums and water pollution control plants. His extensive experience includes cost estimating, project management and design engineering. He has worked on projects for numerous municipal agencies such as: MTA-NYC Transit, MTA-Capital Construction, Dormitory Authority State of NY, NYC Department of Design & Construction, NYC Department of Homeless Services, State University Construction Fund, NYC Department of Sanitation and Nassau County Department of Public Works.

Mr. Graceffa work responsibilities have included the following:

- Preparing detailed cost estimates at all stages of design
- Negotiating and coordinating change order work
- Reviewing design documents for constructability

EDUCATION	B.S., Physics, New York Institute of Technology, Old Westbury, 1989
REGISTRATION / CERTIFICATIONS	Primavera Expedition (Project Controls) Society of Physics Students of N.Y.I.T.
YEARS WITH THIS FIRM	0
YEARS WITH OTHER FIRMS	12

- Analyzing bids and making contract award recommendations
- Value Engineering
- Analyzing and resolving contractors' claims for damages and delays
- Reviewing/processing contractors' payment requisitions
- Performing field Inspections
- Conducting project meetings and generating meeting minutes
- Developing design documents

Continental Airlines, Interim Regional Jet Operations Gate A-1 - As the Owner's Representative for Continental Airlines, LiRo was responsible for the creation of a hold room and office space at Gate A-1 for Continental Express at LaGuardia Airport. This project consisted of an accelerated schedule requiring close coordination between all trades and the owner. The project entailed the demolition of existing office and storage spaces and the installation of fan coil units, lighting, millwork, carpeting, seating and communication data links, and telephone lines.

MTA New York City Transit – East 180th Street Maintenance Facility, Bronx, NY - Demolition and reconstruction of a six track 120,000 sf maintenance facility building for the New Technology Subway Cars including replacement of tracks. The building is a steel frame building with metal panel and masonry exterior walls. The building interior consists of six pitted and posted rail tracks and a three floor office & administration area. Building systems originated from a separate utility building adjacent to the facility and included: (3) New 200 HP Boilers for the Heating and Domestic Hot Water Systems, New Compressors for the Compressed Air System, New Emergency Generator, New Fire Pumps, Elevator machine Room and New Electrical Switchgear. Heating & Ventilation was provided to the Shop Area via Rooftop Heat Recovery type Air Handling Units. (MTA-NYCT, $46M)

MTA New York City Transit, Capital Program Management Department, Senior Estimator - Prepared cost estimates for major multi-million dollar capital projects. Performed general construction feasibility estimates. Estimated change orders for various parts of the infrastructure. Negotiated impact

cost claims and change orders in fair and equitable settlements for the Authority's benefit. Among the specific projects for which cost estimates were prepared were the following:

- **Rehabilitation of Tunnel Lighting - Lenox & White Plains Lines, $11.1M**
- **Rehabilitation of Tunnel Lighting - Broadway/7th Ave. Lines, $20.1M**
- **Tunnel Lighting Modernization – Broadway Line, $31.5M**
- **Rehabilitation of Pumping Facilities - Broadway/Nassau Lines, $8.5M**
- **Rehabilitation of Pumping Facilities – Crosstown Line, $4.1M**
- **Rehabilitation of Pumping Facilities – Lexington Line, $2.5M**
- **Rehabilitation of Pumping Facilities – Flushing Line, $4.4M**
- **Rehabilitation of Pumping Facilities – Concourse & 8th Avenue, $12.1M**
- **Rehabilitation of Fan Plant & Pump Room – Crosstown Line, $8.6M**
- **New Ventilation Plant - Crosstown Line, $20.7M**
- **Furnish & Install 17 Escalators at Various Locations, $39.5M**
- **Replacement of Gap Fillers – South Ferry Station, $4.5M**
- **Lenox Avenue Line Rehabilitation, $13.3M**
- **Lenox Avenue Line Rehabilitation & DOT Work, $63.5M**
- **63rd Street Connection, $9.7M**

James A. Thomas Center (JATC) Renovations at Rikers Island - Comprehensive construction management services were provided to the renovation of the 240,000 s.f. James A. Thomas Center on Rikers Island. The original construction of this high security facility dates back to 1933 and has a housing capacity of 1,600 inmates. The program for renovation consisted of retrofitting existing spaces within the facility cell blocks, day rooms, showers, pantries, housing areas, mechanical rooms, electrical rooms, and common spaces. Part of the renovation program upgraded the electrical systems and domestic hot water distribution system. (NYCDDC, $25M)

Manhattan Civil Court, Construction Management Services, Cost Estimator - This project called for an extensive reconstruction of the building's infrastructure and exterior. Key elements included electrical upgrade that included fire alarm and security systems, mechanical/HVAC that included HVAC controls and building management systems, plumbing, fire protection, DAD compliance for building, entrances and bathrooms, and facade and parapet wall improvements. All work was completed within 12 months while building and court operations continued without interruption. LiRo's construction management services for this facility included design reviews for constructibility; cost estimating; scheduling; development of phasing and staging plans; trade coordination; construction inspection. Mr. Graceffa performed design reviews for constructability and detailed cost estimates during the design phase of the project. During the construction phase, he estimated and negotiated change orders with the contractors. (DASNY, $16M)

FDNY Fire Training Academy at Randall's Island, Phase II, Estimator - This project involved the renovation of two existing buildings and construction of a new building at the FDNY facility at Randall's Island. Mr. Graceffa performed detailed cost estimates during the design phase of the project. (NYCDDC, $7.5M)

Employment History:
The LiRo Group (#### to Present)

Kenneth Mattera
PROJECT COORDINATOR

Since 1974, Mr. Mattera has had extensive experience in all areas of construction management, budget planning, cost control, scheduling, engineering, and personnel supervision. He has a demonstrated ability to coordinate and complete high profile technical projects; maintain schedules; develop and control costs; create and implement policies; procedures; training programs; and negotiate contracts.Representative projects include:

EDUCATION	B.S., Mechanical Engineering, Polytechnic Institute of New York, 1974
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training OSHA 10-hr Training Course
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	25

Deck Replacement on the Randall's Island and Ward's Island Viaduct at the Triborough Bridge. (TB-64B). Assistant Resident Engineer - A $272M, 38 month project, for the deck replacement and widening of the Wards and Randall's Island viaducts, widening of the Queens-Manhattan (QM) Ramp, construction of new entrance ramp from Ward's Island, new pedestrian walkway structure, new surface roads on Wards Island, new electrical utilities and systems, repair to existing superstructure, 22 million pounds of new roadway steel and complete removal, abatement and coating of steel on the suspended span and viaducts substructure. As Assistant Resident Engineer, Mr. Mattera's responsibilities include coordinating construction activities with Prime Contractor, Kosh-Skanska and their sub's with the TBTA; supervisor for six (6) Office Engineers, 3 Chief Inspectors and 24 Inspectors for construction and environmental remediation; reviewing specification, design and shop drawings submittals; maintaining task budgets, funding allocations and schedule development; scope, estimating and processing of contract change orders (Notice of Potential Change Orders (NPCO)) including contract negotiations and implementation. Documenting earned value, performing invoice reconciliation and approvals; planning of work to facilitate construction activities with minimal disruption of traffic over the Bridge Facilities. Coordinating construction activities to minimize disruption and maintain access for the following Island Agencies: NYC Fire Department, NYS OMH, DEP, Parks Department, NYC Shelters, ICHAN Stadium, NYC Police, Coast Guard and Harbor Patrol. (MTA-TBTA, 2006 to Present, $272M)

Reactivation of the Staten Island Railroad, Construction Management Services Contract with NYC Economic Development Corp, Project Coordinator - A $40M Re-Construction with the NYC EDC and the Port Authority of NY & NJ of Arlington Rail Yard, Cut East, replacement of seven miles of track along the North Line, construction of a new Wye connector between the North Line and Travis Branch, and extending the Travis Branch an additional 6,500 feet to the south to connect to the Department of Sanitation new Refuge Compactor and Transfer Facility at Fresh Kills. In addition, a new twin arch culvert was constructed, three timber trestles were replaced with new bridges, three existing bridges required extensive underpinning, 45 switches were installed, 8 grade crossing constructed, and wetlands remediation and rehabilitation were performed. As Inspector/Office Engineer, Mr. Mattera's responsibilities included coordinating construction activities between trades and operating facilities, monitoring daily work progress and safety procedures, issuing field directives and monitoring change order work, writing accurate daily work progress reports, and authorizing contract payments for completed work items. (NYCEDC, 2006)

QM-80, Exhaust Fan Replacement at Queens Midtown Tunnel, Construction Management Services Contract, Project Coordinator - A $35M replacement of twenty-three tunnel ventilation exhaust fans for both the Queens and Manhattan Ventilation Buildings with new stainless steel fans and flues. It required coordination of construction activities while allowing for continues 24-hour operation of the ventilation buildings. Construction included lead and asbestos abatement, replacement of power and control cables, relocation and replacement of the exhaust fan bearings and motor pedestals, replacement of exhaust fan chamber partition walls, rehabilitation of fan air lock doors and dampers, relocation of fan motors and Programmable Motor Protectors

outside the fan exhaust chambers, and repair all concrete exhaust fan chamber walls, floors, airlock walls, and other concrete structures. As an Office Engineer/Inspector, Mr. Mattera's responsibilities included processing correspondence, submittals, change orders, payments, Request for Information (RFI), Inspection Reports, Daily Contractor Head Counts, personnel security clearances, and issuing weekly security clearance reports for all construction personnel and vehicles. Performed Inspection of daily construction activities and Exhaust Fan manufacturing inspection and acceptance testing at the manufacturer's facility. (MTA-TBTA, $35M, 2006)

Contract with MTA Long Island Rail Road (LIRR), Capital Programs Management, Jamaica Transportation Center, Project Construction Coordinator - A $500M Infrastructure Project with the LIRR and the Port Authority of NY & NJ for constructing an Intermodal Terminal at Jamaica, New York to interconnect the JFK International Airport AirTrain with the LIRR, NYC Subway, and Local Bus Services. As Project Coordinator, Mr. Mattera's responsibilities included reviewing specification, design and shop drawings submittals; developing task budgets and funding allocations; implementing cost control programs for measuring earned value, performing invoice reconciliation and approvals; planning of work to facilitate construction activities with minimal disruption to commuter rail services; developing and coordinating security systems for Jamaica Station, JTC Building and adjoining transportation facilities, performing construction field inspections to assess compliance of work with contract plans, specifications and drawings; preparing construction change orders, reviews and cost estimates; and coordinating building fit-out and integration of security, CCTV, communications, and information systems for the AirTrain Terminal and the Long Island Rail Road commuter rail station. (MTA-LIRR, 2001 to 2006)

On-Call Contract with MTA Long Island Rail Road (LIRR) 1998 to 2001, Project Coordinator of Planning & Development - Coordinated and developed project scopes and estimates for the Long Island Rail Road's 2000-2004 Capital Program, valued at approximately $375M for stations, parking, track, signal, communications and structures. Program's projects consisted of 1) Stations: buildings, platforms, canopies, stairs, escalators, elevators, plaza areas and pedestrian over/passes; 2) Parking: new facilities and rehabilitation of existing lots; 3) Bridges: over/under grade bridges, signal bridges and culverts/drainage improvements; 4) Train Yards: new diesel fleet yards and improvement to existing Passenger Train (MU) yards; 5) Track and Interlocking: tie, track and switch state of good repair and signal system modernization; 6) Network Expansion: 3rd Track Project from Jamaica to Hicksville (right-of-way, at-grade crossings, station layouts, over and underpasses, and interlocking). Also developed projects and controlled budgets/expenditures for NY State Senate, Assembly and Local Representatives (CPRB Funds) for Capital Improvements at various stations and LIRR facilities. (MTA-LIRR, 1998-2001)

Previous experience includes:

Project Manager of Maintenance - Lincoln Tunnel - Port Authority of NY & NJ (PA), 1997 to 1998: Managed various engineering design and construction projects simultaneously for the PA Tunnel and Bridge facility improvements (ie Restoration of all granite and brick approaches to Tunnel 1.0M sq.ft.). Tasks included project scope development, feasibility studies, cost estimates, budget requests and allocations, and project/construction management thru project close out activities. Also, performed bid analysis and contract award recommendations; supervised consultants and in-house engineering design groups through project completion; and coordinated facility operations with project construction to maintain schedule and costs with minimal impact on operations.

Manufacturing Technical Training Coordinator - SVG Lithography Systems, Inc., 1995 to 1997: Supervised, developed and implemented corporate policies, a technical certification and management training program for computer chip manufacturing Lithograph Machines costing, $10 Million each.

Project Manager for NY State - Shoreham Nuclear Power Plant Decommissioning, Long Island Power Authority (LIPA), 1993 to 1995: Managed six departments, construction activities of a field force of 2,025 and project costs, for the first successful decommissioning of a nuclear plant. Approved all expenditures; developed, monitored and revised schedules; and supervised project management personnel. Project was completed three months ahead of schedule and within the $800 Million budget. Coordinated re-engineering of the Facility's continued operations, reviewed engineering and cost analysis; identified and corrected operating and cost

inefficiencies; evaluated process requirements and energy consumption; solicited and evaluated vendor proposals; supervised installation and start-up of cost saving equipment and process reductions.

Cost Engineering Coordinator - New York Power Authority (NYPA), 1992 to 1993: Developed project scopes, cost estimates, budgets, and schedules; performed engineering and cost analysis; coordinated construction, developed trend analysis, and authorized earned value. Negotiated contracts, set rates for personnel, services, expenses and profit margins; provided for fixed cost options to eliminate cost overruns; established billing controls; and defined documentation requirements.

KLM Associates, Ltd., Hicksville, New York. *Project Coordinator for Various Clients - (January 1991 through December 1991).* Developed client specific Hazard Communication Programs to comply with Federal requirements 29 CFR 1910 - 1200. This included solicitation, facility inspection, program development, documentation, personnel training, and program updates for eight firms.

Pilgrim Nuclear Power Station, Boston Edison Company (BECO), Plymouth, Massachusetts

Senior Emergency Planner - (September 1990 to December 1990)

Coordinated the development and preparation of BECO's response to the NRC's request for information on Offsite Emergency Plans of Pilgrim Nuclear Power Station. This report responded to the Commonwealth's Inspector General's findings, public meeting transcripts, FEMA's Exercise Report, and Corrective Actions for Offsite Emergency Planning deficiencies. Reviewed and updated the Evacuation Time Estimate (ETE) to reflect the Protective Action Recommendations (PAR). Revised the offsite training practicals for the five towns in the Emergency Planning Zone (EPZ), with the cooperation of the town's supervisor, councilmen and emergency response agencies (ie police, fire ambulance, community centers, school buses, etc). Participated as Controller for two FEMA graded exercises.

Shoreham Nuclear Power Station (SNPS), Long Island Lighting Company (LILCO), Long Island, New York

Financial Comptroller, Budget and Purchasing Coordinator& Senior Emergancy Planning Coordinator - (January 1988 to August 1990)

This appointment included budget development, analysis, allocations, tracking, and reporting of the Emergency Preparedness 11 million dollar annual budget. Mr. Mattera's responsibilities included approving, processing, and tracking all requisitions, purchase orders, and invoices. Conducted classroom training and tabletops for all aspects of emergency response. Participated as Lead Controller for onsite drills and quarterly offsite full activation drills, training drills, tabletops, and NRC and FEMA graded exercises.

Emergency Planning Coordinator - (January 1986 to December 1987)

Assigned to the Technical Support Group of the Local Emergency Response Implementing Organization. Responsibilities included coordinating the Equipment and Facilities Group of 25 maintenance personnel who maintained all offsite emergency facilities, equipment inventories, equipment calibration, and documentation. Other duties included development of the Offsite Radiological Emergency Response Plan and Implementing Procedures, specification of equipment purchases, coordinated revisions, ensured procedure operability, and provided drill support. Conducted classroom training and tabletops for all aspects of emergency response. Participated as Lead Controller for onsite drills and quarterly offsite full activation drills, training drills, tabletops, and NRC and FEMA graded exercises. Lead Controller for LILCO's Storm Restoration Drill and first Oil Spill Drill conducted at the E.F. Barrett PowerStation.

STONE & WEBSTER ENGINEERING CORPORATION, New York, New York (January 1977 to January 1986)

Engineer/Emergency Planner - (February 1983 to January 1986)

Assistant to the Manager of Technical Support of the Local Emergency Response Implementing Organization for the first utility-implemented offsite emergency plan in the country. This entailed the development of the original offsite plan and procedures, revisions, in-place operability, equipment specification, purchasing, training and drills. Support of the Atomic Safety and Licensing Board Hearings (ASLB), response to discovery requests, preparation of legal briefs, drafting testimony and the preparation of witnesses for oral testimony. Lead controller for 22 full activation drills, observer for numerous onsite and offsite drills. Coordinated document control and personnel file requirements and updates, word processing and reproduction.

W. H. Zimmer Nuclear Power Station, Cincinnati Gas and Electric Company, Moscow, Ohio

Engineer/Emergency Planner - (December 1982 to January 1983)

Provided radiological and technical information for the development and updating of the Commonwealth of Kentucky's Radiological Emergency Plan. Developed Radiological Emergency Response Plans and Procedures for Bracken, Campbell and Pendleton Counties.

Shoreham Nuclear Power Station (SNPS), Long Island Lighting Company (LILCO), Long Island, New York

Engineer/Emergency Planner - (February 1982 to November 1982)

Developed the procedures for Suffolk County's radiological emergency response in support of the SNPS emergency planning effort. These procedures included accident assessment, dose projections, field sampling, protective action recommendations, equipment specification and operation procedures, decontamination and record keeping. It required coordination of County resources to develop, train and implement these procedures. Developed procedures for decontamination facility and the handling and transportation of contaminated and/or injured individuals to medical facilities. Established over 200 field sampling locations in the a 10-mile Emergency Planning Zone (EPZ) surrounding the SNPS and updated the County's existing plans and procedures to comply with Federal and State comments and regulations.

Salem Nuclear Power Station, Public Service Electric and Gas Company, Salem, New Jersey

Engineer/Emergency Planner (October 1982)

Official Observer for a joint NRC and FEMA Graded Exercise for the State of Delaware Emergency Operation Center's (EOC) activation, command and control, radiological data acquisition and calculations, protective action recommendations and public notification and information.

Indian Point Nuclear Power Station, New York Power Authority (NYPA), Buchanan, New York

Engineer/Emergency Planner - (January 1982 to February 1982)

Official Observer for a joint NRC and FEMA Graded Exercise for Rockland County Decontamination Center's notification and set-up, procedure implementation and decontamination effectiveness. Developed route alert procedures, time estimates and notification routes for the Indian Point Nuclear Power Station's prompt notification siren system.

W. H. Zimmer Nuclear Power Station, Cincinnati Gas and Electric Company, Moscow, Ohio

Engineer/Emergency Planner - (October 1980 to February 1981)

Prepared the Standard Operating Procedures Manual for the Commonwealth of Kentucky in support of the Zimmer Nuclear Power Station's offsite emergency planning and coordination of State, County and Local agencies. The manual provided procedures for emergence notifications, mobilization, accident assessment, offsite

dose projection, protective action recommendation, radiation exposure control, public notification, decontamination, field sampling, recovery, radiological equipment operation and record keeping.

(CONDENSED VERSION OF PREVIOUS EMPLOYMENT - MARKETING NEED TO DELETE ONE SECTION)

Senior Project Engineer/Planner - KLM Associates, Ltd., 1986 to 1992: Developed and Implemented Emergency Evacuation Plans and Procedures for Shoreham Nuclear Power Plant and Boston Edison's, Pilgrim Nuclear Power Station. This included Litigation, NRC Licensing, Public Hearings, Drills, Certification, Operational Testing and Documentation.

Senior Project Engineer/Planner - Stone & Webster Engineering Corp, Power Division, 1982 to 1986: Performed engineering analysis and design of operating plant modifications for chemical, steam and electric generating facilities. As a Planner, established corporate procedures to handle operational emergencies; identified potential hazards and minimal impact clean-up procedures; notification protocols; regulatory compliance; and training. Developed hazardous materials remediation plans, safety programs, and emergency response procedure, implementation, and testing.

Project Engineer - Stone & Webster Engineering Corp., Petrochemical Division, 1977 to 1982: Supervised plant construction and start-up testing of petrochemical facilities. Contributed to facility design; directed structural assembly, pipe fabrication, and equipment installation; conducted site inspections; equipment start-up, designed field modifications and operational enhancements.

Alfio Paladino, P.E.

ESTIMATOR/CONSTRUCTIBILITY REVIEW

Mr. Paladino has 24 years experience in the construction industry. His extensive experience includes cost estimating, project management and engineering. He has worked on a broad range of Capital Program Projects for New York City Transit where he has held the positions of Senior Estimator, Project Engineer and Mechanical Engineer. Mr. Paladino's broad range of experience in construction and engineering has enabled him to become an accomplished Cost Estimator. He has extensive experience in developing cost estimates for rail construction projects in the areas of Power, Mechanical Systems, Rail Facilities, Environmental Abatements and Fiber Optics. His experience as a Project Engineer, managing construction projects, provides the background required for developing and interpreting construction work scopes. Representative project experience includes:

EDUCATION	B.S.M.E., Mechanical Engineering, Manhattan College, 1984
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	20

New York City School Construction Authority - Emergency Response Management and Coordination Program, New York City - Estimator - Under this contract LiRo managed and coordinated responses to emergencies, on the basis of a telephone call at any time during a twenty-four hour period and on any day Monday through Sunday. LiRo immediately mobilized trades, people or firms and materials for the purpose of correcting or eliminating hazardous materials or dangerous conditions at public school in the five boroughs of New York City. Some of the work was performed in occupied schools. Accordingly, LiRo used best efforts to insure that all such work was performed in a safe and secure manner with minimum disruption to students and school personnel. (NYCSCA, $70M)

Bronx Civil Supreme Courthouse, Estimator- Under this contract, LiRo provided construction management services for the Interior Renovation & Stair Remediation Work. As one of the services, the electrical work cost estimate was performed for maintenance of budget. The electrical work consisted of new interior lighting, power distribution panels, fire alarm system upgrades and telecommunication system. In developing the estimate, calculating quantities and the obtaining of material price quotes were performed. As part of the estimating process, value engineering suggestions were developed and implemented to achieve budget goals. In addition, constructability review was also performed to identify deficiencies and conflicts in the contract documents for correction prior to bid to avoid potential change order work during construction. The total estimated construction cost was calculated to be over $21M.

Battery Park City Community Center, Estimator- As part of the construction management responsibilities for this project, LiRo was required to determine the adequacy of budget for the construction costs reflective of the project design documents. Electrical work cost estimate was performed for new systems which include power distribution, lighting, fire alarm, communications and security. Constructability review of the construction documents was also performed. The total estimated electrical work cost was calculated to be over $5.4M.

Brookhaven National Laboratory National Synchrotron Light Source II, Estimator- The scope of work for this contract consisted of the construction of a new research facility to be used for the development of new efficient energy sources. This facility includes a new one-story Ring Building,

Injection Building and RF Building along with various other buildings that will house MEP systems. The contract required LiRo to prepare cost estimates for the MEP systems. Electrical work estimate was performed. Elements of this work included: site work power distribution system, site lighting, new switchgears and power distribution panels, interior lighting and power, emergency generators and fire alarm system. The total estimated construction cost was calculated to be over $195M.

Norwalk Community College, Estimator- The scope of work for this contract consisted of the construction of a new building wing to replace an existing outdated one. The renovation of another existing wing was also part of the scope of work. Electrical cost estimate was developed for construction costs related to new systems that included power distribution, lighting fixtures, communication, fire alarm, audiovisual and security work. The performance of quantity take-offs, obtaining material price quotes and utilization of estimating software along with current wage rates and industry standards were implemented. Constructability review of documents was also performed to ensure project scope. The total estimated construction cost was calculated to be over $28M.

New Family Intake Center, Estimator- The construction of a new 80,000 SF multi-story office building for the Department of Homeless Services was to be managed by LiRo. The development of a construction cost estimate for all construction work was required as part of LiRo's construction management services to ensure the adequacy of the allocated budget. Electrical and plumbing work estimates were developed as part of this task which included: new power distribution system; lighting; security; fire alarm; domestic water distribution; drainage including sanitary and sewer lines. Estimates were developed by performing quantity take-offs and utilizing documented wage and productivity rates and material price quotes. Constructability review of the construction documents was also performed. The total estimated construction cost was calculated to be over $47M.

DASNY/HHC Emergency Power Systems Upgrade, Estimator- The scope of work for this contract consisted of demolition and reconstruction of outdated Emergency Power Systems at six hospital trauma centers and various other smaller hospital facilities located in the New York City area. The contract required LiRo to prepare cost estimates for the various types of work in the projects. Typical elements of work for these projects included: Emergency Generators, paralleling switchgear, remote radiators for generator cooling systems, power distribution panels, underground fuel oil storage systems and conduit & wire distribution to all associated equipment. The total estimated construction cost was calculated to be over $121M.

Engine Company #277 / Ladder Company 112 - CM Build Services, Estimator - As part of a Requirements Contract, LiRo managed the new construction, renovation, and/or demolition of fire houses or related facilities throughout New York City. The contract required that LiRo participate during the design phase by preparing cost estimates, schedules, reviewing phasing and staging system and constructability issues. Typical elements of construction for these projects included: structural steel, masonry facade, historical masonry and details in some cases, mechanical systems for heat and ventilation, electrical service, vehicle exhaust extraction system, vehicle fuel storage and distribution.

Employment History:

The LiRo Group (2004-Present)
Senior Estimator

New York City Transit (1987 - 1994)
Senior Cost Estimator, Project Engineer, Mechanical Engineer

Spielman Associates Consulting Engineers (1985-1987)
Project Engineer

SCHEDULERS

Martial Elie-Pierre
SENIOR SCHEDULER

Mr. Elie-Pierre has 18 years of experience in progressive project management within the construction industry. He has worked as a Project Manager/Construction Manager and Controls Engineer/Project Scheduler. The types of projects that Mr. Elie-Pierre has been involved with include: transportation (rail), fire/life safety, environmental, infrastructure, roadways, airports, commercial shipping ports, correctional and educational facilities.

EDUCATION	M.S., Civil Engineering/Construction Management, Columbia University, B.S., P.E. Civil Engineering/Construction Management, Columbia University, B.S., Civil Engineering/Construction Management, Universite D'Etat D'Haiti
REGISTRATION / CERTIFICATIONS	Engineer-in-Training, NY
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	11

NYCT IRT 1/9 Subway Restoration/Reconstruction, Lower Manhattan. As Senior Project Scheduler, Mr. Elie-Pierre has been assisting the NYCT project team in finishing this vital project in just six months; a project of this magnitude would normally require three years. He is also currently working on scheduling and phasing development for the South Ferry Complex Terminal, as well as the NYCT Downtown Transit Hub & Center.

Other transportation projects include:
- **JFK 2000 Redevelopment (PANYNJ, $4B)**
- **63rd Road Street Connection Program (NYCT, $700M)**
- **Woodside Electronic Shop Facility (NYCT, $10M)**

Additional project experience:
- Underground Storage Tanks (NYCDDC, $10M)
- Fire/Life Safety at Four Correctional Facilities (NYCDDC, $35M)
- Reconstruction of PS75/Paul Robeson High School (NYCSCA, $25M)
- Queensborough Community College (DASNY, $4.5M)

Mr. Elie-Pierre has utilized several different computer software packages while performing Critical Path Method (CPM) scheduling. Most recently he has worked with Primavera Project Planner and is highly proficient with both the DOS and Windows versions. Regarding methods of CPM, Mr. Elie-Pierre is adept in the use of both Arrow Diagram Method (ADM) as well as Precedence Diagram Method (PDM).

As a Controls Engineer/Project Scheduler, Mr. Elie-Pierre was responsible for developing and updating CPM schedules, developing construction phasing/staging plans, preparing Master Program Schedules, implementing cost control mechanisms, preparing cost estimates, conducting constructibility reviews, reviewing the contractor schedule for adherence to contract specs, preparing periodic progress reports, responsible for all time impact studies, schedule delay mitigation, inter-contract coordination, the maintenance of all Milestones, negotiation of time extension, potential impact costs. Mr. Elie-Pierre has utilized Primavera Expedition to assist in document control and tracking of shop drawings, submissions and requests for information.

Computer proficiency is evidenced by complete working knowledge of the following software packages:

Primavera Project Planner, Primavera Expedition, Microsoft Excel, Microsoft Word, Artemis, Lotus 1-2-3 Harvard Graphics and Prime Computer Vision(CADD).

Employment History:
The LiRo Group (#### to Present)

Matthew Iannuzzi, P.E.

ASSOCIATE

Mr. Iannuzzi has over 15 years of experience providing construction management and engineering services for New York public agencies. Most of his experience is on-site management of multi-prime building renovation projects on occupied sites. Virtually all of his prior projects were situated on complex sites where coordination with neighboring governmental agencies and the overall community were keys to the success of the projects. Representative projects include:

EDUCATION	B.S., Civil and Environmental Engineering, Carnegie-Mellon University, Pittsburgh, Pennsylvania, 1996
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hour Safety Training Certification Primavera Expedition (Project Controls)
YEARS WITH THIS FIRM	18
YEARS WITH OTHER FIRMS	0

FDNY / Leary Firefighters Foundation Addition / Renovation of Building 1, Project Manager - Design / Build Contract. Masonry high rise simulation facility housing a full burn unit, central smoke system and a flashover system for both residential duplex and full commercial floor simulation at the FDNY Training Academy on Randall's Island, NY. (FDNY Foundation / Leary Firefighters Foundation, $4.4M)

FDNY Rehabilitation of Engine Company 259, Assistant Project Manager - CM/Build Contract. Complete gut / rehabilitation of fire house located in Long island City, New York. The building interior was totally gutted and an extension to the rear of the building was added. A new state-of-the-art firehouse was then constructed. (NYC DDC, $9.6M)

FDNY Rehabilitation of R&T Building, Assistant Project Manager - CM/Build Contract in occupied facility that houses FDNY's vehicle maintenance division and the building maintenance division. The existing electrical service is being upgraded. Two (2) new emergency generators are being installed. Three (3) existing boilers are being removed and replaced and central air conditioning will be installed in the 2nd floor office area. Multi phased construction to allow the FDNY to continually occupy / operate (24/7) out of the building, while work is in progress. Long Island City, NY (NYC DDC, $8.1M)

FDNY Engine 84 and 286, Kitchen / Bathroom Renovations, Resident Engineer - CM/Build Contract in occupied fire houses. Kitchens and bathrooms in the two (2) fire houses were renovated in multi phased construction to allow the FDNY to continually occupy / operate out of the fire houses while work was in progress. (NYC DDC, $1.5M)

FDNY Training Academy, Randall's Island Phase I & II, Resident Engineer - The security project included a complete security upgrade of the main entrance to the training facility. This project integrated the construction of Architectural security walls, fencing, a security control guard booth, security devices and high speed crash barriers. Infrastructure was added to the site to allow for monitoring of the new security system through FDNY's fiber optic / data network. Access / egress to the facility had to be maintained through the construction site and all new security equipment had to be tied into existing security and communication systems.

In addition to the above, Mr. Iannuzzi oversaw the punch list / closeout / sign off phase of the following work; Construction of a new Subway Simulator Building, building expansions for an Existing Apparatus Maintenance garage and the existing Mask Service Building. And the sign off phase of Buildings 11, 12, 5 & 2 (NYC DDC, $60M)

Kingsland Avenue Warehouse, Resident Engineer - Construction of a 12,000 SF building (removal of contaminated fill, metal walls and roof panels on pile foundation). There were two (2) demolition projects (adjacent buildings and incinerator stacks) in progress on the site and the site was also completely surrounded by the Newtown Creek Sewage Treatment Plant that was in the midst of a major (one (1) billion dollar upgrade / expansion). Coordination with multiple contractors, consultants and agencies was essential. The local Community Board closely monitored the project over concerns that the construction on the site would disturb prior underground contamination (petroleum). (NYC DOS, $2M)

Queens House of Detention for Men, Kitchen Renovation, Resident Engineer - Renovation of existing kitchen and storehouse (approximately 8,000 SF of space). CM/Build contract. Occupied facility where NYC Corrections daily operations could not be disrupted. Access / egress for Daily truck deliveries from Rikers Island (delivering meals for inmates three (3) times a day while the kitchen was out of service) had to be maintained. Coordination with the neighboring Queens Court Complex, NYC Department of Transportation (Parking facility and street work) and NYC Department of Probation was of great importance. (NYC DDC, $5M)

Queens House of Detention for Men - Electrical Service Coordination Project - Resident Engineer - New building addition (brick/block/steel) to house switchgear, emergency generator, etc. required for new 4000 amp service. CM/Build contract. Occupied facility where NYC Corrections daily operations could not be disrupted. A major part of the project was maintaining daily bus access to the facility (inmates being transported to court) and fire egress. Project ran concurrently with the Kitchen Renovation project listed above. (NYC DDC, $4M)

North Infirmary Command Kitchen Renovation, Resident Engineer - CM/Build contract. Occupied facility where NYC Corrections daily operations could not be disrupted. Conversion of existing space (some of which housed sick inmates / hospital environment) to pantries and interim kitchen, demolition of existing kitchen building (modular building) and construction of new kitchen building (12,000 SF - brick, block and steel). An existing steam tunnel and the electric service to other buildings ran through the foundation of the new kitchen building requiring extreme caution / coordination during pile / foundation work. (NYC DDC, $9M)

Queens House of Detention for Men, Kitchen Renovation, Resident Engineer - This project was part of the System-Wide Kitchen Renovation Program for Department of Corrections, a $50M contract, which entailed the phased renovation of kitchens, pantries, and related food service areas throughout the NYC jails system. LiRo's role was to perform all construction management duties including bidding and entering into contract with various construction contractors. This program required an initial phase of construction whereby 14 facilities were to be upgraded with systems that would last through the construction period. The balance of the program involved the total renovation of kitchens and food related services areas at six correctional facilities throughout Brooklyn, Queens, and the Bronx. ($5.5M)

Employment History:
The LiRo Group (1992 to Present)
Associate

Philip Kalmus
SENIOR SCHEDULER

Mr. Kalmus has been involved in the construction industry for more than 37 years. He is a professional experienced in both construction management and project controls. He specializes in the application of CPM scheduling and project control techniques. Among his areas of expertise are the following:

- CPM/PERT development
- Time/schedule control techniques
- CPM scheduling/phasing
- Claims analyses
- Delay/impact studies
- Earned value assessment
- Monthly reporting/narratives
- Proposal schedules

EDUCATION	B.S., Architecture, New York Institute of Technology, 1975 A.A.S., Design Drafting, New York City Community College, 1969
YEARS WITH THIS FIRM	7
YEARS WITH OTHER FIRMS	31

Representative projects include:

Newark Draw and Approach Structures Rehabilitation, Morris and Essex Lines, Bridges MP7.41, 7.42, 7.48, 7.53, 7.59 and 7.65, Scheduler - The work of this contract generally is to rehabilitate the substructure and superstructure of the Newark Drawbridge and the approach structures to the East and West. The work includes repairing the structural steel in the superstructure and the masonry and concrete in the substructure, repairs to the fender system and the electrical and mechanical repairs to the swing span. The scheduling responsibilities include: Review/commenting on the contractor's baseline schedule until approved Develop/issue monthly schedule Update review/analysis reports and narratives Attend/participate in monthly schedule update review meetings Review/comment and report on the contractor's cost loading of the schedule
(NJT, 2009)

NYSTA Tappan Zee Bridge Project, Milepost 14.67 +/-: The scheduling responsibilities include:

- Reviewing/ Commenting on the contractor's monthly schedule updates
- Developing/ issue monthly schedule review/ analysis reports
- Assist in conducting monthly schedule review meetings
- Attend job progress meetings

(NYSTA, 2009)

WP-269 Pumping Station, Construction of sewers, pumping station, force mains, & associated facilities, Meadowmere & Warnerville, Queens, NY, Scheduler- LiRo is providing full project management (Resident Engineer) on site services. The scheduling responsibilities include:

- Assist contractor in developing baseline schedule by review/comments
- Conduct monthly schedule update review meetings
- Review monthly site progress
- Develop/issue monthly schedule review/analysis reports and narratives
- Attend job progress and I & T meetings

(NYCDEP, 2009)

Sunrise Yard, New DOT Maintenance Facility, South Ozone Park, NY, Scheduler - LiRo is providing full project management on-site services. The scheduling responsibilities include:

Assisting contractor in the development of the baseline schedule by review/comments Conduct and issue periodic schedule updates, as required Produce recovery schedules, as required Produce summary schedules for project minutes Review site progress and discuss with project staff, (NYCDDC, 2009)

Park Slope Armory Revitalization Project, Brooklyn, NY, Scheduler- Under this contract LiRo is performing project management for the renovation of the existing drill floor area which involves full GC/Electrical/Mechanical & Plumbing services and the upgrade of the Life Safety Services. Duties include:

- Developing Scheduling of remaining work items
- Periodic progress updates
- Issuing schedule reports, as required

(NYCDDC, $15M, 2008)

Improvements to County Center Building, Yaphank, NY, Scheduler- Under this contract LiRo performed CM services for constructing a new 4-story 85,000sf Civil Court building, followed by renovating the existing three original court buildings. The renovation included new mechanical, electrical, and plumbing services, along with new interior GC finishes. The third part of the project involved the exterior restoration and weather proofing of the original structures. The scheduling tasks performed were:

- Developing baseline schedules
- Conducting monthly status updates and end date projection
- Walk job to determine progress with the contractors
- Developing and issuing monthly schedule reports and narratives

(SCDPW, $34M, 2007)

Hope VI Ocean Bay Apartments, Far Rockaway, NY, Bayside, Masonry, GC Work, Electrical Distribution, NYCHA - Oceanside, GC and Masonry Work, NYCHA, Day Care/Senior Centers, Scheduler - Under this contract, LiRo performed work on a task order basis. We were charged with renovating and/or constructing several community centers throughout New York City. In addition, we performed new construction of a community center and various renovations and upgrades at Ocean Bay apartments in Rockaway. These properties all required that LiRo perform preconstruction and construction phase services LiRo was responsible for prequalifying potential construction contractors, bidding the work and ultimately entering into contract with the construction contractors. Of particular importance was that these projects required careful coordination with community residents so interruptions of utilities, housing access, etc. was kept to an absolute minimum. In addition, a community liaison was necessary to keep local residents well informed as to the progress and new developments on the project.

Employment History:

The LiRo Group (2003 to Present)
Senior Scheduler
NYC School Construction Authority (1999-2003)
Scheduling Engineer
J.A Jones-GMO LLC (1997-1999)
Scheduling Engineer
Lehrer/McGovern/Bovis (1995-1997)
Scheduling Engineer
Stone & Webster (1990-1995)
Planning Engineer
New York City Transit Authority (1988-1990)
Cost/Schedule Supervisor
Ebasco Services (1971-1976)
Scheduling Engineer

George J. Psillos
ASSOCIATE VICE PRESIDENT

EDUCATION	B.S., Architectural Technology, New York Institute of Technology, 1976
REGISTRATION / CERTIFICATIONS	Primavera Expedition (Project Controls) Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Troubleshooting Exterior Masonry Walls Certification, NY OSHA - 10 Hours Certificate, NY
YEARS WITH THIS FIRM	19
YEARS WITH OTHER FIRMS	14

Mr. Psillos has been providing construction management services for over 30 years. He has provided project management, CPM scheduling, specifications review and cost control services. He has worked on projects for the: New York City Department of Environmental Protection (DEP), Nassau County DPW, Suffolk County DPW, New York City Transit Authority, New York City Department of Sanitation and Merrill Lynch. These projects have ranged in value from $2 million to $600 million. Most recently, Mr. Psillos has served as Project Manager for a multi-site on-call contract with the United States Postal Service. On this project, Mr. Psillos managed nine LiRo field personnel on multiple projects totaling over $90M in renovations. Representative projects include:

U.S. Postal Service On-Call Construction Management Services, Project Manager. LiRo provided construction management services to the U.S. Postal Service under an indefinite quantity contract. The contract demanded both construction management and engineering/architectural expertise, with complete CADD capabilities. The work, which was performed for the New York Facilities Service Office, encompassed Post Office construction projects in the New York area. LiRo's specific responsibilities included:

- Design Consultation, Coordination, Estimating, Coordination Drawings
- Project Management, Coordination, Scheduling and Progress Surveillance
- Construction Planning and Cost Estimating
- Surveillance of Quality Control and Inspection of Construction
- Contract Document Interpretation
- Administration of Project Documents and Records
- Claims Analysis and Defense

(U.S. Postal Service, $59M, 2000-2008)

U.S. Postal Service, On-Call Construction Management Services, Project Manager- Mr. Psillos was project manager for this on-call construction management contract, which entails both construction management and A/E services for the U.S. Postal Service at various locations throughout New York City and Long Island. The assignments were varied, ranging from HVAC improvements to the construction of a completely new post office. Multiple task orders were being completed simultaneously. (U.S. Postal Service, $30M, 1997-2000).

Suffolk County Community College, Multi-Purpose Health Technology Building, Brentwood, NY, - This project involved the new construction for a new Classroom Building, Athletics Complex, and Athletic Sport Fields. Involved CPM scheduling and project coordination for this new 250,000 sf

health, sports and education center on the western campus. The multi-purpose building contains 22 general purpose classrooms, a 150 seat high-tech lecture hall, computer labs and state-of-the-art laboratories for the health sciences, a 60,000 sf field house and a modern fitness center, faculty and administrative offices and the Suffolk County Police Academy. The project was in conformance with the Wick's Law Requirements for multi-prime contracts. (DASNY, $55M, 1997-2000)

Cohalan Courthouse Complex, Assistant Project Manager and CPM Scheduler - Project involved CPM scheduling and project coordination for courthouse and office complex including holding cell and jail facilities for prisoners. ($90M)

Assistant Project Manager and CPM Scheduling for LIRR Herricks Road and Mineola Grade Crossing Elimination Project ($340M) - *Phase I*: Raising 1 mile of mainline track and the lowering of Herricks Road, including a portion of Third Main Line track, installation of high-speed crossovers, signal system equipment, communication, signal and power lines, and signal bridges. ***Phase II:*** Elimination of the remaining five MTA LIRR grade crossings in the Mineola area: Main Street, Willis Avenue, and Roslyn Road on the mainline; and Willis Avenue and Second Street on the Oyster Bay Line. Mr. Psillos was responsible for all CPM scheduling for the LIRR Force Account work. Six weekend track outages were required for track cut-over's, each requiring CPM schedules on 1-hour intervals. Extensive coordination and interface with the railroad was required.

Nassau Community College Expansion, Assistant Project Manager - Mr. Psillos provided administrative and technical management of $35.5 million of contract for the demolition of a 55,000 sf block and brick frame aircraft hangar buildings. For the construction of two new buildings: an 115,000 sf three-story classroom building and 90,000 sf three-story college center. The new construction complies with all applicable codes including new ADA requirements. Coordinated operations of five prime contractors. Mr. Psillos was involved in all aspects of construction management including field inspection, estimating, change order estimating and negotiation, project meeting administration, document control, constructability review, and value engineering.

Additional Projects include:

- JFK 2000 Redevelopment Program, Project Control Engineer ($3.2 Billion)
- Cogeneration Facility at JFK International Airport, Project Control Engineer ($200M)
- Skilled Nursing Facility, Suffolk County, NY, CPM Scheduler($30M)
- Merrill Lynch World Financial Center , CPM Scheduling Engineer($600M)
- DOC Kitchen Rehabilitation, NYC DDC, CPM Scheduler($80M)
- Red Hood Sewer Treatment Facility, NYC DEP, Assistant Project Manager ($80M)
- Bay Park Sewer Treatment, Nassau Country DEP, CPM Scheduler ($120M)
- 63rd & 21st Street Subway Stations, NYC Transit Authority, CPM Scheduler ($60M)

Employment History:
The LiRo Group (1991-present)
Associate Vice President

ADDITIONAL RESOURCES

Gilbert E. Balog, AIA
SENIOR VICE PRESIDENT

In his 40 years of professional experience, Mr. Balog has administered a variety of renovation and rehabilitation projects with a cumulative value of more than $1 billion. He is also an expert in providing feasibility studies, project management and organization, adhering to building codes, and developing design/build and fast-track construction programs for governmental facilities. Most of the projects he has worked have been designed to maintain facility operations during construction.

Mr. Balog has been the recipient of the New York Society of Architects' Citation for Excellence in Design, Planning and Construction. He also has received numerous fellowships and scholarships.

EDUCATION	M.S., Urban Planning, Columbia University, 1968 Bachelor of Architecture, Cornell University, 1966
REGISTRATION / CERTIFICATIONS	Registered Architect, NJ Registered Architect, NY Registered Architect, CT Registered Architect, PA International Code Council American Institute of Architects NCARB Certified
YEARS WITH THIS FIRM	39
YEARS WITH OTHER FIRMS	3

Mr. Balog is a member of the National Fire Protection Association, The International Code Council and The American Institute of Architects. Representative projects include:

World Trade Center, Feasibility Study, Life Safety, and Building Code Analysis for the Expansion of the Concourse Level of the World Trade Center - Completed a building code analysis of the entire Concourse Level of the World Trade Center (approximately 470,000 sf of public passageways and retail facilities). Mr. Balog directed a review of the existing complex and advised the Port Authority of code deficiencies regarding future expansion relative to New York City Building code. Alternative solutions were proposed with estimates of construction cost to mitigate the deficiencies. (Port Authority of NY& NJ)

Mr. Balog also directed the creation and development of a computer generated, life safety analysis model for the evacuation of the existing 20-year old complex. The program was used to provide visual displays of various scenarios regarding the availability or lack thereof of different exits and passageways during emergency situation. (Port Authority of NY/NJ)

Americans with Disabilities Act (ADA) Surveys, World Trade Center - Performed ADA Title III Public Accommodations Facility Surveys of the entire World Trade Center Complex. Under Mr. Balog's direction, LiRo completed an ADA survey report, conceptual designs, transition plan, construction cost estimates, and proposed mitigation measures for the public areas of 1, 2, 4, and 5 World Trade Center (concourse level, plaza level, PATH mezzanine, elevators, parking levels, public toilets and loading dock), sky lobbies of 1 and 2 World Trade Center, the multi-level *Windows on the World* restaurant and banquet facilities on the entire 106th and 107th floors of 1 World Trade Center, and exterior public plaza and fountain (over one million square feet). (Port Authority of NY/NJ)

Call-In Contracts, Feasibility Studies, Code Analysis - Mr. Balog programmed, scoped, planned, and budgeted over 50 individual projects including replacement of doors and roofs, lobby, interior and

new-building designs, feasibility studies, and code and ADA analysis. These projects were developed for various departments of the Port Authority of NY & NJ, including their Engineering, Maintenance, Aviation, and World Trade Departments. (Port Authority of NY & NJ)

Call-In Contract for Architecture - Mr. Balog developed, programmed, planned and budgeted over 30 projects for the client's downstate facilities including a myriad of building system repairs, rehabilitation, upgrading and additions to their aging buildings. (New York State Facilities Development Corporation)

CUNY School of Architecture - Swing Space Relocation, New York, NY - Principal Architect - Responsibilities included programming, design, construction documents and construction administration for the relocation of approximately 60,000 sf of City College's administrative facilities (over 14 departments) previously housed in the "Y" Building to other buildings on the City College campus in order to allow the "Y" Building to be converted into the new home for the School of Architecture. (DASNY, $7M)

Rehabilitation of the 8th Avenue Station and Retaining Walls, Sea Beach Line, Brooklyn, NY - Mr. Balog is the Principal Architect in charge of the design of the 8th Avenue Station renovation. The scope of work for the rehabilitation of this station, which is located in an open cut embankment, includes the rehabilitation of the full-time control house, station platforms, and the Transit Authority's Automatic Fare Control building. The design will bring the entire station to a "state of good repair", provide requisite customer and employee amenities, and enhance customer and employee safety. (NYCT, $1M)

Rehabilitation of the 77th Street and 86th Street Stations, Lexington Avenue Line, Project Manager - Mr. Balog coordinated, managed and planned the complex renovation and rehabilitation of these two subway stations. The scope of work involved numerous upgrades of existing building systems and structures in multiple locations throughout both stations. (NYCT, $30M)

Pennsylvania Station Historic Restoration, Newark, NJ - Provided design services and supervision of multi-contract construction for this project. Scope included historic restoration, renovation, and rehabilitation of the commuter and AMTRAK passenger train and bus terminal including the renovation of all street entrances, the modernization of platform areas, the addition of platform elevators for elderly and disabled access, upgrade of mechanical systems, installation of new security and CCTV systems, track signalization, roof rehabilitation, and reconfiguration of traffic and parking facilities. The project was designed for the phasing and staging of construction to maintain the uninterrupted operation of the terminal during rehabilitation.

Delta Airlines Building Code Study Terminal A & B, JFK international Airport - When Delta Airlines took over Pan Am's International and Domestic Terminal at JFK, it inherited facilities that had been renovated many times and did not meet current building code. Under Mr. Balog's direction, LiRo performed a forensic building-code analysis using the original construction documents to establish initial code compliance and provide Delta with cost-effective mitigation measures for the modification of the existing facilities to meet current code.

Employment History:
The LiRo Group (1971 to Present)
Senior Vice President/Principal Architect
Emery Roth & Son (1968-1971)
Detailer

Marlene Beck
ENVIRONMENTAL SCIENTIST

EDUCATION	B.S., Environmental Science, Plattsburgh State University, 1998
REGISTRATION / CERTIFICATIONS	
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	1

Ms. Beck is an environmental scientist with eight years of experience in the environmental field. Ms. Beck has been assigned to task-order based contracts performing Phase I and Phase II investigations for property transfer/corridor projects in New York City and New Jersey. She has also completed remedial investigation projects involving development of system design and specifications for underground and aboveground petroleum storage tanks In addition, Ms Beck has been assigned to projects involving management of the design and construction of culverts and roads in Erie County and preparation of site investigation, remedial investigation, and asbestos containing material (ACM), lead-based paint, lead in drinking water, radon, mold and PCB investigation reports for the NJSCC. Some of the various projects Ms. Beck has been involved with are provided below:

NYCDDC Requirements Contract for Environmental Services: Lead Environmental Scientist for work-order based contract to perform Phase I/Phase II Environmental Site Assessments (ESAs) and corridor studies in support of NYCDDC property acquisition and corridor rehabilitation projects. More than 60 task orders have been issued and completed. Ms Beck has been the lead program scientist responsible for completing Phase I ESAs in accordance with ASTM standards. Based on the Phase I results, Ms Beck also developed and implemented Phase II/Corridor Investigation work plans at more than 20 sites. She was responsible for all aspects of the program including records reviews, data acquisition, work plan development, oversight of subsurface investigation work, data review and report preparation.

Cherry Street Elementary School, Bridgeton, NJ: Environmental specialist responsible for preparation of Phase I preliminary assessment (PA) and asbestos containing materials (ACM), lead-based paint, lead in drinking water, radon, mold and PCB investigation of the Cherry Street Elementary School for the NJSCC. Responsibilities for the PA report included a thorough file review and document search in accordance4 with ASTM and NJDEP standards for records of historical site ownership and uses, records of known site contaminants or area of concerns (AOCs), and records of environmental actions or listings, interviews with current building owners/occupants and government agency representatives. Responsibilities for the hazardous materials report included reviewing a survey that identified, classified, and quantified suspect ACM, identified lead-based coating on various surfaces, assessed lead hazards associated with the facility's drinking water, assessed possible radon hazards, assessed possible mold growths, and assessed possible PCB hazards.

Indian Avenue Elementary School, Bridgeton, NJ: Environmental specialist responsible for preparation of Phase I preliminary assessment (PA) and asbestos containing materials (ACM), lead-based paint, lead in drinking water, radon, mold and PCB investigation of the Indian Avenue Elementary School for the NJSCC. Responsibilities for the PA report included a thorough file review and document search in accordance with ASTM and NJDEP standards for records of historical site ownership and uses, records of known site contaminants or area of concerns (AOCs), and records of environmental actions or listings, interviews with current building owners/occupants and government agency representatives. Responsibilities for the hazardous materials report included reviewing a survey that identified, classified, and quantified suspect ACM, identified lead-based coating on various surfaces, assessed lead hazards associated with the facility's drinking water, assessed possible radon hazards, assessed possible mold growths, and assessed possible PCB hazards.

Bridgeton Middle School, Bridgeton, NJ: Environmental specialist responsible for preparation of Phase I preliminary assessment (PA) and asbestos containing materials (ACM), lead-based paint, lead in drinking water, radon, mold and PCB investigation of the Bridgeton Middle School for the NJSCC. Responsibilities for the PA report included a thorough file review and document search in accordance with ASTM and NJDEP standards for records of historical site ownership and uses, records of known site contaminants or area of concerns (AOCs), and records of environmental actions or listings, interviews with current building owners/occupants and government agency representatives. Responsibilities for the hazardous materials report included reviewing a survey that identified, classified, and quantified suspect ACM, identified lead-based coating on various surfaces, assessed lead hazards associated with the facility's drinking water, assessed possible radon hazards, assessed possible mold growths, and assessed possible PCB hazards.

Braverman Building, Asbury Park, NJ: Environmental specialist responsible for preparation of preliminary assessment/site investigation (PA/SI) and remedial investigation (RI) reports of the Braverman building for the NJSCC. Responsibilities included identifying any contamination associated with the AOCs , determining an appropriate scope of work for a Phase II site investigation, reviewing the results from soil borings and soil and groundwater analysis, and development of a remedial action plan.

Charleston Bus Annex, Staten Island, NY: Environmental Specialist responsible for updating a Final Environmental Assessment in compliance with the State (SEQR) and City of New York (CEQR) standards at the Charleston Bus Annex for the New York City Transit (NYCT). Responsibilities included obtaining information on land use, evaluation of the proposed activity for compliance with the New York State's Coastal Management Program and the New York City Local Waterfront Revitalization Plan, reviewing environmental records, and performing an air and noise analysis.

Erie County Highway Program Management, NY: Engineer responsible for managing the design and construction of 25 culvert and 7 road projects in Erie County. Responsibilities include the development, maintenance, and coordination of design and construction schedules and the review of culvert and road design and specifications.

Peace Bridge Traffic Study, NY: Project Engineer responsible for conducting traffic counts at various intersections near the Peace Bridge as part of the Peace Bridge Traffic Study.

EMS University Heights, NY: Project Engineer responsible for preparation of drawings and design specifications for relocating a fuel dispenser.

EMS Brooklyn Heights, Red Hook, Rockaway III, Springfield Gardens, and Tuscan NY: Project Engineer for the installation of underground fuel storage tanks ranging in size from 2,5000 to 4,000 gallons. Project included development of system design and specifications.

NYCDCC UST Program, NY: Project Engineer for the upgrade, replacement, and removal of underground petroleum storage tank systems at several HPD, ACS, HRA, NYPD, and DOH sites. Fueling systems included diesel and fuel oil storage tanks ranging in size from 275 - 15,000 gallons. Project included development of pre-design/site recommendation reports and preparation of system design and specifications.

University at Buffalo, NY: Project Engineer responsible for the design and implementation of a study to determine beneficial use in the land application of water treatment residuals. The focus of the design was application of residuals from the Niagara Falls WTP onto a brownfield-type area and demonstrate that a measurable benefit can be achieved through the use of turf grass growth. Project included design of pilot study layout; preparing and maintaining study plots and pots; performing chemical/physical analysis on soil, residuals, and plants; performing a cost analysis for various residual disposal alternatives; and performing a statistical analysis on the physical and chemical parameters of the soil and residuals.

Kenworth Trucks, WA: Engineer responsible for assisting the waste water treatment plant operator in treatment process. Other responsibilities included analyzing and making recommendations for improving packaging

methods, and investigating and identifying solutions to reduce wasted paint.

Eugene Bifulco, P.E.

VICE PRESIDENT

EDUCATION	B.S., Mechanical Engineering, New York Institute of Technology, 1987
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY OSHA 10 Hour Occupational Safety & Health Training NYC DOB 4-Hour Supported Scaffold User Certificate, NY NYC Site Safety Manager License
YEARS WITH THIS FIRM	21
YEARS WITH OTHER FIRMS	7

Mr. Bifulco has over 20 years of experience in the construction industry. Most recently, Mr. Bifulco has been extensively involved with LiRo's contracts with New York City Department of Design and Construction and Dormitory of the State of New York work. Mr. Bifulco is involved with administration, contracts, auditing project schedules and documentation, client liaison and technical troubleshooting. Having worked his way through the ranks, Mr. Bifulco possesses hands-on experience in all areas of construction management. Specific areas of expertise include cost estimating, CPM scheduling and electrical construction. Mr. Bifulco's experience is deeply rooted in public works and he is thoroughly familiar with Wicks Law construction contracts. Representative projects include:

Bernard Fineson Replacement Facility, Project Executive - Under this contract, LiRo provided CM services for DASNY for the pre-construction and construction phases of this project for the Office of Mental Retardation and Developmental Disabilities. The scope of work included the demolition of existing structures on a 12-acre site and the erection of eight new one- and two-story residential buildings and an 80,000 square foot program/administration building. Work also included the development of the 12-acre site and all utilities. (DASNY, $80M, 2009)

DASNY School of Architecture, Project Manager - Demolition and reconstruction of a 136,000 sf building to become the new School of Architecture building. The building frame was structural concrete, which remained. The balance of the building was demolished and rebuilt, including façade, interior and mechanical, electrical and plumbing systems. The estimated project construction cost was $52M. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus, which required the renovation of various locations at a cost of approximately $8M and was accomplished in one year.

Stony Brook University Medical Center - This project consists of various stages of construction with an anticipated overall cost of approximately $170M. The overall scope of work is anticipated to take 7 years, due to the intricate phasing that will be required to keep the facility in operation throughout the entire construction duration. The job consists of five separate projects: Patio Enclosure, Emergency Generator, The Heart Center Project, ACP Project, and a Major Modernization Project.

Westchester County Penitentiary - The Penitentiary Housing Replacement Facility project at Norwood E. Jackson Correctional Center, located in Valhalla, New York, was developed by the Westchester County Department of Public Works. The scope of the project included renovation of existing spaces and the demolition of existing building to allow for the construction of the new facility. The new facility includes a punitive segregation housing area and a general population area. The new facility is structured concrete with a masonry facade and has state-of-the-art security. New housing units replaced the three-story buildings. ($42M)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME) Construction Management Services - LiRo managed the construction of the new Office of the Chief Medical Examiner (OCME) facility in Brooklyn. This is a state-of-the-art facility offering the staff and the public a safe and private environment. Shared between Kings County Medical Center and the OCME, the new facility contains space designated for NYPD investigators. It was designed to be sensitive to the surrounding community and hospital campus. LiRo's role was to provide comprehensive construction management services from design development through the completion of construction. This included the coordination of all construction operations and related vehicular traffic so that it did not interfere with local traffic or hospital campus operations. The 40,000 sf facility was constructed in 28 months. (DASNY, $18M)

System-Wide Kitchen Renovation Program for NYC Department of Corrections, Project Manager - This contract entailed the phased renovation of kitchens, pantries and related food service areas throughout the NYC jails system. LiRo's role was to perform all construction management duties including bidding and entering into contract with various construction contractors. This program required an initial phase of construction in which 14 facilities were to be upgraded with systems that would last through the construction period. The balance of the program involved the total renovation of kitchens and food related services areas at six correctional facilities throughout Brooklyn, Queens and the Bronx. (NYCDDC, $50M)

Various Capital Project Requirements Contract - This CM/build project consists of separate contracts ranging in value from $1M to $14M each. Project types include court mandated correctional facility renovation work as well as renovations to a vintage theater/school in upper Manhattan. (NYCDDC, $35M)

Renovations and Expansions at the Brooklyn House of Detention for Men, Project Manager - This project involved 44,000 sf of new additions and renovations to a high security correctional facility. The new additions were constructed around 60% of the perimeter of the existing building which required a phased sequence of construction including restoration of entry and exit doors. Interruption of facility operations was prohibited and maintenance of security was critical. The additions required a two-story structure to be built along a busy city thoroughfare and very little staging space. (NYCDDC, $20M, 1995 - 2001)

Fire, Life and Safety Improvements at Brooklyn House of Detention for Men - Provided construction management services under a CM/Build requirement contract for fire, life and safety improvements. The Brooklyn House of Detention for Men is a maximum security jail located in downtown Brooklyn, a busy urban area providing the site with limited space (approximately 144,000 sf). This facility houses 815 inmates. (NYCDDC, 2003, $12M)

Employment History:
The LiRo Group (1989 to Present)
Vice President

Thomas Bourque
OFFICE ENGINEER

Mr. Bourque is an Inspector/Office Engineer with experience in the construction industry.

EDUCATION	B.S., Electrical Engineering Technology, Fairleigh Dickinson University, 1973 A.A.S., SUNY at Farmingdale, Electrical Technology, 1971
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training Brick Masonry-Inspections and Quality Control Certification, NY Brick Veneer and Metal Stud Backup Exterior Wall Cert., NY Troubleshooting Exterior Masonry Walls Certification, NY
YEARS WITH THIS FIRM	8
YEARS WITH OTHER FIRMS	17

Mr. Bourque's typical responsibilities have included:

- Coordinating all construction activities between all trades and facility operations
- Monitoring daily work progress and safety procedures.
- Holding coordination and safety meetings with clients and contractors
- Coordinating safety and controlled inspections
- Issuing field directives and monitoring change order work
- Writing accurate daily work progress reports
- Developing and maintaining a schedule
- Reviewing all contractor submissions for completeness and accuracy, and submit to Architects & Engineers for approval.
- Creating and updating logs for Contractor Submittals, Requests for Information (RFI's), Architects Supplemental Information (ASI's) and Change Orders
- Developing and maintaining unique Field Office record keeping systems

His project experience includes:

High Line Reconstruction, New York, NY, Office Engineer - LiRo is providing construction management and inspection services for the transformation of an abandoned elevated rail line into an urban park. This project involves the conversion of a 1.5 mile abandoned elevated freight line into a linear public park that will serve as an open space with outstanding views. The project spans 20 city blocks from Gansevoort Street adjacent to the Gansevoort Market Historic District, north through the meatpacking district, and up to 30th Street where it wraps around the Hudson Rail Yards. The project will also provide 12 points to access the elevated structure and will generate pedestrian traffic in the area. Rentable event space will also be created. Upon its completion, the High Line will take an unused structure and transform it into a one of a kind linear park that will be a great benefit to the community and city. (NYCEDC)

Staten Island Ferry, New York, NY, Office Engineer - As Construction Managers, LiRo's responsibilities included the coordination and inspection of construction in and around the active ferry terminal. Since the work was performed on an active waterway, NYSDEC and USCG permits were enforced as well as current marine security issued by the Department of Homeland Security. Due to the need to moor ferryboats along the pier, the work was completed in accordance with an aggressive schedule and with no impacts to on-going ferry operations. In addition, due to the nature of the accident, all demolition and removal operations were closely coordinated with NYCDOT's appointed forensic expert. (NYCDOT, $1.4M, 2006)

Reactivation of the Staten Island Railroad, NYC EDC, Office Engineer - The project entailed the re-construction of Arlington Rail Yard and Cut-East, replacement of track along the seven-mile North Line and Travis Branch and construction of a new wye connector between the North Line and the Travis Branch. The Travis Branch was extended 6,500 feet to the south. The branch provided a connection to the new Department of Sanitation transfer facility at Fresh Kills. A major component of this project was the replacement of two existing timber trestles with new bridges. In addition, a new twin arch culvert was installed near the project's southern terminus. Three existing bridges required extensive underpinning due to the installation of new retaining walls. These structures as well as the structural underpinning will were the project's most challenging components and required the most expertise.

LiRo's responsibilities consisted of the following activities.

- Construction Supervision and Inspection
- Coordinated USCG and NYS DEC permits
- Monitoring the contractors' activities
- Contract Document Review to identify long lead procurement items and special conditions
- Expediting and tracking of shop drawing submittals
- Providing project controls support to monitor a baseline schedule and construction progress
- Develop coordinated and maintain work plans for each work element

(NYC EDC, $40M, 2005)

Kings County Hospital Center - Office of the Chief Medical Examiner (OCME), Inspector/Office Engineer - This project involved the construction of a new state of the art pathology facility for the Chief Medical Examiner's Office. The building was constructed with a steel frame and a structural concrete deck. The interior fit out of the facility consisted primarily of steel stud gypsum wallboard, terrazzo flooring, and suspended ceilings. This 40,000 sf facility consisted of two stories and basement. The exterior of the building is a combination of block/brick veneer, glass curtain wall, and steel panel. The facility houses two primary areas:

- Clinical space (15,000 sf): this space has extensive mechanical and electrical systems including redundant HVAC and refrigeration systems.
- Administrative and Mechanical Space (25,000 sf): This area consists of offices for OCME staff, public spaces, and mechanical/electrical systems rooms.

This Wicks Law, multi-prime contract required close coordination with the Kings County Hospital Center. Unique features included the installation of stainless steel ducts, walk in morgue coolers, and autopsy tables. Medical and mechanical systems testing was critical prior to building turnover. (DASNY, $17M, 2002-2004)

James A. Thomas Center (JATC) Renovation & Reconstruction project on Rikers Island, Inspector/Office Engineer - LiRo provided comprehensive construction management services to the renovation of the James A. Thomas Center on Rikers Island (approximately 240,000 sf). This high security facility has a housing capacity of 1,600 inmates. The program for renovation consisted of retrofitting existing spaces within the facility cell blocks, construction of new day rooms, showers, pantries, housing areas, mechanical rooms, electrical rooms, and common spaces. The renovation program also upgraded the electrical distribution system and domestic hot water distribution system. (NYCDDC, $25M, 1999 - 2001)

Prior to joining LiRo, Mr. Bourque worked as a Systems Engineer for Lockheed Martin Corp. where he worked on U.S. Navy contracts. Mr. Bourque's responsibilities included:

- Preparation, maintenance and updates of system level documentation.
- Interface with engineers from other departments on operation and maintenance of equipment that comprised the Navigation Training System.
- Assisted in preparation of status presentation to Navy personnel.
- Liaison for department with local navy on problems related to documentation and assisted in running Software Performance Tests (system test for hand over to Navy).
- Preparing and writing quote for new contracts.

Richard Della Ratta, Jr., N-IV

OFFICE ENGINEER

Mr. Della Ratta has over 19 years of experience as a Construction Inspector and Office Engineer primarily related to highway and bridge projects. He is also experienced in technical design/drafting and has a working knowledge of Computer Aided Design (CAD). He has basic surveying experience as well as various computer skills such as Expedition, DOS, basic Computer Programming (Microsoft Visual Basics 6.0), Upgrading and repairing PC's, Microsoft Word, Excel, Access, Corel Word Perfect, Quatro Pro, Lotus, and dbase.

EDUCATION	
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training OSHA 10 Hour Training Course OSHA 10 Hour Training Course CPM Scheduling Certification, NY NICET IV - Highway Construction NICET II - Underground Utilities Formal MPT Training - NYSDOT
YEARS WITH THIS FIRM	20
YEARS WITH OTHER FIRMS	1

Projects on which Mr. Della Ratta has worked include:

ATMS on the Long Island Expressway (D015387), Office Engineer. This project includes the installation of an Intelligent Transportation System (ITS) along the Long Island Expressway corridor between the Queens Midtown Toll Plaza and Main Street Flushing. ITS is a modern communication network system that provides the capability of monitoring and controlling the traffic network from a central station.

This project includes daytime and nighttime operations. For the nighttime operations, the contractor is required to submit for review and approval a detailed Nighttime Lighting Plan in accordance with the NYSDOT Standard Specifications.

Project specifics include:

- Installation of ITS system including receivers, transmitters, camera assemblies, controllers, radar detectors, fiber optic cables, etc. In addition, it requires the installation of server and other ITS equipment at the JTOC station, At the completion of the network, a system integration will be performed.
- Installation of electrical and utility boxes, junction boxes and various sizes and types of conduit and conductor cable.
- Installation of overhead sign structures, VMS signs and illuminated sign panels.
- Installation of corrugated beam guide railing and chain link fence.
- Extensive landscaping work including planting of trees and shrubs, vegetation protection, pruning, clearing and grubbing, etc.
- Full depth concrete deck repairs on viaducts.

In addition, the completion of contract work requires the direct or indirect involvement and coordination with many City and local agencies. (NYSDOT, $27M, 2005-2007)

Cross Island Parkway/Long Island Expressway Interchange (Exits 29-32), Assistant Office Engineer - LiRo provided construction inspection services for the rehabilitation of the Long Island Expressway/Cross Island Parkway Interchange. This project included the construction and/or rehabilitation of 14 bridges, widening and resurfacing of the Long Island Expressway, local NYC roadway and utility rehabilitation, extensive park/wetland mitigation work, noise and retaining wall construction, and other incidental work. The most

complex construction was the replacement of the mainline bridge over the Cross Island Parkway. This bridge was replaced in two stages and requires construction of a temporary structure to maintain three through travel lanes on the Expressway in each direction at all times (NYSDOT, $160M)

Long Island Expressway (I-495) HOV Lane, Exits 57-61, Long Island, Office Engineer - This project involved the construction of new High Occupancy Vehicle (HOV) lanes on the Long Island Expressway and the reconstruction of the LIE mainline pavement from Exits 57-61. A total of eight bridges were reconstructed and/or replaced. Construction encompassed three phases to allow for an unimpeded traffic flow.

Project specifics included:

- Drainage: Over 28,000 lf of RCP and PE pipe in sizes ranging from 15 in. to 42 in. diameter.
- Asphalt: Over 240,000 tons. All asphalt was placed in accordance with Superpave specifications.
- Sound Barrier: Precast concrete panels and posts were mounted on cast-in-place piers. 640,000 sf total.
- Concrete Curb: 12,000 lf.
- Concrete Median Barrier: 30,000 lf, all precast.
- Overhead Sign Structures: 38 total, including span and cantilever types.
- Water Main: Over 2000 lf.
- Extensive underground utility work.

Other work elements included drainage structures, street lighting, INFORM upgrades, and the installation of Variable Message Signs (VMS). MPT on this project was of paramount importance due to the extremely high traffic volumes on the LIE. This project incorporated two A+B bid contracts. The project ran as many as three shifts. (NYSDOT, EIC: Gary Moller, 1/98-12/01, $95M)

Town of Babylon Drainage Project, Inspector/Resident Engineer - Project included installation of spiral ribbed aluminum pipe, leaching basins and catch basins in various locations within the town of Babylon. Acted as a Liaison between the Town and the contractor (6/96 - 10/96).

Nassau County Department of Public Works, Mitchel Park Construction for the 1998 Goodwill Games,Senior Inspector - In preparation for the 1998 Goodwill Games, Nassau County developed improvements to Mitchel Park in two phases. Phase I included the design and construction of a Central Support Facility, Grandstand, Sportsplex Central Building, Electric/Water Service, Track, Portable Bleachers, Softball Field Sportsplex, and Public Address System. Phase II included new playing fields and ancillary facilities constructed after the 1998 Goodwill Games. Recognizing the need to speed development of this project, the County designated LiRo to ensure that the project was constructed on time and resulted in a world class facility with Olympic requirements that serves both the Goodwill Games and the County's requirements into the future.This project included storm and sanitary sewers, building construction, electrical work, basic surveying and general office work. (NCDPW, $18M)

Reconstruction and Widening of Jericho Turnpike, Syosset, NY, Senior Inspector - This project called for the complete reconstruction, widening, and realignment of Route 25. The main thrust of the project was the removal and replacement of an active LIRR Bridge. The existing bridge was demolished and a new 800 ton, 100' span was rolled into place in one weekend. Also included was storm and sanitary sewer work, excavation, extensive retaining walls, water main installation and asphalt paving. Extensive LIRR coordination was required. (NYSDOT, EIC: B. Alford, 11/93 - 5/96, $17M)

Long Island Expressway HOV Lane (Exits 52 to 57), Inspector - LiRo provided inspection and CPM scheduling services for the construction of high-occupancy vehicle (HOV) lanes in the median of the Long Island Expressway from Exit 52 to Exit 57. The project included the construction of a 4-ft paved buffer area, 12-ft travel lane, and a paved shoulder in each direction. Additional elements included:

- Concrete barrier installation
- Widening and reconstruction of bridge decks
- Cleaning and painting of structures
- Hazardous material abatement and monitoring
- Pavement resurfacing
- Drainage modifications
- Lighting
- Signage
- Noise wall construction
- Pavement striping
- Modifications to the INFORM system
- Maintenance and protection of traffic

(NYSDOT, EIC: R. Jedlica, 5/93 - 11/93, $22M)

Bridge Painting Contract, Inspector - Project required various field tests for paints to ensure conformance with specifications. Mr. Della Ratta was also responsible for documentation of daily contractor activities and maintenance and protection of traffic in accordance with project requirements. (NYCDOT, 6/90 - 1/91, $3.5M)

Reconstruction of Sutphin Boulevard, between Linden Blvd, Liberty Avenue and the Van Wyck Expressway Service Road, Queens, Inspector - This project included four miles of roadway reconstruction, installation of approximately 14,000 lf of storm sewers, 13,000 lf of sanitary sewers, with associated appurtenances. The project also included 2,000 lf of 48" diameter welded steel water main, maintenance and protection of traffic, clearing and grubbing, planting of 800 trees, and extensive community relations coordination. (NYCDOT, 3/93 - 5/93, $16M)

Reconstruction of St. Nicholas Avenue from W170th Street to W193rd Street excluding the I-95 Bridge, Manhattan, Inspector - Project involved the installation of water mains, storm and sanitary sewers, curb and sidewalk rehabilitation, and asphalt paving of roadway. (NYCDOT, 4/91 - 3/93)

90th Avenue Sewer Reconstruction Project, Inspector - Project included roadway, curb and sidewalk reconstruction, sewer repair using insetoform, water main installation, and maintenance and protection of traffic. (NYCDOT, 1/91 - 4/91)

Additional projects include:

- Reconstruction of Houston Street, NYC
- Reconstruction of Hillside Avenue, Queens
- Highway Betterment Program, Long Island

Leonard J. DePrima, P.E.

VICE PRESIDENT

EDUCATION	M.B.A., Business Management, Canisius College, 1981 B.S.C.E., Civil Engineering, SUNY at Buffalo, 1969
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	32

Mr. DePrima has over 36 years of professional experience in engineering, planning, design, construction, and program management. As Vice President for Infrastructure Programs, he leads the LiRo team in support of our public and private clients' efforts to maintain and improve their assets and physical plants.

Mr. DePrima was previously employed by the NYS Thruway Authority, where his professional growth in a 20 year career demonstrates his ability to develop, lead, and manage multi-million dollar operating and capital programs. He has gained extensive experience in the innovative financing of projects, contract and project management, and dispute resolution.

He has also had considerable private municipal experience in the design of subdivisions and commercial developments, including drainage studies, design reports, and the design of water and sanitary systems. Representative projects include:

NYCDDC Lower Manhattan/WTC Program Management Services, NY: Project Engineer responsible for coordination of all assigned projects. Mr. Deprima worked closely with the Director of Program Management & Planning, as well as with the designated NYCDDC and NYCDOT representatives. In the effort to rebuild lower Manhattan after 9/11 recovery, duties include selecting and leading work teams based on needs of specific projects, project planning and design coordination, schedule review, progress meetings, development and implementation of MPT schemes for vehicles, bicycles, and pedestrians, quality oversight, and community outreach services. Special emphasis is placed on supporting NYC agencies relative to their interface with NYSDOT, FHWA, and other State Authorities.

Erie County DPW Program Management Services, NY: Program Manager for $50 million accelerated 2003/2004 capital program to plan, design, and construct multiple culvert, highway, and bridge restoration projects throughout the County. As Program Manager, directed LiRo staff and more than 17 diverse professional consultant firms in delivering 30 plus projects on an accelerated schedule, including over 60 individual culverts, 10 bridges, and 50 miles of highway. The goal of this program was to allow the individual consultant teams to function effectively, focusing on their specific projects, while the overall program proceeded in a fast-moving, well-coordinated effort. Interagency coordination, community outreach, and construction management were key components of the program.

Erie County Highways Consultant, NY: Project Manager for general highway engineering contracts with Erie County. Services include highway design and construction management services. Current projects include Maple St. reconstruction in East Aurora and the North French Road reconstruction in Amherst.

ECIDA GM Access Road (2001-2002): Project Manager for design and construction management services for a $2 million access road planned to facilitate construction of the new General Motors $500 million in-line 4/5 engine plant expansion, in the Town of Tonawanda, NY. In addition to general highway engineering, work included; site demolition, soil/water remediation and disposal, and construction management services to insure that the project was constructed as per plans and specifications, on schedule, and within budget.

Tonawanda Incinerator Demolition/ Remediation, NY (2001): Project Manager for the site investigation and engineering services for the demolition of a municipal incinerator structure in the Town of Tonawanda, NY. LiRo provided identification of hazardous materials to be abated prior to demolition and detailed design plans for remediation and demolition of the structure. LiRo also provided construction management and quality assurance services, enabling the Town to plan the future re-development of the cleared site.

Town of Amherst Renovation and Expansion of the Amherst Town Hall (2000): Project Manager for the completion of a feasibility study to expand the Amherst Town Hall at its current location. The LiRo team developed several alternate proposals, including detailed estimates that addressed the architectural and structural modifications necessary to expand the useable space needed for government operations at the existing Amherst Town Hall

Como Lake Park Dam Retaining Wall Rehabilitation, NY: Project Manager responsible for bank stabilization adjacent to the historic Como Park Lake Dam in Lancaster, NY. The project included the design of a reinforced concrete retaining wall with related drainage and civil engineering details. In addition, a historic masonry wall was restored. Subsequent to design, LiRo also provided construction management services.

NYSDOT Term CI, Buffalo, NY: Project Manager responsible for overall management and execution of term contract that provided construction inspection activities at several sites in western NY including:

- Route 240 truss bridge over Cazenovia Creek
- I-190 Virginia Street Ramp
- I-190 Niagara Street Ramp
- Route 430/Route 17 stringer bridge in Mina
- Armenian Road/Route 17 stringer bridge in Sherman
- Day Road truss bridge over Erie Canal

Project includes field inspection of construction activities including the preparation and painting of structural steel, as well as enforcement of the Health and Safety procedures and Maintenance and Protection of Traffic.

Employment History:

The LiRo Group (1999 to Present)
Vice President
New York State Thruway Authority (1978-1999)
Deputy Executive Director (1996-1999)
Chief Engineer (1995-1996)
Division Director (1983-1994)
Asst Superintendent of Maintenance (1981-1983)
Assistant Division Engineer (1978-1981)

Andrew Frangas
OFFICE ENGINEER

Mr. Frangas has over 18 years of profession construction management experience. He is knowledgeable in preparing and managing monthly billing requisitions, auditing contractor requisitions and change orders for client submissions, maintaining billing summaries, contract dollar management, obtaining client approvals for rate increases, contract value changes, meeting with clients to resolve all billing and financial issues, preparation of project financial closeouts and adherence to client contract management guidelines and procedures. Clients include: NYC DDC, NYC DEP, NYC SCA, NYC DOS, Dormitory Authority of State of NY, Nassau County DPW, Suffolk County DPW, NYC Health and Hospitals Corporation

EDUCATION	, Sociology / Business Management, Queens College, 1996
REGISTRATION / CERTIFICATIONS	
YEARS WITH THIS FIRM	20
YEARS WITH OTHER FIRMS	0

United States Postal Service, On-Call Construction Management Services - Mr. Frangas served as Resident Engineer and as an assistant to some Postal Service Contracting Officer Representatives in Hoboken. Mr. Frangas managed the JFK Airmail Facility paint project totaling $1.2 million and has been involved in all aspects of construction management, field inspection, scheduling, project meetings, and contractor/Postal facility coordination.

New York City School Construction Authority - Professional Staffing Services, Assistant Project Manager and Accountant - LiRo was selected to provide supplementary staffing to the New York City School Construction Authority. Assigned personnel responsibilities included the construction management administration and coordination of design and construction for rehabilitation, modernization and new school projects and campuses throughout New York City. Current assignments include providing Project Officers for both new school and school rehabilitation construction in the Bronx, Queens, Brooklyn and Manhattan. (NYSCSA, $29M, On-going)

FDNY Emergency Generators, Project Controls - This project consisted of emergency generator installation, start-up and testing at over fifty FDNY facilities. LiRo was responsible for design services including conducting predesign investigations to determine the optimum location for generator installation. Major concerns included determining site voltage loads, noise and venting control. Based on the results of predesign investigation, the generators were either installed in firehouse basements or outside yards. Indoor locations required the design of piping systems and day tanks installation for automatic fueling from the existing firehouse motor fuel tank.

LiRo visited each site and met with FDNY personnel to plan the location of the generators and review the construction impact to the facility. LiRo provided construction services for all aspects of the program including the development of bidder qualifications, shop drawing review, technical inspection, change orders, claims and closeouts.

During this project LiRo was responsible for maintaining quality control of contractor installations consistent with design parameters and client agency guidelines, enforcement of on-site health and safety plans, coordination with city inspectors, and interface with city employees working at the sites.

Coordination and scheduling of construction activities were carefully monitored to ensure efficient installation and minimal impact on the facilities.

Project Highlights:Prequalification of contractors Design and design review Bidding/Issue contracts Plan filing

with NYCDOB/FDNY Inspection Startup and testing Coordination with fifty firehouses Construction at active FDNY facility without interfering with ongoing operations Construction Management of multiple project sites (New York City Department of Design and Construction, $2.3M, 2006)

Remediation at 60 Sites for the NYCDDC, Soil and Groundwater Remediation - Inspection for the construction of remediation systems, which included the installation of ground water and soil vapor extraction wells that are piped through a series of excavation trenches to multi-phase, soil vapor or pump and treat systems. The multi-phase systems were inspected for the proper installation of liquid ring pumps, phase separators, oil water separators, carbon filters, air strippers, transfer pumps, blowers and a host of sensors connected to a remote communication device for system monitoring. Inspection of bioremediation installations included geoprobe borings and the injection of a bioslurry with oxygen releasing compounds or a bio mix with active hydrocarbon digesting bacteria. Inspection of the excavation soils for disposal followed by spraying a bioslurry before backfilling. (NYCDDC, $23M, 1998-2002)

NYC Petroleum Storage Tank Project - This project included the closure of gasoline underground storage tanks (USTs), the upgrade of aboveground diesel tanks and the installation of replacement USTs with tanks varying in size from 275 gallons to 4000 gallons. These sites had all involved the installation of dispensing systems and electromechanical tank gauging systems.

During this project LiRo was responsible for maintaining quality control of contractor installations, enforcement of onsite health and safety plans, coordination with city inspectors, and interface with city employees working at the sites. Some of the duties he performed are as follows:

- Supervised field operations with Contractor to facilitate contract specifications.
- Quality control supervision involving tank work.
- Enforcement of health and safety regulations at construction sites.
- Maintaining all reports pertaining to projects, such as daily reports, progress reports and logs. Maintained record documents of project quantities installed and correlate with contractor payments

Thomas Gibbons, Jr., RLA
LANDSCAPE ARCHITECT

Mr. Gibbons has over 10 years of landscape architectural experience in the construction industry. He has been responsible for multi-disciplinary projects with emphasis on conceptual design and planning. Mr. Gibbons has experience in preparation of contract documents, specifications and estimates, client interaction, proposals, visual and environmental impact studies, surveying, GPS surveying, construction inspection and garden design. Representative projects include:

EDUCATION	B.L.A., Landscape Architecture, SUNY College of Environmental Science and Forestry, 1995 A.A.S., Ornamental Horticulture, SUNY Farmingdale, 1990
REGISTRATION / CERTIFICATIONS	Landscape Architect, NY Landscape Architect, CT Council of Landscape Architectural Reg. Boards, NY 10-Hour Occupational Safety and Health Training Course
YEARS WITH THIS FIRM	8
YEARS WITH OTHER FIRMS	7

Westchester County Airport, Westchester, NY, Landscape Architect. The scope of this project was to enhance and expand the airport's existing perimeter security road. This required surveying existing conditions, identifying existing trees and routing the road for minimal impact on the vegetation. (Westchester County Airport, 2004)

New York City Department of Parks and Recreation - Project involved restoration of several sites including Juniper Valley Park, Baisley Pond Park, Alice Austen Park, Mount Prospect Park, Owl's Head Park, William E. Kelly Park, and Irving Square Park. Work included restoration of existing ball fields, pathways, lawns, planting beds, and drainage structures. Work also involved installation of new basketball courts, ball fields, play and exercise areas, paving patterns, water features, and new planting designs. (NYCDPR)

Gaynor Park, Glen Head, NY, Landscape Architect- The scope of this project is to provide a pre-fabricated restroom building and a pre-fabricated 1,000sf storage building for this existing park. The project also calls for the design of a pedestrian and vehicular path, site grading and drainage, sanitary systems, electric service, water service and landscaping. In addition to the new work, modifications are required for the irrigation system, existing playground, baseball batting cage and other incidentals. (Town of Oyster Bay, 2007- Present)

Sabellico Field, Farmingdale, NY, Landscape Architect- The scope is to provide a pre-fabricated restroom building for an existing park containing a little league baseball field. In addition to the new building, modifications and design are required for pedestrian paths irrigation system, water service, electrical service, sanitary connections, site grounding & drainage and landscaping. (Town of Oyster Bay, 2007-Present)

Borella Farm Fields, Plainview, NY. Landscape Architect. Borella Fields is an existing 10.2-acre park facility that consists mostly of open grass areas for baseball, softball and soccer use. There were minimal amenities to the site consisting basically of some chain-link fencing for backstops and a gravel area designated for parking. The proposed project called for planning and design of one full-sized baseball field with a 350' center field, one little league field with a 200' outfield and one softball field with a 185' out field. The ball fields each contain two dugouts with batter's box, one scorer's booth, two sets of

bleachers, a scoreboard and perimeter fencing. In addition to the ball fields, there was a proposed soccer/multi-use field, measuring 180' x 360', with bleachers and decorative bleacher walls. The project also called for a restroom facility building, parking for 85 vehicles (which include four ADA spaces), decorative entrance walls with signage, irrigation, 8,000+ sf of decorative retaining wall and a playground area with equipment for children ages two to five, and five to 12, as well as a gazebo. (Town of Oyster Bay, $4M, 2005)

Field of Dreams Athletic Park, Massapequa, NY., Landscape Architect. LiRo was responsible for the planning, design and construction inspections for this project from conception to completion. The Field of Dreams project, located in Massapequa, NY, is a multi-use sports facility for the Town of Oyster Bay. The park consists of two full-size multi-purpose fields, measuring 180' x 360' and a half field measuring 180' x 180'. These fields host numerous soccer, football and lacrosse sporting events. Each field contains its own set of bleachers, a wire-less electronic score board, field-lighting and irrigation. The fields were constructed with a modified soil structure to allow for increased vertical drainage of rain water. In addition, the surface of the soil received a treatment of plastic mesh fibers to increase the holding capacity of the turf. This mesh was installed down the middle of each of the fields, as well as the entire extents of the goal areas. The mesh will allow for greater longevity of the field turf under heavy use and harsh playing conditions. Restroom & utility building facilities were also constructed. Other site amenities included basketball court, two separate playgrounds for children ages two through five and five through 12, on-site parking for 128 cars; extensive landscaping; entrance walls and gates; site lighting, drinking fountains, decorative and utilitarian fences, relocation of electrical services from above ground to underground, sewer connections, curbing and sidewalk. (Town of Oyster Bay)

Heckscher Park, Huntington, NY, Landscape Architect. The scope of this project was to redesign four entrances to the park in order to make them aesthetically inviting to park users. In addition, a gazebo area with landscaping was added next to an existing playground that overlooks the park's lake. The project also required the addition of a decorative retaining wall to solve an existing erosion problem (Town of Huntington, 2005)

Votypka Property, Woodbury, NY, Landscape Architect. The scope of this project was to create a master plan consisting of 27 multiple housing units on a 5.4 acre site. Design criteria included maximizing the allowable area for construction while adhering to property line offsets drainage retention, site access, circulation and provide and environmental buffer from an existing on-site wetland. (Votypka, 2005)

Various Levittown Parks, Levittown, NY, Landscape Architect. This project entailed the redesign of the expansion of six community parks. The work consisted of replacing out-dated playground equipment with ADA compliant equipment. Additional design elements included new pathways, benches, vinyl clad chain link fencing, shade trees, drainage and signage. (Town of Hempstead, 2005)

Employment History:
The LiRo Group (2002 to Present)
Landscape Architect
GPI (Greenman Pederson, Inc.) (1996- 2002)
Landscape Architect
Storch Associates (1995-1996)
Assistant

Howard Goldman
OFFICE ENGINEER

Mr.Goldman has been providing services as Office Engineer for LiRo since 2001. Since 2003, he has served exclusively has Office Engineer for MTA B&T projects. These projects include AW-32, 34 and 36. As these are security projects, Mr. Goldman has extensive experience in the type of documentation control that will be required for the Throgs Neck Bridge project. In addition, he has extensive experience in contractor coordination specifically relating to mustering lists and identification badges required to perform work on the bridge. Mr. Goldman is also experienced in Primavera Expedition and is well-versed in all of the ECP's and documentation that will be required on this project.

EDUCATION	B.A., Communications, City College at CUNY, 1975
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training Microsoft Certified Professional (MCP) Windows 20 OSHA 10 Hour Occupational Safety & Health Training, NY A+ Certified
YEARS WITH THIS FIRM	8
YEARS WITH OTHER FIRMS	15

Project AW-32, Installation of Rotating Prism Signs at all Facilities, Office Engineer. The work for this project was performed for the Triborough Bridge and Tunnel Authority at the Queens Midtown Tunnel - Toll Plaza, located in the Borough of Queens and the Brooklyn Battery Tunnel - Toll Plaza, located in the Borough of Brooklyn.

Queens Midtown Tunnel - The majority of work was located atop the main roof canopy and included:

- Main Toll Plaza - This facility required the removal of two Variable Message Signs and their respective structures, the removal of three fixed signs and their respective structures, the installation of steel pedestals requiring roof penetrations, installation of twenty Rotating Prism Signs atop the canopy and the relocation of four security cameras. This work included electrical and civil related items.

- This facility required lead paint removal that was incidental to accomplishing the following: the demolition of the existing signs, the routing of new conduits within toll booths, installation of new RPS supports to canopy, and the routing of new conduits on and through the Service Building boiler room.

Brooklyn Battery Tunnel - The majority of work was located atop the main roof canopy and included:The removal of two Variable Message Signs and their respective structures, removal of two cloth signs and two fixed signs and their respective structures, the installation of steel pedestals requiring roof penetrations, installation of nineteen Rotating Prism Signs atop the canopy and the relocation of three security cameras.The main canopy roof was completely replaced. In addition, the roof on the Sergeants's booth was completely replaced.This facility required the large scale phases asbestos abatement of the main canopy, satelite canopy, and Sergeants's booth roofing materials This facility required lead paint removal and was incidental to accomplishing the following: the demolition of the existing signs through-out; the routing of new conduits within all toll booths; the routing of new conduits along main coanopy HVAC platform; installation of new RPS supports to all canopies; the demolition of plaza retaining wall railing; and the routing of new conduits on and through the Service Building electrical room.

This work included electrical and civil related items.
All lane closures required for the removal or installation of project items required the use of maintenance and protection of traffic and were coordinated with facility personnel.

(MTA-TBTA, $3M)

Project AW-34 - Installation of Security Systems at TBTA Facilities, Office Engineer. Project AW-34 resulted in the installation of security systems at Queens Midtown Tunnel (QMT), Verrazano Narrows Bridge (VN), Randall's Island (RI) and Two Broadway (2BWY).

Installed at each facility is an access control and alarm monitoring security system (ACAMS) enhancing established procedures and equipment. At the facility level, system operators and administrators perform the necessary functions from the Control Room to ensure that access to all areas, buildings, and rooms is properly controlled and alarm monitoring is accomplished.

The capability to monitor and control security cameras at the Facility was also implemented with this system. Video could be viewed, controlled, recorded, and played back. The system also incorporated a stand-alone intercom system at each facility.

The system enables remote oversight of each facility by senior personnel whereby operators may monitor or control any portion of the entire security system. This includes selectively viewing, controlling, and recording any video signal in the system.

Systems were installed at: Verrazano-Narrows Bridge, Queens Midtown Tunnel, Robert Moses Building, and 2 Broadway. Specific items of work included installation of:

§ Extensive computer systems
§ Control room upgrades
§ System consoles
§ Physical security (gates, locks, card access)
§ Magnetic locks
§ Motion detectors
§ Access Control System (ACS)
§ Intrusion Detection System (IDS)
§ Access Control and Alarm Monitoring Systems (ACAMS)
§ Extensive communications system utilizing devices ranging from low speed data transfer, to Ethernet, to full motion video
§ The communication medium includes fiber, copper, and wireless

Project AW-36 - Installation of CCTV Cameras and Fiber Optic Cable for MTA Facilities, Office Engineer. For this project, cameras and fiber optic cable were installed at the following facilities: Henry Hudson Bridge, Throgs Neck Bridge, Queens Midtown Tunnel, Verrazano-Narrows Bridge, Marine Park Bridge. Items of work included:

§ Installation of conduit, pullboxes and patch panels for fiber optic cable
§ Installation of power feeds
§ Removal of existing coaxial cable
§ Installation and splicing of single-mode fiber optic cable
§ Installation of camera poles and camera mounts
§ Installation of fixed cameras and adjust for required views
§ Installation of pan/tilt/zoom (PTZ) cameras and adjustment for stops
§ Installation of fiber optic video transmitter/receiver pairs, connections to matrix switchers, digital video recorders, and other equipment required for video transmission, control, distribution, and recording
§ Monitor end-to-end OTDR tests and other tests as specified.

All cameras installed required power and video feeds. PTZ cameras required the installation of a data circuit for camera control as well. MPT and coordinated lane closures were required for the installation of many of the cameras. Coordination with facility personnel was of great importance due to the fact that there were modifications to the existing equipment in addition to the installation of the new equipment.

When and Where Structural Repairs, 191st Street Pedestrian Tunnel to the IRT Broadway/7th Avenue Subway Station (Task 7). LiRo provided Resident Engineering Inspection Services at a pedestrian tunnel extending from Broadway to the subway station located at 191st Street and St. Nicholas Avenue in the Inwood section of Manhattan, a length of over 1,000 feet. The project had to be completed quickly to take advantage of the fact that the station was closed for a major upgrade.

The design was fast-tracked, and LiRo was placed in the role of providing construction review of the plans and specifications while actually working on the repairs and improvements.

Project specifics included:

§ Waterproofing designated sections of the tunnel by drilling from the inside of the tunnel roof and injecting waterproofing compound
§ Installing additional weep holes along the walls to convey any intruding ground water to the drainage troughs on each side of the tunnel
§ Reconstructing existing drainage troughs and installing new gratings
§ Sounding concrete roof and walls and repairing discovered cracks and spalled areas
§ Hand tool cleaning and power washing existing paint on roof and walls, and applying a new encapsulating coating with a graffiti resistant property
§ Power cleaning of the existing floor surface and applying a new skid resistant walking surface
§ Replacing the existing fluorescent lighting fixtures with new high pressure sodium lighting fixtures
§ Repairing the entrance stairway surface to make it safe for pedestrian use

Previous Experience includes:

RH Belam Company, Hempstead, NY, Telecommunications Manager - Responsibilities included:
§ Directing all aspects of systems and telecommunications technology including selections, purchases and installations to serve thirty employees
§ Maintaining and upgrading all computer systems, peripherals, severs, and 15 workstations, and a state-of-the-art telephone system with 45 in/out lines
§ Interfacing extensively with VARS to customize software to our specific applications
§ Troubleshooting and resolving any system problems, coordinating help-desk services
§ Assisting with ongoing website development and implementation
§ Administering computer systems security access and virus protection
§ Directing the total conversion of all operations from manual to automated systems including selecting and purchasing hardware, software, and peripherals and managing installations
§ Coordinating compete rewiring, installations, and start up of computers, workstations and telephone systems for two company relocations. (1987 - 2002)

Little Wizard Amusements, Inc., Partner - Mr. Goldman founded and built this video games distributorship. He serviced 30 clients and provided over 150 installations. He analyzed, purchased, installed and maintained new equipment as well as managed the day-to-day operations and a staff of five. Mr. Goldman oversaw corporate finances, was responsible for accounts payable/accounts receivable, and computerized all accounting procedures. Other responsibilities included hiring and training of staff and scheduling service calls. (1975 - 1987)

Oscar Gomez
OFFICE ENGINEER

Mr. Gomez has 16 years of construction experience on highway and heavy construction projects. He has served in the capacity of Office Engineer, Inspector, and Community Liaison. Responsibilities include: Estimating change orders Coordination of construction activities between contractor and various owner's departments Review of contract documents, shop drawing submittals and contractor payments Monthly narrative reports Weekly job status reports Maintaining job logs (submittals, correspondence, change orders) Quantity tracking for unit price bid items Representative projects include:

EDUCATION	B.S., Electrical Engineering, Polytechnic University, 1994
REGISTRATION / CERTIFICATIONS	Engineer-in-Training, NY OSHA 10-hour Safety Training CPM Scheduling Certification, NY OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	1

Charles Guardia, Jr., P.E.
ASSOCIATE

Mr. Guardia's experience includes the public and private sectors. Mr. Guardia has served as chief structural engineer, project manager and director of structures on new and rehabilitative design and construction inspection/service projects involving new construction, alteration, repair and rehabilitation projects for buildings as well as various types of bridges. His career has encompassed structural design as well as project management for construction inspection/support services for buildings, special structures, and bridge and highway projects.

He has performed in-depth inspection of buildings and bridge components including superstructure steel; prestressed concrete; deck slabs; concrete piers; and abutments, retaining and wing walls. He has written reports and contract documents for structural rehabilitations.

EDUCATION	B.S.C.E., Civil Engineering, Polytechnic University, Brooklyn, New York, 1975
REGISTRATION / CERTIFICATIONS	Structural Condition Assessment (ASCE Course) SAVE 40 Hour Value Engineering Workshop FHWA/NSBA Steel Girder Design Workshop ACT-20 Training - Post Earthquake Safety Evaluation Safety and Health Training - 29 CFR/OSHA OSHA 10 Hour Training Course Implementing Anti-Terrorism Design Standards Program S.A.M.E OSHA 10 Hour Occupational Safety & Health Training Professional Engineer, NY Installation-Entire UST System Closure, NJ Subsurface Evaluation, Tank Testing & Corrosion Specialist, NJ Professional Engineer, NY Professional Engineer, NJ
YEARS WITH THIS FIRM	26
YEARS WITH OTHER FIRMS	9

Mr. Guardia has completed a 40-hour Value Engineering workshop and is currently applying Value Engineering techniques to various projects. Some of Mr. Guardia's projects include:

School of Architecture, Urban Design and Landscape Architecture (SAUDLA), Project Engineer - LiRo provided construction management services for this demolition and reconstruction of a 136,000 sf building into the new School of Architecture, Urban Design and Landscape Architecture (SAUDLA) building. The building frame is structural concrete, and still remains. The balance of the building was demolished and rebuilt, including façade, interior and mechanical, electrical and plumbing systems. Prior to demolition, space was provided for the current occupants. These occupants were permanently relocated within the campus. This required the renovation of various locations at a cost of approximately $8M and was a accomplished in one year. (Dormitory Authority of the State of New York, $48M, 2004)

JFK Expressway Recirculation Project for The PANY & NJ, Project Manager and Chief Structural Engineer- Mr. Guardia oversaw his structural team for the widening of the JFK Expressway at JFK. Structural design included the design of new retaining walls, the removal of 3 existing sign structures and the structural design of three new sign structures and their foundations. He also coordinated the existing utility interference investigation. The sign structures supported VMS signs, fixed signs lighting, and a continuous maintenance platform. Sign structures were designed in accordance with NYSDOT and AASHTO Codes. (PANYNJ, $800k, 2006)

PANYNJ, Structural Open End Agreement, Project Manager. Mr. Guardia directed the structural investigation and design of many projects, most occurring simultaneously. These projects included: Investigation and Rehabilitation of the Concrete Canopy for Bldg. 14 at JFK; Investigation and Strengthening of the UNISYS Computer Room at Bldg. 14 at JFK; Roadway Recirculation Refinement at JFK - Design of Sign Structures, Foundations and Retaining Walls and Utility Coordination; Investigation of the Airlock and Vestibule at the LGA

Terminal Building at LaGuardia Airport; Investigation and Rehabilitation of the Precast Concrete Wall Connections at Building 208 at JFK; Investigation and Design for Pipe Supports at LaGuardia Airport; Computer Modeling Checking and Shop Drawing Review of the Red Parking Garage at JFK. Additional PANYNJ assignments have included the Structural Investigation and Rehabilitation of the Steel Substation Structures at LaGuardia Airport. (PANYNJ, 2000 thru 2006)

Riva Pointe Condominiums
As Structural Project Manager, Charles and his staff were responsible for all structural design for this complex. The five story project features 245 individual residential units with a town house typology, a lower level parking structure and a public promenade easement ending with a grand stair and viewing plaza situated on an existing waterfront pier. The pier was built in the early 1960's and is supported on multiple existing piles driven into the riverbed. The steel superstructure is a complex arrangement of lower level steel transfer trusses with overlapping structural bays cantilevering out over the existing pier. The team constructed a computer 3D model of the complex structural system and utilized this model for gravity design as well as lateral load analysis and design. Lateral restraints included the design of moment and diagonally braced frames. Close coordination with the Architectural intent necessitated a more complex structural design but attained the architectural goals. (Riva Pointe Development Corp., $35,000,000, Expected Completion 2006)

Elevator Tower Design - P.S. 120, 129, 190 and 199, NYC
As Structural Project Manager, Charles and his team provided all structural design for building extensions (Up to five stories in height) to house new elevators at four NYC schools. Close coordination with the architect was crucial given tight constraints and proximity to property lines. Structural Work involved mat foundation design and computer modeling of the new steel framed elevator towers so that new extensions would work independently of the existing building thereby not transferring additional loads to the original building frame. Lateral analysis and restraint systems included moment and laterally braced frames. (NYC School Construction Authority, $15,000,000, 2001)

Long Beach Recreation Center Swimming Pool Building Modification, Project Manager- Mr. Guardia provided overall project management for architectural and engineering services in support of modifications to the Long Beach Recreation Center swimming pool building. LiRo developed design drawings, specifications, and cost estimates. Design included replacement of the high roof over the swimming pool area, replacement of the north and east glass block windows, replacement of the ceiling system, structural repair of damaged interior masonry walls, design of structural framing for a future handicap lift, and asbestos abatement investigation and remediation design for the roof and ceiling items (City of Long Beach, 2004).

Brooklyn College Pool Renovation, Project Manager - Mr. Guardia provided structural project management and control for final design documents for the renovation and rehabilitation of existing swimming pool and support facilities. Design addressed the following:

- Reducing depth of existing pool.
- New pool gutter and water filtration/recirculation system.
- Reinforced PVC membrane pool liner over existing tiled pool basin.
- Rehabilitation of pool deck including structural repairs and installation of PVC flooring membrane over existing tiled deck.
- Structural repairs to the supported reinforced concrete pool basin including removal and replacement of deteriorated haunch/gutter.
- Reconstruction of men's and women's locker rooms, toilets, and showers including ADA accessibility.
- Rehabilitation of tile and terra cotta block vaulted ceiling over pool including crack monitoring and repair.

(DASNY)

Brookhaven National Laboratory Inspection of 25 Buildings, Project Manager - Mr. Guardia oversaw the structural in-depth inspection of 25 existing buildings. In addition to inspection, we identified potential problem within the buildings and produced structural rehabilitative documents for repairs. This work included:

- Reviewing existing building drawings.
- Conducting field inspection of buildings, and spot testing of structural materials.
- Determining present design loads based on the Uniform Building Code: Analyzing the existing structures according to present code and provide modification drawings and associated cost estimate for proposed modifications.
- Preparing final report and structural rehabilitative documents.

(Brookhaven National Laboratory)

World Trade Center Disaster Cleanup Project Chief Structural Engineer for Tully Construction Co., - Mr. Guardia led a structural team full time, on-site, to handle immediate structural design for a safe recovery cleanup operation for Tully Construction. Work included the design and implementation of fall systems for the unique environment of the World Trade Center bathtub. Tie back systems included hard-lined cables and fixed points. Mr. Guardia also directed the design and installation of various structural systems, temporary ramps to access the bathtub area, and a temporary bridge providing access from Church Street. Mr. Guardia also directed the design and coordination of the Rector Street Pedestrian Bridge Foundation System. Coordination with the New York City Department of Design and Construction Safety Team, the Occupational Safety and Health Administration, and several private safety and traffic study organizations brought to the site, was vital to make this temporary bridge a fast track operation. This structure was the first to be built in the World Trade Center Disaster Area. This on-site team provided continuous 24-hour operation. (9/01- 4/02)

Structural Project Manager for Program Accessibility (ADA) Various Schools in Brooklyn, Queens and Staten Island, NY - Mr. Guardia led his structural team in the design of both exterior and interior handicapped accessible ramps and stairs, reconfigured washrooms, wheelchair seating spaces in auditoriums and new doors and hardware for 23 schools in three boroughs as part of a citywide program. In addition, he also led the structural effort for the design of new exterior elevator for an additional five schools. As Structural Project Manager, Charles and his team provided all structural design for building extensions (up to five stories in height) to house the new elevators. Close coordination with the architect was crucial given tight constraints and proximity to property lines. Structural Work involved mat foundation design and computer modeling of the new steel framed elevator towers so that new extensions would work independently of the existing building thereby not transferring additional loads to the original building frame. Lateral analysis and restraint systems included moment and laterally braced frames.
(NYC School Construction Authority, $15,000,000, 2001)

Structural Reviewer for the Long Island Rail Road, Constructibility Review and Value Engineering - This 4-year project involved constructibility review, value engineering, and code compliance review for numerous ongoing LIRR projects. Projects have included station renovations and ADA upgrades. The projects are all reviewed by "peer" groups comprised almost exclusively of licensed professional engineers and registered architects. Mr. Guardia reviewed the structural designs of other professional in accordance with MTA Long Island Rail Road's Station Design Guidelines and the Guidelines for Preparation of Technical Requirements, the NY State Uniform Fire Prevention and Building Code, applicable requirements of the Americans with Disabilities Act (ADA), and other applicable state and federal requirements. In addition, he also provided assessments and recommendations regarding constructibility, value engineering, compliance with applicable codes and requirements, as well as conflicts or omissions within the documents. (Project Manager: M. Wolfe-Mulch, LIRR, 2003)

Tappan Zee Bridge, Project Labor Agreement (PLA), Rockland and Westchester Counties, NY, Construction Project Manager - Mr. Guardia is Construction Project Manager of the Project Labor Agreement (PLA) for all construction and repair work contracts on the Tappan Zee Bridge. A PLA is a contract with various building trades that fosters the achievement of the efficient, safe, quality, and timely completion of a specific construction project. All parties involved in the construction process are required to be signatories of the PLA. The PLA provided for standardized work practices; hours; holidays; grievance, dispute, and arbitration procedures; and overall labor/management harmony for the duration of the project. In his role as PLA Project

Manager, Mr. Guardia holds periodic PLA meetings with all parties, addresses disputes and interpretations of the agreement, and provides guidance in the hiring practices of trade personnel. (NYSTA, $100M, 2008)

Tappan Zee Bridge, Rockland and Westchester Counties, NY, Project Manager - Mr. Guardia, as Project Manager for Construction Inspection Services, provided for the rehabilitation of the deck on the west side trestle spans. He oversaw an inspection team of more than 20 personnel ranging from the Resident Engineer to office personnel to Inspectors. This work consisted of strip, repair, seal, and overlay (SRSO) of more than 1.5 miles of bridge deck. Within this length, more than 0.75 miles of the deck in the median lane was replaced with "Inverset" units. This work was conducted at night between the hours of 8:00 p.m. and 6:00 a.m. Rapid-set patching materials for repairs and rapid-set, non-shrink grout for filling of joints between Inverset units were realized because of the rigorous lane closure limitations that had to be adhered to during this project's 24-hour a day operation from Monday morning through Saturday morning. Extensive maintenance and protection of traffic surveillance involved multiple use of flashing arrowboards, advance warning signs, and delineation devices. The entire project was conducted over the Hudson River and, therefore, required safety netting and environmental waterway protection. (NYSTA, $28M, 1999)

Tappan Zee Bridge, Rockland and Westchester Counties, NY, Project Manager - Mr. Guardia was Project Manager for Construction Inspection for the substructure rehabilitation. He oversaw an inspection team of more than 12 personnel ranging from the Resident Engineer to office personnel to Inspectors. The project consisted of primarily concrete repairs and sealing of the abutments, pier columns, pier caps and pile caps of the entire 3.5 mile bridge structure. The Tappan Zee Bridge spans the Hudson River; this location is brackish and experiences tidal fluctuations. Work was accomplished from boats and barges with pile cap repairs scheduled to coincide with low tides. (NYSTA, $14M, 1999)

Bridge Scour Protection, Rockland County, NY, Project Manager - As Project Manager, Mr. Guardia oversaw the construction inspection team for the installation of bridge scour protection of the NYS Thruway Bridge over the Hakensack River. The objectives of this project were to provide scour protection of the Thruway Bridge by means of geotextile bedding and stone fill, and to remove built-up siltation thus restoring the river to its original path. River flow is a minimum of eight million gallons per day with an average of twenty-five million gallons per day. The fresh water river provides drinking water for nearby communities necessitating downstream turbidity curtains, careful monitoring of the work in progress and strict adherence to environmental procedures and regulations. (NYSTA, 1997)

Bear Mountain Bridge, Rockland County, NY, Project Manager - Mr. Guardia oversaw his structural team for the structural design, construction support services and final inspection for an asphalt wearing course system to replace the existing 20-year-old wearing course on the Bear Mountain Bridge. The design also included the drainage analysis of the superstructure and the design of an entire new drainage and downspout system, and east approach improvements. MPT involved not only vehicular traffic, but also pedestrians and bicyclists. The structure is a 2,255-ft-long suspension bridge that crosses the Hudson River. When built in 1924, the Bear Mountain Bridge held the record as the longest suspension bridge in the world and is presently listed as an Historic Civil Engineering Landmark (NYSTA, $2.5M, 1996)

Newburgh-Beacon Bridge, Orange and Duchess Counties, NY, Project Manager - Mr. Guardia oversaw his staff for structural design, construction support services and final inspection for improvements to the safety barriers for the entire lengths of the twin bridge structures. Design and field inspection included structural modifications to existing concrete and steel safety barriers. The economic solution provided was accomplished by the addition and vertical extension of a NYSDOT designed safety railing. (NYSBA, $.5M, 1997-1998)

Howland Avenue Bridge, Bergen County, NJ, Project Manager - Mr. Guardia headed up the structural and civil design team whose tasks included survey, structural investigation of existing conditions, new bridge design, new approach alignment, construction support, and final inspection for the demolition and complete replacement with a pre-fabricated bridge structure over Van Saun Brook. Aesthetics of the new bridge design were of paramount importance as the structure is located adjacent a pond within a park. (BCDPW, $.75M, 1999-2006)

Triborough Bridge Complex, Queens, Bronx and New York, NY, Project Manager - As project manager,

Mr. Guardia oversaw the inspection team, structural and civil designers for tasks that included in-depth inspection and preparation of rehabilitative civil and structural contract documents for the entire Triborough Bridge complex encompassing roadway approaches, viaducts, suspension bridge deck approaches and main suspension cable anchorage chambers. MPT involved not only vehicular traffic, but also pedestrians and bicyclists. Drainage system redesign included collection troughs to catch and divert water from the finger expansion joints away from superstructure steel. (TBTA, $45M, 1991)

East Ramp Automotive Shop and North Garage, Randall's Island, Project Structural Engineer - As Structural Project Manager, Charles and his staff provided complete structural design services for the construction of a new 47,000 sf automotive shop. The new facility included an automotive repair shop with seven vehicle lifts for trucks, buses, vans, and cars, a bridge crane system with hoists, tire storage and repair areas, battery storage room, hazardous storage room, boiler, mechanical and electrical rooms (second floor), and a complete administrative area including offices, break room with kitchen facilities, toilet, shower and locker facilities. Superstructure design consisted of steel frame trusses and long span joists in order to allow large column free areas for truck and bus maneuverability. Foundation design consisted of Mat foundations for exterior column support while typical and economical spread footings provided central column support. (MTA - TBTA, $15,000,000, 1998)

Randall's Island Upgrade. Working closely with MTA's goals and the Mechanical design requirements, Mr. Guardia led the structural team for this project. Structural design entailed generating a computer model of a large steel frame structure to support the intake plenum wall that provides ventilation for the entire existing Maintenance Facility on Randall's Island, NY. The steel structure was designed for minimum deflection due to a pre-determined maximum pressure drop thereby allowing ease of intake filter replacement. The structural team interviewed the MTA's maintenance staff in order to determine maintenance procedures and accessibility. These parameters were incorporated into the final design details making future maintenance practical and simple. (MTA - TBTA, $2,000,000, 1999)

District 11/13 Sanitation Garage and Maintenance Facility, Queens, NY, Project Structural Engineer - Responsible for structural design and construction support services for a 55,000 sf vehicle maintenance facility including complex foundation and structural roof work, site work, administrative offices, repair bays with lifts, storage areas, elevators, locker rooms, shower and bathroom facilities, all handicap accessible. In order to avoid the need for the exterior building wall to serve as a retaining wall, it was deemed advantageous to provide a permanent caisson retaining wall. (NYCDOS, $18.5M, 1990-1993)

Project Manager for Surface and Cathodic Protection of the Outfall Pipe for Bergen Point - Southwest Sewer District #3, Suffolk County, NY - Mr. Guardia oversaw a team of professionals that included geotechnical, ocean and waterfront, Cathodic protection, concrete pipe, and structural experts. The initial effort involved an investigation to determine the effects of beach erosion on the treatment plant outfall pipe. Our studies determined that beach erosion had been so severe that the 100-year mean projected low for cover over the outfall had been exceeded in a short 7-year period. The existing catholic protection system had been exposed and was damaged and needed to be replaced. Contract documents were prepared for construction of new catholic protection for the ocean portion of the outfall and for a protective system consisting of sheet piling and a concrete cover slab to prevent the outfall pipe from becoming exposed in the surf zone. (SCDPW, $4M, 1992)

Naval Air Development Center Tower Rehabilitation, Warminister, Pennsylvania, Project Manager - Mr. Guardia was responsible for and oversaw the structural design and construction support services at the Naval Air Development Center for the structural rehabilitation to Building 367 to sustain new loading requirements for the F-14 aircraft and positioner locater, as well as the structural, design and construction of a new positioner tower and pre-engineered control tower base support building. Building 367 required structural modifications and alterations to sustain the new loading requirements as a result of the positioner locater. The new tower structure was designed to sustain the F-14 aircraft and its positioner. The structural modifications to Building 367 consisted of the addition of external diagonal bracing by four 12-inch square structural tubing sections extending from the southwest and southeast columns at the roof level down to independent spread-type concrete foundations. Analysis indicated this solution to be both structurally and economically advantageous. In addition, there was minimal internal disruption to the structure and operation. Building 367, with the F-14 and positioner, therefore,

was structurally able to sustain the required 80 mph wind design load. (NAVFC, $3M, 1992)

Marine Ocean Terminal, Bayonne, NJ, Project Manager - Mr. Guardia guided the structural and electrical design and construction support services for a 50' high lighting pile supported tower foundation and support structure for the Marine Ocean Terminal. (USACOE, $1.75M, 1990)

Cedar Creek Park, Seaford, NY, Structural Project Engineer - Responsible for the technical design memorandum and structural design for a new nine-bay vehicle and equipment storage building at the Cedar Creek Water Pollution Control Plant on Long Island, New York. Site design included the latest storm water management complying with USEPA criteria. (NCDPW)

U.S. Military Academy at West Point, NY, Project Manager - Mr. Guardia oversaw a team of structural engineers and architects under an Indefinite Quantity Contract (IQC) for various restoration projects on historic/landmark building at West Point. Assignments included inspection, structural analysis and reports, and preparation of construction documents for interior and exterior architectural/structural deficiencies including roofing, and masonry facade repairs for corrective rehabilitation design and historical accuracy to Washington Hall. (USACOE, $10M, 1993)

New York City Federal Building and Foley Square Courthouse - Mr. Guardia was the lead Structural Engineer for design services for over 30 alteration and rehabilitation projects for GSA at the New York City Federal Building and Foley Square Courthouse. Design efforts included hands-on inspection of deteriorated building components, structural rehabilitative repair design and procedures, elevator installation, escalators support rehabilitation, design of handicap ramps, and stairs. (USGSA, $17.5M, 1994)

Aluminum Space Frames & Lighting Standards, Structural Designer - Mr. Guardia designed aluminum street lighting standards, truss structures, and sign carrying space frames for states and municipalities throughout the United States and the world. Aluminum structures were designed in accordance with AASHTO criteria and wind loading requirements. Mr. Guardia was responsible for writing the computer programs for all computer-generated designs.

PENNDOT (1989 - 1999) - Provided construction inspection services for Highway Occupancy Permits in both Delaware and Philadelphia Counties in Pennsylvania from May 1988 through December 1989 on two separate 20-month contracts. In December of 1989, two additional 24-month contracts were awarded to provide this same service -- 1989-1991, Delaware County and 1991-1993, Philadelphia County.

Project responsibilities included providing inspection services on General Maintenance Contracts for repaving; manual patching; repair of guide rails and impact attenuators; graffiti and vegetation removal; and permit inspection for sight distances from driveways and for the construction of various utilities including sewer and water authorities, cable TV, and gas, electric and telephone companies. (PENNDOT, $1.7M)

Paul Hawkins

DIRECTOR, INFORMATION TECHNOLOGY

As Systems Manager for The LiRo Group, Mr. Hawkins is responsible for all operations of CADD and computer systems for the firm. His duties include management of the electronic filing system, drawing layering conventions, drawing format, drawing quality control, and coordination between disciplines.

EDUCATION	, General Studies, St. Petersburg Junior College, 1982 , Structural Design and Drafting, Burns and Roe, Inc., 1976
REGISTRATION / CERTIFICATIONS	
YEARS WITH THIS FIRM	23
YEARS WITH OTHER FIRMS	13

Mr. Hawkins' diverse project experience includes such engineering and architectural assignments as:

Route 112, Suffolk County, New York - Preparation of a Design Report/Environmental Assessment for the construction of improvements to a 3-mile section of Route 112. Project includes traffic data collection; intersection capacity analysis for existing and future traffic volumes; development of alternative improvement schematics; accident studies; evaluation of conformance of existing conditions with standards; property line determination research and computations; utility inventory; conceptual MPT; preliminary cost estimates; and coordination of subconsultant work including survey and mapping, environmental studies, and community outreach program. (NYSDOT, 1994-1999)

New York State Thruway, Ulster County, New York - Preparation of contract drawings for the rehabilitation of 10 miles of the New York State Thruway including five bridges. (NYSTA, 1993-1997)

Newbridge Road, Bellmore, New York - Safety study and design of reconstruction of Newbridge Road. The project included reports, traffic study, accident analysis, preliminary design, and contract documents to improve the capacity and safety of 1.7 miles of road. The design work included layout and traffic control systems. (Nassau County DPW, 1988-1997)

Rockaway Turnpike, Phase I and II, Nassau County, New York - Transportation study and report identifying transportation and safety problems for Rockaway Turnpike. Included in this assignment was accident analysis and mitigation, traffic studies, and development of alternative improvements eliminating identified problems. The project involved design, contract document preparation, and construction supervision. (Nassau County DPW, 1988-1997)

Bear Mountain Bridge, Fort Montgomery, New York - Inspection, design, and preparation of contract documents for an asphalt wearing course system to replace the existing 20-year-old wearing course on the Bear Mountain Bridge as well as drainage and east approach improvements. MPT involved not only vehicular traffic but also pedestrians and bicyclists. This historic, 2255'-long suspension bridge traverses two railroad tracks and the Hudson River. (NYSBA, 1994-1996)

Dean and Bergen Streets, Brooklyn, New York - Reconstruction of over 5.5 miles of roadway including upgrading of street lighting and traffic signals; construction of new sidewalk in conformance with ADA requirements; and extensive modification of public and private utility systems. Water main work consisted of the installation of 20,000 lf of pipe and the replacement of over 1000 house and industrial building connections as well as all fire hydrants. Sewer work involved replacement or rehabilitation of combined sewers and the installation of a new drainage system. (NYCDOT, 1993-1996)

99th Street, Queens, New York - Involved in survey update and mapping of highway and utility features for this project entailing the preparation of contract documents for the reconstruction of 4 miles of city streets. The

assignments involved full reconstruction of street pavement, installation of new curbs and sidewalks, water mains, drainage facilities, traffic signal systems, and maintenance and protection of traffic during construction. (NYCDOT, 1993-1995)

Garage and Vehicle Maintenance Facility, East Windsor, Connecticut - Design of the rehabilitation and addition to an existing facility in East Windsor for the Connecticut Department of Transportation. The existing facility was rehabilitated and brought up to the latest code requirements including conformance to all applicable ADA regulations. The addition consisted of a 10-vehicle bay extension matching the existing construction materials. The design included a unisex toilet and main entrance accessible to the physically challenged. Site work, grading, drainage, parking, landscaping, and mechanical and electrical work were included in the project scope. (CONNDOT, 1991-1993)

Garage and Vehicle Maintenance Facility, Haddam, Connecticut - Design of a new vehicle maintenance facility in Haddam for the Connecticut Department of Transportation. This assignment included 24 vehicle bays; a lift bay; a wash bay; office space; and shower, toilet, and locker facilities. The design complied with all applicable ADA regulations including toilets, showers, and lockers accessible to the physically challenged. Site work involved site restoration, parking, utility design, and landscaping. The project scope also included electrical and mechanical work, provision for emergency power, and fuel and fluid dispensing systems. (CONNDOT, 1991-1992)

Victory Boulevard Pedestrian Bridge, Staten Island, New York - Inspection and design services for the replacement of this 11-span pedestrian bridge providing access over the SIRT. (NYCDOT, 1991-1992)

Avenue O Bridge Over NYCTA, Brooklyn, New York - Structure inspection, Bridge Rehabilitation Project Report (BRPR), design report, and contract documents for complete bridge replacement. The project provided for the construction of a new prestressed concrete box beam superstructure, including new abutments and relocation of utilities. (NYSDOT, 1987-1992)

Miller Highway, New York, New York - Reconstruction of this high-volume roadway which is an essential New York City access route involving complex construction staging and traffic maintenance, three ramps, and local street improvements. (NYSDOT, 1988-1991)

District 11/13 Sanitation Garage and Maintenance Facility, Queens, New York - Design of a new 55,000 sf, two-story sanitation garage and maintenance facility. The new facility included parking for 58 sanitation vehicles; repair bays with vehicle lifts; an overhead hoist and monorail system; two truck wash areas; storage areas; and administration facilities including offices, break rooms with kitchen facilities, an exercise room, and toilet, shower, and locker facilities for male and female employees. The design also included the selection and layout of all shop equipment. (NYCDOS, 1988-1990)

United States Military Academy, West Point, New York -Various rehabilitation projects on historic/landmark buildings at West Point Military Academy under an open-end contract. One project involved on-site inspection, evaluation, and preparation of contract documents for the rehabilitation of Washington Hall. Asbestos inspection and evaluation as well as roof condition surveys for a variety of roofing systems including standing seam copper, modified bitumen, E.P.D.M. single-ply, and typical built-up roofing were involved. As part of the on-site roof condition surveys, non-destructive testing in the form of fibre optic photography was conducted to determine the causes of the roofing deterioration and magnitude of impairment to any adjacent areas such as bulkheads, parapets, facades, etc. As a result of testing, the areas of water infiltration were found structurally sound and proper remedial design recommendations were arrived at. (USACOE, 1987-1990)

Bayport Avenue, Islip, New York - Survey and mapping services, preparation of contract documents, and construction inspection services for repairs to a local street. The project design provided for the construction of new sidewalks, reconstruction of damaged curb sections, complete replacement of roadway shoulders, repair of deteriorated sections of concrete roadway pavement, and construction of new drainage structures. (Town of Islip DPW, 1987-1989)

Peninsula Boulevard, Nassau County, New York - Studies and contract document preparation for full

reconstruction of a major suburban arterial with divided roadways to increase capacity and safety. (NYSDOT, 1987-1988)

Kenneth J. Holmstrom, P.E.

VICE PRESIDENT

Mr. Holmstrom has gained experience in various facets of engineering projects since 1976 including planning and design of highway improvements; bridge rehabilitation and construction design; site development design; design of infrastructure improvements; utility coordination; and building construction and renovation projects. Representative projects include:

EDUCATION	B.S.C.E., Civil Engineering, City College of New York, 1976
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY
YEARS WITH THIS FIRM	34
YEARS WITH OTHER FIRMS	0

Traffic Engineering Services - Port Newark/Elizabeth Marine Terminal, Stage 1 and II, Quality Assurance/ Quality Control - LiRo provided professional engineering services to conduct a comprehensive traffic study for the proposed redevelopment of the Port Newark/ Elizabeth Marine Terminal. The Port redevelopment included relocation and expansion of the existing terminal facilities as well as changes in the roadway network, site access locations, and inter-modal facility operations. (PANYNJ, $450K, 2004)

Port Authority On-Call Structural Engineering Services, Quality Assurance/ Quality Control - Project included various structural assignments including retaining walls, building inspection, parking garage designs, and building renovations. All projects located at JFK Airport. (PANYNJ, $200M, 2001-2004)

Brookhaven National Laboratories - National Synchrotron Light Source II, Project Manager. This project involved the conceptual design of a new facility which would provide the structures and systems necessary to enable installation and operation of the accelerator and experimental beam lines. Facilities consist of Ring Building, a central lab office building, up to four lab office buildings, a linac and RF building, and four service buildings containing mechanical and electrical equipment. LiRo provided conceptual plans for site development and utilities and performed construction cost estimating and scheduling services. (BNL, $200M)

Brooklyn College, Brooklyn, NY, Quality Assurance - Performed architectural and structural inspections, surveys, and evaluations; prepared reports; and generated construction contract documents for the exterior rehabilitation of 12 academic buildings at Brooklyn College. The architectural features, facades, roofs, parapets, and structural systems of many of these buildings had deteriorated due to water leakage, weathering, and deferred maintenance. Design included rehabilitation or replacement of roofing on three buildings and the replacement of windows on four buildings. (DASNY, $5.8M, 2001)

East Ramp Automotive Shop and North Hub Garage, Randall's Island, NY, Site Design Engineer- Design of a new 47,000 sf vehicle maintenance facility and parking facilities to accommodate 88 buses, trucks, vans, and cars. All necessary site improvements, mechanical and electrical work, fire protection and communication systems, and fuel and fluid dispensing systems were included in the project scope. The facility, including applicable mechanical and electrical systems and associated site work, was designed to comply with all applicable ADA requirements. (TBTA)

New York City Transit Authority Surface Facilities, NY, Project Manager- Design of a new, two-story, pre-fabricated building to be constructed at the Queens Village Bus Depot; rehabilitation of the bus dispatcher's tower at the St. George Ferry Terminal; security improvements at the Fanchon Parking Lot, East New York Depot; modifications to the HVAC system for Room No. 27 at the East New York Depot; upgrades to toilet facilities for the Brooklyn Division Office at One Jamaica Avenue; and design of paving, grading, and drainage for the new bus parking lot at the Castleton Bus Depot in Staten Island. (NYCT)

Queens-North Borough Vehicle Maintenance Facility, Queens, NY, Site Design Engineer- Design for site improvements and building service connections including reconstruction of pavement, curbs and sidewalks along the surrounding streets and sanitary sewer, storm drainage, water supply and gas service connections. (NYCDOS)

99th Street Area - Design of Street Reconstruction and New Water and Sewer Lines, Queens, NY, Project Manager - Design of street reconstruction and new water and sewer lines. Prepared the final design for the reconstruction of 4.2 miles of streets in Queens, New York. Project elements included performing survey involving updating of base mapping planimetrics and obtaining additional spot elevations; preparation of micro engineered best fit grading design which minimizes adverse impact on abutting properties and trees; and conducting a Tree Condition Inventory to determine which tree mitigation measures would be required to preserve existing street trees. Detailed Maintenance and Protection of Traffic Plans and Notes providing for the sequencing of construction to minimize disruption of vehicular and pedestrian movements during construction were developed. Further, the project also included reconstruction of water mains and street drainage facilities, construction of street lighting, and installation of pavement markings and signs. (NYCDDC, $11.9, 1998)

Route 112 Reconstruction, Suffolk County, NY, Quality Assurance - Planning and design for improvements to a 3-mile section of a principal arterial involving the preparation of a Design Report/Environmental Assessment which details existing conditions such as traffic volumes, intersection capacity, safety features, drainage systems, environmental issues, etc. defines project objectives and presents recommendations for proposed improvements. Required extensive coordination of sub consultant work including survey and mapping, environmental studies, hazardous material assessment and a community outreach program as well as coordination with three interrelated projects. (NYSDOT, $30M, 1999-on-going)

New York State Thruway MP 76.4 - MP 86.8, Ulster County, NY, Project Manager - Preliminary design for rehabilitation of a 10-mile section of the mainline Thruway involving super elevation improvements, left shoulder widening, roadway resurfacing, guide rail improvements, rock remediation and drainage improvements as well as rehabilitation of three bridges and reconstruction of one structure including deck rehabilitation, reconstruction of approaches, bearing replacement and substructure repairs. (NYSTA, $12M)

Employment History:
The LiRo Group (1976 to Present)
Vice President

Roberto Lorusso
PROJECT MANAGER

Mr. Lorusso has over 20 years construction management experience. His experience includes all aspects of managing complex multi-million dollar Wicks Law projects for public agencies.

EDUCATION	B.S., Mechanical Engineering, New York Institute of Technology, 1986
REGISTRATION / CERTIFICATIONS	CMA Completed 300hr State Mandated Home Inspection Course, NJ EPA Approved Asbestos Contractor/Supervisor Training New York State Basic Code Enforcement Training New York State Code Enforcement Training New York State HVAC Efficiency Improvement Training NYCDOB Scaffold Challenge Certification OSHA 10 Hour Occupational Safety & Health Training, NY OSHA - 10 Hours Certificate
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	16

Representative project experience includes:

ET-0015-M02:Construction Management Services for Neptune Auxiliary Gym/Aquatic Center at Neptune High School, Neptune, NJ, Project Manager - Duties include review/approve change order requests; review and approve payment requisitions, dispute/resolution; maintaining and updating Primavera Project Schedule, coordinate inspections with testing laboratory, claims avoidance; coordinating DCA inspections, maintaining communication with the Neptune Board of Education, and ensuring site safety at all times. (NJSDA, $12.2M)

CM/Build Requirements Contract for NYC Housing Authority, Throggs Neck Façade Restoration, Project General Superintendent- This project was the façade restoration on 10 buildings. The work entailed asbestos abatement on spandrel beams, removal of acm window caulking, removal and rebuilding of roof parapets with asbestos containing flashings, install sections of new roofs and bulkheads, coordinated all de-containment areas and erection of scaffolds per NYCDOB regulations. (NYCHA, $10M)

CM/Build Requirements Contract for NYC Housing Authority, Betances Houses Community Center, Project General Superintendent- Under this contract, LiRo performed work on a task order basis. We were in the design or construction phases of renovating and/or constructing community centers and several other renovation projects throughout New York City. These properties all required that LiRo perform pre-construction and construction phase services. This project was a total gut rehabilitation which included coordination of selective demolition with asbestos abatement of roof flashings and v.a.t. floor tile. (NYCHA, $10M)

NYCDDC Stadia On-Call Assignment, Project Manager - This project involves the CM/Build projects concerning life/safety at Yankee and Shea Stadiums. (NYCDDC, $50M)

NYCSCA Emergency Response Management and Coordination Program, High School of Urban Assembly, Flatbush, Project Manager- LiRo managed and coordinated responses to the emergency needs of the NYCSCA. In this capacity, we stood ready to respond to emergencies on a 24 hour-per day, 7 day-per-week basis. Predicated upon verbal authorization (a telephone call), we were prepared to immediately mobilize construction professionals, Trade Labor Union personnel, contractors and/or material suppliers to arrest dangerous conditions or contain hazardous materials at public schools within the five boroughs of New York City. (NYCSCA, $27M)

Previous project experience includes:

Kreisler Borg Florman (KBF), Project Manager- Mr. Lorusso was responsible for the Chelsea Recreation Center. This center was designed to give the children in the neighborhood's brownstones and public housing a place to unite and play together. The center boasts a computer lab, basketball courts, a ping-pong table and a six-lane, 25 yard pool. The pool (pictured on the right) has a digital scoreboard and underwater timing pads for swimming

meets and a mosiac mural of dolphins, as well as tiled locker rooms with stall showers. The center, at 56,000 square feet is one of the city's largest, and is free for children. The duration of the project was 18 months. (NYCDDC, $22.4M, 2004)

Contact: Luis Mendes, Assistant Commissioner, [redacted]

NYC HRA Office of Design and Construction, Assistant Deputy Commissioner - Mr. Lorusso managed the planning and implementation of capital construction projects and directed staff in architectural and engineering design, contract preparation and compliance, inspection and certification, construction management, supervision of outside contractors and quality control of both contracted and in-house construction activities. His responsibilities included:

- Responsible for ODC's three major Bureaus: Architecture, Engineering and Construction Management, which included a HAZMAT unit.
- Envisioned all aspects of the design and construction phases of capital construction projects from inception to implementation.
- Ensured that all projects adhered to the objectives of HRA program areas and comply with all applicable laws and codes.

NYC Department of Design and Construction, Project Director - In this role, Mr. Lorusso worked closely with the Deputy Commissioner to manage professional and technical staff, including consultants, engaged in overseeing the execution of capital construction, reconstruction and rehabilitation of highly visible, complex projects with accelerated construction schedules valued at approximately $280 million. They included:

- IS 25 Intermediate School for Gifted Children, Brooklyn, NY (6 month duration, $26M)- Gut renovation

Contact: Luis Mendes, Assistant Commissioner, [redacted]

- Yankee Stadium renovation
- Pier 36 Sanitation Garage
- New Emergency Medical Stations for the New York Fire Department
- New Fire Training facility at Randall Island and Fort Totten, Queens

Facilities Development Corporation, Construction Engineer - Mr. Lorusso responsibilities included:

- Administration of design and construction project contracts for Bronx Psychiatric Center, Bronx Children's Psychiatric Center, Bronx Developmental Center, and Bronx Office of Alcoholism & Substance Abuse.

Sebastian Patane, N-IV
ENGINEER

Since 1984, Mr. Patane has provided services in the construction inspection of large-scale infrastructure projects serving as senior inspector and office engineer on several recent projects in the New York Metropolitan area. Mr. Patane's projects include:

EDUCATION	B.S., Mechanical Engineering, New York Institute of Technology, 1983 , Queens College, 1980
REGISTRATION / CERTIFICATIONS	OSHA 10 Hour Occupational Safety & Health Training OSHA 10 Hour Training Course NICET IV - Transportation Engineering, NY IUOE Hazmat Emergency Management Team Respiratory Fit Test Portland Cement 40 Hour Concrete Pavement Construction OSHA 40 Hour Hazardous Material Certification NYCDDC Concrete Certificate, NY Formal MPT Training - NYSDOT
YEARS WITH THIS FIRM	16
YEARS WITH OTHER FIRMS	10

Deck Replacement on the Randall's and Ward's Island Viaducts at the Triborough Bridge, Queens, NY, Assistant Office Engineer - This project involved the deck replacement and widening at the Ward's and Randall's Island Viaducts, the deck replacement at the Ward's Island Anchorage, the widening of the Queens - Manhattan (QM) Ramp, the construction of the Bronx - Ward's Island Ramp, construction of a new pedestrian walkway and surface road, the replacement of existing bearings, the application of new surface coatings to the bridge structure, construction of a new catwalk at the Ward's and Randall's Island Viaduct, electrical improvements, and various repairs to the existing substructure and superstructure of the Viaduct. The responsibilities of the assistant office engineer involved the evaluation and entering of the contract quantities from the inspector's reports, the data entry of the required material certifications and submittals, the preparation of change orders, the preparation of contract item spreadsheets to monitor the job progress, and the submittal of Daily Activity Reports and Daily Planned Event Reports (proposed roadway closures , access requirements, and proposed activities). (TBTA, $282M, 2009)

Stuyvesant Avenue Reconstruction, Brooklyn, NY, Office Engineer - This project involved the replacement of the concrete road base and asphalt, installation of new concrete sidewalks, placement of new granite, concrete and steel faced curb, water main replacement and combined sewer along with new street lights and traffic signals. The office engineer's duties included the maintenance of all project records, preparations of contract requisitions, change orders, time extensions, and material certifications for the project. (NYCDDC, EIC: Edgar Rubiano, $9 M, 2006)

Old Slip Reconstruction, New York, NY, Office Engineer - This project involved the replacement of the concrete road base and asphalt, installation of new concrete sidewalks, placement of new granite, concrete and steel faced curb. Mr. Patane's responsibilities included the maintenance of all pertinent records, preparation of the payment requisitions, change orders, time extensions, and the documentation of the proper certifications. (NYCDDC, EIC: Kalpesh Patel, $1.5M, 2004)

ITS Installation for Route 9A, Electrical Inspector - This project involved the installation of all electrical conduits, boxes, wiring, panels, cameras, and testing for the Intelligent transportation system along Route 9A. Mr. Patane served as an electrical inspector. The duties included ensuring the proper maintenance and protection of traffic and safety, ensuring the electrical work met with the contract specifications, and the documentation of quantities for payment. (NYSDOT - 11/02-3/04)

Ground Zero Recovery, Manhattan, NY, Office Engineer - Tully Construction firm was involved in the construction work at Ground Zero after the 9/11 attacks. The Liro Group provided construction management services for the firm. Mr. Patane was an office engineer responsible for the maintenance of correspondence, inspector reports, requisitions, and other pertinent documentation required by the NYCDDC.(NYCDDC, $5M, 2002)

Reconstruction of Route 9A, Segment 7, Manhattan, NY, Senior Inspector - Mr. Patane provided inspection for the installation of 5,300 fl of 20" water main, valves, hydrants, and house connections. His responsibilities included drawing field cards, coordinating shutdowns with the DEP, water sampling, coordinating the contractor's work with the plans and DDC requirements and regulations. He supervised the water main inspectors in their day-to-day inspection of the work.

LiRo provided construction inspection services for the reconstruction of Route 9A (12th Avenue) from 40th Street to 59th Street. The entire roadway sandwich was reconstructed. Major components of the utility infrastructure were also upgraded. A four-span continuous ram (steel with a concrete deck was added to the Miller (Westside) Highway). The substructure is founded on bored-in-place piles. Existing tidegates were renovated and new ones were built. The utility work included roadway drainage, 20-inch water mains, gas mains, and ECS (telephone) ducts. Traffic signals and street lighting as well as Intelligent Transportation Systems were installed. In the midst of this construction, LiRo maintained traffic flow on the highway. An additional turning lane was added at 42nd Street. The traffic maintenance was compounded by the presence of the Circle Line, the Intrepid Museum, the Passenger Ship Terminal, and a newly opened convention center, all of which required separate plans to address traffic concerns. The reconstruction of the Con Ed Oil/Steam Tunnel required extensive dewatering and grouting schemes to perform the work. (NYSDOT, EIC: Tom Bowers, $85M, 2003)

Reconstruction of Route 9A, Segment 4, Manhattan, NY, Senior Inspector - This project involved the removal and replacement of 1 km of an urban highway on the West side of Manhattan. The roadway was realigned both vertically and horizontally. The existing roadway was removed to a depth of over 4 ½ feet. The roadway was replaced with a 50 year "European Type" unreinforced concrete pavement. Work items included:

4,000 lf of 20" water main

2,000 lf of 12" gas main

100 catch basins and new 24" drainage system.

Rehabilitation and gunniting of 2,000 lf of sanitary sewers ranging in size from 3' to 5'. diameter.

Construction of 3, cast-in-place concrete storm sewer tide gate chambers.

Installation of new primary and secondary high voltage feeder system.

Installation of 9 new telephone duct banks and system upgrades.

Installation of new traffic signals and control systems as well as street lighting.

The most critical aspect of this project were the coordination and interference issues revolving around the massive utility upgrades. This section of roadway was constructed in an extremely vocal community. Work was performed under an accelerated A & B bidding schedule. (NYSDOT, EIC: T. Bowers, P.E., $45M, 1998)

Previous Experience:

Reconstruction of Columbus Avenue, Senior Inspector - This project was done under two contracts: Contract I from W. 59th Street to W. 86th Street and Contract II from W. 86th Street to W. 110th Street. Total distance was 2.5 miles. This reconstruction included:

New roadway consisting of 10" concrete base an a 3" asphaltic concrete wearing course

Rehabilitation of sewers including sewer replacement, insituform lining, and gunniting of sewers ranging in size from 18" to 72"

New drainage facilities including several hundred catch basins and 12" DIP Chutes

New and replacement water mains including a total of six miles of water mains from 12" to 48" in diameter. The 48" main was constructed of welded steel pipe and ran a distance of approximately two miles.

New street signs

Installation of new gas mains

New electrical feeders

New curb (steel faced concrete and granite)

New street lights and traffic signals

New tree plantings

All of the above work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day service. (NYCDOT, 9/93 - 5/96, $85M)

Triborough Bridge and Tunnel Authority, Senior Inspector - Temporary road repairs on various facilities. (Project Manager: N. Palmadesso, 10/93-12/93)

Reconstruction of 14th Street, NYCDOT, Office Engineer -Preparing of all contract quantity records, certifications and payment requisitions. Other responsibilities included handling job correspondence, checking payrolls, and insuring EEO compliance. (NYCDOT, EIC: J. Pusz, 4/90-9/93, $28M)

West Side Pier and Building Inspection, Construction Inspector - Inspection, rating and inventory of building elements including structural steel framing, concrete decks, roofing and drainage systems. (NYSDOT, 8/89-3/90)

Rehabilitation of FDR Drive between 79th and 90th Street, Senior Inspector- Excavation of rock, rock drilling for the placement of sockets and tendons, proof and performance testing of tiebacks, placement of tremie and other classes of concrete, asphalt placement, installation of structural steel and maintenance and protection of traffic. (NYSDOT, EIC: E. O'Leary, 8/87-12/89, $35M)

Rehabilitation of Riverside Drive Viaduct between 125th St. and 134th St, Construction Inspector - Erection of structural steel, concrete deck placement, structural steel painting, steel studs, steel reinforcement and bolt torquing. (NYSDOT and NYCDOT, EIC: R. Holt, $36M, 1986-1987)

Reconstruction of Marine Transfer Station at 59th St., Construction Inspector - Placement of structural steel, reinforcing bars and metal studs along with a reinforced concrete deck. (NYCDOS, $11M, EIC: W. Uterlynde)

Modernization of the IND Line at the 42nd St. Subway Station, Construction Inspector - Installation of ceramic floor and wall tiles, painting, reinforced concrete slabs, concrete stairways, electrical systems, HVAC, ejector pump system replacement, and communication systems. Project also involved coordination of the power outages for the work above the tracks. (NYCTA)

Jeffrey S. Petrie, PTP, LEED AP
SENIOR TRANSPORTATION ENGINEER

Mr. Petrie, a certified Professional Transportation Planner (PTP), has been performing traffic and transportation engineering design and analysis for more than 15 years. He is a former employee of the New York State Department of Transportation in Region 10's Traffic Engineering and Safety Division and its Regional Planning and Program Management. While in the Traffic and Safety Division at NYSDOT, Mr. Petrie was responsible for conducting pre-construction and final inspections, and punch lists of all traffic signal work in the Long Island Region and has conducted more than 100 traffic signal inspections. While in Planning at NYSDOT, he maintained the Region's master project letting schedule using CPM scheduling software. Since his employment at NYSDOT, Mr. Petrie has expanded his experience to include a variety of transportation planning and infrastructure design projects. In addition to traffic planning, design and operations his experience includes airport terminal facilities, parking garages, toll operations, railroad cargo facilities, firehouse facilities, and area-wide pedestrian facilities in Lower Manhattan, New York. Representative projects include:

EDUCATION	M.S. – Transportation Planning and Engineering, 1999 Polytechnic University, New York B.S. – Aeronautics, 1990 Dowling College, New York A.A.S. – Aerospace Technology, 1986 SUNY @ Farmingdale, New York
EDUCATION	M.S., Transportation Planning and Engineering, Polytechnic University, NY, 1999 B.S., Aeronautics, Dowling College, 1990 A.A.S., Aerospace Technology, SUNY at Farmingdale, NY, 1996
REGISTRATION / CERTIFICATIONS	Professional Transportation Planner (PTP) Cert. Program LEED Accredited Professional, US Green Building Council, NY
YEARS WITH THIS FIRM	6
YEARS WITH OTHER FIRMS	10

PANYNJ - JFK Airport Green Garage Toll Plaza Study, Project Manager/ Senior Traffic Engineer - PANYNJ commissioned this study to examine the operation of the exit toll plaza for the Green Parking Lot and garage. The toll plaza was experiencing periodic traffic jams that could require up to an hour to transit. The study involved the examination of historical data, collection and analysis of toll headway, processing time, queue length, and examination of lane geometry and signage. Additionally, the garage geometry and circulation patterns were examined to determine their contribution to the delays. Based on the study's conclusions and recommendations the Port Authority elected to redesign the toll plaza and its approach lanes. (PANYNJ, 2005-2006)

PANYNJ - Terminal "B" Life Safety Analysis, Project Manager/ Senior Traffic Engineer - Work on this assignment focused on assisting the Port Authority in performing a Life Safety analysis for use in developing the new terminal layout at Newark Liberty Airport Terminal B. Extensive pedestrian movement and congregation models were developed based on the proposed terminal designs. Travel time and pedestrian loading for each area of the terminal were developed and used to identify potential overcrowding and ensure adequate circulation and evacuation of pedestrians. (PANYNJ, $120K, 2006)

PANYNJ - JFK Airport Blue Garage Expansion, Project Manager, Senior Traffic Engineer - In order to meet growing parking demand, PANYNJ was considering expanding the existing, near capacity, Blue Garage by adding two additional parking levels. Prior to proceeding with this project it was necessary to examine the operation of the existing vehicular helix ramps and pedestrian elevators to determine if sufficient excess capacity was available to meet future demand and, if not, how to address the shortfall. The study involved the examination of historical parking and pedestrian demand and a detailed analysis of the additional traffic and parking operations. Based on the findings of the study, the Port Authority modified its preliminary design to better meet future demand. (PANYNJ, 2005-2006)

Town of Oyster Bay - Hicksville Commuter Parking Garage, Senior Traffic Engineer- As a result of severe deterioration of the Hicksville Parking Garage Structure, the Town has elected to demolish the existing garage structure. In support of the project, LiRo performed traffic forecasting and intersection capacity analysis for both present and future conditions at the surrounding intersections. This analysis was utilized to assess the impacts of a new garage and determine the need and efficacy of a pedestrian bridge that allows pedestrians to avoid a surface crossing at the intersection.

Town of North Hempstead - Prospect Avenue Traffic Calming- LiRo assisted the Town with the preparation of the Design Report (DR) and prepared Final Plans, Specifications, and Estimate (PS&E) for this Federally Aided construction improvement project involving a 1.0-mile section of Prospect Avenue bounded by Brush Hollow Road on the west and the Wantagh State Parkway on the east in New Cassel, Town of North Hempstead.

The existing roadway consists of two-lanes in each direction in need of pavement rehabilitation, sidewalk and curb replacement and drainage system upgrades. The project included reducing pavement width to accommodate one travel lane, a dedicated bicycle lane, and a parking lane in each direction. In addition, streetscape elements that include decorative pre-cast concrete paver sidewalk areas, decorative pedestrian lighting, benches, trash receptacles, landscaped medians, curb extensions, and tree plantings were major components of the project. The improvements will create an atmosphere conducive to the local business owners and residents by encouraging pedestrian and bicycle traffic while discouraging high-speed through traffic.

Final plans included roadway plans, drainage plans, detailed grading plans, lighting plans and landscaping plans. The grading plans were critical to the project to ensure that existing elevations were met at the highway boundary line as there are no proposed property acquisitions. The plans also included details for a new pocket park to be constructed on Town property. Work Zone Traffic Control Plans were developed in accordance with NYSDOT and MUTCD standards to maintain mobility through the area during the construction activities.

All design work was performed in accordance with the NYSDOT Highway Design Manual and utilizes NYSDOT specifications.

Town of Smithtown - Maple Avenue Reconstruction- This project involved design services related to the reconstruction of Maple Avenue, a 7,500' long, two-lane roadway. In addition to pavement reconstruction, grading, and drainage upgrades, the project included re-design of the pavement markings to accommodate bicycle traffic while improving safety and reducing excessive travel speeds. (Town of Smithtown, $350K)

Employment History:

The LiRo Group (2004 to Present)
Transportation Engineer
H2M Group, Inc. (2000-2005)
Senior Traffic Engineer
Nelson & Pope, LLP (1998-2000)
Traffic Engineer
New York State Department of Transportation (1994-1998)
Principal Engineering Technician

Eric Pollack, N-III
MECHANICAL ENGINEER

Mr. Pollack brings inspection expertise as well as experience in highway/bridge construction to the LiRo Group. He has performed as an Office Engineer, Inspector and Chief Inspector on an array of highway and bridge construction projects. Mr. Pollack has extensive experience with MPT on both NYS Thruway and NYSDOT projects. MPT for all Thruway projects is performed in accordance with NYSDOT requirements.

EDUCATION	B.E., Mechanical Engineering, SUNY Stony Brook, 1994
REGISTRATION / CERTIFICATIONS	NICET III Equivalent
YEARS WITH THIS FIRM	10
YEARS WITH OTHER FIRMS	5

Highlights of his construction inspection experience include:

Installation of High Speed EZPass at Woodbury Toll Barrier (contract 1), I-87 NYS Thruway, Interchange 16, Harriman, NY, Office Engineer - This project was the first of two contracts to construct a high speed EZPass structure at the Woodbury Toll Barrier on the NYS Thruway. In order to accommodate the new EZPass structure for contract 2, the following was incorporated into this contract (contract 1):

Implementation of a 1.6 mile temporary traffic configuration on southbound I-87 at Interchange 16 which utilized additional lane closures while maintaining open traffic 100% of the time. A second acceleration lane on southbound I-87 was then constructed. This included addition drainage structures and the alteration of existing drainage structures, earthwork (cuts/fills), pre-cast T-Wall installation, installation of concrete pier protection, placement of asphalt on sub-base material, and guide rail installation for 1.6 miles. A soil-nailed retaining wall was constructed at the northbound and southbound side of the existing interchange 16 overpass in order to allow for additional future traffic lanes to be added in contract #2. This involved the excavation of existing earth in stages while simultaneously installing soil nails and shotcrete for structural stability. A final concrete finished facing was placed over the nailed shotcrete wall.

Other elements of this project included:

- Resurfacing of two overpasses during night operations with a Rosphalt 50 wearing course. Also included in this was the repair of a steel bridge joint extrusion and replacement of the existing strip seal bridge joint system over the piers. The MPT for this operation involved creating a 16 mile detour along route 32 from Harriman to Newburgh during the closing of the ramps to perform the work.

- The erection of an overhead sign structure with a Variable Message Sign (VMS). MPT requirements for this work involved a traffic shift and the temporary stopping of traffic during night work.

- The expansion of the existing toll utility building at the Woodbury Toll Barrier. An additional section was added to the existing CMU building's recorder room to eventually accommodate additional equipment which will be needed for the proposed high speed EZPass system.

- Relocation of 2 miles of fiber optic communication lines, which included trenching and boring around areas of federally protected wetlands.

- Installation of Transmit EZPass Tag Readers at two remote locations onto existing overpasses on I-87.

($9M, NYSTA, 2006)

Construction Inspection of TANY 06-56, Woodbury Toll Plaza High Speed EZ Pass at MP 45.03, Office Engineer- Construction of high speed EZ Pass at Woodbury Toll Plaza. (NYS Thruway Authority, $785,000)

Replacement of Steinway Street Bridge over the Grand Central Parkway, Office Engineer- This project involved construction inspection for the reconstruction of two rigid frame arch structures over the Grand Central Parkway in Astoria, NY. (NYCDOT, $18.4M)

Interchange 17, NYS Thruway, and I-84/Route 300 Interchange Reconstruction, Contract No. 1, Office Engineer - As Office Engineer on this New York State Thruway Authority project is Phase 1 of the four phase interchange reconstruction, Mr. Pollack was completely familiar with all aspects of NYSTA documentation. The project included the reconstruction of existing eastbound on and off ramps in the I-84 & Route 300 Interchange and lengthening and widening of the northbound I-87 off-ramp to Exit 17 (Newburgh) to allow for an additional lane of traffic. The second major aspect to this project was the excavation, screening and testing, then stockpiling and/or disposing of 73,000 cm of potentially contaminated soils from an abandoned dumpsite within the future interchange footprint. A new traffic signal was installed at the reconfigured intersection for the eastbound I-84 ramps into and off of Route 300. New pavement courses included asphalt perm base, and Superpave mix designs. Safety improvements such as signing, striping, guide rail and lighting were also installed. The abandoned dump cleanup required the close monitoring of contractor operations of excavation and testing of potentially contaminated soils and the documentation of disposal manifests and assuring NYS DEC and US EPA regulation compliance. Mr. Pollack developed checklists and spreadsheets to document and monitor the waste disposal operations. (NYSTA Project Supervisor: John Paul Cunningham, $8.2 M, 2003-2005).

Installation of Weather Recording Systems, Resident Engineer - This project involved the installation of remote operated weather recording systems at the Cross Bay Bridge and the Henry Hudson Bridge. The remotely operated systems monitor and record real time weather information at each facility and send the to a central monitoring station located on Randall's Island, NY. The project involved civil/site work, MPT, and the installation of highly specialized prepackaged weather recording equipment. This project was design build. (MTA TBTA, $500K, 2003)

World Trade Center Site Recovery, New York, NY, Assistant Office Engineer/Safety Compliance Officer - To assist Tully Construction with its responsibility for recovery efforts at the site's largest quadrant, LiRo provided demolition support, structural engineering, scheduling, accounting, and interface with the City's primary engineering consultants. LiRo supplied Tully with a broad range of personnel including structural engineers, architects, construction managers, accountants and safety inspectors. Mr. Pollack was an integral part of our safety inspection and project documentation team serving both in the field and a Safety Compliance Officer and later in the office as an Assistant Office Engineer. As Office Engineer he prepared daily reports of contractor men and equipment usage and materials requirements. (NYCDDC, 2001-2002)

Tappan Zee Bridge, Removal and Replacement of East Deck, Construction Inspection and Scheduling, Office Engineer/Computer Specialist - Set up computerized method of tracking more than 10,000 repair items. Mr. Pollack utilized Excel and AutoCAD 2000. His work tracked and totaled more than 200,000 sf of deck repairs. This project involved construction inspection services for removal and replacement of deteriorated deck sections on the east portion of the Tappan Zee Bridge for the New York State Thruway Authority. Replacement was done using various types of panels including precast reinforced concrete panels, concrete filled steel-grid panels, and exodermic panels with the joints between panels filled with high-strength, rapid-set, non-shrink grout designed to attain a minimum of 3,000 psi within three hours of installation. The rapid set was required for the reopening of all lanes to traffic prior to 6 a.m. each morning. Throughout the project, extensive maintenance and protection of traffic surveillance involved multiple use of flashing arrow boards, advance warning signs, and delineation devices. The project involved work over a railroad and the Hudson River, which required close coordination with NYS Troopers, and the railroad in addition to required permits, safety netting, and environmental waterway protection. Mr. Pollack assisted in all MPT coordination. (NYSTA, $35M, 2000-2001)

Tappan Zee Bridge, Rehabilitation of Substructure, CADD Specialist - Mr. Pollack prepared all AutoCAD

2000 "As-Builts" for project completion. Project involved construction inspection services for rehabilitation of the substructure of the 3.5-mile-long Tappan Zee Bridge that were provided to the New York State Thruway Authority under this contract. This project consisted of primarily concrete repairs and sealing of the abutments, pier columns, pier caps, and pile caps of the entire bridge structure. The Tappan Zee Bridge spans the Hudson River. (NYSTA, $14M, 1999)

Tappan Zee Bridge, Removal and Replacement of West Deck, Construction Inspection and Scheduling, Office Engineer - Construction inspection services for rehabilitation of the Tappan Zee Bridge for the New York State Thruway Authority. Rehabilitation of the deck on the west side trestle spans was the main focus of this project. The work consisted of strip, repair, seal, and overlay (SRSO) of more than 1.5 miles of bridge deck. Within this length, more than 0.75 miles of the deck in the median lane was replaced with "Inverset" units. The work was conducted at night between the hours of 8 p.m. and 6 a.m. Other items of work included installation of supplemental superstructure steel required for the support of the Inverset units, repairs of concrete pedestals, replacement of fixed bearings, cleaning of expansion bearings, installation of new expansion joints, and steel repairs to the fascia. Extensive maintenance and protection of traffic surveillance involved multiple use of flashing arrow boards; advance warning signs, and delineation devices. (NYSTA, $28M, 1997)

New York State Thruway, Interchange 16 Reconstruction, Harriman, New York, Inspector - This project involved the reconstruction of two bridges and the elevating of the interchange. The assignment included new concrete pavement, embankment widening, and the demolition and the reconstruction of two bridges. The reconstruction of both 4-span bridges involved the driving of new piles, the construction of new concrete piers, walls, and slab. MPT for vehicular traffic involved three stages of southbound traffic and a 16-mile detour for northbound traffic. (NYSTA, $10M, 1994-1995)

Taconic Parkway at Route 52, Hopewell Junction, Inspector - Project included rock blasting, ramp renovation and relocation, guide rail, and box culvert construction and extensive MPT. (NYSDOT, Region 8)

John Proios
ASSOCIATE

Mr. Proios has over 14 years experience in the management of multi-task environmental projects that interface with USEPA, NYSDEC, NYCDEP, and other regulatory agencies. As a project manager, Mr. Proios is responsible for the management of all aspects of a project from inspection and investigation to design, preparation of bid documents and technical specifications, contractor selection, site inspections, construction management and contract closeout. Projects under his supervision have included environmental compliance, soil management, risk assessment, remediation design, construction and operation and maintenance.

EDUCATION	B.S., Geology, SUNY-Stony Brook, 1993 M.S., Hydrogeology, SUNY-Stony Brook, 1996
REGISTRATION / CERTIFICATIONS	Reg. Environmental Professional OSHA Hazardous Waste Supervisor Training, NY OSHA 10 Hour Construction Safety Training, NY National Ground Water Association Long Island Geologists Association DOT Hazardous Materials Training
YEARS WITH THIS FIRM	7
YEARS WITH OTHER FIRMS	9

Mr. Proios has managed hazardous waste projects involving petrochemicals, heavy metals, lead, chlorinated hydrocarbons, PCBs and asbestos. Representative project experience includes:

Airport Terminal Redevelopment, JetBlue Airlines, JFK Airport, New York, Environmental Manager- This project included The Terminal 5 Redevelopment Project. Development & implementation of site-specific protocols to ensure environmental compliance, construction impact mitigation, & quality control. Project responsibilities included the removal of a 22,000 linear foot hydrant fuel system, oversight of a 500 gpm water treatment plant & excavation and disposal of 200,000 CY of soil. Collected hundreds of soil & groundwater samples & performed air monitoring daily over the course of the 2 year project. Prepared a NYSDEC MOSF permit required Closure Report & weekly status reports.

EPA Superfund, Remediation System Design & Construction, Mattiace Petrochemical, Glen Cove, NY, Project Manager- Design & build of a $6 million remediation system to treat groundwater and soils impacted with chlorinated solvents at the Mattiace Petrochemical Site. The system was comprised of 5 dual phase extraction wells, 6 soil vapor extraction wells, 20 nested vapor extraction wells, 2 groundwater extraction wells and 10 reinjection wells. The in-situ vacuum extraction system produced a flow rate of 1,660 scfm. Treatment of the extracted soil gas and air stripper off-gas were remediated on-site by a thermal oxidizer and wet scrubber system. Extracted groundwater was treated using phase separation, metals removal via precipitation/flocculation, air stripping, chemical addition, carbon adsorption and sludge handling. Treated water was discharged via ten reinjection wells. Operation and Maintenance activities included system operations, continuous air monitoring (CEMS) and treated effluent sampling. The project required preparation and implementation of the following work plans: soil handling, waste handling, dust control, health and safety and QA/QC.

Soil Removal, Various Clients, New York, NY- Project manager for over 20 soil removal projects at commercial properties for public and private clients. Total excavation and disposal of over 250,000 cubic yards of hazardous and non-hazardous soils contaminated with petroleum hydrocarbons, heavy

metals and PCBs. Waterfront projects have required the use of silt curtains, sediment filters, erosion controls. Dewatering methods have included well-point, sump pump and tidal monitoring. The projects required implementation of the following work plans: waste handling, air monitoring, dust control, traffic, and health and safety.

Remediation Program, NYCDDC, Project Manager- Implementation of a remediation program at over 60 NYC owned/operated sites. Duties include development of designs and supervision of construction, and management of subcontracts to ensure proper system operation and compliance with NYSDEC Order on Consent. Remediation system technologies included dual phase extraction, phase separation, air stripping, soil vapor extraction, bioremediation, and carbon adsorption. Numerous projects required interaction with community civic leaders and neighborhood residents. Issues that were discussed included noise and odor complaints, public safety and general aesthetics.

Underground Storage Tanks (USTs) Removals, New York- Supervised the removal and disposal of over 50 USTs at commercial properties. Performed soil sampling and air monitoring required satisfying federal and state regulations. Site assessment reports were prepared and submitted to the client and regulatory agencies. Site activities included demolition, soil disposal, site soil and groundwater sampling, temporary tank installations, road/sidewalk closures and safety controls.

Oil Recovery- Design and build an oil recovery system to remove 3,000 gallons of fuel oil which was released following an underground storage tank (UST) failure at a hospital in Manhattan, NY. Monitoring wells and soil borings were installed in a public park to delineate the area extent of LNAPL migration. Performed slug tests and applied a finite difference groundwater model to estimate the pumping rate required to capture the plume. A recovery well was installed to capture the plume and recover the fuel oil.

Airport Remediation, Federal Express Corporation, JFK Airport, New York, Project Manager- Operation and Maintenance of a groundwater remediation system. Treatment system equipment included submersible pumps, oil-water separator, bag filters and low-profile tray air stripper. Additional work at this site included subsurface investigations, pilot testing and development of a remedial action work plan.

Site Characterization & Risk Assessment- Conducted risk assessments to determine environmental impact of historical and & use occupants for a confidential client, supervised the collection, compilation & analysis of geologic and hydrogeologic data, reviewed contaminant fate & transport models to determine potential off-site risk. Prepared assessment reports summarizing the impacts to soil & groundwater including recommendations for site monitoring, remediation, institutional control and/or monitored natural attenuation.

Employment History:
The LiRo Group (2003 to Present)
Associate
The Tyree Organization, Ltd. (1994-2003)
Environmental Branch Manager

Hassan Rahemi
ENGINEER

Mr. Rahemi has ten years experience in construction administration and inspection, surveying and testing. He has provided construction related services to the Departments of Transportation for NY State and NY City in capacities which include Office Engineer and Inspector.

His typical responsibilities include:

- Maintaining filing systems for correspondence, RFI's shop drawing logs, and submittal logs
- Preparing reports and meeting minutes
- Preparation of contractor payments
- Preparation of contract change orders

EDUCATION	M.S., Mathematics, Adelphi University, 1987 M.E., Mechanical Engineering, City University of New York, 1986 B.E., Mechanical Engineering, SUNY at Stony Brook, 1982
REGISTRATION / CERTIFICATIONS	
YEARS WITH THIS FIRM	22
YEARS WITH OTHER FIRMS	3

Mr. Rahemi's experience has included the following assignments and responsibilities:

Reconstruction of Columbus Avenue, Office Engineer - This project was done under two contracts: Contract I from W. 59th Street to W. 86th Street and Contract II from W. 86th Street to W. 110th Street. Total distance was 2.5 miles. This reconstruction included:

- New roadway consisting of 10" concrete base and a 3" asphaltic concrete wearing course.
- Rehabilitation of sewers including sewer replacement, insituform lining, and gunniting of sewers ranging in size from 18 to 72".
- New drainage facilities including several hundred catch basins and 12" DIP Chutes.
- New and replacement water mains including a total of six miles of water mains from 12 to 48" diameter. The 48" main was constructed of welded steel pipe and ran a distance of approximately two miles.
- New street signs.
- Installation of new gas mains.
- New electrical feeders.
- New curb (steel faced concrete and granite.)
- New street lights and traffic signals.
- New tree plantings.

All of the above work was accomplished while maintaining vehicular and pedestrian traffic throughout the project in addition to maintaining access for emergency services and the necessary every day service. (NYCDOT, $85M)

Reconstruction of Ft. Hamilton Parkway and Seventh Avenue from Maine Avenue to 79th Street, Brooklyn, NY, Office Engineer - This state and federally funded Westway Trade-In project was a model project for the NYCDOT. This project involved the complete reconstruction of 2 miles of roadway, including curbs and sidewalks, and 1,000 lf of sewer reconstruction. This project also included the installation of 1,200 lf of 72" diameter welded steel water trunk main and 6,000 lf of distribution piping. Drainage improvements, landscaping, and maintenance and protection of traffic were also involved. This project was monitored by the FHA and the NYSDOT. (NYCDOT, $12M)

Reconstruction of Farmers Blvd from 180th Street to Ludlum Avenue, Queens, NY, Office Engineer - This project was a Westway Trade-In and was both state and federally funded. The project involved the reconstruction of 2 miles of roadway with curb and sidewalk. Approximately 5,000 lf of RCP storm sewer piping was installed. Maintenance and protection of traffic as well as extensive community relations work was also involved. Project was built to the NYSDOT specifications. (NYCDOT, $13M)

Resurfacing of the Wantagh State Parkway from the Southern State Parkway to the Northern State Parkway (D015384), Levittown, NY, Office Engineer - This project involved the complete resurfacing of 9.8 km of the Wantagh State Parkway in Nassau County, NY. All existing asphalt pavement was milled. Full and partial depth pavement repairs were made. Over 300 drainage structures were modified. The existing concrete curb was milled and replaced with new modified curb. Extensive electrical work was also performed including 5000 lf of conduit, numerous pull boxes, and electrical appurtenances rewired to support the INFORM system.

A unique aspect of the project was that full nighttime closures of the Parkway were required each night. The closures were coordinated with the NYSDOT, INFORM, the contractor, as well as local municipalities. NYS Troopers provided closure protection. Extensive signage was required for detours within a 5-mile radius of the project. (NYSDOT, $16.2M)

Reconstruction of Route I-495 (Long Island Expressway) from Van Dam Street to the Grand Central Parkway, Office Engineer - The project involves the rehabilitation of seven miles of heavily congested urban expressway. Work includes full-depth concrete pavement, rehabilitation of 27 bridges, installation and use of TSM/ITS, CPM scheduling, A+B bidding, night work, and extensive public outreach.

The challenge of this project is compounded by staggering traffic volumes and a narrow construction corridor. Additionally, this project will require extensive work at the Brooklyn Queens Expressway interchange.

The bridge reconstruction work includes such activities as superstructure replacement of the 58th Street overpass with 8 Inverset panels approximately 25 meters long, replacement of entire structures including piers and abutments, deck replacements, substructure repairs, and extensive bridge painting of many existing structures.

Other work elements include drainage structures, street lighting, a complete ITS system with cameras, ranging radar devices, Highway Advisory Radio, and the installation of Variable Message Signs (VMS). MPT on this project is of paramount importance due to the extremely high traffic volumes on the LIE. (NYSDOT, $170M)

John Rotella
OFFICE ENGINEER

Mr. Rotella has over 25 years of experience in the construction industry. He is currently serving as Construction Cost Estimator for MTA-LIRR for LiRo at the LIRR Capital Program Office. Before working at LiRo, Mr. Rotella worked for the LIRR as Manager for Scopes and Estimates.
Mr. Rotella's recent project experience includes:

EDUCATION	A.A.S., Suffolk Community College, 0 LIRR Labor Relations Certificate, New York Institute of Technology, 0
REGISTRATION / CERTIFICATIONS	OSHA Construction Safety & Health Training Federal Roadway Worker Protection 49 CFR Part 214 Primavera Expedition Training LIRR Labor Relations Certificate/NYIT LIRR Roadway Worker Protection, Article 49 OSHA - Construction Safety & Health Certification
YEARS WITH THIS FIRM	8
YEARS WITH OTHER FIRMS	25

MTA-LIRR On-Call Estimating Services, Mr. Rotella provides cost estimating services to the LIRR for a multitude of projects. He provides estimates from design drawing takeoffs; he develops work scopes for project development and construction change orders. The following is list of the projects he has provided estimating services for.
GEC (High Security Fence, Paving & Landscaping), JCC Interior Fit Out (Basement, 4th, 6th & 7th floors), Richmond Hill \ Morris Park Improvements, Seaford Station Platform Replacement, Shea Stadium Station Improvements, Great Neck Elevator Replacement, LIC Phase II, LIC Yard Sewer Revisions, LIC Yard Wayside Power, LCM Shop Improvements, Electric Substation Soil Remediation, High Security Fence Projects (Carl Place, Richmond Hill & Far Rockaway Yards, Rego Park and various other locations in Queens, Nassau & Suffolk), East Hampton Station Renovations, East River Tunnel Ventilation (2nd Ave. LIC & 1st Ave. Manhattan), Atlantic Ave. Viaduct, Forest Hills ADA Path & Compliance, Jamaica Reconfiguration Project, Montauk Bridge Rehabilitation, Queens Village Station Improvements, Flushing Main Street Station Improvements, VD Yard Improvements and WSSY Control Tower & Welfare Facility Relocation.
Engineering Department Project List: Babylon Yard Reconfiguration, Jamaica Station Trainmen Lobby Storefront, F&A Building Storefront, Inwood Station Parking Improvements, Signal Hut Cost Review, Port Jefferson Lube Cart Yard Access, Signage Replacement Program @ 20 Stations and Shelter Shed Glass Replacement Program.
Special Assignments: 20 Year Needs Capital Program Submission, 2005 -2009 Capital Program Rebalancing and Upcoming Resubmission 20 Year Needs Capital Program.

MTA-LIRR Equipment Assessment Project: Mr. Rotella was responsible for the preparation of estimates, duty cycles and life cycle data for the above noted project. More than 900 units of equipment were evaluated as part of an assessment plan to identify the cycles that shop equipment will be replaced and overhauled in. Mr. Rotella collected cost data and rationalized replacement costs in each LIRR shop and yard location. The approach to estimating the costs of equipment replacement and repair is based on an actual survey of the equipment at each LIRR location and compiling cost data that is collected from vendors who supply equipment and replacement components. Costs are being developed for the LIRR to reach a state of good repair in this area. The cost to correct the deficiencies in the equipment is being identified in the following categories:

- Repair Costs
- Overhaul Costs
- Replacement Costs

Reactivation of the Staten Island Railroad, NYC Economic Development Corporation:
Provided estimating support services for several change orders related to the $40M rail re-activation project

Queens Midtown Tunnel - Construction Administration and Inspection Services for the Rehabilitation

of the Roadway Drainage System (QM-10),Office Engineer:
This project involved the rehabilitation of the tunnel's roadway drainage system. The project calls for the replacement of the main drainage pumps as well as the stripper pumps at all pump stations. The main pumps are 10" diameter, spilt casing centrifugal pumps powered by 50HP 3 phase electric motors, and are used to remove runoff from the sumps to a common header pipe. Mr. Rotella's duties on this project included developing construction estimates and change order packages for all aspects of the project including civil, structural elements and mechanical and electrical components. He developed and negotiated the following change orders:
C\O #1 Additional lead abatement, C\O #2 Stainless Steel repairs at pump rooms, C\O #3 Installation of stainless steel doors at pump rooms, C\O #' 4 & 5 withdrawn by the client, C\O #6 Leak detection control panel modifications, C\O #7 Modifications to access slabs at pump rooms, C\O #8 Access hatch enlargements, C\O #9 Relocation of power & pump panels, C\O #10 Relocation of pump control panel & alarm terminal box, C\O #11 Pump room door and wall relocation, C\O #12 Installation of Posi-Lock plug panel and C\O #13 Stripper pump relocation.

MTA-LIRR, Manager Scopes and Estimates:
At the LIRR, Mr. Rotella worked to establish budgets for Capital Projects. He prepared detailed construction cost estimates from the preliminary through final stages of design. During the construction phase of projects, Mr. Rotella has helped to resolve change orders by preparing independent cost estimates for claimed extra work as well as participating in associated negotiations. Other duties included:
Development of Scopes & Budgets for Capital Programs 20 Year Needs Developed Cost Estimates for Design, Construction, Construction Phase Services and Construction Management Services. Mr. Rotella prepared hundreds of estimates for projects over three Capital Programs.Managed staff in the review and assessment of contractor and consultant proposal submittals Development of Scopes & Budgets for Capital Programs, 20 Year Needs and new initiatives in the following elements (Stations, Shops & Yards, Rolling Stock, Line Structures, Signals, Comm., Power, Track).Interfaced and coordinated activities of consultant services during development of conceptual scope Prepared feasibility studies and constructibility reviews of design documents.

Exhaust Fan Replacement at the Queens Midtown Tunnel, MTA Bridges & Tunnels, Office Engineer:
Mr. Rotella's current assignment is on the TBTA QM-80 project (Exhaust Fan Replacement at QMT). To date he has developed estimates and negotiated 16 C\O's totaling $484,537.93:
C\O #1 Galvanizing partition walls, C\O #2 Additional concrete repairs, C\O #3 Manufacture change in damper coupling, C\O #4 Reconnection of existing drain pipes, C\O #5 Model change in damper actuator doors, C\O #6 Additional asbestos abatement of flush box transite panels, C\O #7Relocation of electrical equipment, C\O #8 Floor slab modifications, C\O #9 Remove & dispose partition wall steel members, C\O #10 Removal of "U" bolts & bracing, C\O #11 Replacement of motor leads, C\O #12 Relocation of PMP panels, C\O#13 Abatement & disposal of lead painted conduits, C\O #14 Modifications to damper door operator shaft, C\O #15 withdrawn by the client, C\O #16 Change in damper door actuator for additional torque and C\O #17 Rebuild fan motors

Westchester Court House Rehabilitation:
Mr. Rotella was responsible for reviewing 20 C\O's on short notice and negotiating each change with the contractor.

Mr. Rotella's computer proficiency is evidenced by complete working knowledge of the following software packages: Primavera Expedition, Microsoft Excel, Microsoft Word, Lotus 1-2-3, Freelance Graphics, WordPerfect and PE + EstimatingSoftware.

Nancy Silver, R.A., LEED AP

ASSOCIATE

Ms. Silver has experience as a Project Architect and as a Project Manager on a wide variety of renovation projects for local municipalities and government agencies. She has been responsible for performing initial field inspections and writing project scope reports, preparing bid documents, ensuring ADA compliance, cost estimating, and providing construction support. Relevant project experience includes:

EDUCATION	M.S., Construction Management, Polytechnic University of New York, 1985 A.B., Architecture/Civil Engineering, Princeton University, 1982
REGISTRATION / CERTIFICATIONS	Registered Architect, NY LEED Accredited Professional LEED for New Construction, Green Building Certification
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	17

Port Authority of New York and New Jersey, GWB Bus Station Lower Bus Level Renovations, Project Manager. Developed architectural design documents and coordinate design team for the replacement of 150' long storefront entrance wall and metal panel ceiling system at the bus parking area. (PANYNJ, $1.2 M)

Port Authority of New York and New Jersey, LaGuardia Airport Structural Slab Repairs, Project Architect. Prepare a feasibility study, in coordination with the structural engineering prime, to determine potential methods of repairing areas of deteriorated structural slabs. Extensive field survey work was performed. (PANYNJ)

Port Authority of New York and New Jersey, LaGuardia Airport Pump house No. 6, Project Manager. Developed architectural design documents for the replacement of exterior cladding for this small building, housing storm water runoff pumping apparatus. (PANYNJ, $200K)

NYC School Construction Authority, Project Manager. Architectural and engineering upgrade projects in over 135 schools over a ten-year period. Responsibilities include field surveys and development of project scope reports and estimates; coordination of design team; preparation of architectural design documents; building department filing; and provision of post contract services. Projects include:

- Science lab renovations, including complete replacement of new casework, room finishes, mechanical and electrical utilities, and computer networking.
- Program accessibility, including renovations to toilets, entrances, and public assembly spaces. Design of new elevator additions.
- Gymnasium floor replacement Coping stone and roofing replacements
- Window replacements
- Exterior masonry restoration.
- Swimming Pool Upgrades Library upgrades
- MEP upgrades including boiler replacements
- Feasibility Studies for new school buildings, including site evaluation and zoning analysis, development of conceptual designs, and generation of construction cost estimates.

(NYCSCA)

DASNY/ CUNY SAUDLA Swing Space Relocation, New York, NY - Project Manager. Developed program requirements for the relocation of a total of 14 departments, originally housed in 50,000 sf in the "Y" Building, to new locations on the City College Campus. Developed architectural design documents, coordinated design disciplines, and provided construction phase services for 5 of those departments. (DASNY, $1.8M).

Town of Oyster Bay Town Hall South Relocation, Project Architect. Performed field surveys, wrote existing conditions assessment reports, and prepared cost estimates for the upgrade of both the existing town hall building and of the Packard Middle School, which the Town is considering purchasing for use as a new town hall.

Ellsworth Allen Park, Farmingdale, NY, Project Architect. Developed architectural design documents and provided construction phase services, in coordination with the engineering prime, for the construction of a new 5,000 sf building, including a community room, full service kitchen, administrative office spaces, and public toilets. (Town of Oyster Bay, $710K)

Marjorie Post Park Skatehouse, Massapequa, NY, Project Manager. Coordinated design team and prepared architectural design documents for the renovation of a 5,000 sf building, including complete interior demolition and reconstruction of toilets, skate rental and repair shop, full service kitchen and concession area, and public lounge area. (Town of Oyster Bay, $750 K)

Design of Animal Shelter in Town of Southampton, Project Manager. Coordinated design team, developed conceptual design, prepared architectural design documents, and provided construction phase field support for a new 12,000 sf animal care facility, including animal holding areas, animal recreation spaces, veterinary clinic, staff spaces, and a community meeting room. The design incorporates noise control, specialized HVAC and plumbing design, and ADA compliance. (Town of Southampton, $1.9M, 2001)

Jackson Avenue Master Plan, Project Manager. Developed a conceptual master plan for the future development of an 80-acre central public works/ public safety site. Tasks included survey of existing building conditions, review of program information for departmental expansions, development of phased plans for future expansion, and coordination of design team to perform utility survey of site and analysis of fuel storage conditions. (Town of Southampton, $55K, 2004)

Playground at Heckscher Park, Project Manager. Developed architectural design documents and coordinated design team for the complete renovation of an existing playground. (Town of Huntington, $400K)

Village of Thomaston, Village Hall Renovation/ Addition, Project Manager. Coordinated design team and prepared architectural design documents for the renovation of existing courtroom and office spaces, and the addition of new office space, and the installation of an elevator to meet ADA requirements. (Village of Thomaston, $900 K)

Employment History:

The LiRo Group (1999 to Present)
Associate

Lockwood Greene Engineers (1989 – 1999)
Project Manager/ Architect

Grumman Corporation, Bethpage (1982 –1989)
Architect, Facilities Department

Michelle Singh, N-III
OFFICE ENGINEER

EDUCATION	B.S., Architectural/Construction Engineering, Florida A&M University, 1991
REGISTRATION / CERTIFICATIONS	NICET III Equivalent OSHA 10-hr Training Course OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	8
YEARS WITH OTHER FIRMS	0

Since 1991 Ms. Singh has been working as an Office Engineer on a variety of projects with the NYSDOT, NYCDDC, and the NYCDOT. She is well versed in all MURK procedures.

Ms. Singh's projects have involved duties such as preparing daily reports, lost time documentation, extra work, minor and major orders on contract, monthly estimates, material acceptance records, final agreement and final agreement package, as well as record plans. **All records are kept up to date in accordance with the Manual of Uniform Record Keeping (MURK).**

She also has insured that project records be available for inspection by NYSDOT, Federal Highway Administration personnel, and NYCDDC at the Engineers field office at all times. All documents are kept locked up in the fire resistant project office files every night.

Projects representative of Ms. Singh's experience include:

CI Services for Brooklyn ATM's, Gowanus-Prospect Expressway ITS, Phase,1 ITS Improvements, Office Engineer- This project included the installation of an Intelligent Transportation System (ITS) along the Gowanus Expressway corridor between the Brooklyn Battery Tunnel and Verrazano Narrows Bridge. ITS is a communication network that provides the capability of monitoring and controlling traffic from a central station.

This project included daytime and nighttime operations. For the nighttime operations, the contractor was required to submit a detailed Nighttime Lighting Plan in accordance with the NYSDOT Standard Specifications. Project specifics included:

- Installation of ITS system included: receivers, transmitters, camera assemblies, controllers, radar detectors, fiber optic cables, etc. In addition, it required the installation of a server and other ITS equipment at the JTOC station. At the completion of the system hardware installation, a system integration was performed.
- Installation of electrical and utility boxes, conduit, and conductors to support new equipment.
- Installation of drilled shaft foundations for new Camera Poles.
- Installation of corrugated beam guide railing and chain link fence.
- Extensive landscaping work including planting of trees and shrubs, vegetation protection, pruning, clearing and grubbing, etc.
- Full depth concrete pavement repairs to complete trench restorations.

(NYSDOT, $8M, 2009-2011)

Replacement of Steinway Street Bridge over the Grand Central Parkway, Office Engineer- This project involved construction inspection for the reconstruction of two rigid frame arch structures over the Grand Central Parkway in Astoria, NY. The project included the demolition of the existing rigid frame arch structures; erection of new steel frame posts and arches, pouring of encasement abutments and new poured-in-place concrete deck slabs and sidewalks; bridge railing & fencing; permanent soldier pile and lagging sheeting with grouted tie-back anchors; the installation and removal of two temporary ACROW truss bridges; and extensive MPT detour scenarios. Project

elements also included; drainage systems; underground and bridge supported utilities (water main, gas, telephone and NYC DEP & FDNY communications); traffic signals; and intersection and safety improvements. (NYCDOT, $18.4M)

REI Services Requirements Contract, Borough of Staten Island, Office Engineer - Resident Engineering Inspection Services are being provided to support of the NYCDDC Capital Improvement Program in Staten Island. This contract involves water main installation, sanitary and sewers installation, street lighting improvements, traffic work including installation of new traffic signs and traffic posts, roadway reconstruction, and curbs and sidewalks.
Duties include review of inspector daily reports for quantities and clarity, preparation and verification of proper Material Certification, processing of payments for contractors on a monthly basis and ensuring quality assurance with activity breakdown reports on a daily basis, preparation of monthly progress meeting minutes, and monthly reports for submittal to NYCDDC, and assistance to the Resident Engineer with field inspection and reporting as needed.
Projects include:
Park Street - from E. Broadway to Shadow Lane ($1.7M)Gansevoort Boulevard - from South Ganon to Westwood Avenue; and on Hylan Boulevard from Malone Avenue and Adelaide Avenue ($2.3M)Bay Street at Tompkinsville Square Park - from Victory Boulevard to Hannah Street, also includes the beautification of the park by planting and pruning trees ($1.7M)
(NYCDDC, $6M)

Long Island Expressway Reconstruction from Van Dam Street to the Grand Central Parkway, Office Engineer - This project involved the rehabilitation of seven miles of heavily congested urban expressway. Work included full-depth concrete pavement, rehabilitation of 27 bridges, installation and use of TSM/ITS, CPM scheduling, A+B bidding, nightwork and extensive public outreach.
Staggering traffic volumes and a narrow construction corridor compound the challenge of this project. This project will also require extensive work at the Brooklyn Queens Expressway interchange. The bridge reconstruction work includes such activities as superstructure replacement of the 58th Street overpass with eight Inverset panels approximately 25 meters in length, replacement of entire structures including piers and abutments, deck replacements, substructure repairs, and extensive bridge painting of many existing structures. Other work elements include drainage structures, street lighting, a complete ITS system with cameras, ranging radar devices, highway advisory radio, and the installation of Variable Message Signs (VMS). MPT on this project is of paramount importance due to the extremely high traffic volumes on the LIE. (NYSDOT, $170M)

Emergency Repairs to the Belt Parkway Bridge over Paerdegat Basin, Brooklyn, NY, Office Engineer- This contract called for providing an alternate support system for the loading, formerly carried by a pier-column, that had been severely damaged by a recent barge hit and was no longer functional. A strict incentive/disincentive provision was included for this work because traffic has already been channelized into narrow lanes, and disruption of this major arterial highway for construction operations has to be kept to an absolute minimum. One other task included in the work was the installation of a special movable median barrier powered by electricity, with the capability of creating an opening which will be used in emergency situation to turn around over-weight vehicle to prevent them from traversing the bridge, and for emergency traffic detours. Other tasks included installation of major signage and the installation of heavy duty pier protection fender system to preclude damage to the channel pier-columns in the future.
Among the items of work on this contract included:
Structural concrete Major structural steel girders Concrete over-filled steel grid deck Movable steel beam guide railing Signs, foundations gautries and posts Installation of electric motors, conduits and cables Parkway land remediation Steel cased concrete piles Wooden piles Timber fendering system Maintenance and protection of traffic on a high speed parkway Nighttime operations Environmental protection, protection of trees and shrubs Restoration of parkland
(NYCDOT, $14M)
Rehabilitation of 171st Street to George Washington Bridge over Riverside Drive, Office Engineer - An open spandrel concrete bridge. Responsibilities included processing monthly and change order payments, EEO compliance, monitored Contractor daily activities, review inspector reports. Project included resurfacing approach roadways, repointing stones and waterproofing. (NYSDOT)

Robert Soldano
PROJECT MANAGER

Mr. Soldano brings over 20 years of professional experience to LiRo Engineers, Inc.

EDUCATION	M.S., Environmental Health & Safety, Hunter College, 1993 B.S., History, Queens College, 1979
REGISTRATION / CERTIFICATIONS	NYSDOL Asbestos Handling - Project Designer, NY Certificate: Electrical Lockout/Tagout Certificate: Accident Investigation Certificate: Labor & Management Safety Certificate: Fall Protection SSPC C-3 Certified OSHA Confined Space Entry OSHA Lead Awareness Training
YEARS WITH THIS FIRM	9
YEARS WITH OTHER FIRMS	20

Nassau County Government Operation Center: Managed all interior and exterior abatement activities including floor and ceiling tiles, pipe insulation, roof membrane, window caulking and ballast removal in accordance with NYS and EPA regulations during the interior demolition and asbestos abatement at the historical courthouse of the Nassau County Government Operation Center. Coordinated all air monitoring and insured all safety measures, documentation, manifests and strict quality control measures were complied with. During the construction phase, responsibilities included document control utilizing the client data base system, Prolog, to record and track submittals, RFI's, monthly payment requisitions, daily reports and weekly meeting minutes. In addition, provided construction field inspection during the restoration and renovation of the historical courthouse and during the construction of the new Annex of the Nassau County Government Operation Center. Supervised the installation of EPDM roofing at the new Annex of the Nassau County Government Operation Center.

NYC Transit Capital Program Management - Project Engineer for the S.O.N.E.T. fiber optics cable installation for track signal synchronization upgrading.

NYC Transit Capital Program Management - Final Report Manager. As the Final Report Manager, my responsibilities included the compiling of all documentation associated with NYC Transit asbestos abatement projects, i.e. daily logs, air sample results, waste manifests, NYS notification and contractor and workers licenses, and arranging these documents into reports to be used by Transit.

Environmental Remediation and Demolition of the Greenpoint Avenue Incinerator: Mr. Soldano provided environmental management/office engineering services during the asbestos abatement, hazardous materials abatement and decontamination of the complete building interior, incinerator equipment and furnaces.

NYCDDC Fuel Conversion Projects, NY -Project Manager for asbestos issues during boiler upgrade at NYC Fire Houses. Provided asbestos survey and design services to address materials which would be disturbed during the fuel system upgrade or material gas conversion work. These projects involved the investigation, planning, and development of abatement approaches.

JetBlue Airways, NY -Project Manager responsible for the design and abatement of JetBlue buildings 81 and 179 at JFK International Airport. Responsible for the field effort and preparing site investigation reports for the remediation of hazardous materials and asbestos. Provided data for the drawings and specifications for the removal of asbestos.

Environmental Remediation and Demolition of the Greenpoint and Hamilton Avenue Incinerators: Mr. Soldano provided environmental management/office engineering services during the asbestos abatement, hazardous materials abatement and decontamination of the complete building interior, incinerator equipment and furnaces.

Nathan Hale Housing Complex, NY - Project Manager responsible for the asbestos abatement of 60,000 square feet of asbestos floor tiles from a senior citizens housing complex. Conducted an environmental Phase 1

of the housing complex.

NYCT Capital Program Management -Project Engineer for the S.O.N.E.T. fiber optics cable installation for track signal synchronization upgrading.

NYSDOT LIE-Cross Island Parkway Asbestos/Lead Projects, NY - Project Manager for asbestos and lead paint issues for the Long Island Expressway - Cross Island Parkway Interchange.

MTA-East Side Access - Office Engineer responsible for document control utilizing the client data base system, Expedition, to record and track submittals, RFI's, monthly payment requisitions, daily reports and weekly meeting minutes

MTA Bridges and Tunnels -Project Manager for the Industrial Hygiene Asbestos Program which was established to identify asbestos hazard conditions in the work place and those impacted by construction projects. Responsible for overseeing the remediation effort, including reviewing specifications and design drawings, conducting surveys, supervising consultants and contractors, and evaluating bid documents and proposals.

Rapid Environment Management - Project Manager responsible for the success of asbestos survey, design, and abatement contracts for the New York City School Construction Authority and Board of Education. Supervised the installation of entire new roofing at various schools in which asbestos roofing was removed.

Professional Service Industries, Inc. - Staff Engineer in the environmental department whose responsibilities included the preparation of operations and maintenance plans to manage asbestos in place for the Long Island Railroad as well as abatement oversight tasks.

Professional Service Industries - Designer and Project Manager for the asbestos abatement of 55 floors in a NYC office building. Responsible for the build back of core walls, HVAC duct work, fire sprinkler systems on the abate floors. Wrote the Confined Space Policy for the company.

Ernest Strada
PROJECT MANAGER

Mr. Strada has been an architect representative since 1970. He has been an owner's representative, a contractor's project manager, and a county municipal project manager. As Deputy Commissioner of the Nassau County Department of Public Works. Mr. Strada worked closely with the Nassau Community College on numerous projects. His work includes the supervision of construction for police, jail, hospital, college, courthouse, and other municipal Wicks Law projects. During his years in the construction industry, Mr. Strada has applied the fundamentals of construction management including scheduling, estimating, value analysis, on-site field administration, coordination with contractors, and ultimately as the owner's representative on numerous facilities.

EDUCATION	A.A.S., Technical, SUNY Farmingdale, 0
REGISTRATION / CERTIFICATIONS	
YEARS WITH THIS FIRM	12
YEARS WITH OTHER FIRMS	0

Representative projects include:

Park Slope Armory Revitalization, Brooklyn, NY, Project Manager - Provided construction management services for this old military armory that was being converted into an indoor sports facility. The building is an historic landmark, over 110 years old. Responsible to oversee two contracts: one for life safety for NYCDHS, and one for the sports facility. (NYCDDC, $15M, 2008)

New York City Department of Homeless Services, New York, NY - The NYC Department of Homeless Services maintains shelter facilities at various locations around the City. Responsible for construction management services for various upgrades and renovations to many of these facilities under requirements contracts.

Some of the projects under this contract included:

Park Slope Armory mechanical work and boiler replacement ($1,600,000)

Jamaica Assessment Center facade repairs, building upgrades, and boiler replacement ($1,300,000)

39 Auburn Place 2nd floor renovation and conversion into 11 apartments ($180,000)

Park Avenue Armory facade repairs, code compliance, and overall building upgrades ($7,600,000)

Charles Gay Buildings at Wards Island (Keener, Clarke Thomas, and Schwartz Buildings) - Window replacement, facade repair ($1,500,000)

Gunner Avenue Armory - Roof and window replacement ($250,000)

(New York City Department of Homeless Services, $12M, 2004)

U.S. Postal Service, On-Call Construction Management Services - Mr. Strada managed several projects for this on-call construction management contract services for the U.S. Postal Service at various locations throughout New York City and Long Island. The assignments were varied, ranging from toilet renovation of an existing facility to the replacement of interior office and classroom finishes to CCTV system upgrading. Multiple task orders were completed simultaneously. (U.S. Postal Service, $23M, 2000).

New York Methodist Hospital, Construction Manager - Responsible for contractor coordination, scheduling, contract administration and negotiation for renovation of waiting, registration and emergency room area in-house and several offsite facilities ranging from general health facility interiors including physical therapy, x-ray, and renal dialysis. ($4M)

Nassau County Jail 832-Bed Modular Facility, On-site Representative - Monitored the construction of this facility and coordinated contractors, architects, engineers, code enforcement, and day-to-day construction activities.

Nassau County Jail 300 Inmate Kitchen Facility, Project Manager - Oversaw this work requiring the day-to-day coordination of the consultants, architects, engineers, and contractors.

Hempstead District Court, Deputy Commissioner for Building Construction - Oversaw the complex renovation and restoration of this maximum security detention cell in one of the busiest courthouses in New York State. At no time were the courthouses closed or was access of correctional officers and inmates impeded.

Nassau County 240-Bed Maximum Security Facility, Owner's Representative - Responsible for monitoring the progress and performance of consultants, contractors, and county support staff. Mr. Strada negotiated changes and mitigating construction problems.

Good Samaritan Hospital, Construction Manager -

Responsible for negotiation of all contracts.

Responsible for administration and coordination of contract operations to meet G.M.P. requirements with client.

Conducted all operations for additions of 5 stories throug hand over existing facility, including preparations for all temporary department relocations to swing spaces, as required.

($35M)

Rockland County Jail - Managed all contractors, dispersed all project payments and negotiated change orders and potential contract claims. ($16M)

Clermont Condominiums, Construction Manager - Responsible for the completion of Phase I for 37 units and a riverfront marina in Nyack. Prepared and managed the contracts for the construction of Phase II (40 units) and formulated the construction program for Phase III which included NYSDEC requirements for additional marina bulkhead and public dock. ($20M)

SUNY at Stony Brook, Project Manager - Responsible for contractor coordination, scheduling, and construction administration relating to this field house facility which included a gymnasium, locker rooms, administrative areas, and ancillary spaces. ($8M)

SUNY at Old Westbury, Resident Manager - Engaged by SUCF for 13 years and responsible for the new construction of the Academic Village, Core West Project, L.T.A. Building, Field house and athletic field, Entry Road and various site developments. ($100M)

Emil Tancredi
SAFETY OFFICER

Mr. Tancredi is a highly skilled safety engineer with over 35 years of experience. His vast work history includes experience in higher education, transportation and building construction safety. He has worked for the Metropolitan Transit Authority, Long Island Railroad and the Port Authority of New York and New Jersey and also was a transit officer with the New York Police Department for 20 years.

EDUCATION	Asbestos Inspector, New York University Amtrak Railroad Worker Protection Training, LIRR, 2005 Safety Manager's Academy, Clemson University, 1989 A.A.S., John Jay College of Criminal Science, 1974
REGISTRATION / CERTIFICATIONS	OSHA 40 Hour Hazardous Waste Operations & Emergency OSHA - 30 hours safety - Construction Safety and Health, NY American Society of Safety Engineers (ASSE
YEARS WITH THIS FIRM	2
YEARS WITH OTHER FIRMS	44

As Project Safety & Health Supervisor, Mr. Tancredi monitors construction site safety and health programs and investigates reports on the construction site pertaining to hazardous or contaminated material, develops an on-site emergency action plan and works with the contractors to promote good safety practices and awareness by the work force through training, among other duties. Mr. Tancredi provides these services on numerous projects. A representative selection of his project experience includes:

JFK Airport Redevelopment, Port Authority of New York and New Jersey (PANYNJ), Jamaica, New York, Project Safety and Health Supervisor (1994-1995) - Responsible for all safety matters pertaining to PANYNJ at the project site; monitored required, comprehensive construction site safety and health programs, investigated reports of all accidents, injuries and property damage on the construction site, handled matters pertaining to hazardous or contaminated material, developed on-site emergency action plans and worked with the contractors to promote positive safety practices and awareness to work force through training.

MTA Long Island Railroad, New York, Senior Safety Director (2005-2007) - Responsibilities included doing safety audits and reporting back to the risk manager. Worked on the following job sites:

- Flatbush Terminal
- Croton on Hudson Locomotive & Coach Shops & Yard
- Metro North Stations Rehabilitations on Metro North Hudson Line

MTA Long Island Railroad (LIRR), New York, (1997-2005) - As the senior safety supervisor, Mr. Tancredi provided complete safety oversight for projects for the MTA's Risk Management and Insurance Department (OCIP Insurance Programs). Responsibilities included: analysis of accident and claim history, preparing reports and recommendations, identifying and evaluating physical conditions, safety practices and hazardous situations and compliance with established safety standards. Additionally, he participated in accident investigations as required, provided technically sound recommendations for the correction of unsafe conditions, participated in pre-bid, pre-construction and progress meetings to foster proactive loss control efforts and prepared weekly written reports (loss control surveys) of findings.

Amtrak & MTA Long Island Railroad, Long Island City Vent & First Avenue Vent, New York, Senior Safety Director (2007-2009) - Responsible for safety audits and reported back to the risk manager.

LIPA & Northeast Utilities, Long Island Replacement Cable Project, Senior Safety Director (2007-2008) - Oversaw and reported to the client on the safe work performance of the contractor. The project included building two power substations: one in Norwalk, Connecticut, and the other in Northport, Long Island. The project also included the removal of seven obsolete cables as well as the underwater burial of three 138kv cables, each 12 miles long.

CM/Build Requirements Contracts, NY - New York City Housing Authority, $250M LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of renovating and/or constructing numerous community centers, performing upgrades of building systems and facade/roofing restoration at several housing projects throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services.

Bronx Civil/Civil Supreme Courthouse, Bronx, NY - DASNY, $40M A partial interior renovation of the Bronx Civil/Civil Supreme Courthouse Building including the gut interior renovation of approximately 24,000 GSF and the installation of exterior pressurization ductwork for the primary egress stairs of the building.

Community Center, Battery Park City, NY – BPCA, $25M Owner's Representative/ Construction Management services for a 60,000 sf community center/ballfield maintenance facility in the base of two residential towers at Site 23/24 in Battery Park City. Oversight from design development through completion of all construction and post-construction.

New Family Intake Center, Bronx, NY – NYCDDC, $50M Construction Management (CM/Build) services for the construction of a new 84,000 square foot New Family Intake Center. The state of the art facility will serve as an entry point for the homeless, where clients will be interviewed and evaluated before being dispatched to shelters throughout the five boroughs.

Roberto Clemente State Park, Bronx, NY – NYS Department of Parks, Recreation and Historic Preservation Major work items within the perimeter of the existing aquatics area or within the filter room of the Administration Building include demolition, miscellaneous hazardous materials removals, concrete pool deck replacement, rehabilitation of existing diving pool and Olympic swimming pool, construction of a new wading pool and spray pad, rehabilitation of the existing water safety room, replacement of pool electrical, mechanical, and plumbing systems, and site work / landscaping.

Project 2000, University of Connecticut, Stores, Connecticut, Project Safety & Health Supervisor (1996-1997) - Monitored construction site safety and health programs and investigated all reports on the construction site pertaining to hazardous or contaminated material; developed an on-site emergency action plan; worked with the contractors to promote good safety practices and awareness by the work force through training; administration of owner-controlled wrap-up insurance programs; monitored compliance of prime and sub-contractor; conducted and monitored "tool box training" programs for the site contractor's use; inspected all work areas for safety compliance; conducted weekly craft steward's safety committee meetings; incoming inspection with craft steward of cranes to be used on the project; reviewed the US DOL (OSHA) for any contractor violation; advised and recommended corrective action regarding safety and security matters to the client; and assisted contractors in developing their safety programs and procedures.

Ronald Wilson, P.E.

ASSOCIATE, PROJECT MANAGER

Mr. Wilson has 34 years of construction administration and design management experience for a wide range of diversified, multi-million dollar projects. These include a major water tunnel project; water pollution control plants throughout the New York City and Long Island docking facilities for the U.S. Navy; and buildings such as schools, prisons, airport terminals, and railroad stations. As a Construction Manager with LiRo, Mr. Wilson has managed all aspects of projects, from initial development through staff management, day-to-day administration, and close out. His responsibilities include value engineering, constructibility review, estimating, bid packaging, claims control, and supervision of construction inspection. Relevant project experience includes:

EDUCATION	M.B.A., Executive Management, St. John's University, 1988 B.S., Civil Engineering, Polytechnic Institute of New York, 1971
REGISTRATION / CERTIFICATIONS	Professional Engineer, NY Professional Engineer, NJ Professional Engineer, CT
YEARS WITH THIS FIRM	14
YEARS WITH OTHER FIRMS	26

Christopher Zanoni
ASSOCIATE VICE PRESIDENT

Mr. Zanoni has over 18 years experience in the environmental field, with extensive asbestos and lead based paint project experience. Mr. Zanoni is responsible for the management, planning and staging of all aspects of asbestos and lead based paint projects from the initial building survey through design and preparation of bidding documents. Mr. Zanoni is also experienced in all areas of abatement related services including: submittal review, project abatement monitoring and project close-out requirements. Some of the notable projects Mr. Zanoni has been directly involved with are provided below:

EDUCATION	Ph.D. (pending), Civil Engineering, Polytechnic University, 0 M.S., Environmental Engineering, Polytechnic University, 1994 M.E., Civil Engineering, Cooper Union School of Engineering, 1993 B.E., Civil Engineering, Cooper Union School of Engineering, 1992
REGISTRATION / CERTIFICATIONS	NJ Asbestos Safety Technician, NJ CTDOPH Asbestos Project Designer, CT NYSDOL Asbestos Inspector, NY NYSDOL Asbestos Project Designer OSHA 10 Hour Occupational Safety & Health Training
YEARS WITH THIS FIRM	11
YEARS WITH OTHER FIRMS	7

MTA New York City Transit Comprehensive Environmental Services Contract, New York, NY, Project Manager- Responsible for several continuous indefinite quantity environmental On-Call services contracts. Services included development of lead based paint and asbestos abatement work plans, cost estimating, project coordination and interfacing with site representatives, and project management of inspections and oversight of abatement activities. Supervised over 50,000 hours of field operations including abrasive blasting, needle gun scaling, chemical striping wet scraping at various NYCT facilities ranging from elevated structures on the Flushing IRT line and pedestrian bridges at Corona Park, to active bus depots and station platforms; he has prepared work plans for field operations and managed the hazardous waste storage maintenance program for NYCT. Additional responsibilities included preparation and enforcement of site specific Health and Safety Plans. Project sites included operating substations, subway stations, office buildings, mechanical rooms, rail yards, bus depots, tunnels, bridges, and various other structures throughout many of NYCT's three thousand facilities located throughout the five boroughs of New York City.

New York City School Construction Authority On-Call Asbestos and Lead Paint Services: Since 2004, served as the quality assurance officer and senior project manager responsible for maintaining the quality of all contract deliverables and performing overall task order management for asbestos/lead/PCB inspection, design and abatement monitoring. Approximately 1,000 separate projects have been executed and requisitioned over the course of 2 continuous contracts valued at over $4M. Asbestos and lead inspection/design/remediation have been conducted in connection with capital improvements to New York City schools throughout the 5 boroughs including climate control upgrades, roofing system replacements, façade restorations, classroom conversions, elevator installations, new playgrounds, window replacements, and electrical upgrades associated with new fire alarm systems and computer centers.

Dormitory Authority State of New York On-Call Environmental Services: Senior Project Manager and principal point of contact for all asbestos, lead paint and mold hazards that are impacted by planned DASNY capital improvement projects at hospitals and universities throughout New York State. Work orders in combined excess of $1M since 2008 have been issued in connection with façade, roof, window, emergency power systems, and full facility demolition work. All project efforts from inspection/design through abatement management are coordinated with the DASNY project manager at each facility as well as the DASNY code compliance officers. Inspections typically require review of architectural and MEP specifications to determine affected areas of the facility and the extent of impact to hazardous/regulated materials. Remediation designs are followed by detailed design review meetings. Abatement management includes review and approval of contractor pre-work

submittals, monitoring of abatement activities, waste tracking, and area air testing. Recent projects have involved interfacing with NYC DEP/ATRU as a result of phased abatements in NYC/DCAS operated facilities managed by DASNY.

MTA Bridges and Tunnels (Tri-borough Bridge and Tunnel Authority)- Worked in coordination with TBTA Safety and Health manager Steve Kozak; functioned as Project Manager for all asbestos and lead based paint project consultation and daily contractor oversight enforcing all applicable EPA, NYSDOL, Local Laws for the renovation and modernizing/restoration of vents shafts, security devices upgrades in the Manhattan, Queens, Staten Island ventilation facilities as well as Brooklyn Battery Tunnel and Verrazano Bridge. The general scope consists of interpretation and implementation of MTA/TBTA regulations and site specific procedures, surveys, designs, oversight of construction phases. This contract is similar to activities and functions noted for the MTA/NYCT system contract.

Recreation and Historic Preservation - Bear Mountain Inn Lead and Asbestos Remediation Services, Senior Project Manager- During emergency lead based paint assessment, remediation planning and oversight at the historic Palisades, New York recreation facility. Performed scoping, coordination, and quality control during field assessment activities aimed at the Identification and mapping of lead based paints and areas with visible dust accumulations presumed to be contaminated with lead paint; reviewed proposed abatement contractor work plans and matched those locations where large areas of LBP coatings were likely to be disturbed verses areas of "incidental" disturbance; accurately identified to the restoration contractors the surfaces that may be coated with lead paint. Remediation phase work included (a) Inspection of lead paint removal operations to ensure that the work was performed in accordance with specifications issued by NYS Parks as well as applicable regulations; (b) collection of surface wipe samples/air samples for testing subsequent to the completion of decontamination activities to establish that re-occupancy levels have been met; (c) inspection of lead waste storage areas to confirm proper labeling, waste stream separation, waste testing (TCLP) and waste manifesting procedures; (d) inspection and evaluation of suspect asbestos-containing materials and subsequent collection and analysis of representative bulk samples from materials that may be impacted by the renovation; (d) project monitoring during asbestos removal activities and reporting of observation of regulatory non-compliance to NYS Parks; (e) preparation of asbestos and lead based paint project close out reports and/or monthly reports during phased abatements.

Highline Reconstruction Rehabilitation, Task Manager- Provided direct assistance to the Resident Engineer for implementation and enforcement of SSPC, NYSDOT, EPA, OSHA, NYS, and relevant Local laws and guidelines for the abatement of ACM and the removal, treatment, disposal and handling of lead based paint during abrasive blasting of lead based paint from over 2 miles of elevated structural steel. Conducted QC inspections of blasting containments and waste storage areas. Provided management support and technical guidance during excavation of contaminated soil and demolition of ancillary structures below the Highline. Defined the scope and procedures for abatement of asbestos containing track bed expansion joint tar, rail connector rust inhibitor, and miscellaneous ACM encountered during the project.

New York City Department of Environmental Protection – Legacy Program Remediation of Contaminated Paint, NY, NY: Performed Project Management during program aimed at removing coatings contaminated with lead, PCB, and mercury. A total of 16 sites consisting of effluent chambers, intake chambers, shaft-ways, maintenance facilities, were targeted throughout the Hudson Valley watershed area. Management tasks included field reconnaissance to confirm inspection data and site conditions, interviews with local DEP personnel to obtain information on individual facility operations and potential constraints to the pending remediation effort, specification drafting, and construction management during the abatement phase.

JetBlue Airways Warehouse Demolition/ Remediation, NY, Task Manager- Responsible for the site investigation and design for the demolition of four large warehouse and maintenance facilities at JFK International Airport in connection with the construction of the new Terminal 5. Responsible for oversight of field effort and assistance with preparation of site investigation reports for the remediation of hazardous materials and asbestos. Provided analysis and recommendations for plans and specifications for the removal of asbestos, USTs, drummed wastes, PCBs, and CFCs. Prepared site specific variances for the abatement of sub-grade hydraulic fuel piping and utility duct banks.

New York City Department of Sanitation -Incinerator/Garage Demolition Projects, NY, Task Manager- Responsible for environmental services involving detailed site investigations at two former municipal waste incinerators for asbestos and other hazardous materials and a structural evaluation in preparation of demolition design documents and specifications. Responsible for oversight of field effort and for assistance in the preparation of drawings and specifications for: environmental issues: soil and water contamination; RCRA wastes; residual ash/refractory brick; PCBs; lead paint; and drum waste.

Recreation and Historic Preservation, Project Manager and lead inspector- During environmental assessments focusing upon asbestos and lead based paint at 350 acre site of the former Kings Park Psychiatric Center. The site included 75 abandoned buildings and a network of underground steam tunnels most of which had visible contamination and structural deficiencies - prepared findings report and detailed estimate for pre-demolition remediation.

New York City Housing Authority, Project Manager- Responsible for numerous environmental contracts. In addition to those associated with identifying and abating asbestos-containing materials at many NYCHA complexes, project work often involved overseeing lead-based paint removal and collecting clearance wipe samples in accordance with HUD guidelines. Projects included Indoor Air Quality studies to identify sources of airborne particulate and causes of elevated levels of carbon dioxide and carbon monoxide; monitoring and analysis often focused on multiple gases. Odors stemming from molds and microbiological growths within water-damaged porous finishing materials were also included in the scope of many IAQ studies.

PA of NY&NJ Asbestos and Lead Paint Consulting Services, Project Manager- Responsible for asbestos air and project monitoring services at various PA facilities. Project includes surveying, bulk sampling, reporting, tracking of materials/quantities, compliance monitoring, daily record-keeping of all contractor activities, and report preparation. Prepared Phase I Environmental Site Assessments for use by Port Authority of New York and New Jersey in negotiating lease agreements with air carriers and other tenants. A total of six Phase I assessments were performed in accordance with ASTM guidelines over a one month period of time and included special consideration of existing asbestos-containing materials and lead-based paint. Project sites included plane hangars, warehouses, administrative buildings, and Port Authority maintenance shops.

New York City Board of Education, NY, Senior Project Manager- Responsible for managing simultaneous AHERA inspections, performing Quality Control field audits, reviewing inspection reports and management plans, and ensuring the quality and timeliness all contract submittals. Coordinated with Environmental Health and Safety department for all periodic surveillance and AHERA document updating. Efforts under this contract included the preparation and review of Phase I ESA's aimed at identifying properties for potential conversion to classroom space.

USACE West Point Military Academy, NY,Project Engineer- Responsible for conducting asbestos and lead paint survey and design. Project involved the inspection and sampling of suspect asbestos and lead based painted surfaces throughout various buildings at the site. The design plans and specifications were developed based on asbestos and lead survey results.

U.S. General Services Administration, Foley Square, NY, Senior Project Manager- Responsible for a comprehensive environmental inspection of the United States Courthouse, Foley Square, NY. The inspection determined the location, quantity, and condition of asbestos-containing materials, lead-based paint, and other hazardous materials and universal wastes throughout the 33-story facility. Scheduling and coordinating of the on-site work was prepared around federal marshal and Supreme Court activities, and field procedures were tailored to prevent adverse impact to areas and materials in the landmark structure. Design plans and contract specifications for the remediation of lead-based paint and asbestos based upon findings of the inspection were drafted and approved by GSA.

Lincoln Center for the Performing Arts, NY, Project Engineer- Responsible for high profile asbestos abatement of the main mechanical equipment room at Lincoln Center. Air handling units providing HVAC to the Julliard School and Alice Tully Hall were kept continually operational while 10,000 square feet of friable asbestos-containing fireproofing on overhead steel beams was abated using modified containment procedures secured via negotiated Site Specific Variance from the New York City Department of Environmental Protection. The abatement work was completed in under six weeks and the design of the project was awarded by the New York Association of Consulting Engineers.

DY CONSULTANTS

NADER DEJKAMEH P.E.

CONSTRUCTION INSPECTOR

EDUCATION
Polytechnic University of New York, BS in Civil Engineering, 1983

CERTIFICATIONS
P.E. License - NY

YEARS OF EXPERIENCE
25 years of experience

Nader has more than 25 years of broadly based engineering and construction management background. He represented a number of clients such as The Port Authority of NYINJ, The Triborough Bridges and Tunnel Authority, and the Department of Design and Construction in a variety of great assignments in the metropolitan area.

He experienced in all aspects of structural steel and concrete construction. Project management including coordination between consultants, city agencies and contractors to insure compliance with design drawings and specifications.

Experience

Triborough Bridges and Tunnels **July 2008 to Present**

Cost Engineering Specialist

- Complete cost estimate analysis of proposed projects for the TBTA facilities
- Perform feasibility study of the projects and review contractors proposals and change orders based on the most recent labor rates
- Develop, maintain and review all project cost controls
- Initiate, and maintain project cost analysis and budget

State University of New York at Old Westbury **July 2003- 2008**

Rehabilitation of the existing paved areas, installation of new signage throughout the campus. Upgrade of number of teaching spaces

- Provide solutions and recommendations for design to field issues with the owner, architect, engineers and the contractors
- Initiate and conduct design development and construction feasibility, meetings with architect, engineers and subcontractors
- Initiate and maintain project cost control, including project budget, potential change orders and approved change orders
- Review and negotiate all contract and change order costs
- Supervise all contractor work

Brooklyn Battery Tunnel

Supervise rehabilitation of the tunnel and related vent buildings in Manhattan, Governors Island and Brooklyn, a $90 million dollar project which has now been completed.

- Perform design development document constructability and value engineering review
- Initiate, develop, review and maintain all construction contracts
- Develop and maintain master project schedule
- Develop and initiate bid packages
- Develop site logistics and phasing plan

Contract Management

- Administer, coordinate and initiate contractor, owner, architect and engineer coordination for installation and construction of structural, mechanical and electrical systems
- Conduct and lead all project meetings
- Supervised and coordinated all subcontractor work.
- Develop, maintain, and approve all project documentation. Including contracts, insurance, bonds, payments applications, and change orders
- Develop, maintain and review owner, contractor and construction cost exposure

PAUL D. BARROCA P.E.

CONSTRUCTION INSPECTOR

EDUCATION
Polytechnic University of New York, BS in Civil Engineering,1985

CERTIFICATIONS
P.E. License – NY, PA, & CT

NY State Certified Building Inspector, 1993

NY State Certified Licensed Home Inspector and Instructor, 2006

YEARS OF EXPERIENCE
20 plus years of experience

DY Consultants

Experience

Engineering Designer and Analyzer

- Designed, inspected and analyzed road reconstruction and rehabilitation projects, subdivisions, site plans, new residential, commercial and industrial buildings, grading, drainage systems, water and sewer systems, road & parking lot design, landscape design, drafting & specification writing. Special consulting engineer, building inspector and plan examiner to various private and municipal clients

Engineering Designer and Analyzer

- Designed the following: subdivisions, site plans, New residential, commercial and industrial buildings, special structures, drainage systems, water and sewer systems, road & parking lot design, landscape design, building renovations and additions to residential, commercial and industrial buildings, demolition analysis, site plan review, drafting & specification writing. Special consulting engineer, building inspector and plan examiner to various private and municipal clients

Former Village Engineer/ Superintendent of Buildings/ Building Inspector -

- Manager of Engineering Department & Chief Commercial Plan Examiner, Town of Oyster Bay P & D
- Superintendent of Buildings, Department Head & Plan Examiner Building Departments, Villages of Sea Cliff, Oyster Bay Cove, Malverne, Westbury & Muttontown
- Village Engineer for Brookville, Roslyn, Roslyn Harbor, Sea Cliff & Muttontown. These positions involved direct dealings on a daily basis with some of PR's most important clients, running the departments for these clients, enforcing the various codes, rules and regulations, plan examination, design analysis, estimating, building and site inspections, reports, public relations, management of civil service employees, and engineering consultation upon request

Construction Manager

- Management and inspection of projects involving subdivision developments, building construction, roadways, storm and sanitary sewer systems, retaining walls, condominium and industrial developments, water main projects, sewer pumping station renovations and installations and various public works projects

MOHAMMAD MOHAMMADINIA, PH.D., P.E.

CONSTRUCTION INSPECTOR

EDUCATION

Polytechnic University of New York, Ph.D. in Civil Engineering, 1997

Polytechnic University of New York, M.S. in Civil Engineering, 1994

Hofstra University, New York, Ph.D. in Industrial Engineering, 1990

CERTIFICATIONS

P.E. License - NY

YEARS OF EXPERIENCE

19 years of experience

Approximately nineteen years of engineering experience in planning, design, risk assessment, construction supervision and oversight, the last ten years of which have been at the project management level. Long history of successfully managing major multiyear contracts including: Project Management Oversight Consultant - Federal Transportation Administration, Independent Engineering Consultant - New York Metropolitan Transit Authority, Structural Engineering Consultant - Hudson River Park Trust.

Experience

Senior Project Manager

As the Independent Engineering Consultant (IEC) for the New York Metropolitan Transportation Authority, provided oversight and expert recommendations/suggestions on the planning, design and construction of the following projects:

- $87 million, Rehabilitation of the 2,208 ft. Henry Hudson steel arch bridge, including steel repairs, drainage improvements, and replacement of lower level concrete deck with concrete filled steel grid deck.
- $146 million, Construction of Charleston Annex Bus Facility. This 110,000 square foot, multi-storied facility stores 200 buses, and includes interior areas for bus queuing, a service area with two bus fueling lanes, two bus washers and a maintenance area.
- $74 million, 8th Ave Subway Tunnel structure, drainage and lighting rehabilitation,
- $53 million, Tunnel Lighting at 42nd to 96th Line, 53rd St Station to Queens Plaza, Clark St. to Borough Hall, and Chamber St. to Jay St.

Senior Project Manager

- As Project Management Oversight Contractor (PMOC) for the Federal Transit
- Administration (FTA), provided expertise during the design and construction of the new $535 million South Ferry Terminal Station. The scope of the project included cut and cover tunnel construction, blasting and excavation of 19,000 cubic foot of bedrock, and placement of 1800 linear foot on new rail, installation of 7 escalators, 2 elevators, and electrical/mechanical/HVAC and security systems.
- Monitored project budget and schedule, performing risk assessments, monitoring compliance with federal standards and grant requirements and assessing overall project performance.
- Provided early notification of issues that could impact project scope and schedule.
- Met regularly with the grantee (New York Metropolitan Transit Authority), user groups and the FTA Lower Manhattan Recovery Office.

Project Manager (Structural Engineering Department)

- Managed design team for $150 Million Hudson River Park Design Segment 3, 6 & 7. The scope of work included the design of a granite esplanade spanning 2 mile length of the park, seven rebuilt piers stretching up to 1,000 feet into the Hudson River, rebuilding of the seawall and the underground platforms which support the riverfront land. Construction Administration duties included shop drawing review and site visits to answer design questions and consider contractor recommendations in product substitutions and alternatives

- Supervised all subconsultants in Topographic, Geotechnical, Bathymetric and Combined Sewer Outfall surveying in Stage 1 design/condition assessment of $130 Million Brooklyn Bridge Park.
- Managed design of 200 yard security waterfront markers, 100 yard waterfront barriers, and proposal of new technologies for airport waterfront security for LaGuardia and JFK Airports.

Senior Project Manager (Office of Capital Programs)

- Managed $60 Million rehabilitation of the Kingsbridge Armory in the borough of Bronx, New York. The scope of this project involved coordination with historical preservation architects for insight as to the original 1917 design of the Armory, environmental engineers and toxicologists for the removal of asbestos, lead paint and fungi throughout the building, and engineers and contractors for the complete reconstruction 0000,000 square foot of deteriorated roof.
- Managed design and construction of $19 Million, 120,000 square-foot, Hunts Point Meat Refrigeration Building, in the Borough of Bronx, NY.
- Oversaw construction process of $16 Million Wall Street Pier and Esplanade/bikeway, in the Borough of Manhattan, NY. The scope of this project included rehabilitation of bulkhead and construction of all new piles, supports, surface deck of the Esplanade/Bikeway and 544' by 62' Pier, and a 3,500 square-foot pavilion for ticketing, ferry manager's office, restrooms and passenger waiting area.

Civil Engineer (Surface Transit Division)

- Organized surveys and made presentations on vehicle travel times and traffic classification for various New York City streets and arterials. Constantly reevaluated various private bus companies' bus routes and bus stop locations in order to find the most efficient alternatives.
- Prepared project management plan and supervised construction of the $50 million College Point Bus Maintenance and Storage Facility that provided new diesel and compressed natural gas for a mixed fleet of 280 buses. The project also required the reconstruction of 28th Avenue including new storm sewers, water mains and lighting.
- Designed stripping plans for intersections, streets and parking areas, using the AASHTO guidelines. Prepared reports and plans relating to the expansion and enhancement of the New York City's bus priority network.
- Inspected and wrote condition reports of various NY City Ferry Landing facilities.

EDUCATION

- B.S. Civil Engineering, New York University Polytechnic Institute, Completed Various Courses.

PROFESSIONAL REGISTRATIONS and CERTIFICATIONS

- American Concrete Institute (ACI) Level 1 Field Technician
- NYC MTA Certified in Track Safety
- Certified in High Strength Structural Bolting Inspection by Skanska Civil
- Certified in Section 609 of Clean Air Act for handling of Freon
- Certified New York State Automotive Inspector Class 1D

YEARS OF EXPERIENCE

2 years

DY Consultants

Experience

Max's professional experience includes:

World Trade Center Transportation Hub Reconstruction
Field Quality Control Inspector, 2006 – 2008 Seasonal

Field inspector's responsibilities included the quality control of materials and the acceptance of completed work, including high strength structural bolting inspection and high strength concrete for the Port Authority of NY & NJ, while correlating with various third party inspectors and contractors. Notable Projects include:

- Boring and installation of 250+ member secant support wall
- Installation of 300+ mini piles through active 1/9 PATH Tunnel
- Installation and acceptation of high strength reinforced concrete throughout the job, including installation of Church Street slurry wall panel

Office Assistant, 2005- 2006 Seasonal

- Coordination of event activities and member relations including clerical and managerial duties
- Assisting in organization of year end member's meeting held in Waldorf Astoria,

Field Crew Member/Managerial Assistant, 2003-2006 Seasonal

- AutoCAD drawings for site plans, project details and as built drawings
- Selection, acquisition and transportation of materials for rough and finish carpentry and MEPS

Hirani Group

PHILIP CAPONITI, P.E.

RESIDENT ENGINEER/SR. CONSTRUCTION ENGINEER

EDUCATION
BCE, Manhattan College, 1983

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, NY, 1989
Roadway Worker Protection Training Course, 2008
Site Safety Manager (7 Hour Orientation)
OSHA 10

EXPERIENCE:
Mr. Caponiti has over 23 years of civil engineering experience with a specialty in highway/bridge inspection and design on projects for the NYSDOT, NYCDOT, and NJDOT. He has served as a Resident Engineer on several NYSDOT projects, and has additionally performed services as a Chief Inspector, Office Engineer, and Senior Inspector. His design experience is inclusive of highway, traffic engineering and utility projects for the transportation agencies identified above. Mr. Caponiti is intimately familiar with MURK and CEES programs.

Specific project experience includes:

Force Main Construction / Avenue V Pumping Station, NYCDEP Contract PS-79CM. Construction engineer responsible for coordination and compliance monitoring of health and safety operations of the general contractor for the installation of a new force mains to improve the conveyance of storm water and sewage from the Avenue P Pumping Station to the Owls Head Water Pollution Control Plant. Inspection involves over 18,500 LF of force main through local streets, along the Belt Parkway Service Road to the WPCP. The project is $450 Million. (2008 – present)

NYSDOT – Region 10 – Resident Engineer, Bridge Fencing (Long Island) – Oversight of bridge fencing installations in Nassau and Suffolk Counties. Fencing was inclusive of wrought iron and chain link o local roadways over the Long island Expressway and Northern State Parkway. Ensure compliance with NYSDOT and NYSDEC specifications and regulations. Strict adherence to OSHA requirements and significant coordination of maintenance and protection of traffic for lane closures and night time work. (2002 – 2005)

NYSDOT Region 10 – Resident Engineer, Bridge Painting – Miscellaneous locations in Nassau and Suffolk Counties, including critical bridges on the Long Island Expressway, I-495, which required night time work and the full closure of the Expressway. Maintenance and Protection of Traffic plans and closures were closely coordinated with both NYSDOT personnel and the Suffolk County and Nassau County Police Departments. NYSDEC and OSHA requirements were strictly adhered to. Mr. Caponiti followed a specifically developed Lead Health and Safety Plan for this project. (1997 – 2002)

Town of Southampton, NY – Bulkhead Replacement – Resident Engineer. Project included the replacement of bulkhead, parking lot construction and drainage enhancements. (2006)

NYCDEP, Sr. Design Engineer – NY City Watershed. Performed dissolved oxygen study of NY City watershed streams, including analyzation of test results and the preparation of a report which projected future oxygen deficits. (1990)

NYSDOT Region 10 – Chief Inspector for the raising of five Long Island expressway bridges to obtain Federal standard clearances. (2006-2007)

NYSDOT Region 10 – Reconstruction of NY 25A, Shoreham – Assistant Resident Engineer and Office Engineer. Full reconstruction of NY25A inclusive of roadway widening, recharge basin construction with a positive drainage system, traffic signal construction/reconstruction, full roadway excavation with new asphalt pavement construction, new curb and sidewalk, directional boring for new utility installations, water main installation, installation of new guide rail, signage and pavement markings. (1996 – 1997)

NYSDOT Region 10, 5 Concurrent Projects In Nassau and Suffolk Counties – Assistant Resident Engineer/Office Engineer. Contract work included two projects relative to the enhancement of NYSDOT INFORM facilities on the Long Island Expressway, two traffic signal improvement contracts, and a utility relocation project as a make ready for a future construction of the Long Island Expressway – Seaford Oyster Bay Interchange. (1993 – 1996)

NJDOT – Chief Inspector, Rte. 10, Passaic County. Pavement and geometric improvement project which included drainage enhancement, guide rail installation and ramp widening. (1992)

NYCDOT – Senior Design Engineer/Project Engineer for Projects in Manhattan, Queens and the Bronx. Preliminary and Final Design in accordance with NYCDOT specifications and contract plan requirements for roadway rehabilitation projects which included full street reconstruction, new drainage installations, traffic signals, water mains, sanitary sewer relocation, curb, sidewalk and active communication with New York City Community Boards. (1985 – 1991)

NYSDOT Region 10 Permit I intersection and traffic signal design for the Meadowbrook Commons Shopping Center on NY 27 in Freeport. Design was inclusive of left turn lane and ingress/egress design. (1992)

NJDOT – Senior Design Engineer/Project Engineer, Widening of I-287, Somerset, NJ. Responsible for pavement and sign structure design, utility coordination, traffic studies and archaeological survey. (1992 – 1993)

NYSDOT – Design Engineer. As an employee of the NYSDOT and as a consultant, Mr. Caponiti performed preliminary and final designs for projects in New York City (Region 11) and Region 10 (Long Island). Design included pavement, drainage, and traffic safety designs, including major capital improvements on both the Belt Parkway and Cross Island Parkway in Queens. (1983 – 1990)

Police and Fire Communications Center, NCDPW – Senior Inspector. Oversight of temporary power installation, removal of electrical equipment and installation of temporary roof barricades for the consolidation of Police and Fire Communications into a single location. The project included the renovation and expansion of Buildings 1, 3, and 4, existing Nassau County DPW facilities located at1194 Prospect Avenue. (2007)

Inspection Supervision for ADA Compliance at 6 Police Precincts, NCDPW – Senior Inspector. This work was performed as part of an On-Call CM Agreement – Buildings and included oversight of the installation of handicap accessible ramps, lighting installation, new sidewalk installation and parking lot expansion. (2007)

Hirani Group

Robert Christian, P.E.

Sr. Electrical Inspector

EDUCATION

MBA, Business Administration, Adelphi University 1991

BE, Electrical Engineering, SUNY Stony Brook University, 1983

REGISTRATION

Professional Engineer, NY

EXPERIENCE

Mr. Christian has over twenty years of expertise in the engineering profession with a specialty in the management of construction projects as a Project Manager, Construction Manager, Senior Electrical Engineer, Site Safety, Senior Operations Engineer and as a Senior Analog Design Engineer. He has excellent computer skills inclusive of MS PowerPoint, MS Access, CAD equivalent programs such as Vector Works, and scheduling programs such as Primavera and MS Project. His construction project involvement with New York City Agencies includes the NYCSCA, MTA, NYC Building Dept. and NYCDEP. Exceptional verbal and written communication skills.

Mr. Christian's engineering experience includes:

Sr. Electrical Inspector, Call-In Contract for Construction Management Services 2007-2009, PANY&NJ. Electrical System Rehabilitation of the PATH System Station, Yards and Tunnels. Responsibilities include coordinating and inspecting work of numerous contractors working on the PATH rail system. Assigned to inspection of installation of radiating cable in PATH system tunnels and the inspection of new bracket installations. Also inspecting drag line installation and pulling of fiber optic cable. Inspect retrofit of TSI boxes. Perform surveys for emergency repairs at Hoboken and other tunnel locations. Inspect inner ducts for fiber optic installation. Construction contracts in use included lump sum, unit price and cost plus. Responsible for determining acceptable quantities and estimates for payments to contractors. Determine schedule progress using Primavera and Expedition. Prepare progress reports. (12/2007 – Present)

On Staff Professional Engineer. Served as on staff Licensed Professional Engineer for United Homes. Duties included performing controlled inspections on one, two and three family homes during the construction process. Using AutoCAD created drawings and completed Sewer Drain Permit Application and signed off on such application as a licensed P.E. before submissions to the Department of Buildings of NYC. *1/2007 to 4/2007*

Project Manager – **Report Preparation for the Impact of the Proposed Development above the LIRR Atlantic Yards in Brooklyn.** Environmental impacts to the existing ventilation, storm water, and sanitary sewers were reviewed relative to the construction of the new Net Basketball Arena and commercial development. Code issues relative to AASHRA, NYS and NYC Building Codes were significant to the evaluation. *12/2006 – 1/2007*

Facility Assessment Team Leader:
Served as team leader of a group of Engineers and Architects and the Electrical Engineer for my team in the process of building condition assessment for the New York City School Construction Authority. Each team consisted of an Electrical Engineer, a Mechanical Engineer and two Architects. Each team was charged with Building condition assessment of about 110 building assets that were either leased or owned by the NYC Board of Education. In addition to team administrative

duties I served as the Electrical Engineer for my team. The information was gathered and submitted to the NYC School Construction Authority. *2/2006 – 12/2006*

Project Manager:

- NYCSCA (PS18K) – Contractor representative responsible for permitting, scheduling, payment requests, site safety, material safety data sheets, catalog cut submittals and approvals, and field construction.
- NYCDEP (Water Treatment Plant Sites) – Contractor representative with responsibility for producing daily productivity reports, all project submittals, material ordering, and scheduling.
- Vladek Housing Complex – Oversaw completion of roof repairs in two buildings. Installed the roof gutters, splash pans and flashing on four newly constructed elevator bulkheads in the complex.
- Commercial Construction – Responsible for scheduling, quality control, bid submittals, site safety, quantity take-offs and coordination with the architect and owner's representative.
- Prepared, estimated, negotiated and closed out change orders for the Coach NYC World Headquarters project with prime contractor Vangard Construction.

Construction Manager:
Demolition of three 3-story wood and brick buildings in Brooklyn. Responsible for adherence to applicable Site Safety regulations, dust control, and progress reporting.

Construction Manager:
Oversight an coordination of interior building construction relative to rough carpentry, dry wall, wire lathe construction, acoustical ceiling, prefab wall sections, exterior masonry and roofing.

Senior Operations Engineer (Technology New Products Development):
Transition new products from the concept and design stage to full volume production. Duties included development of documentation framework for product transition and scheduling of all operations tasks related to the assembly process. Supervised technical staff in the execution of pre-production runs and the collection of data obtained during those runs. Produced summary reports outlining the results of pre-production runs along with recommendations of improvements before product release.

Senior Analog Design Engineer:
Devised custom interfaces for barcode scanner and custom scan platforms for unique applications. Supervised technical staff in the testing of these devices for compliance with customer requirements.

- Transitioned to production several scanner interfaces and barcode scanner platforms. Met with sales force and high volume customers including Sears, GM and Pitney Bowes to determine customer design requirements.
- Developed and released to production Symbol Technologies' first compact fixed mount scanning platform.
- Designed and developed the first high visibility laser barcode scanner used to scan laser etched low contrast barcodes through tinted windshields in bright sunlight (10,000ft.cd).
- Designed custom interfaces for barcode scanners of Sears & Roebuck and Intermec Corporation.

INSPECTION CERTIFICATIONS

NICET III Certification

NICET II Certification (Highway Engineering)

NYC DDC Concrete Inspection Certification #DDC-C-2084-QA

ACI Certification

EXPERIENCE

Mr. Moore has 14 years of experience in the field of civil engineering and construction inspection. His representative project experience includes:

Construction Inspection of Meadowbrook State Parkway ITS, NYSDOT, D015553, Nassau County - Inspector. Installation of variable message signs, CCTV, Acoustic Vehicle Detectors, Highway Advisory Radio Transmitters, TRANSMIT Probe Surveillance Readers and Antennas, and a fiber optic cable communications network to interconnect the field equipment with the INFORM control center in Hauppauge. Supervised excavation for trenching and foundation cast in place foundations, determining adequacy of concrete cylinder strength, testing of concrete cylinders, conduit and buried cable installations for ITS structures. (2006- 2008).

Reconstruction of NY 27 Service Road, Babylon, NY, NYSDOT (2006) – Inspector with responsibilities for pavement milling and asphalt overlay. Project inclusive of drainage improvements, pavement markings and maintenance and protection of traffic.

Construction of Manhattan Sidewalks, NYCDDC (2005 – 2006) -Inspector. Resident Engineering Inspection Services included the replacement of sidewalks that have violations. Replacement of deteriorated sidewalks with poor curb reveal. The project also includes concrete work around hydrants, drainage modifications, asphalt pavement replacement and protection of trees. Inspected depth of concrete per specifications. Monitored placing and curing of concrete and installation of wire fabric for reinforcement.

1.7 Kilometers of Asphalt Concrete Milling & Paving on NY Route 27 in the Village of Freeport, Nassau County, NYSDOT – Senior Inspector. Construction activities included pavement repairs, such as joint and spall repair, calcium chloride concrete patch repair, milling asphalt concrete pavement, superpave HMA paving, pavement markings, construction of sidewalk and concrete curbs, traffic signal loop installation, MH resetting and rebuilding, sawing and sealing of concrete patches, cleaning of drainage structures. Performed asphalt depth check, temperature check, density check, collected asphalt core samples during paving operation. Construction activities required extensive maintenance and protection of traffics during night time and day time operations. The operation was mainly carried out during night time. The project also required coordination and communication with local town agencies for better completion. (2004-2005)

Reconstruction of Route 25B, Hillside Avenue, Nassau County (NYSDOT) – Senior Inspector. Construction Inspection Services for the reconstruction of Hillside Avenue including pavement reconstruction, curbing, sidewalks, drainage, traffic signal installation and utility relocations.

Town of Babylon: Capping of Sonia Road Landfill, Suffolk County (Project-9024.1) – Inspector. Excavation, drainage basin and pipe installation, backfilling, deliveries of fill material, along with logging in calculations of the quantities of material delivered.

NYSDOT - Installation of Telephone Conduit by Open Cut Jacking, Route 106/107 Town of Oyster Bay, Nassau County – Inspector. Maintenance & Protection of traffic, excavation, Jacking for conduit installation, installation of conduit, backfilling, grading, concrete testing, rebar and Calcium Chloride concrete was used in roadway replacement, curb and driveway replacement, asphalt, Placement and restoration of disturbed areas. All work was performed at night.

NYSDOT - Reconstruction of Route 25, Nassau County (Project D-257703) – Inspector. Maintenance & Protection of traffic, Asphalt, Pavement repairs, Calcium Chloride Concrete pavement repairs, Concrete testing, Pavement makings removals and installation along with assisting Office Engineer with various office duties.

NYSDOT - Reconstruction of Sunrise Highway, Nassau County (Project D-257211 & D-257214) – Inspector. Maintenance & Protection of traffic, asphalt pavement repairs, Calcium Chloride concrete pavement repairs, curb, sidewalk concrete median realignment, concrete testing, drainage, all aspects of traffic signal work, guiderail, median barrier, fencing, pavement milling, mainline asphalt paving, pavement makings & removals, restoration of disturbed areas. All paving & milling operations were performed at night. Assisted Office Engineer with preparation of progress pavements to Contractor and other various duties.

NYSDOT - Federal Aided Nassau County Traffic Signal Upgrade (Project D-256710) – Inspector. Traffic signal installation, excavation, backfilling, grading, asphalt, placement, structural curb and sidewalk, wire and conduit installation, traffic poles and signal installation, along with concrete testing. Supervised cast in place foundations. Determined adequacy of concrete cylinder strength. Monitored test cylinders of foundation concrete and determined compliant orientation of pole foundation to align with signal cabinet and cabinet wiring access holes. Field checked condition of equipment delivered to site.

Hirani Group

LEONID SIGAL
CONSTRUCTION INSPECTOR

EDUCATION
BS, Civil Engineering, Kiev Institute of Civil Engineering, 1988

Certificate in Computer Systems, Globe Institute of Technology, 1998

EXPERIENCE
Mr. Sigal has twelve years of diversified inspection experience in construction of bridges, highways, residential, commercial and industrial buildings. His experience includes organization of site activities including job assignments, safety and supervision of construction teams including supervision and inspection of concrete placement, steel erection, welding, laboratory and field testing and sampling.

Project experience includes:

Bridge Inspector / Chas H. Sells/ July 2009 – Present/ Walkill River Viaduct/MetroNorth R.R.
Inspection of repairs to concrete arch barrel bridge and drainage improvements, including sediment erosion control measures.

Structural Inspector /Greenman Pedersen, Inc., /May 2008 – July 2009 / Queensboro Bridge Protective Coatings Project
$170 Million project involving the erection of containment structures, abrasive blasting, lead paint removal and the application of a three-coat painting system. Responsibilities included cataloging shop drawings for scaffolding and containment erection, field inspection and documentation of erection of scaffolding and containment structures.

Senior Inspector / Hirani Group / May 2006 – February 2007/Replacement of Division Street and Memorial Highway Bridges, NYSDOT, Region 8 Construction inspection services for the replacement of Memorial Highway Bridge over I-95/MNRR (New Haven Division), Division Street Bridge over I-95, and Division St. Bridge over MNRR and the rehabilitation of the connecting ramp from Memorial Highway to Division Street. Duties included the installation of water and gas mains, steel and concrete conduits, drainage system, construction of new sidewalk and curb, resurfacing of existing roadways. Provided oversight of bridge demolition and construction of new bridges including excavation, steel reinforcing and erection and concrete work/field testing.

Inspector/Maitra Associates, P.C./1997-1999/ Reconstruction of McGuiness Blvd., Brooklyn, NY – NYCDOT Work included reconstruction of curbs, sidewalks, subbase and asphalt pavement, and installation of catch basins, manholes, water main, sewer and street lighting and house connections. Responsibilities included inspection of contractor's work, field measurements and quantity computation, preparation of inspector's reports, concrete and asphalt testing.

Inspector / Versatile Consulting and Testing Services, Inc. /2000–2006/ Condominium Complex a 416 Washington Street. Inspection of contractor's work, quantity and quality control, preparation of inspector's reports, concrete testing (slump, air and cylinders), inspection of subbase, curbs, sidewalks, CMU, rebar installation, review of compliance with the welding code.

Inspector, Preconstruction inspection of residential, commercial and industrial buildings. Inspection of condition walls (inside and outside), ceiling, roof, pluming. Detection of damages and cracks/leaks. Installation of the crack monitors if needed, preparation of reports with explanation of all damages, crack and leak location maps with the extent of deterioration.

School Rehabilitation in Various Locations, NY & NJ. Work included rehabilitation of a wide range of existing school buildings. Steel structure rehabilitation and replacement (lintels, spandrel beams), masonry replacement, roof and fireproofing slabs replacement. Replacement of concrete sidewalks and asphalt roadways. Demolition of concrete, steel and timber structures and installation of new structures.

Hirani Group

JOSEPH PERRICELLI, P.E.

SENIOR PROJECT MANAGER

EDUCATION
BE, Cooper Union, 1970

REGISTRATIONS/ CERTIFICATIONS
P.E., New York, [redacted] 1975

AFFILIATIONS:
American Society of Civil Engineers

EXPERIENCE
Mr. Perricelli has 39 years of civil engineering experience as a Chief Inspector, Senior Highway Designer and Technical Services Supervisor. He retired from the NYSDOT in April of 2003 after 33 years of service.

Mr. Perricelli's project experience includes:

Wantagh State Parkway ITS and Lighting, Suffolk County, NYSDOT - Project Manager. The project will install ITS Improvements along the Wantagh State Parkway corridor. In addition, a new lighting system will be installed.Hirani is responsible for structural design of the new overhead sign structures, locating and plotting the utility location plan, and performing various survey tasks which include spot cross sections at the overhead sign locations, supplemental topo mapping for the base maps, and establishment of a centerline station line.

Route 454 Drainage Improvements, NYSDOT – Project Manager. This project will construct a new positive drainage system, including new recharge basins on the NY 454 corridor within the project limits. Hirani is responsible for preparing the inventory and plotting of existing utilities, performing various survey tasks including creation of baseline points, GPS points, topographic survey in unmapped or poorly mapped areas, and cross sections, and to assist with the design elements in the drainage analysis and design.

Concrete Pavement Repair, Various Locations, NYSDOT – Project Manager. This contract will perform concrete pavement repairs and other rehabilitative work at various highway locations in Nassau and Suffolk Counties. Hirani is providing a pavement specialist as part of the field team that will field investigate the pavement and prepare the repair tables (lists) in the plans. Hirani is also responsible for the utility inventory.

Recharge Basin Reconditioning, NYSDOT – Project Manager. This contract will construct improvements as required at 30-35 existing recharge basins. Hirani is responsible for the field investigation, preparation of reconditioning plans, and all other work design tasks for final PS&E for several of the recharge basins in the East end of Suffolk County. In addition, Hirani is performing spot survey to upgrade existing mapping where necessary.

Southern State Parkway Mill & Fill, NYSDOT – Project Manager. This project will construct a new asphalt riding surface on a section of Southern State Parkway from Route 110 to Nassau Road. This will be accomplished by

milling and filling. Other miscellaneous construction such as guiderail work, drainage, etc. will be done as required as the budget permits. Hirani is responsible for the design of the Maintenance and Protection of Traffic Plan for the project. This will be night time construction involving numerous road/ramp closings and detouring. Hirani is also the project surveyor for topographic data and establishing existing bridge clearances.

Design Services, Phases I-IV, SPEDS MS4 Storm Water Outfall Mapping Regions 8, 10 and 11, NYSDOT – Senior Civil Engineer. Developed and implemented a Geographic Information System (GIS) to map storm water discharge points entering waters of the United States for New York State Department of Transportation (NYSDOT) roadways in Regions 8, 10, and 11 (Dutchess, Orange, Putman, Rockland, Ulster, Westchester, Nassau, Suffolk, Bronx, New York, Queens, Kings and Richmond Counties). The system utilized portable Geographic Positioning Systems (GPS) to record the location of each outfall, attributes of the outfall and receiving waters. The system allows for graphic display of each outfall location referenced to the attribute informational database. The project was undertaken by the NYSDOT to comply with the NYS Department of Environmental Conservation General Permit for Storm Water Discharges from Municipal Separate Storm Sewer Systems (MS4).

NY 110 Bridge over the LIE, NYSDOT – Project Manager. This ongoing design project will rehabilitate, raise and widen the two (2) bridges that carry NY 110 over I-495 (Long Island Expressway) in Melville, NY. Hirani is directly responsible for the Maintenance & Protection of Traffic (MPT) design required for both the I-495 and NY110 corridors within the project limits, and for the coordination of the MPT with the adjoining project to widen and reconstruct NY 110. In addition Hirani is responsible for the new vertical profile of the reconstructed bridges and approaches, and all grading work.

Bryant Avenue Complex Site Improvements, White Plains, NY, DASNY - Project Manager. The project included making site improvements and the installation of gas service to a 10 acre site maintained by DASNY which houses the mentally retarded and developmentally disabled. Services included gas main design, drainage design, erosion and sediment control plans, a comprehensive SWPPP (Storm Water Pollution Prevention Plan), the design of new roads to link the road network within the site, pavement replacement and repair strategy, grading and paving. Hirani was the Site/Civil Engineer for the project.
Deficient Bridge Rehabilitation, NYSDOT - Senior Civil Engineer. Development of Preliminary Maintenance and Protection of Traffic Plans including layouts, schemes, notes and operation sequence tables for various locations. Also performed accident analysis for several locations and other traffic engineering services.

Marine Parkway Bridge Headquarters, Senior Site/Civil Engineer for the design/build team for the construction of the new building. Responsibilities included the site/civil design for the new TBTA Service Building. This included the drainage design, grading design, utility design and all associated plans. The nature of the work necessitated the preparation of an SWPPP (Storm Water Prevention Plan) and the design of an Erosion and Sediment Control Plan which was used to obtain DEC approval for a SPDES permit.

KS ENGINEERS, PC

JEANNE BRADY
Senior Construction Inspector

KS Engineers, P.C.

PROFESSIONAL CERTIFICATE/LICENSES
NICET III Certification [redacted] thru March 2012
ACI, Concrete Construction Special Inspector, thru 12/09/11
ACI, Concrete Laboratory Testing Technician- Grade I, thru 11/01/13
ACI, Concrete Field Testing Technician- Grade I, thru 04/28/12

EXPERIENCE

NYSDOT, D261021, Reconstruction and Bridge Replacements Route 59, Town of Clarkstown, NY ($29 Million) – Inspector for roadway reconstruction and bridge replacements (prestressed concrete box beam) on Route 59 from Sickletown Road to Route 303.

NYCDEP, Concrete Quality Assurance Program, New York, NY - Concrete Technologist/Services Supervisor for inspection of various concrete batch plants and laboratories, universal labs, Tectonics Consultants, Futuretech and Fairways. Responsibilities include monitoring of trial batching procedures for newly designed concrete mixes; verifying compliance of plants and laboratories, as per specifications; recording laboratory test results and readings (concrete cylinder breaks, slump tests, air content, unit weights, etc.); Overseeing field testing and performing audits as requested. Training and supervising Assistant Concrete Technologists in service related inspections and audits.

Interim Stability Improvements at the Gilboa Dam, Schoharie County, NY - Site Inspector responsible for quality assurance personnel in charge of overseeing the contractor's quality control for the installation of post-tensioned rock anchors. Duties include record keeping of daily construction activities, including installation of pre-production anchors, environmental controls, safety measures, drilling of anchor holes, grouting of anchor holes, and installation of post-tensioned rock anchors.

Garden State Parkway, Bridge Repairs North - Engineering Technician, Level III worked directly with and responsible for 5(+) person crew. Worked on repairs to 16 bridges along a 15-mile span of the Garden State Parkway. Activities included substructure concrete repair, concrete deck repair, and temporary support of stringers, asphalt milling and paving, installation of guide rail, and maintenance and protection of traffic.

Village of Port Chester, Waterfront Redevelopment - Engineering Technician, Level III worked directly with and responsible for 9+ person crew. Worked on widening and redevelopment of U.S. Route 1. Activities included excavation, traffic signals, street lighting, concrete and granite curbs, sidewalks, asphalt overlay, and MPT.

Reconstruction of I-287, Stage 2A - Engineering Technician, Level III worked directly with and responsible for 5+ person crew. Worked on widening of I-287 and replacement of 3 bridges. Activities included installation of drainage, installation of guide rail, milling and placement of asphalt, survey of final grades and creation of as-built drawings.

Reconstruction of the Palisades Interstate Parkway - Engineering Technician, Level II worked directly with and responsible for 7+ person crew. Worked on widening and reconstruction of the Palisades Interstate Parkway. Activities included placement of inlets and drainage pipes, excavation, embankment, grading, silt fence, and maintenance and protection of traffic.

Reconstruction of I-287 over the Saw Mill River Parkway, NY - Engineering Technician, Level II worked directly with and responsible for 5+ person crew. Worked on replacement of an existing bridge structure with a structure composed of steel tubgirders and pre-cast piers and decks. Activities included

asbestos removal, drainage, excavation, embankment, pile driving, post tensioning and grouting of pier and deck segments, and conducted slump and air tests on concrete.

Reconstruction of Route 17, Ramapo, New York - Engineering Technician, Level II - activities included excavation, embankment, clearing and grubbing, landscape, guide rail, survey and H-piles.

Reconstruction of Routes 6 and 17, Town of Woodbury, NY - Engineering Technician Trainee worked as a trainee during construction of Route 6 extension. Activities included excavation, embankment, survey, draining and MP&T.

DUKE SAMALA
Senior Inspector

KS Engineers, P.C.

EDUCATION
BSCE, La Salle University, Manila Philippines - 2000

CERTIFICATIONS
ACI Field Testing Technician, Grade I – expires October, 2013
ACI Concrete Construction Special Inspector – expires July, 2014
Registered Civil Engineer – Manila, Philippines - 2000

TRAINING
Health and Safety Training

- OSHA 10-Hour Construction Safety Training, *29 CFR 1926.21(b)*
- Confined Space Entry Entrant, Attendant and Supervisor, *29 CFR 1910.146(g)*
- NYC Department of Buildings 4 Hr Supported Scaffold User
- Underground Construction for Tunnels and Shafts, *29 CFR 1926.800*

Welding and Welding Codes 4.5-Hour Course Completion - *American Council of Engineering Companies of NY*

Software Skills:

- RAM Structural System version
- RAMS Beam
- SAP version 14
- ENERCALC
- SAFE
- AutoCAD 2007
- AutoCAD 2004
- Microsoft Word & Excel

EXPERIENCE SUMMARY

NYCT, CM-1311, Construction Management for No. 7 Subway Line Extension Project - Senior Tunneling Inspector for this $1.5 billion project. Project includes providing construction management services that will extend the No. 7 Line westward under West 41st Street and southward under Eleventh Avenue to the southerly terminus at West 25th Street. The extension provides a 7,100 feet long two-track railroad with two lay-up tracks for the storage of six trains. It also provides two new stations; at West 41st Street and Tenth Avenue and a 2-track terminal station on Eleventh Avenue at West 34th Street. Project also includes working in the tunnel under the Street level Site "A" that is located on the East side at 11th Avenue between 25th and 26th Streets as shown in the above picture. Work in this area includes deck and concrete edge pans, safety lines, temporary lights, and tower stairs.

NYCDEP, Contract CRO-313 ($212M contract value) Protection Capitol Improvement Project WM-11 – Water Tunnels and Associates Works – Senior Inspector/Engineer providing inspection and support services for the work being performed as part of the construction of the Croton Water Filtration Plant in Bronx, New York. The filtration plant construction is part of the NYCDEP's Bureau of Engineering, Design & Construction project to upgrade the water supply system, improve water quality and ensure compliance with stricter water quality standards.

The principal items of the tunnel and shaft work consist of the construction of two 13.5-ft diameter Treated Water (TW) tunnels, approximately 3,500-ft in length, excavated using a Robbins Open-Main Beam High Performance Tunnel Boring Machine (TBM) and lined with 9-ft diameter concrete-lined steel pipe between the filtration plant and the Jerome Park Reservoir (JPR) shaft chamber. Tunneling was also comprised of the excavation of a 32-ft diameter starter tunnel chamber approximately 385-ft in length and a 14.5-ft diameter Raw Water (RW) tunnel, approximately 865 feet in length, between the filtration plant and the New Croton Aqueduct (NCA), and lined with cast-in-place concrete using Everest

forms having a finished inside diameter of 12 feet. Two shafts were also constructed utilizing raise bore excavation methods. Throughout the execution of the contract, my responsibilities have included:

- Provide support to the Resident Engineer for field office administrative duties performing technical and administrative activities within Contract Compliance, Quality Control and Quality Assurance (QC/QA).
- Provide engineering inspection and monitoring of day-to-day operations of tunnel, civil, and structural related construction work including TBM tunnel excavation and shaft construction including conformance to project plans and specifications, health and safety regulations, and environmental compliance and reporting.
- Evaluate excavation support requirements and grouting;
- Field checks of placement/location of supports, reinforcing steel, embeds, anchor bolts, forming system, shoring, and sub-base material before placement of concrete.
- Inspection of final lining including welded steel pipe, reinforcing steel and concrete quality control; understanding of tunneling construction methods and equipment and knowledge of OSHA regulations regarding confined space entry, ability to work independently to identify construction issues and communicate these issues effectively to others in a team environment, documentation skills required to provide clear and concise reports of daily activities.
- Analyzing applicable codes, standards and project contract documents and monitors construction activities to ensure compliance with contract documents.
- Preparing a variety of records, including daily progress reports, material accounting records, performing and/or evaluating tests and inspections.
- Monitoring contractors' compliance with approved Quality Control Plan.
- Providing general inspection of contractor and subcontractor work to assure a safe and workmanlike operation and quantifying production delays.

Gilsanz Murray Steficek Structural Engineers & Building Envelope Consultants LLP, NYC – **Structural Engineer/Inspector** providing design and inspection services as follows:

- **JP Morgan Chase Building Renovations** handled the structural design of building renovation executive floors down to base building; designed high density file system beam support and reinforcement of existing wide flanges; designed web openings and existing beam cut enlargements with reinforcement plates; structural analysis.

- **MTA, Grand Central Terminal -** performed Tunnel Inspection of MTA tracks 33 to 42 at Grand Central Terminal slab, column, and existing conditions, documentation and creation of Controlled Inspection reports. Responsible for the review of AutoCAD designs on blueprints and plans, review of shop drawings and preparation of architectural and structural drawings/plans using AutoCAD software. Site inspection conducted on a regular basis, project updates and weekly on-site meetings with client, architect, MEP contractor, and General Contractor; review of site and plan addendum, and change orders.

AHMED HUSAIN ZUBAIR
Construction Inspector

KS ENGINEERS, P.C.

EDUCATION
BS/Civil Engineering, Drexel University, 1997

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
OSHA 30 HOURS SAFETY COURSE/ 2005 and 2009
OSHA 500 Trainer Course 2009
Lead Awareness Course at NYSDOT Region 11
Long Island Rail Road Track Safety Certificate/ 2008
SSPC C-3 COURSE FOR LEAD REMOVAL SUPERVISOR/ 2008
National Association of Corrosion Engineers, International
NACE Certified Coatings Inspector (Certification [redacted]/VALID UPTO 2013
NACE Marine Coating Inspection
NACE Basic Corrosion
NYC DOT Approved Courses
OSHA Lead Awareness Course
40 HR Site Safety Managers Course for NYC Department of Buildings
Suspended Scaffold Safety Challenge Examination approved by NYC Dept of Buildings
MTA Department of Capital Program Management
REINFORCED STEEL & CONCRETE INSPECTION Certificate
QUALITY ASSURANCE/ QUALITY CONTROL MASTER WORKSHOP Attendance Certificate
MTA Department of Human Resources Division of Training
MTA NYCT Track Safety Training Certificate
MTA Approved Environmental and Training Center
LEAD AWARENESS TRAINING Certificate [redacted]
RESPIRATOR TRAINING AND FIT TEST [redacted]

EXPERIENCE SUMMARY
Mr. Zubair has over 14 years of experience in construction inspection. His experience covers both highway and bridge work, including bridge structural painting and paint removal; scheduling; cost estimation; processing change orders; sanitary sewer and water main installation; air monitoring; maintenance and protection of traffic; surveying monuments; excavation; sub-base concrete and asphalt pavement; erection of electric poles; sidewalk installation; etc. He is proficient in the following programs/systems: SureTrak, Primavera, AutoCAD 2002, MURK, ASTM standards, ACI codes, and AASHTO Specifications for Highway Bridges. Mr. Zubair's relevant experience includes:

NYSTA, Painting of Six Bridges in the NY Division of NYST in Rockland and Orange Counties, NY – Resident Engineer responsible for providing civil engineering expertise to the Painting of 6 Bridges Project on NYS Thruway. Protect client's interest thru quality control and mitigation of schedule problems relating to completion deadlines. Conduct Pre Construction meeting and monthly progress meetings. Track submittals from Contractor. Verify Contractor's Insurance Certificates. Ensure Contractor's compliance with EEO and NYS DOL rules. Monitor Contractor's Apprentice Training Program. Review and comment on Containment shop drawings and Suspended Platform System. Monitor CPM schedule and progress of work as per schedule deadlines. Check RFIs, evaluate RFIs feasibility and coordinate with field inspectors and design consultant and contractor. Field verify rigging of Suspended Platform System and installation of Class 1 A Containment prior to lead removal operations and ensure all construction proceeds in accordance with contract specifications and approved shop drawings. Delegate duties to Inspectors and oversee their work and Daily Work Records. Review and sign off Daily Work Records of Construction Inspectors daily reports. Coordinate with MTA Metro North and all other utility agencies involved, to mitigate upcoming problems and conflicts. Oversee MPT setup and sign installations and lane closure communication to NYST Traffic.

Approve quantities for monthly payments and enter the same on NYSTA CEES program. Process monthly payments and change orders. Write Engineer's Diary as per MURK rules.

NYSDOT Region 11, Nassau Expressway & Interim Nassau Expressway Pavement Rehabilitation & Resurfacing (Including painting of 7 bridges) – Chief Inspector responsible for providing civil engineering expertise to the whole construction project of rehabilitation of 7 bridges and ramps. Responsibilities included protecting client's interest through quality control and mitigation of schedule problems relating to completion deadlines. Monitor CPM schedule and progress of work as per schedule deadlines. Check RFIs, evaluate RFIs feasibility and coordinate with field inspectors and design consultant and contractor. Widening of highway ramps. Installation of new sub base and concrete pavements. Shoring and replacement of bridge decks. Replacement of bridge bearing. Operations involve shoring and hydraulic jacking of bridges. Installation of Calcium Patch to replace deteriorated concrete on approach slabs at abutment locations. Review shop drawings, perform site inspection, ensure all construction proceeds in accordance to contract specifications and approved shop drawings. Oversee MPT setup and sign installations. Check installation of vehicle arresting barrier net. Coordinate and liaise with different City and State agencies to mitigate upcoming problems and conflicts. CALL INFORM traffic communication about all lane closures and openings.Review and sign off Daily Work Records of Construction Inspectors daily reports. Performed office engineering duties also by obtaining work completion information from all inspectors daily reports and tallied the quantities completed with quantities approved for payment and matched the same with CEES quantities data entry.

NYSDOT Region 10, Replacement of Joints of 33 Bridges in Nassau and Suffolk County in Long Island, NY – Chief Inspector for the replacement and waterproofing of existing joints of 33 Bridges in Nassau and Suffolk County in Long Island. Installation of elastomeric concrete at expansion joints. Also replacement of bearings of 2 Bridges over Long Island Railroad. Operations involve shoring and hydraulic jacking of bridges. Review shop drawings, perform site inspection, ensure all construction proceeds in accordance to contract specifications and approved shop drawings. Review Inspector's daily reports. Installation of Calcium Patch to replace deteriorated concrete on approach slabs at abutment locations. Oversee MPT setup and sign installations. Check installation of vehicle arresting barrier net. Coordinate with CALL INFORM traffic communication about all lane closures and openings.

NYSDOT Region 10, Robert Moses Causeway over Great South Bay N/B Substructure Repair and Painting N/B and S/B, NY – Senior Inspection for the inspection of structural marine concrete repairs in the Great South Bay. Installation of steel reinforcement and cathodic protection system. Inspection and documentation of installation of cathodic protection system and corrosion protection operations especially abrasive blasting to 'near-white metal' standard and painting of structural steel surfaces. Rigging of chain-link fence platform and installation of Class 1 A containment prior to lead removal operations. Cathodic protection of subsurface and marine reinforced concrete structures subsequent to removal of existing steel jackets and spalled concrete. Installation of embedded zinc anodes in underwater concrete piles supporting roadway bridge slabs. Also performed the following office engineering duties: Prepared monthly payment estimates by proportionally allocating money to work completed as per difficulty of work; obtained work completion information from all inspectors daily reports and tallied the quantities completed with quantities approved for payment and matched the same with CEES quantities data entry.

NYSDOT, Inspection of Rehabilitation of Nine Bridges, Westchester County, NY – Bridge Painting Inspector responsible for review of contractor submittals for quality and safety issues, including bridge painting and surface preparation for painting, and quality control for all construction operations.

PMA CONSULTANTS

Andrew J. Chattaway

Senior Associate

14 YEARS EXPERIENCE
5 YEARS WITH PMA

Education

BIPP PQE (BA equivalent)
Professional Qualifying Exam in Photography Film & Television
British Institute of Professional Photographers

HND (Higher National Diploma 2-year course)
Photography Concentration
Film & Television

OND (Ordinary National Diploma 2-year course)
Design/Photography Concentration
Plymouth College of Art and Design
Plymouth, UK

City & Guilds Certificate in Communication studies
Graduated with four Distinctions
Plymouth Chamber of Commerce & Industry
Plymouth, UK

Mr. Andrew Chattaway has extensive experience in a diversity of project-based industries. He is highly proficient in Primavera P3, P3e, P5 and P6, Pertmaster risk software, MS Project, Keynote and MS Office software. His experience has focused on the development and analysis of schedules and costs, Risk Management process and methodology, 3D/4D GIS and Web-based project modeling, Value Planning, progress reporting, data analysis, logistics analysis and presentation techniques. He has worked as an integral member of project teams and as client advisor on large civil, nuclear, construction and wastewater management projects. He has also successfully produced large-scale video productions, both on time and to budget. He has a unique range of skills that integrate with and compliment diverse project management requirements.

SCHEDULING, RISK & 4D MODELING

Lower Manhattan Construction Command Center (LMCCC) - New York, NY

Mr. Andrew Chattaway is currently serving as a lead schedule consultant for Lower Manhattan Construction Command Center (LMCCC). The LMCCC is charged with coordination and facilitation of all Lower Manhattan construction projects, including street rehabilitation, transportation infrastructure, and private commercial projects, along with the World Trade Center site. The primary aim is to communicate information between projects and the community to minimize the impact of ongoing and future construction projects.

Mr. Chattaway is responsible for preparing updates, analyzing project schedules and for coordinating and integrating these into a single master schedule using P5 and P6. He is proficient using the full Primavera suite of products and has developed EPS, WBS, and project coding structures to report data from over 500 construction projects. He has developed layouts and outputs for regular monthly progress review meetings, and has analyzed contract SOW documents and plans for schedule development and project phasing.

Mr. Chattaway has been instrumental in developing a system for linking live schedule data to a GIS mapping system in order to graphically display construction projects and related street impacts over their construction durations. This has been enhanced further by updating the GIS system with a web-based Google Maps and Google Earth interface for public access to project data enabling the user to view 2D, 3D and 4D simulations of construction activity in Lower Manhattan over the project construction timeframes.

In addition to Master Scheduling Mr. Chattaway provides construction logistics analysis including materials, labor and trucking supply and demand analysis for all key major projects in Lower Manhattan.

Mr. Chattaway has been key in providing ongoing Risk Analysis and support to the LMCCC Value Planning Exercises and to the overall LMCCC Risk Management Program. A detailed 3D model representation of the WTC site was developed and linked to Pertmaster derived risk schedules. This enabled the creation of a 4D construction simulation of

the WTC site program and surrounding projects and the side-by-side comparison of deterministic and risk schedule scenarios. This process has been particularly helpful in identifying clashes affecting project interdependencies, stake-holder issues and logistical requirements to support construction activities and site access requirements.

PRIOR EXPERIENCE

Previously with JCMS, Inc., Mr. Chattaway served as a project controls/scheduling engineer. His project experience included initial planning for the deconstruction of 130 Liberty Street at the WTC Site and an environmental impact study for Lower Manhattan/JFK/Jamaica rail link.

With JoLee TV, Inc., Mr. Chattaway served as a production manager and associate producer. He managed day-to-day business operations, including scheduling, preparing budgets and bids, cost actualizing, purchasing, billing, and supervising administrative personnel/production staff and marketing meetings.

With MWH Project Management/North West Water AMP3 Projects, Mr. Chattaway served as Planning Engineer for Project Controls.

Mr. Chattaway also served as Deputy Planning Manager on the major Civil Nuclear Construction Project for AMEC Group Ltd. /British Nuclear Fuels Ltd. (BNFL) Project B41 Waste Retrieval Plant.

He also worked for Allott & Lomax Consulting Engineers, as Advisor to the UK Ministry of Defense, Project D154, served as Planning Engineer (Planning & Risk Support).

Jamie Apostolou

Senior Consultant

10 YEARS EXPERIENCE
1 YEAR WITH PMA

Education

BS,
University of Massachusetts

Case Study on European Union's Infrastructure & Development,
Universiteit Van Amsterdam

Mr. Jamie Apostolou has extensive experience in Project Management, Project Controls, Dispute Resolution, Project Oversight as well as on-site construction. His past project experience includes utilities, airports, education, medical and residential facilities, sports arenas, railways, and convention centers. His software capabilities include Microsoft Office, Mac OS, OmniPro, Primavera, SAP, Corel Draw, AutoCAD, Practice Master, Lenstar, Word Perfect, Photoshop, and construction equipment operation.

PROJECT CONTROLS

Mr. Apostolou is a senior consultant and active on-site member of the PMA team to assist PSE&G to establish a world-class project controls office (PCO) within the delivery projects and construction organization Project Controls. The project controls group manages a $1 Billion portfolio of new projects as well as system wide upgrades. Mr. Apostolou's primary emphasis is on the management of design, procurement, schedule, contracts, assets and costs for each project.

PRIOR EXPERIENCE

Prior to joining PMA Mr. Apostolou served as a consultant to performed analysis and oversight on capital projects for public, private and government as well as assisted counsel on litigation matters including deposition, mediation, and trial. Mr. Apostolou's forensic and dispute resolution experience on various project includes RFI & change order analysis, manpower analysis, damage and design assessment, project control analysis, design error and omission assessment, defense development, measured mile and schedule analysis as well as assistance with the preparation for litigation matters including arbitration, mediation, deposition and trial.

In addition to dispute resolution and forensic cases Mr. Apostolou also performed project oversight, risk assessment and management as well as advisory services. His experience included schedule review, process analysis, budget monitoring, risk analysis, project status analysis, and development for software designed to monitor project status and risk exposure.

Mr. Apostolou served as oversight advisory for project management oversight with Federal Transit Authority for a $50 million ski lodge and report project this was an implementation plan for King Abdullah Economic City in Saudi Arabia, $9 billion hotel and casino development and $611 million LNG facility.

As a legal assistant for the Real Estate and Construction practice within a private law firm in Chicago he was responsible for processing sensitive and confidential cases, deadline execution, calendar management and daily communication among staff with top tier American banks. He also assisted to implementation and training of a new document control and tracking software.

Mr. Apostolou also served with a private general contractor for a large

public facility's maintenance division, where he participated in the construction of a 120-unit residential subdivision development, and supervision of a 136-acre facility, respectively. Mr. Apostolou was responsible for the supervision of additional staff as well as performing a variety of construction activates, including paving, masonry, roofing, drywall, concrete, light steel erection, finishes and equipment operation.

Purvasha V. Patel

Senior Engineer 1

3 YEARS EXPERIENCE
1 YEARS WITH PMA

Education

BS, Civil Engineering

Rutgers University

Ms. Purvasha Patel has extensive experience in the engineering and construction industry with an emphasis on project, cost, and scheduling management.

COST ESTIMATING

Ms. Patel has performed cost analysis and cost management services on many large projects.

- **Northline Utilities, On-Call Contracts Review & Claims Assistance**

SCHEDULING

Ms. Patel has extensive experience in the development, updating, and analysis of project schedules using P3 and P6.

- **MTACC On Call Schedule Assistance** - New York, NY - $24B
- **Norwich University Student Housing Project**
- **Mount Pleasant Water Main**
- **NYCDEP Dependability Program**

PRIOR EXPERIENCE

Previously, Ms. Patel served as Project Engineer/Scheduler on a $145 million highway project. She was responsible for the submission of schedule updates to the owner and distribution of four-week and one-week look-aheads to team and upper management. She also helped implement a company-wide P3 schedule system. She oversaw a $2.8 million precast operation. Her responsibilities included oversight of revenue, cost, schedule impact and product procurement.

Previously, Ms. Patel served as Field Engineer. She was responsible for monthly billing to the client. She also teamed with the project superintendent to oversee installation of all post and panels retaining walls and MSE retaining walls. She tracked weekly labor costs and production on precast/cast in place concrete work. She also managed vendors and subcontractors.

Previously, Ms. Patel served as Assistant Field Engineer. She utilized P3 to create schedules under the guidance of the head scheduler. She collaborated with the project management on buy-out process and the project engineers to establish a submittals process.

Sadia Janjua, LEED AP

Project Scheduler

8 YEARS EXPERIENCE

Education

BS, Industrial Engineering and Operations Management

Minor Civil and Environmental Engineering

University of California, Berkeley

Professional

Leadership in Energy and Environmental Design (LEED AP®)

Members

U.C. Berkeley Engineering Alumni Society (board member)

National Association of Women in Construction

Project Management Institute

Ms. Janjua is a scheduler and project controls specialist with particular experience in preparing schedules and cost analyses for education, government, and healthcare facilities as well as pipeline construction projects. She is skilled with developing and updating baseline project schedules, performing trend and critical path analyses, and preparing cost estimates and audits. Ms. Janjua has experience in engineering design, construction management, financial and resource planning, and dispute resolution for several agencies, including the San Francisco Public Utilities Commission (SFPUC). Ms. Janjua is proficient with the following software: Primavera Project Planner, Primavera Contract Manager, SureTrak, SAP, i2, MS Projects.

SCHEDULING

Ms. Janjua has extensive schedule development, review, updating and analysis experience that includes utilizing CPM scheduling to produce master schedules for all project phases and project delivery methods. Her scheduling experience has been assisting general contractors as well as owners. She has represented the following projects:

- **Willis Ave Bridge Replacement - Queens, NY, $612**
- **New Jersey Transit Portal Bridge project - New Jersey, $7.3B**
- **MTA Capital Construction LIRR East Side Access - New York, $16.8B**
- **Cross Harbor Freight**
- **Lockheed Martin Multipurpose Building**
- **Lockheed Martin High Bay Addition- New York, $9.5M**
- **DASNY Bronx Family Courthouse Renovation - Bronx, NY**
- **NYCHA Housing Projects Renovations - Various Area, NY**
- **Mateo College of San Mateo Science Building 36 - San Mateo, CA, $19.5M**
- **University of California Berkeley C.V. Starr East Asian Library – CA, $42M**

PROJECT CONTROLS

Ms. Janjua also has extensive experience with project controls and cost for project development support for various projects. Her work has included establishing and providing full-time project controls for projects, reviewing and validating contractor, change order, project planning and status reviews; schedule reviews, monitoring actual progress, change order management, and final project reporting. She has represented the following projects:

- **DDOT 11th Street Bridge Rehabilitation - Washington, DC, $10.5M**
- **STV Project Controls Department Procedures**
- **NYCHA Housing Projects Renovations - Various Area, NY**
- **New Jersey School Development Authority Capacity Study - NY $450M**
- **Hillsborough Unified School District 2007 CIP, $449M**
- **BG Group Trinidad Cross Island Pipeline, $3B**
- **Sonatrach/Japan Ohanet Oil and Gas/Woodside Energy**

Southern Algeria Pipeline, $1B

- San Francisco Public Utilities Commission - San Francisco, CA

Dane C. McBaine, LEED AP

Assistant PM

7 YEARS EXPERIENCE
7 YEARS WITH PMA

Representative Projects

Detroit Water & Sewerage Department (DWSD) Water Meter Replacement & Automatic Meter Reading Equipment Installation – Detroit, MI *($150M)*

DWSD 800 MHz Radio System
Detroit, MI *($120M)*

DWSD CS-1304 As-Needed Capital Improvement Program
Detroit, MI *($2B)*

DWSD CS-1433 As-Needed Capital Improvement Program
Detroit, MI *($2B)*

Visteon Village Corporate Headquarters *($270M)*

Guardian Electric v. State of Michigan (Anchor Bay Schools)

State of Michigan Center for Forensic Psychiatry *($95M)*

Education

BS, Civil Engineering
Michigan State University

MIOSHA 10-Hour Training
Construction Association of Michigan

LEED Professional Accreditation Seminar

United States Green Build Council

Mr. Dane McBaine started his career as an intern with PMA in 1994. PMA hired Mr. McBaine as a full-time employee after he graduated from Michigan State University in 2003. Mr. McBaine has seven full-time equivalent years experience in project controls administration, project management, field inspection, and claims avoidance and resolution.

PROJECT CONTROLS

Mr. McBaine has been working on The Port Authority of NY & NJ (PANYNJ), Capital Improvement Program to implement the cost loaded schedules using Primavera P6.2 and Web client applications for the Project Management Office and capital planning group, which have a combined capital program and operating budget in excess of $1 billion per year on 100 projects.
Mr. McBaine has performed schedule reviews and associated analyses for the DWSD on a regional 800 MHz radio system, Springwells Water Treatment Plant Chemical Feed Improvements, and on water meter replacement and automatic meter reading equipment installation projects, and for Visteon on their corporate headquarters project for compliance with respective contracts.

Mr. McBaine has provided cost estimating services and monthly billing reviews for the regional radio system project and on the water meter replacement and automatic meter reading equipment installation project. He also provided project controls for architect costs on the Visteon Village Corporate Headquarters project.

PROJECT MANAGEMENT

Mr. McBaine provided project management and administration services, including RFI responses, submittal reviews, correspondence, changes, and QA/QC of contractor work for a regional 800 MHz radio system and for water meter replacement and automatic meter reading equipment installation projects.

PROCUREMENT ASSISTANCE

Mr. McBaine provided procurement assistance for the water meter replacement and automatic meter reading equipment installation project. Responsibilities included assisting the client with proposal evaluation, contract award, and negotiation of contract scope and price.

DISPUTE RESOLUTION

On claims for Water Works Park II, Lake Huron Water Treatment Plant, *Guardian Electric vs. State of Michigan* (Anchor Bay Schools), *Center for Forensic Psychiatry vs. URS Corporation*, and *Rockwell International vs. MDOT*, Mr. McBaine provided support to senior consultants through analyses of cost and damages, schedule analyses, delay and disruption analyses, and by preparing issue books.

REPRESENTATIVE PROJECTS

- **Detroit Water and Sewerage Department (DWSD) Water Meter Replacement & Automatic Meter Reading Equipment Installation** – Detroit, MI *($150M)*
- **DWSD Regional 800 MHz Radio System** – Detroit, MI *($120M)*

- **DWSD Springwells Water Treatment Plant Chlorination Feed Improvements –** Detroit, MI *($14M)*
- **Visteon Village Corporate Headquarters** – Van Buren Twp., MI *($270M)*
- ***Guardian Electric vs. State of Michigan* (Anchor Bay Schools)** *(Conf'l)*
- ***State of Michigan Center for Forensic Psychiatry vs. URS Corporation*** – Ann Arbor, MI *(Conf'l)*
- **DWSD Water Works Park II** – Detroit, MI *($288M)*

ZACHARY O. WALTERS, PSP

Engineer

5 YEARS EXPERIENCE
1 YEARSWITH PMA

Education

BS Electrical Engineering,

University of Maryland

Professional

AACEi Planning & Scheduling Professional (PSP)

Mr. Zachary Walters has extensive experience in commercial and residential construction. He is proficient in Primavera/Oracle Project Management (P3, P5, and P6), SureTrak, Microsoft Project Planner, entire Microsoft Office Suite, Trouble Shooting and Updating Windows Software Programs, HTML. He has completed various coursework including Comprehensive Calculus, Physics, and Engineering Curriculum, Numerical & Statistical Methods, Urban Planning, Product Liability.

SCHEDULING

Mr. Walters has performed expertise scheduling service for the following types of projects including Schools, Waste Water Treatment & Water Pollution Control, Road & Bridge, Scientific Research Laboratories, Vertical Structures, Embassies and Mixed Use Residential.
He is currently serving as a scheduler to perform schedule management tasks for NYCDEP project. This project involves the expansion and upgrade of the existing 350 MGD Newtown Creek Wastewater Treatment Plant in Brooklyn, NY. The upgrades involved will enable the owner to begin a major $1 billion expansion and upgrade at the conclusion of this assignment.

PRIOR EXPERIENCE

Prior to joining PMA, Mr. Walters worked with FTI Consulting *in* Rockville, MD. He developed and worked with CPM schedules of up to 30,000 activities and worked closely with clients on-site or in home offices when needed. He loaded schedules with costs and resources for billing and usage reporting and generated comprehensive schedule update packages with reports for schedule narratives, remaining Work, critical Path, total float and provide monthly and weekly look-a-heads, TIAs and fragnets.

Steven M. Pagani

Principal Associate

25 YEARS EXPERIENCE

Education

Construction Management Program

Worcester Polytechnical Institute

Civil Program Studies

Cape Cod Community College

Construction Supervisory License, MA [redacted]

Real Estate Salesperson, MA

Mr. Steven Pagani has extensive experience in all corporate administrative functions. His industry experience includes construction, government, and infrastructure projects.

COST ESTIMATING

Mr. Pagani has developed many construction cost estimates on a variety of projects. He has performed material takeoffs requiring the review of contract documents, specifications, cut sheets, and impact statements. He also supervised the development of a proprietary cost-based estimating system for primary use in the New York City area, with expansion possibilities on a national level.

MTA / LIRR East Side Access Project - New York, NY

Mr. Pagani is currently the senior estimator for the East Side Access Project. The East Side Access Project is a $ 7 Billion public works project being undertaken by the Metropolitan Transportation Authority (MTA) in New York City, designed to bring the Long Island Railroad (LIRR) into a new East Side station to be built below and incorporated into Grand Central Station in Manhattan.

Port Authority Trans Hudson (PATH) World Trade Center (WTC) Transportation Hub - New York, NY

This $2 billion project was designed by world-renowned architect Santiago Calatrava to serve as a source of inspiration for the heroes, survivors, and families of September 11th, as well as for those who live and work in and visit Lower Manhattan.

SCHEDULING

Mr. Pagani has extensive schedule development, review, and analysis experience that includes utilizing CPM scheduling to produce master schedules for all project phases and project delivery methods.

Croton Water Treatment Plant - New York, NY

This $2 billion project is a 290 MGD facility to treat New York City's Croton water supply.

DestiNY USA Management Company LLC - Syracuse, NY

The DestiNY USA project involved the design and construction of an $25 billion amusement/retail/hotel complex. This includes 12 hotel towers and 6 million-SF of retail space.

CLAIMS ANALYSIS

Mr. Pagani has prepared claim estimates and has assisted in the negotiations of more than $325 million in contract claim settlements.

Massachusetts Turnpike Authority (MTA) Central Artery Tunnel (CA/T) - Boston, MA

This $14.6 billion project is the largest infrastructure project in the country. It involves extending I-90 under the Boston Harbor to Logan International Airport and replacing the existing I-93 highway viaduct with a newly constructed tunnel.

PRIOR EXPERIENCE

Prior to joining PMA, Mr. Pagani worked with Bearse Corporation in East Sandwich, Massachusetts, as a Senior Project Manager where he

managed all ongoing projects for this midsized contracting firm. His project highlights include the MBTA Police Station, Boston, MA; Am-Trak car wash maintenance facility, Boston, MA; a wastewater treatment facility, Otis Air Force Base, Sandwich, MA; and the Brighton District Court House, Brighton, MA.

SYSTRA ENGINEERING

KEVIN CARDACI
Chief Inspector

EDUCATION:
B.S., Electrical Engineering, Lafayette College, Easton, PA

SUMMARY OF QUALIFICATIONS:
Mr. Cardaci has extensive experience with the construction, testing, and maintenance of signal and communication systems for several railways. He is proficient in Microsoft Word, Excel and Power Point and is also NORAC and Roadway Worker Qualified. He has experience with hiring, managing and training teams of professionals, technicians and junior staff; assessing strategic and tactical issues and determining course of action under time and budget constraints.

WORK EXPERIENCE:

LIRR East Side Access, New York – Lead Field Engineer F/A
Manages, plans, and coordinates the day to day Force Account field engineer's work activities in support of the construction schedule. He reviews Force Account construction drawings and conducts field walks to verify actual site conditions, conducts constructability reviews of design documents. He observes and documents the work progress in the field to ensure it is in conformance with plans and specifications. He assists the field engineers in resolving technical, equipment or material problems that may arise. He coordinates and oversees all survey work as it pertains to Force Account construction. He actively participates in creation and maintenance of a safe work environment following corporate and railroad guidelines and safety policies.

Claim Services International – Claim File Handler
Responsible for handling claims of property damage for Nestle Waters N.A.

New York Susquehanna & Western Rail Road – Senior Signal Supervisor
Managed a team of three technicians on a fixed budget and maintained signal system, crossings, and Federal Railroad Administration (FRA) records. Mr. Cardaci was also responsible for trouble shooting signal problems.

Norfolk Southern Railway – Senior Communications and Signal Supervisor
Responsible for a variety of duties, including: directing and supervising 10 maintainers, maintainer testmen, electronic technicians, and radio maintainers- Newark, NJ to Corning, NY. He oversaw signal maintenance and FRA testing and reviewed and filed test reports, hours of service, and credit card statements. Mr. Cardaci held the title of Chairman of Southern Tier Safety Committee and was the Harrisburg division signal designate/safety training instructor. Mr. Cardaci's responsibilities also included ordering signal materials while adhering to an annual budget of $100,000.

Consolidated Rail Corp – Signal Supervisor
Served as assistant supervisor and assistant field engineer GCT. Mr. Cardaci managed signal employees covering the Philadelphia, Newark, Newburgh, Albany, and Campbell Hall territories and was a member of the signal training team (Albany division). Mr. Cardaci was promoted three times while at this company.

AWARD:
Mr. Cardaci won the Mobius award for three consecutive years. The Mobius award is Conrail's Engineering Excellence Award for lowest number of FRA defects per mile.

SYS TRA USA

LEO F. CHARLES, P.E.
Resident Engineer

EDUCATION:
B.S., Electrical Engineering, Pratt Institute, Brooklyn, NY, 1980
Concentration in Control & Communication Systems and Mathematics

REGISTRATIONS:
Professional Engineer: NY (No. 070411)

SUMMARY OF QUALIFICATIONS:
Mr. Charles has more than 30 years of extensive experience in all project management and engineering aspects of the contracting industry. His areas of expertise include: project management and engineering, contract administration, estimating, procurement, subcontractor management, and schedule management. His responsibilities have included preparing scope change estimates, packaging change order documents, and preparing shop and trade drawings. In addition, Mr. Charles has managed the preparation of submittals such as Requests for Information and Requests for Qualifications. He also has experience with facility improvement projects where he has provided field engineering support, sketch development services, and has ensured compliance with plans and specifications.

WORK EXPERIENCE:

Primiano Electric, New York, NY – Project Manager/Resident Engineer
Responsible for the management and engineering of installations for Hyatt Hotels' multimillion dollar 5-Star Renovation - "Hotel Andaz on Fifth Avenue". Work commenced with a value engineering study to determine cost savings for the owner, resulting in an immediate $1 million savings. Mr. Charles prepared change order estimates for Construction Change Directives (CCDs) and Additional Supplemental Instructions (ASIs). He also negotiated change orders with ownership and installed and successfully commissioned a 1250 kVA standby roof-top generator set for use as the separately derived power source and backup for the newly installed 4000A primary service.

Mr. Charles attended all weekly trade and coordination meetings to monitor contract progress and resolve installation issues. He supervised the CAD operators with the preparation of all shop and trade coordination drawings. In addition, he performed surveys and field inspections of construction work to monitor safety/quality as well as ensure compliance with plans and specs. Mr. Charles coordinated the commissioning of all building conditioning systems including, but not limited to, chillers, cooling towers, and room fan coil units with InnCom Suite Control Interface. He also planned and supervised the installation of a computerized Lutron Scene Lighting Control System.

Mr. Charles monitored construction progress by performing field inspections, managing subcontractors and vendors with an emphasis on long-lead items. He also monitored submittals and Requests for Information (RFIs) and their impact on the schedule. He handled payment requisitions and was the liaison between the field and the corporate office.

MDM P.C. Consulting Engineers, a CSA Group Company, New York, NY – Senior Project Manager
Responsible for the management of MTA/NYC Transit projects, including the rehabilitation of 59th Street and 96th Street Stations as a MEP Infrastructure Subcontract to Dattner Architects and Urbahn Architects respectively. Mr. Charles prepared scope change estimates in anticipation of negotiations with MEP installers. He packaged all change order documents including, but not limited to, narratives, plans, and specifications. He reviewed

SYSTRA USA

and discussed alternatives to resolve RFIs with MDM's Design Department heads to assure compliance with NYCT's and the design team's requirements.

Mass Electric Construction Company, New York, NY – Project Manager/Lead Estimator
Responsible for all management and administration activities of Amtrak Contract C-047-34557, standpipe electrical bonding & grounding for this unique project encompassing 18 miles of railroad, from Sunnyside Yards in Long Island City, Queens, NY to Weehawken, NJ. As a life-safety issue, the project assured the electrical integrity of a newly install fire standpipe system by the installation of bonding details over system-wide Victaulic couplings plus, grounding shunts to the substation catenary static ground. Mr. Charles created and implemented a newly devised testing procedure, with third party certification, to fully document that all 20,000 units were performed in unison to the designed intent. He attended all project and track outage planning meetings and negotiated for the best logistical operations plan within the constraints of a heavily used and highly volatile railroad.

Mr. Charles also prepared estimates for various governmental transportation agencies' Invitation for Bids and Requests for Proposals for such agencies as Long Island Rail Road (LIRR), New York City Transit (NYCT), Metro-North Railroad (MNR), New York City Department of Environmental Protection (NYCDEP), New York State Department of Transportation (NYSDOT) and NJ TRANSIT. He was responsible for the preparation of estimates from take-off to final presentation to upper management for final review and approval. Tasks included: packaging of major long lead equipment/systems, subcontract bid packages for Request for Qualifications (RFQs), and evaluation of received RFQs for contract compliance to the bid document's plans and specifications.

L.K. Comstock & Company, Inc., White Plains, NY - Procurement Manager
Responsible for providing engineering and project management services for multiple transit projects. Mr. Charles' responsibilities included performing field inspections, monitoring safety compliance, ensuring adherence to all plans and specifications, supporting field engineering and sketch development, attending progress meetings and developing meeting minutes, managing all submittals and RFI's, and supporting quality audits. Projects include: NJ TRANSIT Morrisville Train Storage Facility ($11M), NYCT Jamaica Signal Rehabilitation, NJ TRANSIT Southern New Jersey Light Rail Transit ($18M), Maryland Mass Transit Administration Cromwell Maintenance Facility ($7M), NYCT Pelham Line Signal Replacement, NYCT 63rd Street Tunnel, Miami International Airport Automated People Mover ($22M), WMATA Largo Extension ($18M), WMATA New York Avenue Extension ($7M)

L Frederick Charles, PE, PC, Bronx, NY – President & Owner
Mr. Charles was responsible for project management of various construction elements such as: power distribution equipment; signal, power, and communication cable and equipment procurement and management; signal system design; automatic train stop fabrication; and miscellaneous contract requirements including final drawings and contract deliverables. The various MTA contracts included: NYCT Pelham Line (Signal Modernization, Cable Management and Design), Overspeed Restriction (Signal Circuit Redesign and Stop Modification), NYCT 63rd Street Tunnel (Cable Management and Design), NYCT The Canarsie Line (Signal Modernization and Power Distribution System Design), and NYCT The Flushing Line (Signal Modernization and Cable Management and Design).

SYSTRA USA

RICHARD FUNK
Senior Project Engineer

EDUCATION:
A.A.S., Civil Engineering, Gloucester County College, 1971
U.S. Army Corps of Combat Engineers, 1966-1972
Institute of Asphalt Technology
Conrail Training Courses: Track Foreman, Track Supervision, Conrail Quality Control and Conrail's Challenge of Supervision
OSHA 30-hour Safety Course

ASSOCIATIONS:
American Society of Civil Engineers

SUMMARY OF QUALIFICATIONS:
Mr. Funk has more than 40 years of diverse experience in engineering and construction for rail facilities and system improvements, electric power projects, roads, utilities, and other types of infrastructure. He has been involved in track construction and improvements, as well as passenger stations and intense background in tunneling for various projects involving transit and heavy rail. Mr. Funk has also been involved in Homeland Security construction efforts- cameras and monitoring stations. His responsibilities have encompassed a wide range of duties for supervising and managing construction site activities including field inspections, quality control, change order review, progress payments, safety, estimate reviews and analysis and constructability reviews.

WORK EXPERIENCE:

ConnDOT Rail Office New Haven Line Danbury Branch Signalization – Construction Supervisor/Inspector
Responsible for supervising construction, inspection services, and quality control on this major capital project. The entire Danbury Line is to be signaled with a Traffic Control System and cab signals with improvements to track reconfigurations with a vital micro processor based interlocking system. Mr. Funk is also responsible for providing engineering design review, contract administration assistance to ConnDOT, and resident engineering and inspection to verify construction compliance with contract requirements. He also monitors and measures work completed and records all force account activity, reviewing contractor payment requisitions and disposition. Additionally he is responsible for document control, generating monthly progress and manpower reports detailing schedule and expenditures, as well as developing and executing safety policy.

Amtrak Station Assessment Surveys – Construction Manager
Engaged in field assessing ADA and State of Good Repair surveys of passenger stations for Amtrak for the purposes of determining the scope of work required for both ADA and SGR work. Investigated structural and roofing components, electrical and plumbing systems, fire, security and safety systems, heating and air condition. Assisted in preparation of recommended improvements and estimates for ongoing and proposed maintenance costs impacts.

CSX Capacity Improvement – Track Superintendent
Responsible for overseeing and providing on-site Construction Management for all contract activities for the construction of several miles of new CWR rail double track territory as well as the installation of numerous high speed turnouts and crossovers. Also responsible for supervising the installation a new wayside train control system and the rehabilitation of several grade crossings, in addition to expansion of the CSX's Willard Double Hump Classification yard.

SYS TRA USA

NJ Transit Hudson-Bergen Light Rail Transit System – Construction Management Oversight and Resident Engineering
Responsible for expansion of the Weehawken Tunnel and construction of the Bergen-Line Station. Project involved a new light rail service, including stations, park-in-ride facility, overhead catenary power system, elevators, ventilation systems, wayside signals, VIS signage and Homeland Security systems. The design and build effort was to enlarge the existing 4,500 foot tunnel to accommodate a two track system. A new underground station was constructed 160 feet below the surface; access is via a vertical shaft which was accomplished by blasting the crown and tunnel sides and blasting the 60-foot diameter shaft for the three elevators from the surface plaza area. Was also responsible to monitor all design changes and T/M work associated with the station and plaza area for bus drop off and storage buildings, also for the installation of the Homeland Security systems for the underground station, Tunnel Avenue Station and Port Imperial Station. Later in the project monitored the erection of the Port Imperial Pedestrian Bridge to the New York Waterway Ferries. Work encompassed a 200-foot steel and concrete single span with elevators at both ends and access from the existing passenger station.

Lackawanna County Railroad Authority – On-site Construction Management Services
Responsible for newly constructed trolley tracks from existing mainline trackage to the Philadelphia Phillies "Red Barons" ball stadium. Work involved half mile track with OCS, grade crossings, passenger station and a track maintenance and storage building.

Delaware River Port Authority – On-site Construction Monitoring Services
Responsible to certify that all materials and workmanship for this project was completed in conformance with contract requirements and standards. 50,000 concrete cross ties were installed to replace existing wood ties. Work included tie installation, CWR thermal distressing, rail welding, and surfacing 14 miles of track and survey control. This work was performed around the clock to maintain project schedule and train scheduling constraints.

Delaware River Port Authority-PATCO Reverse Signaling – Project Engineer
Responsible for supporting the rehabilitation, design and construction of Reverse Signaling Capacity from Ferry to Linden Interlockings. Work performed included all modifications to signaling, blocking, interlocking, code generation, dragging equipment detectors and control systems necessary to permit complete automatic cab signal bi-directional operations.

Metro-North Station Improvements to Botanical Gardens, Woodland and Williams Bridge Stations – On-site Supervision and Field Inspection Services
Responsible for the station improvements, platform rehabilitations and hi-level platform extensions and cross over elevators at Botanical Gardens station along Metro-North's Harlem Line. Responsibilities also included adhering to the budget and schedule and conforming to contract specifications.

ERIK GREHL
Civil/Track Engineer

EDUCATION:
B.S., Civil Engineering, Villanova University, 2001

ASSOCIATION:
American Society of Civil Engineers – Philadelphia Branch

SUMMARY OF QUALIFICATIONS:
Mr. Grehl is a civil/track engineer for SYSTRA and provides support for various railroad projects. He has developed detailed design drawings, specifications, and procurement packages for various trackwork design projects. His responsibilities on these projects included, creating/editing track drawings and alignments, preparing cost estimates and submittals, and lastly, assisting other team members with workload to gain new knowledge and experience.

WORK EXPERIENCE:

PANY&NJ PATH Test Track
Worked within Inrail and performed design calculations to determine the proper curve radii, superelevations and speeds for the test track. Additionally, he aided in creating a procurement package for final submittal.

MTA/LIRR East Side Access – Force Account Track Inspector
Working with both Amtrak and the Long Island Rail Road (LIRR) forces for the reconfiguration of Harold Interlocking to provide access for the LIRR to the new tunnels leading into Grand Central Terminal in midtown Manhattan. Harold Interlocking, the busiest interlocking in North America, is part of the Northeast Corridor. This reconfiguration consists of the installation of 98 switches, numerous track alignment changes, installation of 200 catenary poles and signal modifications. All work is being performed while the interlocking remains active.

MTA/LMDC/EDC/PANY&NJ Lower Manhattan-Jamaica/John F. Kennedy International Airport (JFK) Transportation Project
Worked within Inrail to determine the proper curve radii and clearances for the Jamaica line creating a two track connection with the station. He also helped calculate distances and travel times between stations for scheduling purposes.

LIRR Atlantic Avenue Viaduct Rehabilitation
Worked within AutoCAD and Inrail to produce revised alignments produced from survey information that was imported into Inrail, analyzed, and recreated to remove the curve from within the station limits.

NJ Transit Penn Station Capacity Enhancements
Aided in the complicated analysis and realignment within Penn Station. Also, he determined required clearances, car envelopes, and platform geometry to accommodate better fitting track alignments and a wider platform.

NJ Transit Access to the Regions Core EIS
Worked with Microstation and Inrail to finalize the EIS drawings and re-work part of the proposed alignment. Also, Mr. Grehl determined quantities and costs for new trackwork and aided in producing the submittal package.

SYSTRA USA

NJ Transit Newark Penn Station Track 5 Extension
Worked within the team to finalize changes to the drawings, horizontal and vertical profiles, reviewed comments, and submitted a final set of drawings.

NYSDOT Internship
Reviewed construction plans to ensure compliance to NYS standards. He supervised site construction, verified various site measurements and reported to the chief engineer. Here he completed the NYSDOT Earthwork Inspection School.

Putnam Precision Engineering Dept. Internship
Reviewed engineering design plans for various components, measured and ensured exact dimensions, and obtained experience dealing with different manufacturing processes.

Senior Design Project in Water Resource Engineering – Member of a Team
Redesigned the storm water management system for Villanova's stadium area and presented the project to faculty and administration.

Undergraduate Research on High Strength Concrete
Experimented on the water to cement ratio verses compression strength to determine the most effective ratio which maximized compression strength with standardized materials.

ROBERT LATINSKY, P.E.
Constructability Engineer

EDUCATION:
B.S., Civil Engineering, Rutgers, the State University of New Jersey
B.A., Political Science, University of Pittsburgh 1973
Various employer-sponsored courses, 40 hours each: NJ Construction Law, Construction Inspection, Concrete Inspection, Electrical Inspection, Construction Management, Cost Estimating, Network Analysis (CPM Scheduling), Value Engineering, Negotiating Change Orders, Asbestos Abatement Procedures, Coastal Engineering, Health and Safety Training for Superfund Sites and Scaffolding, Construction Law and Claims, Design/Build Strategies and Approaches

REGISTRATIONS:
Registered Professional Engineer: NJ, NY, PA, CT

SUMMARY OF QUALIFICATIONS:
Mr. Latinsky is a specialist in managing the construction of a variety of transportation structures, multi-purpose buildings, and infrastructure, with an emphasis on public transportation. He is recognized for his achievements in change order control and claims mitigation. He has established detailed quality assurance requirements, inspected contractor's work on-site, and supervised the work of several inspectors, office engineers, and secretaries. Mr. Latinsky has developed methods and practices for managing construction compliance with plans and specifications, and this experience has served him well on constructability reviews of pre-bid documents. Mr. Latinsky has also been responsible for reviewing and approving shop drawings, developing and updating CPM schedules, including modification of schedules to account for changes and other impacts, preparing cost estimates, and negotiating change orders with contractors as well as coordinating activities with public agencies. Many of his assignments have required construction on an active transit property, requiring close coordination with operating personnel.

WORK EXPERIENCE:

NYCDEC/Turner Construction, Brooklyn, New York – Resident Engineer
Responsible for oversight of Local Law 11 façade repairs at the Brooklyn Army Terminal.

Amtrak ARRA, Rail Maintenance Facility, Hialeah, FL – Resident Engineer
Responsible for construction management of multi contract projects for improvements at Amtrak's Hialeah Yards. This includes construction of a new progressive maintenance facility including overhead cranes, car jacking systems, and truck wash systems, as well as replacement of existing electrical and mechanical systems for maintenance of Amtrak coaches. Other contracts include rehabilitation and replacement of yard track and switches, construction of a new Maintenance of Way Building, site lighting, and drainage improvements.

MTA Capital Construction East Side Access – Testing and Commissioning Manager
As part of the Operational Readiness Team, participated in development of the Testing and Commissioning Plan for the project, coordinate railroad systems testing and training with Long Island Railroad and liaison between the general engineering consultant and construction management consultant with regards to systems testing.

NJ TRANSIT Hudson Bergen Light Rail Transit, New Jersey – Project Manager
Responsible for various construction management tasks, including estimating, cost analysis, and negotiation of over $500 million of work associated with the first and second

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phases of the project, including civil and track work, electrification, and signals system construction and design, coordination of the RFI process between the Contractor and Designer, and supervision of inspectors for quality assurance and time and material/force account work associated with changes. Assist client in defending against a multi-million dollar delay claim.

NJ TRANSIT Rail Operations Center (ROC) and Communications Link, Secaucus, NJ – Resident Engineer
Responsible for construction management services for the ROC and associated communication and fiber optic systems improvements. The ROC, a three-story, 55,000-SF structure, combined NJ TRANSIT's system-wide train control and monitoring, traction power dispatch, and bridge operations into one facility. The facility includes redundant power feeds, a 1250 KW emergency generator and UPS systems, control theaters for rail and power operations, and SCADA system for control and monitoring of NJ TRANSIT's traction power system. The remainder of the facility is comprised of office, mechanical, and telecommunication support areas. NJ TRANSIT used a design/build delivery system for this project.

NYCDOT/NYCT Williamsburg Bridge Contract Package No. 6/BMT Line Reconstruction, NY – Transit Systems Engineer
Led the systems construction management effort for the team that provided project oversight, which involved the reconstruction of the main bridge span and approaches, including the demolition and reconstruction of NYCT's BMT Line. Mr. Latinsky was responsible for construction inspection, testing, system start-up and cut-in, and resident engineering services for all rail systems construction work, including electrical power, track work, signals, communications and traction power systems. He also oversaw construction of electrical AC service and HVAC for three new Central Instrument Rooms connected with the new signals/communications systems. The majority of the work, including system start-up, was accomplished during a five-month shutdown of the line.

Metro-North Railroad Improvements to Bronx Stations, Bronx, NY – Project Manager/Resident Engineer
Responsible for overseeing construction of station improvements and platform rehabilitation and extensions at Botanical Gardens, Woodlawn, and Williams Bridge stations along Metro-North's Harlem Line. The project also included construction of a pedestrian overpass, hydraulic elevators for ADA compliance, electrical AC service, shelter heating system, and station lighting. All work took place while stations were active, which required ongoing operations interface/scheduling among the contractor, Metro-North, and passengers.

NJ TRANSIT Newark Central Maintenance Complex, Newark, NJ – Project Manager/Resident Engineer
Responsible for a multi-phased project to construct a major new transit maintenance and repair facility. Phase I included rehabilitation and reconstruction of a 350,000-SF facility, including a heavy mechanical repair area, body repair area, unit repair area, central parts warehouse, non-revenue vehicle repair area, and wastewater pre-treatment facility. Mr. Latinsky was responsible for constructability reviews, project administration, coordination among contractors, subcontractors, and vendors. He also assisted the contractor develop, update, and modify the CPM schedule, and estimate, negotiate, and process more than $2.5 million in change orders.

EDWIN A. LOFGREN
Systems Manager, Construction Engineering

EDUCATION:
George Meany Center for Labor Studies, Silver Spring, MD
Suffolk County Community College, Long Island, NY
U.S. Army Engineering School

RELEVANT ADDITIONAL TRAINING:
Advanced Signal Training, Long Island Railroad
Project Management, Long Island Railroad
Budgets & Contracts, Long Island Railroad
Effective Business Writing, Long Island Railroad
Diversity in the Workplace, Long Island Railroad

COMPUTER SKILLS:
Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Procurement Logistics System (PLS)

SUMMARY OF QUALIFICATIONS:
Mr. Lofgren has more than 40 years of experience in the construction and maintenance of railroad signal systems. He brings a wealth of management experience to each project, including quick decision-making skills in resolving diverse problems and/or challenges. He possesses the ability to communicate and coordinate effectively at all levels and forms detailed, sensitive assignments with dependability and function. His engineering expertise includes work performed for both public and private entities, such as New York City Transit (NYCT) and Long Island Railroad (LIRR).

WORK EXPERIENCE:

Parsons – Senior Signal Engineer
Supported New York City Transit's (NYCT) ATS-A test group with Field Integration Testing at Rail Control Center (RCC). Mr. Lofgren assisted NYCT (CPM) Signal Engineers in the analysis of signal supervisory system performance. He also reviewed circuit plans and verified circuits as required.

Maitra Associates – Test Engineer
Provided inspection services for Parsons Engineering on New York City Transit's Carnarsie Communication Based Train Control (CBTC) project. Mr. Lofgren witnessed Integration & Interoperability tests for car borne equipment provided by Siemens & Alcatel. He also insured contract compliance with signal system requirements.

Northeast Construction Services – Resident Engineer
Represented New York City Transit (NYCT) (CPM) on the SIRTOA Staten Island Rapid Transit Signal Modernization Project. This project included new electric switches, wayside signals, and automatic speed control. In addition to contract compliance, Mr. Lofgren assisted the contractor in proper installation and testing of signal and communication equipment. He also represented NYCT (CPM) on ATS (Automatic Train Supervision) project and ensured contractor compliance with NYCT signal installation procedures. His responsibilities on this project included reviewing circuit drawings, testing, and reviewing AWO requests as required. Mr. Lofgren was also the representative for CPM on the ATM-SONET project, responsible for ensuring contractor compliance with communication installation procedures for power systems and fiber optic cable.

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O'Brien Kreitzberg (URS) – Project Engineer
Provided expertise in the procurement of railroad-related projects for the firm of O'Brien Kreitzberg in the New York office. Mr. Lofgren's assignments included cost estimating, reviewing technical drawings, and designing and maintaining a railroad construction database used for cost estimating services.

Long Island Railroad (LIRR), Jamaica, NY – Foreman, Construction
Responsible for performing site surveys and approving construction methods. Mr. Lofgren interfaced new signal huts with existing locations, reviewed and finalized as-built drawings, installed and tested fiber optic cables for signal supervisory control systems, and installed and tested communication modems. In addition, he developed new FRA & LIRR testing procedures.

Long Island Railroad (LIRR), Jamaica, NY – Staff Engineer, Scopes, Schedules & Estimates
Responsible for developing conceptual and detailed scope documents for force account projects. Mr. Lofgren prepared order of magnitude and detailed cost estimates for construction labor, material, design, and project management. He supported the development of resource-loaded work schedules and monitored project budgets. He also assisted and represented project managers in contractor meetings, reconciled force account labor, and prepared (51R) material requests for the following projects:

- PN-22 - Micro Processor Installation - Garden Interlocking
- PN-2D - Remote Supervisory Installation - Hempstead, Long Beach Yards
- PN-3N - Signal Improvement Project (5-year), entire LIRR
- PN-3S - 100 Cycle and Electronic Track Circuit Replacement Mainline & Port Jefferson Branches
- PN-3W - Atlantic Branch Interlocking Replacement

Long Island Railroad (LIRR), Jamaica, NY – Foreman, Signal Inspector
Supervised new switch/signal installations and upgraded and installed mechanisms for signal crossings. Mr. Lofgren also supervised testing in compliance with FRA (Parts 233-236) and LIRR testing procedures (C & S 223 & 227). His additional responsibilities included reviewing and performing maintenance test procedures for all signal-related equipment and maintaining a database of scheduled tests.

MICHAEL McDONALD, P.E.
Project Manager

EDUCATION:
B.S., Electrical Engineering, University of Utah, 1974

REGISTRATIONS:
Professional Engineer: OR (12122), and CA (CS7139)

SUMMARY OF QUALIFICATIONS:
Mr. McDonald has 28 years of experience in both design and construction capacities for rail transit projects. Mr. McDonald was responsible for coordination and design of systems conduit/ductbank and systems buildings and installation of conduits/ductbank for the traction power substations for the Westside Light Rail project. He has also served as Project Engineer and Assistant Resident Engineer with complete construction responsibilities for electrical and all systems elements including traction power, signal and communications for the 3-mile tunnel portion of the Westside Corridor project. He served as the Resident Engineer coordinating the system elements for the South Sacramento Corridor Extension Project. Most recently, Mr. McDonald served as the Systems Design Manager for the LACMTA Gold Line Eastside Extension.

WORK EXPERIENCE:

LACMTA Gold Line Eastside Extension, Los Angeles, CA – Systems Design Manager
Responsible for coordinating the traction power, overhead contact, train control and communications systems designs and coordinating all four systems designs with all other design elements. Mr. McDonald coordinated design efforts of several design firms to provide a comprehensive systems design.

Sacramento South Corridor Light Rail Sacramento, CA – Systems Resident Engineer
Responsible for the traction power and signal system elements for the civil and systems contract in addition to electrical elements needed for the stations. Mr. McDonald's responsibilities included submittal administration and review, response to requests for information, construction oversight, supervision and oversight of traction power, OCS and signal inspectors, administration of change notices and change orders, inspection of electrical elements of the stations and coordination with electric, as well as telephone and city fire alarm utilities.

Pasadena Blue Line Light Rail, Pasadena, CA – Project Engineer
Participated in a value engineering study to determine and recommend the best course of action to complete the construction of the Pasadena Blue Line within budget. The work performed included analysis of plans to determine design status, development of minimum criterion for use of plans for design-build contract, assessment of individual plan sheets against the criteria developed for usability, as well as review of signaling, traction power and communication systems, including emergency communication systems, for redundant and/or unnecessary features and coordination with other disciplines and development of a comprehensive recommendation of a course of action.

San Jose VTA Capital Light Rail Extension, San Jose, CA – Project Engineer
Provided coordination and design for systems design including street lighting, traction power, signal and communication ductbanks. Provided support for traction power design.

Tri-Met Westside Corridor, Portland, OR – Project Engineer, Systems Resident Engineer
Designed signal communication, traction electrification, and facilities raceway systems for Westside Light Rail and Hillsboro Light Rail extensions. Reviewed signal communication,

traction electrification, and facilities raceway catalog cut sheets, shop drawings, installation procedures and design calculations. Inspected installations and coordinated with follow-on signal, communication, and traction electrification work. Witnessed testing, performed acceptance inspections, made design changes as necessary to accommodate field conditions and changing design requirements, directed field corrections, and recommended acceptance/rejection of work as completed. Coordination work of electrical (sub)contractors with other disciplines and follow-on contracts. Functioned as Assistant Resident Engineer (electrical) for the 3-mile long tunnel section of the project.

Banfield Double Tracking, Portland, OR – Project Engineer
Engineering for installation of one new substation, modifications to an existing traction substation and preparation of installation drawings including substation equipment, conduit and ductbank, dc feeders, grounding and utility interface.

Tri-Met Ruby Junction Operations Facility Improvements, Portland, OR – Project Engineer
Provided design support for all system elements including signals, communications, OCS and traction power related to the improvement of the rail operations facility.

Washington Department of Transportation, Seattle, WA – Project Engineer
Provided electrical and control system design for Kingston Ferry Terminal passenger overhead loading ramp. Design included low voltage power distribution, interior and exterior lighting, emergency power generation and switching, PLC control system, PA, telephone, and intercom systems and engineering cost estimate.

Lewiston-Clarkston Bridge, Washington – Control Systems Engineer
Provided control system design and quality control for the electrical design for rehabilitation of the Lewiston-Clarkston Bridge.

4th Street Bridge, San Francisco, CA – Project Engineer
Provided design management, coordination and quality control for the electrical, control, Overhead Contact System (OCS) and OCS structural elements of the design for the seismic rehabilitation of the 4th Street Bridge.

Sacramento International Airport, CA – Project Engineer
Design for relocation of ductbanks, manholes and taxiway and apron lighting to support apron and taxiway expansion at Terminal A.

Spokane Airport, WA – Control Systems Engineer
Design communication backbones for the baggage handling EDS (explosive detection system) machines and for the TSA telephone system. Design included providing network switches, patch panels, equipment racks, conduit and raceway and termination points for telephone, fiber optic and CAT 5e systems.

CHARLES MILLER
Estimator

EDUCATION:
B.A., English, Hartwick College, Oneonta, NY 1972

SUMMARY OF EXPERIENCE:
Mr. Miller has estimated requests for contract change and product orders, and has successfully negotiated and closed added scope of work changes to base contract. He has scheduled work and resources of project team within specification deadlines. He also forecasted and planned material requirements for off-the-shelf product inventory.

WORK EXPERIENCE:

MTA Capital Construction LIRR East Side Access, NY – Signal Package Manager
Responsible for review of consultant design effort for the signaling portion of the East Side Access project, Metropolitan Transportation Authority. Mr. Miller was responsible for monitoring review of design documentation for signal systems work and reviewing labor requirements to maintain constant work flow. He estimated change order requirements for revised scope of work and coordinating interface between systems designer and customer engineers. Mr. Miller reconciled project schedules and recommended corrective actions.

BART Advanced Automatic Train Control (AATC), CA – Resident Engineer
Responsible for advanced automatic train control contract. Mr. Miller was responsible for monitoring field installation effort for work associated with radio based train control equipment and tracking and coordinating documentation for contractor payment requests. He also developed negotiating, and executing change orders for additional contractor scope of work.

ALSTOM Signaling Inc., Rochester, NY – Project Manager
Responsible for transit contracts in Boston, Chicago, Cleveland, Los Angeles, New York City, and San Francisco. He was responsible for coordinating design, application engineering, manufacturing, test and field installation forces for contracts valued to $60 million dollars. He also developed, tracking, and modifying activity requirements on the Critical Path Management System to achieve on-time delivery. Mr. Miller was tasked with maintaining and reporting monthly labor, material, and expense cost figures to support business reviews. He created, submitted, and closed contractual invoicing and payment requirements. Mr. Miller tracking payments for all accounts receivable and accounts payable contract information and estimated and negotiated to completion contract change orders valued in excess of $20 million. He monitored contract-required Disadvantaged Business Enterprise participation and coordinating activities and field resources with subcontractors for the installation and testing of on-site equipment.

Supervisor, Contract/Product Order Department
Supervised acceptance, scheduling, shipping, and invoicing customer product, contract, and repair and return orders. Mr. Miller booked customer orders, in excess of $100 million annually, achieving 99 percent department accuracy rate. He was responsible for tracking warranty status of all in-service material while maintaining detailed logs of all in- and out-of-warranty and repairing and returning products. Mr. Miller developed off-the-shelf inventory system for high volume products exceeding $6 million in sales annually. He was responsible for forecasting and placing product requirements on manufacturing system to support inventory turns while maintaining acceptable inventory levels. Mr. Miller updated and maintained information data files for transit, railroad, and electrical companies. He was responsible for training individuals in all facets of departmental duties and

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procedures. He facilitating interaction of sales with manufacturing, engineering, and field test forces and implemented on-line order entry system with MIS.

Estimator
Responsible for the compilation of material, engineering, labor, and test information necessary to quote major transit and railroad contracts. Developed estimates working with manufacturing, engineering, factory and field test, and subcontractors. Interfaced with sales and management to compile bid into competitive package.

Order Writer
Responsible for the timely and accurate booking of customer orders. Evaluated and logged customer orders. Checked and verified work of other department personnel.

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THOMAS M. PERMODA
Resident Engineer

EDUCATION:
B.S., Civil Engineering, Michigan Technological University, 1973

REGISTRATION:
Engineer-in-Training

SUMMARY OF QUALIFICATIONS:
Mr. Permoda has over 39 years of experience in providing engineering services and brings a wealth of knowledge and experience to each project from inception to completion. He is experienced in all facets of civil and structural engineering, including the construction of new structures, rehabilitation of existing structures, and stormwater drainage design. His responsibilities have included engineering drawings and specifications, performing analyses, and providing construction inspection and construction management services for facilities and a variety of rail and bus projects. His experience includes work performed during his 20 years at Southeastern Pennsylvania Transportation Authority (SEPTA), where he held project engineer positions in both the Structural Engineering Section and the Civil Engineering Section of the Bridges and Building Department of the Engineering, Maintenance & Construction Division.

WORK EXPERIENCE:

Southeastern Pennsylvania Transportation Authority, Philadelphia, PA – Senior Project Engineer, Maintenance & Construction Engineering - Stimulus Program Department
Provided engineering services for stimulus projects that included bridge replacements and concrete repair, a rock stabilization project, and numerous railroad station rehabilitations. Mr. Permoda's construction management duties included managing field inspectors, conducting and documenting project progress meetings, and developing punch lists. He was responsible for processing and reviewing RFIs, shop drawings and submittals, and close-out documents. He coordinated railroad track outages, power outages, and signal/communication outages on work within track limits. He also coordinated the construction work on a running railroad. Mr. Permoda ensured the safety and cleanliness of all construction sites and made sure all construction personnel were track safety-certified.

Southeastern Pennsylvania Transportation Authority, Philadelphia, PA – Project Engineer, Maintenance & Construction Engineering Section of the Transit Facilities Department
Provided project management services for the $15 million dollar North Philadelphia Transportation Center (NPTC) project that included the rehabilitation and expansion of the North Philadelphia Station on SEPTA's Broad Street subway. Mr. Permoda processed all shop drawings and resolved issues, conflicts, and questions between SEPTA, the consultant, and the contractors to ensure that the project was constructed in accordance with the contract documents. He ensured that all RFIs were answered expeditiously and conducted biweekly progress meetings. While working closely with the Project Manager and Field Inspector, he provided field inspection services to confirm that all construction was in compliance with construction specifications and drawings. In addition to developing punch lists, Mr. Permoda monitored punch list completion and processed all close-out documentation.

The NPTC project included the following:

- Installation of three new elevators - one from street to mezzanine level and two from mezzanine to platform level.

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- Installation of a new escalator.
- Expansion of the south mezzanine at the mezzanine to platform elevators and the escalator and stair to improve sight lines.
- Installation of a new cashier booth and fare line.
- Rehabilitation of Police Zone Headquarters shower, bathroom, and office facilities.
- New finishes throughout the station which included tiling the station platforms and walls, and painting walls, ceiling, and columns.
- Rehabilitation of all the stairs throughout the station, realignment of three stairs, and installation of new glass block enclosed headhouse structures over five stairs and the elevator and escalator.
- Conversion of the north mezzanine from an exit only area to an entrance and exit area.

Southeastern Pennsylvania Transportation Authority, Philadelphia, PA – Project Engineer, Structural Engineering Section of the Bridges and Buildings Department
Responsible for the inspection of existing structures and new construction, structural analysis and design, preparation of engineering drawings and specifications, project management for construction of new structures, and rehabilitation of existing structures.

Significant projects included the following:

- Emergency Exit Door Replacement Program
- Subway Ventilation Structure Rehabilitation Program
- 60th Street Station Stair Replacement Program
- Fern Rock Police Station
- Wyoming Station Headhouse Rehabilitation
- 11th Street Station Platform Edge Repair and ADA Tile Installation
- Snyder Station Rehabilitation
- Fall Protection at the Berridge Bus Shop
- Crane Installation at the Fern Rock Machine Shop
- Walnut-Locust Subway Column Repairs
- Allegheny Station Subway Column Repairs
- Comly Bus Depot Sound Barrier
- Southern Bus Depot Sound Barrier
- Protection for SEPTA Underground Facilities from Heavy Loads, Cranes and Trucks

Southeastern Pennsylvania Transportation Authority, Philadelphia, PA – Project Engineer, Civil Engineering Section of the Bridges and Buildings Department
Provided civil engineering design services for parking facilities throughout SEPTA's system. This included parking lot layout, pavement design, stormwater drainage design, preparation of drawings and specifications, and coordination with municipal, city, and state agencies in completing these projects. Mr. Permoda also evaluated many existing parking facilities for possible replacement or rehabilitation. Significant projects included the following: 69th Street Terminal Parking Facility; Concrete Paving for Germantown Bus Facility; Parking Facilities for Luzerne Facility; and Pavement Maintenance Management Program for SEPTA's Parking Lots System Wide.

O'Brien-Kreitzberg & Assoc., Inc., Pennsauken, NJ – Project Engineer
Performed a solid waste study for the Camden Resource Recovery Facility, as well as field investigations of residential structures, condominium developments, and parking garages with architectural, mechanical, structural, and flooding problems. Mr. Permoda participated in a value engineering report for SEPTA's' Midvale Bus Garage. He also made presentations to condominium associations and produced final reports.

MICHAEL SHURGALA
Office Engineer/Inspector

EDUCATION:
Certificate (CPM Program), Construction Management ,Rutgers, the State University of New Jersey, 2007
On-Track Safety Training (including RWP training), Amtrak and NJ TRANSIT (Hudson-Bergen Light Rail)
AMT-2 Electrical Operator Instruction for Working in Railroad Electrified Territory.
STOP, Amtrak Supervisor Training Program
OSHA - 30 Hour Training

COMPUTER SKILLS:
Proficiency in Microsoft Word, Microsoft Excel, Microsoft Visio. In addition, experience with Primavera Expedition tracking project transmittals, submittals and RFI's. Also utilized Primavera (P4) scheduling to analyze/input project scheduling data for both baseline and CPM updating, analyzing critical path activities in relation to how those activities effects the overall project completion date.

SUMMARY OF QUALIFICATIONS:
Mr. Shurgala is an experienced office engineer and inspector with 19 years of experience. His extensive office engineer work has included monitoring contractors' daily activities, developing master logs, and spreadsheets, budgets, and ensuring materials and equipment meet contract requirements. In addition, he has served as construction manager and has planned and coordinated the installation and repair of high voltage railroad utility lines. In addition to his catenary, substation, and third rail experience, Mr. Shurgala has also been involved in various rail renewal projects including, but not limited to, providing temporary negative propulsion return across insulated joints; testing insulated joints for proper resistance; and replacing impedance bonds.

WORK EXPERIENCE:

PANY&NJ Capitol Security Program – Lead Superintendent
Responsible for overseeing the installation of a $15 million communication system infrastructure on the PATH rail system. Mr. Shurgala's duties included the planning and coordination of 800 MHz radiating (antenna) cable and 48 strand fiber optic backbone with 12 strand fiber spurs throughout the PATH system—an installation critical to emergency responders. He supervised superintendents and monitored the daily activities of the contractor; extracted information from daily reporting to develop master logs and spreadsheets indicating installation progress; and communicated with PATH representatives daily, coordinating work train platforms, available work areas and other PATH/Port Authority vital resources such as PA inspectors working in conjunction with superintendents monitoring daily activities.

ConnDOT Danbury Branch Signalization, Danbury, CT – Inspector
Responsible for inspecting this signalization project. Mr. Shurgala also served as the office engineer. This was a major capital project that proposes the entire Danbury Line be signaled with a Traffic Control System and cab signals with improvements to track reconfigurations with a vital micro processor based interlocking system.

NJ Transit Hoboken Ferry Terminal, Phase II – Superintendent
Led oversight activities and daily documentation of structural demolition and the installation of interior and exterior piles. The project also included the monitoring of contractor quality control activities to assure compliance with contract documents. Mr. Shurgala made sure that all materials and equipment installed by the contractor meet the

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contract requirements. Aside from the civil work associated with this project, there was a $350,000 fiber-optic lighting installation as part of the phase II contract. The review of conceptual drawings (electrical) provided for efficient placement of new equipment and participating in design review meetings and budget planning on behalf of client.

NJ Transit/Meadows Maintenance – Electrical Project Manager
Responsible for overseeing electrical contractor's installation of various electrical apparatus', routing of 4160-volt medium voltage cable. In addition to managing the contractor's day-to-day activities, Mr. Shurgala was also responsible for the allocation of million dollar budget with additional supplemental costs.

DRPA PATCO/Lindenwold Concrete Tie Installation – CM Inspector
Responsible for the oversight and replacement of 35 year old wood railroad ties with newer, more durable and longer lasting concrete railroad ties between Lindenwold and Camden, NJ. Mr. Shurgala was also responsible for monitoring the production associated with the installation of concrete railroad ties, monitoring and overseeing all of the rail distressing of 132 RE, and all thermite welding and surfacing associated with the tie installation project, plotting all surveys and geometry provided by contractor and maintaining daily inspection reports.

SEPTA Checking Signal Equipment at New Frankford Terminal.
Responsible for cross checking all points inside signal houses against "as built" plans.

Washington Group International – Former Line Technician
Inspected and maintained 800VDC catenary system, as well as 13,200VAC/800VDC substations. Also, Mr. Shurgala performed inspection, testing, installation, maintenance and repair of a wide range of electrical power apparatus, including distribution systems, overhead catenary system, transformers, rectifiers, power conversion equipment, high voltage AC and DC switch gear, and auxiliary equipment; inspects overhead contact wire for gauge and integrity. He maintained, repaired, and replaced overhead contact wire, and all related parts and devices; responds to equipment failure. Mr Shurgala's responsibilitites also included trouble shooting and restoring equipment to service; emergency by-pass procedures and/or actuates alternative power routes during emergencies. He read and interpreted electrical blueprints, and testing equipment to various locations along the rail line.

Amtrak – Former Lineman
Directed, coordinated, planned, constructed, installed, and maintained the 12,000 VAG catenary system, in a supervisory capacity. Additional duties included AC high voltage propulsion power testing, maintenance and restoration; rail renewal projects, catenary and substation renewal projects and other systems maintenance.

Secaucus Transfer Station
Responsible for the review and approval of all invoices associated with the Amtrak/NJ Transit force account personnel utilized on the project.

Hudson-Bergen Light Rail Phase I – Line Technician
Responsible for inspecting and maintaining 800 VDC catenary system and 13,200VAC/800VDC substations. Mike performed inspections, testing, installation, maintenance, and repair of a wide range of electrical power apparatus including distribution systems, overhead catenary systems, transformers, rectifiers, power conversion equipment, high voltage AC and DC switch gear and auxiliary equipment. He also inspected overheard contact wire for gauge and integrity.

ROBERT K. THOMAS, P.E.
Assistant Vice President
Deputy Director Facilities

EDUCATION:
B.S., Civil Engineering, South Dakota School of Mines and Technology, 1971

REGISTRATIONS:
Registered Professional Engineer: PA, VA, NY
Certified Plant Engineer

ASSOCIATIONS:
American Society of Civil Engineers
ASCE National Infrastructure Committee
Building Officials Code Administrators International
Association for Facilities Engineering

SUMMARY OF QUALIFICATIONS:
Mr. Thomas has more than 30 years of experience in civil engineering and facilities design and Engineering management. He has provided services for site development, master planning, facility design, utility coordination, industrial engineering, and project and construction management. He has been project manager on multi-million dollar facility rehabilitation projects, maintenance facilities and major Department of Defense mission facilities. Mr. Thomas is the assistant vice president and deputy director of right-of-way and facilities, leading corporate facilities engineering in the planning, design (structural and Industrial), and construction management of railroad and transit associated buildings and structures such as maintenance facilities, stations, terminals, parking garages, and associated infrastructure.

WORK EXPERIENCE:

PANY&NJ PATH "Call-In" Track and Civil Engineering Design Services, New York – Task Manager
Responsible for the design of new track, traction power, electrical, and communication systems in tunnels E and F as part of the PATH Downtown Restoration Program following the WTC disaster. Tunnels E and F are twin bored tunnels under the Hudson River for Exchange Place Station in New Jersey to the World Trade Center in Manhattan.

LIRR East Side Access Project, New York – Asset Manager
Responsible for the development of the project's Asset Management Plan and a portion of the Operations and Maintenance Plan. Mr. Thomas is also responsible for other efforts required to ensure that facilities and equipment are prepared for opening day operations. This is an $8 billion project, which will allow trains originating in Queens and Long Island, NY to go directly to Grand Central Terminal in Manhattan.

Jersey City Municipal Services Facility, Jersey City, NJ – Lead Industrial Designer
When completed, this new $56 Million Municipal Services facility will consolidate municipal services for Jersey City to a modern facility replacing several outdated current facilities presently in use. The new facility has repair bays for complete maintenance for Jersey City's police, fire, and sanitation vehicles as well as renovated shop facilities for DPW support services. The new maintenance facilities will include new vehicle lifts, cranes, service fluids, and tire services.

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Façade Rehabilitation, Brooklyn Army Terminal, Brooklyn, NY – Resident Engineering Services
Responsible for the rehabilitation of the concrete facades to buildings A, B, administration and laundry at the Brooklyn Army Terminal, Brooklyn, NY. Mr. Thomas is monitoring the contractors' activities, providing engineering recommendations with regards to repair methods and materials as well as approving all contractor required submittals and repair quantities for payment.

NYCT Flood Mitigation- Mechanical Ventilation Closure, New York, NY – Project Manager
Responsible for the development of a prototype devise for the temporary closure of the subway sidewalk ventilation grates. This one of a kind devise will close during periods of heavy rain to prevent flooding of subway system caused by rain water overwhelming the existing subway pumps. It is prototypical devise that is part of an overall system modification to the subway ventilation grates.

MBTA Rockport Commuter Rail Station – Project Manager
Responsible for the renovation and expansion of the station and layover facility in Rockport Massachusetts. Project includes the realignment of four tracks and switches, a new 800-foot covered platform, engine shed, and crew facilities as well as lighting, parking and electrical power upgrades. Additionally, construction phasing plans are developed to accommodate station operation during renovation of this vital end of the line facility.

SEPTA Fern Rock Shop Roof Replacement Project, Pennsylvania – Project Manager
Responsible for this $7.2 million capital improvements project to restore the masonry façade and replace a failing roof on this 155,000-SF maintenance facility. The work associated with this project will ensure a water tight working environment for SEPTA's employees in maintaining its Broad Street Subway vehicles.

NJ TRANSIT Hudson Bergen Light Rail
Working with PMOC prepared cost estimates relating to contractor claims and change orders associate with the construction of the light rail system. Claims were associated with foundations, communications and electrical systems.

NYCT LEED Certification Commissioning Services Fulton Street Transit Center, New York, NY – Project Manager
Responsible for the commissioning services required for LEED certification. This commissioning provides third party validation and documentation, using an established rating and measurement system, of the design intent and environmental performance of key building systems. Three areas of the Energy and Atmosphere (EA) portion of the criteria were considered to include (1) fundamental commissioning of the building energy system (2) measurement and verification and (3) green power. When completed the FSTC will be LEED Silver Certified.

NJ TRANSIT Hilton Bus Garage and GOB Parking Facility, Maplewood, NJ – Project Manager
Responsible for the structural condition assessment and rehabilitation of the parking deck above the Hilton Bus Garage and the GOB parking facility in Maplewood, NJ. This study provided an evaluation of the structural integrity of the precast concrete structures, architectural finishes and mechanical and electrical systems. Failure mechanisms, condition evaluations and remedial methods were identified. The final report provided recommendations for structure rehabilitation, project costs and a prioritized schedule of work.

WPA / Joseph Guirgis

PROFESSIONAL EXPERIENCE

RICHMOND TESTING LABORATORIES INC., Staten Island, NY — July 2010-Present
Certified Special Inspector
Aurthor Kill Bridge, Staten Island, NY

SOR TESTING LABORATORIES, INC., New Jersey — July 2001-Jan 2010
Certified Special Inspector
Greystone Park Psychiatric Hospital, Morris Plains, NJ
Plaza #5 (33-Story building) Harbor Side, NJ

- Performed fielded inspections for commercial, industrial, construction in accordance with ASTM codes.
- (PSF) Footing observation.
- Back fill maximum dry density observation.
- Reinforcing steel observation.
- Concrete testing and observation.
- Fire proofing testing and observation.
- Asphalt testing and observation.
- C M U testing and observation.
- Water stops, fire stops, dray wall and insulation observation.
- Prepare daily reports for the performed work.

U.S. ENGENERING LABROTORIES CO., New Jersey — May 1999-July 2001
Certified Inspector

- Performed fielded inspections for commercial, industrial, construction in accordance with ASTM codes.
- Performed earth work for soils (PSF and back-fill compaction).
- Prepared daily reports for projects activities under inspections.
- Communicated with contractors regarding works not in compliance with project specifications or codes.
- Read and interpreted engineering plans, blue prints and specifications.
- Operated and transferred nuclear moisture density equipment where required.
- Performed the necessary tests for Concrete, Soils, Sanitary Sewers, Storm Drain Sewers, Water Main Piping, Asphalt, Fire Resistive and Fire safe, Water Proofing, Reinforcing Steel and CMU Block Walls.
- Read the project drawings and observed the work in progress.

EDUCATION

Alexandria Commercial Institute
Associate degree: Management

CREDENTIALS

- ACI Concrete Field Testing Technician – Grade I. Certification ID [redacted]
- ACI Concrete Construction Special Inspector. Certification ID # [redacted]
- Q/C Resource Training Certification. Certification ID [redacted]
- 8 Hour Hazwoper Refresher Training. Instructor [redacted] Certification [redacted]
- HazMat Refresher Course for Nuclear Gauge requirements: 49CFR 172 subpart H and IATA 1.5.2.

PROFESSIONAL EXPERIENCE

DELTA TESTING LABORATORIES, Mount Vernon, NY 2007-Present
Lab Manager
INDEPENDENT TESTING LABS., College Point, NY 2007-Present
Field Technician
Responsible for ensuring Field Technicians are properly trained, ensuring job coverage and overseeing their performance in the field and in the laboratory.

Concrete, Mortar, & Grout Inspection

- Determining P.S.I. using the Windsor Pin Test System and Windsor Probe Test System
- Determining Slump using Slump Cone
- Obtaining Air Percent in Concrete utilizing Air Pressure Pot
- Obtaining Concrete Core Samples using Concrete Coring Drilling Equipment
- Concrete Batch Plant Inspection
- Masonry, Core drilling

Steel Inspection

- Rebar, Bolting, and Fire stopping Inspection
- Load test

Soil Inspection

- Soil Compaction using Nuclear Densometer / Sand Cone
- Determining Soil Bearing Capacity using the Windsor Penetrometer
- Sub-grade Inspection

Laboratory Testing

- Wash Sieve Analysis , 5 point proctor
- Compressive strength of concrete materials
- Calibration of various gauges
- Soil classification (soil boring), Air content (concrete)
- Unit Weight test, Brick Absorption test
- Plastic Limit, Liquid Limit

Sampling of Roadwork projects include:
433 Broadway, NYC Concrete; rebar; Masonry; soil; **413 E 69th Street,** NYC; **164, 184 Kent Avenue,** Brooklyn, NY; **400 Kingsland Avenue,** Brooklyn, NY; **789 Co-op City Blvd.**, Bronx, NY; **729 Webster Avenue,** Bronx, NY; **77 W 45th Street,** NYC; **231 Duffield Street,** Brooklyn, NY; **401 Park Avenue South**, NYC; **80 Bruckner Blvd**, Bronx, NY; **80 DeKalb Avenue**, Brooklyn, NY; **424 Park Avenue South,** NYC; **2nd Avenue Subway**, East Side excess, Long Island City, NYC; **Columbus Circle,** new train station

Sampling of construction projects include:
World Trade Center, Tower # 2, NYC Concrete Inspector for Foundation work
Mt. Sinai Hospital, NYC Concrete; rebar and soil
Rego Park Mall, Queens, NY Concrete; rebar; Masonry; soil; fire proofing; fire stopping and more
57 Reade Street, NYC Concrete; rebar; Masonry; soil; fire proofing; fire stopping and more
2 Cooper Sq., NYC Concrete; rebar; Masonry; soil; fire proofing; fire stopping and more
Fordham University, Bronx, NY Concrete; rebar; Masonry; soil; fire proofing; fire stopping and more
Delta Airline, JFK, Cargo 21; **USTA**; **Barnard College,** NYC; **Jamaica Hospital,** Jamaica, NY Nursing Center

U.S. CONSTRUCTION, INC., Brooklyn, NY 2006-2007
Project Manager

RITE AID PHARMACY, Brooklyn, NY 2003-2006
Manager 2005-2006

- Processed customer efficiently and effectively
- Assisted with vault operations
- Served as a mentor
- Worked well as a team member and assisted branch manager with special project
- Cashier, stock, photo express

EDUCATION

New York City College of Technology, Brooklyn, NY
A.A.S. Civil Engineering Technology
A.A.S. Construction Management

CERTIFICATIONS AND LICENCES:

- ACI Concrete Field Testing Technician – Grade1. Certification ID [redacted]
- ACI Concrete Construction Special Inspector
- NICET- Material Testing Method – Level 1
- USNRT- Radiation Safety – Nuclear Densometer
- OSHA 10 Hours.

COMPUTER SKILLS:

- Microsoft Word
- Microsoft Excel
- Microsoft Power Point
- Microsoft Access
- Adobe Photo shop, Photo express.
- Auto Cad

PROFESSIONAL HIGHLIGHTS

2001-Present

- Experienced in the development and implementation of field inspection, analyzing standard protocols to ensure uniform conduct of field inspections and making recommendations to ensure standardized interpretations.
- Five years experience working in the construction trades as inspector and quality control.
- Performed controlled inspections such as: Structural, Post-tension cable, Soil analysis, Soil test, Concrete test, Underpinning test, Steel, Masonry, Fire stopping, Fireproofing and others.

CANTOR SEINUK GROUP, New York, New York
AMERICAN STANDARD TESTING LAB, Great Neck, NY
BIG APPLE TESTING LAB, Whitestone, NY
Structural Field Inspector

PROJECTS

NYCTA-Highbridge Yard	Slattery Skanska	Controlled inspections
MTA Revenue Facility	HRH	Controlled inspections
Emergency Sewer Repair	Kenneth Delaney	Controlled inspections
Shoreham Power Plant	Modern Continental	Controlled inspections
West Medical Center	Granary Assoc	Controlled inspections
NYCDOT Bridges	Greenman/Peder	Controlled inspections
Grand Central Terminal	ECCO III	Controlled inspections
Battery Park Authority	CDS Marine Cons	Controlled inspections
NYC/DDC	NYC/DDC	Controlled inspections
NYC/DOT	O'Brien Kreitzberg	Controlled inspections
NYCHA	NYCHA	Controlled inspections
Con Edison	Con Edison	Controlled inspections
Westin Hotel-Times Square	Tishman	Controlled inspections
36 West 33rd street	Tishman	Controlled inspections
Teachers College-Columbia U.	Granary	Controlled inspections
Memorial Sloan-Kettering Cancer Center		Controlled inspections
Sole on the Ocean	Bovis - Miami	Special Inspector
10 West End Ave. Building	Gotham	Structural Inspector
1269 Lexington Ave, Building	Bovis	Structural Inspector
Building I-Building H	Bovis	Structural Inspector
Brooklyn Technical College	Tishman	Structural Inspector
68th Street & 1st Avenue	Hunter Roberts	Structural Inspector
86th Street & Lexington Avenue	Bovis	Structural Inspector
Avalon Building, Brooklyn	Bovis	Structural Inspector
Mayflower Building	Bovis	Structural Inspector
798 Amsterdam Ave	Gotham	Structural Inspector
775-795-805 Buildings	Tishman	Structural Inspector

WPA / Oscar Rojas

EDUCATION
Universidad del Valle, Cali, Colombia 1995
B.A., Survey Engineer

CREDENTIALS

- ACI level I
- ACI level II – Special inspector
- 10 hours OSHA training
- 4 hours NYC-DOB Supported Scaffold Certificate
- Amtrak safety system, New York City
- Post-Tension cable inspection, City of Miami
- Certificate, Tracks Safety Job, MTA-LIRR, New York, 2003
- B.A., Nuclear Management Equipment, Troxler Equipment, New York, 2002
- B.A., Field Technician Soil, DDC, New York, 2002
- Certificate, Concrete Technician, American Concrete Institute, New York, 2000
- Safety in Construction, Camacol, Colombia

ENGINEERING & TECHNICAL PERSONNEL RATE SCHEDULE

Performance of Expert Professional Construction Management Consulting Services

Firm Name LiRo Engineers, Inc.

**Status: E - Employee; SC - Subconsultant

***Multiplier will = 1 for partners and principals

PANYNJ Title	Employee Name	LIRo Title	Status**	Actual Hourly Rate	Multiplier***	Billing Rate	Premium Rate (Actual)	
							OT	Night
Project Managers	Burton, Michael	Project/Contract Manager	E	$100.00	1	$100.00	NA	NA
	Schmalz, Richard	Project/Contract Manager	E	$100.97	1	$100.97	NA	NA
	Bailey, Michael	Project/Contract Manager	E	117.80	1	$117.80	NA	NA
	Busch, Raymond	Project/Contract Manager	E	$99.99	2.02	$201.98	NA	NA
	Pagano, James	Project/Contract Manager	E	$61.83	2.02	$124.90	NA	NA
	Villa, Carlos	Project/Contract Manager	E	$56.27	2.02	$113.67	NA	NA
	Valdemira, Vincent	Project/Contract Manager	E	$93.44	2.02	$188.75	NA	NA
	Owen, Douglas	Project/Contract Manager	E	$69.71	2.02	$140.81	NA	NA
	Salerno, Phillip	Project/Contract Manager	E	$81.31	2.02	$164.25	NA	NA
	Bowers, Thomas	Project/Contract Manager	E	$78.42	2.02	$158.41	NA	NA
	Ahrens, James	Project/Contract Manager	E	$84.26	2.02	$170.21	NA	NA
	Althoff, Gordon	Senior Project Manager	E	$74.19	2.02	$149.87	$74.19	$81.61
	Fogel, Bernard	Senior Project Manager	E	$75.01	2.02	$151.53	$75.01	$82.52
	Venechanos, Leonard	Senior Project Manager	E	$63.15	2.02	$127.56	$63.15	$69.46
	Bornkamp, Donald	Senior Project Manager	E	$68.63	2.02	$138.63	$68.63	$75.49
	Guardia, Charles	Senior Project Manager	E	$63.92	2.02	$129.12	$63.92	$70.31
	Hall, David	Senior Project Manager	E	$72.34	2.02	$146.12	$72.34	$79.57
	Dolce, Anton	Senior Project Manager	E	$74.52	2.02	$150.53	$74.52	$81.97
	Iannuzzi, Matthew	Project Manager	E	$58.65	2.02	$118.47	$58.65	$64.51
	Wilson, Ronald	Senior Project Manager	E	$80.47	2.02	$162.56	$80.47	$88.52
	Comunelli, Louis	Senior Project Manager	E	$62.95	2.02	$127.17	$62.95	$69.25
	Abdo, Rasem	Project Manager	E	$65.65	2.02	$132.62	$65.65	$72.22
	Allender, David	Project Manager	E	$56.45	2.02	$114.04	$56.45	$62.10
	Back, James	Project Manager	E	$58.07	2.02	$117.30	$58.07	$63.88
	Burke, Stephen	Project Manager	E	$77.25	2.02	$156.05	$77.25	$84.98
	Conti, Peter	Project Manager	E	$56.51	2.02	$114.14	$56.51	$62.16
	Cordero, Moises	Project Manager	E	$53.23	2.02	$107.53	$53.23	$58.55
	Dorost, Jerry	Project Manager	E	$76.14	2.02	$153.80	$76.14	$83.75
	Ferguson, Leonard	Project Manager	E	$52.98	2.02	$107.03	$52.98	$58.28
	Gallo, William	Project Manager	E	$66.86	2.02	$135.05	$66.86	$73.54
	Guiseppone, Christopher	Project Manager	E	$58.36	2.02	$117.89	$58.36	$64.20
	Gundogdu, Tunc	Project Manager	E	$76.17	2.02	$153.86	$76.17	$83.79
	Killeen, William	Project Manager	E	$60.10	2.02	$121.40	$60.10	$66.11
	Logsdon, David	Project Manager	E	$57.50	2.02	$116.16	$57.50	$63.26
	Lorusso, Roberto	Project Manager	E	$61.50	2.02	$124.23	$61.50	$67.65
	Maraj, Jaio	Project Manager	E	$57.87	2.02	$116.89	$57.87	$63.65
	Pulaski, Robert	Project Manager	E	$54.47	2.02	$110.02	$54.47	$59.91
	Sartoris, Edward	Project Manager	E	$65.98	2.02	$133.28	$65.98	$72.58
	Strada, Ernest	Project Manager	E	$65.87	2.02	$133.05	$65.87	$72.46
	Swanson, Mark	Project Manager	E	$71.38	2.02	$144.19	$71.38	$78.52
	Velasco, Juan	Project Manager	E	$52.13	2.02	$105.30	$52.13	$57.34
	White, William	Project Manager	E	$57.09	2.02	$115.33	$57.09	$62.80
	Wong, David	Project Manager	E	$71.80	2.02	$145.04	$71.80	$78.98
	Soldano, Robert	Project Manager	E	$41.61	2.02	$84.06	$41.61	$45.77
	Asquith, Steven	Project Manager, Geologist	E	$62.22	2.02	$125.69	$62.22	$68.44
	Bretan, Acela	Project Manager	E	$47.50	2.02	$95.96	$47.50	$52.25
	Brooks, Matthew	Project Manager	E	$57.28	2.02	$115.70	$57.28	$63.01
	Cerrato, Richard	Project Manager	E	$48.93	2.02	$98.83	$48.93	$53.82

ENGINEERING & TECHNICAL PERSONNEL RATE SCHEDULE

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PANYNJ Title	Employee Name	LiRo Title	Status**	Actual Hourly Rate	Multiplier***	Billing Rate	Premium Rate (Actual)	
							OT	Night
	Enang, Joseph	Project Manager	E	$47.27	2.02	$95.48	$47.27	$51.99
	Falkowski, Vincent	Project Manager	E	$66.31	2.02	$133.95	$66.31	$72.94
	Killeen, William	Project Manager	E	$60.40	2.02	$122.01	$60.40	$66.44
	Palermo, Albert	Project Manager	E	$35.98	2.02	$72.68	$35.98	$39.58
	Petranek, Gregor	Project Manager	E	$34.02	2.02	$68.72	$34.02	$37.42
	Lynch, Chris	Project Manager	E	$63.35	2.02	$127.96	$63.35	$69.68
	McDonald, Michael	Project Manager	SC	$57.70	2.02	$116.55	$57.70	$63.47
	Baranello, Michael	Assistant Project Manager	E	$57.26	2.02	$115.66	$57.26	$62.98
	Karmel, James	Assistant Project Manager	E	$55.61	2.02	$112.33	$55.61	$61.17
	Piccirillo, Michael	Assistant Project Manager	E	$55.87	2.02	$112.85	$55.87	$61.45
	Wall, William	Assistant Project Manager	E	$59.63	2.02	$120.45	$59.63	$65.59
Construction Managers	Aviles, Juan	Construction Mgr/ RE	E	$52.37	2.02	$105.78	$52.37	$57.60
	Berrios, Alfred	Construction Mgr/ RE	E	$48.04	2.02	$97.04	$48.04	$52.84
	Blum, Walter	Construction Mgr/ RE	E	$48.94	2.02	$98.85	$48.94	$53.83
	Bonasia, Michael	Construction Mgr/ RE	E	$53.85	2.02	$108.77	$53.85	$59.23
	Buquicchio, Anthony	Construction Mgr/ RE	E	$47.46	2.02	$95.87	$47.46	$52.21
	Carrion, Ramon	Construction Mgr/ RE	E	$55.60	2.02	$112.31	$55.60	$61.16
	Carter, James	Construction Mgr/ RE	E	$53.86	2.02	$108.79	$53.86	$59.24
	Cheatham, Mark	Construction Mgr/ RE	E	$50.76	2.02	$102.53	$50.76	$55.83
	Clarke, Dwight	Construction Mgr/ RE	E	$51.61	2.02	$104.26	$51.61	$56.77
	Elias, Alan	Construction Mgr/ RE	E	$44.17	2.02	$89.22	$44.17	$48.58
	Engblom, Trevor	Construction Mgr/ RE	E	$54.49	2.02	$110.06	$54.49	$59.94
	Fagerland, Scott	Construction Mgr/ RE	E	$52.78	2.02	$106.61	$52.78	$58.05
	Fitzpatrick, Lawrence	Construction Mgr/ RE	E	$43.58	2.02	$88.03	$43.58	$47.94
	Gamba, Thomas	Construction Mgr/ RE	E	$57.80	2.02	$116.76	$57.80	$63.58
	Gonzalez, Ricardo	Construction Mgr/ RE	E	$39.40	2.02	$79.58	$39.40	$43.34
	Huemmer, Thomas	Construction Mgr/ RE	E	$50.63	2.02	$102.28	$50.63	$55.70
	Johansen, Arthur	Construction Mgr/ RE	E	$73.35	2.02	$148.16	$73.35	$80.68
	Krebs-Fogel, Allison	Construction Mgr/ RE	E	$38.47	2.02	$77.71	$38.47	$42.32
	Manente, Nicholas	Construction Mgr/ RE	E	$57.04	2.02	$115.22	$57.04	$62.75
	Marino, Anthony	Construction Mgr/ RE	E	$54.11	2.02	$109.29	$54.11	$59.52
	Mo, Thomas	Construction Mgr/ RE	E	$44.01	2.02	$88.90	$44.01	$48.41
	Muldowney, Adrian	Construction Mgr/ RE	E	$51.50	2.02	$104.03	$51.50	$56.65
	Negroni, Norberto	Construction Mgr/ RE	E	$58.18	2.02	$117.53	$58.18	$64.00
	Newnom, John	Construction Mgr/ RE	E	$48.77	2.02	$98.52	$48.77	$53.65
	Nichilo, James	Construction Mgr/ RE	E	$52.82	2.02	$106.69	$52.82	$58.10
	Nicholas, Whitfield	Construction Mgr/ RE	E	$49.01	2.02	$98.99	$49.01	$53.91
	O'Connor, Ralston	Construction Mgr/ RE	E	$39.68	2.02	$80.14	$39.68	$43.64
	Olson, Mark	Construction Mgr/ RE	E	$54.60	2.02	$110.29	$54.60	$60.06
	Patel, Bharat	Construction Mgr/ RE	E	$65.01	2.02	$131.33	$65.01	$71.51
	Pinto, Edward	Construction Mgr/ RE	E	$56.61	2.02	$114.35	$56.61	$62.27
	Prasad, Narendra	Construction Mgr/ RE	E	$41.20	2.02	$83.22	$41.20	$45.32
	Rant, Joseph Michael	Construction Mgr/ RE	E	$60.29	2.02	$121.78	$60.29	$66.31
	Savarirayan, David	Construction Mgr/ RE	E	$60.62	2.02	$122.44	$60.62	$66.68
	Sisca, Mario	Construction Mgr/ RE	E	$55.92	2.02	$112.96	$55.92	$61.51
	Swann, Robert	Construction Mgr/ RE	E	$42.14	2.02	$85.12	$42.14	$46.35
	Venechanos, Peter	Construction Mgr/ RE	E	$46.87	2.02	$94.67	$46.87	$51.55
	Volpe, Lou	Construction Mgr/ RE	E	$54.63	2.02	$110.36	$54.63	$60.09
	Williams, Glenn	Construction Mgr/ RE	E	$50.90	2.02	$102.82	$50.90	$55.99
	Egozi, Alon	Construction Mgr/ RE	E	$64.38	2.02	$130.04	$64.38	$70.81

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							OT	Night
	Goldman, Roy	Construction Mgr/ RE	E	$58.04	2.02	$117.24	$58.04	$63.84
	Gupta, Vijay	Construction Mgr/ RE	E	$55.43	2.02	$111.98	$55.43	$60.98
	Haritonides, Drew	Construction Mgr/ RE	E	$64.16	2.02	$129.60	$64.16	$70.57
	Hoetzl, Carl	Construction Mgr/ RE	E	$57.37	2.02	$115.89	$57.37	$63.11
	Johnson, Paul	Construction Mgr/ RE	E	$61.99	2.02	$125.21	$61.99	$68.18
	Johnston, Brian F.	Construction Mgr/ RE	E	$47.49	2.02	$95.94	$47.49	$52.24
	Lamorelle, Rene	Construction Mgr/ RE	E	$65.00	2.02	$131.31	$65.00	$71.50
	LaRocco, Joseph	Construction Mgr/ RE	E	$55.42	2.02	$111.96	$55.42	$60.97
	Linnane, John	Construction Mgr/ RE	E	$55.73	2.02	$112.58	$55.73	$61.31
	Naseri, Mohammad	Construction Mgr/ RE	E	$56.16	2.02	$113.43	$56.16	$61.77
	Pagano, James	Construction Mgr/ RE	E	$60.66	2.02	$122.53	$60.66	$66.72
	Pfister, Frank	Construction Mgr/ RE	E	$62.03	2.02	$125.29	$62.03	$68.23
	Roy, Robert	Construction Mgr/ RE	E	$58.71	2.02	$118.59	$58.71	$64.58
	Rubinstein, Felix	Construction Mgr/ RE	E	$65.46	2.02	$132.22	$65.46	$72.00
	Trotta, Michael	Construction Mgr/ RE	E	$40.73	2.02	$82.27	$40.73	$44.80
	Villa, Carlos	Construction Mgr/ RE	E	$56.55	2.02	$114.22	$56.55	$62.20
	Bowers, Thomas	Construction Mgr/ RE	E	$78.42	2.02	$158.42	$78.42	$86.27
	Carr, David	Construction Mgr/ RE	E	$38.27	2.02	$77.32	$38.27	$42.10
	Christman, Kenneth	Construction Mgr/ RE	E	$50.17	2.02	$101.35	$50.17	$55.19
	Cusumano, Nunzio	Construction Mgr/ RE	E	$60.05	2.02	$121.30	$60.05	$66.05
	Denning, Edward	Construction Mgr/ RE	E	$31.83	2.02	$64.29	$31.83	$35.01
	Hendrickson, John	Construction Mgr/ RE	E	$68.29	2.02	$137.94	$68.29	$75.12
	Conenna, Stephen	Constr Mgr/RE/Inspector	E	$57.29	2.02	$115.72	$57.29	$63.02
	Hanna, Medhat	Construction Mgr/ RE	E	$80.34	2.02	$162.29	$80.34	$88.37
	Singh, Prem	Constr Mgr/RE/Chief Insp	E	$48.94	2.02	$98.85	$48.94	$53.83
	Ibrahim, Ahmed	Construction Mgr/ RE	E	$62.13	2.02	$125.50	$62.13	$68.34
	Calvert, Richard	Constr Mgr/RE/Sr. Insp	E	$44.26	2.02	$89.40	$44.26	$48.69
	Shaw, Arthur	Constr Mgr/RE/Sr. Insp	E	$50.61	2.02	$102.24	$50.61	$55.68
	Coates, Brian	Constr Mgr/RE/Sr. Insp	E	$43.31	2.02	$87.49	$43.31	$47.64
	Fox, Joseph	Construction Manager	E	$67.16	2.02	$135.66	$67.16	$73.87
	Camilleri, Philip	Construction Manager	E	$86.66	2.02	$175.06	$86.66	$95.33
	Lofgren, Edwin	Construction Manager	SC	$58.00	2.02	$117.16	$58.00	$63.80
	Bretan, Acela	Construction Manager & LEED Spec	E	$47.51	2.02	$95.98	$47.51	$52.27
Construction Safety Engineers	Tancredi, Emil	Senior Safety Engineer	E	$54.90	2.02	$110.90	$54.90	$60.39
	Moore, Patrick	Safety Engineer	E	$58.18	2.02	$117.53	$58.18	$64.00
	Avino, Carl	Safety Engineer	E	$56.31	2.02	$113.75	$56.31	$61.94
	Romeo, Brian	Safety Engineer	E	$33.52	2.02	$67.70	$50.27	$36.87
	Gargano, Thomas	Safety Engineer	E	$47.51	2.02	$95.98	$47.51	$52.27
	Coates, Brian	Safety Engineer	E	$42.46	2.02	$85.76	$63.68	$46.70
Inspectors	Cacioppo, Andrew	Chief Inspector	E	$51.50	2.02	$104.03	$51.50	$56.65
	Conti, Marc	Chief Inspector	E	$53.56	2.02	$108.19	$53.56	$58.92
	Gioffre, Sean	Chief Inspector	E	$46.06	2.02	$93.04	$46.06	$50.67
	Misetzis, Michael	Chief Inspector	E	$45.56	2.02	$92.02	$45.56	$50.11
	Eskridge, John	Chief Inspector	E	$52.13	2.02	$105.30	$52.13	$57.34
	Nikas, Konstantine	Chief Inspector	E	$49.52	2.02	$100.04	$49.52	$54.47
	Olk, Miroslaw	Chief Inspector	E	$46.45	2.02	$93.84	$46.45	$51.10
	Randall, Clayton	Chief Inspector	E	$49.63	2.02	$100.24	$49.63	$54.59
	Riccio, Daniel	Chief Inspector	E	$45.00	2.02	$90.90	$45.00	$49.50
	Russo, Joseph	Chief Inspector	E	$50.63	2.02	$102.28	$50.63	$55.70
	Byfield, Desmond	Chief Inspector	E	$45.46	2.02	$91.84	$45.46	$50.01

ENGINEERING & TECHNICAL PERSONNEL RATE SCHEDULE

Performance of Expert Professional Construction Management Consulting Services

Firm Name LiRo Engineers, Inc.

**Status: E - Employee; SC - Subconsultant

***Multiplier will = 1 for partners and principals

PANYNJ Title	Employee Name	LiRo Title	Status**	Actual Hourly Rate	Multiplier***	Billing Rate	Premium Rate (Actual)	
							OT	Night
	Chirila, Viorel	Chief Inspector	E	$55.04	2.02	$111.19	$55.04	$60.55
	Colabella, Todd	Chief Inspector	E	$51.65	2.02	$104.34	$51.65	$56.82
	Pagano, Raymond	Chief Inspector/ Senior Inspector	E	$52.45	2.02	$105.94	$52.45	$57.69
	Cardaci, Kevin S.	Chief Inspector	SC	$48.50	2.02	$97.97	$48.50	$53.35
	Qian, Wenbiao	Civil Engineer	E	$25.75	2.02	$52.02	$25.75	$28.33
	Pollock, Theodore	Civil Inspector	E	$46.51	2.02	$93.96	$46.51	$51.17
	Zaleski, Joseph	Senior Construction Inspector	E	$43.50	2.02	$87.86	$43.50	$47.85
	Capone, Joseph	Senior Inspector	E	$49.73	2.02	$100.46	$49.73	$54.70
	Trotta, Gennaro	Senior Inspector	E	$29.68	2.02	$59.96	$29.68	$32.65
	Copeland, Donald	Senior Inspector	E	$33.99	2.02	$68.66	$33.99	$37.39
	Gargano, Thomas	Senior Inspector	E	$47.51	2.02	$95.98	$47.51	$52.27
	Gebhard, Robert	Senior Inspector	E	$39.29	2.02	$79.37	$39.29	$43.22
	James, Linus	Senior Inspector	E	$35.06	2.02	$70.82	$35.06	$38.57
	Sanchez, Genaro	Senior Inspector	E	$36.19	2.02	$73.11	$36.19	$39.81
	Tomlinson, Colin	Senior Inspector	E	$40.39	2.02	$81.58	$40.39	$44.42
	Yeates, Edward	Senior Inspector	E	$34.93	2.02	$70.55	$34.93	$38.42
	Zamparelle, Frederick	Senior Inspector	E	$39.21	2.02	$79.21	$39.21	$43.13
	Bulaon, Fernando	Senior Inspector	E	$42.23	2.02	$85.30	$42.23	$46.45
	Asquith, Michael	Construction Inspector	E	$26.90	2.02	$54.35	$40.36	$29.59
	Bossio, Frank	Construction Inspector	E	$40.64	2.02	$82.10	$60.97	$44.71
	Bridgewater, Ronald	Construction Inspector	E	$15.45	2.02	$31.21	$23.18	$17.00
	Bryson, Richard	Construction Inspector	E	$38.92	2.02	$78.63	$58.39	$42.82
	Campbell, Anthony	Construction Inspector	E	$15.45	2.02	$31.21	$23.18	$17.00
	Darrow, Patrick	Construction Inspector	E	$39.66	2.02	$80.10	$59.48	$43.62
	Fein, Michael	Construction Inspector	E	$43.71	2.02	$88.30	$65.57	$48.08
	Garcia, Giorgio	Construction Inspector	E	$32.23	2.02	$65.10	$48.34	$35.45
	Gurung, Mekh	Construction Inspector	E	$30.90	2.02	$62.42	$46.36	$33.99
	Hernandez, Carlos	Construction Inspector	E	$15.45	2.02	$31.21	$23.18	$17.00
	Interrante, Charles	Construction Inspector	E	$46.35	2.02	$93.63	$69.53	$50.99
	Kirincic, John	Construction Inspector	E	$41.20	2.02	$83.22	$61.80	$45.32
	O'Neil, Claude	Construction Inspector	E	$46.76	2.02	$94.46	$70.14	$51.44
	Romeo, Brian	Construction Inspector	E	$33.52	2.02	$67.70	$50.27	$36.87
	Ross, Sean	Construction Inspector	E	$33.09	2.02	$66.85	$49.64	$36.40
	Salimeni, Roberto	Construction Inspector	E	$42.99	2.02	$86.84	$64.49	$47.29
	Santos, David	Construction Inspector	E	$26.16	2.02	$52.85	$39.24	$28.78
	Trotta, Robert	Construction Inspector	E	$40.18	2.02	$81.16	$60.27	$44.20
	Cabezas, Carlos	Construction Inspector	E	$41.20	2.02	$83.22	$61.80	$45.32
	Durnin, Sean	Construction Inspector	E	$28.39	2.02	$57.34	$42.58	$31.23
	Elmalt, Said	Construction Inspector	E	$30.90	2.02	$62.42	$46.35	$33.99
	Empric, Ronald	Construction Inspector	E	$25.75	2.02	$52.02	$38.63	$28.33
	Francis, Arthur	Construction Inspector	E	$38.27	2.02	$77.32	$57.41	$42.10
	Fung-A-Ling, Theresa	Construction Inspector	E	$24.92	2.02	$50.33	$37.37	$27.41
	Gugino, Anthony	Construction Inspector	E	$25.75	2.02	$52.02	$38.63	$28.33
	Haghshenas, Mohamad	Construction Inspector	E	$36.96	2.02	$74.65	$55.43	$40.65
	Hansen, Joseph	Construction Inspector	E	$26.78	2.02	$54.10	$40.17	$29.46
	Jennings, Joanne	Construction Inspector	E	$30.45	2.02	$61.50	$45.67	$33.49
	Kamna, Leeann	Construction Inspector	E	$19.00	2.02	$38.39	$28.51	$20.90
	Karmel, Jody	Construction Inspector	E	$33.73	2.02	$68.14	$50.60	$37.11
	Kowalski, Tomasz	Construction Inspector	E	$33.78	2.02	$68.24	$50.68	$37.16
	LaBarbera, Anthony	Construction Inspector	E	$29.61	2.02	$59.82	$44.42	$32.57

ENGINEERING & TECHNICAL PERSONNEL RATE SCHEDULE

Performance of Expert Professional Construction Management Consulting Services

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Firm Name LiRo Engineers, Inc.

PANYNJ Title	Employee Name	LiRo Title	Status**	Actual Hourly Rate	Multiplier***	Billing Rate	Premium Rate (Actual)	
							OT	Night
	LaGrassa, Paul	Construction Inspector	E	$42.85	2.02	$86.55	$64.27	$47.13
	Lipinski, Kevin	Construction Inspector	E	$27.02	2.02	$54.57	$40.53	$29.72
	Luciano, Jones	Construction Inspector	E	$38.44	2.02	$77.65	$57.66	$42.28
	Malik, Muhammad	Construction Inspector	E	$25.75	2.02	$52.02	$38.63	$28.33
	Mannino, Giuseppe	Construction Inspector	E	$40.74	2.02	$82.29	$61.10	$44.81
	Mathurin, Nickossi	Construction Inspector	E	$25.34	2.02	$51.18	$38.01	$27.87
	Maung, Kyaw	Construction Inspector	E	$36.05	2.02	$72.82	$54.08	$39.66
	Morsy, Mohamed	Construction Inspector	E	$36.48	2.02	$73.69	$54.72	$40.13
	Mosser, Aaron	Construction Inspector	E	$36.05	2.02	$72.82	$54.08	$39.66
	Murillo, Eduardo	Construction Inspector	E	$27.45	2.02	$55.45	$41.17	$30.19
	O'Reilly, Patrick	Construction Inspector	E	$32.62	2.02	$65.89	$48.93	$35.88
	Patel, Dhansukh	Construction Inspector	E	$30.26	2.02	$61.13	$45.39	$33.29
	Pena, Justin	Construction Inspector	E	$19.15	2.02	$38.68	$28.72	$21.06
	Sanz, Eric	Construction Inspector	E	$30.90	2.02	$62.42	$46.35	$33.99
	Serelis, Angelo	Construction Inspector	E	$40.69	2.02	$82.18	$61.03	$44.75
	Todd, Daniel	Construction Inspector	E	$32.60	2.02	$65.85	$48.90	$35.86
	Tornquist, Rowan	Construction Inspector	E	$33.78	2.02	$68.24	$50.68	$37.16
	Tydeman, Ryan	Construction Inspector	E	$23.93	2.02	$48.33	$35.89	$26.32
	Vena, Daniel	Construction Inspector	E	$38.54	2.02	$77.86	$57.81	$42.40
	Zakria, Yaser	Construction Inspector	E	$30.90	2.02	$62.42	$46.35	$33.99
	Zdrinca, Ion	Construction Inspector	E	$38.38	2.02	$77.52	$57.57	$42.22
	Zeises, Jay	Construction Inspector	E	$37.13	2.02	$75.01	$55.70	$40.84
	Albergo, James	Construction Inspector	E	$33.59	2.02	$67.85	$50.38	$36.95
	Alexander, Atiba	Construction Inspector	E	$20.26	2.02	$40.93	$30.39	$22.29
	Antonucci, Anthony	Construction Inspector	E	$43.26	2.02	$87.39	$64.89	$47.59
	Croucher, Bradley	Construction Inspector	E	$22.66	2.02	$45.77	$33.99	$24.93
	Dailey, Shawn	Construction Inspector	E	$29.36	2.02	$59.30	$44.03	$32.29
	Dawson, Jean	Construction Inspector	E	$30.90	2.02	$62.42	$46.35	$33.99
	Deslouches, Lys	Construction Inspector	E	$25.75	2.02	$52.02	$38.63	$28.33
	Devaney, Conor	Construction Inspector	E	$27.45	2.02	$55.45	$41.17	$30.19
	Gliganic, Tanya	Construction Inspector	E	$20.06	2.02	$40.53	$30.10	$22.07
	Rivera, Santos	Construction Inspector	E	$20.60	2.02	$41.61	$30.90	$22.66
	Esposito, Michael	Construction Inspector	E	$34.79	2.02	$70.28	$52.19	$38.27
	LaBoyne, Steven	Construction Inspector	E	$37.14	2.02	$75.03	$55.71	$40.86
	Machado, Alex	Construction Inspector	E	$39.15	2.02	$79.08	$58.73	$43.07
	Mutarelli, Vincent	Construction Inspector	E	$36.06	2.02	$72.84	$54.09	$39.67
	Patel, Navnit	Construction Inspector	E	$30.05	2.02	$60.69	$45.07	$33.05
	Alves, Simao	Coating and Construction Insp	E	$31.67	2.02	$63.98	$47.51	$34.84
	Christou, Argirios	MEP Inspector	E	$39.14	2.02	$79.06	$58.71	$43.05
	Kobetitsch, Joseph	Mechanical Inspector	E	$48.94	2.02	$98.85	$48.94	$53.83
	Gorodnitskiy, Max	Construction Inspector	SC	$28.84	2.02	$58.26	$43.26	$31.72
	Mohammadinia, M	Construction Inspector	SC	$51.50	2.02	$104.03	$77.25	$56.65
	Dejkameh, N	Construction Inspector	SC	$51.50	2.02	$104.03	$77.25	$56.65
	Barroca, Paul	Construction Inspector	SC	$48.41	2.02	$97.79	$72.62	$53.25
	Brady, Jeanne	Construction Inspector	SC	$41.25	2.02	$83.33	$61.88	$45.38
	Samala. Duke	Construction Inspector	SC	$37.00	2.02	$74.74	$55.50	$40.70
	Zubair, Ahmed	Construction Inspector	SC	$45.00	2.02	$90.90	$67.50	$49.50
	Sigal, Leonid	Construction Inspector	SC	$39.14	2.02	$79.06	$58.71	$43.05
	Moore, William	Sr. Inspector	SC	$33.99	2.02	$68.66	$50.99	$37.39
	Guirgis Joseph	Construction Inspector	SC	$36.05	2.02	$72.82	$54.08	$39.66

ENGINEERING & TECHNICAL PERSONNEL RATE SCHEDULE

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							OT	Night
	Mowla, Mahfuzar	Construction Inspector	SC	$36.05	2.02	$72.82	$54.08	$39.66
	Rojas, Oscar	Construction Inspector	SC	$36.05	2.02	$72.82	$54.08	$39.66
Contract Administrators	Massa, Joseph	Financial Administrator	E	$59.70	2.02	$120.59	$59.70	$65.67
	Campagna, Anthony	Project Controller	E	$45.42	2.02	$91.75	$45.42	$49.97
	Mattera, Kenneth	Project Coordinator	E	$61.29	2.02	$123.80	$61.29	$67.41
	Lyashenko, Svitlana	Contract Controls Specialist	E	$26.40	2.02	$53.33	$39.60	$29.04
	Bevers, Audrey	Cost Controller	E	$28.87	2.02	$58.32	$43.31	$31.76
	Uddin, Parvin	Office Clerk	E	$21.75	2.02	$43.94	$32.63	$23.93
	Lai, Betty	Administrative Assistant	E	$21.75	2.02	$43.94	$32.63	$23.93
	Walls, Raven	Administrative Assistant	E	$17.85	2.02	$36.06	$26.77	$19.63
	Collins, Rob - PE	Contract Administrator	SC	$88.70	2.02	$179.17	$88.70	$97.57
	Mardini, Monther	Contract Administrator	SC	$75.22	2.02	$151.94	$75.22	$82.74
	Queeney, Paul	Contract Administrator	SC	$71.74	2.02	$144.91	$71.74	$78.91
Schedulers	Frysztacki, Edward	Sr CPM Scheduler/Chief Estimator	E	$71.82	2.02	$145.08	$71.82	$79.00
	Carrion, Anthony	Scheduler	E	$53.56	2.02	$108.19	$53.56	$58.92
	Gifford, George	Scheduler	E	$47.01	2.02	$94.96	$47.01	$51.71
	Prince, Gina	Scheduler	E	$48.72	2.02	$98.41	$48.72	$53.59
	Vanatta, Peter	Scheduler	E	$53.05	2.02	$107.15	$53.05	$58.35
	Bradley, Daniel M.	Scheduling/Cost Controls Engineer	E	$54.73	2.02	$110.56	$54.73	$60.21
	Elie-Pierre, Martial	Senior Scheduler	E	$62.67	2.02	$126.58	$62.67	$68.93
	Kalmus, Philip	Senior Scheduler	E	$54.11	2.02	$109.29	$54.11	$59.52
	Chattaway, Andrew	Senior Scheduler	SC	$63.04	2.02	$127.34	$63.04	$69.34
	McBaine, Dane	Scheduler	SC	$49.13	2.02	$99.24	$49.13	$54.04
	Purvasha, Patel	Jr. Scheduler	SC	$40.87	2.02	$82.56	$40.87	$44.96
	Apostolou, Jamie	Scheduler	SC	$40.87	2.02	$82.56	$40.87	$44.96
	Walters, Zach - PSP	Scheduler	SC	$40.00	2.02	$80.80	$40.00	$44.00
	Junjua, Sadia	Scheduler	SC	$52.17	2.02	$105.38	$52.17	$57.39
	Mital, Parikh - PE	Scheduler	SC	$41.30	2.02	$83.43	$41.30	$45.43
Cost Estimators	Frysztacki, Edward	Sr CPM Scheduler/Chief Estimator	E	$71.82	2.02	$145.08	$71.82	$79.00
	Pachuta, Richard	Scheduler/Estimator	E	$66.95	2.02	$135.24	$66.95	$73.65
	Curran, William	Estimator/Constructability Reviewer	E	$54.59	2.02	$110.27	$54.59	$60.05
	Daulatani, Prakash	Estimator/Constructability Reviewer	E	$54.73	2.02	$110.56	$54.73	$60.21
	Paladino, Alfio	Estimator/Constructibillty Review	E	$58.74	2.02	$118.66	$58.74	$64.61
	Forcier, Raymond	Estimator	E	$48.94	2.02	$98.85	$48.94	$53.83
	Yong, Mireya	Estimator	E	$52.79	2.02	$106.63	$52.79	$58.07
	Graceffa, Giovanni L.	Project Engineer/Estimator	E	$58.20	2.02	$117.55	$58.20	$64.01
	Pagani, Steve	Sr. Cost Estimator	SC	$61.30	2.02	$123.83	$61.30	$67.43
	Miller, Charles	Sr. Cost Estimator	SC	$63.75	2.02	$128.78	$63.75	$70.13
Field Engineers	Gaspari, James - PE	Resident Engineer	E	$72.50	2.02	$146.45	$72.50	$79.75
	Tilleli, Ralph	Resident Engineer	E	$76.40	2.02	$154.32	$76.40	$84.03
	Eckhoff, James - PE	Resident Engineer	E	$69.94	2.02	$141.27	$69.94	$76.93
	Fall, William	Resident Engineer	E	$85.86	2.02	$173.44	$85.86	$94.45
	Caponiti, Philip - PE	Resident Engineer	SC	$43.26	2.02	$87.39	$43.26	$47.59
	Charles, Leo	Resident Engineer	SC	$62.50	2.02	$126.25	$62.50	$68.75
	Permoda, Thomas	Resident Engineer	SC	$45.70	2.02	$92.31	$45.70	$50.27
	Anderson, Matthew	Superintendent	E	$30.54	2.02	$61.69	$30.54	$33.59
	Comilloni, Eugene	Superintendent	E	$45.55	2.02	$92.00	$45.55	$50.10
	Tapp, Joseph	Superintendent	E	$47.50	2.02	$95.96	$47.50	$52.25
	Vatovec, Michael	Superintendent	E	$53.40	2.02	$107.86	$53.40	$58.73
	Petrasek, Thomas	Superintendent / Inspector	E	$50.68	2.02	$102.37	$50.68	$55.74

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							OT	Night
	Avino, Carl	Assistant Resident Engineer	E	$56.31	2.02	$113.75	$56.31	$61.94
	Reidel, Frederick	Assistant Resident Engineer	E	$54.59	2.02	$110.27	$54.59	$60.05
	Stives, Charles	Assistant Resident Engineer	E	$58.20	2.02	$117.55	$58.20	$64.01
	Funk, Richard C.	Sr. Project Engineer	SC	$66.85	2.02	$135.04	$66.85	$73.54
	Grehl, Erik	Track Engineer	SC	$26.70	2.02	$53.93	$40.05	$29.37
	Gala, Richard	Project Engineer	E	$55.73	2.02	$112.58	$55.73	$61.31
	Russo, Carl	Project Engineer	E	$46.10	2.02	$93.13	$46.10	$50.71
	Graceffa, Giovanni L.	Project Engineer/Estimator	E	$58.20	2.02	$117.55	$58.20	$64.01
	Belling, Michael	Civil Senior Engineer	E	$59.52	2.02	$120.24	$59.52	$65.48
	Pollack, Eric	Mechanical Engineer	E	$44.10	2.02	$89.09	$44.10	$48.52
	Azmat, Shafia	Office Engineer	E	$30.92	2.02	$62.46	$46.38	$34.01
	Chauvin, Kelsy	Office Engineer	E	$60.10	2.02	$121.40	$60.10	$66.11
	Frascatore, Cielo Angelica	Office Engineer	E	$40.12	2.02	$81.04	$60.18	$44.13
	Fuller, Clarissa	Office Engineer	E	$29.17	2.02	$58.92	$43.75	$32.09
	Gavin, James	Office Engineer	E	$31.40	2.02	$63.44	$47.11	$34.55
	Hernandez, Raul	Office Engineer	E	$25.49	2.02	$51.49	$38.24	$28.04
	Koehler, George	Office Engineer	E	$31.89	2.02	$64.42	$47.83	$35.08
	Lugo, Celia	Office Engineer	E	$33.44	2.02	$67.56	$50.17	$36.79
	Miranda, Emil	Office Engineer	E	$46.51	2.02	$93.96	$69.77	$51.17
	Rojas, Dora Fannie	Office Engineer	E	$33.14	2.02	$66.93	$49.70	$36.45
	Stevenson, Kelly	Office Engineer	E	$27.54	2.02	$55.64	$41.31	$30.30
	Swann, Chris	Office Engineer	E	$23.26	2.02	$46.98	$34.89	$25.58
	Thompson, Shelly	Office Engineer	E	$22.34	2.02	$45.13	$33.51	$24.57
	Fascianella Jr., Thomas	Office Engineer	E	$26.65	2.02	$53.83	$39.97	$29.31
	Goldman, Howard	Office Engineer	E	$35.79	2.02	$72.30	$53.69	$39.37
	Gomez, Oscar	Office Engineer	E	$43.90	2.02	$88.68	$65.85	$48.29
	Kiel, John	Office Engineer	E	$37.60	2.02	$75.94	$56.39	$41.35
	Leon, Michelle	Office Engineer	E	$25.24	2.02	$50.97	$37.85	$27.76
	Parekh, Madhusudan	Office Engineer	E	$39.25	2.02	$79.29	$58.88	$43.18
	Plato, Paul	Office Engineer	E	$32.81	2.02	$66.27	$49.21	$36.09
	Ramanathan, Alagappan	Office Engineer	E	$39.07	2.02	$78.92	$58.60	$42.97
	Rotella, John	Office Engineer	E	$48.72	2.02	$98.41	$73.08	$53.59
	Rykowski, Joseph	Office Engineer	E	$40.64	2.02	$82.10	$60.97	$44.71
	Singh, Michelle	Office Engineer	E	$41.33	2.02	$83.49	$62.00	$45.47
	Sipa, Alla	Office Engineer	E	$35.54	2.02	$71.78	$53.30	$39.09
	Argiro, Patrick	Office Engineer	E	$34.70	2.02	$70.10	$52.05	$38.17
	Bourque, Thomas	Office Engineer	E	$41.41	2.02	$83.64	$62.11	$45.55
	Colon, Mildred	Office Engineer	E	$30.45	2.02	$61.50	$45.67	$33.49
	Della Ratta, Richard	Office Engineer	E	$41.70	2.02	$84.24	$62.56	$45.88
	Warhaftig, Joel	Office Engineer	SC	$38.63	2.02	$78.03	$57.95	$42.49
	Shurgala, Michael D.	Office Engineer	SC	$36.71	2.02	$74.15	$55.07	$40.38
	Buzeta, Ramiro	Electrical Engineer	E	$46.82	2.02	$94.58	$70.24	$51.51
	Cioffi, Jerry	Electrical Inspector	E	$42.62	2.02	$86.10	$63.93	$46.88
	Hernandez, Jonathan	Engineer	E	$27.81	2.02	$56.18	$41.72	$30.59
	Kemp, John	Engineer	E	$27.81	2.02	$56.18	$41.72	$30.59
	Patane, Sebastian	Engineer	E	$36.12	2.02	$72.97	$54.18	$39.73
	Rahemi, Hassan	Engineer	E	$45.56	2.02	$92.02	$68.34	$50.11
	Rem, Michael	Engineer	E	$34.06	2.02	$68.81	$51.09	$37.47
	Zinger, Paul	Engineer	E	$30.90	2.02	$62.42	$46.35	$33.99
	Ganesan, Gajendran	Engineer/Senior Inspector	E	$30.46	2.02	$61.52	$45.69	$33.50

ENGINEERING & TECHNICAL PERSONNEL RATE SCHEDULE

Performance of Expert Professional Construction Management Consulting Services

**Status: E - Employee; SC - Subconsultant

***Multiplier will = 1 for partners and principals

Firm Name LiRo Engineers, Inc.

PANYNJ Title	Employee Name	LIRo Title	Status**	Actual Hourly Rate	Multiplier***	Billing Rate	Premium Rate (Actual)	
							OT	Night
Other Support Staff	Camarillo, Janice	Project Architect	E	$40.27	2.02	$81.35	$40.27	$44.30
	Frangas, Emmanuel	Senior Office Engineer	E	$39.32	2.02	$79.42	$39.32	$43.25
	Christian, Robert - PE	Electrical Engr/ Inspector	SC	$51.35	2.02	$103.73	$51.35	$56.49
	Cruz, Francisco	Engineer II	SC	$39.13	2.02	$79.04	$58.70	$43.04
	Chesanek, Mark	Architect	E	$49.54	2.02	$100.08	$49.54	$54.50
	Byrnes, Michael	Certified Industrial Hygienist/Safety	E	$45.44	2.02	$91.80	$45.44	$49.99
	Ramos, Ralph	Community Liaison	E	$21.01	2.02	$42.44	$31.52	$23.11
	Harris, Nadine	Community Liaison	E	$30.09	2.02	$60.77	$45.13	$33.09
	Jesse, Eileen	Community Liaison	E	$29.04	2.02	$58.65	$43.55	$31.94
	Halliday, Jeremy	Geologist	E	$31.22	2.02	$63.06	$46.83	$34.34
	Romano, Maddalena	GIS Specialist - Geologist	E	$28.76	2.02	$58.09	$43.14	$31.63
	Rojas, Antonio E.	Industrial Hygienist	E	$34.69	2.02	$70.07	$52.04	$38.16
	Rago, John	Jr. Engineer	E	$27.81	2.02	$56.18	$41.72	$30.59
	Carter, Christopher	Junior Architect	E	$43.51	2.02	$87.88	$65.26	$47.86
	Szczapa, David	Junior Architect	E	$29.21	2.02	$59.01	$43.82	$32.13
	Coyle, William	Project Officer	E	$51.06	2.02	$103.14	$51.06	$56.16
	Dumitrescu, Constantin	Project Officer	E	$44.01	2.02	$88.90	$44.01	$48.41
	Kambouris, George	Project Officer	E	$39.88	2.02	$80.56	$39.88	$43.87
	Martell, Steven	Project Officer	E	$53.24	2.02	$107.55	$53.24	$58.56
	Santos, Matthew	Project Officer	E	$55.76	2.02	$112.64	$55.76	$61.34
	Yuen, Alan	Project Officer	E	$52.16	2.02	$105.36	$52.16	$57.38
	Razzaq, Abdur	Project Officer (Mechanical)	E	$44.95	2.02	$90.80	$44.95	$49.44
	Achouri, Aomar	Transportation Engineer	E	$50.21	2.02	$101.43	$50.21	$55.23
	Huang, George	Traffic Engineer	E	$32.96	2.02	$66.58	$32.96	$36.26
	Karydas, Euripides	Traffic Engineer	E	$54.41	2.02	$109.92	$54.41	$59.86
	Latinsky, Robert M.	Constructability Engineer	SC	$79.55	2.02	$160.69	$79.55	$87.51
	Thomas, Robert	Facilities Engineer	SC	$74.15	2.02	$149.78	$74.15	$81.57

PROJECT NAME, LOCATION	Capital Budget	Program/Project Management	Strategic Planning and Development	CIP Prioritization and Validation	Design Management	Organizational Development	Benchmarking and Baseline Assessments	Staff Training/Skills Technology Transfer	Regulatory Compliance/Consent Order Management	Document Controls and Progress Reporting	Cost and Schedule Tracking and Controls	Communications/Public Outreach	Subcontractor Coordination and Management	QA/QC Auditing Services	Procurement Support Services	Risk Analysis/Risk Management	Specification and Construction Contract Standardization	Interagency– Intergovernmental Liaison	Construction Contract Preparation, Negotiation, and Execution	Operations Management	Construction Management	Constructability, Operability, VE Reviews	Claims Avoidance and Resolution
LiRo																							
Port Authority On-Call 2006-2010 Terminal 5/6 Redevelopment	*$900M*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MTA - East Side Access	$6.3B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NYCEDC High Line Reconstruction Project	$125M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
No. 7 Subway Line Extension, Program and Construction Management	$2.1B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LMCCC Program Management Services	$9M (fee)	✓	✓			✓			✓	✓	✓	✓				✓	✓	✓					
MTA TBTA Triborough Bridge Rehabilitation	$160M	✓		✓		✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓
Long Island Railroad Capital Improvement, Jamaica, NY	$2B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MTA-Bridges and Tunnels As-Needed Construction Management Services 2004-2007	$30M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NYSDOT Region 11 (New York City) and Region 5 As-Needed Construction Management Services 2005-2007	$170M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MTA-NYCT On-Call Scheduling Support Services 2004-2007	*$10M*	✓						✓	✓	✓		✓				✓						✓	
Post 9/11 Infrastructure Reconstruction, Lower Manhattan, NY	$700M	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
World Trade Center PATH Station Service Restoration Roadway Analysis	*$250K*	✓	✓		✓	✓			✓	✓				✓				✓				✓	
Post 9/11 Temporary PATH Station Pedestrian Analysis	$200M	✓			✓				✓			✓	✓	✓				✓					
City-Wide Facilities Upgrade (EMS, Fire Academy, Correctional Facilities), NYCDDC	$143M	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

RELEVANT EXPERIENCE

PROJECT NAME, LOCATION	Capital Budget	Program/Project Management	Strategic Planning and Development	CIP Prioritization and Validation	Design Management	Organizational Development	Benchmarking and Baseline Assessments	Staff Training/Skills Technology Transfer	Regulatory Compliance/Consent Order Management	Document Controls and Progress Reporting	Cost and Schedule Tracking and Controls	Communications/Public Outreach	Subcontractor Coordination and Management	QA/QC Auditing Services	Procurement Support Services	Risk Analysis/Risk Management	Specification and Construction Contract Standardization	Interagency– Intergovernmental Liaison	Construction Contract Preparation, Negotiation, and Execution	Operations Management	Construction Management	Constructability, Operability, VE Reviews	Claims Avoidance and Resolution
NYC Housing Authority Renovation/Upgrading Program, NY	$265M	✓	✓	✓		✓			✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
NYC Department of Design and Construction (DDC) On-Call Construction Management Services for Shea and Yankee Stadia 2004-2006	$50M	✓	✓			✓	✓	✓	✓	✓	✓		✓		✓			✓	✓		✓	✓	✓
NYC School Construction Authority Emergency Response Management and Coordination Program	$265M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
.YSDOT LIE – Grand Central Parkway to Van Dam Street, Queens, NY	$165M		✓		✓				✓	✓	✓	✓	✓	✓		✓	✓	✓			✓	✓	✓
USPS On-Call Construction Management Services 2000-2008	$60M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CUNY School of Architecture	$60M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NYCDDC New Bronx Family Intake Center	$50M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DY Consultants																							
Delta Airlines, Terminals 2&3 JFK	$50M		✓		✓			✓	✓											✓			
Jet Blue Hangar, JFK	$50M	✓							✓		✓			✓	✓			✓					
Runway Safety Area Improvement Analysis									✓		✓			✓	✓			✓				✓	

RELEVANT PROJECT EXPERIENCE

In addition to our own Port Authority experience, LiRo has assembled a team of subconsultants with proven success on projects for the Port Authority. Summaries of our team's accomplishments are below.

LiRo Engineers, Inc.

LiRo is ***presently managing the construction of nearly $20 billion of public sector capital construction projects locally.*** Our construction management staff has extensive experience coordinating, progressing and delivering construction projects in difficult environments and sensitive operational facilities.

LiRo has been responsible for some of the New York region's most complex projects, including:

- East Side Access, $6.5B
- #7 Line Extension, $2B
- Over $12B in New York City Transit work
- More than $1B of bridge projects for the Triborough Bridge and Tunnel Authority (TBTA)
- More than $1B of bridge and highway projects for the New York State Department of Transportation (NYSDOT)
- More than $800M of tunnel, bridge, roadways, infrastructure, and marine work for New York City agencies including the NYC Department of Design and Construction (DDC) and NYC Economic Development Corporation (EDC)

In addition to currently providing construction management services on major Metropolitan area capital projects, *LiRo has unmatched experience in On-call Construction Management/Inspection contracts that demand immediate responsiveness supported by extensive resources.* With over a decade of On-Call Construction Management contracts, these include:

- PANYNJ Call-In Contract 2006-2010
- CUNY On-Call CM Contract 2010-2013
- NYC Housing Authority CM/Build Requirements Contract 2005-2009 (Consecutive Contracts)
- NYC Schools Construction Authority Construction Management Services (Consecutive Contracts)
- MTA-LIRR As-Needed Construction Management and Associated Services 2005-2009
- MTA-Bridges and Tunnels As-Needed Construction Management Services 2004-2007
- NYSDOT Region 11 (New York City) and Region 5 As-Needed Construction Management Services 2005-2007
- Keyspan Energy Services, As-Needed Construction Inspection Services 2005-2007
- MTA-NYCT On-call Scheduling Support Services 2004-2007
- NYC Department of Design and Construction (DDC) On-Call Construction Management Services for Shea and Yankee Stadiums 2003-2005

- NYCDDC CM/Build Requirements for Fire Department Unit 2002-2006
- NYCDDC Resident Engineering Inspection Services 2003-2006
- MTA-NYCT On-call Technical Inspection During Construction 2002-2005
- USPS On-call Construction Management Services 2002-2005

We are adept at working within the constraints of complex, occupied facilities. Our careful attention to CPM scheduling and construction staging and phasing allows for smooth transitions, continuous facility operations, timely progression of construction work and public safety. The following tables demonstrate our team's experience with Tunnels and Bridges, PATH, Aviation, Port, and World Trade Center projects.

TUNNELS, BRIDGES, AND TERMINALS

MTA's East Side Access Project ***Owner:*** *MTA Capital Construction* ***Contact:*** *Alan Paskoff* *2 Broadway* *New York, NY 10004* [redacted] ***Start:*** *2007* ***End:*** *2015* ***Cost:*** *$6.5B*	The project connects the LIRR's Main Line and Port Washington Branch in Queens to a new LIRR terminal beneath Grand Central Terminal (GCT) in Manhattan and includes 7 miles of tunneling in Manhattan and Queens. Work includes the construction of 5 ventilation buildings, new transportation terminal 135' below GCT, new passenger station at Sunnyside train storage facilities, 50,000' of track, a reconfigured Harold Interlocking and systems components including signals, communications, power and security.	
Multiple TBTA Projects ***Owner:*** *MTA TBTA* ***Contact:*** *Igor Shapiro, P.E.* *2 Broadway* *New York, NY 10004* [redacted] ***Start:*** *2000* ***End:*** *2010* ***Cost:*** *$1B*	On Call construction inspection services including highway and bridge construction, electrical and mechanical construction, building construction and renovation, asbestos & lead abatement, underground storage tank replacement, as well as estimating, scheduling, and shop drawing review. Work was performed day and night at all TBTA facilities	
Triborough Bridge Deck Replacement on the Wards and Randall's Island Viaduct (TB-64B) ***Owner:*** *MTA TBTA* ***Contact:*** *Tom Bach, P.E.* *2 Broadway* *New York, NY 10004* [redacted] ***Start:*** *2005* ***End:*** *2010* ***Cost:*** *$282M*	This project involved the reconstruction of the Wards/Randall's Island Viaduct, new coatings, bearing replacement on the Queen's Approach and Bronx Truss, construction of new ramps, access road construction on Randall's Island and widening of the Queens to Manhattan Ramp.	

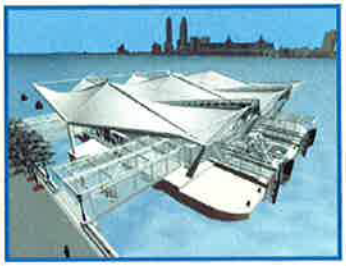
PATH

PATH Reconstruction-World Trade Center Site to Exchange Place ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *David Caruth* *Senior Project Manager* *2 Gateway Center* *Newark, NJ 07102* [redacted] ***Start:*** *2002* ***End:*** *2003* ***Cost:*** *$323M*	The LiRo team provided project management services supporting the PATH reconstruction. Key project features: • New rock tunnel/rail turnouts at Exchange Place • Removal/replacement of signal & communication systems, 3rd rail power cables, tunnel lighting, track and 3rd rail • Temporary & permanent ventilation system	
Post 9/11 Temporary PATH Station Pedestrian Analysis ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *Renalto Commacio, P.E.* *EADD Traffic Engineering* *2 Gateway Center* *Newark, NJ 07102* [redacted] ***Start:*** *2001* ***End:*** *2004* ***Cost:*** *$200M*	Simulation model to compile passenger routing, based on various entrances and exit flows at peak periods. These were probabilistically applied to tens of thousands of passengers via millions of computer calculations. Continuous population densities were reported , and model was used to evaluate the effect of flow surges increased loads, & reconfigured entrances /exits. The assignment focused on the completion of a NEPA 130 Analysis & a dynamic simulation of pedestrian activity associated with PA's temp. PATH station.	
No. 7 Subway Line Extension, Program and Construction Management ***Owner:*** *MTA -NYCT* ***Contact:*** *Phil McGrade, P.E.* *Program Manager* *2 Broadway* *New York, NY 10004* [redacted] ***Start:*** *2008* ***End:*** *2013* ***Cost:*** *$2B*	The LiRo team is providing program & construction management which includes: • 7,000 feet of tunnel by excavation, • A cavern station terminal • Shaft excavations for tunnel access/ vertical circulation, construction of steel/ concrete structures for stations/other facilities, construction & installation of tracks, drainage, third rail power/other electrical systems, signals, communications, tunnel ventilation systems	

AVIATION

Call-In CM Contract 2006-10 ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *William Kehoe, P.E.* *241 Erie Street,* *Jersey City, NJ 07310* [redacted] ***Start:*** *2006* ***End:*** *2010* ***Cost:*** *$900M*	The LiRo team provided Project Management and Resident Engineering Inspection services on a call-in basis. Assignments included: • John F. Kennedy International Airport Terminal 5/6 Redevelopment Project • John F. Kennedy International Airport Parking Garage at JetBlue	
Delta Airlines Terminals 2 & 3 ***Owner:*** *Delta Airlines* ***Contact:*** *Corgan Associates* *350 Fifth Avenue* *New York, NY 10118* [redacted] ***Start:*** *2003* ***End:*** *2005* **Cost:** *$50M*	The LiRo team provided a comprehensive study & implementation of an Infrastructure Investment Plan at JFK Airport for Delta Airlines Terminals 2 & 3. Delta increased flights, and invested more than $300M in improving its JFK terminals over 6 years. The facility investments planned for Terminals 2 & 3 focused on the scope of work required to maintain operational reliability, improve service levels & address building code deficiencies. The scope included passenger experience enhancements, infrastructure improvements to building systems, envelope & apron pavement rehabilitation.	
Air Train Station ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *Tom Amoia* *Jamaica Air Train Terminal* *148-15 Archer Avenue* *Jamaica, NY 11435* [redacted] ***Start:*** *2003* ***End:*** *2007* ***Cost:*** *$385M*	The LiRo team provided field inspection & administrative services on the Jamaica Air Train Station. This link now provides a true inter-modal hub with connections to & from the MTA/LIRR, the MTA/NYCT, and Air Train JFK. The LiRo team has provided civil engineers, mechanical engineers & contract administrators. The LiRo team has provided a significant role in two major areas: Vertical Circulation Building /Jamaica Central Control & Platform/ Portal.	

PORTS

Waterfront Structural Engineering Services New Jersey Marine Terminal-Elizabeth, NJ ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *Yu Shing Wong* *3 Gateway Center* *Newark, NJ 07102* [redacted] ***Start:*** *2009* ***End:*** *2010* ***Cost:*** *N/A*	The LiRo team provided the waterfront structural engineering services to inspect, evaluate, design and prepare contract drawings and construction cost estimates for priority repairs for the following: • NJMT Port Newark Berths 3 to 25 (Odd) • NJMT Port Newark Berths 2 to 36 (Even) • Elizabeth PAMT Berths 50 to 86 (Even) • Elizabeth PAMT Berths 88 to 98 (Even) & Turntable • NJMT AMT Berths 1 &2, Conc. Mooring Dolphins & Timber Walkways	
Battery Park City Ferry Terminal ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** Nilgun Ozdemir, P.E. *3 Gateway Center* *Newark, NJ 07102* [redacted] ***Start:*** *1998* ***End:*** *2008* **Cost:** *$70M*	The LiRo team to provide structural and marine engineering services for the design of a permanent floating ferry terminal, which will provide the facility a minimum 25-year life. The facility is the largest of its kind in the US, encompassing more than ¾ acres of floating structure. The floating terminal structure consists of a mono-hull main terminal; two anchorage towers anchored to bedrock, 75 feet below the water; & pedestrian walkways connecting to the Battery Park City Esplanade.	
Inspection of NJ Marine Terminal–Port Elizabeth ***Owner:*** *Port Authority of NY & NJ* ***Contact:*** *Mr. C. John Lin, P.E.* *3 Gateway Center* *Newark, NJ 07102* [redacted] ***Start:*** *2007* ***End:*** *2007* **Cost:** N/A	The LiRo team provided marine engineering services in connection with the performance of a condition survey of Berths 88, 90, 92, 94, 96, 98 and Turntable located at the NJ Marine Terminal in Elizabeth, NJ. The condition survey enabled the verification of the status of all load restrictions and priority repair recommendations as compared with the previous condition survey inspection.	

WORLD TRADE CENTER

Lower Manhattan Infrastructure - Program Management ***Owner:*** *NYCDDC* ***Contact:*** *Thomas Foley* *30-30 Thomson Ave.* *LIC, NY 11101* [redacted] ***Start:*** *2001* ***End:*** *2003* ***Cost:*** *$9M (fee)*	The LiRo team provided program management services in support of: • Coordination of all Infrastructure below Canal Street • Road Projects included, West St. Liberty, Vesey, Barclay • WTC 7 Area Coordination and Scheduling • Coordination of City Five Year Road Construction Program • Utility Coordination ConEd, ECS, City DEP • Agency Coordination, NYC DDC, NYC DOT, Port Authority, State DOT	
LMCCC Program Coordination Services ***Owner:*** *LMCCC* ***Contact:*** *Robert Harvey, PE* *One Liberty Plaza* *New York, NY 10006* [redacted] ***Start:*** *2005* ***End:*** *Ongoing* ***Cost:*** *$9M (fee)*	The LiRo team is the primary day-to-day coordinator of the lower Manhattan construction projects, responsible for coordinating and organizing logistics, scheduling, and other actions relating to the various construction projects, in addition to taking all appropriate steps to insure minimize disruption to the lower Manhattan residential and business community	
Rebuilding of Fiterman Hall - Borough of Manhattan Community College ***Owner:*** *DASNY* ***Contact:*** *Richard Dalessio* *One Penn Plaza* *New York, NY 10119* [redacted] ***Start:*** *2007* ***End:*** *2012* ***Cost:*** *$160M*	The LiRo team is presently serving as CM subconsultant for the rebuilding of Fiterman Hall for the Borough of Manhattan Community College. For this project, LiRo is providing construction management services including scheduling, cost estimating and constructability review and inspection services.	

Systra Engineering (SYSTRA) is a specialist in engineering, design, planning, and construction management for transportation systems and their associated facilities. The firm brings to each transportation project an integrated approach, applying state-of-the-art technology, creativity, and intelligence to meet each client's unique needs. Systra has performed various projects for the Port Authority on Call-In basis including #415-05-016 for Professional Electronic Engineering Services, the PATH 84C Contact Rail Analysis and Design (Stage III) for Tunnels A & B, and PATH Call-In Track and Civil Engineering Services.

PMA Consultants LLC (PMA) a 100% minority-owned firm, was first awarded an on-call consulting contract with the Port Authority Engineering Department in 1998. Since then, they have performed many different functions under that contract, including:

- Implementation of Project management Systems for Engineering and the Chief Operating Officer
- Development of custom software applications
- Reporting for project management, Capital Budget management, and data integrity verifications
- Business process consulting for Engineering and Chief Operating Officer
- Schedule reviews for the Goethals Bridge Program
- Estimating for the $2.2B World Trade Center Transportation Hub
- Value Engineering for the $2.2B World Trade Center Transportation Hub

PMA was so successful in its implementation of these new customized systems that they continued as the administrators of these systems with PMA staff working for the Port Authority central project controls. They also continue to bring in new systems and upgrade and enhance the existing systems.

Also, because of its successful system implementation for Engineering, PMA was hired by the Chief Operating Officer of the Agency to replace their Capital Program Management System (Captrak) with a Primavera P3e/MyPrimavera system that is fully integrated with Engineering's project controls system.

As part of this assignment PMA brought many other innovations to the Port Authority, including:

- Complex, custom-designed, graphical performance reports seamlessly accessed from the Primavera toolbar.
- Automation of cost and schedule data into a monthly progress report previously done by project managers in Microsoft Word.
- Creation of a new cost-update cycle that made actual cost data available in Primavera within two weeks of month end closing, six weeks earlier.
- Creation of a new schedule-update cycle that provided project managers with a variance report after they provided update info to the scheduler. This control measure dramatically improved the accuracy of the schedule data.

- Recommendations on ways to identify and reconcile data inconsistencies between various Port Authority legacy databases.

The Port Authority also asked PMA to review complex construction bid packages to help expedite their multi-billion dollar three-year capital program. PMA also served on several committees, including a Design Quality Committee charged with improving and documenting design quality procedures in accordance with ISO 9000 standards and best practices. PMA used the lessons learned from their bid document review efforts to recommend several innovative solutions that are currently under consideration.

PMA also drafted special conditions contract language related to schedule and submittal management, incorporating best practices customized to the Port Authority's business processes.

Hirani Engineering and Land Surveying, P.C. is uniquely qualified and experienced as a Call-In Consultant for the Port Authority of NY & NJ. Our firm has received consecutive contracts as a prime consultant for Call In Construction Management and Land Surveying services with the Port Authority, and has performed numerous engineering, surveying and construction support and inspection services on Port Authority facilities over the past fifteen years.

Call-In Contract experience with the Port Authority include:

- CM Call In Agreement 2005-2007 - Prime Consultant
- CM Call In Agreement 2007-2009 - Prime Consultant
- Survey Call In Agreement 2005-2007 - Prime Consultant
- Survey Call In Agreement 2007-2009 – Prime Consultant

Staffing and On Call CM Contracts held with other agencies include:

- CM Services – Nassau County DPW – Joint Venture Partner
- CM Services – NYC School Construction Authority – Subconsutlant
- Construction Inspection Services – NYS DOT – Subconsultant
- Indefinite Requirement REI Services – NYC DDC – Prime Consultant

Representative Projects – Construction Inspection and Construction Management

- Second Avenue Subway. Role: Subconsultant for Inspection and Safety
- Fulton Transit Center. Role: Subconsultant for Inspection Services
- Bronx Whitestone Bridge. Role: Subconsultant for Inspection Services
- Town of Hempstead. Role: Prime Consultant for Roadway Inspection

KS Engineers, P.C. (KSE), is a certified MBE/DBE with full-service offices in Newark, NJ, New York City, Utica, NY and Philadelphia, PA, is a highly qualified professional engineering firm that provides civil engineering; structural engineering; geotechnical engineering; construction management & inspection; landscape architecture; aerial mapping ground control; boundary

survey, topographic survey, Right-of-Way and GPS mapping services. KSE is providing or has recently completed assignments for Construction Management & Inspection services as both a Prime and subconsultant, under the following "Call-In" or "Task Order" contracts listed below.

As Prime Consultant

- PANYNJ, Construction Management Services (MBE/WBE) On A "Call-In" Basis 2010
- NJ Transit, Task Order Contract (TOC) for Construction Management Services 2010 – 2012
- PANYNJ, Construction Management Services (MBE/WBE) On A "Call-In" Basis 2007, 2008 and 2009
- PANYNJ, Construction Management Services (MBE/WBE) On A "Call-In" Basis 2004, 2005 and 2006
- NJDOT, Construction Inspection Term Agreement (Central Region), 2006 – 2009

As Sub Consultant

- MTA LIRR, Contract # 5884-3-2 – On-Call Construction Management Services – On-Call Land Surveying Services
- NJ Transit, Task Order Contract (TOC) for Construction Management Services 2006 – 2009

DY Consultants (DY) are specialists in aviation planning and engineering. Since its inception in 1991, DY has played a significant role in the development of airports throughout the northeast. Relevant experience with the Port Authority includes subconsultant on-call assignments at LaGuardia and JFK airports. Specific experience of the LiRo Team is presented on a 'project-type' basis within the sections that follow. These sections are categorized in the following manner:

- On-Call Contracts
- Airports
- Bridges and Tunnels
- Buildings and Facilities
- Ports and Terminals
- Rail and Transit

Works-In-Progress Associates, LLC (WPA) has broad experience with projects within the Metropolitan New York/New Jersey area. WPA provided the preliminary design for Pan American expansion studies and cargo roadway system at Kennedy Airport International for The Port Authority of New York & New Jersey. The tasks included preparation of contract drawings for renovation and expansion of police garage at La Guardia Airport. Other area projects include:

US Federal Bankruptcy Courthouse and Post Office: Brooklyn, NY This is a 488,000gsf of renovation and 87,000 gsf of new space. WPA was responsible for construction administration including developing millwork, plaster and other finish details and resolving all site-related issues regarding electrical, HVAC, sprinkler system distribution and installation.

Avery Hall Restoration: New York, NY Starting in 1999, WPA was engaged by the Columbia University Department of Design and Construction as Project Manager for extensive upgrades

to the historic Avery Hall Building, which was part of the original Master Plan for Columbia's main campus. The total project budget was $20M and led to further contracts with Columbia University, demonstrating client satisfaction.

ON-CALL CONTRACTS
Call-In Construction Management Contract 2006-2010
JFK Terminal 5/6 Redevelopment
Jamaica, NY
Cost: $900M
Project Description: LiRo has provided Project Management and Resident Engineering Inspection services on a call-in basis. Assignments include:

John F. Kennedy International Airport Terminal 5/6 Redevelopment Project

Due to JetBlue Airways exceeding the capacity of its current terminal at JFK, an area behind the existing Terminal 5 has been designated for the development of a new 26 gate terminal building (625,000 sf) including connectors to the AirTrain, a new parking garage and the historical Saarinen building. The construction activities are being performed in a cost-effective and customer-friendly fashion. The terminal is operating at a minimum IATA Level of Service C. A summary of the primary construction activities follows:

Terminal

The new terminal building will be approximately 625,000 square feet. The existing flight wings 1 and 2 of the TWA terminal are being demolished to accommodate the construction of the new terminal for JetBlue. The new terminal design is based on a daily average of 248 arrival flights and 248 departing flights, with peak arrivals of 20 flights per hour and 25 departing flights per hour. The new terminal will consist of:

- 12 Curbside check-in positions
- 24 Kiosks for customers with bags
- 20 Kiosks for customers without bags
- 28 Lobby Check-on positions
- 20 Security positions
- 6 Bag Claim Devices

Airside

- 26 A320/EMB 190 compatible contact gates and 8 hardstands
- Dual taxi lanes to facilitate simultaneous arriving and departing flights

Landside

- New elevated pedestrian connector between new garage and AirTrain station and the new terminal. The connector will include moving walkway between the AirTrain station and the new terminal building.

- New loading dock including six loading bays, two of which will be capable of accepting a 55-foot long articulated semi-trailer truck.

Flight Wing Connector Tubes to Original Terminal 5

- The East Tube will be demolished. Flight Wing 2 will be maintained as a link between the new terminal and the original Terminal 5, with unobtrusive structural modifications.
- The West Tube will be modified to operate at a minimum Level of Service C to facilitate JetBlue customers checking in at kiosks in the Saarinen Building.

John F. Kennedy International Airport Parking Garage at JetBlue($65M)

To support the Terminal 5/6 Redevelopment Project, and the increased capacity of customers at the new JetBlue terminal building a new parking garage (yellow garage) has been constructed to provide a minimum of 1,500 net parking spaces. The garage is designed to operate at a minimum Level of Service C.

Owner: Port Authority of New York & New Jersey
Contact: William Kehoe, P.E.
[redacted]
241 Erie Street, Room 238 Construction Management Division
Jersey City, NJ 07310

On-Call Asbestos Material and Lead Paint Consulting Services 2002 - 2004

Various Locations, NJ

Cost: $450,000

Project Description: LiRo provided environmental consulting services to the Port Authority at their facilities throughout New York and New Jersey. These services included: asbestos/lead air and project monitoring, including facility consultant and contract specification and plan review; facility environmental/building surveys for asbestos and lead containing materials; risk assessment for occupational exposure to asbestos, lead, and hazardous materials.

Certified personnel from LiRo have worked to assist Port Authority specialists in overseeing comprehensive major asbestos removal projects at Port Ivory in Staten Island and LaGuardia Airport in Queens. Our effort on these projects involved project monitoring to confirm the contractors compliance with federal, state, and Port Authority requirements; daily inspection of

the work area containments and work zone boundaries; assessment of engineering control applicability and effectiveness; review of MSDS and contractor health and safety plans; air sampling during abatement activities; waste manifest review; and other tasks necessary to ensure the safe and responsible completion of the asbestos contractor tasks.

LiRo has had experienced lead paint abatement monitors certified by the Society of Protective Coatings as competent persons (C-3 and C-5) perform inspections at numerous Port Authority facility projects involving abrasive blasting procedures including the ramps to the Lincoln Tunnel, the towers of the George Washington Bridge, and the decks of the Goethals Bridge and Outerbridge Crossing. Continuous inspections were conducted throughout the work shifts to assess the containment structure, workers compliance with the stated health and safety plan, and job progress; findings reports were completed for each inspection and submitted daily to Port Authority personnel.

Owner: Port Authority of NY & NJ
Contact: Uday Mehta
[redacted]
2 Gateway Center
Newark, NJ 07102

NYC School Construction Authority Emergency Response Management and Coordination Program 2006-2009, *Citywide*
Cost: $70M
Project Description: LiRo is serving as Construction Manager (CM) to manage and coordinate responses to emergencies. CM personnel shall be on-call twenty-four hours per day, seven days per week, including holidays. The CM must respond to emergencies on the basis of a telephone call from an authorized SCA representative, immediately mobilize the CM's personnel and the required trades and labor, hire Contractors/Subcontractor/ Subconsultant(s), etc., and procure required materials and equipment for the purpose of correcting, stabilizing and/or eliminating hazardous materials or dangerous conditions at public schools in the five boroughs of the City of New York.

Owner: New York City School Construction Authority
Contact: Gordon Tung, Chief Project Officer
[redacted]
30-30 Thomson Avenue
Long Island City, NY 11101

CM/Build Requirements Contract for NYC Housing Authority, *Citywide*
Cost: $249M
Project Description: Under successive contracts, LiRo is performing work on a task order basis. Currently, we are in the design or construction phases of roofing façade repair projects, boiler room upgrades and electrical system upgrades throughout New York City. These properties all require that LiRo perform pre-construction and construction phase services. LiRo is responsible

for pre-qualifying prime contractors, bid administration for the projects and ultimately entering into contract with the lowest responsible prime contractor. These projects include a wide variety of CM services including:

- Demolition
- Lead and Asbestos Abatement
- Cost Estimating
- Constructability Review
- Scheduling
- Phasing Development
- Contractor Prequalification
- Bid Administration
- Project Management
- Construction Inspection
- Document Control
- Change Orders
- Progress Payments
- Project Closeout

Of particular importance is that these projects require careful coordination with community residents so that interruptions of utilities, housing access, dust, noise, etc. is kept to an absolute minimum. In addition, a community liaison is necessary to keep local residents well informed as to the progress and new developments on the project. These projects include a wide variety of CM services including:

- Demolition
- Lead and Asbestos Abatement
- Foundations
- Structural Concrete
- Structural Steel
- Mechanical, Electrical, Plumbing
- Sitework
- Cost Estimating
- Constructibility Review
- Scheduling
- Phasing Development
- Contractor Prequalification
- Bid Administration
- Project Management
- Construction Inspection
- Document Control
- Change Orders
- Progress Payments
- Project Closeout

Owner: New York City Housing Authority
Contact: Constantino Sagonas, Assistant Deputy General Manager
[redacted]
90 Church Street, 11th Floor
New York, NY 10007

On-Call Construction Management Services 1999-2004, *Various Locations*
Cost: $100M
Project Description: LiRo provided resident engineering inspection, CPM scheduling, and construction management services to the Long Island Rail Road (LIRR) on an as-need basis. The contract required LiRo to be "on-call" to respond to a broad range of construction projects on short notice. Project included the scope development, estimating and scheduling for its $2B Capital Program and representative projects:

- Speonk Yard Construction
- Bayside Station Rehabilitation
- 9 Suffolk County Bridge Rehabilitation
- 8 Nassau County Bridge Rehabilitation

- 30 Passenger Station Improvements
- Jamaica Station to JFK AirTrain
- Valley Stream Power Substation
- Hicksville Station Rehabilitation
- Parking improvements at 10 stations

Owner: Long Island Rail Road
Contact: Eric Denker
[redacted]
Jamaica Station
Jamaica, NY 11435

On-Call Owner's Representative Construction Management Services, *New York, NY*
Cost: $2M
Project Description: LiRo provided construction management services on an On-Call/Emergency basis. The contract involved any work that may require CM services throughout all of Battery Park City. Projects included:

- Rector Street Bridge repair
- North End sidewalk widening and fence relocation
- New ballfield maintenance shed
- Installation of new street and directional signage

Owner: Battery Park City Authority
Contact: Kevin Finnegan
[redacted]
One World Financial Center
New York, NY 10281

Hirani Group

CALL-IN CONTRACT FOR CONSTRUCTION MANAGEMENT SERVICES DURING 2005, 2006 AND 2007
AIR TRAIN PROJECT.

Hirani worked directly for the Port Authority providing project schedules as the project neared final completion. The $1.2 Billion project included the construction of the guideway structure and foundation system, trackway, modifications at nine terminals, and four new stations. Hirani developed preliminary CMP schedules, and reviews and analysis of contractor schedules for the completion of the project.
Key Project Elements:
- Critical Path Method (CPM) Scheduling
- Preliminary Schedules
- Periodic Scheduling Updates
- Planned and As-Built Analysis Schedules
- Resource and Cost Loaded Schedules
- Construction Project Acceleration
- Schedule Delay Analysis and Quantification

OWNER: PORT AUTHORITY OF NEW YORK & NEW JERSEY
CONTACT: William Kehoe
[redacted]

CALL-IN CONTRACT FOR CONSTRUCTION MANAGEMENT SERVICES DURING 2007, 2008 AND 2009

PATH SYSTEM ELECTRICAL UPGRADES

As prime consultant for CM call in services, Hirani provided two electrical engineers for construction inspection services for the PATH System electrical system improvements in the tunnels and yards. Representative Project Activities:

- Inspected installation of radiating cable in PATH system tunnels
- Inspected new bracket installations
- Inspected installation of drag lines and the pulling of fiber optic cable.
- Inspected retrofit of TSI boxes
- Performed surveys for emergency repairs at Hoboken Station and various tunnel locations
- Inspected installation of inner ducts for fiber optic installation
- Inspected installation of LIDS control panels and conduit
- Testing of laser intrusion detection systems and camera installation
- Inspection of installation of 800 MHZ cables and Type III brackets
- Inspected Leak Repair work at tunnel locations

CONTRACT COMPLIANCE/OFFICE ENGINEERING SERVICES

Hirani provided a contract compliance specialist/office engineer to assist the Port Authority of NY & NJ in assessing and measuring compliance with the agency's M/W/B/DBE program. Services provided include:

- Analysis of contractor M/W/S/DBE participation
- Processing of M/W/S/DBE set aside requests
- Reviews of subcontractor approvals
- Update of M/W/S/DBE vendor data base
- Monitoring M/W/S/DBE contractor utilization and award
- Participate in audit of PA FAA Contracts
- Attend low bid meetings
- Attend agency M/W/S/DBE programs
- Prepare management assessment reports
- Document corrective action compliance with contract

OWNER: PORT AUTHORITY OF NEW YORK & NEW JERSEY
CONTACT: William Kehoe
[redacted]

PANY&NJ Call-In Contract #415-05-016 for Professional Electronic Engineering Services - New York & New Jersey

Under the Port Authority Electronic Call-In Contract, SYSTRA has performed numerous tasks. These tasks included Jamaica Station Radio Communications; Perimeter Intrusion Detection System (PIDS); JFK 800 MHz Enhancement Project; AK Drawbridge construction-related services, construction management services, and as-in-service plans; WTC CCTV Access Control Design; M/A Corn SITEPRO Upgrade and Corn System Expansion; staff augmentation design services; Corbin St. Phase 2A Equipment Flyover Bridge; PATH DCE Multiplex System Evaluation Services; LGA roof replacement; TEB Lindbergh Drive guard post widening; Laser Intrusion Detection System (LIDS); PATC Communications Equipment Room Dwg. Development; Port Jersey Marine Terminal Development; Lincoln Tunnel Vent Plant; and Newark Liberty Intertional Airport Terminal A.

SYSTRA SERVICES:

- Project Management
- Engineering
- Stations
- Architectural
- Electrical
- Traction Power/Catenary
- Systems
- Supervisory Control
- Security
- Systems Integration
- Communications
- Construction Management

CLIENT: Port Authority of NY&NJ
225 Park Avenue South
New York, NY 10003
Mr. Vijay Revankar, Acting Principle – Electronics

Port Authority of New York and New Jersey/PATH Call-In Track and Civil Engineering Services, New York, New York

PANY&NJ's Engineering Department sought "call-in" civil engineering and track design services to support the continual maintenance of the PATH system, which plays a vital role in the daily transportation needs of New York and New Jersey. SYSTRA was retained by PANY&NJ to provide tunnel track contract drawings, special trackwork design, design of third rail modifications associated with track improvements, and civil engineering projects, such as drainage and utilities design. SYSTRA also provided staff to PANY&NJ to work on an "as-needed" basis at the client's Manhattan offices.

Task assignments included assistance in the procurement of a prototype "high-technology crossover, including the development of specifications for the procurement and review of

proposals for the design and manufacture of tangential geometry special trackwork with flexible switches; development of contract drawings fortunnel track replacement, a ventilation facility, and drainage improvements to the right-of-way; a tunnel turnout survey that evaluated new turnout technologies that could be applicable to PATH; a tunnel clearance study conducted on an old section of the original brick tunnel under the Hudson River which was discovered to need reinforcement and involved a detailed analysis of the tunnel survey data and production of a dynamic displacement diagram for PATH cars; and engineering and design services to replace the existing 75 lb "umbrella" rail in the Hudson River tunnels while preserving adequate clearances to the tunnel structure.

SYSTRA SERVICES:

- Tunnel Track
- Special Trackwork
- Third Rail
- Drainage and Utilities

CLIENT:

Port Authority of New York and New Jersey
225 Park Avenue South
New York, NY 10003
Mr. Ted Muellers, Project Manager
[redacted]

KSE

LIRR, ON-CALL CONSTRUCTION MANAGEMENT SERVICES – ON-CALL LAND SURVEYING SERVICES

Various Locations, New York

PROJECT DESCRIPTION

As a subconsultant to HDR/Daniel Frankfurt, P.C., **KS Engineers, P.C. (KSE)** was solely responsible for providing the LIRR with on-call surveying services under an overall On-Call contract for construction management services. ***KSE*** provided surveying services for 21 individual assignments over a four year period from 2007 to 2010. The individual assignments consisted of the following:

- Outbound and Topographic Bayside and Murray Hill Substations, Queens, NY
- Broadway Station As-Built Survey, Flushing, NY
- Topographic Survey for Bellaire Substation, Hempstead, NY
- Topographic Survey for Long Island City Freight Yard, Queens, New York
- As-Built Survey at Rosedale Station, Nassau County, Long Island, NY
- Outbound Survey – Port Washington Station Parking Lot, North Hempstead, NY
- Topographic Survey for Shea Stadium Platform Extension, Queens, NY
- Outbound, and Planimetric Survey at LIRR Hicksville Station, Hicksville, NY
- Outbound, Topographic & Subdivision Survey for LIRR Merrick Substation, Merrick, NY
- Topographic Survey at Jamaica Station and Hillside Support Facility, Queens, NY
- Topographic Survey for LIRR Hicksville Substation, Hicksville, NY
- Shore Road Bridge, Oyster Bay, NY
- Bayshore Station Overpass Replacement, Town of Islip, NY
- As-Built Survey at Cold Spring Harbor Station

- Topographic Survey for LIRR Little Neck Substation, Great Neck, NY
- Survey Services at Pennsylvania Station, Manhattan, NY
- Topographic Survey for LIRR Lindenhurst Substation, NY
- Topographic & Right of Way Survey Plans for Wantagh Interlocking, Amityville Interlocking, Part of Seaford Station, and Part of the Amityville Station
- Construction Stakeout for Broadway Station, NY
- Outbound and Topographic survey for LIRR Syosset Station, Syosset, NY

PROJECT OWNER

MTA Long Island Rail Road
Hillside Support Facility
93-59 183rd Street-Sept. 3143
Hollis, NY 11423
Mr. Valeriy Makarovskly [redacted]

CLIENT

HDR / Daniel Frankfurt
500 Seventh Avenue
New York, NY 10018
Mr. Pasqual Tulino, P.E. [redacted]

"CALL-IN" CONSTRUCTION MANAGEMENT SERVICES

PROJECT DESCRIPTION

Services being provided under this contract generally consist of performing construction management & inspection services of structural steel, structural concrete, asphalt and concrete paving, painting of structural steel, electrical, mechanical, construction contract administration, constructability review, construction scheduling & cost estimating.

PROJECT OWNER/CLIENT

Port Authority of NY & NJ
241 Erie Street, Room 228, Jersey City, NJ 07310-1397
William Kehoe, Project Manager, [redacted]

AVIATION

Traffic Engineering Services at NY & NJ Airports, *Queens, NY*

Cost: $78M

Project Description: LiRo is providing traffic engineering services on an as-needed basis. Assignments have included:

- A low speed weaving analysis-requiring calibration of the HCS results with empirical data for LOS determination (LaGuardia Airport)
- Exit roadway signing analysis requiring collection and interpretation of origin and destination data (LaGuardia Airport)
- Alternative analysis of egress ramps from a proposed multi-level parking structure (LaGuardia Airport)

- Frontage analysis of HOV operations at U.S. Airways and Delta Airlines (LaGuardia Airport)
- Accident analysis of parking lots 9 and 10 (John F. Kennedy International Airport)
- Traffic/civil design of signal system and crosswalks for Central Terminal Area (Terminals 2 and 3) where services included traffic analysis and development of a final design, MPT and construction document package
- Field inspections of Kennedy Airport traffic control devices, to evaluate their condition and effectiveness
- Preparing Sign Service Requests (SSRs) related to signs, pavement markings, and delineation devices (Quick Kurb, etc.). LiRo staff will capitalize on our extensive knowledge of the MUTCD and the new PA standards (JFK and LGA).
- Performing various traffic analyses and studies (JFK)
- Support with the design of parking lots, including the determination of adequacy of handicapped parking spaces (JFK)
- Speed and Delay Studies (JFK)

JFK AirTrain

LiRo staff was responsible on an ongoing basis for the daily inspection of maintenance and protection of traffic for the AirTrain construction project including reviewing plans, representing the Port Authority at meetings, investigating construction sites, and responding to incidents with follow-up support (John F. Kennedy International Airport).

- Verified that all lane closings and detours conform to the approved plans and any applicable standards
- Ensured that all MPT related activities such as implementing lane closings and detours were performed in a safe manner acceptable to all state and federal guidelines.
- Monitored vehicle and pedestrian traffic flow to identify problems caused by construction related activities, such as improving detour signage and improving traffic signal timing.
- Attended weekly MPT meetings with the contractor and Port Authority to discuss coordination issues and address any concerns the Airport facility may have in regard to current and future detours.
- As an integral part of the Joint Operations Center (JTOC) responsibilities included identifying any incident on the Van Wyck Expressway that may impede traffic flow to the JTOC. Informed the JTOC of ongoing construction activities on the Van Wyck such as lane closures and report the observed level of service for the roadway.

LiRo conducted a passenger survey for AirTrain that focused on collecting non-revenue pedestrians using the facilities stations A, B & C and terminal stations 1, 2/3, 4, 5/6, 7 & 8/9. In addition, a verbal survey was also conducted. The findings were assembled in a technical memo including summary sheets and the raw data.

Newark Airport
Assignments at Newark Airport have included:

- Roadway pavement markings and signing
- Roadway safety studies
- Assistance with developing an overall MPT program for the airport's capital programs
- Analysis of vertical and horizontal clearances along roadways
- Preparation of service sign requests
- Professional assistance with the design and placement of variable message signs
- Technical assistance with the preparation of presentations concerning MPT strategies

The conceptualization and review and layout of trail-blazer signing tasks included the preparation of Service Sign Request forms and the investigation of alternate means for detection of oversized vehicles.

Parking Garage for Terminals 8 & 9, JFK
LiRo provided professional traffic engineering services to assist in the design of a new parking garage for Terminals 8 and 9 at Kennedy. The future five-story garage will provide parking for customers utilizing American Airlines and a direct connection to the Terminals 8/9 JFK AirTrain Station. The garage will add 1950 public parking spaces into the Central Terminal Area. To maximize capacity parking spaces, the entrance plaza was located outside the garage footprint and a double threaded helix would accommodate the vehicular flow between levels. The project required extensive coordination with all other engineering disciplines, primarily civil, architectural and structural.
During the expected 22-month construction period, LiRo assisted in the design of a new temporary parking lot outside of the Central Terminal Area that would accommodate 850 public spaces for the American Airlines patrons. An extensive detour plan was designed. Free shuttles will transport customers to and between the terminals.

Owner: Port Authority of NY & NJ
Contact: Edoardo Cuniberti
[redacted]
JFK International Airport, Building 111
Jamaica, NY 11430

Port Authority of New York and New Jersey, John F. Kennedy Airport – Central Taxi Hold (CTH) Lot Improvements, New York, New York

SYSTRA was awarded a task to provide professional engineering services for the design and installation of an automated Optical Recognition System at the PANYNJ John F. Kennedy Airport – Central Taxi Hold (CTH) Lot. The project included detailed design for the automation of the taxi assignment program using an Optical Character Recognition System. The design allowed for an automated collection of a taxi license plate (medallion) number upon entry to the lot via three entrance lanes. This information is displayed on LED displays for driver verification and compared with a database that directs the taxi to the short or long trip lot queuing area. The system runs on a first-in/first-out basis, which allows for the orderly retrieving and dispensing of taxis within the JFK terminals.

CLIENT: Port Authority of New York and New Jersey
225 Park Avenue South
New York, NY 10003
Charles Clinton, PE, Project Manager
[redacted]

PANY&NJ, LGA CTB Roof Replacement Electronic Device Assessment, LaGuardia International Airport, New York

SYSTRA completed a detailed site investigation to evaluate the more than 50 electronic devices on the roof of the CTB. SYSTRA identified electrical code deficiencies, generated applicable drawings, and prepared reports.

SYSTRA SERVICES:
Communications
Electrical
RF Engineering

CLIENT: PANY&NJ
225 Park Avenue South
New York, NY 10003
Mr. Vijay Revankar, Principal
[redacted]

"CALL-IN" CONSTRUCTION MANAGEMENT SERVICES

PROJECT DESCRIPTION

Services being provided under this contract generally consist of performing construction management & inspection services of structural steel, structural concrete, asphalt and concrete paving, painting of structural steel, electrical, mechanical, construction contract administration, constructability review, construction scheduling & cost estimating. To date ***KS Engineers, P.C. (KSE)*** has been given the following construction management assignments under this "Call-In" agreement:

- **EWR 264.003 – Lower Level Expansion and B-1 Circulation - Project Scheduler**. The scope of work of this contract is to develop the at-grade space in Terminal B into a new domestic baggage claim hall on the lower level of Terminal B, including two new substations. Approximate contractual amount of $53M.

- **LGA 124.029, ARFF – Assistant Resident Engineer** responsible for electrical/mechanical building construction at the ARFF project and to work on other general LGA contracts including volume of electrical/mechanical work, including High Pressure Water Storage & Pump Station.
- **EWR, CTA Toll Plaza & Terminal B Renovations – Electrical Inspector** responsible for the inspection of the installation and/or commissioning of electrical equipment (including high tension), communication and fire alarm systems, and electrical rehabilitation of existing building systems (including switchgears, switchboards, emergency generators, fire alarm systems).

PROJECT OWNER/CLIENT

Port Authority of NY & NJ
241 Erie Street, Room 228, Jersey City, NJ 07310-1397
William Kehoe, Project Manager[redacted]

BRIDGES AND TUNNELS
Construction Inspection on an As-Needed Basis 2004-2007
New York, NY
Cost: $30M
Project Description:
LiRo provided construction management and inspection services on an as-needed basis at all MTA-TBTA facilities. Projects included:

- Installation of ethanol tanks at the Brooklyn Battery Tunnel and Randalls Island
- Deck joint repair at the Verrazano Narrows Bridge
- CCTV cameras and light at the Battery Parking Garage
- Dyckman Street Bridge access platform at the Henry Hudson Bridge
- Salt dome installation at the Cross Bay and Marine Park Bridges
- Miscellaneous roadway repairs at all facilities

Owner: MTA-Bridges and Tunnels (TBTA)
Contact: Igor Shapiro, P.E.
[redacted]
Robert Moses Building
New York, NY 10085

PANY&NJ/PATH 84C Contact Rail Analysis and Design (Stage III) PATH Tunnels A & B, New York and New Jersey
SYSTRA's scope of work was to perform a field inspection in Tunnels A and B to identify the various forms of contact rail mounting and to recommend some options for converting to a new style mounting. The work included final track designs to develop custom contact rail and coverboard brackets that would work in the most tightly constrained

areas of the PATH tunnels. Design included custom mounting details and rotation of contact rail to achieve required clearances to the tunnel ring structure, similar to what SYSTRA designed for PATH Tunnels E and F in 2002. A prototype bracket was manufactured and is currently under field testing.

SYSTRA SERVICES:

- Project Management
- ROW/Track
- Structural
- Traction Power/Catenary

CLIENT:

Port Authority of New York & New Jersey
Two Gateway Center, 16th Floor
Newark, NJ 07102
E. J. Stastny, PE, Senior Engineer
[redacted]

BUILDINGS AND FACILITIES

Aircraft Rescue Fire Fighting Facility, La Guardia Airport, New York

Jamaica, NY

Cost: $35,000,000

Project Description:

The Aircraft Rescue Fire Fighting Facility (ARFFF) is located just north of the Delta Shuttle Terminal at LaGuardia Airport. This 50,000SF two-story steel structure with exterior aluminum cladding will house the Port Authority Police LGA Command and the airport's emergency vehicles. The new facility will provide for critical on-airport emergency, safety and security functions, and will help reduce emergency response times. The building includes separate detention cells for juveniles and adults, interrogation rooms, detective workstations, canine facilities, bicycle patrol, locker rooms, offices, records storage room, and a 9,000SF garage. It will also include a separate VIP suite with a private entrance. The building is equipped with a full sprinkler system, state-of-the-art security and communications system, chemical foam storage tanks, and a building fire alarm system that connects to other buildings within the airport.

LiRo's responsibilities included:

- Managing site inspections to ensure that all construction complies with the contract requirements and with the applicable building codes.
- Coordinating life safety inspections, including fire alarm, sprinklers, fire smoke dampers, and smoke purge systems.
- Tracking all inspection deficiencies and updated status database.
- Reviewing shop drawings, mock-up installations, and coordinating with various trades to resolve field conditions.
- Reviewing contract documents for errors and omissions and assisted with change orders preparation.

- Interacting with a project team of Port Authority staff and consultants to monitor project progress.
- Attending weekly job meetings and reporting construction activities.
- Preparing punch lists with the assistance of Architects / Engineers for the entire building including electronic systems.

Owner: Port Authority of New York & New Jersey: Port Authority Police Department
Contact: William Kehoe, P.E.
[redacted]
241 Erie Street, Room 238, Construction Management Division
Jersey City, NJ 07310

CONSTRUCTION MANAGEMENT SERVICES FOR TRENTON STATION REHABILITATION

This station rehabilitation project includes the expansion of the building footprint and the addition of a second floor/mezzanine level in order to provide additional office, retail and civic space; exterior and interior architectural improvements; upgrades of various building systems; landscaping and circulation improvements to the existing parking areas; and miscellaneous improvements including closed-circuit televisions, signage, and graphics and information displays. Construction cost of this improvement project is approximately $30 million.

PROJECT OWNER
NJ Transit
One Penn Plaza East
Newark, NJ 07105
Mr. Mike Tomasetti
[redacted]

CLIENT
Michael Baker Corporation
565 East State Street
Trenton, NJ 08609
Martin Portik
Resident Engineer
[redacted]

ATLANTIC CITY TRAIN STATION

Under a Construction Management Task Order Agreement, ***KS Engineers, P.C. (KSE)*** provided resident engineering and inspection services for the upgrade of a rail terminal fueling facility at the Atlantic City Train Station.

PROJECT OWNER
NJ Transit Corporation
One Penn Plaza East
Newark, NJ 07105
Mr. Mike Tomasetti
[redacted]

CLIENT
JCMS, Inc.
1741 Whitehorse-Mercerville Rd.
Mercerville, NJ 08619
Mr. Jayanta Dutta
[redacted]

PORTS AND TERMINALS

PANY&NJ Corbin Street Intermodal Rail Facility, Port Newark and Port Elizabeth, New Jersey

SYSTRA provided preliminary and final design services for a new intermodal freight yard located at the Port Newark and Port Elizabeth Marine Terminals in New Jersey. SYSTRA was the lead consultant and coordinated and prepared all contract drawing packages, as some portions of the project were designed by the PANY&NJ or its call-in consultants. The full build plan for the facility consisted of approximately 125,000 feet of new track, 118 turnouts, three new rail bridges, a rail to truck unloading area, a vehicular flyover bridge, and an administration building.

SYSTRA SERVICES:

- Project management
- Track design
- Civil design
- Electrical design
- Mechanical design
- Construction staging

CLIENT:
Port Authority of New York & New Jersey
225 Park Avenue South
New York, NY 10003
Kelly Pollard, Civil Engineer
[redacted]

Port Authority of New York and New Jersey, Port Newark Tyler Street Project, Newark, New Jersey

As part of a civil/track call-in contract with the Port Authority of New York and New Jersey, SYSTRA led a track replacement project along Tyler and Corbin streets in Port Newark, NJ. This project included special trackwork with special lap turnouts and numerous at-grade crossings of varying material types.

SYSTRA SERVICES:

- Civil
- Track
- Project Management

CLIENT:
Port Authority of NY & NJ
225 Park Avenue South
New York, NY 10003
Mr. Tom Lapinsky, Project Manager
[redacted]

"CALL-IN" CONSTRUCTION MANAGEMENT SERVICES

KSE

Services being provided under this contract generally consist of performing construction management & inspection services of structural steel, structural concrete, asphalt and concrete paving, painting of structural steel, electrical, mechanical, construction contract administration, constructability review, construction scheduling & cost estimating. To date ***KS Engineers, P.C. (KSE)*** has been given the following construction management assignments under this "Call-In" agreement:

- **NJ Marine Terminal – Civil Inspector** monitoring activities at Marine Terminal construction sites; includes installation, testing and inspecting civil works. Provides oversight to ensure construction progresses as scheduled and contract specifications are adhered to.
- **New York Marine Terminal, Howland Hook & Teterboro Airport, PIDS – Senior Inspector** responsible for building demolition at Howland Hook & the inspection and testing phase of the Perimeter Intrusion Detection System at Teterboro Airport, fencing sensors and radar system.
- **Howland Hook/Brooklyn Piers – Senior Office Engineer** responsible for various construction projects at Howland Hook / Brooklyn Piers, Port Authority Teleport and selective contracts at Airport locations with a construction cost of up to $150 million. Responsibilities also include processing of contractor requisitions, verifying labor, equipment & materials.

PROJECT OWNER/CLIENT

Port Authority of NY & NJ
241 Erie Street, Room 228, Jersey City, NJ 07310-1397
William Kehoe, Project Manager, [redacted]

DY Consultants provides Construction Inspection Services to the Port Authority of New York & New Jersey under a contract for MBE and DBE firms. This contract is in place for a term of 3 years. DY is a subconsultant to Hirani Engineering on this contract. Examples of these projects include:

- LRS 284.401 Jamaica Station AirTrain Terminal/LIRR Station
- LRS 740.000 Van Wyck Expressway Beautification Hardscape Roads and Bridges
- LRS 750.000 Van Wyck Expressway Beautification Street Signs, Trees and Sidewalks
- LRS 770.000 Van Wyck Expressway Beautification Jazz Names, Piano Keys, Portal Signs
- LRS 790.00 Van Wyck Beautification Jamaica Station Parking Lot
- JFK 564.301 JFK Expressway Outbound Widening

RAIL AND TRANSIT

Traffic Engineering Services (JFK AirTrain MPT - Hines)

Queens, NY

Cost: $500,000

Project Description:

LiRo staff was responsible on an ongoing basis for review and comment on traffic related submittals as well as performing daily MPT inspections. Due to the fast pace nature of the AirTrain Project submittal and approval process for MPT items were streamlined by having "working" session with the contractor's designers. In order to fulfill the Port Authority's obligation for an operational JTOC during the construction of the Van Wyck Section, responsibilities included the assurance that all staffing needs were fulfilled. Coordinated notifications for construction activities and incidences with various City and State agencies as well as the public. (Port Authority of NY & NJ, $500K, 2001)

Owner: Port Authority of NY & NJ

Contact: Mizra Rizwan Baig
[redacted]
JFK International Airport, Building 111
Jamaica, NY 11430

KSE

No. 7 Subway Line Extension Project

As a subconsultant, KS Engineers, P.C. (KSE) is providing construction management services for this project that will extend the No. 7 Line westward under West 41st Street and southward under Eleventh Avenue to the southerly terminus at West 25th Street. The extension provides a 7,100 feet long two-track railroad with two lay-up tracks for the storage of six trains.

PROJECT OWNER
MTA Capital Construction
NYC Transit
Mike Rafat
Project Director
[redacted]

CLIENT
Hill/LiRo/Lemley/HDR JV

MANAGEMENT APPROACH

THE LIRO TEAM IS COMPRISED OF THE VERY BEST CONSTRUCTION PROFESSIONALS THAT ARE AVAILABLE LOCALLY. LIRO HAS SUCCESSFULLY WORKED TOGETHER WITH MEMBERS OF OUR PROPOSED TEAM ON PRIOR AND/OR CURRENT STAFF AUGMENTATION CONTRACTS. WE HAVE THE TALENT, EXTENSIVE LOCAL RESOURCES, TECHNICAL CAPABILITIES, AND PROVEN APPROACHES BASED UPON PORT AUTHORITY EXPERIENCE TO SUCCESSFULLY SUPPORT YOUR CAPITAL PROGRAM. WE WILL BE IMMEDIATELY RESPONSIVE TO YOUR NEEDS AND WILL UNCONDITIONALLY SERVE YOUR INTEREST WITH QUALITY AND EFFICIENCY.

MANAGEMENT APPROACH

Overview

Similar to the services provided during the past 5 years under our current 'On-Call' CM Contract with the PANYNJ, LiRo will work closely with the Port Authority's Engineer of Construction, Senior Resident Engineers, and Resident Engineers to develop an integrated team that will manage all construction activities on an individual assignment basis.

BENEFITS OF THE LIRO APPROACH

The LiRo Team understands the Port Authority's administrative procedure: PACCs, Change Orders, Tenant Alteration Applications, etc.

LiRo understands the Port Authority's need for deep resources and immediate responsiveness.

Our team has first-hand experience with the Port Authority's construction inspection and reporting requirements.

We know the required interface and coordination with operating departments and tenants.

LiRo is skilled at coordinating work with ongoing restoration projects.

We are familiar with requirements of on-call and task order assignments.

As the Port Authority's Construction Consultant, LiRo will focus on managing all project phases as required and directed by the Port Authority. In general, this will include providing construction management and inspection services for all aspects of construction work related to projects that may be assigned. If requested, as a full service construction management firm we will provide design and constructability reviews for design feasibility and efficiency.

Understanding the Authority's Needs

A fundamental source of our success on this call-in construction management contract is our ability to be immediately responsive, efficient and provide the depth of resources to address any requirement. Our staff focuses its energy on supporting the Port Authority to the fullest extent by performing all services to the highest levels of quality and timeliness. The result is an efficient construction management organization that is able to effectively manage any challenge.

The LiRo team's New York/New Jersey pool of qualified personnel that we can draw upon, totals more than 800 individuals.

Staffing Approach

The most important element of LiRo's staffing approach is the breadth and depth of our team. We have assembled an outstanding project team of technical and construction management experts who collectively possess expertise in every element of the anticipated Port Authority Capital Program. All construction management activities will be under the direction of the LiRo Principal-in-Charge, Luis Tormenta, P.E. and our Program Manager, Michael Burton, P.E. LiRo anticipates that the specific staffing requirements for this project will fall into four primary categories:

- Port Authority staff augmentation
- Project controls and administration
- High level technical review and analysis services
- Construction management and inspection services

Staff Augmentation

Upon assignment of LiRo to a particular task, the LiRo Program Manager will consult with the Port Authority's Engineer of Construction/Sr. Resident Engineer to determine project needs. This may entail providing an individual inspector or inspectors, project administrators, cost engineers, scheduling professionals or resident/assistant resident engineers. The selected staff will work from the Port Authority's facilities and will be responsible to the Port Authority's Engineer of Construction or designee.

For specific elements of work as determined and assigned by the Port Authority, LiRo will provide a complete construction management staff or as few personnel as an inspector. LiRo has some of the region's most experienced and aggressive construction professionals on staff to assist the Port Authority with any assignment, whether it be Civil, Structural, Electrical, or Mechanical related. Contingent on the actual staffing levels required, Resident and/or Assistant Resident Engineers would be assigned with a contract administrator, scheduling and estimating assistance, and/or a contingent of appropriate inspectors. All staffing levels will be planned by our Program Manager in consultation with the Port Authority's Engineer of Construction, or Sr. Resident Engineer(s).

As in the case of work at JFK, LiRo's most recent assignment involved working with the Resident Engineer's Office, Engineering Department – Construction Management Division, and had staff reporting directly to the Senior Resident Engineer, Emanuel Ciminiello, P.E. Assignments included inspection staff for construction of the new JetBlue Terminal and the Yellow Parking Garage. In addition, LiRo provided inspection staff who were assigned to projects such as EZ Pass at CTA, Taxiway F Rehabilitation, and Building 60 TWA Flight Center Restoration at Kennedy Airport, and to the new Aircraft Rescue Fire Fighting Facility (ARFFF) at LaGuardia Airport.

Project Controls and Administration

The assigned LiRo Resident and/or Assistant Resident Engineers, all of whom are seasoned, senior-level professionals, will direct the project administration activities, which include:

- Establishing project organization and staffing
- Establishing systems and procedures for the management of contracts
- Establishing communication protocol with the Port Authority, the designer of record, the contractor, and other involved parties
- Establishing and maintaining a state-of-the-art Computerized Document Control System (CDCS), as required
- Directing the preparation of CPM schedules and cost tracking and reporting procedures
- Establishing contract administration procedures

The LiRo Resident/Assistant Resident Engineers will coordinate closely with the Port Authority's Sr. Resident Engineer(s), Resident Engineers(s), and Engineer of Construction in all administrative matters and will obtain prior approval for all staffing assignments.

Technical Specialists

In order to assure the Port Authority that any task completed by LiRo complies with the contractual requirements, and meets all industry standards, the LiRo team will maintain an available pool of resources in all technical specialties. They will review and verify, as requested, that the design meets the criteria established by the Port Authority and will confirm that the construction is compliant with the approved design.

The resource pool includes experts in:

1. Civil/Structural Design and Construction
2. ACI-certified Concrete Inspection
3. Building/Structural Design and Construction
4. ICC-certified Structural Steel / Bolting Inspections
5. NACE Level 1 Coatings Inspections
6. Electrical Design and Construction
7. Safety and Security Engineering
8. Traffic Engineering
9. Architectural Design
10. Vertical Circulation Design and Construction
11. Construction Staging
12. Value Engineering
13. Scheduling and Cost Estimating
14. Cost Control
15. Document Control

Our Program Manager, Michael Burton, PE, will be responsible for the coordination and scheduling of the technical experts on an as-needed basis and as approved by the Port Authority. LiRo's ability to draw upon the expertise of such technical specialists will provide the

Port Authority with added assurance that all potential problem areas can be resolved quickly and efficiently.

Construction Management and Inspection Services

Construction management activities related to quality assurance, safety inspection, cost containment, schedule management, submittal reviews, coordination with utilities, etc., fall under the category of Construction Management and Inspection Services. These activities will be under the direction of the assigned LiRo Resident/Assistant Resident Engineers or the Senior Level Inspector(s) who will manage and coordinate day-to-day activities with the Port Authority's Sr. Resident Engineer/Resident Engineer. The LiRo Program Manager and the Port Authority's Engineer of Construction/Sr. Resident Engineer will provide the overall leadership and direction to the on-site Port Authority-LiRo Team.

Performance of Tasks

The responsibilities and functional relationships have been graphically indicated in the Organizational Chart in Section E/Resume. The Program Manager is responsible or the entire project execution. The Principal will oversee all contractual agreements to ensure that the necessary resources are available, and will periodically review our performance of the assigned tasks. The Resident Engineers or Construction Inspectors will be responsible for ensuring that all project specific procedures, as required, have been developed and provided by LiRo, and are being implemented, including:

- Project Management and Operations Plan
- Quality Assurance and Quality Control Plan
- Environmental Safety and Health Plan
- Construction Management Plan

The Construction Management and Inspection Staff report to the Port Authority's EOC, or Sr. Resident Engineers. Specific duties will be assigned to the inspection staff based upon the project assignments and tasks being performed. Our construction managers bring the construction knowledge and management skills necessary to identify potential problems and provide solutions before they can impact the project.

The following essential elements as outlined in the RFP demonstrate our overall understanding of and approach to meeting the challenges of these construction oversight objectives and key issues.

Task A: Constructability/Bidability and General Engineering Review

LiRo places significant emphasis on the pre-construction phase of an assignment. The staff of construction and engineering specialists that the LiRo team brings to the Port Authority offers the best combination of talent for this task. The Resident/Assistant Resident Engineers will

coordinate all submittal review activities to ensure comprehensive evaluation for the constructability, bidability, and feasibility of the design.

Constructability Reviews are an essential part of the Program's development and provide a means to mitigate problems between disciplines during the design and construction phases. Constructability reviews are closely coordinated with the Port Authority's Engineering Department, specifically the Construction Management Division (CMD).

Each major construction system, such as foundations, superstructure, building façade/enclosure system, or MEP systems, is analyzed to determine their completeness and that it is an economical and practical solution, tailored to meet the project's needs and overall objectives. All systems will be studied to ensure that they are coordinated and meet all local and jurisdictional requirements at the lowest cost to the Port Authority.

The Team has established a successful track record preparing and performing constructability reviews, with a focus on staging and logistical planning, on a variety of highly complex and time critical construction programs. Key LiRo Team members possess years of comprehensive experience working with the Port Authority on their facilities and understand the inter-departmental workings and structure of the agency.

Task B. Construction Staging

Comprehensive Phasing and Staging plans are required to interweave and coordinate the development, design and construction of all the task assignment elements planned for a specific project to ensure success. The Phasing Plan relates to the development of distinct functional or institutional elements at the specific project location. It addresses the issues of "what element gets built" and "when does it become available in order to facilitate the project development plan". The Phasing Plan fits the elements together from a functional perspective.

The LiRo Team will prepare an overall construction staging and sequencing plan based upon established parameters. The plans will clearly indicate the necessary work sequence, staging areas, construction access and property available for construction during the project. Led by our Program Manager, we will employ the services of our technical experts to devise creative approaches to the various elements of the work. LiRo will work with the Port Authority, the contractor and the designer to affect the most cost effective staging plan.

Some of the key issues which will require significant attention in review include:

- Type, placement and usage of major construction equipment.
- Compliance with environmental issues, including water runoff and silt controls.
- Utilization of available property as prescribed without disruption to PA operations.
- Movement and storage of construction materials.
- Location and extent of temporary construction facilities.
- Staging of work along right-of-ways, roadways, airfields, bridges and/or tunnels

- Interface and staging of terminal work.
- Location and use of major construction lifting and rigging equipment.
- Scheduling of major site deliveries.
- Implementation of dust control, noise control, and vibration control measures.
- Maintenance and Protection of traffic.

Task C. Schedule Development and Monitoring
Project Construction Schedule
Master schedules and phasing plans will incorporate all activities, phasing and sequencing, interrelationships, and milestones for completion of each project within the timeframe specified in each Task Order. LiRo will prepare and update a time-scaled master schedule, including the A-E's activities, for each project. Updates will be submitted to the Port Authority no later than the 7th of each month. We will also prepare a *CPM* Milestone Schedule to track project activities, dates and the party responsible for accomplishing an activity.

Our operating method for complex and multifaceted projects is based on using Primavera Project Planner (P3) and/or Oracle Primavera P6. LiRo has extensive experience integrating Primavera data with estimating, financial and accounting systems. We can often embed Primavera data into other Windows applications for reporting and presentation. Typically, LiRo will provide weekly, one-page summary reports to the Port Authority using this technique.

These reports will incorporate all requisite Port Authority and external agency reviews/approvals (e.g., permits, approvals), bid cycles for the contract packages, construction phasing, staging of all work activities, and temporary relocation/workaround activities.

By developing a CPM schedule with this level of detail, as required on any task, the PA's Engineer of Construction/Sr. Resident Engineer and the Construction Management Team will possess the necessary information and tools to evaluate the contractor's schedule for accuracy, feasibility and completeness.

Construction Contract Scheduling Provisions
As required, the LiRo Team will prepare the detailed requirements for schedule preparation, reporting and updating which will be incorporated into the construction contract documents. The language will encompass all aspects of the scheduling which is necessary to ensure that the contractor is fully aware of the requirements at the time of bid and will address as a minimum:

- Software requirements to be consistent with the Port Authority's Project Construction Schedule [Primavera Project Planner (P3), or Oracle Primavera P6]
- Required level of detail
- Methods and timing of regular progress reporting
- Manloading and cost loading requirements
- Input needs for equipment and material restraints

- Method of scheduling (CPM)

Project CPM Schedule

The detailed CPM schedules submitted by the contractor for procurement, construction, and installation will form the basis for monitoring the progress of the work. Bi-weekly, the Resident Engineer/Assistant Resident Engineer and scheduling personnel will meet with the contractors to assess schedule progress and identify problem areas using the detailed schedules submitted by the contractor.

The LiRo Team will provide a complete analysis of the contractor's monthly submittal for presentation to the Port Authority. Team members will work closely with the contractor to develop alternative approaches to the work schedule, as situations require. We will assist the contractor in correcting any schedule deficiencies and expedite progress.

Task D. Quality Assurance/ Inspection

Construction Management Staff

Qualified and experienced construction personnel, working within a proven organizational structure with defined lines of authority and accountability, will provide the Port Authority with the expert services required for the successful construction of assigned projects. The LiRo Team considers the assignment of such personnel vital to the accomplishment of the construction management activities required for these projects. We have established an experienced, aggressive and energetic team who will perform their duties with the diligence and integrity that the Authority demands.

Quality Management and Inspection

The LiRo Team will provide a comprehensive quality management and inspection program to encompass all construction management and contractor activities required on assignments. This program will be integrated with the Port Authority's program and QA/QC programs implemented by the contractor. Our Construction QA Plan will be documented in the Project Management Plan (PMP) that will be prepared for the project.

The Team will review the contractor's QC Plan to make sure that it complies with all requirements for a QC Program. We will make sure that all employees involved in enforcing the program are qualified, that the contractor is using approved testing companies and equipment, and that the contractor is adhering to the plan. Procedures that we will use to oversee the contractor's QC program will be detailed in the PMP, but they will also include regular auditing of the contractor's field office, accompanying the contractor's QC inspectors, and witnessing certain tests.

As-Built Drawings

The LiRo Team will maintain a control copy of all construction contract documents at the site. The Resident Engineer/Architect will ensure that the control documents are current by red-

lining as-installed conditions of the work on a weekly basis. This will include all approved changes, clarifications and modifications. We will confirm that the construction contractors maintain record as-builts on a monthly basis by incorporating such verification as a part of the progress review for payment.

Safety Plan

Like quality, safe performance is crucial to the success of these assignments. LiRo will monitor and audit the contractor's implementation of their project Health & Safety Program. It is expected that the contractor will be responsible for the preparation and implementation of a comprehensive Health & Safety Program addressing every element of the work, including safety in design and construction. The Program must address safety as it relates to the long-term safe operations and maintenance of Port Authority projects. Safety during construction is paramount. The contractor cannot allow the safety of the staff workers and the traveling public to be compromised for any reason. LiRo in its CM capacity will review, evaluate and recommend approval of the contractor's Health & Safety Program in the initial stages of the project. During construction, we will monitor its implementation for compliance with the approved Program.

Task E. Contract Administration

Contractor Coordination

The Team understands that successful completion of construction projects depends upon utilizing effective contract administration processes to maintain the highest regard for quality, timeliness, and effective contract delivery with a minimum of impact for all involved. Effective contract administration processes include:

- Cooperation and partnering, both formally and informally.
- Timely project delivery including an expedited project closeout.
- Employing early and aggressive approaches to complete required contract documentation.
- Identifying Port Authority customers who may be impacted by a project with a focus on mitigating impacts, quick response, and professional dealings with regard to complaints,
- Open, frequent and forthright communication.
- Diligent risk and safety management.

The Team will provide services for developing and processing post award contract changes (PACCs) and change orders, processing time and material records (T&M), payment applications, updating of computer databases such as CONTRAK, status reporting, document control and attending contractor status meetings.

Correspondence

Should a task require an Office Engineer, our Office Engineer will be responsible for the maintenance of the project files and general office administration. Working with our Resident/Assistant Resident Engineer, the Office Engineer will establish a detailed correspondence log, which will provide the Assistant Resident Engineer and the Port Authority with a complete status of all contractual correspondence. We will utilize ***Expedition*** software package as the document control system. In addition to correspondence management, the system provides for shop drawing management, request for information control, budget tracking and control, change order administration, etc. making this system the management information system of choice for LiRo.

Monthly Progress Payments

The Resident Engineer (RE) or Assistant Resident Engineer (ARE) will work with the Port Authority staff and the contractor to develop an itemized breakdown of the construction cost elements consistent with the progress schedule. On a monthly basis, the RE/ARE, with input from the field staff, will perform a quantitative assessment of actual progress and reach agreement with the construction contractor prior to submittal of the payment application to the Authority.

- Sound procedures, format, and responsibility for review of contractor payment vouchers
- Determination of completed work in place
- Accurate and complete supporting documentation

The LiRo Team will comply with Port Authority procedures for the preparation, submittal, review, and approval of contractor invoices. The RE/ARE will review the vouchers for proper format, i.e., unit prices of lump-sum broken down by CPM activities. The team will review the quantities in place and/or percent complete as of the voucher date and will also check the material inventories if allowed for partial payment.

Change Order Control - Post Award Contract Changes (PACC)

The LiRo Team will utilize procedures that assign responsibility and establish the level of authority for initiating, evaluating, accomplishing, and approving changes. These procedures are precise and provide for a full evaluation of the impact of the change, as well as emphasize the need to minimize changes. Judicious delegation of monetary authority to approve change orders at the field level will expedite this process.

Claims Management

It is likely that there will be a number of disputes asserted by contractors. Disputes and change orders have become the administrative vehicle whereby owners and contractors may equitably allocate the impact costs of events which occur outside of the scope of the contract. Recognizing the contractor's contractual and legal right to pursue the recovery of costs attributable to valid change orders and disputed items, the LiRo Team will apply methods and

procedures to minimize the impact of disputes through prompt and fair evaluation and where applicable recommendations for equitable resolution. In cases where disputes have no apparent merit, the Team will provide the means to defend the Port Authority's position with facts supported by pertinent documentation and technical analysis. Effective claims management is a process that seeks to efficiently resolve all disputed issues, thereby preventing such issue from becoming claims. The procedures developed during the pre-construction phase, will become the basis for claims management during the construction phase of the project.

On behalf of the Port Authority, our Team will aggressively pursue expeditious evaluation and recommendation for resolution of all disputes. Our detailed analysis and recommendations will be presented to the Port Authority's Engineer of Construction/Sr. Resident Engineer using clear and concise reporting methods.

Task F. Cost Engineering/Estimating Services

Successful cost control starts with the establishment of an achievable, realistic budget, broken down in sufficient detail for each major element or component of the project. This needs to include both hard and soft costs and appropriate allowances for contingencies, indicative of the phase of the design. In support of the cost control effort, the LiRo Team will provide independent construction cost validation estimates on a total program level. Reconciliations with the engineer's estimates will be performed, as necessary.

During the design phase, our services will include periodic review of design documents and the preparation of detailed cost estimates. Our estimating services will continue during the construction phases, as necessary. The LiRo Team will review and update the estimates during this phase and provide estimates for bulletins, productivity cost, and other changes, as required.

The LiRo Team will work with the Port Authority's project team so that our efforts reinforce and complement each other. We come to this project with the intention of acting as an extension of the Port Authority's staff. As your Estimating Service Group, our efforts will be directed exclusively at preserving and advancing the interests of the Authority.

Estimating Services Plan

The LiRo Team will prepare an Estimating Services Plan (ESP). The ESP's primary purpose is to define and document the responsibilities and tools required to execute the required estimating tasks. The ESP will address the following issues:

- Design reviews
- Development of conceptual budget estimates
- Development of detailed design estimates
- Document Control System
- Constructability Reviews
- Estimate reconciliations with engineers' estimates
- Review of bulletins/changes

Estimate Preparation Methodology

All estimates will be prepared in a Construction Specification Institute (CSI) format, with a rolled up summary by CSI Division and a detailed breakdown for each Division. As-Planned construction estimates will be structured to readily allow updating as design releases are provided. Each estimate will contain contingency, which can be adjusted as design is further developed.

Task G. Resources

The LiRo Team considers the ability to provide the Port Authority the depth and breadth of resources to be critical to the successful provision of professional services under this "Call-In" Construction Management Contract. Our team maintains on of the largest construction management resource pools in the New York and New Jersey.

New York/New Jersey Construction Management Resources	
Construction Managers	55
Resident Engineers	241
Inspectors	112
Cost Estimators	15
Schedulers	26

More than 98% of LiRo's professional services are provided to public agencies, over 50% on a call-in basis. We understand the requirement to be immediately responsive with highly qualified personnel. The LiRo Team will unconditionally comply with this requirement.

AFFILIATE FIRMS

LiRo Engineers, Inc.
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Architects + Planners, P.C.
EIN: [redacted]
Type of Business: For profit
111 Broadway – Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Program and Construction Management, P.C.
EIN [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: (516) 938-5476
Fax: (516) 938-5491

LiRo Consulting Engineer, P.C.
EIN: [redacted]
Type of Business: For profit
6 Aerial Way
Syosset, NY 11791
Telephone: 516-938-5476
Fax: 516-938-5491

LiRo Architects & Engineers West, P.C. (NJ)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Architects & Engineers, P.C. (Connecticut)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Architects + Engineers, P.C (Pennsylvania)
EIN: [redacted]
Type of Business: For profit
111 Broadway, Suite 501
New York, NY 10006
Telephone: 212-563-0280
Fax: 212-563-1841

LiRo Program and Construction Management, Inc. (California)
EIN: [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: (516) 938-5476
Fax: (516) 938-5491

LiRo Constructors, Inc.
EIN [redacted]
Type of Business: For profit
3 Aerial Way
Syosset, NY 11791
Telephone: (516) 938-5476
Fax: (516) 938-5491

POTENTIAL CONFLICT OF INTEREST

At this time, LiRo Engineers, Inc. does not have any nor do we foresee any potential conflict of interest.

EXCEPTIONS

LiRo Engineers, Inc. does not have any exceptions to the standard agreement.

THE Louis Berger Group, INC.

June 2, 2011

The Port Authority of New York and New Jersey
One Madison Avenue
Seventh Floor
New York, NY 10010
Attention: RFP Custodian

RE: Request For Proposals For Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014 (RFP No. 24440)

Dear Sir/Madam:

The Louis Berger Group, Inc. (LBG) is pleased to submit one (1) original, three (3) copies, and three (3) compact disc copies of its proposal to provide the Port Authority of New York and New Jersey (the Authority) with Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014 (RFP No. 24440). This proposal is in accordance with the requirements detailed in the RFP, including all addenda.

LBG is ideally suited to provide the referenced services, based on our current and past work with the Authority. Our background and proven abilities give us an unsurpassed ability to understand and fulfill the Authority's needs. We are also dedicated to utilizing M/WBE firms and, to that end, we have collaborated with JCMS, Inc. (MBE), Techno Consult, Inc. (MBE), Haider Engineering, P.C. (MBE) and EnTech Engineering, P.C. (WBE) to augment our Team's capabilities.

We look forward to the opportunity to work with the Port Authority on this Call-In contract. We hope that, upon your review, you will agree that our proposal represents the utmost in quality, experience, responsiveness and effectiveness. Should you have any questions or need additional information, please do not hesitate to contact me via e-mail at cfking@louisberger.com, or by telephone at (212) 612-7976.

Sincerely,

The Louis Berger Group, Inc.

Charles "Chuck" F. King, PE
Vice President, Program & Construction Management

ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf,* not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

The Louis Berger Group, Inc.

(Company)

(Signature) Charles "Chuck" F. King, P.E.

Vice President, Program & Construction Management

(Title)

May 31, 2011

(Date)

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DO NOT RETYPE.

May 11, 2011

SUBJECT: REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 – 2014 (RFP #24440) ADDENDUM #1

Dear Sir or Madam:

The following question was received from an RFP recipient. The question and corresponding Authority answer are provided for your information and use, as appropriate:

In reference to Section 1. Proposer Requirements in the RFP, we would like to know if a certified ACI Concrete Field Testing Technician - Grade I fulfills the requirement of an ACI Concrete Construction Special Inspector.

Answer: No. An ACI Level I is a Field "Technician"; ACI Level II is a Concrete "Inspector".

If you have any questions, please contact Ms. Mary Lou Rivera, Principal Contract Specialist, at mlrivera@panynj.gov.

Sincerely yours,

Tim Volonakis
Manager
Professional, Technical & Advisory Services Division
Procurement Department

May 17, 2011

SUBJECT: REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 – 2014 (RFP #24440) ADDENDUM #2

Dear Sir or Madam:

The following questions were received from RFP recipients. The questions and corresponding Authority answer are provided for your information and use, as appropriate:

1. Can you please provide a list of the MBE/WBE firms that are certified by your agency?

Answer: A list of certified MBE/WBE service firms is available to you at http://www.panynj.gov/business-opportunities/supplier-diversity.html.

2. Under Item I – Proposer Requirements, Section C. Construction Staff…. Item 2, the requirement calls for "ACI Concrete Construction Special Inspectors." The NYC Building Code, which the PANYNJ adopted considers the "ICC Reinforced Concrete Special Inspector as an equal". Would the PANYNJ recognize the ICC Reinforced Concrete Special Inspector as an equal substitution?

Answer: The substitution is not acceptable.

3. Under Item I – Proposers Requirements, C. Construction Inspection Staff…., Item 2. & 3. Must the minimum required totals of (10) and (3) respectively for "ACI Concrete Construction Special Inspectors" and the "ICC Certified as Structural Steel and Bolting Inspectors" be met by the Prime firm only or will the certified inspectors from the Prime Firm's subconsultant be considered and meeting the minimum number of staff.

Answer: Subconsultant staff may be considered in order to meet the requirements of C. Items 2. and 3.

If you have any questions, please contact Ms. Mary Lou Rivera, Principal Contract Specialist, at mlrivera@panynj.gov.

Sincerely yours,

Tim Volonakis
Manager
Professional, Technical & Advisory Services Division
Procurement Department

May 20, 2011

SUBJECT: REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 – 2014 (RFP #24440) ADDENDUM #3

Dear Sir or Madam:

The following questions were received from RFP recipients. The questions and corresponding Authority answer are provided for your information and use, as appropriate:

1. *Is an AWS CWI (certified welding inspector) a suitable substitute for the ICC certification for Structural Steel and Bolting Inspector?*

Answer: No.

2. *Are appendices included in the page count?*

Answer: Resumes, certifications, and Attachments B and C are not included in the page count.

If you have any questions, please contact Ms. Mary Lou Rivera, Principal Contract Specialist, at mlrivera@panynj.gov.

Sincerely yours,

Tim Volonakis
Manager
Professional, Technical & Advisory Services Division
Procurement Department

THE PORT AUTHORITY OF NY & NJ

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN' BASIS DURING 2011-2014
RFP #24440

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ATTACHMENT B

PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf,* not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

The Louis Berger Group, Inc.

(Company)

(Signature) Charles "Chuck" F. King, P.E.

Vice President, Program & Construction Management

(Title)

May 31, 2011

(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

B. Attachment C

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ATTACHMENT C

COMPANY PROFILE

REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL CONSTRUCTION MANAGEMENT AND RELATED TECHNICAL SERVICES AS REQUESTED ON A "CALL-IN" BASIS DURING 2011 THROUGH 2014 (RFP #24440)

1. Company Name (print or type):
   The Louis Berger Group, Inc.

2. Business Address (to receive mail for this RFP):
   199 Water Street, 23rd Floor, New York, New York 10038

3. Business Telephone Number: 212-612-7919

4. Business Fax Number: 212-363-4341

5. Firm website: www.louisberger.com

6. Federal Employer Identification Number (EIN): [redacted]

7. Date (MM/DD/YYYY) Firm was Established: 05 / 08 / 1963

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):
   See Attached Listing of Affiliates

9. Officer or Principal of Firm and Title:
   D. James Stamatis, PE, Group Vice President

10. Name, telephone number, and email address of contact for questions:
    Charles "Chuck" F. King, PE, Vice President, Program & Construction Management
    212-612-7976, cfking@louisberger.com

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (M/W/SBE)? ☐ Yes ☒ No

    If yes, please attach **Port Authority** certification as a part of this profile.

    If your firm is an M/WBE not currently certified by the Authority, see the Authority's web site – http://www.panynj.gov/business-opportunities/supplier-diversity.html, to receive information and apply for certification.

THE Louis Berger Group, INC.

The Louis Berger Group, Inc - List of Affiliates/Subsidiaries		
Firm	**Corp Address**	**FEIN**
Berger Group Holdings, Inc.	412 Mount Kemble Avenue, P.O. Box 1946, Morristown, NJ 07962	[redacted]
Louis Berger Incorporated, Nigeria	110 Lewis St.; 6th Floor; Lagos, Nigeria	None
Louis Berger International, Inc., Korea	412 Mount Kemble Avenue, P.O. Box 1946, Morristown, NJ 07962	[redacted]
Louis Berger Route Yaounde S.A.R.L	B.P. 5009-Nlongkak; Yaounde, Cameron	None
The Louis Berger Group (Domestic), Inc. fka Louis Berger & Associates, Inc.	412 Mount Kemble Avenue, P.O. Box 1946, Morristown, NJ 07962	[redacted]
Wuhan Louis Berger Tech. Engineering Co., Ltd.	37, Qingshanzheng Street, Qingshan District, Wuhan, China	None
Louis Berger Consulting Private Limited	Plot No. B 3-6, Sector 32, Gurgaon 122001, India	None
Louis Berger Holdings, Inc.	412 Mount Kemble Avenue, P.O. Box 1946, Morristown, NJ 07962	[redacted]

C. Proposer Prequalification Requirements

Solutions for a Better World.

THE Louis Berger Group, INC.

C. Prequalification Requirements

At LBG, Construction and Project Management is a discipline taught and nurtured. We select promising candidates from our engineering staff possessing the interest, leadership communication and organizational skills necessary to master Construction Management and Inspection assignments. This discipline includes learning the tools to manage schedule and budgetary performance. Our Project Managers are all technical experts with superior managerial skills. These managerial skills are developed through in-house training in cost and schedule control, including advanced training with the systems (P6, Cost Manager, etc.) used to monitor cost and schedule. An essential part of our PM training includes effective communications, both internally with management and staff and externally with clients and other stakeholders. Our communication procedures include both meetings and written communications such as regular project status reports, meeting minutes, public presentations and financial reports. We will assign personnel with experience on facilities and with an understanding of the technical challenges of multi-trade building contracts. Our personnel will also bring design and construction expertise in Environmental Remediation, Civil Construction, Bridge/Highway, Water/Wastewater and Marine Engineering. In addition, our staff is skilled in Security Engineering, both in electronic systems and hardening.

The chart below identifies our proposed personnel, and resumes and copies of each employee certificate follow. We have identified at least ten (10) ACI Concrete Construction Special Inspectors; at least three (3) ICC Certified Structural Steel and Bolting Inspectors, and at least one (1) NACE Level I coatings certified.

Staff Certifications – The LBG Team	
At Least Ten (10) Engineers/Architects Licensed in the States of NY and/or NJ	
1. H. Wayne Valentine, PE (LBG)	7. Vinod Khetarpal, PE (LBG)
2. Charles "Chuck" King, PE (LBG)	8. Luis Correia, PE (LBG)
3. Charlie Raubacher, PE (LBG)	9. Frederick H. McCarthy, PE (LBG)
4. James Murray, PE (LBG)	10. Richard Barrington, PE (LBG)
5. Tu Nguyen, PE (LBG)	11. John Tan, PE (LBG)
6. Joseph Masucci, PE (LBG)	12. Richard Law, PE (LBG)
At Least Ten (10) ACI Concrete Construction Special Inspectors	
1. Eduardo Vazquez (LBG)	6. Roger Lopez (AEL)
2. Kenneth Favaro (LBG)	7. Bassel Feroz (T)
3. Michael Maggio (JCMS)	8. Iqbal Feroz (T)
4. Roberto Benitez-Villalta (AEL)	9. Vergil JoJo F. Villarama (H)
5. Naiem Mosaad (AEL)	10. Joseph Paternostro, Jr. (H)
At Least Three (3) ICC Certified Structural Steel and Bolting Inspectors	
1. Michael Maggio (JCMS)	4. Albert Elvis (AEL)
2. Shawn Heany (JCMS)	5. Nirav Patel (AEL)
3. Paresh Patel (AEL)	6. Emad Qadi (H)
At Least One (1) NACE Level I Coatings Certified	
1. Prakash Saha (LBG)	3. Oric J. Faria (H)
2. Hardik Shah (ET)	

D. Multiplier

Solutions for a Better World.

D. Multiplier

SALARY MULTIPLIER FOR PROJECT STAFF

The proposed multiplier for this project is 2.50 for Home and 2.05 for Field. The following is a derivation of the salary multiplier based on The Louis Berger Group, Inc.'s Overhead Rates.

Derivation of Multiplier

The following table is a standard audited derivation of the overhead for The Louis Berger Group, Inc.

DERIVATION OF SALARY MULTIPLIER (Berger Home Rate)	
Base Salary	1.0000
Overhead Rate (Audited)	1.4766
Profit at 10% of Salary & OH	0.2477
Total Berger Multiplier	2.7243

DERIVATION OF SALARY MULTIPLIER (Berger Field Rate)	
Base Salary	1.0000
Overhead Rate (Audited)	1.2137
Profit at 10% of Salary & OH	0.2214
Total Berger Multiplier	2.4351

FAR - Home Rate Base/ Element of Expense	Total Home Costs Presented	Audit Adjustments	Footnote Reference	Allowable Home Costs	Overhead Rates
DIRECT LABOR	$ 34,264,286	$ 109,620	A	$ 34,154,666	100.00%
FRINGE BENEFITS					
Payroll taxes	3,904,727			3,904,727	
Vacation	2,831,289			2,831,289	
Legal Holidays	1,479,164			1,479,164	
Sick Leave	775,404			775,404	
Group Insurance	2,790,817			2,790,817	
Sec 401-k Matching Costs	862,006			862,006	
Miscellaneous Benefits	94,307	4	B	94,303	
TOTAL FRINGE BENEFITS	$ 12,737,714	4		$ 12,737,710	37.30%
GENERAL OVERHEAD					
Indirect Labor	11,510,088			11,510,088	
Incentive Comp and Bonus	628,531			628,531	
Short term Consultants	14,112			14,112	
Printing and Reproduction	237,435	(2,548)	C	239,983	
Travel and Lodging	1,198,033	27,420	D	1,170,613	
Purchased Services	818,553	94,702	E	723,850	
Office Rent and Rental of Equipment	3,287,682			3,287,682	
Brochures, Reports and Proposals	14,631			14,631	
Training and Seminars	159,454	8,381	F	151,074	
Insurance	1,164,044			1,164,044	
Field and Office Expenses	1,275,715	7,396	G	1,268,319	
Communications and Utilities	891,204			891,204	
Depreciation	411,511			411,511	
Vehicles, Equipment, Building	191,866			191,866	
Postage and Freight	145,801			145,801	
Business Taxes- State	149,332			149,332	
Miscellaneous	3,543,206	282,343	H	3,260,862	
Corporate Allocations	12,640,716	169,763	I	12,470,953	
TOTAL GENERAL OVERHEAD COSTS	$ 38,281,914	$ 587,457		$ 37,694,456	110.36%
TOTAL OVERHEAD & FRINGE COSTS	$ 51,019,627	$ 587,461		$ 50,432,166	147.66%

Berger Field Rate

THE LOUIS BERGER GROUP(DOMESTIC), INC
STATEMENT OF DIRECT LABOR,FRINGE BENEFITS AND GENERAL OVERHEAD
FOR THE FISCAL YEAR ENDED JUNE 30, 2010

EXHIBIT B

FAR - Field Rate Base/ Element of Expense	Total Field Cost Presented	Audit Adjustments	Footnote Reference	Allowable Field Costs	Overhead Rates
DIRECT LABOR	$ 8,685,124	$ 27,786	A	$ 8,657,338	100.00%
FRINGE BENEFITS					
Payroll taxes	989,749			989,749	
Vacation	717,660			717,660	
Legal Holidays	374,930			374,930	
Sick Leave	196,545			196,545	
Group Insurance	707,401			707,401	
Sec 401-k Matching Costs	218,497			218,497	
Miscellaneous Benefits	23,904	1	B	23,903	
TOTAL FRINGE BENEFITS	$ 3,228,686	1		$ 3,228,685	37.30%
GENERAL OVERHEAD					
Indirect Labor	2,917,514			2,917,514	
Incentive Comp and Bonus	159,316			159,316	
Short term Consultants	3,577			3,577	
Printing and Reproduction	-			-	
Travel and Lodging	303,671	6,950	C	296,721	
Purchased Services	190,206	24,005	D	166,202	
Office Rent and Rental of Equipment	33,545			33,545	
Brochures, Reports and Proposals	-			-	
Training and Seminars	40,418	2,124	E	38,293	
Insurance	295,056			295,056	
Field and Office Expenses	52,696			52,696	
Communications and Utilities	-			-	
Depreciation	28,195			28,195	
Vehicles, Equipment, Building	34,613			34,613	
Postage and Freight	-			-	
Business Taxes- State	35,003			35,003	
Miscellaneous	898,112	71,567	F	826,546	
Corporate Allocations	2,391,059			2,391,059	
TOTAL GENERAL OVERHEAD COSTS	$ 7,382,981	$ 104,646		$ 7,278,336	84.07%
				-	
TOTAL OVERHEAD & FRINGE COSTS	$ 10,611,668	$ 104,647		$ 10,507,021	121.37%

Note References:

A - Represents premium portion of overtime unallowable per FAR 31.202.
B - Rounding adjustment.
C - Unallowable public relations costs per FAR 31.205-1; Exhibit costs unallowable per FAR 31.205-1(f);
Amounts deemed unreasonable per FAR 31.201-3; Cost of entertainment unallowable per FAR 31.205-14;
Unsubstantiated costs deemed unallocable per FAR 31.201-4; Lobbying costs unallowable per FAR 31.205-22;
Membership dues for other than professional organizations unallowable per FAR 31.205-43.
D - Unsubstantiated costs deemed unallocable per FAR 31.201-4; Prior period costs demmed unallocable per FAR 31.201-4:
Amounts deemed unreasonable per FAR 31.201-3; Cost of entertainment unallowable per FAR 31.205-14;
Unallowable public relations costs per FAR 31.205-1; Lobbying costs unallowable per FAR 31.205-22;
Reclassification of mispostings; Direct costs unallowable per FAR 31.202; Prior period costs deemed unallocable per FAR 31.201-4.
E - Unallowable public relations costs per FAR 31.205-1; Exhibit costs unallowable per FAR 31.205-1(f);
Unsubstantiated costs deemed unallocable per FAR 31.201-4.
F - Unallowable cost of personal use of company vehicles per FAR 31.205-46(d) ;
Unsubstantiated costs deemed unallocable per FAR 31.201-4.

See accountants' report and accompanying footnotes.

E. Staff's Qualifications & Experience

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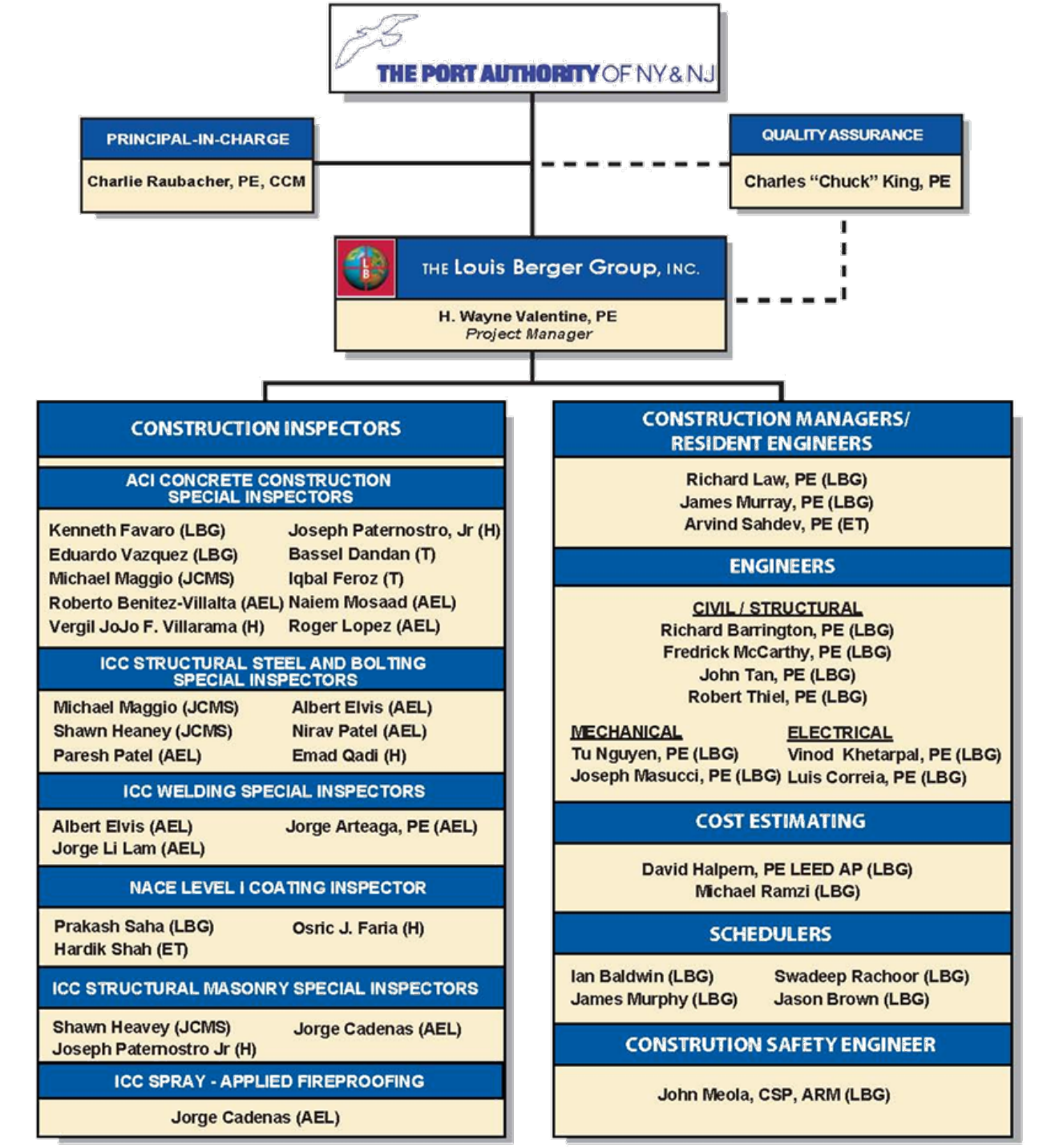
E. Staff Qualifications & Experience

Below is an Organizational Chart depicting the management structure of our proposed Team. Resumes detailing the qualifications of all proposed personnel follow.



LEGEND: **(LBG)** - The Louis Berger Group, Inc. / **(AEL)** - Atlantic Engineering Laboratories, Inc. / **(ET)** - EnTech Engineering, P.C. (WBE) **(JCMS)** JCMS, Inc. (MBE) / **(T)** - Techno Consult, Inc. (MBE) / **(H)** - Haider Engineering, P.C. (MBE)

THE Louis Berger Group, INC.

Charlie Raubacher, PE, CCM

PRINCIPAL-IN-CHARGE

EDUCATION
M.S., Engineering (Engineering Management), Catholic University
M.S., Civil Engineering (Construction Management), Catholic University
B.S., Civil Engineering, University of Maryland

PROFESSIONAL REGISTRATIONS
Professional Engineer, Maryland, Virginia, Washington, DC
CMAA Certified Construction Manager (CCM)
ASHE Construction Certified, Construction Project Management, Infection Control

PROFESSIONAL AFFILIATIONS
Construction Management Association of America
Georgia Foundation for Independent Colleges Board of Advisors

AWARDS
Council of Educational Facility Planners International Service Citation Award
Georgia Tech ASCE Certificate of Appreciation for CM Education Contribution
Atlanta Rotary Club of America Fred Hoyt Hospitality Award
Georgia Foundation for Independent Colleges Service Appreciation Award

PROFESSIONAL EXPERIENCE
Mr. Charlie Raubacher possesses over 39 years of experience in the construction industry. His experience includes: program and construction management; development management; general contracting; alternative delivery; estimating; scheduling, change order and claims analysis and resolution. Markets include: office/headquarters; K-12; college/universities; museums; criminal justice; wastewater; healthcare; roads and infrastructure for private, city, county, state and federal clients. Mr. Raubacher developed and taught the graduate Program and Construction Management course at George Tech and has participated in numerous program management training seminars for public and private organizations. Moreover, he often speaks at professional associations on project delivery methods and program management. Mr. Raubacher has held a number of senior management positions with some of the leading international program and construction management firms.

- Hartsfield Atlanta International Airport, Maynard H. Jackson Jr. International Terminal, Atlanta, Georgia. *Management Overview* for LBG, in joint venture, for the project and construction management services for the new $1.4 Billion Maynard Holbrook Jackson, Jr. International Terminal (MHJIT). The project will add an international terminal and twelve (12) gate concourse (Concourse F) to the airport complex. The project will include a total of 1 million square feet of new construction, including the connector to Concourse E, baggage tunnels, and mechanical penthouses.
- Port Authority of NY and NJ George Washington Bridge Bus Station Redevelopment, NYC, NY. *Management Overview*. The Station now serves 20,000 daily commuters as a connection point for trips from NJ to Manhattan. In a Public-Private partnership, the PANYNJ has contracted with a Retail Developer to modernize the Bus Station. A new bus platform and pavilion are being configured for

improved operations and passenger comfort. Services include assisting with the program definition, design management, cost control, scheduling, document control and project management.

- New York City Public Schools, New York, NY. *Principal* for the estimating, cash flow analysis and scheduling for the renovations, additions and new construction program for elementary, middle and high schools.
- Bronx-Lebanon Hospital Addition and Renovations, New York, NY. *Management Overview* for the $180 million addition and renovations to the Bronx-Lebanon Hospital.
- 1996 Summer Olympics, Atlanta, GA. *Management Overview*. Helped launch the construction management services for the Temporary and Portable Facilities program for the Summer Olympics.
- City of Elizabeth Police and Municipal Court Facility, Elizabeth, NJ. *Management Overview* for the demolition of 13 existing buildings and construction of a new two-story building with a one-story annex totaling 80,000 SF. The main building houses the municipal court, police station with 16 cells, pistol range and emergency ambulance center. The annex holds the maintenance for vehicles and emergency services areas.
- Georgia Institute of Technology Substation and Power Distribution, Atlanta, GA. *Principal-in-Charge* for the construction management of this $36 million project, which included a new substation and power distribution.
- Smithsonian Institution Program, Washington, DC. *Principal-in-Charge* for the $240 million renovation and moderation program that include Natural History, Air and Space, American History and American Art and Portrait Gallery and the new American Indian Cultural Resource Center.
- Federal Communication Commission Headquarters, Washington, DC. *Principal-in-Charge* for the project management of the 635,000 SF headquarters build-out with open and private offices, auditorium, hearing rooms, conference rooms, audio-visual and support spaces.
- General Accounting Office Building Renovations and Modernizations, Washington, DC. *Principal-in-Charge* for construction management for the $100 million, 1,400,000 SF phased renovation while the building remained occupied. The facility included offices, auditoriums, conference rooms, hearing rooms, audio-visual and support space.
- Defense Logistics Agency Headquarters, Ft Belvoir, VA. *Principal-in-Charge* for the project and construction management for the new $100 million, 810,000 SF headquarters which included offices, auditoriums, video conferencing, computer rooms, training rooms and photography lab.
- Pentagon Renovation and Modernization, Arlington, VA. *Principal-in-Charge* for the project and construction management for the $125 million, 450,000 SF renovations.
- Host Marriott Concessions for Dulles International Airport, Herndon, VA and Hartsfield International Airport, Atlanta, GA. *Principal-in-Charge.* The program included 70 separate retail and restaurant facilities at the Hartsfield Airport and 45 separate retail and restaurant facilities at the Dulles Airport.
- National Institutes of Health Mechanical and Electrical Infrastructure Program, Bethesda, MD. *Principal-in-Charge* for the $180 million mechanical and electrical infrastructure modernization program. The program included the replacement of major campus chillers and boilers and extension of the underground utility ductbank walkway.

THE Louis Berger Group, INC.

Charles "Chuck" F. King, PE

QUALITY ASSURANCE

EDUCATION
M.S., Civil Engineering, University of Oklahoma, 1983
B.F.A, University of Oklahoma, 1975

PROFESSIONAL REGISTRATIONS
Professional Engineer, NY, NJ, CT, MD, PA
Structural Engineer, IL

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers
American Institute of Steel Construction
Project Management Institute
Construction Management Association of America

PROFESSIONAL EXPERIENCE
As a Program and Construction Management executive with nearly thirty years experience, Mr. King has served in a number of increasingly responsible positions on several complex transportation and facilities projects. His management experience on design and construction programs includes strategic planning, cost analysis, budgeting, stakeholder relations, schedule and scoping analysis, contracts and public relations. His experience ranges from "on site" management including inspection and field engineering to document control, change order processing, claims mitigation and quality assurance and control. These management skills coupled with his Professional Engineering background in both design and construction permit him to immediately understand issues on large complex projects and manage the resolution of cost, schedule, quality, and safety issues. Relevant project experience includes:

- George Washington Bridge Bus Station Redevelopment Program Management Services, Port Authority of New York and New Jersey, NYC, NY. *Program Manager* responsible for supporting the PANYNJ managing the public/private venture for redeveloping the Bus Station is located directly on the George Washington Bridge approach. The Station, designed by Pietro Nervi, was originally constructed in the 1950's, it now serves 20,000 daily commuters as a connection point for trips from NJ to Manhattan. In a Public-Private partnership, the PANYNJ has contracted with a Retail Developer to modernize the Bus Station and introduce a retail shopping complex to the serve the local Washington Heights community. A new bus platform and pavilion are being configured for improved operations and passenger comfort. Services managed by Mr. King as Program Manager include assisting with the program definition (including permitting and historic preservation analysis), design management, cost control, scheduling, document control and project management.
- World Trade Center Site Redevelopment Program, Port Authority of New York and New Jersey, NY, NY. *Deputy Consulting Program Manager* responsible for the supervision of the program management team supporting the PANYNJ for the reconstruction of the World Trade Center in Lower Manhattan. This $16 billion program for reconstruction of the WTC site includes a new Transportation Hub designed by world renowned architect, Santiago Calatrava, the 1776 feet tall Freedom Tower designed by SOM, the 9/11 National Memorial, Towers 2, 3, and 4, Vehicle Security Center, Rte. 9A realignment, a Central Chiller Plant, and the extensive Site Roadways and Utilities. Mr. King assisted the PA Director in managing the program including budgets, forecasts and cost variance analysis, project

status reports, financial analysis and invoice processing, monthly financial and progress reports, program CPM scheduling, site logistics, project communications, document control, contract management and serving as a liaison with the FTA and other stakeholders.

- Project Management Office Assessment, Port Authority of New York and New Jersey, NY, NY. *Project Manager*. Interviewed PANYNJ Executive Management and Project Management staff, analyzed business processes by comparing them to other agencies such as MTA CC, NJDOT, DASNY and NYC SCA, quantified project management and project controls staff to capital spending for the four Line Departments (Aviation, PATH, Port Commerce and Tunnels, Bridges and Terminals), investigated the PM's role in the PANYNJ's restructured PM organization, developed recommendations for increasing the effectiveness of the central Project Management Office per principles of the Project Management Institute.
- NYC Police Department, Public Safety Answering Center/Enhanced 9-1-1, Program Management, Brooklyn and Manhattan. *Program Manager for Facilities*, responsible for the $100M system integration and facility upgrade to the NYPD 911 System including the design and construction of two new Call Centers housing the 911 operators and supervisory personnel. The primary Call Center, PSAC 1, was located in Metro Tech Center, Brooklyn, designed by SOM and developed by Forest City Ratner. The new Call Center FFE, MEP and communications systems were integrated into the new building through a collaborative effort between Mr. King's firm Ebasco and SOM. The second Call Center, PSAC 2, was a new facility at One Police Plaza to be designed by SOM and managed by NYCDDC. Mr. King served as coordinator for the NYPD and System Integrator.
- Amtrak/Long Island Rail Road JV in Manhattan, NYC Design and Construction Phase Services, Penn Station Control Center Building (Construction Cost - $20M). *Project Manager* responsible for the delivery of this new facility housing all signals for the Northeast Corridor through New York City, including Sunnyside Yards. The new building located in mid town Manhattan was six stories with subgrade structures extending to the rail yard nearly 100 feet below grade. The facility housed a state of art theatre for displaying all the lines and rail activity through the Station. The facility also housed the corporate meeting rooms for Amtrak and LIRR. Mr. King served as PM during the final design phase and construction.
- Construction Management for two new schools, PS376A and PS24, in Brooklyn for the New York City School Construction Authority. *Project Manager* responsible for managing the on-site Construction Management staff that consisted of a Construction Manager, Office Engineer, MEP Inspector and Construction Inspectors. The projects were constructed as Wyck's Law projects with multiple trade contracts. The three story buildings were located in urban neighborhoods in Queens.
- Southeast Pennsylvania Transit Authority (SEPTA) on the Market Street Elevated Reconstruction Program in Philadelphia, PA. *Deputy Program Manager*. This $567M program involves the replacement of 2.5 miles of elevated transit structure with a new composite steel/concrete guideway carrying dual track service. Six transit stations are being completely demolished and replaced under this program. The program is divided into four construction contracts. Responsibilities include oversight of four construction contracts, one design contract and several specialty support contracts for quality, cost control and schedule compliance. Managed a staff of over fifty (50) construction engineers, inspectors, safety and office personnel. Mr. King also managed community relations and reporting to SEPTA's Board. At the conclusion of each construction contract, Mr. King managed the claims analysis and negotiation process. This process included performing in-depth review of RFI and submittal histories, Time Impact Analyses, cost estimating and contractual interpretations.

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H. Wayne Valentine, PE

PROJECT MANAGER

EDUCATION
M.S., Civil Engineering, New Jersey Institute of Technology, 1983
B.S., Civil Engineering Technology, Fairleigh Dickinson University, 1974

PROFESSIONAL REGISTRATIONS, CERTIFICATIONS & MEMBERSHIPS:
Professional Engineer - New Jersey
American Society of Civil Engineers - Member
Construction Management Association of America – Member
40 hour HAZWOPER Health and Safety Training, 8 hour HAZWOPER Supervisor Training
10 hour OSHA Construction Safety and Health, OSHA Fall Protection and Prevention Training

PROFESSIONAL EXPERIENCE
Mr. Valentine has over 36 years of experience in construction management and inspection and engineering design. He has experience in project and construction management and quality control for a wide range of public and private agencies, as well as experience in the administration of construction contracts. Mr. Valentine has additional experience in procurement, negotiation of subcontracts, financial forecasts, scheduling, cost estimating, claims review and constructibility reviews of plans and specifications. His experience includes on-site contract administration and construction management and inspection. Major recent project experience includes the following:

- Port Authority of New York and New Jersey, On Call Construction Management Services. *Project Manager providing Construction Administration and Inspection* on the construction of the various new and maintenance type projects at Newark Liberty Airport, Stewart Airport and the Brooklyn Marine Terminal. Projects have included installation of fire alarm system upgrades, emergency repairs to waterlines, drainage improvements, resurfacing parking lots, installation of security devices and CCTV cameras in Terminals A and C at the Airport, and piling repairs and restoration along with structural repairs to existing bulkheads and piers at the Marine Terminal.
- Atlantic Aviation Services Inc., West Side Ramp Improvements, Teterboro Airport, NJ. *Senior Cost Estimator / Consultant for* construction of the expansion of the asphalt parking apron adjacent to Taxiways C, L and P. Work included the excavation of unsuitable material and the construction of 10" thick asphalt parking apron over a 11" aggregate base course, milling existing surfaces and installing new surface, modifying existing drainage system and installing new drainage piping and manhole system, installation of an subsurface detention basin, and relocation of existing utilities, installing new airport lighting.
- Red Bull – New York, Inc: Harrison, New Jersey. *Project Manager/Resident Engineer providing Construction Administration and Inspection* on the construction of a large sports and entertainment stadium. Performed inspections to verify that construction is in accordance with the plans, specifications, local codes and standards of the Owner. Provided progress reports to the Corporate Representative. Assisted client in reviewing construction costs. Monitored project schedules, evaluated change orders and assisted client in the buy-out of the project, and interfaced with the Contractor's Project Manager and Facility Coordinator. Scope of responsibilities on site include but were not limited to monitoring of all concrete work (below/above grade); structural steel fabrication and erection; precast stadia fabrication and erection; precast plank fabrication and installation; all MEP installations; all building envelope

installations (stadium skin, canopy skin, building skin, all roofs); soccer field construction including drainage and underground heating systems; site utility and drainage installation; all audio-visual, security, telecast, broadcasting systems; installation of stadium seating as well as overseeing the architectural finishes of the arena's integrated 5 story multi-use building that is to hold the player locker rooms, kitchen/catering areas, Red Bull New York offices, luxury suites, restaurant/bar areas as well as broadcast facilities.

- Confidential Client, New Jersey. *Consultant, Construction Manager* for the construction of this $4 million, 100,000 SF expansion and renovation project. Area covered two floors in an office building. Performed inspections to verify that construction is in accordance with the plans, specifications, and standards of the Owner. Conducted progress meetings with the Prime Contractor and subcontractors. Provided progress reports to the Corporate Representative. Monitored project schedules, evaluated and approved pay requests, and interfaced with the Contractor's Project Manager and Facility Coordinator. Work included demolition of the existing interior finishes, new construction, new office layouts, new electrical and data wiring, Arch. finishes and office equipment and 320 office cubicles and 35 interior executive offices and conference rooms, assisted client in coordinating consolidation of four office locations into one location, assisted in coordinating moving of existing office materials and furniture to new space.
- US Army Corps of Engineers, New York District, New York, NY. *Project Construction Engineer / Senior Cost Estimator* for preparation of the Design/Build performance specifications and preliminary and final cost estimates for the SRS / SCAT Support System installation for the guided munitions team and department of public works at Picatinny Arsenal, Rockaway NJ. The project involved site work, excavation, rock blasting and backfilling, reinforced concrete and miscellaneous site utility improvements. Performed constructibity review of the drawings and specifications, performed quantity take offs and cost estimates within the allowable project budget. Responsible for overall supervision of one onsite construction inspector and coordination with Picatinny Dept. of Public Works and Engineering Department.
- NJ Turnpike Authority, Air Conditioning System for Toll Booths, HVAC, Electrical and General Construction at Interchanges 7A, 9, 11, 12, 13A, 15E and 15W. *Resident Engineer* for removal of existing toll booth heating equipment, relocation of data and electrical components, and installation of new equipment and all piping and controls associated with a dual-temperature HVAC system. Provided shop drawing and submittal reviews, and review and approval of contractor's project schedule. Processed construction progress payments, and provided construction inspection and contract administration in accordance with the NJTA *Construction Procedures Manual*. Responsible for overall supervision of three on-site construction inspectors and coordination with the NJTA Project Manager.
- US Postal Service, NJ International and Bulk Mail Center, Jersey City, NJ. *Senior Construction Manager* for the construction of a $4.3 million, 9,000 SF expansion project to increase operational effectiveness of this plant. Performed inspections to verify that construction conformance with the plans, specifications, and USPS standards. Conducted progress meetings with the Prime Contractor and subcontractors. Provided progress reports to the Contracting Officer's Representative. Monitored project schedules, evaluated pay requests, interfaced with USPS Project Manager & Facility Coordinator.
- Water Treatment Facilities, Northern NJ. *Contract Manager* on a $45 million, 90MGD water treatment plant. Responsible for obtaining bid packages, conducting pre-bid site inspections, locating and investigating local suppliers, preparation of construction cost estimates for bid, preparation of scope of work packages for subcontracts, solicitation of subcontractors' bids, development of preliminary material and equipment delivery schedules, obtaining local permits and negotiation of final subcontracts.

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Kenneth Favaro

ACI CONCRETE CONSTRUCTION SPECIAL INSPECTOR/
MARINE/PIER INSPECTOR

EDUCATION
Masters, City & Regional Planning, Urban Design, , Rutgers University
B.A., City Planning & Political Science, Rutgers University

CERTIFICATIONS/PROFESSIONAL TRAINING
Special Inspection Certificate, American Concrete Institute (ACI)
ACI Concrete Field Testing Technician – Grade I
OSHA 10-hour Safety Course/Certification
OSHA Confined Space Certification
OSHA Demolition Certification

PROFESSIONAL SUMMARY
Mr. Ken Favaro has 34 years experience and has been a Marine Construction and Site Work Project Manager in the New York metropolitan area since May 1984. Ken is Senior Civil Inspector for the Port Authority of NY and NJ, handling complex, large-scale marine construction projects for the Port Commerce Division, operating primarily at the Brooklyn Marine Terminal in Red Hook and the New York Container Terminal in Port Ivory, Staten Island. Ken's primary job responsibilities include workmanship and materials quality assurance, daily detailed job inspections, site safety/OSHA compliance, and approving/processing contractor payment requisitions.

- Port Authority of NY & NJ Field Representative/Marine, Brooklyn Marine Terminals, Piers 7, 8 & 9B. *Construction Inspector* for rehabilitation project. Work includes 354 pile jacket repairs; removal and replacement of 650 LF of deteriorated steel walers supporting existing steel bulkheads; preparation and welding of 30 large steel plates along the existing bulkheads to prevent upland wash-out; and removal and replacement of the timber fendering pile system in order to replace steel walers. Job responsibilities include providing quality assurance to ensure the repairs are performed per the contract documents; daily job inspections; daily job reports; scheduling and witnessing underwater inspections; ensuring adherence to OSHA safety regulations and weekly safety/toolbox; attending progress meetings, review RFIs; reviewing contractor's status reports and monthly payment requests.
- Various Projects New York Waterway and Arcorp Properties, Inc., New York, NY. *Director of Construction* responsible for permitting, design, construction and maintenance of 37 ferry terminals / maintenance facilities. Responsible for the procurement of all regulatory and environmental permits from Army Corps of Engineers, Section 10 Permits and Section 404 Permits; NY Department of Environmental Conservation; and the NJ Department of Environmental Protection. Specific construction and environmental related issues reviewed by the Federal and State agencies include demolition and removal of debris; dredging and dredge spoils remediation; installation of turbidity curtains / environmental controls during construction; pile driving / bulkhead and breakwater construction; water quality control; conformance with seasonal construction and dredging windows; shoreline stabilization / erosion control.
- WTC Terrorist Attack Action & Construction, New York, NY. Directed Ferry activity during the emergency evacuation of approximately 180,000 people fleeing NYC using all fleet vessels after the WTC attacks. Immediately identified the locations for new and relocated upgraded ferry terminals in the NY Harbor as described in the Ferry Project List.

- International Naval Review 2000, NYC Harbor, New York, NY. Had direct interface with the commander of the Naval Supply Corps, relative to the installation of ferry berthing facilities throughout the NYC Harbor to transport naval personnel, dignitaries and invited public to board and tour the JFK Aircraft Carrier, USS Whitney, and the USS Nassau.
- MTA Transit Strike , New York, NY. Directed the fast track installation of six temporary ferry terminals in the NYC Harbor to handle increased commuter demand generated by the 2000 MTA transit strike.
- Hudson River Waterfront Program, New York, NY. Director of Construction for Shoreline stabilization or bulk heading of approximately 2 miles of the Hudson River waterfront. Filling and grading of approximately 300 acres of waterfront property in preparation for development. Construction of approximately three miles of road. Construction of 2,000+ stall ferry parking lot, automated access control systems and parking lot office. Conversion of the existing Company's corporate offices and ferry and bus maintenance facility including OSHA compliant fueling depot and body/paint shop. Construction of a 305 slip full service Marina. Installation of site infrastructure including electric, power, water, fiber optic and phone/data. Construction of fine dining restaurants including Arthurs Landing, Spirito Grill and Arthurs Downtown. Also constructed Cafes at most of the Ferry Terminals. Served as Owner's Representative to upland mixed use development in a joint venture with Roseland Development Corp., including high-rise/condo/rental residential, hotel-conference center, and retail and office space.
- Hudson River Harbor Drift Removal Projects, United States Army Corps, New York, NY. Director of Construction this project included Reach #2 (executed by Weeks Marine, Inc.) and Reach #3 (executed by Donjon Marine Co., Inc.). Acted as Arcorp's direct point of contact with the Army Corp of Engineer's (ACOE) office, regulatory and on-site demolition and removal contractors to execute the extraction and removal of piers, pilings, abandoned dry-docks and miscellaneous debris posing a potential hazard to navigation along the west coast of the Hudson Rivers along Arcorp's entire river frontage. Total project cost: $35 Million. Established scope of work and site specific extraction specifications to be performed by the marine contractor. Performed daily field inspections and management of Arcorp full-time site inspectors to assure the debris was demolished and removed per the terms of the contract. Attended weekly job meetings to ensure contract compliance and work quality. Reported to the USACE NYC field office where there was an issue of performance or environmental nonconformance.
- Marina Development and Dredging (dba Port Imperial Marina). *Director of Construction.* This project involved the development of a 305 slip full-service marina including managing Arcorp's environmental and marine construction engineers to develop plans / specifications, conducting hydrographic / side-scan sonar surveys, performing bioassay / bioaccumulation tests on specified number of dredge soil samples, and securing permits from all regulatory agencies including: ACOE, NJ DEP, Municipal Planning/Zoning Boards, and the Hudson County Soil Conservation District. Construction elements included dredging and ocean disposal for clean dredge spoils; dredging and off-site soil remediation for contaminated dredge spoils; on-site soil treatment; pile driving and installation of floating docks; approximately 1,600 linear feet of timber pile breakwater and walkway; installation/distribution of electric, water, phone, cable, and sanitary pump out facility; diesel and gasoline floating fueling facility with upland underground fuel tanks; and construction of an award winning building marina operations design by Aquitectonica.

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Eduardo Vazquez

ACI CONCRETE CONSTRUCTION SPECIAL INSPECTOR

EDUCATION
B.S., Construction Management Engineering Technology, State University of New York, Farmingdale, NY
A.S., Civil Engineering Technology, City University of New York, NY

PROFESSIONAL REGISTRATION
NICET Engineering Technologist (CT)
NICET Level III (Highway Construction)
NICET Level I (Highway Surveys)
ACI Level I (America Concrete Certification)
NICET Level IV (Highway Construction) Pending
ACI Concrete Technologist Certification (NJ)
ACI Special Inspector Certification
Asphalt Technologist Certification (NJ)
Traffic Control Coordinator Certification (NJ)
Municipal Engineering Construction Inspection Certification

PROFESSIONAL EXPERIENCE
Mr. Vazquez is a NICET certified Construction Inspector with over 15 years of experience on major construction projects in the New York Metropolitan Area. Previous experience encompasses the inspection of highways, bridges and landscape construction, school building construction, and quality control testing of construction materials. Mr. Vazquez has passed the NICET Level IV (Highway Construction) exam and is awaiting award of the certification pending approval of his major project write-up. Relevant project experience includes the following:

- Union County NJ, Township of Berkley Heights, Diamond Hill Rd /Valley Rd. Intersection Improvement Project. Senior Civil inspector for these projects involving the removal and replacement of concrete curbs, sidewalks, traffic pole foundations, new signal poles, traffic signals, traffic controllers, meter cabinets, signage and new striping. Providing construction administration, construction inspection, coordination of materials testing and evaluated and approved pay request.
- Union County NJ, Town of Westfield, Central Ave Corridor (CR613) from E. Broad St to 150 feet south of Raritan Rd. Intersection Improvement Project. Civil inspector for these projects, involving the removal and replacement of concrete curbs, sidewalks, traffic pole foundations, installing drainage structures, installing new signal poles, traffic signals, traffic controllers, meter cabinets, new striping and signage. Providing construction administration, construction inspection, coordination of materials testing.
- Union County NJ, Township of Scotch Plains, Terrill Ave Corridor Intersections from Raritan Rd to Front St. Intersection Improvement Project. Civil inspector for this projects involving the removal and replacement of concrete curbs, sidewalks, traffic pole foundations. This job still in progress and forth coming to the site new signal poles, traffic signals, signage and striping. Providing construction administration, construction inspection, coordination of materials testing and coordination of maintenance of protection of traffic with local and county police evaluate and approved pay request.

- Red Bull Park, Soccer Stadium, Harrison, NJ. *Senior Inspector* on the new Stadium to accommodate 25,000 people. Responsible for supervising various construction operations such as: earthwork excavation, pile driving, reinforcement rebar installation, placement of concrete for pile caps, slabs, columns; asphalt placement for parking areas, overseen structural steel columns and beams.
- New York City Department of Environmental Protection/Department of Environmental Conservation, Fountain Avenue Landfill Remediation and Capping Project, Brooklyn, NY. *Civil Inspector* on the 300-acre landfill closure project. Project includes the clearing of the site, re-grading the existing landfill cover, placement of new backfill and re-grading, well installation, leachate collection system, landfill gas collection system, final grading and fill operation, installation of geomembrane, geocomposite and geotextile, installing a drainage layer, installing top cover, top soil and landscaping items. The project also includes roadways, shoreline revetment and drainage facilities. Provided construction administration, construction inspection and observation of testing of materials in place.
- Brooklyn Queens Expressway (BQE) From Broadway to 25th Avenue, Queens, NY, New York State DOT. *Construction Inspector (NICET Level III)* on this $230 million bridge and roadway reconstruction project. Project involved the reconstruction and resurfacing of roadways and ramps, demolition of 19 bridges, construction of 17 bridges (15 roadway bridges and 2 railroad bridges), reconstruction of the BQE and Grand Central Parkway Interchange. Inspected the placement of concrete for new footings, abutment (stem, back wall, cheek walls), pedestals, piers, bridge decks, ballast retainer, sleeper slab, approach slabs, sidewalks, concrete curbs, median barriers, lamp post foundations, sign structure foundation.
- New York City School Construction Authority, Various Project Sites throughout the Five Boroughs, New York, NY. *Construction Inspector* on school building construction projects responsible for inspection of excavation and placing of soils for foundations, concrete foundation construction, masonry construction, drainage systems and asphalt paving for playgrounds.
- New York State DOT Reconstruction of Sunrise Highway, Valley Stream, Lynbrook, Rockville Center, Nassau County, NY. *Construction Inspector (NICET Level II)*. Inspected concrete for monolithic medians, curbs and sidewalks. Reporting of quantities and calculations for completed work. Responsible for inspecting the installation of new traffic signs. Also, responsible for inspection of landscape including placement of subsoil, topsoil and seeding.
- New York State DOT Brooklyn Queens Expressway Overpass at Atlantic Avenue, Kings County, NY. Construction Inspector (NICET Level I) responsible for inspection of roadway and bridge construction including concrete construction, asphalt placement and landscape construction including the placement and grading of topsoil, fertilizing, seeding and mulching and planting of trees and shrubs.
- New York State DOT Long Island Expressway in Queens and Long Island, NY (Engineering Aide). I had the opportunity to assist in the inspection of several existing Bridges along the Expressway; included driving a van with flashing arrow board in order to close traffic lanes, assisting in measuring various Bridge structures; photographs were taken to record measurements and deficiencies of Bridge surfaces, approach slabs, back walls, traffic barriers, pedestals, decks, abutments sidewalks, drainage structures and traffic signs.

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Prakash K. Saha

NACE LEVEL I COATING INSPECTOR

EDUCATION
A.A.S., Applied Science, A.H. College, Bangladesh, 1987

PROFFESSIONAL REGITRATIONS
New York State Asbestos Inspector, Air Sampling Technician, Project Monitor, Project Designer
New York City Asbestos Investigator
NJ Asbestos Safety Technician (AST) - State of New Jersey
NIOSH 582 Sampling and Evaluating Airborne Asbestos
EPA, HUD Lead Inspector and Risk Assessor - State of New York & New Jersey
(XRF) Certified Technician (RMD, Niton)
OSHA 40-hour HAZWOPER
OSHA Confined Space
SSPC C-3/5 Supervisor/Competent Person for De-leading of Industrial Structures – State of New Jersey
NACE Certified Coating Inspection Technician

PROFESSIONAL EXPERIENCE
Mr. Saha is a Manager with over 15 years of environmental engineering and consulting experience. Mr. Saha specializes in conducting investigations of environmental hazards including lead and asbestos containing materials surveys, design and management; including schools and commercial buildings per Industrial Code Rule 56 and NYCDEP Title 15. Also managed services associated with oversight and implementation of environmental site assessments including Phase Is and IIs, subsurface investigations, geotechnical services, wetlands services, noise, radiation and worker health and safety.

- Building Facades, 23rd Street, New York, NY (2002). Painting Field Technician, CIP Level 1. Responsible for oversight and monitoring of abrasive blasting and repainting of eight story cast iron building facades. Responsibilities included oversight/confirmation of surface preparation; data collection (temperature/relative humidity) as well as paint mixing method and thickness of newly applied paint as per specification.

- New York City DOT, Broadway Bridge (2001). Lead Paint Removal/Repainting Field Technician. Responsible for oversight and monitoring of abrasive blasting and repainting of a NYC DOT Bridge over Harlem River between Bronx and Manhattan. Responsibilities included oversight of multiple monitoring technicians, TSP sample collection, DataRAM monitoring, Class 1-A containment visible emission monitoring/assessment, etc.

- New York City Department of Design + Construction Environmental/IH Services and Geotechnical Contracts (2 consecutive) for Infrastructure and Facility Projects City-wide. Contract/ Client Manager. Managed Berger's services associated with oversight and implementation of more than 200 projects to date involving lead and asbestos containing materials surveys, design and management, environmental site assessments including Phase Is and IIs, subsurface investigations, geotechnical services, wetlands services, noise, radiation and worker health and safety.

- New York City School Construction Authority, Capital Improvement Program. Contract manager for SCA program. Specific responsibilities included senior technical reviewer on asbestos, lead-based paint. mold and PCBs identification surveys and abatement design including specifications and cost

estimates. As well as managed Berger's services associated with asbestos air monitoring and industrial hygiene services for many schools throughout the five boroughs.

- Environmental Support Services, Government Services Administration. Project Manager. Provided engineering conditions assessments and regulatory compliance support for program development study at Byron Rogers federal building in Denver, Colorado. Addressed all engineering and compliance related issues including but not limited to lead/asbestos, chemical/ biohazard protection, building demolition and abatement, PCBs, waste management and health and environmental safety.
- Port Authority of NY/NJ, Asbestos and Lead Paint Survey and Design Contract. Project Manager. Over 10 assignments to date in NY State, NY City, and NJ providing comprehensive asbestos services for capital projects, with primary emphasis on air and contractor monitoring and inspections.
- TriBorough Bridge and Tunnel (aka MTA Bridges and Tunnels) Asbestos Survey/Design Contract and Asbestos Monitoring Services Contract (2 consecutive). Manager. Over 20 task orders to date throughout NY City providing comprehensive asbestos services for bridge and tunnel projects.
- U.S. Army Corps of Engineers, New York District Multiple Projects at Fort Hamilton, New York. Served as task manager and senior technical reviewer on asbestos and lead-based paint identification surveys, and abatement design including specifications cost estimates. Projects include renovation/upgrades of Buildings 207 and 230 project; 135, 136, 137, and 138 project; 209 and 210 project.
- New York State Office of General Services Asbestos/Lead Materials Survey and Design for Many Architectural & Engineering Projects, NY. Task Manager. Directly responsible for managing the day-to-day operations, including the following: Pre-Inspection & Document Review, Site Inspections, Bulk Sampling, Laboratory Analysis, Sample Analysis and Review, Analytical Quality Assurance Plan, Final Survey Report Preparation, Cost Estimation, Preparation of Schematic Plans, Drawings and Specifications and Pre-Bid Coordination. Over 100 such projects have been completed.
- Westchester County School Districts, New York. Task Leader for asbestos identification surveys, prepared asbestos abatement specifications for removal asbestos containing materials (ACM), and provided oversight of abatement of ACM. Project included weekly progress meetings with architect and Board of Education officials. Services provided to various school district throughout Westchester County.
- New York City Transit, CM-1182 Services of an Environmental Engineering Consultant, New York, NY. Participated in survey and design aspects of QA/QC of CADD drawings for functionality and scales. Performed data collection for abatement projects in order to compile final reports.
- New York Power Authority, Asbestos Planning and Environmental Consulting Services, NY, NY. Performed several surveys and designs associated with energy upgrade projects throughout New York State.
- Asbestos and Lead Paint abatement, New York and New Jersey. *Field Asbestos Safety Technician*. Monitoring in high rise structures, health care facilities (including UMDNJ Facility), public schools, etc.

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Richard Law, PE

CONSTRUCTION MANAGER/RESIDENT ENGINEER

EDUCATION
Bachelor of Science in Civil Engineering, Stevens Institute of Technology, New Jersey, 1986

PROFESSIONAL EXPERIENCE
Mr. Law has nearly 25 years of technical and management experience in civil engineering related projects. The majority of his experience is on projects in the New Jersey and New York metropolitan area. He has active Professional Engineering Licenses in both NY and NJ. He has served as a Project Manager, Design Manager, and Resident Engineer throughout his career. As a designer and project manager, he has worked on all aspects of civil engineering and has prepared many designs and complete bidding documents on many different types of projects. While serving as a Resident Engineer, he has gained a significant amount of field experience, which he has reflected on the designs under his supervision. Relevant project experience includes the following:

- Port Authority of NY and NY George Washington Bridge Deck Repairs and Approach Reconstruction. *Project Manager* for the design for the construction staging and traffic control for the overall project, which involved other sub-consultants and agencies. The project included designing the most desirable traffic control measures for each of the many construction stages, designing detours for the more problematic and/ or critical construction stages, temporary and permanent signage and striping, safety improvements. Required multiple and inter-governmental coordination for the George Washington Bridge as well as the Palisades Interstate Parkway and the NJDOT Approach Roads. These activities were undertaken in one of the world's most heavily travelled corridor which serves as the main approach to New York City. The high traffic volumes, restricted working areas, high traffic demands and stringent restraints made this work particularly challenging.
- Port Authority of NY and NY Goethals Bridge and Outerbridge Crossing Lighting and Impact Attenuation Replacement Project and the Bayonne Bridge Toll Plaza Impact Attenuation Replacement Project. Project Manager for each of these separate contracts, which included the design of the most desirable traffic control measures, construction staging, and detouring for the more problematic/ critical construction stages. Complex traffic control measures were required at each of the sites, especially the Goethals Bridge due to the extensive number of Eastbound and Westbound access roads and connectors. These projects all are located in highly urban, heavily travelled areas.
- Port Authority of NY and NY Lot G Reconstruction, Newark Airport New Jersey. Project Manager. Responsible for the design of the reconfiguration of the access roads to and including Lot G at Newark Airport, in order to provide a safe access road and an organized parking facility consistent with the ongoing airport expansion program. This involved the monitoring of existing and proposed traffic management systems and the design of the parking facility including the layout, temporary traffic control (including detours), lighting and construction staging and multiple discipline coordination with the adjacent road systems, parking garages and access roads. Traffic management for these reconstruction projects were particularly difficult due to the necessity of extremely efficient traffic control to limit the impact of the project in these heavily utilized areas by both private and commercial vehicles, including heavy container and general cargo trucks that used the system to connect to passenger and cargo terminals, storage areas and warehouses.

- General Services Administration Office Manhattan Office, New York City. Served as the Construction Manager for of various building reconstruction/ renovation projects for two of the GSA's primary government buildings in Manhattan. The task includes the day to day inspection of the contractor's construction operation, progress schedule, held and chaired progress meetings attended by all relevant parties, approved invoices and maintained the records of the project status, which was continuously updated and distributed. The project recipients included the GSA, Department of Homeland Security, Immigration and Customs Enforcement, Veterans Administration and the Federal Bureau of Intelligence. Several projects were simultaneously ongoing. The project utilized Federal Codes in accordance with FP100, but the local and state codes where followed to the maximum extent practicable. The position included numerous technical reviews and evaluations of the Contract Documents, Project Schedule/ CPM Analyses, Contractor Performance, Assessing and Resolving Claims, Reviewing Contractor's Value Engineering Proposals and addressing all construction-related issues and disputes including providing responses to all RFIs, issuing of RFPs and the preparation of and negotiation of Contract Modifications. Each of the projects are in the multi-million dollar range.
- Lower Manhattan Reconstruction Project, New York City. *Construction and Design Management Specialist* preparing the Project Management Manuals (PMPs) for the WTC Memorial and the Freedom Tower. The task includes the compilation of all the procedures, controls, roles, responsibilities and technical obligations required for these two major components of this extremely high-profile project. The PMPs were prepared to define the methods and procedures for the preparation of Contract Documents, Preparation of the Master and Project Schedule and CPM Analyses, Monitoring and Evaluation of the Contractor Performance, Method to Assess and Resolve Claims, Method to Review the Contractors' Value Engineering Proposals, Method to route (to the various stakeholder and other affected parties) and respond to RFIs, Method to define and prepare RFPs and Contract Modifications. The position includes numerous technical review/ evaluation meetings, which are necessary to provide realistic and useful Project Management Manuals, which will be a primary management resource during the lifespan of the projects.
- NJDOT - Bridge Deck Repair Contracts 5A, 5B, 94-1, 95-1, 96-1&1A and 97-1. *Project Manager* responsible for the full design for the deck repairs and safety upgrades on numerous bridge sites throughout northern New Jersey, released under multiple contracts. Included bridge plans, construction plans, traffic control plans, construction staging and detouring, including utility research and all site-specific details for over one hundred sites throughout northern NJ. Drawings, Specs and cost estimates prepared for all repair sites. A full set of contract documents was prepared, including the project schedule.
- NJDOT – Route 120 Realignment, East Rutherford, New Jersey. *Project Manager* responsible for the utility research and utility relocation plans. The project involved extensive research and design of numerous utility relocations due to the full highway and interchanges realignment, designed to pass thru the meadowlands sports complex in Hudson County, New Jersey. This project required the staged construction of nearly all of the below ground facilities so as to keep all utilities operational during each stage of the construction. An extensive coordination effort was required to ensure that the staged construction of the utility relocations, including temporary connections would not hinder the construction of the road and bridge construction.
- NYSDOT/NYSTA - I-95 Reconstruction, Mamaroneck, New York. *Project Engineer* responsible for a significant portion of the roadway design, which included the full reconstruction of over five miles of 6-lane freeway including extensive ramping systems, intersection design and structural design. Utilization of spiral horizontal curvatures, collector-distributor roadways, high rock profiles, difficult traffic design and construction staging due to extremely heavy traffic volumes and urban surroundings made project particularly challenging. A full set of contract documents was prepared, including the project schedule.

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James J. Murray, PE

CONSTRUCTION MANAGER/RESIDENT ENGINEER

EDUCATION
B.S.C.E, New Jersey Institute of Technology

PROFESSIONAL REGISTRATIONS
Professional Engineer, New Jersey
Professional Planner, New Jersey (inactive)

PROFESSIONAL EXPERIENCE
Mr. Jim Murray is a Project Manager with 30 years experience on widely diversified transportation infrastructure projects, including both highway and transit, for a variety of city, state and federal transportation agencies in the greater New York Metropolitan area. Project work includes feasibility studies through final design and construction, with estimated construction costs exceeding $1 billion, for clients including PANYNJ, NYSDOT, MTA NYCT, MTA LIRR, NYCDOT, NJDOT, NJTA and NJHA. Has managed contract negotiation, planning, scheduling, project controls, supervision and financial performance as well as business development. Technical skills include planning, analysis, design, specifications and estimates for highway and transit projects.

- Port Authority of New York and New Jersey Downtown Restoration Program, NY, NY. *Assistant Program Manager* for preparing PATH Construction Agreement with FTA and grant actions, preparing Project Management Plan, NHPA Section 106 compliance, providing executive and status reporting and documentation, developing program schedules and timelines, cost estimates and budgets and performing other support functions.
- City Island Bridge Value Engineering Study. *Lead Civil Engineer*. Reviewed the civil / highway aspects of a proposed replacement of the City Island Bridge with a cable-stayed bridge option for NYCOMB. The project included development, review and presentation of a number of alternatives for structure types, alignments, utility impacts and construction methods.
- Cross Bronx Expressway Signing and Lighting. *Project Manager*. The project included construction of sign structures and roadway lighting for NYSDOT on portions of the Cross Bronx Expressway, Hutchinson River Parkway and Bruckner Expressway.
- Traffic Engineering and Design. *Project Manager*. Miscellaneous task order assignments for NYCDOT including pedestrian and safety improvements on Atlantic Avenue, Brooklyn and Queens, safety improvements on Hylan Boulevard, Staten Island. Work included traffic data collection, surveys, alternatives analysis and conceptual design. Prepared Primavera Suretrak schedules and Excel spreadsheets for project management.
- Route 9A Program Management and Coordination. *Deputy Project Manager*, PMC² JV. Provided program management and coordination services to NYSDOT for the reconstruction of Route 9A adjacent to the World Trade Center. The project included bypass tunnel and at-grade alternatives with a total cost of approximately $1 billion. Responsible for coordination of project elements with adjacent projects including the PANYNJ for the WTC site and permanent PATH Station, and the MTA for the Fulton Transit Center and South Ferry project, as well as public and private utilities affected by the project. Wrote procedures for NYSDOT to coordinate Route 9A work with external partners, targeting levels of responsibility for decision making within the NYSDOT team. Coordinated Route 9A work with PANYNJ

projects, focusing on issues such as ventilation, security, and construction phasing and estimates. Coordinated the design and construction schedule for the work of the NYSDOT design teams and with external parties. Prepared Primavera (P3) project schedules and developed standardized management reports.

- East Side Access to Grand Central Terminal. *Deputy Director, Systems Design*. On LIRR's project to construct a $6.3 billion tunnel into Grand Central Terminal, responsible for coordinating designs for power, communications, signals, fire life safety and mechanical designs with heavy civil and structural designs. Responsibilities included identifying and tracking systems design elements to ensure integration with facilities and tunnel designs both in terms of design schedules and design responsibilities with the Tunnel Engineer, as well as the spatial integration of construction. Prepared Primavera (P3) project schedules to validate the master schedule and verify interfaces between the Systems and Tunnel Engineering teams. A significant accomplishment included writing a space allocation plan for the tunnels and ancillary spaces for railroad and support utilities, culminating in a detailed presentation of the report to the engineering department. The allocation plan included traction and facility power, communications, signals, fire suppression and life safety, and facility power and HVAC. The required facilities included space for conduit and pipe, splice chambers for the distribution systems as well as the sizing of the facility rooms themselves, and developed a database for the tracking and management those spaces. As a quality management function, created a CAD drawing set to establish a regimented way to investigate interdisciplinary interfaces. Coordinated the contract packaging and estimating of systems contracts, including trending changes to scope and construction cost.
- Improvements to MTA Bridges and Tunnels Facilities. *Project Manager*. Repairs and replacement of toll canopies at the Brooklyn Battery Tunnel and Tri Borough Bridge toll plazas for MTA B&T.
- LaGuardia Airport Subway Access. *Design Manager, Infrastructure and Systems Engineering*, HDU JV. On behalf of NYCT, provided conceptual design and evaluation of new transit service options to LaGuardia Airport, including N Line subway extension. Responsibilities included preliminary track alignments, construction methods, impact assessments, and coordination of engineering and architectural disciplines. Special requirements of the project included coordination with the PANYNJ for reviews of possible above grade and underground construction on and adjacent to the airport.
- Traffic Signalization, Brooklyn, Bronx, and Queens. *Project Manager*. The purpose of this project was to provide centralized management to 2,000 intersections for NYCDOT. Responsible for the development of a communications strategy, data collection, preparation of design documents and estimates. Developed Access database for collection and validation of inventory data and proposed improvements. Prepared P3 schedules and Excel spreadsheets for project management.
- I-278 Gowanus / Prospect Expressway Interchange Reconstruction. *Project Engineer*. Responsible for alignments, specifications and estimates and subconsultant management of the final design of the Gowanus / Prospect Interchange, one of the most heavily traveled segments of the I 278 corridor, for NYSDOT. The project included the relocation of three complex ramp structures, widening the Gowanus viaduct and TSM implementation in support of MPT. Incidental work included utility relocations.
- Williamsburg Bridge Rehabilitation TSM Program. *Project Manager*. Transportation System Management (TSM) Study for the Williamsburg Bridge Rehabilitation for NYCDOT. Responsible for data collection, development of traffic schemes to allocate traffic lanes, and development and evaluation of TSM measures, including IVHS implementation, in an effort to mitigate traffic impacts during rehabilitation of the Williamsburg Bridge. Prepared P3 schedules and Excel spreadsheets for project management.

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Richard Barrington, PE

CIVIL/STRUCTURAL ENGINEER

EDUCATION
B.S., Civil and Environmental Engineering Cornell University, 1996

PROFESSIONAL REGISTRATION
Professional Engineer - NJ

PROFESSIONAL ASSOCIATIONS
American Society of Civil Engineers

PROFESSIONAL EXPERIENCE
Mr. Barrington is a licensed principal engineer serving as the Manager of Facilities Engineering. He currently has over fourteen (14) years experience in design services for civil and environmental engineering. He has been involved in a wide variety of projects for both private and public sector clients. His experience ranges from preliminary investigations and conceptual plans, through design and preparation of contract documents, to construction phase services. He has worked in many sectors most notably education, aviation, transportation and sports/recreation. His experience includes:

- Port Authority of NY & NJ, EWR Terminal A Redevelopment and Infrastructure Assessment. *Engineer* responsible for providing design evaluation and civil engineering services for the development of the Terminal A Sustainability Report. Provided utility assessment and master planning in support of the overall Airport redevelopment program. Provided evaluation of transportation and infrastructure elements in addition to sustainable options for addressing stormwater management, increased utility demand, and other affected elements by the redevelopment project within the airport environment.
- Port Authority of NY & NJ, Perimeter Intrusion Detection Systems, Design/Build Project. Civil/Structural Engineer responsible for providing lead design engineering services for civil/utilities and environmental/permitting aspects as well mechanical and electrical engineering support services within the command and control rooms for this confidential security PIDS for all major NY and NJ airports.
- Port Authority of NY & NJ, On-Call Security Engineering Services, Unmanned Gates Stage 3 EWR. Project Manager responsible for civil engineering and design associated with security improvements at Unmanned Gate Locations at Newark Liberty International Airport. The project included both physical and technical improvements consistent with PANYNJ technology requirements and threat requirements.
- Port Authority of NY & NJ, On-Call Security Engineering Services, Unmanned Gates Stage 3 TEB. Project Manager responsible for civil engineering and design associated with security improvements at Unmanned Gate Locations at Newark Liberty International Airport. The project included both physical and technical improvements consistent with technology requirements and design based threat requirements.
- Port Authority of NY & NJ, On-Call Security Engineering Services, Unmanned Gates Stage 3 LGA. Project Manager responsible for civil engineering and design associated with security improvements at Unmanned Gate Locations at LaGuardia Airport. The project included both physical

and technical improvements consistent with existing technology requirements and design based threat requirements.

- Port Authority of NY & NJ, On-Call Civil Engineering Services. Project Manager responsible for civil engineering and design associated with roadway, utility, drainage and pavement design at JFK, Newark and LaGuardia Airports. Performed engineering assessments and development of design plans, specifications and cost estimates for EWR Baywater Piping Removal, Building 141 Site/Civil and Parking Design, and JFK Cargo Road Rehabilitation.
- First Aviation Teterboro Airport, West Side Ramp Improvements. Civil/Structural Engineer responsible for providing lead design engineering services for the paving over 10 acres along the west side ramp at Teterboro Airport. The project included extensive grading/drainage to facilitate the paving of the apron in accordance with FAA standards. All drainage features were designed in accordance with FAA, NJDEP standards which exceeded LEED goals for the project.
- Jet Aviation Teterboro Airport, 0.25 acre Ramp Improvements. Civil/Structural Engineer responsible for providing lead design engineering services for the paving of 0.25 acres along taxiways next to Jet Aviation leasehold at Teterboro Airport. The project included extensive grading/drainage to facilitate the paving of the apron in accordance with FAA standards.
- Jet Aviation Teterboro Airport, Vehicle Maintenance Facility. Civil/Structural Engineer responsible for providing lead design engineering services for the design of a lean to structure to accommodate vehicular maintenance at the Jet Aviation leasehold.
- Jet Aviation Teterboro Airport, Joint Fuel Farm. Civil/Structural Engineer responsible for providing owners representative services on behalf of Jet Aviation for the joint fuel farm development effort constructed with adjacent leaseholder. The project included code review, design review, and client representation with port Authority.
- On-Call Site Feasibility Investigation Services, Statewide, NJSDA. Project Manager for on-call engineering and environmental support program to NJSDA. Under this task order provided program management for the contract which provided engineering and environmental services for over twenty (20) schools throughout New Jersey.
- CUNY On Call Engineering, City University of New York, NY. *Project Director* responsible for providing proposal information and negotiating task orders for recently awarded on call contract. The on call engineering contract provides civil/structural and m/e/p engineering services to a variety of CUNY campuses. Awards to date include structural evaluation for a renovation for Gershwin Hall at Brooklyn College and Special Inspections for renovation to the Kupferberg Arts Quad at Queens College.
- SUNY Dance Building, State University of New York Purchase, NY. *Project Manager* responsible for providing lead civil and utility engineering services for the drainage improvements associated with water infiltration issues surrounding the Dance Building. Services rendered included site assessment, investigation of existing utilities, stormwater management design, and construction oversight.
- Rutgers University Catholic Center at Saint Peters Convent, New Brunswick, New Jersey. Project Manager, working with DEVCO, responsible for preparation of the site feasibility/investigation services and the civil site work portion of contract documents for the restoration of the Rutgers affiliated catholic convent located proximate to Queens College in New Brunswick.

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Fredrick McCarthy, PE

CIVIL/STRUCTURAL ENGINEER

EDUCATION
B.E./1983/Civil Engineering Manhattan College

PROFESSIONAL REGISTRATION
Professional Engineer - NJ, NY, PA, DE, RI and FL
OSHA HAZWOPER 40-Hour Health and Safety Training
8-Hour OSHA Supervisor Training
NJ DEP UST Certification - Subsurface Evaluation and Closure
DISCO Security Clearance - Secret

PROFESSIONAL ASSOCIATIONS
American Society of Civil Engineers
National Society of Professional Engineers
NCEES Member No. [redacted]

PROFESSIONAL EXPERIENCE
Mr. McCarthy is in charge of Facilities Engineering including remedial design services with over 20 years of facilities, structural and security engineering experience. He has performed and managed numerous facility evaluations, upgrades and designs involving buildings, utilities and site restoration and has conducted environmental investigations and remediation system designs for private industries as part of plant operations and maintenance. Recent projects include the following:

- Port Authority of NY & NJ, Facility Condition Surveys, Waterfront Facilities. Program Director responsible for structural and mechanical evaluations of wharfs, piers and related marine building structures. In responsible charge of engineers and building and underwater inspection teams in the performance of physical surveys, detailed reporting and remedial analysis and reinforcement/upgrading of deficiency elements and supporting systems. Responsible for fast tracked survey of Red Hook Wharf in Brooklyn, New York and Howland Hook Wharf in Staten Island, New York involving underwater pile and bulkhead evaluations, underdeck and above deck inspections and lighting towers.
- Port Authority of NY & NJ, On-Call Civil Engineering Services. Program Director responsible for QA/QC of civil engineering services involving roadway, drainage and pavement design at JFK, Newark and LaGuardia Airports. In responsible charge of engineers and in the performance of engineering assessments and development of design plans, specifications and cost estimates. Representative projects included JFK Airport Service Road and Taxiway Rehabilitation, LaGuardia Airport Service Road Restoration, Oil/Water Separator Installations at Buildings 14, 75 and 79 at Newark International Airport, JFK Cargo Road Rehabilitation and Guard Post Crash Barriers at JFK.
- Port Authority of NY & NJ, JFK and LGA Building Conditions Assessment. Director in responsible charge of this facilities engineering project which involved the survey and evaluation of numerous cargo hangars, buildings and terminals at JFK International Airport and LaGuardia Airport to inventory architectural/civil/structural and environmental items and ascertain equipment and general compliance deficiencies. The hangar and building facilities evaluated at JFK included Buildings 72 (Citibank), 111 (FAA Building), 261 (Lufthansa Cargo) and 263 (Asiana Cargo), the Hangar 12 Complex with ancillary

Buildings 94, 95 and 96, Buildings 6, 66 (British Airways Cargo), 67 (Delta Air Cargo), 215 (Greenwich Air Services), 262 (Federal Express) and Terminal 6 (TWA's domestic passenger terminal). At LGA, evaluated Hangar 4 and Building 17.

- Port Authority of NY & NJ, Professional Design and Technical Services for Security Capital Programs on a "Call-In" Basis. Director in responsible charge for providing various confidential security related design services for various tunnel, bridge, airport, rail (PATH) and port facilities projects in NY and NJ. Under this contract, presently preparing Stage I reports and design documents for construction and installation of crash barriers, perimeter intruder detection systems, structural hardening of access points, Infographics systems, ventilations systems safeguards and landside improvements.
- Port Authority of NY & NJ, Perimeter Intrusion Detection Systems, Design/Build Project. Principal – In-Charge responsible for providing lead design engineering services for civil/utilities and environmental/permitting aspects as well mechanical and electrical engineering support services within the command and control rooms for this confidential security PIDS design/build project for all major New York and New Jersey airports.
- Port Authority of NY & NJ, Crash Barriers at Guard Posts A-1 & A-2, H, J, O, P, R, S, V, W, Z and Gate 106 – JFK International Airport. QA Manager responsible for oversight of contract documents development for the installation of Vehicular Crash Barriers at 11 of the 17 Guard Post locations at John F. Kennedy International Airport. The Guard Posts provide secured access to airside areas of the airport. Work involved civil, structural, mechanical, electrical and traffic engineering and design as well as CM services.
- Northwest Terminal Building, Chicago, IL. Analyzed and designed the wind frame and gravity loading systems which incorporated steel beams, columns and cross bracing for this 46 story building. Designed high tension and compression gusset plate connections, roof framing systems and exterior panel support assemblies.
- O'Hare International Airport, Chicago, Ill. Responsible for the design of the castellated steel vaulted archways and the new control tower. For the control tower, responsibilities included the analysis and design of the entire structure, which incorporated composite steel floor system and steel columns.
- Stamford Railroad Station, Stamford CT. Responsible for rail and pedestrian bridge design and performed redesign to address overstress condition of station platform structure.
- Threat Assessment and Security Upgrade, USMA, Westpoint, US Army Corps of Engineers, NY District. QA Manager on this project, which involved the preparation of a threat assessment report and planning charrette document to develop alternatives to upgrade the perimeter security along the Hudson River waterfront. In terms of physical security, the security systems considered for different alternatives included perimeter fencing to block intruder access and vehicular pop-up barricades to inhibit unauthorized vehicular access.
- Metro North Railroad – Installation of Access Control Points at Yards Facilities. Principal responsible for project oversight of this on-going design effort at the Brewster and North White Plains Facilities involving civil engineering associated with roadway access re-configuration and electrical/electronics design associated with the security gates.

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John H. Tan, PE

CIVIL/STRUCTURAL ENGINEER

EDUCATION
M.B.A., Montclair State University, 2002
M.E., Stevens Institute of Technology, Civil, 1989
B.E., Stevens Institute of Technology, Civil, 1987

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
Professional Engineer - New Jersey [redacted]; Pennsylvania [redacted]
Load Resistance Factor Design (LRFD), 2001

PROFESSIONAL EXPERIENCE
With over 21 years of experience, Mr. John Tan is the Director of Structural Design. He has been responsible for managing projects as well as analysis, design and preparation of contract plans and specifications on various engineering projects, especially for highway and railroad bridges throughout the Mid-Atlantic region. This experience includes performing bridge and box culvert, retaining wall, sign structure and seismic bridge designs, in accordance with AASHTO standards. In addition, he has a thorough knowledge of the NJTA and NJDOT Procedure Manuals, and has received training in Load Resistance Factor Design.

- Delaware River Joint Toll Bridge Commission, Trenton-Morrisville Toll Bridge (Route US 1 over Delaware River) Rehabilitation and One Auxiliary Lane, Bucks Co., PA/Mercer C. NJ. *Project Manager* overseeing the post-design construction engineering services for the project. Responsibilities include review of all shop drawings, addressing Requests for Information and addressing all design related construction issues. *Lead Structural Project Engineer* for the feasibility study, preliminary and final design for the 12-span crossing of the Delaware River and geometric improvements to the Pennsylvania Avenue and NJ Route 29 interchanges, and noise barriers. Effort also included condition assessments of bridge decks, pavement, settlement analysis, seismic vulnerability, in-depth inspection and rating.
- NJ Turnpike Authority, Interchange 6 to 9 Widening, Section No. 4 Final Design. *Structural Design Task Leader* for the 2.3 mile segment of the widening program that reconfigures Interchange 7A. This section includes all ramp connections and mainline widening for connections with Interchange 7A and Route I-195 including expansion of the existing toll plaza from 10 to 13 lanes. Section No. 4 also includes the construction and/or replacement of 13 bridge structures, retaining walls, sign structures and noise barriers. Responsible for overseeing the design, preparation of contract documents and review of shop drawings of all structures including coordination with all other disciplines.
- NJ Turnpike Authority, Interchange 6 to 9 Widening, Section No. 2 Final Design. *Structural Design Task Leader* for the Berger design of two U-Turn Bridges over the mainline, sign structures and 12 retaining walls and noise barriers as a sub-consultant for this design section as part of the reconfiguration of Interchange 7 for the widening program.
- NJ Turnpike Authority, Interchange 6 to 9 Widening, Preliminary Engineering. *Structural Design Task Leader* for the Preliminary Engineering of the 35-mile study to widen the Turnpike from six (6) to twelve (12) lanes between the Pearl Harbor Memorial Turnpike Extension and Interchange 8A and from ten (10) to twelve (12) lanes between Interchanges 8A and 9. Mr. Tan was responsible for the bridge sketches and structural engineering support for the Alternative Analysis Report.

- NJ Turnpike Authority, Garden State Parkway Interchanges 9, 10 and 11. *Structure Design Task Leader* for the Preliminary Engineering of the reconfiguration of these three interchanges to eliminate the at-grade signalized intersections with local roadways. Responsible for evaluating the structural aspects of the various alternatives and preparing the bridge sketches for the Alternatives Analysis Report.
- NJDOT, Sussex County Bridge K-07 Replacement, Hopatcong, Stanhope & Byram, New Jersey. *Structural Design Task Leader.* This project involves the replacement of an existing one-lane bridge with a new bridge along a new alignment consisting of one-12-foot lane and 10-foot shoulders in each direction. The new alignment improves both the horizontal and vertical geometry of the Route 605 as it spans the abandoned Lackawanna Cutoff Railroad. The existing historic single span, filled spandrel, reinforced concrete arch bridge structure is being rehabilitated and maintained as a pedestrian and bicycle access to a hiking route adjacent the railroad track.
- Essex County DPW, Passaic Avenue Bridge Replacement. *Project Manager* for the Preliminary and final design for bridge replacement of an deficient existing structure over the Passaic River and improvement to the approaching roadways. The project which involves environmental permitting and property acquisition also requires maintenance of traffic along Passaic Avenue during the entire project.
- Essex County DPW, Bloomfield Avenue Bridge Replacement. *Project Manager* for the Preliminary and final design for bridge replacement of a deficient existing structure over the Peckman River.
- New Jersey Turnpike Authority, Secaucus Interchange Section 3, Phase B/C/D Services. *Deputy Project Manager.* The critical issues associated with this section are: the structural design of the various structures; coordination with NJ Transit and Seaview Drive (being designed by others); identification of site access for construction; and establishing a design that is compatible with future transportation improvements under consideration by the NJDOT for the connection to the Bergen Arches, Tonnelle Avenue and/or other roadways.
- NJDOT, Route 9, U.S. 9&35 Victory Circle Elimination, Sayreville New Jersey. *Project Structural Engineer.* Replacement of the Route U.S. 9&35 Victory Circle with a grade separate modified diamond interchange, between Route 9/35 and Route 35/Main Street, with a loop ramp in the southeast quadrant. Responsible for design of a seven-lane wide, two-span bridge over Route 35 SB and Chevalier Avenue Connector, four proprietary retaining walls and extension of three existing box culverts.
- NJDOT, Route 9 Edison Bridge, Section 25K & 1F, Woodbridge, New Jersey. *Project Structural Engineer.* This project involves the design of a new 4,385 feet bridge to double the Route 9 traffic capacity. The proximity of the existing Edison Bridge and Driscoll Bridge increased the complexity of this project. Involvement included the development of preliminary (30%) plans, including alternate bridge spans and systems for the bridge selection process and preparation of construction cost estimates for the different alternates.
- NJDOT, Route 18 over Main Street, Conrail and South River, East Brunswick & Old Bridge, New Jersey. *Project Structural Engineer.* Design of a 400-foot-long bridge spanning over Main Street, Conrail and South River in East Brunswick and Old Bridge Townships. The project replaces the existing four-lane bridge with a new six-lane structure with auxiliary lanes in each direction.

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Robert J. Thiel, PE

CIVIL/STRUCTURAL ENGINEER

EDUCATION
M.S., Construction Management, Stevens Institute of Technology, 1998
B.E., Civil Engineering, Stevens Institute of Technology, 1996

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS
Professional Engineer: NJ, NY, PA, VA, DC, MD, NC, FL, MI
Module I Value Engineering Training Workshop (2006)
Context Sensitive Solutions
Utility Design – NJDOT
The new Utility Process, NJDOT
OSHA Safety Training (10 hour)

PROFESSIONAL AFFILIATIONS
New Jersey Professional Engineers, Treasurer
New Jersey Profession Engineers in Construction, Chairman
NJSPE Educational Foundation, Secretary
NJSSP Engineering Career Day, Chairman
National Society of Professional Engineers, Member
American Society of Civil Engineers, Member
American Railway Engineering and Maintenance Association, Member

PROFESSIONAL EXPERIENCE
Mr. Thiel's experience in civil engineering design includes roadway alignment, preparation of construction contract documents for public bidding, including design of construction staging and traffic control plans. He is thoroughly knowledgeable in New Jersey Turnpike Authority (NJTA), Port Authority of NY & NJ (PANYNJ) and New Jersey Department of Transportation (NJDOT) Procedures, and the application of CAD Standards – both AutoCAD and MicroStation. His relevant experience includes:

- Port Authority of NY and NJ Stage I, PATH-EWR Connection, Essex County. Civil Task Leader for preliminary design of $500 million in construction. Developed the transportation component to the Lower Manhattan Recovery Effort. Particular Focus was placed on extending the existing South Street tail tracks on a new alignment between the Northeast Corridor and the McCarter Highway with multiple bridge crossings, an alignment under NJ 21, US 22, the CSX truss bridge, and I-78 with a short tunnel section under NJ Transit's Raritan Valley Line. Major considerations included the yard configuration and location, Rail Link Station, platform modifications, ROW requirements, cut and cover vs. NATM tunneling, embankment vs. structured cantilever bridges. Focus was placed on a one seat ride from Newark Liberty Airport to Lower Manhattan. The project refined the recommended alternatives from the feasibility study and the conceptual design was refined for the 2.1 mile extension of the PATH system between Newark Penn Station and the Newark Liberty Airport's Rail Link Station. Provided a DC-traction power, two track system by extending the system west of the Northeast corridor. Conceptual studies and alternative analysis for the $3.0 Billion extension of the PATH system from Newark Airport to the Central Terminal Area of Newark Liberty International Airport.

- Port Authority of NY and NJ Stage III, JFK Cargo Road Service Road Reconstruction, Phase I and Phase II, NYC. Civil Task Leader for the final roadway design of new connection to JFK intermodal facility at JFK Rail Link Federal Circle Station, including temporary connection to existing Rental Car Lane. Final design of connection between intermodal facility and existing JFK Cargo Road, including reconstruction of JFK Cargo Road and construction of a new intersection.
- Port Authority of NY and NJ Port Newark and Port Elizabeth, Essex and Union County – Project Engineer. Performed traffic studies and conceptual design for various safety projects at Port Newark and Elizabeth. Performed conceptual design of realignment of North Avenue and McClester Avenue substandard roadway curve, including ROW taking study.
- Port Authority of NY and NJ WTC Parking Modifications and West Street River Water Line, NY- Project Engineer. Designed layout for surface and subsurface parking facilities for the former World Trade Center in New York. In addition, the project included inspection and placement of maintenance and protection of traffic devices for the River Water Line project on West Street. Assisted in the preparation of traffic studies, traffic counts and level of service calculations.
- New Jersey Transit, RT 1 BRT First Operating Segment, Preliminary Design of Princeton / Dinky Connector, Mercer County. *Civil Task Leader* for conceptual alignment, alternatives development and preliminary design. Prepared concepts and preliminary design for exclusive BRT Row connecting Route 1 with Princeton via the Dinky corridor. Coordinated with Princeton University to incorporate elements of planned redevelopment. Develop cost estimates for realignment of existing Dinky tracks and for construction f new BRT exclusive ROW, with two bridge crossings of extremely sensitive environmental features.
- New Jersey Transit, RT 1 BRT Plainfield Segment, Mercer County. *Project Manager* for development of operational plan and preliminary design of on-road segment of RT 1 BRT. Developed concepts to account for current and future development. Evaluation and location of potential BRT stops.
- New Jersey Transit, RT 1 BRT Princeton Junction, Mercer County. *Project Manager* for development of operational plan and preliminary design exclusive BRT ROW to Princeton Junction Station. Development of Conceptual redevelopment schemes for existing Princeton Junction Station, in conjunction with Township Planning effort. Development of potential parking garage schemes and Intermodal BRT Hub schemes. Evaluation of alternatives and development of cost estimates.
- MTBA, Rehabilitation / Replacement of System Wide Bridges, Boston Metropolitan area: Railway alignment task Leader for the inspection of existing railway structures, evaluation of bridge load ratings, evaluation of lifespan, seismic analysis, and Hydraulic Analysis. Track alignment plans were prepared for the replacement bridges over the Neponset and Shawsheen Rivers.
- NJDOT Route U.S 9, Section 1M, Edison Bridge Rehabilitation, Middlesex County: Project Engineer for final scope development, initial and final design and construction support to reconstruct the historic Edison Bridge over the Raritan River. This high level fixed structure consists of 29-spans with total length of 4280 feet. Effort included seismic and scour design, geotechnical design, complete superstructure, replacement, pier cutting to lower the maximum clearance from 130' to 110', pier and fender design
- New York State Department of Transportation - Project Engineer. Transportation Construction Inspector II. Performed construction inspection on I-287, I-87, and Route 17 Interchange in Suffern, NY. Assisted in the preparation of change orders and the preparation of the monthly estimate for payment.

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Tu Nguyen, PE

MECHANICAL ENGINEER

EDUCATION
B.S. Mechanical Engineering, Lehigh University, 1997

PROFESSIONAL REGISTRATIONS/TRAINING
Professional Engineer – PA
Facility / Infrastructure Inspection Certification
Member-American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE)

PROFESSIONAL EXPERIENCE
Mr. Tu Nguyen is a Principal Engineer with more than 13 years experience responsible for concept, development and preparation of construction plans, design analysis, specifications and cost estimates relative to mechanical systems including HVAC systems for Government facilities, schools, commercial buildings and ware houses. Relevant project experience includes the following:

- The Port Authority of NY & NJ, Terminal 'A', Newark International Airport, NJ. Performed HVAC, Plumbing and Fire protection condition assessment of 1.4 millions square foot Terminal 'A' and its satellites A-1, A-2 and A-3. Responsible including surveying, reviewed related drawings and information and evaluated existing system conditions. Summarized condition survey report for mechanical, plumbing and fire protection systems including repair and replacement recommendations with associated cost estimates.
- The Port Authority of NY & NJ, PATH Ventilation System Study. Engineering, study and evaluation of the existing Ventilation conditions of the PATH System. Performed the site survey at each stations, and ventilation buildings of the PATH system. Reviewed the existing PATH Ventilation drawings and related information. Compared the survey information with existing document information in order to recommend the improvements for safe ventilation systems. Performed schematic diagrams and summary report.
- The Port Authority of NY & NJ, Holland and Lincoln Tunnels Study. Engineering, study and evaluation of the existing conditions of the tunnel ventilation systems and drainage systems. Reviewed the existing tunnel ventilation, drainage system drawings and related information. Compared the survey information with existing document information and performed schematic diagrams.
- NJ School Construction Corporation-Oakwood Avenue, Maple Avenue and Burnet Street Elementary Schools Studies. Responsible for studying and evaluation the existing conditions HVAC and plumbing systems. Performed the site survey at school buildings. Reviewed related information. Performed summary mechanical and plumbing report including recommendations for renovation the existing HVAC, plumbing systems and providing recommendations for HVAC systems.
- Department of The Army-Corps of Engineers, NY-Pyrotechnics Research Facility. Engineering and design of 25,000 square foot Pyrotechnic research, development and engineering facilities for the U.S. Army in Picatinny Arsenal NJ. Responsible for heating, cooling and ventilation calculations for HVAC systems. Evaluated and analyzed alternate designs and lay-outs to arrive at optimum solution. Selected HVAC equipment and performed the utility ductwork and piping lay-out. Prepared contract drawings, specifications and shop drawings review.

- Department of The Army Corps of Engineers NY, Officer Club. Engineering and design of Officer Club-Building B121 for the U.S. Army in Picatinny Arsenal NJ. Evaluated existing HVAC conditions. Selected HVAC equipment and performed the lay-out for the HVAC and piping systems. Prepared contract drawings and specifications.
- Department of The Army-Corps of Engineers, NY, Armament Integration Facility. Engineering and design of 8,000 square foot Lab Building and 100 meter Firing Range for the U.S. Army in Picatinny Arsenal NJ. Responsible for calculations for HVAC systems. Evaluated and analyzed alternate designs and lay-outs to arrive at optimum solution. Selected HVAC equipment and performed the ductwork and piping lay-out. Prepared contract drawings, specifications and shop drawings review.
- Department of The Army-Corps of Engineers, NY, Joseph G. Minish Park-Newark NJ. Engineering and design sprinkler system of the Joseph G. Minish Park. Performed utility lay-out and prepared drawings, specifications for sprinkler distribution system.
- New York City-Department of Correction, Rikers Island Correctional Facility, NY. Engineering and design for replacement Chillers, Air handling units, Rooftop units, Heating/Ventilating units at RNDC Building & AMKC Building. Performed survey and evaluated existing conditions and analyzed the existing HVAC systems. Prepared contract drawings, specifications and reviewed shop drawings.
- New York City-Department of Correction, Rikers Island Correctional Facility, NY: Engineering and design for upgrade/replace the AC system by heat recovery system at RNDC Building. Performed survey and evaluated existing conditions. Analyzed & provided alternative design for replacement of the existing HVAC systems. Prepared contract drawings, specifications and cost estimate.
- New York City-Department of Correction, Mahattan Detention Center (MDC), NY: Engineering and design for upgrade/replace the chilled water cooling system and AC system for 10,000 SF Gym at MDC Building. Performed survey and evaluated existing conditions and analyzed the existing HVAC systems. Prepared contract drawings, specifications and cost estimate.
- New York State-Office of General Services, Sing Sing Correctional Facility, NY: Engineering and redesign for replacement of heating, cooling systems included hot water system and chilled water system for Building 8 of this facility. Evaluated existing conditions and the existing HVAC system. Reviewed preliminary heating, cooling load and the existing air distribution in this building. Performed the piping layout, prepared contract drawings and specifications.
- New York State-Office of General Services, Bay View Correctional Facility, New York: Engineering and design for replacement Air Handling Units of the Annex Building. Performed survey and evaluated existing conditions and analyzed the existing HVAC system. Reviewed preliminary heating, cooling load and analyzed the existing air distribution. Prepared contract drawings, specifications, cost estimate and reviewed shop drawings.
- New York State-Office of General Services, Bay View Correctional Facility, New York: Engineering and design for replacement the existing Water Piping System of Annex Building. Performed analysis of the existing water piping system. Prepared contract documents for the replacement of the water Piping System.
- New Jersey Department of Environmental Protection, MSLA-1D Landfill Site-Kearny, NJ: Engineering and design for Gas Extraction Piping System at MSLA-1D Site, Kearny NJ. Performed survey and evaluated existing conditions existing gas piping system. Performed calculation and prepared schematic diagram for extension of gas piping system including pump station, forced main for the leach ate collection system, sump pumps, controls and underground gas piping.

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Joseph S. Masucci, PE

MECHANICAL ENGINEER

EDUCATION
M.B.A., Concentration in Finance, Seton Hall University
B.S., Mechanical Engineering, University of Miami

PROFESSIONAL ASSOCIATIONS
American Society of Heating, Refrigeration and Air Conditioning Engineers
Board of Governors, North Jersey Chapter 1993 to 1995
Chairman - Energy and Technical Affairs Committee 1991 to 1993

PROFESSIONAL EXPERIENCE
Twenty four (24) years experience in engineering and engineering management with a MEP consulting engineering firm and as the senior mechanical sales engineer/system specialist. Experience includes working with architects, owners and government authorities developing and renovating various types of buildings. Major responsibilities included design development, reviewing engineering and construction budgets, project schedules, value engineering, QA/QC, constructability reviews, construction management, site investigations, and start-up of new HVAC and plumbing systems. Supervising the design of electrical, HVAC and plumbing systems from the initial concept through to detail design, construction, and start-up.

- National Park Service (NPS), Liberty Island, Force Main Evaluation. *Mechanical Engineering Manager* responsible for the evaluation of the Liberty Island Force Main. Due to the recent opening of the new concession facility on the island, the existing force main was continuously backing up. The new building added approximately 25 restrooms for ladies, 20 restrooms for men and a new food service area. This significantly increased the sewerage generated on the island along with the increase in tourism on the island.
- NPS Rehabilitation of Lincoln Memorial Reflecting Pool and Grounds, National Mall and Memorial Parks, Washington, D.C. *Project MEP manager* responsible for the mechanical and electrical design. The project involves the structural rehabilitation of the Reflecting Pool, the addition of a Water Treatment Sytem for the pool water, improved site lighting, and new electrical service to the site.
- Pyrotechnic Facility Design, Picatinny Arsenal, Dover, NJ. USACE NY. *Project Manager* in charge of the construction management of the mechanical design of the $15,000,000, 4-building complex for the testing, research and development of pyrotechnic flares at Picatinny Arsenal. The facility is designed with Hazard and non- hazardous areas. The primary facilities consist of: a 11,000 sf Laboratory with a Flare Tunnel and 9,500 sf Pilot Plant; a 6,500 sf Engineering Building; a 1600 sf Magazine Storage Building; a 1300 sf Flammable Storage Building; and 7,000 sf of Covered Walkways. Supporting facilities include ultra high speed deluge fire protection, fire service tanks/pumps/piping, intrinsically safe electrical fixtures, explosion-proof HVAC systems, and fugitive emissions controls.
- Adam Clayton Powell Federal Office Building, NY, NY Directed the design of new high efficiency boiler plant. The project included a site survey to develop as-built installation drawings and comprehensive energy and cost analysis to determine the most cost effective type of boiler installed. The project also included installation of new high pressure gas main and pressure reducing station, and improvements to the building management system. Responsible from concept thru final design.

- US Department of Commerce, National Oceanic and Atmospheric Administration, (NOAA), Geophysical Fluids Dynamics Laboratory, Forrestal Campus of Princeton University, Princeton, NJ. *Project Manager* in charge of the mechanical engineers for performing Building Useful Life Assessment of all mechanical, plumbing and fire protection equipment. This also included the evaluation of the system operation. The mechanical equipment included boilers, chillers, cooling towers, circulation pumps, fluid inhibiter feeders for circulation systems, and computer room air conditioning systems.
- NYC Transit Authority, Metro-North Commuter Railroad, Grand Central Terminal – Domestic Water System Upgrades, New York, NY. *Project Manager* in charge of preparing construction documents for the upgrade of the domestic water system at the Grand Central Terminal in NYC. The system upgrades included the replacement of the 20,000 gallon domestic water supply day-tank, two 10,000 gallon storage tanks and the two domestic water pumping stations. The design also included a cost analysis to determine the most cost effective system to be used and materials used to construct the tanks. This took into account estimated useful life of the tanks, energy required to operate the system, annual maintenance cost, construction costs and other pertinent data. The domestic water tanks were beyond their useful life and were replaced in kind with stainless steel tanks.
- U.S. General Services Administration 201 Varick Street – Central Chilled Drinking Water System. *Lead Analysis, Project Manager* for the study to determine the source of the lead in the central chilled drinking water system and make recommendations for elimination of the source of lead. The Safe Drinking water Act (SDWA) requires water to have no more than 15 parts per billion (ppb) of lead in potable/drinking water. As the sample results indicated lead concentrations exceeded 15 ppb at multiple outlets, the project required a site investigation to identify the equipment installed, the piping system and tie-ins to other building systems as well as testing of piping and pipe joints to determine remedial solutions for the lead source elimination.
- State University of New York, Performance Evaluation of Local Exhaust Systems and Area Ventilation Project of Paint Spray Booth Room D637, Fashion Institute of Technology, New York, NY. *Project Manager:* Working with Berger's industrial hygienist, we evaluated the current paint spray booth work practices and ventilation. Proposed additional ventilation and exhaust hood replacement to comply with the ACGIH recommended practices, OSHA, NFPA, NYC Department of Buildings, and NYC Department of Environmental Protection. Provided a 30% engineering recommendations report including; calculations, drawings and construction cost estimate.
- State University of New York, Performance Evaluation of Local Exhaust Systems and Area Ventilation Project of Print Making Studio D602, Fashion Institute of Technology, New York, NY: *Project Manager.* Working with Berger's industrial hygienist, we evaluated the current printing practices and ventilation. Proposed the addition two ductless carbon absorption laboratory hoods to capture etching and photo-developer vapors. Proposed modification of the supply and return air arrangement in the room to provide better mixing. Provided a design for an exhaust hood for the Intaglio plate heater process to exhaust asphalt fumes and other organic combustion products to comply with the ACGIH recommended practices, OSHA, NFPA, NYC Department of Buildings, and NYC Department of Environmental Protection. Provided a 30% engineering recommendations report including; calculations, drawings and construction cost estimate.

THE Louis Berger Group, INC.

Vinod (Vinnie) Khetarpal, PE

ELECTRICAL ENGINEER

EDUCATION
M.S., Electrical Engineering, New Jersey Institute of Technology, 1986

PROFESSIONAL TRAINING
Professional Engineer - NJ, VT

PROFESSIONAL EXPERIENCE
Mr. Khetarpal has over 38 years of engineering experience, including: 10 years of engineering & design of power control and instrumentation systems for subsystems for fossil power plants; 10 years of engineering and design of electrical control and instrumentation systems for petrochemical, chemical and waste water treatment plants; 18 years of engineering and design of electrical power, low voltage systems, security systems, lighting systems for facilities, sport complexes, schools, shopping centers, food chain stores and hospitals; and five years of engineering, design and construction administration for the Mission Critical buildings (e.g; telecommunication and data centers), US Postal services, Bulk Mail Processing Centers. Mr. Khetarpal is also experienced with US Army Corps of Engineers projects. Relevant project experience includes, but is not limited to, the following:

- Veterans Affairs Medical Center, Chiller Replacement, New York City, NY. *Lead Engineer*. Replaced a 1x1,000 ton chiller and seven air handlers. Provided medium voltage variable speed drive for the chiller at 4160v.
- United States Military Academy, Power and Lighting for 11 Miles of Steam Tunnel, West Point, NY. *Lead Engineer.* Mr. Khetarpal designed power and lighting systems for several steam tunnel vaults.
- United States Army Corps of Engineers, Greenbrook Flood Control Gates, Greenbrook, NJ. Designed Emergency Power System for the flood control pumps at Greenbrook, NJ. As a Lead Electrical Engineer designed Long Hill Flood Control Project. Coordinated with utility company for power requirements. Designed Control System for Wet Well pumps and Sluice Gates. Conducted Value Engineering for multiple projects in Afghanistan for Security Fencing, Emergency Power, Lighting and design of Army Quarters/Barracks.
- National Park Service, Statue of Liberty. *Lead Engineer*. Mr. Khetarpal designed new Wet Well Power control system for the sewer well.
- Freedom Tower, NY. *Consulting Engineer*. Mr. Khetarpal worked on the power distribution and control system for the Metropolitan TV Alliance Facility.
- Multiple Clients, Data Center Design, Multiple Locations, NJ. *Project Engineer.* Mr. Khetarpal designed several data center projects for banks and commercial establishments. Work involved the design of power systems, emergency diesel generators, UPS systems, fire alarms, lighting systems and security systems. Also supported mechanical departments for the sizing of power equipment for utilities, CRAC units and boilers.
- USPS, Rochester, NY; Springfield, MA; Stamford, CT; and White Plains, NY. *Lead Engineer.* Mr. Khetarpal designed CCTV security camera system for United State bulk mail handling facilities in various locations.

- JFK Airport, New York, NY. *Lead Engineer*. Mr. Khetarpal calculated Voltage Drop for the power cables associated with the CCTV Camera System and provided QA/QC oversight on the design drawings.
- New York City School Construction Authority, New York, NY. *Lead Engineer.* Mr. Khetarpal designed CCTV Camera System for NYCSCA PS 22 in New York City.
- New Jersey Schools Development Authority, Gladys-Hillman School Parking Lot Lighting, NJ. *Lead Engineer* for designing outdoor parking lot lighting for NJSDA, Gladys Hillman Jones School.
- United States Postal Service, Facility Upgrade for Lighting, HVAC and Security System, New York, NY. *Lead Engineer*. Mr. Khetarpal performed services for two million sf facility. Replaced approximately 8000 lighting fixtures. Designed computer controlled energy efficient lighting using AGi32 photometrics. Calculated Return on Investments. Supported mechanical department for the power requirements for the chillers.
- United States Postal Service, Upgrades at Various Facilities, NY, CT and MA. *Lead Engineer*. Mr. Khetarpal designed power systems and energy-efficient lighting systems for the Bulk Mail Flat Sorting Sequencing machines at US Postal Service facilities in Rochester, NY, Westchester, NY, Stamford, CT and Springfield, MA.
- New York City Department of Environmental Protection, Flushing Bay Combined Sewer Overflow Retention Facility, Flushing Bay, Queens, NY. *Field Construction Engineer*. This vital $550 million project was performed jointly with URS and Malcom Pirnie. Responsible for the field changes and redesign of several sections of the Plant for the Power, Instrumentation and Security Control System.
- New York City School Construction Authority, Low Voltage Design for Fire Alarms, PA Systems and Building Management Systems, New York, NY. *Lead Engineer* responsible for the design of several school projects, involving the design of power upgrades, emergency power, lighting design, auxiliary alarm system, fire alarm system and PA system for several New York City schools.
- New Jersey Department of Environmental Protection, Power and Control Systems, Raritan, NJ. Lead *Engineer.* Mr. Khetarpal designed power and control system for Raritan Municipal Sewage Authority wastewater treatment plant.
- Verizon, Multiple Projects, Multiple Locations, NJ. As *Project Engineer*, designed more than 100 projects for Verizon in the State of New Jersey. Projects involved utility power upgrades, emergency diesel generators and UPS power. Designed fire alarm and Very Early Smoke Detection system for telecommunications equipments.
- Port Authority of NY/NJ Multiple Projects. *Senior Electrical Engineer*. Mr. Khetarpal designed Outer Bridge Crossing Toll Booths for interstate Traffic. Completed Study for the Life Safety Signals distribution for the New York Bus Terminal. Completed Study for the provision of SCADA System for Lincoln Tunnel. Conducted 15 KV Cable Pulling Tensions for the Newark Airport Mono Rail system.
- Multiple Clients in the United States, Clients of National Repute, e.g; Exxon, Chevron, Dupont, Conoco, Union Oil Refinery. *Electrical Engineer*. Mr. Khetarpal designed Electrical Systems for Hazardous and Non-Hazardous Areas. Designed Substations, Motor Control Centers, Process Control Logic, Hazardous Area Lighting, Instrumentation Loops.
- United States Dept. of State: Overseas Buildings Operations. *Lead Engineer*. Mr. Khetarpal conducted value engineering for the New Embassy Compound in Belgrade, Serbia.

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Luis Correia, PE

ELECTRICAL ENGINEER

EDUCATION
B.S. Electrical Engineering, Rutgers University, 1996

PROFESSIONAL REGISTRATIONS
Professional Engineer – NJ

PROFESSIONAL EXPERIENCE
Mr. Correia is a Manager, Electrical Engineering with 14 years of technical experience on a wide variety of electrical engineering projects. Mr. Correia leads the development of conceptual and final design and detailed specifications for normal and emergency power, lighting, fire safety, communications, CCTV, and various security (exit lane screening) systems. Relevant project experience includes the following:

- Port Authority of New York & New Jersey, Marine Terminals. *Principal Electrical Engineer* responsible for the development of contract documents for the replacement of the existing access control card readers with TWIC compatible card readers and integration with existing head end equipment.
- Port Authority of New York & New Jersey, Staten Island Bridges. *Design Engineer* responsible for the development of construction contract documents to rehabilitate roadway lighting, power, CCTV, aviation obstruction, and navigable channel lighting for three bridges. The project entailed field survey of all existing systems, verification of code compliance, coordination with civil and structural engineering teams.
- Port Authority of New York & New Jersey, Newark Airport, Design/Build Project. *Principal Electrical Engineer* responsible for the development of contract documents for the installation of digital CCTV at terminal B checkpoints and consolidation of viewing and storage locations for the whole airport.
- Port Authority of New York & New Jersey, JFK Airport, Design/Build Project. *Principal Electrical Engineer* responsible for the development of contract documents for the consolidation of viewing and storage locations for the whole airport. Project requires expansion and modification of existing fiber infrastructure.
- Port Authority of New York & New Jersey, LaGuardia Airport, Design/Build Project. *Principal Electrical Engineer* responsible for the development of contract documents for the upgrade of the existing storage solution and integration of two distinct digital CCTV systems.
- Port Authority of New York & New Jersey, Biometrics – Newark, JFK, and LaGuardia Airport, Design/ Build Project. *Principal Electrical Engineer* responsible for the development of contract documents for the upgrade of the existing access control.
- Orange County Airport, NY. *Principal Electrical Engineer* responsible for the development of contract documents to provide access control at multiple airside locations at Orange County Airport. The access control points were designed to contain powered vehicular gates and access control readers with infrastructure leading back to a centralized control station.

- U.S. Army Corps of Engineers, New York, Picatinny Arsenal, Armament Integration (AIF) Facility. *Principal Electrical Engineer* responsible for the electrical engineering design for the single-story laboratory building and 100-meter Indoor Firing Range for large caliber automatic weapons testing.
- US Army Corps of Engineers, NY District, Replacement of Cadet Mess Ovens, U.S. Military Academy West Point, NY. *Manager, Electrical Engineering* responsible for overview of the electrical design documents, technical specifications, cost estimate, and construction administration. Project comprised design and preparation of construction documents for the phased replacement of fourteen ovens that provided unreliable service and were subject to frequent failures.
- US Army Corps of Engineers, Baltimore District, Secure Access Lane (SAL) Remote Screening Facility Pentagon Reservation, Washington D.C. *Manager, Electrical Engineering* responsible for electrical quality assurance (QA)/quality control (QC) review of the electrical design documents, technical specifications, and cost estimate associated with the Design-Bid-Build Acquisition of the Secure Access Lane (SAL) Remote Screening Facility at the Pentagon. The Project provides a comprehensive vehicular inspection facility permanently replace the temporary screening facility and existing canopy.
- Red Bull Arena – New York, Inc., Inspection Services. *Manager, Electrical Engineering* conducting and providing supervision of electrical quality assurance inspections carried out during the construction of a large sports and entertainment stadium. Project entailed field verification of electrical systems such as power distribution, lighting, grounding, transient voltage supression system (TVSS), fire alarm, emergency power generators, etc were in accordance with the plans, specifications, local codes, and Owner standards.
- National Parks Service (NPS), Rehabilitation of Lincoln Memorial Reflecting Pool and Grounds. *Manager, Electrical Engineer* responsible for the electrical design associated with the rehabilitation of the reflecting pool - the NPS's largest American Reconstruction and Recovery Act project. The design addressed structural deficiencies in the reflecting pool and enhanced the infrastructure, safety and pedestrian circulation systems in the surrounding area. The design provided an environmentally sustainable water intake from the Tidal Basin minimizing reliance on the potable city water supply and reducing municipal water consumption by about 17 million gallons a year.
- General Services Administration, Federal Bureau of Investigations (FBI) Field Office Salt Lake City, Utah. *Manager, Electrical Engineering* responsible for the assurance (QA)/quality control (QC) review of the electrical design documents, technical specifications, and cost estimate associated with the design build of LEED silver rated FBI field office to be constructed in Salt Lake City, Utah.
- General Services Administration/Customs and Border Protection, Land Port of Entry Pilot Program Project. *Principal Electrical Engineer* responsible for pilot program condition assessment of MEP systems at five Land Ports of Entry. In collaboration with architectural discipline, the study established a standard by which nationwide architectural and engineering firms will inspect, report, and rehabilitate the points of entry.
- Department of Homeland Security, Customs and Border Protection Boston Office Renovation. *Principal Electrical Engineer* responsible for the development of contract documents for the renovation of the CBP office renovation in the Boston Federal building. Performed facility condition assessment of the MEP systems and reported non-compliance with PBS P100 standards. As a result of the field investigation, project scope was revised to meet the budget and satisfy the operational requirements.

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David Halpern, PE, LEED AP

COST ESTIMATOR

EDUCATION
B.S., Civil/Environmental Engineering, Bucknell University, 2002

PROFESSIONAL REGISTRATIONS
LEED Accredited Professional, June 2008
Professional Engineer Licensure: New Jersey

TRAINING
40-Hour HazWOPER, December 2005 (latest 8-hr refresher July 2010)
MCACES, 2nd Generation (MII) Basic Training, October 2006

AWARDS
Louis Berger Mid-Atlantic Environmental Engineering, Employee of the Quarter, April-June 2006
ACEC New Jersey Branch - Honor Award (SRS/SCAT Gun project at Picatinny Arsenal, New Jersey)

PROFESSIONAL EXPERIENCE
Mr. Halpern has eight years experience in the field of civil and environmental engineering and cost estimating. He is a task manager supporting the programming, design, and construction of facilities through turn-key including: project planning and design charrettes; programming (DD 1391 and PAX support); cost estimating (PC-COST, PACES, MCACES, MII); conceptual design; permitting; final design (plans, technical specifications); and construction support (submittal review, change order/claims review, and construction inspection and administration). Mr. Halpern has worked on projects, including a broad range of military facilities (military construction and base realignment and closure [BRAC]), eco-restoration sites (civil works), National Park Service (NPS) projects, General Services Administration (GSA) projects, and airports and various civilian facilities. He joined Berger after working in the construction contracting field, where he gained both field and cost estimating experience. He has played a leading role as task manager on various planning and design activities.

- GSA, Feasibility Study, Patrick Moynihan Courthouse Juror Expansion, New York, New York. *Cost estimator.* The GSA uses the feasibility study (FS) to evaluate prospectus-level capital investments proposed to meet tenant agency space needs and Government-owned facility requirements. The FS is required to assess the number of engineering and construction alternatives for a proposed expansion of juror facilities at the Moynihan Courthouse, due to antiterrorism/force protection needs such as relocation of HVAC intake structures, reconfiguration of juror waiting area, reconfiguration of courthouse entrance, and associated structural upgrades. Developed cost estimate in Excel format.
- USACE New York, Museum HVAC Upgrade for Fort Hamilton, New York. *Cost estimator.* Developed cost estimate in R.S. Means and later MII format for an upgrade to the existing museum (building 230) at Fort Hamilton. The project involved developing conceptual level estimates for four alternate design solutions, and preparing a detailed cost estimate for the selected alternative which provided an upgrade to the building's existing HVAC system while still preserving the historic nature of

the structure. The design also included removal and replacement of the building's sod roof to install new exterior waterproofing.

- USACE New York, Gymnasium HVAC Upgrade for Fort Hamilton, New York. *Cost estimator.* Developed cost estimate in R.S. Means and later MII format for an upgrade to the existing gymnasium (building 402) at Fort Hamilton. The project involved developing conceptual level estimates for four alternate design solutions and preparing a detailed cost estimate for the selected alternative. This project consisted of the repair, renovation, and replacement of the existing HVAC, dehumidification equipment of the lower level men's locker room, and new chilled air supply to the main gymnasium.
- USACE New York, Administration/Medical Building HVAC Upgrade for Fort Hamilton, New York. *Cost estimator.* Developed cost estimate in R.S. Means and later MII format for an upgrade to the existing administration/medical center (building 114) at Fort Hamilton. The project involved developing conceptual level estimates for four alternate design solutions and preparing a detailed cost estimate for the selected alternative. This project consisted of the repair, renovation, and replacement of the existing Heating Ventilating and Air Conditioning Systems (HVAC), including replacement of the chiller, ductwork, hot water piping, and new roof-mounted air handling units. Add-on to original project encompassed renovation to five separate rooms throughout the building, converting storage space to office space.
- USACE New York, Jamaica Bay Ecosystem Restoration Project, Shoreline Stabilization, New York, New York. *Cost estimator.* Revised MCACES cost estimate for an approximately 495.4 acre wetland restoration project at the planning level, comprised of 8 different sites.
- NPS, Sandy Hook Ferry Dock, Gateway National Recreation Area, New Jersey. *Cost estimator.* Prepared a Class C cost estimate based on RS Means 2009 data in accordance with NPS guidelines. Researched and compared recent similar projects for comparison costs. Project involved two-foot widening of an existing pier, along with the replacement of a deck barge with spuds used as a floating dock.
- NPS, Rehabilitation of Lincoln Memorial Reflecting Pool and Surrounding Area, District of Columbia. *Cost estimator.* Reviewed Class B & Class A cost estimates submitted by a subcontractor and provided QA services including comments and project-specific recommendations. Project involves rehabilitation of pool foundation system, potable and sanitary water utilities, along with numerous site improvements.
- USACE Baltimore, Defense Information School, Fort Meade, Maryland. *Cost estimator.* Developed and refined cost estimate portion of Army DD 1391 using PC-Cost (Parametric Cost Engineering Program) during planning charrette. Interfaced with planning team using PAX system to upload finished DD 1391. Project consisted of 5 days of intense planning meetings culminating in presentation of cost estimate to client. Project involved a new 60,273 sf administrative and academic instruction facility addition to an existing 232,989 SF training building and renovation of 50,630 sf of existing space.

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Michael Ramzi

COST ESTIMATOR

EDUCATION

M.S., Civil Engineering, New Jersey Institute of Technology (NJIT), Newark, NJ, January 1998
B.S., Construction Engineering, Fairleigh Dickinson University, Teaneck, NJ, May 1990

TECHNICAL SKILLS

Microsoft Word, Excel, PowerPoint, Access, Lotus 1-2-3, DOS, ACAD 14/2004/Autodesk, Primavera P6/P3, Expedition Project Management, Microsoft Project, C & C++, FORTRAN, Visual Basic

PROFESSIONAL EXPERIENCE

Mr. Ramize has 28 years of Program and Construction Management experience. His experience spans a wide range of projects including educational facilities, commuter rail systems, subway, energy, residential, commercial, public buildings, schools and colleges, cultural institutions, airports, manufacturing facilities and courthouses. Mr. Ramzi managed to reduce the labor costs of Pre-Construction, Project Controls and Estimating in projects while increasing work efficiency and deliverables' quality. His success is attributed to augmenting full time controls and estimating staff with field staff and then stream line the information exchange between both while slowly providing training on and off the job. He managed and completed a number of private and public projects within scheduled completion time, quality, and budget to the satisfactory of all parties involved.

Port Authority of NY and NJ World Trade Center Redevelopment Program, New York, NY. *Senior Estimator.*

- ✓ Develop engineer estimates for both WTC Transportation Hub and Oculus construction.
- ✓ Perform price comparisons and development of quantity take-offs.
- ✓ Overseeing estimate reviews and validations; negotiating and resolution of contractors claims.
- ✓ Coordination with design entities and vendors on change order works and costs.
- ✓ Support of value engineering activities; and support of other cost/budget management activities.

STRUCTURE TONE, INC., Lyndhurst, NJ. *Senior Estimator / Project Cost Engineer*

- ✓ Developed cost data for contract changes; monitored and reported project plan, cost, forecast, trends, commitment and contingency. Calculated and evaluated cost variances for corrective actions.
- ✓ Prepared and issued bid packages for various trades
- ✓ Developed and managed cost databases and benchmarking
- ✓ Provided ongoing evaluations of alternative designs, materials and construction methods, and projected impacts on progress and performance
- ✓ Prepared project cash flow reports and budgets for management reviews
- ✓ Analyzed and negotiated change orders and claims, and reviewed and reconciled payment applications
- ✓ Provided CPM schedule control analysis and resource management. Interfaced with clients, owner's representatives, public officials, account executives and contractors, and provided engineering and cost data.
- ✓ Performed performance and determined scope definition mandates for trades in coordination with Engineering for compliance with contract documents and agreements
- ✓ Prepared various bid proposals for private and public projects. Performed computerized and manual

take-offs and pricing for required materials, manpower, and equipment.

HILL INTERNATIONAL, INC., New York, NY. *Project Cost Engineer*

- ✓ Developed cost data for contract changes, monitored and reported project plan, cost, forecast, trends, commitment and contingency. Calculated and evaluated cost variances for corrective actions.
- ✓ Performed routine interface with Engineers, Procurement, Contract Administrators, Accounting, Project Managers, and Consultants to verify costs, commitments, changes, progress, and performance
- ✓ Performed performance monitoring and determined scope definition mandates for trades in coordination with Engineering for compliance with contract documents and agreements
- ✓ Collected and tabulated quantity data for summary comparisons and reconciliations or verified quantities provided by others
- ✓ Compiled and coordinated estimate data and processing of approved scope and non-scope changes
- ✓ Developed cost recording, reporting, and analyzing standards, programs, and reports

BROCKWELL & CARRINGTON CONT., INC., Wayne, NJ. *Chief Estimator / Senior Project Manager*

- ✓ Managed and controlled the construction of a number of various public projects
- ✓ Collected and compiled project data resources and pricings for producing the CPM schedule
- ✓ Processed RFI's, RFA's, purchase orders, and AIA Contract Agreements
- ✓ Reviewed and approved shop drawings, scope and non-scope change orders and claims, and certified payrolls
- ✓ Prepared project cost controls information system to forecast performance and progress
- ✓ Produced monthly summary cost report to determine the cost status of the project and to pinpoint work classifications where expenses were excessive
- ✓ Procured subcontractors and suppliers, coordinated among subcontractors to avoid conflicts and delays
- ✓ Prepared various bid proposals for private and public projects. Performed computerized and manual take-offs to estimate the value of overall utilized resources

JOS. L. MUSCARELLE, INC., Maywood, NJ. *Chief Estimator / Project Manager*

- ✓ Managed and controlled the construction of a number of public projects
- ✓ Processed RFI's, RFA's, purchase orders, and AIA Contract Agreements
- ✓ Reviewed and approved shop drawings, scope and non-scope change orders and claims, and certified payroll
- ✓ Prepared project cost controls information system to forecast performance and progress, and collected and compiled project resources and pricings data to assist in the provision of the CPM schedule
- ✓ Procured subcontractors and suppliers, coordinated among subcontractors to avoid conflicts and delays
- ✓ Prepared various bid proposals for private and public projects. Performed computerized and manual take-offs to estimate the value of overall utilized resources

SERENITY CONTRACTING GROUP, INC., Riverdale, NJ. *Project Manager / Estimator*

- ✓ Managed and controlled the construction of numerous public projects
- ✓ Processed RFI's, RFA's, purchase orders, and AIA Contract Agreements
- ✓ Reviewed and approved shop drawings, scope and non-scope change orders and claims, and certified payrolls
- ✓ Prepared project cost controls information system to forecast performance and progress, and collected and compiled project resources and pricings data to assist in the provision of the CPM schedule

THE Louis Berger Group, INC.

Ian P. Baldwin

SCHEDULER

EDUCATION
B.S., Construction Management, Pratt Institute, New York, NY
Certificates, AutoCAD Design, New York University, New York, NY

TECHNOLOGY SKILLS
AutoCAD, Primavera Project Planner, SureTrak Project Manager, Prolog Manager, CorelDraw, MS Excel, Project & PowerPoint.

PROFESSIONAL EXPERIENCE
Mr. Baldwin has an impressive 30-year career highlighted by exceptional growth and outstanding performance with a positive "can-do" attitude. A results-driven manager with consistent track record demonstrating self-motivation, creativity and initiative to exceed or achieve personal and corporate goals. An integral member of a cohesive management team, contributing broad-based perspective to achieve outstanding results. Remains on the cutting edge of technology; experienced in conducting presentations and training seminars utilizing computerized visual aids. Demonstrates broad-based strengths and accomplishments in:

- ✓ Change Management
- ✓ Custom Programming
- ✓ Cast Flow Projection
- ✓ Time Impact Analysis
- ✓ Risk Management
- ✓ Development Training
- ✓ Presentation Graphics
- ✓ Claims Analysis
- ✓ Site Safety/Logistics

- Port Authority of New York & New Jersey (PANYNJ) Technical Center, Jersey City, NJ. *Senior Scheduler.* Responsibilities include the development and maintenance of CPM schedules for several PANYNJ, as well as the review and approval of all contractor schedules. Currently assigned to the George Washington Bridge Palisades Interstate Parkway to Lower Level Connector Ramp, a $50M improvement project.
- High-Rise Residential Projects. *Senior Scheduler*. Responsible for developing and maintaining CPM schedules for several high-rise residential projects in the Miami area. Responsibilities included the development and implementation of schedule comparisons and narratives, as well as Time Impact Analysis and Delay Claims Analysis. Performed on-site status updates and conducted schedule meetings with entire field staff to ensure the on-time completion of all projects.
- Various Projects. *Senior Scheduling Engineer*. Responsible for creating and maintaining CPM schedules, time impact analysis and monthly progress reports as well as analyzing delay claims. Hired and trained junior schedulers for project assignments, in-house scheduling, and technical support. Coordinated all scheduling meetings with field staff to ensure all projects were completed on time and as per contract documents.

Accomplishments:

- ✓ Implemented company-wide tracking and reporting system to enable executive management to assess productivity and project progress, simultaneously anticipating and averting project delays and claims. Monitor accuracy and diligence of scheduled maintenance through on-site visits to job sites.
- ✓ Assessed needs and developed company-wide training seminars on CPM scheduling and software integration; designed and created detailed training manuals and PowerPoint presentations.

- Various Projects. *Assistant Project Manager / Scheduling Engineer*. Responsible for all project planning and scheduling as well as site safety and logistics utilizing a variety of scheduling and computer graphics software. Tracked and maintained change management and budget revision system as well as assisted in the contractor payment review, negotiation and approval process.

  Accomplishments:

  - ✓ Created custom designed cost and data entry and tracking templates using Lotus 1-2-3, macro-programming language; generated CAD graphics for site safety and logistics planning as well as stacking plans.
  - ✓ Successfully fostered collaboration between project management and sales personnel to create outstanding presentation materials instrumental in acquiring several major projects.

- Various Projects. *Assistant Project Manager / Scheduler*. Produced CPM logic generated schedules for new as well as periodical updating of ongoing projects using Primavera software. Created custom designed change management and scheduling program using spreadsheet application utilized by both office staff and project managers in the field. Created computer graphics and CADD drawings for site safety and logistics planning.
- St. Regis Hotel, New York, NY. *Assistant Project Manager*. Created and implemented change order / purchase order tracking system. Tracked and managed project shop drawings, submittals, material delivery and request for information logs.
- U.S. Trust Headquarters, New York, NY. Performed management responsibilities for 36-story interior construction and base building upgrade of newly constructed building at 114 West 47th Street. Coordinated activities of all contractors and field management staff; tracked performance and approved subcontractor payments and change orders. Reviewed and approved contractor payment requisitions and change orders.
- Barclays Bank Plaza, New York, NY. Provided overall management responsibilities for demolition of 14-story building and construction of new three-level public plaza.

THE Louis Berger Group, INC.

James Murphy

SCHEDULER

EDUCATION

MBA, Construction Management and Real Estate Finance, Columbia University, New York, New York
B.S., Engineering and Computer Science, United States Military Academy at West Point, New York

PUBLICATIONS

Co-author, *The Effect of Resource Constraints on Project Schedules*, presented to the American Association of Cost Engineers.
Co-author, *New Ideas in Overhead Recovery*, presented to the American Association of Cost Engineers.

PROFESSIONAL EXPERIENCE

Mr. Jim Murphy has over 15 years of experience in dispute resolution, project management and controls, which, when coupled with his education in construction management, engineering, and finance, allows him to service a broad range of client needs.

- Port Authority of NY and NJ Downtown Restoration Program, New York, NY. *Integrated Master Schedule Manager.* Serving as Integrated Master Schedule Manager for the Downtown Restoration Program in conjunction with The Port Authority of New York & New Jersey. Responsibilities include:
  - Developing the program's Integrated Master Schedule (overall program construction schedule) using P3 / P6 (recently released web-based system)
  - Conceptual Planning and Logistics Analysis
  - Earned value analysis
  - Value planning construction activities and identifying best practices for sequencing and logistics
  - 3D modeling and 4D scheduling / visualization support
  - Revising the progression of planned construction to advance schedule, minimize impacts and interferences, enhance cost savings
- Port Authority of NY and NJ World Trade Center Reconstruction and PATH Transportation Hub, New York, NY. *Master Scheduler* for this $10 Billion program to reconstruct the World Trade Center. As part of the PB-URS Joint Venture team, served as an extension of staff to the Port Authority of New York and New Jersey in facilitating the phasing and staging of the program. Also coordinated PB/URS' efforts to provide reports for FTA oversight, including the conduct of earned value reviews. Conducted schedule reviews, as well as manpower, security, and feasibility studies in support of the Site Integration Team.
- Port Authority of NY and NJ Newark Airport Terminal C Modernization, Newark, NJ. *Program Controls Manager* on this $1 billion program to expand and improve Continental Airlines' facilities at Newark. The project was designed and built under a fast-track process under operating conditions, requiring significant phasing and staging operations, and numerous construction change orders. Responsibilities included management of a staff of eight, including estimating, scheduling, contract administration, and cost & document controls. Additional responsibilities included significant involvement in change order review process as well as claims evaluation.
- Various Projects, New York, NY. *Managing Consultant*. Responsible for claims analysis and dispute resolution, construction management, estimating, scheduling, and other project control needs.

- Brooklyn Courthouse and General Post Office, Brooklyn, NY. *Claims Manager and Scheduler*. Four years into the construction of this project, the contractor went bankrupt. Called in to evaluate construction claims, currently totaling almost $100 million, and to facilitate the schedule review and monitoring of the surety's replacement contractor's schedule. The project is nearing a successful completion, with the claim review complete and ADR still pending.
- Jersey City Schools Program, Jersey City, NJ. *Deputy Program Manager* on this $1.1 billion program to construct 30 new schools and perform renovations and additions to 31 existing schools throughout the Jersey City Public School District. Managed a staff of 10 performing all program controls functions, including scheduling, cost management, and document controls. Successfully implemented web-based Prolog project management software as pilot project prior to company-wide implementation.
- Construction Disputes Group, San Francisco, CA. Managed dispute avoidance, mitigation, and resolution assignments on behalf of all parties to the construction process. Assignments have included assisting clients with document discovery; formulation of written discovery and deposition support; claim preparation, review and analysis; rendering expert testimony in deposition and mediation; formulation of written testimony and trial graphics; and trial and post-trial support.
- Naval Air Weapons Center Telecommunications System, China Lake, CA. Evaluated contractor's delay and damages claim arising out of the construction of this $30 Million fiber-optic and copper telecommunications system. Prepared written report outlining the shortcomings of the contractor's presentation and rendered expert opinion during deposition. Supported counsel in the deposition of opposing expert, preparation of percipient witnesses, development of cross-examination, and drafting post-trial briefs. Client prevailed on all elements, with no damages awarded.
- Eden Canyon Road Improvements, Alameda County, CA. Performed critical path and issue analyses related to schedule delay claims asserted by the contractor on this road and water channel improvement project. Produced detailed baseline versus actual schedule exhibit to provide alternate explanation for the project's late completion due to contractor causes. Demonstrated the falsity of some of the contractor's claims through audit of the contractor's internal cost records. Rendered expert opinion during deposition. Case settled on the eve of the trial.
- David Grant Memorial Hospital, Travis Air Force Base. Managed Critical Path Method schedule analysis and productivity analysis to evaluate subcontractor's claims for delay and disruption damages. Performed exhaustive cost audit of contractor's records to demonstrate that claimed costs had not been incurred. Worked with counsel to develop contract arguments, which facilitated settlement of the claim at less than 10% of the claimed amount.
- Veteran's Administration West Side Medical Center, Chicago, IL. Performed critical path and issue analyses to determine contractor's entitlement to delay damages arising out of numerous change orders on a surgical suite renovation. Developed comparative exhibit of contractor's as-built schedule versus that produced by OK from contractor's records, showing disparities in contractor's claimed versus actual performance. Assigned responsibility for project delays. During trial, assisted government counsel in formulation of direct and cross-examination, preparation of witnesses, and served as cost and schedule consultant to counsel in the courtroom.
- Newmont Gold Refractory Ore Treatment Plant, Carson, NY. Formulated owner's claim against designers for project cost escalation and delay damages caused by defective design and misrepresentation. Conducted cost and schedule analysis to determine owner's damages and duration of contractor delay. Assisted counsel in drafting petitions, conducting discovery, document database management, and general litigation support.

THE Louis Berger Group, INC.

Swadeep C. Rachoor

SCHEDULER

EDUCATION

M.S., Construction Management, Stevens Institute of Technology, Hoboken, NJ, December 2007
B.S., Architecture, CSIIT, Jawaharlal Nehru Technological University, Hyderabad, India, 2005

PROFESSIONAL AFFILIATIONS

Indian Architect and Builder Association, Associate Member
Indian Institute of Architects, Associate Member

TECHNICAL SKILLS

SharePoint 2007, Primavera P3,P6.1,P6v7, MS Project 2007, @Risk for Risk Analysis, Primavera Contract Manager, Prolog Manager 2007 R1, Expedition 8.59, MS Office, AutoCAD 2004, 3DS Max 4, Adobe Photoshop CS, PageMaker, Corel Draw 11

PROFESSIONAL EXPERIENCE

Mr. Swadeep C. Rachoor is a Project Controls Engineer with over 5 years of experience in the construction industry. He has been involved in scheduling, performance measurement, earned value analysis, status reporting, and space planning. In addition, Mr. Rachoor has served as both a Project Engineer, where he performed various project management functions, and an Assistant Architect.

- G&W System Tech Data Facility, Fuze and PHS&T Picatinny Arsenal Support, *Project Controls Specialist.* Performed detailed resource and cost analysis, impact of time on the schedule and critical path analysis using P6.1.

  Analyzed: the critical path to see how long the project would take to complete and which activities were critical; the activities with invalid relationships appearing in the Scheduling/Leveling Report; the progress and status of the project & forecasted the likely future performance of the project to indicate how much of the budget had been spent, in view of the amount of work done and generated Earned Value reports (EV) from P6.1. Also made suggestions on how to get the schedule back on track.

- Multi-facility Aviation Perimeter Intrusion Detection Systems (PIDS) for Newark Liberty Int'l Airport (EWR), John F. Kennedy Int'l Airport (JFK), LaGuardia (LGA), Teterboro (TEB), Port Authority of New York and New Jersey (PANYNJ). *Project Controls Specialist.* Performed detailed schedule analysis on PIDS Integrated Master Schedule (IMS) utilizing P6.1 for issues and inefficiencies in appropriate resource allocations, deadlines, milestones, critical path and made suggestions on adding and removing excess Float. Monitor progress against interim milestone dates and report issues/delays and make suggestions to resolve scheduling delays and conflicts.

- Various Projects, Port Authority of New York and New Jersey (PANYNJ), *Project Controls Specialist.* Performed Schedule Risk Assessment and Cost Risk Assessment using P6.1 for the following projects:
  - ✓ The John F. Kennedy Hangar 12 & Building 94 Demolition and Airport Beacon Light Relocation Project, New York, NY.
  - ✓ The George Washington Bridge Structural Steel Rehabilitation & West Bound Repaving Project, New York, NY.

- City of New Orleans Disaster Recovery Project, New Orleans, LA. *Project Controls Specialist.* Developed individual facility tracking system (IFTS) and Document control management system (DCMS) based on Windows SharePoint Services 2007 to act as a single point of access to eleven hundred facilities related documents and facility progress tracking for the team. The system composed of a repository around a SharePoint Document library with custom WebParts to cater different views. Reviewed existing Document Storage. Structured projects in to five departments, eleven hundred facilities and thirteen facility types. Produced Document Control flow charts. Developed Document Types. Developed Individual document libraries for each facility, Created functional flow charts for Document Control SharePoint site. (September – December 2009)
- Downtown Restoration Program, Port Authority of New York and New Jersey (PANYNJ), New York, NY. *Project Controls Specialist.* Traced critical paths and prepared summary schedule leading to the 9/11 Milestone on the following projects utilizing P6.1: Transportation Hub; Freedom Tower; Streets, Parks and Plazas; NS11MM Memorial and Museum; and Vehicle Security Center 1, South Basement. Involved on the World Trade Center Construction (WTCC) cost and schedule integration model. Assisted in creating Cost Accounts in the P6 database. Entered the Activity Line Items (ALI) into the appropriate Global Activity Code Listing. Assigned codes to the activities in the Program Controls Model. Assisted in the development of the Integrated Cost and Schedule Reporting System. Worked to expand the Program Controls Resource Library. Assigned resources to activities in the Program Control Schedule.
- Various Projects, Morristown, NJ. *Project Controls Engineer.* Worked on the proposed schedule for the New Jersey Turnpike Exits 6 to 9 Widening Project, which involved both cost and resource loading. Also developed the proposal schedule for the Susquehanna-Roseland 500 KV Transmission Line Project for Geotechnical Services. Trained in Primavera Contract Manager and P6.1. (January 2009 – August 2009)
- New York City School Construction Authority (NYCSCA), Brooklyn, NY. *Project Engineer*. Responsibilities included: generating, forwarding and tracking status of submittals; contacting subcontractors and suppliers for bid solicitations and evaluating lower bids and aiding in pricing alternates; assisting in managing the project; providing necessary coordination and planning for NYCSCA along with the subcontractors; attending and taking notes for project team meetings, including biweekly NYCSCA/Architect meetings and subcontractor coordination meetings and distributing the meeting minutes to participants. Prepared and submitted daily/monthly project progress reports; prepared and answer RFIs; attended NYCSCA project meetings and updated construction schedule based on project team input; oversaw the set-up of job files. Prepared, updated and monitored logs for tracking submittals, RFIs, change orders, etc., considered necessary for a successful project. Prepared biweekly/monthly schedule in coordination with the Project Manager and Field Supervisor.
- Various Projects, Middletown, CT. *Facilities Space Planning and Move Coordinator.* Provided project management support, which involved space planning to assist Aetna with the proper placement of new offices, rooms, systems furniture and employees within established guidelines. Produced drawings for review and feedback and involved project management staff as needed for construction services. Coordinated with employees to ensure that all move-related information was properly reflected on Move Spreadsheets. Conducted independent spot-checks of work areas affected by move planning to ensure that current locations and office availability at destination locations was accurately located. Designed and maintained floor plans. Communicated with all departments and companies in scheduling move activities (i.e. movers, IT, voice communications & mail room contacts). Coordinated planning, scheduling and execution of employee moves of all sized on a daily basis.

THE Louis Berger Group, INC.

Jason Brown

SCHEDULER

EDUCATION
B.A., Political Science, Kansas State University, 1992

TECHNICAL SKILLS
@ Risk, Contract Manager, Microsoft Office, Master Builder Accounting, Pertmaster, Primavera 6.0, Primavera Project Planner, Primavera SureTrak, Prolog

PROFESSIONAL EXPERIENCE

Mr. Jason M. Brown possesses approximately 17 years of experience in senior level project and program management positions for over $20 Billion in design and construction projects. He has substantial additional experience including contract controls and information technology systems. Sectors of project oversight include transportation, commercial, educational, financial, hospitality, medical, and municipal.

- Downtown Restoration Program, Port Authority of New York & New Jersey, New York, NY. *Senior Program Scheduler* for the development and implementation of a unified multi-platform system to manage budget, cost and schedule towards World Trade Center Redevelopment and the PANYNJ Capital Plan. Chief responsibility for management and oversight of the National September 11th Memorial Museum; including a comprehensive re-baseline effort at inception to ensure acceptable resource planning and production rate levels could be maintained towards project completion. Design and implementation of a production-based system for monitoring progress and concerns towards the successful completion of Master Development Agreement Milestones established between PANYNJ and Silverstein Properties; as well as Federal Transportation Administration milestones and other key sitewide deliverables. Comprehensive program modeling for Risk Assessments and analysis. Liaising with Program and Construction Management teams regarding overall program scheduling and planning, cost and schedule maintenance and mitigation efforts, claims avoidance techniques and solutions, and construction logistics planning. Reviewing Construction Manager, General Contractor, and Subcontractor schedules for validation, coordination and acceptance purposes. Issuing monthly status reports, schedule analyses, and "what-if" scenarios and solutions.
- FTA Project Management Oversight: Lower Manhattan Recovery Organization, World Trade Center PATH Terminal and Vehicle Security Center, New York, NY. *Construction Manager.* Provide oversight and guidance to the Port Authority of New York and New Jersey regarding the design and construction of these two programs; and within the larger World Trade Center Redevelopment Program. Participate in constructability reviews, schedule and estimate reconciliation workshops, and develop solutions towards the prompt and efficient completion of the programs. Identify, define and assess potential program risks and impacts; offer mitigation strategies and monitor implementation and success. Direct coordination with scheduling and project management staff for CPM scheduling methods, cost control, earned value analysis, claims avoidance, and risk mitigation techniques. Monitor construction progress to determine adequacy of performance with regards to cost, schedule, quality, and planning. Execute forensic and analytical reviews of engineering and construction schedules to determine compliance with Project Management Oversight Guidelines. Participation in the development of CM/GC and other contract documents to ensure compliance with Federal Acquisition Regulations and minimize the potential for disputes and claims.

- Nassau County Real Estate Consolidation Program, Mineola, NY. *Senior Cost / Schedule Analyst*. Developed Program Master Schedule and provided analysis of potential areas of conflict, time-loss, and risk potentials. Reported on schedule slip and provided impact analysis on weekly and monthly basis to determine mitigation needs, cost risk, and cash flow revisions. Provided program management level scheduling analysis and reviews to ensure proper coordination amongst multiple contractors and county agencies towards the successful completion of each project and the fluid relocation of all parties. Reviewed progress of each design consultant and contractor to determine equitable progress payments, realign program strategies and optimize efficiency.
- Project Management System, New York, NY. *Project Manager*. Participated in development, implementation and training for a proprietary project controls system, designed to integrate corporate project schedules with existing timekeeping system to improve project and profitability. Conducted multi-office interviews to determine needs and constraints across multiple client types. Trained corporate project management staff in system principles, techniques and utilization.
- MTA NYC Transit, Construction of Communication and Signal Rooms, New York, NY. *Senior Project Manager* responsibile for two concurrent contracts involving simultaneous construction of eighteen communication and signal facilities in four boroughs of New York City over three years.
- Primavera Expedition Contract Control System, New York, NY. *Senior Project Manager*. Implemented, managed and maintained Primavera Expedition Contract Control software for full corporate utilization. Established company policies and procedures regarding system utilization, process requirements, and security restrictions. Trained all corporate personnel in software use, including project budgets, subcontracts and purchasing, issues tracking, change order processes, and submissions and document control. Provided integrated use with Primavera Project Planner towards a holistic project management and contract control system for all corporate projects.
- Various Projects, Brooklyn, NY. *Construction Accounting & IT Systems Consultant.* Specified and installed integrated network solutions for construction companies, including the implementation of select construction accounting software package designed to provide comprehensive financial reporting at all phases of the construction process. Trained uses in construction accounting principles and theory, and drove practice implementation.
- Metro North Railroad, Poughkeepsie Line Improvements. *Senior Project Manager*. Contract included demolition and replacement of both inbound and outbound platforms at three stations; demolition of an existing drawbridge and appurtenances for replacement with steel truss bridge; demolition and reconstruction of existing signal stations at two locations; and miscellaneous demolition and removals along the line.
- New York City Department of Design + Construction, Reconstruction of Fingerboard Road, Staten Island, NY. *Senior Project Manager*. Direct oversight and management responsibility for the successful completion of the demolition of an existing bridge structure and associated roadway; installation of new utility corridors and systems; and replacement of roadway.
- Washington Dulles International Airport, 4th Runway Final Design, Washington, DC. *Senior Scheduler / Cost Analyst*. Provided detailed design and construction schedules; as well as quantitative and qualitative oversight and review of engineers' estimates for each of four primary design and construction packages including: earthwork, paving, transitions, and navigational aid systems. Performed monthly schedule updates, including earned vale measurement, resource utilization and forecasting, and cost-to-complete analyses. Determined areas of schedule slip and developed recovery schedule.

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John J. Meola, CSP, ARM

CONSTRUCTION SAFETY ENGINEER

EDUCATION
B.A., Education, Rhode Island College, 1976

PROFESSIONAL REGISTRATIONS
Certified Safety Professional (CSP)
Associate in Risk Management (ARM)
OSHA Outreach 500 (1926 Construction) Trainer (Certificate Renewal Pending)
Insurance Institute of America, Instructor (Ergonomics & Back Injury Prevention)

PROFESSIONAL TRAINING
OSHA Disaster Response & Recovery Trained
National Incident Management System (NIMS), Completed courses 100 & 200
VA Department of Environmental Quality – Soil Erosion and Control Course
Technical Safety Consulting: Specialized Carrier & Rigging Association (1994 – 1995), Fairfax, VA

PROFESSIONAL EXPERIENCE
Mr. John Meola possesses 35 years of safety management experience in the construction industry. Relevant skills include: developing and maintaining comprehensive HSE programs; conducting onsite safety training, compliance audits and facility inspections; assuring compliance with OSHA 1926/USACE EM385 standards; developing and presenting customized safety training courses for specialty trade contractors, including Safety Orientation; technical writing for safety and health procedural specifications including customized safety manuals, instructional materials and reports, with ISO level documentation; preparation of QA/QC specifications for construction safety practices, including specialty applications for high hazard work exposures; executive and managerial level of interaction for performance reporting; develop risk and performance metrics to measure organizational safety progress, including contractors; conducting OSHA HAZWOPER Training at Level 1 and 2 (First Responder) for incident management, spill control, substance identification and incident reporting; and conducting DOT Hazmat training for commercial Hazmat Drivers. Mr. Meola has extensive knowledge of HHM storage, transfer and use of safety practices.

Mr. Meola has an extensive inventory of technical safety skills including employee training in accordance with OSHA and USACE Safety Program, including OSHA competency in: Confined and Restricted Space Entry; Lock Out Tag Out / Hazardous Energy Control; Crane and Rigging Safety; Excavation and Trenching; Scaffold Erection and Dismantle; Fall Prevention and Protection; Powered Industrial Trucks; PPE Hazard Assessments; Industrial Hygiene and Health Hazard Identification; Ergonomics and Back Injury Prevention; Process Safety Management/Machine Guarding; Serious Incident and Accident Investigations using Root Cause Analyses; Employee Recognition and Motivation Techniques; Train the Trainer Courses; Close Call and Near Miss Reporting with analysis and corrective actions follow up.

- Steam Tunnel Rehabilitation, Bethesda NIH. Provided loss control and safety liaison support to insured Medical Contractor performing removal and replacement of large diameter steam lines, valving, manifolds and instrumentation. Included scaffolding, fall protection, hot work, confined spaces, hoisting and rigging, PPE, LOTO and other relevant safety aspects. Performed safety inspection and follow up

to ensure identified deficiencies were corrected in a timely manner. Performed risk and hazard assessment review with Contractor staff.

- Methodist Hospital Expansion Project, Montgomery, AL. Provided loss control and safety liaison support to insured General Contractor performing a multi-phase expansion project to main hospital buildings. Provided coordination and communication to support uninterrupted clinical services during term of the project. Performed safety inspection and follow up to ensure deficiencies were corrected in a timely manner.
- One Twenty Five High Street (Twin 25-Story Towers), Boston, MA. Provided loss control and safety liaison support to insured Developer and General Contractor on a four year project. Work included excavation, foundation, and historic preservation. Provided all trade safety training and orientation; auditing and inspections with follow up documentation. Intensive fall protection, crane and rigging, steel erection, scaffold and netting, coordination of safety practices among multiple trades. Supervised the full range of construction technical safety elements including: re-bar handling and cage assembly, concrete pouring, pumping and finishing, form removal, and pre-cast placement.

Safety Training Programs and Achievements

- ✓ Developed and maintained formal safety and health programs for this 400 employee asset management company. Provided safety training and contractor safety management services. Traveled extensively to project locations throughout the United States and Canada.
- ✓ Performed safety audit and inspections, with consultative approach to problem solving
- ✓ Made numerous OSHA compliance and training presentations including simulated OSHA inspections and audits
- ✓ Provided safety training, inspections, compliance surveys and in-depth safety practices for a 5,000 person, non-union, heavy steel fabrication facility
- ✓ Managed Employee Safety Committee operations
- ✓ Worked closely with AIHA certified testing lab on site for air and dust sample analysis
- ✓ Fall protection engineering, training and monitoring for difficult applications. Included use of high reach aerial platforms, man baskets, and spider lifts.
- ✓ Provided industrial hygiene training, monitoring for confined space work including hot work safety
- ✓ Provided welder, pipefitter, shipwright, sheet metal mechanic and millwright safety training
- ✓ Supervised safety elements for heavy lift marine transport operations; crane operations including mobile (rubber tire and crawler), overhead, gantry to 150 tons, rail and barge loading
- ✓ jWorking knowledge of Mil. Spec and QA/QC standards and DCAA performance requirements
- ✓ Extensive experience with confined space entry and hot work processes training, on-site monitoring, atmospheric sampling instrumentation and documentation
- ✓ Personal protective equipment specialist including selection and fit
- ✓ Hazard Communication and Hazardous Materials Awareness
- ✓ Respiratory Protection Program – health assessments, training, fit testing, selection
- ✓ Hearing Conservation Program – noise surveys (personal and area) training
- ✓ Control of Hazardous Energy (LOTO) – custom programs engineering for site and process specific applications
- ✓ Incident and accident investigations with follow up corrective measures
- ✓ Lead, Asbestos, Indoor Air Quality monitoring and industrial hygiene controls
- ✓ Knowledge of US EPA/RCRA/SARA air-water-waste regulatory requirements including underground tank removal and in-site passivation, contaminated soil disposal, asbestos removal practices and controls, hazardous waste disposal practices including preparation of Shipping Manifests
- ✓ HVAC, mechanical, process piping, instrumentation

JCMS, Inc.
25 Years of Excellence

MIKE MAGGIO — ACI Concrete Construction Special Inspector; ICC Structural Steel & Bolting Inspector

Experience Highlights:
Considerable Experience in Special Inspections

Total Experience:
9 Years

Education:
Graduated Nassau Community College, Garden City, NY

Associates Degree – Business Management

Certifications:
- *ICC Certified Structural Steel and Bolting Inspector*
- *ACI Concrete Special Inspector Level II*
- *ACI Certification ID#* [redacted]
- *ACI Concrete Field Technician level I*
- *ACI Concrete Laboratory Testing Technician Level 1*
- *ACI Concrete Strength Testing Technician*
- *ACI Aggregate Testing Technician Level 1*
- *AWS-CWI Certified Welding Inspector Certificate #* [redacted]
- *OSHA 30 hour Construction Safety and Health*
- *NYC DOB Supported & Suspended Scaffold*
- *New York City Transit Authority track safety certified*
- *Radiation Safety Officer (RSO)*
- *Nuclear gauge Safety/Hazmat Certified (Troxler)*
- *Experienced Mold/Moisture Indoor Air Quality Consultant*

Skills:
MS Project, MS Word, Publisher, Excel

Mr. Maggio has over (9) years of experience as Inspector responsible for all technical field operations including special inspections. He has been responsible for inspections of commercial & residential projects that include heavy rain, mold remediation, fine art restoration, fuel oil spills. His responsibilities also include scheduling and updating, change order processing, daily correspondence, forecasts, and record keeping, closeout documentation

- Responsible for overseeing all technical field operations including special inspections and special inspectors.
- Integrating design management and review as required for adjacent property surveys, special inspections and lab work, contractor design and environmental issues.
- Deals directly with clients to ensure satisfaction and resolve field issues.
- Indoor Air Quality Hygienist; Qualified to conduct mold inspections, define and implement procedure for remediation.
- Versed in ASTM standards and testing methods.
- Possesses the ability to provide a concise and accurate situation report detailing events supported by attached and annotated photographs.

PROJECT EXPERIENCE:

Domani Consulting, Inc., Valley Stream, NY 10/08- Present
Inspector/ Field Operations Manager
Stonybrook University -Simon Center for Math and Geometry
7 story steel superstructure on cast in place foundation.Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds, metal decking welds. Steel plant source inspection of Canatal Industries in Montreal Canada
Hyde Charter School, 830 Hunts Point Avenue – Bronx, NY 4 story school building - steel superstructure on cast in place foundation.Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds, metal decking welds
61 5th Avenue – New York, NY
8 story residential- steel superstructures on cast in place foundation, inspections included; Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds, metal decking welds.

30-20 Thomson Avenue – Long Island City, NY
Inspection QA/QC for the installation of pressure grouted micro piles, concrete pile cap/elevator pit and steel frame structure for two new elevator shafts, floor access ramps, rack and pinion drive mechanism. Operations conducted after hours, enforcing stringent control of means and methods due to limitations associated within interior atrium PA space, occupied multi-use commercial/educational facility.
Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds. Steel fabrication source inspections protocol that included the limitation of individual welders to process and positions pre qualified.
276 Water Street – New York, NY
5 story residential- steel superstructure on cast in place foundation.
Preformed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds, shear stud welds, metal decking welds.
1280 5th Avenue – New York, NY – African American Museum
30 story residential/commercial- cast in place superstructure with steel 4 story façade/atrium
Performed inspection QA/QC including but not limited to: NCR reporting, log maintenance and tracking to resolution. Skidmore device verification of high strength bolts with ongoing MTR heat and lot verification of delivered bolts/nuts/washers. Bearing bolt connections, full and partial penetration welds, typical fillet welds. Load testing of connections at marquee.

Trade Winds Environmental, Holtsville, NY 08/2007 – 03/2008
Sales/Site Supervisor/Emergency Response
Environmental restoration and disaster recovery company specializing in fire, flood, and hazardous material remediation.

- Respond to scenes of disaster, sign new business, deploy appropriate resources and oversee project through completion.
- Projects have included: commercial and residential fire, flood from heavy rain, mold remediation, fine art restoration, fuel oil spills.

Colon Associates Inc., Flushing, NY 10/2002-06/2007
Project Manager/Site Supervisor
New York City School Construction Authority Mentor Program.

- Successfully completed twelve projects on time and under budget earning 2006 Emerging Contractor of the Year award from the SCA.
- Work included but not limited to; all pre bid information gathering, submittals, permit filing, baseline scheduling (MS Project) and updating, represent GC at bi-weekly meetings, negotiation and coordination of applicable subs and trades, material procurement (daily and long lead), site safety compliance, change order processing, daily correspondence, forecasts, and record keeping, closeout documentation.

JCMS, Inc.
25 Years of Excellence

SHAWN M. HEANEY **ICC Structural Steel & Bolting Inspector**
ICC Structural Masonry Special Inspector

Experience Highlights:
Extensive Experience in Steel & Bolting Installation Projects

Total Experience: *7 Years*

Education:
B.S. - Civil Engineering, University of Hartford, West Hartford, Connecticut

Certifications:
- *A.C.I. Certified Field Technician – Level 1*
- *I.C.C. Certified Structural Steel and High Strength Bolting Special Inspector*
- *I.C.C. Certified Structural Masonry Special Inspector*
- *O.S.H. A. 10-Hour Construction Safety*

Mr. Heaney has over (7)seven years of experience working as Project Manager, Inspector & Lead Project Engineer. Some of his responsibilities include performing detailed, controlled special inspections throughout the greater New York City Metro Area which consist of reinforced concrete, high strength structural bolting; structural steel welding; structural masonry; concrete placement oversight; HVAC/Mechanical systems; sprinkler systems; building façade installation; mortar sampling; grout sampling; horizontal and vertical fire-stopping; and spray-on fire-proofing.He is also responsible for maintaining client relationships through detailed on-site communication, detailed contract drawings, specifications and shop drawings RFI's to engineers and architects, construction schedules, work logs, Punchlists and field inspection reports.

PROJECT EXPERIENCE:

Confidential 2010 - Present

830 Hunts Point Avenue – Bronx, NY – 08/2010-10/2010: Conducted on-site Skidmore Bolt Testing to confirm on-site, high-strength, non-galvanized, A325 and A490 tension-indicating bolting assembly strength, including Direct Tension Indicating Washers, for multiple size assemblies, for installation into slip critical connections. Skidmore Testing performed on-site on two (2) separate occasions to achieve conformance with the Specification for Structural Joints Using ASTM A325 or A490 Bolts as prepared by the RCSC. Conducted an on-site meeting that included request/review of the proper procedure required when receiving, storing and installing high-strength bolted assemblies. Performed controlled inspection of installation of all slip-critical high-strength A325 and A490 tension-indicating bolt assemblies including direct tension indicating washers.

61 5th Avenue – New York, NY – 11/2010-01/2011: Performed controlled inspections of installation of high strength steel and associated bearing connections consisting of high-strength A325 tension-indicating bolt assemblies for the Cellar, 1st, 2nd and 3rd Floors of a 9 Story steel frame structure. Conducted on-site meetings with responsible field supervision highlighting the importance of proper on-site material storage, on-site material control, material documentation required and proper installation of tension-indicating bolt assemblies at each structural connection.

2293 3rd Avenue – New York, NY – 11/2010: Conducted on-site Skidmore Bolt Testing to confirm on-site, high-strength, non-galvanized, A325 and A490 tension-indicating bolting assembly strength, for multiple size assemblies, for installation into slip critical connections. Skidmore Testing performed on-site on one (1) occasion to achieve conformance with the Specification for Structural Joints Using ASTM A325 or A490 Bolts as prepared by the RCSC.

81 Franklin Avenue – New York, NY – 08/2010-09/2010: Performed controlled inspections of installation of high strength steel and associated bearing connections consisting of high-strength A325 tension-indicating bolt assemblies for the Penthouse and Bulkhead Area of a 9 Story combined steel frame/structural masonry structure.

1623 Kings Highway – Brooklyn, NY – 09/2010: Conducted a series of controlled inspections to document the existing steel frame structure including confirming existing column and beam size, structural connection configuration and bolt assembly size/type.

Gemma Power, Inc. 2007 – 2010
Colusa Power Generating Station, Site Procurement Manager

Responsible for bidding and procuring $24.3 Million of consumables, equipment, materials and tools and awarding $4.5 Million Service Agreements and Subcontracts for a 660 MW Combined Cycle Power Plant with two GE 7FA Turbines. Responsibilities also included:

- Prepared detailed Scope's of Work, Request for Proposals, Bid Analysis, Service Agreements and Subcontracts for multi-trade construction activities; Developed and maintained Subcontractor and Vendor relationships – Direct interface with all Vendors. Identified appropriate bidders for required scope of work; Conducted Capital Expenditure Cost Benefit Analysis for purchase versus rent of large tools and equipment; Interfaced with Multiple Trade Superintendents to assure bids reflect desired scope of work as required to meet project schedule;
- Assisted in preparation and tracking of vendor and subcontractor back-charges and liquidated damages. Maintained and tracked Project Equipment Rental Log, including actual and projected costs, for all major rental equipment including cranes, welding machines, pumps and earth-moving equipment;

Renewable BioFuels Biodiesel Process Facility, Lead Project Field Engineer

Provided civil, electrical, instrumentation and mechanical engineering support during all phases of project development, including procurement, engineering, construction, and commissioning for a $140 Million project that consisted of two 90 million gallon/ year continuous operation trains with pretreatment, capable of operating on multiple feed stocks; largest facility on-line in the U.S.

- Engineer responsible for coordinating 6,500 linear feet of new railroad track installation with a total value of $5.5 Million, including: coordination of all surveying; initial/final railroad location layout; coordination and review of design drawings; selection of rail installation subcontractor, including contract negotiations and scheduling of material delivery to the project site; coordination with four (4) pipeline utilities at four (4) pipeline crossing locations; Engineer responsible for coordination of design review, initial/final pipeline layout, permitting and subcontractor coordination installation of 8,000 linear feet of 12-inch diameter biodiesel finished product pipeline.

Green Earth Fuels Biodiesel Process Facility: Provided civil, electrical, instrumentation and mechanical engineering support during all phases of project development, engineering, construction, and commissioning for an 80 million gallon per year biodiesel process facility with a total project cost of $45 Million. Performed technical evaluation of design drawings piping & instrumentation diagrams, isometric drawings and equipment specifications.

- Engineer responsible for coordination/maintenance of a detailed Purchase and Delivery Schedule for all major equipment deliveries to the project site; Responsible for reparation of two (2) Union-Pacific Railroad Crossing Permits; coordination with City of Houston Water Department Engineering review, permitting and approval; purchasing and design of a prefabricated water meter vault and dual check valve backflow prevention assembly; supervision of directional boring two (2) 4-inch diameter pipelines underneath the Union Pacific Railroad. Engineer responsible for coordination of design review, permitting and subcontractor coordination with new gas and electric utility installations to the project site.

Dodson & Associate Consulting Engineers, PLLC 2003 – 2006

Project Engineer Responsible for, construction administration, design and construction observation of large municipal water and wastewater projects throughout New York State including over 300,000 linear feet of distribution mains, pump stations, water storage tanks, pressure reducing stations, railroad crossings, State Highway crossings and commercial/residential water services.

Key Projects Included: Town of Forestport, NY Water System Improvements; New Municipal Water System – South Rome, New York; Water System Improvements – Willsboro, NY; Water System Improvements – Villages of Sandy Creek/Lacona; Water System Improvements – Village of Remsen, NY; Water System Improvements – Town of Paris, NY; Water System Improvements – Westmoreland, NY; Water System Improvements Phase I – Town of Elizabethtown, NY

Atlantic Engineering Laboratories, Inc.

PROFESSIONAL RECORD

Roberto Benitez-Villalta
ACI Concrete Construction Special Inspector

CERTIFCATIONS:

- ACI Associate Concrete Construction Special Inspector
- ACI Concrete Strength Testing Technician
- ACI Concrete Field Testing Technician – Grade 1
- Hercules Cement School Mix Design Technology
- TSC Certified – NYC DOB 16 hr Scaffolding
- ACI Seminar for Cold Weather Concrete
- ACI Seminar for Hot Weather Concrete
- ACI Seminar for Concrete Permeability
- Norlite Workshop for Structural Lightweight Concrete

EXPERIENCE:

2009-Present **ATLANTIC ENGINEERING LABORATORIES, INC.**
Rahway, NJ

Senior Inspector
Responsible for performing field inspection and testing of pile driving, soil boring, footing bottoms, earthwork, reinforcing steel, concrete (field & plant) and masonry systems on a wide array of construction projects. Also perform tensile testing of embedded anchors, concrete and asphalt core drilling, Windsor probe and Swiss hammer testing.

Recent Representative Projects:
Astoria II- Queens, NY

2005-2009 **RALPH CLAYTON & SON**
Northern NJ

Quality Control/Quality Assurance Manager
Creation of Concrete Mix Designs. Managed all NY/NJ Port Authority and DOT projects. Testing of all raw material used in design mixes. Testing of all cementicious material used in design mix. Testing of all admixtures used in mix designs.

Atlantic Engineering Laboratories, Inc.

Oversaw all QA/QC operations in the field as well as in the plant.

2003-2005 **LOIZEAUX BUILDERS SUPPLY**
Elizabeth, NJ

Quality Control/Quality Assurance Manager
Creation of Concrete Mix Designs. Managed all NY/NJ Port Authority and DOT projects. Oversaw all QA/QC operations in the field as well as in the plant.

Skills:
Able to read architectural and structural plans.
Able to read, write and speak English, and Spanish**.**

Atlantic Engineering Laboratories, Inc.

PROFESSIONAL RECORD

Naiem Mosaad
ACI Concrete Construction Special Inspector

CERTIFCATIONS:

- ACI Certified Level 1 Concrete Field Testing technician
- ACI Certified Concrete Construction Special Inspector

EXPERIENCE:

2010- Present

ATLANTIC ENGINEERING LABORATORIES, INC.
Rahway, NJ

Inspector
Responsible for performing field inspection and quality control testing of concrete perform slump, air and temperature tests on fresh concrete. Fabricate test cylinders. Inspected reinforcing steel for conformance to approved project and shop drawings. Inspect footing subgrades using penetrometer. Test soil density and moisture using a nuclear densometer. Prepare technical reports.

1995 – 2009

NACAMULI ASSOCIATES
Elizabeth, NJ

Inspector
Responsible for conformance of all structural and foundation work with contract documents. Performed inspection for concrete placement and reinforcing steel for high rise buildings. Inspected CMU walls, monitored preparation of sub grade to receive slab.

Atlantic Engineering Laboratories, Inc.

PROFESSIONAL RECORD

Roger Lopez
ACI Concrete Construction Special Inspector

CERTIFCATIONS:

- Troxler Nuclear Density Gauge Operation, 30-Hour OSHA.
- NJDCA Certified Concrete Placement Inspector
- NICET Level 1 Concrete Technician
- ACI – Level 1 Concrete Inspector
- ACI Concrete Construction Special Inspector
- Certified Asphalt Technician (SAT)

EXPERIENCE:

2004– Present **ATLANTIC ENGINEERING LABORATORIES, INC.**
Rahway, NJ

Construction Inspector

Soil backfill inspection and compaction testing with moisture-density gauge.
Reinforcing steel inspection for concrete footing and walls.
Concrete sampling and testing (slump, air content and temperature) at the time of pour.
Foundation sub-grade inspection for allowable bearing capacity.
Compaction and inspection of bituminous concrete.

Recent Representative Projects

Astoria Energy, NY
11 Times Square, NY
PSE & G Hawthorne, NJ
Atlantic Avenue Self Storage, NY
Red Bulls Stadium, NJ

2003–2004 **Tri-Con Construction.**
Rockaway, NJ

Project Manager Assistant/ Safety Officer

Safety coordination with the sub-contractor.
Inspection reports for construction site and workers.
Help superintendent to oversee construction progress.
Record work performed on daily reports.

Atlantic Engineering Laboratories, Inc.

2001–2003 **SESI Consulting Engineers**.
Pine Brook, NJ

Soils Inspector
Testing backfills with the moisture-density gauge.
Dynamic compaction inspection.
Responsible for presenting field reports to the client.
Testing with seismograph in dynamic compaction close to walls or roads near site.

Education:

2000-2003 **New Jersey Institute of Technology**
Newark, NJ
BS in Construction Engineering Technology

1997-2001 **Essex County College**
1997-2002 Newark, NJ
AAS in Civil/Construction Engineering Technology

Atlantic Engineering Laboratories, Inc.

PROFESSIONAL RECORD

Paresh Patel
ICC Structural Steel and Bolting Special Inspector

CERTIFCATIONS:

- ACI Grade I, Lab/Field - Farmington Hills, MI 2005
- A.W.S. CWI - Florida, FL 2005
- MINT UT, VT, PT, Level II - Surat, India 2005
- MP NAS 410 Level II – Heller Tech, CT 2004
- MINT QC1 – Surat, India 2003
- Well Weld Training Ctr – Navsari, India 2002
- NJDCA Structural Welding Special Inspector Lic # SI-11

EXPERIENCE:

10/07-Present **ATLANTIC ENGINEERING LABORATORIES, INC.**
Rahway, NJ

Senior Structural Steel Inspector
Responsible for the inspection of structural steel welding, bolting, erection, corrosion protection, painting, fire protection and firestopping systems. Performed non-destructive evaluation of welded connections.

Representative Recent Projects – Field and Shop

1. Preferred Freezer – Elizabeth, NJ
2. Schering Plough – Summit, NJ

11/03 – 10/07 **Key Tech**
Keyport, NJ

Welding Inspector

- Inspection of structural steel, soils, asphalt, and concrete, test as per required design and specification
- Structural tests with MT, UT, PT, and VT

Atlantic Engineering Laboratories, Inc.

03/96 – 04/03 **PRV Engineering Co.**
Surat, India

Q.C. Engineer

- Quality control activities relate to welding and NDT (RT, UT, MT, and PT) for various jobs of the company and site activities for 7 years. Co-coordinated to various inspection agencies for the AWS Codes/Standards

EDUCATION:

1990-1992 **Kendriya Vidyalaya**
Surat, Indai

- Undergraduate study – All India Secondary School Education AISSCE (XII)

Atlantic Engineering Laboratories, Inc.

PROFESSIONAL RECORD

ALBERT ELVIS
ICC Structural Steel and Bolting Special Inspector
ICC Welding Special Inspector

CERTIFICATIONS:

- ICC Certified Spray Applied Fireproofing Inspector
- ICC Certified Structural Steel & Bolting Inspector
- ICC Certified Structural Welding Inspector
- HILTI – Firestopping
- Troxler Electronic Laboratories Certified Nuclear Gauge Operator
- AWS Certified Associate Welding Inspector (CAWI)

EXPERIENCE:

2006 – Present **ATLANTIC ENGINEERING LABORATORIES, INC.**
Rahway, NJ
Senior Inspector

Structural Steel Inspector

Performs field and shop inspections of structural steel. Responsible for the inspection of structural steel welding in accordance with AWS D1.1 requirements. Inspects erection, corrosion protection, painting, fire protection, and fire stopping systems. Performs field testing of paint, galvanizing and other coatings for thickness and adhesion. Performs non-destructive evaluations of welded connections. Inspects high strength bolting in accordance with AISC requirements.

Representative Projects

- Novartis Pharmaceuticals, East Hanover, NJ: 2 – 5 story buildings and 1 – 4 story garage
- Columbus Towers, Jersey City, NJ
- New Meadowlands Stadium, East Rutherford, NJ

2002 – 2006 **U.S. ENGINEERING LABORATORIES, INC.**
Rahway, NJ

Atlantic Engineering Laboratories, Inc.

Inspector
Performs field and shop inspections of structural steel. Responsible for the inspection of structural steel welding in accordance with AWS D1.1 requirements. Inspects erection, corrosion protection, painting, fire protection, and fire stopping systems. Performs non-destructive evaluations of welded connections. Inspects high strength bolting in accordance with AISC requirements.

Representative Projects
- Spring Street – 22 story tower in New Brunswick, NJ
- Red Bank Parking Garage – 6 stories

1996 – 2000 **DOUBLE 'A' CONSTRUCTION CO.**
Guyana

Managing Director
Supervised the work force which comprised of: carpenters, masons, plumbers, electricians, pavers, and construction crew.

1983 – 1996 **GUYANA DEFENSE FORCE**
Guyana

Engineer Officer
Supervised field and construction engineer companies.

EDUCATION:

- 2007 – ITS – Linden, NJ – Certified Welding Inspector's Course
- 2003 – Density Gauge Course – USEL – Rahway, NJ
- 2003 – Lead Abatement Supervisor's Course – NJ
- 1988-1989 – Guyana Management Institute – Public Administration
- 1983-1984 – Colonel Ulric Pilgrim Officer Cadet School
- 1967-1968 – Structural Engineering course – Ministry of Works and Hydraulics – Guyana
- 1965-1967 – Civil Engineering Course, Ministry of Works and Hydraulics – Guyana

Atlantic Engineering Laboratories, Inc.

PROFESSIONAL RECORD

Nirav Patel
ICC Structural Steel and Bolting Special Inspector

CERTIFCATIONS:

- Troxler Electronic Laboratories Certified Nuclear Gauge Operator
- Certified Member American Welding Society
- Certified Associate Welding Inspector 2004
- Certified Grade I Concrete Testing Technician 2001
- ICC Certified Structural Masonry Special Inspector
- ICC Certified Spray-applied Fireproofing Special Inspector
- ICC Certified Structural Steel; and Bolting Special Inspector
- NJDCA Certified Structural Steel Inspector

EXPERIENCE:

2007– Present **ATLANTIC ENGINEERING LABORATORIES, INC.**
Rahway, NJ

Senior Inspector
Responsible for performing field inspection and testing of pile driving, footing bottoms, earthwork, reinforcing steel, concrete (field & plant) and masonry systems on a wide array of construction projects.

2003– 2007 **ANS Consultants**
South Plainfield, NJ

Structural Steel/ Spray on Fireproofing Inspector
Performed visual welding and bolting inspections on a variety of projects. Performed inspections of sprayon fireproofing including thickness and bond strength.

Recent Representative Projects
Essex County Hospital, Newark, New Jersey
Imclone Systems Inc., Branchburg, New Jersey

Atlantic Engineering Laboratories, Inc.

2000–2003 **U.S. ENGINEERING LABORATORIES INC.**
Rahway, NJ

Senior Inspector

- Soil Testing
- Compaction Testing.
- Footing Bottom Inspection.
- Rebar Inspection.
- Concrete Testing.
- Asphalt Inspection.
- Masonry Inspection.
- Fireproofing Inspection.

Atlantic Engineering Laboratories, Inc.

PROFESSIONAL RECORD

Jorge Li Lam(Chino)
ICC Welding Special Inspector

CERTIFCATIONS:

- ACI Certified – Concrete Inspector, Level I
- Troxler Electronic Laboratories Certified Nuclear gauge operator
- ICC Certified Reinforced Concrete Special Inspector
- ICC Certified Spray on Fireproofing Special Inspector
- ICC Certified Welding Special Inspector
- NJDCA Certified Concrete Placement Inspector
- NJDCA Certified Reinforced Concrete Special Inspector

EXPERIENCE:

2004-Present **ATLANTIC ENGINEERING LABORATORIES, INC.**
Rahway, NJ

Senior Inspector

Responsible for performing field inspection and testing of pile driving, soil boring footing bottoms, earthwork, reinforcing steel, concrete (field & plant) and masonry systems on a wide array of construction projects. Also perform tensile testing of embedded anchors, concrete and asphalt core drilling.

Recent Representative Projects:

Middlesex Warehouse- South Brunswick, NJ
Columbus Towers- Jersey City, NJ
Grove Point- Jersey City, NJ
Lakewood Public Work- Lakewood, NJ
New Meadowlands Stadium – East Rutherford, NJ
NJPHEAL – Trenton, NJ

Education:

Pontificia University Catolica Del Peru, 92 credits toward Engineering Degree.

Atlantic Engineering Laboratories, Inc.

Related Courses:
Discreet Structures
Graphic Design

Skills:
Able to read architectural and structural plans.
Computer knowledge in word, excel and FoxPro.
Able to read, write and speak English, and Spanish**.**

41 Murray Street * Rahway, NJ 07065 * Office: 732-815-0400 * Fax: 732-815-0422
www.aelinc.net

Atlantic Engineering Laboratories, Inc.

PROFESSIONAL RECORD

JORGE E. ARTEAGA P.E.
ICC Structural Steel and Bolting Special Inspector

Experience:

2010 – Current ATLANTIC ENGINEERING LABORATORIES OF NY, INC, Rahway, NJ

Professional Engineer/Project Manager

- Technical project manager for geotechnical services
- Supervises site investigations including borings, test pits, infiltration tests, etc.
- Coordinates geotechnical site inspection for shallow foundations, mat foundations, driven piles, auger cast piles, mine and micro piles and shoring systems.
- Supervises/manages field staff of 12 inspectors.

Representative Projects:

- North Shore Marine Transfer Station – Flushing, NY
- Hamilton Avenue Transfer Station – Brooklyn, NY
- Mercer County Courthouse – Trenton, NJ
- Marlboro Commons Retail Center – Marlboro, NJ

2008-2010 MUSS DEVELOPMENT, LLC
Forest Hills, NY

Atlantic Engineering Laboratories, Inc.

Senior Project Manager

- Coordinated Architectural, Structural, MEP, Civil and Landscaping drawing for construction.
- Managed, supervised and coordinated on-site structural elements.
- Responsible for the management and supervision of controlled inspections for concrete, steel ,masonry to obtain TCO approval.
- Managed the Building bulletin 2009-014 Technical procedure required by NYC DOB.
- Verified and coordinated field conditions and prepared detailed sketches to complete Request for Information (RFI's).
- Provided on-site visual observation and approval for all construction work to ensure compliance.

ADDITIONAL PROFESSIONAL EXPERIENCE:

2004-2008	DESIMONE CONSULTING EINGINEERS, PLLC New York, NY
2002-2004	GALSANZ MURRAY STEFICEK, LLP New York, NY
1995-2002	THE CANTOR SEINUK GROUP, P.C. New York, NY
1992-1995	R & R ENGINEERS Caracas, Venezuela

Education:

Universidad Santa Maria – Caracas, Venezuela

- Bachelor of Science in Civil Engineering
- Specialization in Structural Engineering.

Professional Associations

- **Structural Engineers Association of New York**
- **American Concrete Institute**
- **American Society of Civil Engineers**
- **Member, Venezuelan Society of Civil Engineers**

Licensing **Registered Professional Engineer – New York – License [redacted]**
California – License [redacted]

Atlantic Engineering Laboratories, Inc.

PROFESSIONAL RECORD

Jorge Cadenas
ICC Structural Masonry Special Inspector
ICC Spray – Applied Fireproofing

CERTIFCATIONS:

- Troxler Electronic Laboratories Certified Nuclear gauge operator
- ACI Certified Grade I Concrete Inspector
- NJDCA Certified Concrete Placement Inspector
- ICC Certified Structural Masonry Inspector
- ICC Certified Spray Applied Fireproofing Inspector
- ICC Certified Reinforced Concrete Inspector
- NJDCA Certified Structural Masonry Inspector

EXPERIENCE:

2005- Present **ATLANTIC ENGINEERING LABORATORIES, INC.**
Rahway, NJ

Inspector

Responsible for performing field inspection and quality control testing of concrete perform slump, air and temperature tests on fresh concrete. Fabricate test cylinders. Inspected reinforcing steel for conformance to approved project and shop drawings. Inspect footing subgrades using penetrometer. Test soil density and moisture using a nuclear densometer. Inspect spray on fireproofing, perform thickness and bond strength tests. Inspect waterproofing systems. Prepare technical reports.

Atlantic Engineering Laboratories, Inc.

Recent Representative Projects:

NJ Jets Training Facility – Florham Park, NJ
Columbus Towers – Jersey City, NJ
New Brunswick High School, New Brunswick, NJ

2001– 2005 Fill Rite Corp, Newark, NJ
Supervisor.

1996-2001 R & S contractor, Lima Peru´
Civil Engineer

Education: Bachelor's degree in Civil Engineering
1995 University Federico Villarreal, Lima Peru´.
1993 Computer Science Certificate from engineering university, Lima Peru´.

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www.aelinc.net

Mr. Vergil Vilarama is an accomplished Field Engineer and multi-disciplined Construction Inspector with extensive experience in Construction inspection and supervision. Vergil is excellent in understanding and interpreting contract drawings and specifications. He has proven ability in structural, civil, Drainage, specialty work and renovation work. He has supervised contractor's work in accordance with Construction Plans and Specifications. Prepared Inspector Daily Report, Kept track of Pay Items, Performed Slump and Air Test to check the consistency of the Concrete. Mr. Vilarama is certified Concrete Construction Special Inspector by ACI. He is also proficient in AutoCAD, MS Office and other computer programs.

PROFESSIONAL EXPERIENCE:

April 2009- Present
Construction Inspector
Haider Engineering P.C.
NYCDDC Contract HWMWTCAA7A – Reconstruction of Harrison Street.
Types of works included are installation of Water Main, Sanitary Sewers, Relocation of Utilities, Concrete Curbs, Ramps, Roadway, Street Lighting etc.
Contact Person: Mr. Ashwin Patel, E.I.C., NYCDDC [redacted]

May 2005 – Feb 2009
Construction Inspector
Gilsanz • Murray • Steficek LLP (New York, NY)
Oversaw structural concrete rebar & concrete placement, structural masonry, structural steel repair and reinforcement welding, shear stud welding, window/curtain wall, foundation waterproofing, roofing/waterproofing, fireproofing, exterior wall air/moisture protection and flashings, protective coating and caulking work. Inspected renovation of existing structural concrete beam/column, exterior wall and masonry parapet wall. Coordinated with structural engineer, construction manager, contractor and owner. Prepared inspection reports and punchlist. Assisted in evaluating contractor's requisitions and reviewing material submittals and shop drawings. (All projects were high-rise commercial and residential buildings).

Feb. 2002 – Apr 2005
Construction Inspector
Future Tech Consultants of New York (Mineola, NY)
Conducted quality control inspection in numerous construction activities such as backfilling/compaction; rebar/concrete placement; field concrete testing; exterior/interior masonry; and fireproofing/firestopping. Notable projects were American Airlines Terminal Extension project (JFK Airport); Schools (NYCSCA & DASNY), Hospital (DASNY), High Rise buildings and a 60 foot High Retaining Wall. Prepared daily inspections and non-conformance reports. Assisted in structural investigation (Non Destructive Test) of existing reinforced concrete structures (DASNY & NYCDEP).

Sep. 1996 – Nov 2000
Field Engineer
Dept. of Transportation & Communications (Philippines)
Managed and supervised construction of government owned multi-story office building, warehouse, maintenance building and lighthouses. Oversaw all soil excavation; backfilling/compaction; rebar/concrete placement; steel structures erection; fiberglass tower erection; drywall construction; masonry work;

carpentry work; waterproofing and painting work. Assisted in evaluating contractors' monthly requisitions. Prepared project reports and punch list.

Mar. 1990 – Aug 1996
Field Engineer
Santa Ana-AJ Construction Corporation (Philippines)
Completed numerous construction projects as Lead Project Engineer for the General Contractor. Managed and supervised all construction activities. Assisted Project Manager in running site operations and overall manpower schedule; sub-contractors supervision & coordination; materials and equipment procurement. Processed material submittal and approval. Prepared project's requisitions and progress reports. Evaluated sub-contractor's requisitions. Processed change orders and drawing modifications.

Oct. 1989 – Jan. 1990
Field Engineer
AVD Construction Managers (Philippines)
Supervised reinforced concrete and masonry construction as member of the project management team. Assisted in preparing quantity take-offs, cost estimates, change orders, project report and puchlist.

EDUCATION/LICENSURE/CERTIFICATION/COMPUTER:

Bachelor of Science in Civil Engineering – 1988, UNC (*Philippines*)
Registered Civil Engineer – Philippines
Certified Concrete Construction Special Inspector – American Concrete Institute
Certified Concrete Field Testing Technician Level 1 – American Concrete Institute
AutoCAD, MS Word, MS Excel, MS PowerPoint and others.

Joseph M. Paternostro, Jr. **ACI Concrete Construction Special Inspector**
ICC Structural Masonry Special Inspector

SUMMARY:

Mr. Joseph Paternostro has more than 30 years of experience in Construction Management. He has rendered his services on numerous rehabilitation projects for industrial, commercial and transportation related structures. Served on many **Port Authority** projects.

Haider Engineering P.C. 4/05- Present.
Construction Management Services at Port Authority Facilities, 2010,2011 and 2012.
Responsibilities include supervision of contractor's work in accordance with plans and specifications, prepare Daily Inspectors reports, Coordination with PA officials.
Contact Person: Tom Amoia, Project Engineer, PA- [redacted]

Construction Management Services at Port Authority Facilities, 2007,2008 and 2009.
Responsibilities included supervision of contractor's work in accordance with plans and specifications, prepare Daily Inspectors reports, Coordination with PA officials.
Contact Person: Tom Amoia, Project Engineer, PA- [redacted]

JFK Airport CM Civil Engineer Inspector
Oversite inspection for the Port Authority of NY & NJ at JFK Airport central terminal area. Responsibilities included piles, pile caps, utility relocations and concrete for guideway columns. Also, over site inspection for construction of Air Train stations at American Airlines, British Airways, Terminal One, Delta Airways and TWA. Lead Inspector for the Port Authority of NY & NJ in the construction of the New York City 09/98 to present.

Transit Authority Howard Beach Station and the reconstruction of the Transit Authority North and Southbound "A" train platforms at the Howard Beach Station. Interfaced daily with New York City Transit personnel. Coordinated and was lead contact for final inspections with NYCT and Port Authority. Attended job progress meetings and prepared minutes.

Superintendent
JFK International Airport Coordinated direct hire force for the Aeronautical side of the new construction of Terminal 4 including drainage, utility relocations, new fuel lines, mono tube piles, concrete and asphalt pavement. 11/97-09/98

Assistant Superintendent
Long Beach, NY coordinated a direct hire force for a New York Department of Transportation which included new drainage, water bulkheads, curb, sidewalk and roadway Pavement on Park Avenue from Nevada Street to New York Avenue. 01/97-11/97

Assistant Superintendent
Bronx, NY Major Deegan Expressway – I87 Restoration of joint replacement and 14 mile asphalt resurfacing. 10/95 to12/96

Assistant Superintendent
5 Borough of New York City The Port Authority of NY & NJ LaGuardia Airport Taxiway "X" repairs, JFK aircraft. Hard stand repairs and various bridge repairs in Queens County. 02/92-10/95

Superintendent
New York City Department of Environmental Protection. Repair and replacement of tidal gates at locations in Brooklyn and Queens, NY

Assistant Project Superintendent 5 Boroughs of New York City **Project Superintendent for Heavy Construction** New York City Board of Education, various Astroturf athletic fields in Queens & Brooklyn;

New York City Bridge Reconstruction at East 177th Street Bridge, Bronx, NY; replacement of sanitary and storm sewers on Beach Channel Drive; reconstruction of New York City parks; New York City DOT street repairs at various locations in Queens; Port Authority of NY & NJ – JFK steam tunnel repairs, resurfacing of Parking Lot 2, construction of Train-to-the-Plane at Howard Beach and asphalt overlay at the GWB. Coordinated sub-contractors, ordered materials, equipment and approved field payments. 01/76-01/92

Survey Party Rodman & Transitman
Queens, NY JFK & LaGuardia Airports, lay out for drainage building foundations; taxiway & runway asphalt overlays. 07/71 to 01/76

Concrete Laborer
Flushing, NY Manufacture of pre-cast manholes, catch basins and concrete pre-stressed beams for Fire Island Bridge. 08/70 to 07/71

Aircraft Mechanic
Texas, Arkansas & Michigan Crew Chief on B-58 & B-52 bombers 08/66 to 08/70

EDUCATION:

Herrick's Senior High School – New Hyde Park, NY
Graduated 1965; Academic Diploma
C. W. Post College – Westbury, NY
Attended from 1965 to 1966; Liberal Arts Major

OTHER CERTIFICATIONS
Masonry Certified
ACI I and II Certified
OSHA 10-HOUR Completed

Mr. Emad Qadi is experienced in all types of Bridge construction and Repairs, Construction and Renovation, Trestles, Bridges, Commercial High-rise, Residential, School Construction and Rehabilitation, Railroad, Environmental Cleaning and heavy Civil works. Emad is also experienced in Design Reviews, Estimates Preparation, Preparing and negotiation of Change Orders, CPM schedule review and site visibility studies.
Mr. Qadi is Field Management oriented, possessing a strong grasp of computerized project management control systems, management of contracts, and the interpersonal skills required for building relationships with building occupants and owner personnel. Emad has more than 19 years experience of Resident Engineer and as a Senior Construction Manager.

Experience: 7/07 – Present Haider Engineering, P.C.,
Construction Management Services During 2010, 2011 and 2012 – Newark Airport Construction Inspector Responsibilities are Reviewed Schedule, Specifications, Shop Drawings and processed payment requisitions. Check Daily contractor work and prepared daily reports.
Contact Person: Peter Rozpedowski, Resident Engineer, PA, [redacted]

New York Project: NY & NJ Port Authority #410-07-002, Performance of Expert Professional Construction Management Services During 2007, 2008 and 2009 – Newark Airport Construction Inspector Responsibilities are Reviewed Schedule, Specifications, Shop Drawings and processed payment requisitions. Check Daily contractor work and prepared daily reports.
Contact Person: Peter Rozpedowski, Resident Engineer, PA, [redacted]
Oct. 06 – End of April 2006. Lead Project officer New York City, NY – USA Job totaling $30,000,000.00 work included building a new school and two level 90 feet long bridge over the highway to existing school, foundations, structural steel, Fireproofing, extensive concrete placement, plumbing, electrical, fire sprinkler, intercom system, data lines, fiber optics, security cameras, central air conditioning, roofing, emergency generator installation etc. In charge of all field operations managed 12 Engineers, 12 Subcontractors and 110 Laborers. Reviewed Schedule, Specifications, Shop Drawings and processed payment requisitions.
Mar 2005 - August 2006 MAG Construction, Dubai, UAE Contracts Manager – Contract Assignment 66 Story Tower in the Arabian Gulf, total cost $105 MM. Construction included a four-story day care center. Prepared BOQs (Bill of Quantities) based on Architectural Contract Drawings. Prepared, related by trade, Contract Drawings and Specifications for Bidding. Advertised/solicited Subcontractors. Conducted walk-through with potential Subcontractors. Qualified Subcontractors to perform required work, i.e. Bonding, Insurance, Workmen's Compensation, Credit Rating, previously performed jobs, checked references, etc. Illustrated Contract CPM Schedule and Milestones to be met by Subs. Received Bids Short-listed Subcontractors. Sent LOI (Letter of Internet) to qualified Subcontractors, clarifying contract CPM/Milestones and related contract drawings/specifications. Explained Contract Terms and Conditions. Drafted method of payments, i.e. mobilization, progress payments, demobilization, retainage. Prepared contract for negotiations and final signature. Prepared, negotiated item breakdown for progress payment purposes. Reviewed and commented on Subcontractors Health & Safety, QA/QC Plans. Prepared list of submittals. Prepared list of required testing and certifications. Received product samples and forwarded to owner for final approval. Made sure that all Subcontractors are in compliance with owner, local, state codes.
Dec 2003– Mar 2005 QAD, Inc. Upper Montclair, NJ Chief Engineer – General Contractor Constructed a 16-unit apartment building located in East Orange, NJ. Designed and constructed a 16,000 SF commercial space located in Orange, NJ. Designed and built homes.

Designed, financed and built residential building in Amman, Jordan. Estimated, scheduled and obtained financing for projects. Prepared Contract Drawings and wrote job specifications. Obtained zoning and building permits.

May 2001– Dec 2003 Jacobs Engineering, New York, NY, RE/Construction Manager Construction Manager of nineteen Public Schools of the State of NJ Health and Safety Program at Paterson Public School System, total construction cost $700 MM. Managed six civil engineers. Reviewed Architectural Designs, structural, electromechanical, entertainment arenas, theater for three schools, Worked with independent estimators. Prepared phasing plan to conduct construction during School occupancy. Prepared Site Specific Health and Safety Program.

Prepared QA/QC Plans. Determined and prioritized school repairs, i.e. meeting fire code requirements/safety regulations, eterias, HAVC, etc. Advertised for job biddings. Conducted walk-throughs with potential bidders and explained the scope of work in detail. Checked Bidders qualifications. Worked hand-in-hand with, Designers, NJ/Paterson Boards of Ed., School Principals, Custodians, Utility Companies and Contractors

Oct 1996- May 2001 Jacobs Engineering RE/Construction Manager Extensive steel/Concrete Repairs at Bayonne and Outerbridge Crossing (The Port Authority of NY and NJ – Client). Brooklyn Polytechnic (Assistant RE): Construction of Dormitory, Stadium and Cafeteria. In Charge of Contract Specifications, Estimates and Design Review and 24 Hrs/3 Shift Field Operations. Work Totaling $115 MM. Chief Inspector/Acting Resident Engineer at Henry Hudson Bridge – Reconstruction of second level – Job totaling $26 MM. Installation of fiber optic lines at Bayonne Bride (security cameras).

Jun 1992– Oct 1996 Munoz Engineering New York, NY Office Engineer/ Senior Field Construction Inspector Quality Assurance – monitored Contractor's adherence to Contract Specifications and construction related documents. Contract Plans and Specifications review and modification. Processing Contractor's Payment Requisitions. Monitored Asbestos and Hazardous Removal and Disposal. Field inspected removal of Croton Point Ave. Bridge over 35 MTA Railroad Tracks. Field Inspected Construction of 2300 LF Two-way Bridge over MTA Tracks. Field Inspected Removal and Replacement of Annsville Creek Trestle. Work Totaling $65 MM, Optic Line Connections

Jun 1990– Jun 1992 NYSDOT New York, NY Senior Field Construction Inspector Replacements of Steel Beams, Bearings and Armored Joint Systems. Reinforced Concrete and Asphalt Testing and Replacements Preparing Daily Reports and Estimating/Preparing Change Order Requests. Maintenance and Protection of Traffic. Work totaling $3MM

Education 1980–1987 Moscow University Moscow, USSR Graduate courses at NJIT, 1992. Masters of Science in civil engineering. Seton Hall University – Masters Program – Diplomacy and International Relations regarding environmental issues.

CERTIFICATIONS:
OSHA
Metro-North and Bridge Paint Safety Courses,
ACI I and II Certified, and
ICC Certified Bolting Inspector.
Hazardous waste removal and disposal, Interests

Osric Faria is a certified NACE Coatings Inspection Technician (#7696). He has worked on numerous rehabilitation projects which involved removal and painting of the structures. He is familiar with the methods and procedures of the Construction industry. Inspected Contractor's work in accordance with plans and specifications, prepared inspector daily reports as per MURK manual. His experience is as follows.

EXPERIENCE

9/10- Present- **D213973-NYS Thruway- CI for oainting of 13 Bridges.**
Working as Construction Inspector on Painting of 13 bridges in various counties in Region 8.

07/08 – 08/10 **The Throgs Neck Bridge-New York, NY. – Client - TBTA**
Provided construction inspection and environmental oversight services during the removal of lead-based paint and recoating of the bridge (Project No. TN85).
Resident Engineer – Mr. Eugene Birgy, Tel: (718) 684-5923

03/06 – 01/08 **Queens-Borough Bridge, New York, NY. – Client - NYCDOT**
Worked as Senior Coating Inspector with Urbitran Associates. Duties include the inspection of surface preparation after abrasive blasting is completed, and monitoring the applications of the new coating system.
Resident Engineer – Mr. Keith Pilewski, Tel: (212) 763-4567

01/06 – 03/06 **Verrazano Narrows Bridge, New York, NY. – Client – TBTA**
Worked as Senior Coating Inspector. Duties include observing rigging operations, performing blast inspections and monitoring the paint applications.

03/05 – 12/05 **Newark International Airport Newark, NJ – Client – PANYNJ**
250,000 Gallons Elevated Water Storage Tanks. Assignment was to provide surface preparation and coating inspection at Newark International Airport. This involves the inspection of the abrasive blasting and painting of the interior and exterior of the tank.

1/05 – 5/05 Triborough Bridge & Tunnel Authority, New York, NY. Provided construction inspection and environmental oversight services during the removal of lead-based paint and recoating of the Verrazano-Narrows Bridge (Project No. VN-28).

11/04 – 03/05 **Electric Boat Shipyard – Groton, Connecticut – Client - General Dynamics**
Worked as part of the inspection team providing inspection services during the rehabilitation of a submarine for the United States Navy. Duties included monitoring the removal and replacement of coatings on the exterior and interior surface.

06/04 – 10/04 **Henry Hudson Bridge – New York, NY – Client – PANYNJ**
Served as a Senior Coating Inspector to monitor the removal of lead base coatings by abrasive blasting and application of the coating system. In addition, performed construction observations during the erection and removal of the metal deck type work platform, and class 1A containment.

4/02 – 8/04 Triborough Bridge & Tunnel Authority, New York, NY. Provided construction inspection and environmental oversight services during the removal of lead-based paint and recoating of the Verrazano-Narrows Bridge (Project No. VNM-316).

02/02 – 10/04 **Verrazano Narrows Bridge, New York, NY. – Client – TBTA**
Worked as Senior Coating Inspector with KTA. Duties include observing rigging operations, performing blast inspections and monitoring the paint applications.
Resident Engineer – Mr. Eugene Birgy, Tel: [redacted]

03/99 – 12/01 **George Washington Bridge, New York, NY – Client – PANY**
Performed duty as a Coating Inspector, performing inspection of surface preparation after the removal of existing lead paint, and monitoring the repainting.

1995 – 1997 **Porter, Williams Real Estate Company, New York, NY**
Responsibilities include the cleaning and maintenance of interior floors, and the painting of the building interior, including stairwells.

1994 – 1995 **Burtis Construction Company, Yonkers, NY**
Laborer – Worked as part of a crew repairing bridges in the New York area.

1993 – 1994 **Beys Specialty Contracting, Brooklyn, NY**
Laborer – Worked as part of a crew repairing bridges in the New York area.

EDUCATION

1995 New York University - Diploma in Computer Technology
1978 High School Equivalency Diploma, New York, NY

REGISTRATION AND TRAINING

NACE Coating Inspection Technician (Session I)
Inspector #7696
OSHA 10-Hour Safety and Health Training

BACKGROUND

Mr. Shah has a MS degree in construction management and holds SSPC and NACE II certifications. He is very familiar with painting operation in different types of projects including construction, industrial, transit, and public projects. He has knowledge of related quality control measures. Mr. Shah has worked on a diversified range of coatings and paint projects, including spray applied coatings, reinforced linings, thermal spray, pipe coatings, and shop painting. He has worked on cost estimating tasks on coating projects such as sewage treatment plants and power plants. He has been responsible for contract document review, resolving project coating issues, reviewing construction documents and specifications, preparing punch list, implementing and overseeing quality control requirements, and coordinating OSHA compliance.

PROFESSIONAL EXPERIENCE

Inspector, NYSDOT Contract D015394, Construction Inspection and Management of Route 9A Corridor Reconstruction Project, Manhattan, NY
This $280 million project includes complete reconstruction of Route 9A and West Street in Lower Manhattan. The work includes OSHA and environmental compliance, MPT, construction inspection and coordination with all involved parties. Mr. Shah inspected and monitored the ongoing concrete removal operations which included breaking concrete with Hoe ram at the World Trade Center. He supervised and inspected the underground concrete operation and made sure operations do not damage the utilities underground. He is responsible for coordination with all involved agencies including PATH, ECS, Con Edison, LMDC and NYSDOT.

Painting/Coatings Inspector, NYCDOT, REI Services for Rehabilitation of Roosevelt Island Bridge over East River East Channel, Queens, NY
The project includes the complete rehabilitation of the Roosevelt Island Bridge. The work included replacement of the roadway deck and approaches, construction of turning lane from the bridge onto Vernon Boulevard southbound, replacement of bearings to current seismic codes, removing the existing paint and repainting the entire bridge, install new sidewalks and pedestrian safety fencing, repair deteriorated structural elements, river piers and the timber fender system, replacement of the mechanical and electrical systems, including all lights on the bridge and approaches, installing stairways' enclosures, rehabilitating service road, and Mr. Shah serves as the coating and painting inspector for this project. Responsibility included inspection of all painting operation and related work including confirming quality/quantity for painting operation, painting in the mechanical/electrical rooms and MEP parts, checking compliance with the contract documents and standards specifications.

Painting/Coatings Inspector, NYCDOT, REI Services for Rehabilitation of Bruckner Expressway Bridges over AMTRAK/CSX Rail Road, Bronx, NY
This $74M design build project consisted of the rehabilitation of Bruckner Expressway Bridge over AMTRAK and CSX Rail Roads and involves a new superstructure with rehabilitation of the abutments and replacement of the deck. The REI Team is responsible for performing in-depth inspection, deck evaluation, rehabilitation report, review of preliminary and final design and construction support services for the rehabilitation of the expressway, work permits, insurances, work schedule, and evaluating traffic maintenance plan (MPT). The REI Team actively communicates with utilities and rail road companies for coordination of the work. Mr. Shah responsibility include coordinating and inspecting the painting contractors' activities, prepare related paperwork and daily log, perform

measurements and quantity checks according to contract specifications for painting and lead abatement of structural steel over Amtrak and CSXT Railroad, preparing reports on a daily basis and ensuring that the work is performed is in compliance with the contract documents.

Painting/Coatings Inspector, NYCTA, Charleston Bus Annex, Staten Island, NY
Scope of work included painting of structural steel supporting metal deck, painting of MEP pipes, stairwell steel, CMU/GWB and concrete walls, ceilings and hollow metal doors and frames, epoxy painting of battery charging areas. Ensured the method of application, safety, quality is as per the owner's requirement and compliance with the specifications.

Painting/Coatings Inspector, Department of Homeland Security, Plum Island Animal Disease Center, Plum Island, NY
Scope of work included application of chemical resistant coating on the walls and ceilings, application of resinous flooring in containment areas, epoxy painting of miscellaneous structural steel, hallow metal doors and frames, MEP pipes etc. Blasting required prior to installation of the special coating and resinous flooring. Ensured the method of application, safety, and quality is as per the owner's requirement and compliance with the specifications.

Painting/Coatings Inspector, NYCTA, Fulton Street 4/5 Line Station Lead Abatement, Manhattan, NY
Scope of work included lead abatement of 4/5 line Fulton Street station northbound /southbound platforms, tracks, lead abatement of exposed structural steel, concrete ceiling etc. The work was completed in one stage requiring of manpower and job planning. Responsible coordinating the project and for lead abatement and compliance with the standard requirements and the specifications and SSPC manual.

Painting/Coatings Inspector, NYCTA Jackson Avenue Vent Plant Painting and Lead Abatement, Queens, NY
Responsible for painting and lead abatement inspection including method of application, safety, and quality. Ensured compliance with the contract and specifications. The project involved extensive lead abatement in the tunnels, painting of structural steel, concrete walls and ceilings, floors, hallow doors, frames, MEP pipes, ducts and conduits.

EDUCATION

MS, Civil Engineering - Major Construction Management, 2007
New Jersey Institute of Technology

BS, Civil Engineering, 2004 School of Building Science and Technology

CERTIFICATION

NACE Level II Coating Inspector
NACE Level I Coating Inspector
SSPC C3 Lead Paint Removal
OSHA 29 Lead in Construction
OSHA 10 Hour Certification

BACKGROUND

Mr. Arvind has over 20 years work experience in all aspects of construction and engineering. He has worked on many projects for various agencies including PANYNJ, NYCDDC, NYCDOT and NYCSCA as engineer. He has experience construction management, resident engineering inspection and environmental engineering for sidewalk reconstruction, trunk water main, gas main installation, complex pedestrian ramps and street reconstruction projects. He has a master's degree in biological sciences and a bachelor's degree in mechanical engineering.

PROFESSIONAL REGISTRATION

Professional Engineer: State of New York

PROFESSIONAL EXPERIENCE

Staff Engineer, PANYNJ, Various Construction Management Projects at JFK Airport, Citywide, NY
Managed various construction projects at JFK Airport, from inception to completion which included management and oversight of contractors and subcontractor performing mechanical installations like, HVAC units, ductwork, piping, boilers and chimney stack, chillers, jet fuel tank and associated piping modifications, sand blasting, priming and painting of the fuel tanks, zip testing for anti-corrosion of tank structure. Also supervised installation of Building Management Systems controls associated with HVAC and Fire Alarm System installation. Representative projects include:
- JFK Airport, East Parking (Blue) Garage
- JFK Airport Taxi Hold Building Construction
- JFK Airport Bulk Fuel Farm Project
- Van Wyck Expressway and JFK Expressway Project
- JFK Airport Terminal 6 Renovations Project Work Order
- JFK Airport Taxi Hold Parking Lot
- JFK Airport Port Authority Administration Building 14 HVAC Upgrade
- JFK Airport Tenant Construction Projects Terminal 1, 4 and 7

Assistant Engineer, PANYNJ, Environmental Field Operations, NY
Managed and performed comprehensive environmental services on various construction asbestos and lead abatement projects at JFK Airport, including, but not limited to managing and auditing the Tenant Consultants, Engineers, Architects, Contractors and Subcontractors. Reviewed and approved asbestos and lead abatement contract specifications, drawings, proposed petition variances and regulatory notifications for compliance with applicable New York State DOL, Port Authority specifications, Federal and OSHA codes. Interfaced between the contractor, the regulatory agency and the consultant. Managed and performed control inspections on Tenant and Port Authority asbestos and lead projects and enforced regulatory and contractual compliance. Performed site survey and risk assessment of Port Authority buildings for the presence of asbestos and lead. Supervised the abatement of asbestos and lead projects.

Environmental Consultant, PANYNJ, Manhattan, NY
Coordinated various asbestos and lead projects between Tenant liaison division, contractors, project designers and environmental engineering division. Performed site survey, risk assessment, project monitoring and inspection of asbestos abatement work.

Resident Engineer, NYCDOT Contract HB10700FA, REI Services for Protective Coating of Bruckner Expressway Bridges over Bronx River, Bronx, NY
Mr. Sahdev managed this NYCDOT project involving Class 1A and 3P Containments, abrasive blasting, application of protective coatings systems on existing structural steel and the appurtenances attached along the bridges. The project has application of Paint System B which included total coating replacement of bridge structural steel and appurtenances, Paint System M which included total coating replacement of bare galvanizes steel and Paint System O which included total coating replacement of concrete surfaces. Incidental repairs of the safety and structural appurtenances of the bridge and roadways including stringers, floorbeams, girders, columns, concrete roadway slabs, concrete sidewalk, railings an structural components of the abutment pier and wing wall, and machine room roof repairs.

Supervised team of coating and environmental inspectors, community liaison and office engineer. Reviewed Bridge containment drawings, submittals, site work permits, construction schedule, MPT Plans and lane closure permits. Performed project supervision during erection of containment and scaffolding structure in insure contractor's compliance with safety, reviewed and approved contractor's schedule of values, payments and change orders, wrote daily diary report, maintained all project records as per NYSDOT "Manual for Uniform Record Keeping "(MURK). Maintained construction schedule, insured conformance with the material specifications of the contract.

Resident Engineer, NYCDDC Contract SEQ002513, REI Services for Construction of Strom and Sanitary Sewers at 110th Street, Manhattan, NY
As the Resident Engineer, Mr. Sahdev oversaw the construction of this $20 million contract which involved construction of 7'-6"W x 6'-0"H Single Barrel Flat Top Rectangular Storm Sewer and Reinforced concrete sewer of various sizes from 24" to 66", modification of existing culvert chamber, construction of new chambers, construction of 10" to 18" ESVP sanitary sewers on piles, installation of the water main, fire alarm, street lighting, traffic signal and utility work. Mr. Sahdev insured that all construction and project activities performed by the contractor were in compliance with NYCDDC contract plans and specifications and in adherence with NYCDEP, NYCDOT, FDNY and NYCDEC standards. Also supervised the REI staff consisting of the field inspectors, office engineer and community liaison, conducted progress meetings, negotiated and prepared change orders, overruns and all contract correspondence on the project, coordinated with other NYC agencies, like DEP, NYCDOT, FDNY and utilities companies, like Con Edison, National Grid, Verizon, Time Warner Cable, involved in the project. Reviewed and approved field changes in accordance with the design documents and oversaw MPT on daily basis, prepared RE daily diary, hosted progress meetings and approved field changes in co-ordination with the NYCDDC EIC.

EDUCATION

MS, Biological Sciences, Pilani, India 1985
BS, Mechanical Engineering, Pilani, India 1983

CERTIFICATION

HAZWOPER 40 Hour Course
OSHA Safety 10 Hour Safety
Confined Space Training Program
SSPC (C3)
Supervisor/Competent Person for De-leading for Industrial Structures
MTA NYCT Track Safety Course

F. Hourly Rates

Solutions for a Better World.

F. Hourly Rates

NAMES, TITLES AND RATES FOR TECHNICAL PERSONNEL

STATEMENT OF PREMIUM PAY

As required by the Port Authority's RFP to provide a company policy for compensation for premium pay (i.e., holidays, shift differentials, regular days, weekends and night work or union required payments), The Louis Berger Group, Inc.'s policy is as follows:

> "The Berger overtime policy is to pay overtime in compliance with FLSA regulations. Non-exempt employees are paid premium pay (time and a half) for all hours worked in excess of 40 in an FLSA workweek (Sunday through Saturday).
>
> Although not required by the FLSA, when Exempt employees work in excess of 40 hours in an FLSA workweek, they are paid for the additional hours at their usual hourly rate.
>
> Employees who work on a company Holiday may receive Holiday pay in addition to work pay, at their usual rate. No premium pay applies.
>
> Employees who work at night or on weekends generally receive pay for hours worked at their usual rate without any premium. However, in some circumstances, they may receive premium pay if the client or employment contract includes premium pay because of special conditions."

The hourly rates table of our proposed technical personnel including Key personnel indicated on our project organization chart is provided as follows.

Employee Roster—The Louis Berger Group, Inc. (LBG)

Staff Name	Title	Company	Hourly Rate
Charlie Raubacher, PE	Principal-In-Charge	LBG	$87.50
Charles “Chuck” King, PE	Quality Assurance	LBG	$110.58
Wayne Valentine, PE	Project Manager	LBG	$61.30
Richard Law, PE	Construction Mgr./Resident Engr	LBG	$63.02
James Murray, PE	Construction Mgr/Resident Engr	LBG	$72.08
Richard Barrington, PE	Civil/Structural Engineer	LBG	$66.35
Fredrick McCarthy, PE	Civil/Structural Engineer	LBG	$83.37
John Tan, PE	Civil/Structural Engineer	LBG	$75.00
Robert Thiel, PE	Civil/Structural Engineer	LBG	$66.35
Joseph Masucci, PE	Mechanical Engineer	LBG	$67.43
Tu Nguyen, PE	Mechanical Engineer	LBG	$42.66
Luis Correia, PE	Electrical Engineer	LBG	$67.43
Vincent Khetarpal, PE	Electrical Engineer	LBG	$57.69
Kenneth Favaro	Construction Inspection	LBG	$50.00
Prakash Saha	Construction Inspection	LBG	$49.03
Eduardo Vazquez	Construction Inspection	LBG	$36.00
Michael Ramzi	Cost Estimating	LBG	$63.94
David Halpern, PE LEED AP	Cost Estimating	LBG	$36.06
James Murphy	Scheduler	LBG	$88.05
Jason Brown	Scheduler	LBG	$85.44
Ian Baldwin	Scheduler	LBG	$73.50
Swadeep Rachoor	Scheduler	LBG	$28.85
John Meola, CSP, ARM	Construction Safety Engineer	LBG	$44.00

Atlantic Engineering Laboratories, Inc. (AEL)			
Jorge Arteaga	Construction Inspection	AEL	$48.08
Paresh Patel	Construction Inspection	AEL	$40.00
Nirav Patel	Construction Inspection	AEL	$30.00
Jorge Li Lam	Construction Inspection	AEL	$28.00
Jorge Cadenas	Construction Inspection	AEL	$26.00
Roger Lopez	Construction Inspection	AEL	$25.00
Albert Elvis	Construction Inspection	AEL	$24.00
Roberto Benitez-Villalta	Construction Inspection	AEL	$20.50
Naiem Mosaad	Construction Inspection	AEL	$20.00
JCMS, Inc.			
Michael Maggio	Construction Inspection	JCMS	$47.00
Shawn Heaney	Construction Inspection	JCMS	$43.00
EnTech Engineering, P.C.			
Arvind Sahdev	Construction Mgr./Resident Engr	ET	$60.00
Hardik Shah	Construction Inspection	ET	$36.00
Techno Consult, Inc.			
Bassel Dandan	Construction Inspection	T	$42.00
Iqbal Feroz	Construction Inspection	T	$37.00
Haider Engineering, P.C.			
Joseph Paternostro	Construction Inspection	H	$53.00
Emad Qadi	Construction Inspection	H	$48.00
Vergil Villarama	Construction Inspection	H	$36.00
Osri Faria	Construction Inspection	H	$36.00

G. Firm Qualifications & Experience

Solutions for a Better World.

G. Firm Qualifications & Experience

The Louis Berger Group, Inc. Introduction.

The Louis Berger Group, Inc. (LBG), one of the largest multidisciplinary consulting organizations in the United States, specializes in the delivery of project management, construction management and construction inspection services to public agencies in support of both capital and maintenance projects. LBG has extensive experience and a reputation for excellence for managing programs for public agencies, including CM On Call contracts for construction management, construction inspection, cost/schedule control and document control for the planning, design and construction phases. LBG employs well established standard procedures for on call construction management and inspection services including construction phase quality assurance and quality control.

Since 1953, LBG has worked on some of the world's most demanding and complex construction projects, involving pre-design, design, bid/award, construction and post-construction phase services which include:

- Program and project management
- Construction management and inspection
- Claims analysis and dispute resolution
- Risk assessment and management
- Cost estimating and scheduling
- Web-based management information systems
- Document control systems
- Multi-disciplinary engineering
- Architecture
- Planning
- Feasibility studies
- Economic analysis
- Environmental
- Value engineering and life cycle costing
- Bid document and constructability review
- Facility condition assessments

Our projects have resulted in enormous benefit to quality of life, the economy and environmental improvement, testimony to the LBG mission of offering better solutions for a changing world. We are consistently rated by *Engineering News-Record* (ENR) as one of the top engineering consulting firms in the United States.

Our team understands the requirements associated with complex endeavors, and we maintain the professional resources to provide a solid foundation of analysis to support our clients' programs and decisions. LBG's experience includes buildings, marine, airports, roads and highways, tunnels, bridges, water, energy colleges and universities,

Firm Size and Location.

The Louis Berger Group, Inc. is one of 10 firms that make up Berger Group Holdings. With a resource base of more than 5,000 professionals and affiliate employees, which include:

- Program Managers
- Project managers
- Construction managers
- Construction inspectors
- Claims and Dispute Resolution Specialists
- Cost Estimators
- Schedulers
- Document control Specialists
- Management information system specialists
- LEED AP
- BIM specialists
- Alternative delivery specialists
- Planners
- Scientists
- Economists
- Architects
- Multi Discipline engineers

As such, we are able to respond to local conditions while providing clients with the world-class industry experts of a leading global organization. LBG partners with our clients to tackle complex projects that require significant stakeholder coordination and facilitation.

With 90 offices across the United States and throughout the world, LBG and its affiliates are able to provide responsiveness to local conditions while providing clients with the technical resource base and rapid response capability of a worldwide organization. Several of these offices include our headquarters office in Morristown, NJ and *our office at 199 Water Street in New York City*, with nearly 450 professionals in the New York City metropolitan area. For virtually any size of assignment, LBG is readily able to draw upon our skilled in-house technical specialists and leverage critical resources to rapidly and effectively respond to our client's needs, thereby providing the right technical expertise for each assignment.

LBG has a long standing working relationship with the Port Authority of New York and New Jersey (PANYNJ). The firm presently serves PANYNJ on several "Call In" contracts. A detailed account of our Team's relevant project and construction management On Call experience follows.

Port Authority of NY & NJ Construction Management Services on a "Call In" Basis. Tasks included:

- Inspection of Perimeter Strengthening security device installations at Teterboro and Newark Liberty Airports;
- Inspection of unmanned Access gates with Gate hardening devices;
- Inspection and oversight of construction activities on miscellaneous projects, several which are on the air side, such as taxiway improvements and runway rehabilitation;
- Inspection and oversight of construction activities on miscellaneous projects in Newark Liberty airport terminal buildings A1, A2 and A3; and C1, C2 and C3. Work included security cameras and ACDTV Coordinated activities with PA operations, Airline tenants and the TSA agency;
- Inspection and oversight of construction activities on miscellaneous projects on Airport property, such as internal roadways, external roadways, ramps and bridge repairs;
- Inspection and oversight of construction activities on installing Fire Alarm System upgrades in miscellaneous building on site at Newark Liberty airport. Coordinated activities with PA operations and maintenance units, Airline tenants and the TSA agency;
- Provided oversight on Construction activities associated with Replacement of Electrical Switch House components. Coordinated work with FAA, PA airside operations and maintenance units at Newark Liberty Airport.
- Provided oversight on Construction activities associated with Restriping of Runway and Taxiways at Stewart Airport. Coordinated work with FAA, PA airside operations and maintenance units at Stewart Airport.

- Inspection and oversight of construction activities on installing Ground Power and Pre Conditioned units located at seven jet bridges at Stewart Airport. Coordinated activities with PA operations and maintenance units, Airline tenants and the TSA agency
- Inspection and oversight of construction activities on miscellaneous projects at Stewart Airport property, such as installing utility duct banks, sanitary and storm water piping system replacement and repairs, relining existing pipe systems and roof replacement projects. Coordinated activities with PA operations and maintenance units, Airline tenants and the TSA agency.

As a result of this long standing relationship, LBG has developed an efficient approach for supporting PANYNJ in responding to task order requests. We respond to RFP's in a timely manner and although we are not always selected for the assignment we are proud that we have always provided PANYNJ with quality choices. Our pool of available Construction Manager, Engineers, Construction Inspectors, Project Management and Project Control personnel is always robust. With a reputation as a quality provider of PM – CM services, LBG attracts and retains some of the best talent in the business. We are pleased to be able to consistently offer strong candidates for all assignments, no matter the size. Contact for PM Services: Martin Sklaver, PANYNJ, (201) 595-4788. Contact for CM Services: Paul Salvatore [redacted]

Port Authority of New York & New Jersey World Trade Center Redevelopment, New York, NY

The Louis Berger Group, Inc. is presently serving as Program Manager for the World Trade Center Reconstruction and has served in this role since immediately after the 9/11 terrorist attack. A major early success for LBG's Program Management team was the restoration of PATH service to Lower Manhattan within a year after the attacks. LBG is now managing the complex reconstruction program consisting of the Transit Hub, World Trade Center One, 9/11 Memorial and the Vehicle Security Center, totaling $16 billion construction value.

The Port Authority Trans-Hudson (PATH) Commuter Rail System was a key component of the transportation infrastructure of the New York Metropolitan Area, and particularly important to the economy of Lower Manhattan. It carried thousands of commuters between New Jersey and New York. One of its two terminus points in New York City (Lower Manhattan) was eliminated by the events of September 11, 2001.

In an effort to re-establish this service, the Authority embarked on an extremely "fast track" program to: (1) construct a Temporary PATH Station at the site of the former World Trade Center; (2) restore the two miles of tunnels beneath the Hudson River connecting this terminal with New Jersey; and (3) improve the first station in New Jersey, Exchange Place Station, to operate as an interim terminal and handle the size trains needed to provide the level of service required by this

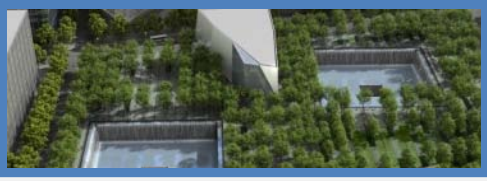
World Trade Center Reconstruction

Port Authority of NY & NJ

Program Management Services

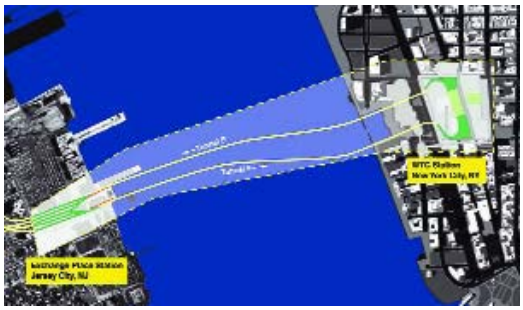
The Louis Berger Group, Inc.

- $16B Construction
- PATH Transit System Restoration
- 50+ Construction Contracts
- Integrated Master CPM Schedule
- Cost Control
- Progress Status Reporting



key rail artery. These three projects represented the first phase of the overall program for redevelopment of the World Trade Center site and restoration of transit services.

LBG, with a select team of specialty subconsultants, was contracted to provide Program Management Support to both the Authority's Office of Priority Capital Programs and the Engineering Department. In addition to overall program and project level cost, schedule and scope control, LBG's responsibilities included program definition, management of in-house staff, review of consultant staff design and reports, coordination of a PEER review by national rail experts, validation review of the signal technology with heavy rail signal experts, system integration, implementation of engineering technologies for information management and team communication / collaboration.



Rehabilitation of Tunnels E and F - The tunnels, connecting New Jersey to Lower Manhattan, ran under the Hudson River from Exchange Place Station to the site of the Temporary World Trade Center Station. Because of flooding following the September 11, 2001 terrorist attacks on the World Trade Center, the project required the demolition and removal of the entire infrastructure, track work and systems within the tunnels and restoration of all cables and wires, tracks, lighting, drainage, fire protection, and signal and communication systems. Nearly 20 miles of cables (including high voltage, traction power, communications and signal) and over four miles of track were replaced.

Exchange Place Station Improvements – Exchange Place Station was the last station in New Jersey before the PATH tunnels cross the Hudson River into lower Manhattan. Because it was not configured as a last-stop terminal station, service was lost to this station when the World Trade Center was destroyed. Loss of service to Exchange Place Station had adversely affected the large commercial and residential complex on what is called the "Gold Coast" of New Jersey. The project scope included construction of several cross-tunnels to connect the existing five tunnels and allow installation of track crossovers to connect the tracks serving Exchange Place Station and the replacement of an existing signal relay room in the way of the proposed connecting tracks. The Program called for the early opening of the Exchange Place Station as a terminal facility so the Authority could provide a more effective and balanced operating system and enhanced patron services. In addition to the new tunnel crossovers, the Exchange Place Station platforms were lengthened to accommodate 10-car trains, increasing commuter capacity from its earlier 8-car train design. Additionally, the Station was completely refurbished, including vertical circulation, lighting, wayfaring signage, floors and finishes, and utilities and systems.

Temporary WTC PATH Station: A new temporary station at the World Trade Center site was opened for service on November 23, 2003. The station was constructed at the same location as the damaged facility to expedite alignment and configuration design and mitigate the need for additional property acquisition. The design and construction of a temporary WTC PATH Station, including a track and platform configuration similar to the former World Trade Center station, was planned to ensure restoration of PATH service to Manhattan within 24 months. The Station has a mezzanine (with fare control area) above the platforms, with stair and elevator access connecting the two levels. From the mezzanine, passengers follow the previous circulation route, to escalators/elevators/stairs which provide access up to street level under a new canopied plaza on the west side of Church Street. Though an "open-to-air" design with minimal exterior walls, the temporary station features semi-opaque fabric enclosures to provide protection from both inclement weather and the anticipated

construction at the surrounding site. Contact: Alan Reiss, PANYNJ Deputy Director, Construction Department [redacted] areiss@panynj.gov, BB pin# [redacted]

Port Authority of New York & New Jersey Newark Liberty International Airport Program

For nearly 20 years, starting in 1990, LBG has provided Program Management services for the Newark Liberty Airport Redevelopment Program (EG245A). During this time LBG managed planning, design and construction phases of three separate expansion and improvement programs which included the Monorail, Parking Garages, International Terminal, Administration Building, Taxiway Expansions, and Access Roadway and Bridge Improvements.

During the past decade, passenger growth at Newark International Airport has risen by more than 35% to 34 million. In response, the Authority has begun an ambitious redevelopment program to provide more parking, easier access to and around the airport, and better terminal facilities. The program is being accomplished in conjunction with the Continental Airlines Global Gateway Project at Terminal C, the extension of the Monorail to NJ Transit and Amtrak rail lines, improvements to all terminals, and a new control tower being constructed by the FAA. Most projects, including the parking garages, the Terminal C expansion, the Monorail extension, and many other terminal improvements, were completed during 2001, and the balance of work was phased through 2004.

Parking - The Program provides thousands of additional, conveniently located, parking spaces at two locations: A 6-level structure, adjacent to Monorail Station E, which is accessible directly from I-78. It features easy access to all airline terminals via the Monorail, as well as an expanded valet parking service. A 4-level structure in front of Terminal C has direct pedestrian access to Terminal C.

Roadways and Frontages - The airport entrance was expanded, as were roadways leading to the Monorail stations and rental car facilities. A new multi-lane, grade level roadway, passing directly in front of all terminals, provides direct access to hourly and daily parking, and to the new parking garage at Terminal C. Commercial vehicles also use this roadway for pick-up and drop-off, and have three special lanes at Terminal C. Private vehicles reach the new at-grade five-lane arrivals level at Terminal C via a new ramp. Passengers for departing flights are able to use both the second and third levels; passengers on arriving flights claim baggage on the ground level, which is served by a new 5-lane road for private cars. The second level departures roadway was expanded to four lanes. To alleviate the traffic back-ups common during peak travel hours, cars are separated from buses and other commercial traffic. The roadways and bridges connecting the airport entrance with NJ Turnpike Interchange 13A, Routes 1&9, and I-78 were also improved. Phase 1 of the project included the addition of a new ramp and bridge at the airport entrance, the widening of Brewster Road near the entrance, and the construction of new roadways south of the airport. During Phase 2, a new fly-over was built on North Avenue, and a new ramp was

constructed at Interchange 13A of the New Jersey Turnpike. Phase 3 included new ramps at the McClellan Street Interchange with Routes 1&9.

Terminal Facilities - Terminal C was expanded to include a new concourse and immigration facility. Continental Airlines added a 12 wide-body gate concourse, a new baggage handling system, a 20,000-square-foot Presidents Club and a Customs and Immigration area.

Terminal B Modernization Program, Newark Liberty International Airport – Provided Project Manager services for the Port Authority's Terminal B Modernization Program. This project included the transformation of the existing mid and upper departures levels of the facility, as well as the expansion of the existing meter-greeter hall.

Repaving of Hotel Road, Newark Liberty International Airport – Providing the Project Manager for the resurfacing of Hotel Road which includes milling and asphalt overlaying of Hotel Road with site improvements.

Pavement markings on South Directory Road, Brewster Road and North Bound Route 1&9 Ramp, Newark Liberty International Airport – Providing the Project Manager for the traffic pavement markings added to South Directory Road, Brewster Road and NB Route 1&9 Ramp.

Regulatory Compliance Management System, Newark Liberty International Airport – Providing the Project Manager for the development of a regulatory compliance management system by implementing the Enviance system.

Remedial Investigations at Buildings 11 and 76, Newark Liberty International Airport – Providing the Project Manager for the development of a supplemental Remedial Action workplan to be approved by NJDEP and installed and monitored quarterly over a 10 year period.

Airside Facilities - The site of the former control tower and administrative complex, as well as adjoining roadway and parking areas, were converted to airside operations. This provides needed space for aircraft parking and additional taxiways, and improves aircraft traffic flow. A new tower was erected at Terminal C to improve ramp utilization and manage the servicing of aircraft. This facility alleviates taxiway congestion and makes better use of all Terminal C gates. A new administration/airport rescue and fire-fighting facility houses the central nerve center for the airport. All operations, from roadway traffic conditions, to the Monorail and passenger terminal activities, are monitored from this facility, which also houses the airport's police force. The structure is a composite of a new building, joined to the original central passenger terminal at the airport (an historic building). Contact: Paul Wood, PANYNJ Program Director [redacted]

Port Authority of New York and New Jersey George Washington Bridge Bus Station Redevelopment

This Bus Station is located on 178th St in upper Manhattan, directly on the George Washington Bridge approach. The Station, designed by Pietro Nervi, was originally constructed in the 1950's, it now serves 20,000 daily commuters as a connection point for trips from NJ to Manhattan. In a Public-Private partnership, the PANYNJ has contracted with a Retail Developer to modernize the Bus Station and introduce a retail shopping complex to the serve the local Washington Heights community.

The project is being designed and constructed within the PANYNJ owned facility; they are leasing the space, exclusive of the bus operations, to a private New York City Developer. A new bus platform and pavilion are

being configured for improved operations and passenger comfort. The developer is responsible for design and construction of the new bus pavilion and concourse for 30 buses to a specified Design Criteria. This relationship is similar to a CM/GMP agreement. Once a Guaranteed Maximum Price is agreed upon, the developer is at risk to deliver the project for the Price. The construction is being staged and phased to allow the continued operation of the bus station during the 3 year construction period.

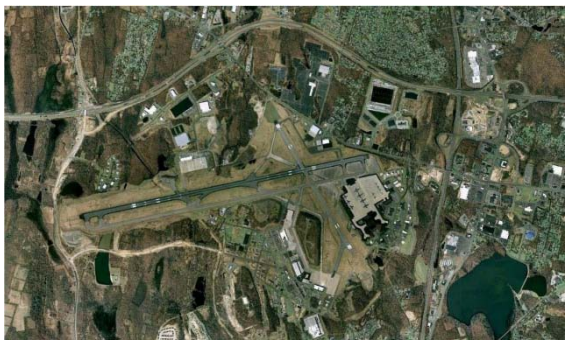
The significant issues on this project include:

- Bus Concourse and Pavilion
- Historic Restoration, considered an important example of Modern Architecture.
- Retail Development (Public/Private Partnership)
- Guaranteed Maximum Pricing (Developer Agreement)

The Louis Berger Group, Inc (LBG) is currently providing program definition (including permitting and historic preservation analysis), design management, cost control, scheduling, document control and project management. Once in the construction phase, it is intended for LBG to provide construction management and inspection service. Contact: Brian Emch, P.E., PANYNJ [redacted]

Port Authority of New York and New Jersey, Stewart International Airport, Newburgh, New York

As a result of previous work at Stewart International Airport, LBG had developed a thorough knowledge of the Airport site and adjacent land. This previous work included the site development plans and a federal environmental impact statement on behalf of the Federal Aviation Administration and New York State Department of Transportation for the development of Stewart Airport Properties site.



Currently, LBG is supporting the Port Authority of New York and New Jersey in performing construction inspection services on a wide range of projects including airside projects, rehabilitation of electrical systems and taxiway lighting systems, terminal renovations, construction of U.S. Customs and Boarder Protection screening areas. These projects include:

Rehabilitation of Weather Instrument Power (WIP) Circuit – LBG was responsible for coordinating with the Stewart Airport Operations group on the issuance of Notices To Airmen (NOTAMs) relative to our work location in critical areas on the airfield. Because the project required closures of runways and taxiways to facilitate duct bank crossings the work was compressed into 48 hour schedules to complete the work on each duct. This scope of work also included installation of manholes outside of safety areas but between taxiways and runways.

Rehabilitation of Taxiway Edge Lighting – LBG coordinated with DOA Operations to manage the closing of numerous crossings and manage the work that was being done on the taxiway edges. The scope of work included circuit shut downs for edge lights, trenching to accommodate new conduits and new wiring for high efficiency LED edge lights.

Rehabilitation of Runway 9 Approach Lighting and Cables – In order to maintain Stewart's CAT II airport status, the FAA required an upgrade of, and insurance of, a fully functioning system. Elements of this project included displacing the main runway (9-27), which is 11,817 feet long. Light cans were replaced and new light can locations were cored and installed for conformance to appropriate Advisory Circular requirements. New power lines were fed from the airfield electrical vault and four new manholes were added over the NYC Aqueduct that runs underground, perpendicular to the runway. Timing was also of the essence in this task due to multiple closures to vital areas of the runway.

Airside Pavement Repairs and Markings - Under this work order LBG oversaw concrete and pavement repairs, landside paving, airside trench drains, airfield restriping, Airfield Slab repairs and paving of Fuel Pad ramp airside.

All airside operations, communication with Ground Control was necessary for movement and escorting of contractors around the airfield. Contact: Omar Astacio, Resident Engineer for SWF [redacted]
oastacio@panynj.gov

Port Authority of New York and New Jersey, Teterboro Airport, Teterboro, New Jersey

Through On Call contacts, LBG has support the PANYNJ with the following projects and construction management projects:

Rehabilitation of Runway 1-19, Teterboro Airport – Providing the Project Manager for the rehabilitation of Runway 1-19 which includes the milling and overlay of the runway asphalt with the full depth pavement restoration of Taxiway 'G', East of Runway 1-19. The program also includes electrical lighting upgrades.

Rehabilitation of Taxiway 'K', Teterboro Airport – Providing the Project Manager for the rehabilitation of Taxiway 'K' which included the milling and asphalt overlay of the Taxiway along with electrical lighting upgrades.

Constructing Staging Area, Teterboro Airport – Providing the Project Manager for the comprehensive studies to locate and construct a construction Staging Area at Teterboro Airport.

Airfield Fire Fighting Hydrant System (North), Teterboro Airport – Providing the Project Manager for the development of an airfield fire fighting system with flush mounted fire hydrants used for fire safety.

Continuation of Patrol Road, Teterboro Airport – Providing the Project Manager for the development of a patrol road which enables vehicles to access airside locations without the need of crossing runways.

Athletic Field Improvements, Teterboro Airport – Providing the Project Manager for the development of a report enabling the municipalities utilizing the athletic fields at Teterboro Airport to maintain the fields in an effective manner.

Rehabilitation of the drainage system, Teterboro Airport – Providing the Project Manager for the development of a drainage system analysis encompassing the airport and the surrounding properties.

Wildlife Hazard Managements vs. Wetland Mitigation, Teterboro Airport – Providing the Project Manager for the development of a stage I report addressing the jurisdictional agencies conflicts in relation to wild life hazards, wetland mitigation and operational airfield safety.

Wetland Impacts to Construction Projects, Teterboro Airport – Providing the Project Manager for the development of a stage I report addressing the future projects at Teterboro Airport and their environmental impacts in relation to wetlands. Contact: Kathy Nigro, PANYNJ Resident Engineer (201) 807-4013

Port Authority of New York and New Jersey Brooklyn Marine Terminal

LBG is providing construction administration and construction inspection on the reconstruction and rehabilitation of Piers 7, 8 and 9B. Work consists of pile repairs including installing pile jackets, pier deck repairs and removal and replacement of bulkhead waters, structural repairs to the existing bulkhead and pile bracing. Evaluated and recommend approval of the contractors pay requests. Work also includes oversight of four dive teams. Project Construction Cost is nearly $2.8 Million. Contact: Pamela M. Dunne, PE, PANYNJ [redacted]

Hartsfield-Jackson International Airport, Fifth Runway, Atlanta, Georgia

LBG was a key member of a Joint Venture providing construction management and resident engineering inspection services to the City of Atlanta, Department of Aviation. The Fifth Runway project was one component of major airfield and associated landside projects required to construct the new 9,000-foot Runway 10/28.

LBG was directly responsible for providing resident inspection services on the following construction contracts in the Runway program:

- New 9,000-foot Runway 10/28
- Road Relocations

- Demo & Site Preparation Phases 1 & 2
- Runway 10/28 Structures
- Sam's Lake Wetlands Mitigation
- Airfield Systems; Pavement Replacement; Repair and Maintenance Improvements
- Taxiway N5, M14 and Intersection Upgrades
- Airfield Pavement Replacement Program, Taxiways F and L

Ancillary project elements included:

- Airfield Pavement Repair Maintenance Improvements providing for joint repair and replacement for various airfield pavements
- Airfield Lighting and Control Monitoring System - providing the infrastructure, duct banks, cabling, and control systems required to upgrade the existing Airfield Lighting and Control System (ALCS) and to allow for the implementation of the Surface Movement Control and Guidance System (SMCGS)
- End Around Taxiway-Runway 8R Threshold - providing the construction of a new taxiway from Ramp 1 around the west end of Runway 8R and 26L Connecting into Taxiway H, south of Taxiway B, between Runways 8L and 8R
- Apron Replacement Program: providing for the capital replacement of portions of Ramps 1 and 3 taxi lane pavements

Contact: Ted Allen [redacted]

Hartsfield Atlanta International Airport, Maynard H. Jackson Jr. International Terminal, Atlanta, GA.

LBG is currently providing project management, construction management and inspection services for the new Maynard H. Jackson, Jr. International Terminal (MHJIT). The project is adding an international terminal and a 12-gate concourse (Concourse F) to the airport complex. The project will include a total of one million square feet of new construction, including the connector to Concourse E, baggage tunnels and mechanical penthouses.

The construction work performed under this agreement consists of the following subcomponents: embankment and utilities relocation, Phase II and III; MHJIT Boulevard reconfiguration; APM station; APM extension and support facilities; terminal roadways; terminal parking structure; terminal building; and passenger boarding bridge. The project also includes apron work; aircraft parking gates; aircraft utilities, such as preconditioned air and hydrant fueling; support facilities; and a reconfiguration of Aviation Boulevard that will allow traffic destined for the new complex to be separated from other commercial airport traffic.

LBG is also actively managing the airside site construction of the MHJIT project which includes 30 acres of new apron and taxiway pavement. Construction components of this portion include: erosion and sedimentation control; concrete pavement assembly; asphalt paving and repair; curbs, gutters and side barrier; airfield striping; under drain system; storm drain system; sanitary drain system; domestic water system and fire hydrant system; fencing and barricades; passenger boarding bridge and miscellaneous pads; signage; fuel piping; emergency fuel shut off system (EFSO) and dion equipment; site electrical; airfield lighting; Taxiway Lima modifications; and glycol system. Contact Kathy Masters [redacted]

Expert Professional Design and Technical Services For Perimeter Intrusion Detection System (PIDS)

LBG was on the Raytheon led design-build team selected by the Port Authority of New York & New Jersey to develop and provide engineering, construction, and maintenance to support the Port Authority's Perimeter Intrusion Detection System at the three major metro area airports and a fourth FBO based airport. The services performed by LBG include conceptual design, design development, final design, system design and development, contract document preparation and post award services for a variety of security upgrades that involve design and upgrade of Operations and Security Command and Communication Centers.

As part of the PIDS program, multiple server rooms and control rooms are being designed at each facility to support PIDS and to integrate existing security systems and operations at each facility. The upgrades are being designed to be completed in phases to minimize disturbance to existing functions. The team is working with Raytheon to create ergonomically efficient spaces to install highly sophisticated equipment. The improvements at each space vary from workstation improvements to complete renovations, including mechanical, electrical, and fire protection improvements. Contact: Michael Valletta, PANYNJ, [redacted]

Expert Professional Design and Technical Services for Security Capital Programs on "Call-In" Basis

LBG was among several teams selected by the Port Authority of New York & New Jersey to develop and provide engineering and technical services to support the Port Authority's five year capital program for security on a "Call-In" Basis at its aviation, tunnels, bridges, terminals, rail and marine facilities. The required services include conceptual design, design development, final design, system design and development, contract document preparation and post award services for a variety of security projects that may involve physical hardening of structures, design or upgrade of Operations and Security

Command and Communication Centers, integrated perimeter security, hazardous material detection, multi-technology access control, integrated access control, integration of add-on components, CCTV and integrated intercom.

Projects assigned to LBG to date have involved work for their tunnel, rail and building facilities for the Lincoln and Holland Tunnels and PATH. The specific services provided are deemed confidential but generally involve both physical and technical security aspects. Contact: Michael Valletta, PANYNJ, [redacted]

U.S. General Services Administration, Public Building Service Indefinite Delivery/Indefinite Quantity Contract to provide Nationwide Construction Management Services

- Louis Berger Group/Hill International Joint Venture was awarded a contract to provide nationwide construction management support services by the U.S. General Services Administration, Public Building Service (Contract Number: GS-00P-04-CYD-0060). This indefinite delivery/indefinite quantity (ID/IQ) contract consists of a one-year base period and four one-year option periods. Each year of the contract has a maximum order limit of $5,000,000 for a total potential contract value to the joint venture of $25,000,000.
- The contract involves a wide variety of design and construction projects nationwide, including both new construction projects and renovations of existing buildings as well as historic properties. The building types include federal office buildings, federal courthouses, border stations, laboratories, warehouses, and other types of real property. Project sizes range from small remodeling or repair projects to multi-million dollar new buildings or renovations of major existing buildings. Under this contract, the Joint Venture provides construction management support for that program for all 11 GSA Regional Offices and the GSA Central Office.
- The services provided by Berger/Hill include pre-planning, programming, design management, design review, procurement support, construction management, commissioning, and post-construction support. The Joint Venture establishes all necessary liaisons, coordination, and support with project-related agencies and representatives at the federal, state, regional, and local levels as appropriate for each specific assignment. The following New York City CM tasks have been performed by LBG under this contract, all these tasks. The tasks all included numerous technical review/ evaluation meetings, addressing all construction-related issues and disputes including providing responses to all RFIs, issuing of RFPs and negotiation of Contract Modifications.
  Contact: Regina Crews, COTR [redacted]

V.A. Realignment at 201 Varick St., NYC – $2,269,883.51, Contact: Matty Seth, [redacted]. LBG served as the Construction Manager for this office space reconfiguration project on the 2nd and 3rd floor for one of the GSA's primary government buildings in Manhattan. The project included staging the construction of the occupied space while extensive renovations were taking place. The project involved the demolition and reconfiguration/ upgrading of the interior partitions (some masonry load-bearing walls), secure and interior doors, the building's HVAC, Electrical, PA, Muzac and Fire-Safety Systems. Also included was the installation of plumbing, plumbing fixture and cabinetry work for break rooms, and all interior-related items such as carpet, VCT, suspended ceilings, new lighting, etc. The task includes the day to day inspection of the contractor's construction operation, progress schedule, held and chaired progress

meetings attended by all relevant parties, approved invoices and maintained the records of the project status, which was continuously updated and distributed. The project recipient was the Veterans Administration.

DHS/ICE Renovations at 201 Varick St., NYC – $1,912,032, Contact: Vincent Hom, [redacted]. LBG served as the Construction Manager for this multi-use office space construction project on the 12th floor for one of the GSA's primary government buildings in Manhattan. The project involved the demolition and reconfiguration/upgrading of the interior partitions, secure and interior doors the building's HVAC, Electrical, Plumbing, PA, Muzac and Fire-Safety Systems. Also included was the installation of a gym and men's/lady's restrooms, showers, and locker rooms, extensive plumbing and plumbing fixture construction and cabinetry work for the rest rooms and break room, and all interior-related items such as carpet, VCT, suspended ceilings, new lighting, etc. The task includes the day to day inspection of the contractor's construction operation, progress schedule, held and chaired progress meetings attended by all relevant parties, approved invoices and maintained the records of the project status, which was continuously updated and distributed. Coordination efforts were required between the Contractor and outside vendors for the systems furniture and the phone and data systems. The project recipient was the Department of Homeland Security, Department of Immigration and Customs Enforcement.

FBI Fitness Center at 26 Federal Plaza, NYC – $1,662,000, Contact: Victor Gamboa, [redacted] LBG served as the Construction Manager for the construction of a fitness center on the 23rd floor for one of the GSA's primary government buildings in Manhattan. The project involved the demolition and reconfiguration/upgrading of the interior partitions, the building's HVAC, Electrical, Plumbing and Fire-Safety Systems. Also included was the installation of a gym and mens/ lady's restrooms, showers and locker rooms, extensive (steam pipe, chilled water, water heaters, heat exchanger) plumbing fixture and plumbing system construction and all interior-related items such as doors, carpet, VCT, tiling, cabinetry work, suspended ceilings, new lighting, etc. Extensive plumbing and HVAC work was required to provide a fitness center that would be operational 24/7. The building systems function only during normal building hours. The task includes the day to day inspection of the contractor's construction operation, progress schedule, held and chaired progress meetings attended by all relevant parties, approved invoices and maintained the records of the project status, which was continuously updated and distributed. Coordination efforts were required between the Contractor and outside vendors for the systems furniture and the phone and data systems. The project recipient was the Federal Bureau of Intelligence.

FBI Secure Work Environment at 26 Federal Plaza, NYC – $ 910,011, Contact: Abdala Elkholy, [redacted]. LBG served as the Construction Manager for the construction of a Secure Work Environment Office Space on the 28th floor for one of the GSA's primary government buildings in Manhattan. The project involved the demolition and reconfiguration/ upgrading of the interior partitions, the building's HVAC, Electrical, Plumbing and Fire-Safety Systems. Also included was the installation of extensive HVAC system (Fan Coil Units) construction and all interior-related items such as secure doors, carpet, VCT, suspended ceilings, new lighting, etc. Extensive plumbing and HVAC work was required to provide a secure office space that would be operational 24/7. The building systems function only during normal building hours. Stringent FBI requirements for a Secure Work Environment (SWE) had to be adhered to, which impacted nearly all work items. Periodic inspections by the FBI's security specialists were periodically held. The task includes the day to day inspection of the contractor's construction operation, progress schedule, held and chaired progress meetings attended by all relevant parties, approved invoices and maintained the records of the project status, which was continuously updated and distributed. Coordination efforts were required between the Contractor and outside vendors for the systems furniture, window blast film installation and the phone and data systems. The project recipient was the Federal Bureau of Intelligence.

FBI Command & Operations Center at 26 Federal Plaza, NYC – $4,393,787, Contact: Victor Gamboa, [redacted]. This project is currently in the latter stage of design. During the design stage, LBG assisted with the GSA's design review process. After Construction commences, LBG will serve as the Construction Manager for the construction of a FBI Command and Operations Center, which will be constructed as a Secure Work Environment on the 27th and 28th floor of one of the GSA's primary government buildings in Manhattan. The project will involve the demolition and reconfiguration/ upgrading of the interior partitions, the building's HVAC, Electrical, Plumbing and Fire-Safety Systems. Also included is the abatement of asbestos, installation of extensive Electrical, Data and HVAC systems and all interior-related items such as carpet, VCT, suspended ceilings, new lighting, etc. Extensive plumbing (including steam piping) and HVAC work is required to provide a secure command and operations center that would be operational 24/7. The building systems function only during normal building hours. Stringent FBI requirements for a Secure Work Environment (SWE) will be adhered to. The tasks during the Construction Phase (to commence late in 2009) will include the day to day inspection of the contractor's construction operation, progress schedule, hold and chair progress meetings by all relevant parties, approve invoices and maintain the records of the project status, which will continuously updated and distributed. Coordination efforts will be required between the Contractor and outside vendors for the systems furniture, window blast film installation and the phone and data systems. The project recipient was the Federal Bureau of Intelligence.

Indefinite Quantity Contract for Construction Management Support Services, U.S. Postal Service

In April 2002, LBG was selected for a third consecutive time by the U.S. Postal Service (USPS) for an Indefinite Quantity Contract (base year and four one-year renewal periods) to provide construction management support services within the Metropolitan New York Postal Regions. LBG services included construction management oversight, design-build support, design consultation, coordination, estimating, drawing coordination in accordance with USPS Standard Criteria; solicitation documentation preparation, advertising, award coordination and analysis; project management and coordination; project scheduling and progress surveillance; construction planning; cost estimating; surveillance of quality control and inspection of construction; contract document interpretation; records management; testing and acceptance of systems; project closeout and turnover; and claims analysis and defense. Projects under this contract included 25 design-build projects, 50 new construction projects, and 200 modernization/alteration projects.

LBG prepared CPM Schedules and performed construction management for the outages and phased work to ensure uninterrupted mail processing service. The major projects assigned to LBG included:

- Northeast Building Expansion Project – New Jersey International Bulk & Mail Center, Jersey City, NJ (Cost: $4,291,093);
- Chiller Replacement – Morgan Processing & Distribution Center, New York, NY (Cost: $5,932,510);
- Replace Fire Protection System – James A. Farley Processing & Distribution Center, New York, NY (Cost: $3,792,000);
- Replace Electrical Circuit Breakers – New Jersey International & Bulk Mail Center, Jersey City, NJ (Cost: $3,241,674);
- Building Expansion – Bridgewater Main Office, Bridgewater, NJ (Cost: $2,410,918);
- Cooling Tower Replacement – Morgan Processing & Distribution Center, New York, NY (Cost: $2,289,087);
- Bypass to Secondary Building Expansion Project At New Jersey International and Bulk Mail Center, Jersey City, NJ (Cost: $1,632,782);

- Battery Room Upgrade and Improvements At New Jersey International and Bulk Mail Center, Jersey City, NJ (Cost: $610,187);
- Chiller Replacement – Manhattanville Station, New York, NY (Cost: $546,961); and
- Relocate Dock Raceways – D.V. Daniels Processing & Distribution Center, Kearny, NJ (Cost: $620,808).

In addition to these major projects, LBG's CM team has provided construction management assistance for the fit out of several smaller projects where architectural finishes and furnishings were upgraded or replaced. Over twenty such projects were managed by the LBG CM. Contact: Dane Weir [redacted]

Red Bull Stadium Construction Management Services

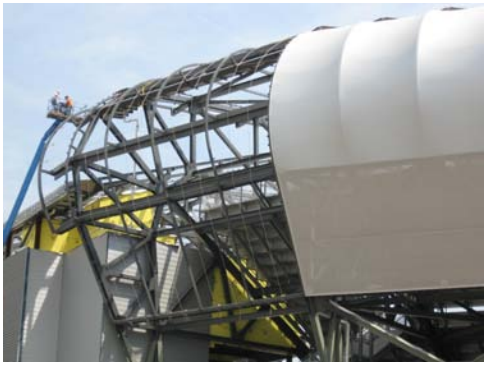
The Louis Berger Group, Inc. (LBG) performed Construction Management Services for the Red Bull Arena the new home of Major League Soccer's New York Red Bulls. The Arena, is the first tri-state regional (NY/NJ/CT) facility with the look and feel of other worldwide "fan-friendly" soccer environments.

Located in the Town of Harrison, NJ and accessible via PATH and NJ Transit, the 25,000 seat arena consists of an upper and lower "bowl", 30 suites on two levels, three premium clubs, concessions and team store. State of the art television and radio broadcasting facilities are incorporated into the arena.

The Harrison NJ project site is a former industrial site that required mitigation of contaminated soil and groundwater. LBG provided environmental compliance inspections during construction and environmental consulting services to Red Bull for the state mandated cleanup. Construction Cost: $250M, Completion: 3/2010 Contact: John Amorosa [redacted]

Logistics at this site were challenging because the Arena occupies most of the property tract framed by Cape May Street and the Passaic River to the South and East, a warehouse operation to the North and the Harrison Riverfront Redevelopment project and Frank Rogers Boulevard, a major thoroughfare in the Town of Harrison to the West.

During pre-construction, LBG's Construction Management team assisted Red Bull in reviewing the preliminary designs. These reviews consisted of performing constructability reviews, preparing an independent cost estimates on different stadium conceptual plans and reviewing the conceptual CPM schedule. LBG analyzed the CPM schedule work activities and recommended revisions to account for the site logistics, interdependency of the activities and reasonableness of activity durations.



Under the direction of Project Manager, Wayne Valentine, PE, , LBG provided daily inspection and monitoring of the work in-progress as well as performance of Special Inspections required for building code compliance by the Town for

reinforced concrete, structural steel, steel connections, structural steel welding and spray on fireproofing. LBG also worked with the Town of Harrison, Building department personnel for inspections. The on-site construction inspection staff was comprised of five full time inspectors, a testing agency for material quality verification as well as off site shop inspections. During peak activities, as many as four additional inspectors were utilized. The offsite inspections included inspection of the casting of 120,000 square feet of hollow core precast deck planking for the concourse level (Hanover, PA), casting of nearly 2,000 pieces of precast lower bowl seating Stadia pieces (Bethlehem, PA) and provided inspection for the fabrication of over 7,500 tons of structural steel in Canada. Each inspector prepared a daily report to catalog the work in progress.

LBG assisted the client in reviewing several of the Contractors change order requests and has performed independent cost estimates on extra work and credit items. LBG tasks also include recommending to the owner the approvals or acceptance of various stages of the work and final acceptance of major features, as appropriate. The project was completed in time for the scheduled Spring 2010 season opening.

New Walter Reed National Military Medical Center and Supporting Facilities (Walter Reed), Bethesda, MD – Under a IDIQ task order contract LBG provides construction management support to the Naval Facilities Engineering Command Washington construction management staff. The design-build project involves relocating Walter Reed from Washington, D.C. to the National Naval Medical Center (a campus with National Historical Preservation Act Considerations) in Bethesda, Maryland. The project includes 667,000 square feet of new inpatient and outpatient wings, emergency room, and patient care construction and 400,000 square feet of renovations to existing facilities totaling $700 Million. New construction includes a six-story ambulatory care facility, a four-story diagnostic and testing in-patient facility and a 943 space parking garage located adjacent to the ambulatory care facility and connected by an enclosed walkway.

LBG Services – LBG personnel provide project management, engineering support, *quality assurance*, safety management, visualization/modeling and move coordination services.

Quality Assurance/Inspection – Quality Assurance and Inspection requires the project team to do the following: ensure the design-builder is following the approved quality control plan; attend weekly and special contractor quality control meetings; *review daily production and quality control reports*; witness tests*; inspect the work* according to the three phase quality control system, at the preparatory, initial, and follow up stages of construction for each definable feature of work.

Scheduling - LBG project managers *review contractor monthly schedules* for accuracy and *evaluate change requests for potential delays*. We are providing critical path method (CPM) scheduling services utilizing Primavera P3 and P6 software. Our team provides independent *schedule analysis* and supports progress briefings. Data from the schedules is integrated into the master schedule. Scheduling services include *schedule review and analysis, schedule reporting and change and delay impact analysis*.

Preparation of Change Order Packages, Estimates and Review of Value Engineering – Our assistant project managers are heavily *involved in the change order process* and perform the following functions:

- Prepare Request for Proposal in support of government requested change to modify the contract by preparing the Statement of Work to include complete Scope of Work for the proposed changes.
- Review plans and specifications and compare with bulletins and contractor's proposal or request for modification in order to *perform a complete analysis of labor, materials and equipment*. Check for

competitive rates including errors and omissions. Ensure that the scope of work is complete per the issued bulletins/changes and also ensure that the quotations meet specifications as well as project schedule.

- Ensure that contractor proposal does not contain any exclusion that could constitute further cost escalation. POC is Masood Shoyooee, Supervisory General Engineer, masood.shoyooee@navy.mil, [redacted]

H. Management Approach

Solutions for a Better World.

H. Management Approach

Approach and Capability for the Work

The Louis Berger Group, Inc. (LBG) has performed Construction Management services for the Port Authority of New York and New Jersey, U.S. General Services Administration and United States Postal Service in the New York City region. As a result of this experience, LBG is knowledgeable with construction management and inspection On Call in the New York/New Jersey metropolitan area. We have a well-established approach for staffing and managing the planning, design and construction work required for these projects. Our staff is experienced with building, airport, marine, bridge, roadways and infrastructure design and construction work and we have well-established procedures for delivering these projects on time and within budget.

We maintain a well established set of procedures for managing this work. The Port Authority of New York and New Jersey (PANYNJ) is well aware of the LBG approach to Construction Management from our work at the World Trade Center Reconstruction Program, where we have served the PANYNJ since the 9/11 attacks. In this capacity, LBG assisted the PANYNJ with the fit-out work at 115 Broadway for the WTC Construction Department. LBG also assisted the PANYNJ in an office fit out and relocation of nearly 400 staff members to the Technical Center in Jersey City and Gateway Plaza in Newark, NJ.

Construction Management Approach

For each assignment, it is our intention to maintain quality, schedule and budget, in accordance with the plans and specifications. Our team will approach this project in the same way we have approached all of our previous successful projects with PANYNJ and other agencies. Our CM Manager, Wayne Valentine, PE, will provide the overall supervisory responsibility for the field staff with administrative responsibilities to PANYNJ. He will meet with the field staff on a regular basis to discuss job progress and quality of work, and will assist in the review and approval of the progress schedule. He will attend bi-weekly project meetings and other meetings as requested by PANYNJ. Mr. Valentine will be reachable 24 hours a day and will be available for incidents that are critical in nature.

Scope of Work – Consultant Tasks

Task A. Constructability/Bidability and General Engineering Review

LBG's ability to provide design management includes understanding the key elements of design management, which themselves include providing clear design scope to the design firm. This includes the establishment of the design criteria, which include the design guidelines and standards, the program of requirements for each project, and applicable codes. LBG will oversee the design for conformance with the design guidelines and standards, program of requirements, schedule and budget.

Enforcement of design criteria is accomplished with critical design review milestones which, depending on the complexity of the project, may include interim design progress technical reviews and code compliance reviews.

LBG will perform bid document reviews of drawings and specifications for coordination of scope, schedule and methods. The review will include constructability and biddability. LBG will prepare a design phase cost estimate; reconciliation of the design phase estimate with the designer's estimate; the estimate as reconciled with the project budget; cost analysis; and cost control and monitoring. We will coordinate all design review

comments for PANYNJ and provide them to the designer. In subsequent design reviews, we will check to see if previous design review comments have been incorporated. Management services include ensuring that the final design is responsive to all interim review comments or that the comments are otherwise reconciled.

Additionally, the design process may need to be supported with engineering reports, including energy studies; utility studies; site investigations; site surveys; hazardous material surveys/analysis; scheduling (including preparation of schedules and schedule reviews); design problem resolution; review of design scope changes (including analysis of schedule impact); scheduling, conducting and documenting design-related meetings; participation in time of performance meetings to establish construction durations; participation in all "Partnering" activities during design (workshops, meetings, etc.); and performing market studies (material availability, contractor interest, etc.).

Task B. Construction Staging

The development of a construction plan is critical to the efficient delivery of the project and the avoidance or minimization of construction impacts on the physical environment (community, neighborhood, adjoining businesses, and existing tenants) and its occupants. Forming a good construction plan is an exceptionally challenging problem, as there are numerous possible plan alternatives that can be devised for any given project. Although construction projects tend to be fairly standard from one project to another, it is the project's setting and its greater potential sphere of impact that will influence the selected plan.

The project documents will bring to the attention of the Contractor, several items which would become part of the Contractor's responsibilies to maintain and protect the end users. The costs associated with for such phasing and staging, protections and hours of operation and other restrictions will be included in the project bid price and not become a change order just before construction.

Before construction activity begins in an area of a project, the contractor will submit to the Port Authority project officer for approval, its plan for staging, the installation / relocation of temporary walkways, covered walkways, roads, foot bridges, fences and security measures, barriers, and other facilities required to isolate and protect the public from the construction. LBG will review the contractor's plans to ensure that disruption to and impacts on the project environment are minimized, are in compliance with the bid documents and that the work breakdown of the construction is logically staged so that construction takes place as quickly as practicable without jeopardizing the safety, security, and noise/air/light quality of the project environment. LBG will make sure that the following components of a Construction Staging Plan are appropriately addressed:

- Roads and Maintenance and Protection of Vehicular Traffic — In the urban NY Metro Region, nothing is as challenging as planning the movement of traffic in the affected project areas. Temporary closure, permits, re-direction, signage, pedestrian hazard evaluations, day-night traffic alternatives — the considerations can be significant. *The LBG team is composed of all the planning, engineering and construction professionals to meet any Port Authority demand.* We'll make sure that temporary changes to traffic signals are well designed, and that the impacts of both regular and project-generated traffic are mitigated appropriately.
- Walkways and Maintenance and Protection of Pedestrian Traffic — The LBG team will ensure that pedestrian safety and security in the vicinity of the project area is adequately addressed in the contractor's staging plan, or we'll develop the pedestrian plan. *LBG is expert at modeling and communicating pedestrian movement in urban environments and can support the Port Authority with these types of studies.* We'll make sure the interface between pedestrians and vehicles is well considered, that
- Parking — Understanding and responding to impacts on parking, planning for temporary parking, and shifting permissible parking around the construction project area are just three of the major CM challenges

in the urban environment, - of which the majority of Port Authority facilities are located. *LBG and its subconsultant team of construction managers have true expertise in this MPT and Parking planning and will bring our collective capabilities to this On-Call contract.*

- Wayfinding Signage — There is no excuse for poor directional signage. Good signage improves flow. Simply stated, the LBG team will ensure that drivers and pedestrians know where they *can't* go, where to turn, how to pass through, where to find parking, and similar considerations. All wayfaring signage must be coordinated, particularly with the codes, standards and specifications of the affected city or town.
- Staging Plan — The contractor's Staging Plan must be dovetailed with approved plans for site safety, access and security, and protection of health and environmental quality. During the actual construction, LBG will monitor and review the staging setup and plans and make recommendations to the Authority if changes are necessary, in order further enhance the project operations without jeopardizing the safety, security and quality of the project.
- Construction Office / Trailers / Sheds — Shielding and screening the construction site offices, trailers, sheds and toilets from the general public is a best practice. LBG will ensure, when necessary, that such facilities are selected so that in more exposed locations, they compliment the businesses, residences, and landscape / environment of the immediate project area. Multiple facilities on the same site, for example, will likely be required to be of consistent style, and skirting at the base of the on-site buildings may also be required.
- Material Lay-down / Storage Areas — Every contractors aspires to "Just-in-Time" delivery of materials and supplies, regardless of the project location, though it's especially desirable in the urban environment. Nevertheless most construction projects require a fair degree of space somewhere on or adjacent to the project to stock and distribute supplies. As cranes, loaders, and other men and machinery work the lay-down area, trucks moving the materials interface with non-project traffic. *Making sure that the impacts of a materials and supply operation on or near the project are well understood and minimized is a task the LBG team is well prepared to accept.*

Task C. Schedule Development and Monitoring

1. Develop a Detailed Construction Schedule. LBG will develop a critical date schedule at the beginning of the project and update as necessary. From the critical date schedule, we will develop a program master schedule and master schedules for each project, and update as necessary. These master schedules will be updated as appropriate.

   We recognize that having a thorough understanding of the schedule and the interrelationships between tasks and activities will greatly improve the success of the project. As everyone in construction knows, problems can arise throughout a project. These unforeseen happenings can be greatly mitigated by having a thorough knowledge of the relationships among all the activities in the project. This knowledge will also help LBG to efficiently determine the effects on the schedule when problems arise.

   LBG succeeds by taking a proactive but realistic attitude toward time, by identifying schedule bottlenecks and by developing innovative ways to avoid them using real-time parameters.

2. Review Contractor's Schedules. When the contractor submits its CPM schedule, LBG will review the contractor's schedule and advice PANYNJ if the schedule is acceptable and if it meets the contract and schedule and reports section requirements. Our review will include checking the overall schedule logic; the overall float situation; critical path; long-lead items; and activity duration.

Once we have completed our CPM schedule review, we will have the contractor cost load each activity in the schedule, we the exception of shop drawing and submittal related activities. LBG will review the activity cost loading for "front end loading", proper distribution of costs in each CSI division, etc.

If the contractor is more than two weeks behind schedule, we will require the contractor to submit a recovery schedule. LBG will review the contractor's recovery schedule, and closely monitor the contractor's schedule recovery progress.

Every month, LBG will review the contractor's schedule and either forward to the PANYNJ or return to the contractor for having failed to meet the contract's criteria. We will track this submittal to assure that the contractor receives comments within 25 days. We will forward the schedule to PANYNJ along with our comments highlighting and emphasizing key points of critical concern. Further, we will recommend actions to be taken for any work appearing to be behind schedule and, if need be, we will develop a recovery schedule.

On a bi-weekly basis, LBG will review the log to determine if submittals are being received, reviewed and returned in an efficient manner which meets schedule requirements. We will also maintain contract drawings and inspection reports in the document control file. Prior to contract closeout, we will use a final checklist to verify that all guarantees, affidavits, releases, manuals and other required materials have been received.

LBG will utilize the latest version of Primavera (P6) and an experienced scheduler to evaluate the baseline and monthly progress schedules. Every month, during the third week, LBG will hold a meeting for an in-depth review of the CPM, project progress, and determination of the percent complete.

- Review and approval of baseline schedule.
- Perform monthly schedule reviews and note progress of activities against baseline durations and milestones.
- Tasks and sub-tasks will be clear and logical.
- Long Lead items will be identified and tracked vigorously.
- Provide timely recommendations to PANYNJ and make recommendations to the contractor.
- The schedule will be cost-loaded so that progress payments can be thoroughly evaluated.
- Review any time impact analysis schedules are submitted by the contractor to PANYNJ due to delays to contract duration.

Task D. Quality Assurance Inspection

1. Reviewing Contractor Quality of Construction

   Monitoring Performance. Work In Progress – The most efficient method of monitoring technical performance is reviewing work in progress. Quality Assurance of the final work products rests with the Project Manager and his team. However, if the Specialist Manager waits until the assignment is completed, time and money could be wasted if work is done inadequately or incorrectly. If errors of consistency are allowed to continue unchecked, the technical analysis will be flawed, regardless of whether or not the methodology was correct. Another reason to perform QC throughout the project is to make sure the technical performance of the team members is on track.

   Quality of the Work. We will monitor the construction to determine if the work is in accordance with the contract documents. LBG is committed to quality management. Our commitment to quality management begins with a thorough understanding of the project and the needs of NYPA, and is reinforced by a quality assurance process which has been implemented and utilized for numerous projects. LBG has an established QA/QC program which has been approved by clients and has been successfully proven on a number of projects. The QA/QC plan will be customized and implemented for this specific project. Our

QA/QC plan, comprised of 15 elements designed to ensure quality, has been adopted from the American National Standards for Quality Systems (ANSI/ASQC Q90-Q94) and the International Standards for Quality Systems (ISO 9000 – ISO 9004).

Inspection. The primary safeguard for infrastructure work is the "on-site" construction inspection staff. Our focus will be the daily operations of the contractor and his adherence to the contract documents. Our inspection staff will observe all operations and file daily reports that will be the detailed history of the project. These reports will be prepared each day. Work performed each day will be documented and payment records will be matched against these reports to ensure that PANYNJ is paying for proper work in place.

The Inspection Staff will be responsible for monitoring all the General Contractor's operations. Duties include, but are not limited to:

- quantity measurements and calculations;
- quality verification and control;
- obtaining material delivery slips and certifications;
- verifying materials for acceptance in the work;
- inspecting the contractor's MPT procedures;
- inspecting measures taken for safe operations on or around the Railroad;
- observing the contractor's adherence to plans and specifications;
- monitoring project safety of our staff. The staff will notify the contractor's representative of any construction safety issues and advise the field office if the safety issue has not been corrected in a timely manner as required. All issues will be recorded on daily reports; and
- entering data into the payment processing system, coordinated with the Office Engineer.

Testing. When required by contract and city building code, a PANYNJ-approved independent testing firm will perform special inspections and obtain and test samples of materials.

2. Conformance to Contractor Safety Requirements. Our personnel and any visitors to the site will be required to wear approved safety vests, work shoes and hard hats at all times, as well as any other safety items that may apply to the construction activity of which they are in the vicinity. Our Project Manager will make sure that appropriate Personal Protective Equipment (PPE) is available for all Construction Inspection staff and visitors as required.

   We have assigned a Certified Safety Professional (CSP) to the inspection team. The CSP will make periodic site visits to monitor safety activities and verify compliance with the project Health and Safety Plans.

   When the construction contractor submits their Health and Safety Plan for review, our CSP will perform the review and provide comments documenting its level of conformance with the construction contract specifications and provide a recommendation of approval or disapproval which the Resident Engineer will report to the PANYNJ for action.

   The CSP will review all construction contractor-submitted Health and Safety Plans (HASP) for conformance with contract specifications and adherence to standard policies and procedures. The results of this review will be provided to the Project Manager documenting its level of conformance with the construction contract specifications and a recommendation of approval or disapproval to be reported to the PANYNJ.

   Also, the CSP will develop a Site Health and Safety Plan addressing activities associated with existing on-site conditions and covering on-site personnel The Construction Inspection Team will provide site-specific

training to its on-site staff on the use of protective equipment to those personnel deemed appropriate. All planned construction activities will be addressed.
As the CSP will only make periodic site visits to monitor compliance with the HASPs.

3. Conformance to Contractor Contract Requirements

Shop Drawings and Material Approval. Approval of the technical adequacy of the shop drawings and samples remains the duty of the architect/engineer. We will oversee the submission of all shop drawings, composite shop and coordination drawings, brochures and material samples and instruct the contractors that submission is to comply with project requirements.

We will track all submittals utilizing the latest version of Primavera "Contract Manager" (previously Expedition). Each submittal will be reviewed within three days of receipt for conformance and then either returned to the contractor for revision or forwarded to the designer, respective utility or railroad. The submittal log will reviewed on a regular basis and the PANYNJ will be notified when the review exceeds 21 days.

In the course of developing the project schedule and tracking shop drawings and material approvals, LBG will develop a tracking system to prevent installation of any material or equipment not approved or certified. These material approval logs will be developed during the preconstruction phase and will be reviewed during the bi-weekly progress meeting held with the contractor.

Requests for Information will be similarly tracked using the latest version of Primavera "Contract Manager". LBG will generate a standard RFI form, assign each RFI a unique number and create a tracking system. The RFI log will also be reviewed on a bi-weekly basis to ensure that RFIs are being addressed in an efficient manner to protect the schedule of the contractor. RFIs will be reviewed by LBG prior to forwarding the Designer, to assure that all pertinent information is included; references are made to the plans or specifications; and effects on schedule and costs are noted.

Project Close-Out. We will work with the contractor to finalize the project and ensure that all contractual obligations are complete. To verify that the project is substantially complete, we will monitor the following:

- The CM, with the concurrence of the PANYNJ PM, will determine substantial completion.
- Prepare a punch list of work remaining to be finished. This list will be documented in the Monthly Report.
- Monitor the correction or completion of the punch list items; record status in the Monthly Report.
- Determine Final Completion and recommend acceptance of the work to the PANYNJ.
- Perform Final Inspection.
- Verify that all final documents have been submitted and are complete and approved, including warranties, guarantees, affidavits, releases, bonds, O&M Manuals, etc.
- Monitor all start ups and commissioning of equipment.
- Verify that training of PANYNJ personnel for operation of equipment has been performed and training manuals and sessions are available.

Task E. Contract Administration

1. Processing Change Orders. A significant portion of contract administration involves the management of change orders. LBG will analyze and evaluate project requirements in order to anticipate difficulties and minimize the need for change orders. The first activity after a contractor requests a change order is a determination of entitlement. LBG, in conjunction with the designer, will review the change order request and the contract documents and determine if the work is actually a contract change. If considered a change order, a scope of work and independent estimate for the work will be obtained from the designer.

In the event that a change order is required, we will, in conjunction with the designer and with PANYNJ's approval, negotiate, expedite and manage the change order process. We will obtain agreement from the contractor on the change order and will expedite the change order approval process.

If a time and material change order is required, we will keep accurate records, sufficient to determine the cost of the work. The contractor will submit daily time sheets to our inspectors monitoring the work. Our inspector will review and sign the time and material sheets and note any disagreements.

The staff can review the project documents to determine if design errors and/or omissions have occurred. The documents reviewed would include the contract plans and specifications, correspondence, requests for information (RFIs), change orders, change order and RFI logs, meeting minutes, drawing logs, and sketch content and logs.

Our staff reviews each change order to initially determine if the necessity for the change should be attributed to something the design professional did or did not do. Secondly, those change orders possibly precipitated by a design professional issue are classified into four categories:

- Changes due to Errors – a mistake by the design professional that was corrected either before or after the work is constructed. The correction of a code violation is another example of a design error.
- Changes due to Omissions – a piece of work that was not included in the bid documents that is necessary for the project to function as intended.
- Scope Changes – a piece of work included in the bid documents that was changed before or after the work is constructed. This change is only an issue when the Owner and design professional dispute whether the change was caused by the owner or design professional.
- Performance Based Changes – a compensable change order written to a contractor for an impact. Contractor may be entitled to extended field and office overhead in this case.

Change orders precipitated from scope changes, errors or omissions may or may not result in betterments, destruct-reconstruct work and other impacts. These secondary issues must be evaluated since they have a direct impact on the amount of compensation an owner may seek to recover as a result of design professional issues. The team staff is totally familiar with all of these and other considerations, such as the evaluation of the standard of care of the design professional as a threshold issue in calculating the above kinds of damages.

During the construction process, disagreements over in-scope or out-of-scope work, or disputes over the cost of changed work, can cause unintended impacts to the project if not dealt with expeditiously. Oftentimes, these issues are not dealt with contemporaneously but are postponed to be dealt with after the project is complete, as part of a total claim submission.

Whether it is disputed extra work, or a disagreement over the cost of changed work, the LBG Team has the staff to analyze virtually all scope and impact issues. The qualifications and experience of our architects and engineers enable them to timely analyze disputed work and provide an expert opinion as to whether or not the work was part of the contractual scope of work. Similarly, our staff are qualified and experienced in estimating the reasonable cost of changed work.

2. Processing Time and Material Records. If a time and material change order is required, we will keep accurate records, sufficient to determine the cost of the work. The contractor will submit daily time sheets to our inspectors monitoring the work. Our inspector will review and sign the time and material sheets and note any disagreements.
3. Payment Applications. LGB will be a central figure in the contractor application for payment process. LBG, in conjunction with PANYNJ and the designer, will develop and implement the application for

payment process. We will review the contractor's applications for payment and make appropriate recommendations to PANYNJ. We will promptly input the completed quantities and percentage complete for each activity on a monthly basis and review the daily inspector's reports, verifying specification compliance. We will follow up to ensure that PANYNJ pays promptly for proper work performed and that the contractor's cash flow is maintained. Our document control system will be structured to track program payment applicatoins. This system will assist the Project Manager in managing the submittal process and progress payment approvals to ensure that the contractor is in compliance with contract documents and that the payments are timely and accurate. Project records shall be retained throughout the duration of the construction work.

The schedule and cost loading will be the basis for the monthly payment applications and schedule reports. Each month, LBG's Project Manager and Construction Inspector and the designer will accompany the contractor through the construction site and assess the percent complete of each activity that construction had taken place that month. The percent complete information will be applied to the schedule logic and activity cost loading and the monthly schedule report and progress payment report will be issued and become part of the monthly status report and application for payment.

We will forward the schedule report and application of payment to PANYNJ along with our comments highlighting and emphasizing key points of critical concern. We will seek input from the designer in instances on non-conforming work and other appropriate contract matter. Further, we will recommend actions to be taken for any work appearing to be behind schedule.

4. Status Reporting and Document Control

Monthly Program Status Reports. We will review the PANYNJ reporting requirements and prepare a status report based on the PANYNJ needs and reporting frequency. The report will be supplemented by real-time access to project information and documentation using a document control application. Reports to be prepared will reflect the projects' scope, budget and schedule, potential change orders and claims, risk mitigation and recommendations, project progress, key issues, critical path items, achieved deliverables, completed tasks, as well as identified variances. The reports also recommend corrective actions where progress or cost overruns are anticipated. Project photos and video clips will be featured where appropriate.

Document Management. The documents generated during the lifecycle of the project are of crucial importance to the various stakeholders involved with the projects that will be part of the overall Project. These parties require frequent and accurate access to records and need the ability to control workflow through change management and administrative rights. The historical challenges in managing paper based project records has underscored the need for an effective Electronic Document Management System (EDMS) that will create to the greatest practical extent a paperless communications environment and provide the basis for effective communications for all stakeholders.

The LBG team will remedy the conventional handling of paper documents by procuring, implementing and managing a state-of the art electronic project communications and document control system (EDMS), based on the Project's requirements and existing information system architecture. EDMS will improve communications between stakeholders and meet the need to assure seamless and timely documents submittal for review and approval. The benefits of utilizing our electronic system shall include at least the following:

- Electronic and paper document submission, based on Project-specified rules including issue labelling and identification.
- A well-defined workflow process for handling submittals, RFIs and design changes.

- Automatic document tracking and control improving construction claims prevention and if needed, defence.
- Effective electronic search by any authorized team member from anywhere.
- On-line document access for reviewing, generating and tracking comments and response submittal, encouraging project team collaboration.
- Ability to access the same status reports by all project stakeholders, minimizing disputes.

On a bi-weekly basis, LBG will review the submittal log to determine if submittals are being received, reviewed and returned in an efficient manner which meets schedule requirements. We will also maintain contract drawings and inspection reports in the document control file.

Record Keeping. LBG will establish and maintain project files at the work site in accordance with project requirements. These files will conform to the requirements set forth in the contracts between PANYNJ and the contractor. LBG anticipates using the latest version of the Primavera "Contract Manager" (previously Expedition) software program. The project files will include:

- Contracts.
- Inspector Daily Reports.
- Correspondence files, incoming and outgoing from the Contractor, the Designer, and other stakeholders.
- Shop drawings and submittals, including logs.
- Requests for Information (RFI) and all follow-up correspondence and change orders if the RFI results in a cost impact.
- Nonconformance Reports and log, the file shall include all follow-up reports leading to a resolution or corrective action.
- Schedules, the baseline and all updates. Fragnets and Time Impact Analyses will also be filed. All review notes will also be filed.
- Progress payments.
- Meeting minutes (Contract Manager format), filed by type of meeting.
- All ad hoc or special reports.
    - Design changes, including those arising from differing site conditions and design errors.
    - Change Order File (potential and approved).
    - Material test reports.
- Contract specifications and drawings.

5. Attending Contract Status Meetings. LBG will chair and prepare minutes for all meetings. Meeting minutes will be prepared and distributed within three days of the meeting. The meeting minutes will be included in the monthly reports. These meetings will include the following:

    - Preconstruction meeting
    - Bi-weekly Progress meetings; for critical activities, the frequency of meetings may be increased to weekly, if needed.
    - Pay application review meetings (and pencil copy meetings).
    - Change order negotiation meetings.
    - Schedule review meetings.
    - Any other meeting required throughout the project for specific issues.

Task F. Cost Engineering/Estimating Services

LBG will establish a total budgetary control system, tailored to meet PANYNJ's requirements and will track all costs for the entire project. LBG has capability and experience to establish a total budgetary control system, tailored to meet PANYNJ's requirements, we will track all costs for the entire project. LBG has introduced "Prism" at the World Trade Center project, to compare budgets and forecasts and perform "Earned Value" analysis. The system allows the designers, and all team members to review any element or category of project costs, to identify construction costs, controlled inspection costs, force account expenditures, design costs, labor increases and change orders etc. As we have done on other projects, this system is capable of producing reports in a wide variety of formats.

The ability to accurately estimate costs, including those associated with PANYNJ projects, is an essential component of the success of the Authority's Capital Program. An accurate estimate of facility force support will require a detailed approach that includes an understanding of the factors that will affect cost, including schedule coordination, interrelationships between projects, and availability of facility force support resources.

Our Team has performed pricing for complex projects in various stages of design, from conceptual to final, with construction costs in the billions of dollars. The LBG Team will use the design documents, individual project construction schedules, and the Master Schedule to develop accurate estimates of total project costs. Our personnel will work closely with PANYNJ personnel to prepare cost estimates that accurately incorporate labor productivities, current material prices, and construction equipment rates suited to the project specific site conditions and staging requirements. In addition, the LBG Team can utilize its database of historical labor productivities and/or unit prices to develop an order of magnitude preliminary estimate, when limited scope of work or design information is available. We develop "real-world" cost estimates based on our understanding of the constraints and cost impacts of performing construction activities in active transit environments.

LBG will utilize the Authority's Construction Estimating Guide and were applicable, the following tools in managing the cost of the project:

Design Phase / Pre-Construction Phase

1. Project and Construction Budgets
2. Cost Analysis of Design Alternatives
3. Construction Cost Verification Stages
    a Schematic Design Phase Estimate
    b Design Development Phase Estimate
    c Construction Document Phase Estimate
4. Value Engineering Studies
5. Review Construction Documents for Constructability and Completeness.

Construction Phase

1. Change Order Control
2. Trade-Off Studies
3. Claims Control
4. Invoice Control
5. Schedule of Values

As requested, LBG will provide detailed construction cost estimates in trade format and specification format for the cost estimates required during the Design Phases and for the Port Authority-directed modification requests and for evaluation of contractor change requests. Cost estimates will include breakdowns for labor, materials, equipment, field and home office overhead, profit, and impact (when applicable).

LBG manages project costs beginning with establishing cost reporting requirements, format of reports, and cost controls. Based on project goals for performance, quality and time, local LBG offices routinely develop or review estimates of probable costs of construction and total probable project costs. These estimates are used to assist in evaluation and confirmation or revision of project budgets, as a baseline throughout a project. Following approval of a budgetary estimate, we establish and maintain a uniform cost estimating framework through design, procurement, and construction phases. We believe in fostering an approach of "design to cost" from the start. We prepare independent cost reports to compare the budget to the actual costs incurred and the forecast to complete.

LBG recognizes that changes to the contractor's scope of work can significantly impact the budget and/or schedule. We therefore rigorously review all scope changes prior to notifying the Port Authority in writing of potential change orders. LBG inspectors assist project managers by reviewing in detail, the project's budget and schedule and supporting documentation. They also note deviations from base conditions arising from changes that result from revised drawings and specifications, bulletins, addendums, the Port Authority's decision to accelerate work, unanticipated field conditions, added trade work or a variety of other similar conditions. The tools used to evaluate the contractors value of a scope change involves the following:

- LBG's estimated cost of the change, adding general conditions, fee and possible bonding costs to the value of the scope change. Typically markup on changes is addressed in the contract.
- Contractor Lump Sum Proposal and/or subcontractor backup.
- Unit Prices applied to known commodities.

LBG's estimating staffs are composed of full-time professional engineers and certified cost estimators representing all of the design and construction disciplines (civil, architectural, structural, mechanical, and electrical). Our combined estimating staff has experience in the preparation of conceptual through final design cost estimates. In addition to building projects, our estimators have experience with special project types include waterfront facilities; airfields; hangars; wastewater and water treatment plants; hospitals; corrections facilities; highways and bridges; light and heavy rail transit systems; computer facilities; support facilities; fueling systems; and pipelines.

LBG's cost estimates contain all necessary data including descriptions, codes, material unit prices, labor, equipment, crew composition, and crew/labor productivity.

By phase, LBG has the capability of providing the Port Authority with myriad cost estimating services:

Project Phase Estimates

- Concept
- Design
- Bid (detailed contractor-type estimates)
- Change Orders
- Estimates-to-Complete
- Value-in-Place

Project Types

- Buildings, Commercial, Industrial and Educational
- Transportation
- Water and Wastewater Treatment Facilities
- Power
- Infrastructure
- Healthcare
- Dams and Waterways
- Temporary Work
- Hazardous and Toxic Waste Remediation

Construction Disciplines

- Civil
- Architectural
- Structural
- Mechanical / Electrical / Plumbing
- Automated Control Systems
- Specialized Finishes and Equipment

Task G. Resources

Qualified Personnel. Our construction managers and inspectors will come from the ranks of our staff presently assigned to facility projects in the New York City region, such as our work for the PANYNJ, GSA at 26 Federal Plaza and 201 Varick Street and our work for the US Postal Service on their facilities in both New York City and Northern New Jersey. These projects are similar to the work required by the PANYNJ. They will be totally familiar with PANYNJ procedures and will be technically qualified for the MEP installations that will be part of this effort.

We will assign personnel with experience on PANYNJ facilities and with an understanding of the technical challenges on multi-trade building contracts. Our personnel will also bring design and construction expertise in HVAC systems, electrical distribution, communication and data systems, plumbing, fire protection, architectural finishes, door and window systems and vertical transportation systems. We are also assigning staff skilled in security engineering, both for electronic systems and hardening.

Firm Commitment and Staff Availability. LBG is committed to delivering the resources indicated in our proposal, specifically our proposed staff, for the full duration of the project. We understand that the most important factor in selecting a Construction Management consultant is the quality of the proposed personnel; therefore, if selected by PANYNJ, as LBG's quality assurance policies require, we will deliver the proposed personnel. We know that if the right staff is not delivered, your confidence in LBG may decrease, and thus we have carefully selected our staff not only on the basis of their technical capabilities, but also their availability.

I. Firm's Affiliates

Solutions for a Better World.

THE Louis Berger Group, INC.

I. Firm's Affiliates

The Louis Berger Group, Inc - List of Affiliates/Subsidiaries		
Firm	**Corp Address**	**FEIN**
Berger Group Holdings, Inc.	412 Mount Kemble Avenue, P.O. Box 1946, Morristown, NJ 07962	[redacted]
Louis Berger Incorporated, Nigeria	110 Lewis St.; 6th Floor; Lagos, Nigeria	None
Louis Berger International, Inc., Korea	412 Mount Kemble Avenue, P.O. Box 1946, Morristown, NJ 07962	[redacted]
Louis Berger Route Yaounde S.A.R.L	B.P. 5009-Nlongkak; Yaounde, Cameron	None
The Louis Berger Group (Domestic), Inc. fka Louis Berger & Associates, Inc.	412 Mount Kemble Avenue, P.O. Box 1946, Morristown, NJ 07962	[redacted]
Wuhan Louis Berger Tech. Engineering Co., Ltd.	37, Qingshanzheng Street, Qingshan District, Wuhan, China	None
Louis Berger Consulting Private Limited	Plot No. B 3-6, Sector 32, Gurgaon 122001, India	None
Louis Berger Holdings, Inc.	412 Mount Kemble Avenue, P.O. Box 1946, Morristown, NJ 07962	[redacted]

J. Conflict of Interest Statement

Solutions for a Better World.

THE Louis Berger Group, INC.

June 2, 2011

The Port Authority of New York and New Jersey
One Madison Avenue
Seventh Floor
New York, NY 10010
Attention: RFP Custodian

RE: Request For Proposals For Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014
(RFP No. 24440)

Dear Sir/Madam:

To the best of our knowledge, The Louis Berger Group, Inc. (LBG) does not have any Conflicts of Interest or potential Conflicts of Interest which might arise should LBG be awarded this Agreement.

Sincerely,

The Louis Berger Group, Inc.

Charles "Chuck" F. King, PE
Vice President, Program & Construction Management

K. Exception to Standard Agreement

Solutions for a Better World.

THE Louis Berger Group, INC.

June 2, 2011

The Port Authority of New York and New Jersey
One Madison Avenue
Seventh Floor
New York, NY 10010
Attention: RFP Custodian

Re: Request for Proposal for No. 24440, Performance of Expert Professional Construction Management and Related Technical Services as Requested on a "Call-In" Basis During 2011-2014

Dear Sir/Madam:

The Louis Berger Group, Inc. agrees with the standard agreement and its terms and conditions without any exceptions, and provides the following disclosure:

27. CERTIFICATION OF NO INVESTIGATION (CRIMINAL OR CIVIL ANTI-TRUST), INDICTMENT, CONVICTION, DEBARMENT, SUSPENSION, DISQUALIFICATION AND DISCLOSURE OF OTHER INFORMATION

By proposing on this Agreement, each Consultant and each person signing on behalf of any Consultant certifies, and in the case of a joint proposal each party thereto certifies as to its own organization, that the Consultant and each parent and/or affiliate of the Consultant has not:

...

G. been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency.

The Louis Berger Group (LBG) was the subject of an investigation by the US Attorney's office in Newark, NJ for over-allocation of overhead charges in connection with contracts performed for the U.S. Government overseas, primarily for the United States Agency for International Development (USAID). Salvatore Pepe and Precy Pellettieri, LBG's former CFO and Controller respectively, pled guilty on November 5, 2010 (Pepe and Pellettieri are no longer employed by and/or associated with the Company) for providing false information to the government. On the same day, LBG entered into a deferred prosecution agreement with the Department of Justice and an administrative agreement with USAID resolving all matters. LBG is improving and enhancing its accounting, compliance and internal control systems; cooperating fully in the investigation; making complete restitution; and separating from the company those responsible for the actions at issue were all recognized as part of the agreements and allowed LBG to be considered as a responsible contractor for present and future U.S. Government projects. LBG subsequently entered into an Integrity Monitor Agreement ("IM Agreement") with The Port Authority of New York and New Jersey ("PANYNJ"). The IM Agreement with the PANYNJ has also determined that LBG continues to be eligible for PANYNJ contracts.

Please feel free to contact me should you have any questions or need additional information at 973-407-1215 or jstamatis@louisberger.com.

Sincerely,
THE LOUIS BERGER GROUP, INC.

D. James Stamatis, PE
Group Vice President, US Operations

Appendix

Solutions for a Better World.

State of New Jersey

Division of Consumer Affairs

State Board of Professional Engineers and Land Surveyors

THIS CERTIFIES THAT

THE LOUIS BERGER GROUP, INC.
412 MOUNT KEMBLE AVE.
P.O. BOX 1946
Morristown NJ 07960

Has met the requirements of the State Board of Professional Engineers and Land Surveyors and is hereby issued a

CERTIFICATE OF AUTHORIZATION

to offer the following services

Engineering	09/01/2010	08/31/2012

Person in Responsible Charge DEMETRIOS J STAMATIS

For the names of other Responsible Charge Licensees, go to: http://www.njconsumeraffairs.com/pels/certrpt.pdf

Date: September 22, 2010
Certificate No. 24GA27933700
Expiration Date: 08/31/2012

Arthur Russo

Executive Director

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Anthony E. Shorris
Executive Director

Certified

by

Office of Business & Job Opportunity

Entech Engineering, P.C.

Certificate PA-15304

This certificate acknowledges that the above named firm is certified as a **Woman-owned Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: May 4, 2007

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: May 3, 2012

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

By

Office of Business & Job Opportunity

Haider Engineering, P.C.

Certificate PA-12383

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: April 12, 2010

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: April 12, 2015

Form: 6/10/93

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Kenneth J. Ringler, Jr.
Executive Director

Certified

by

Small Business Programs

JCMS, Inc.

Certificate PA-19889

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
General Manager
Certified: September 8, 2006

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: September 7, 2011

Form: 6/10/93

THE PORT AUTHORITY OF NY & NJ

Anthony R. Coscia
Chairman

Christopher O. Ward
Executive Director

Certified

By

Office of Business & Job Opportunity

Techno Consult, Inc.

Certificate PA-20443

This certificate acknowledges that the above named firm is certified as a **Minority Business Enterprise**. This company has met the criteria for ownership and control as established by the Port Authority Policy for Revised Minority, Woman and Small Business Enterprise (M/W/SBE) Programs, dated June 10, 1993.

This certification will remain in effect for five years from the date of notice and may be extended only upon submission by you, and acceptance by the Port Authority of a recertification application attesting that the ownership and control of the business, on which this certificate is granted, has not changed. This office must be notified within 30 days of any material changes in the business which affect ownership and control. Failure to do so may result in the revocation of this certification and/or imposition of other sanctions.

Lash Green
Director
Certified: April 12, 2010

Rosemary Jenkins-Varela
Manager, Certification
Scheduled Re-evaluation: April 12, 2015

Form: 6/10/93

AMERICAN CONCRETE INSTITUTE

This is to certify that

KENNETH W FAVARO

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 11/16/2010 **Expires: 11/16/2015**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

AMERICAN CONCRETE INSTITUTE

This is to certify that

MR EDUARDO P VAZQUEZ

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

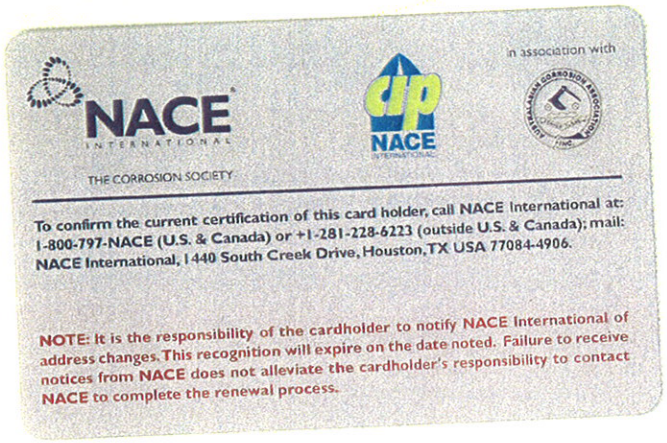
ACI Concrete Construction Special Inspector

Certified Date: 12/09/2008 **Expires: 12/09/2013**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify



NACE INTERNATIONAL
THE CORROSION SOCIETY

In association with

CIP NACE INTERNATIONAL

To confirm the current certification of this card holder, call NACE International at: 1-800-797-NACE (U.S. & Canada) or +1-281-228-6223 (outside U.S. & Canada); mail: NACE International, 1440 South Creek Drive, Houston, TX USA 77084-4906.

NOTE: It is the responsibility of the cardholder to notify NACE International of address changes. This recognition will expire on the date noted. Failure to receive notices from NACE does not alleviate the cardholder's responsibility to contact NACE to complete the renewal process.

NACE INTERNATIONAL
THE CORROSION SOCIETY

NACE COATING INSPECTOR
LEVEL 1—CERTIFIED

Prakash K. Saha

CIP No [redacted] Expires: November 2012

The person to whom this has been issued has fulfilled the examination requirements of NACE to attain the status of NACE Coating Inspector Level 1—Certified (successful completion of Level 1 examinations).

Tony Keane

Tony Keane—Executive Director

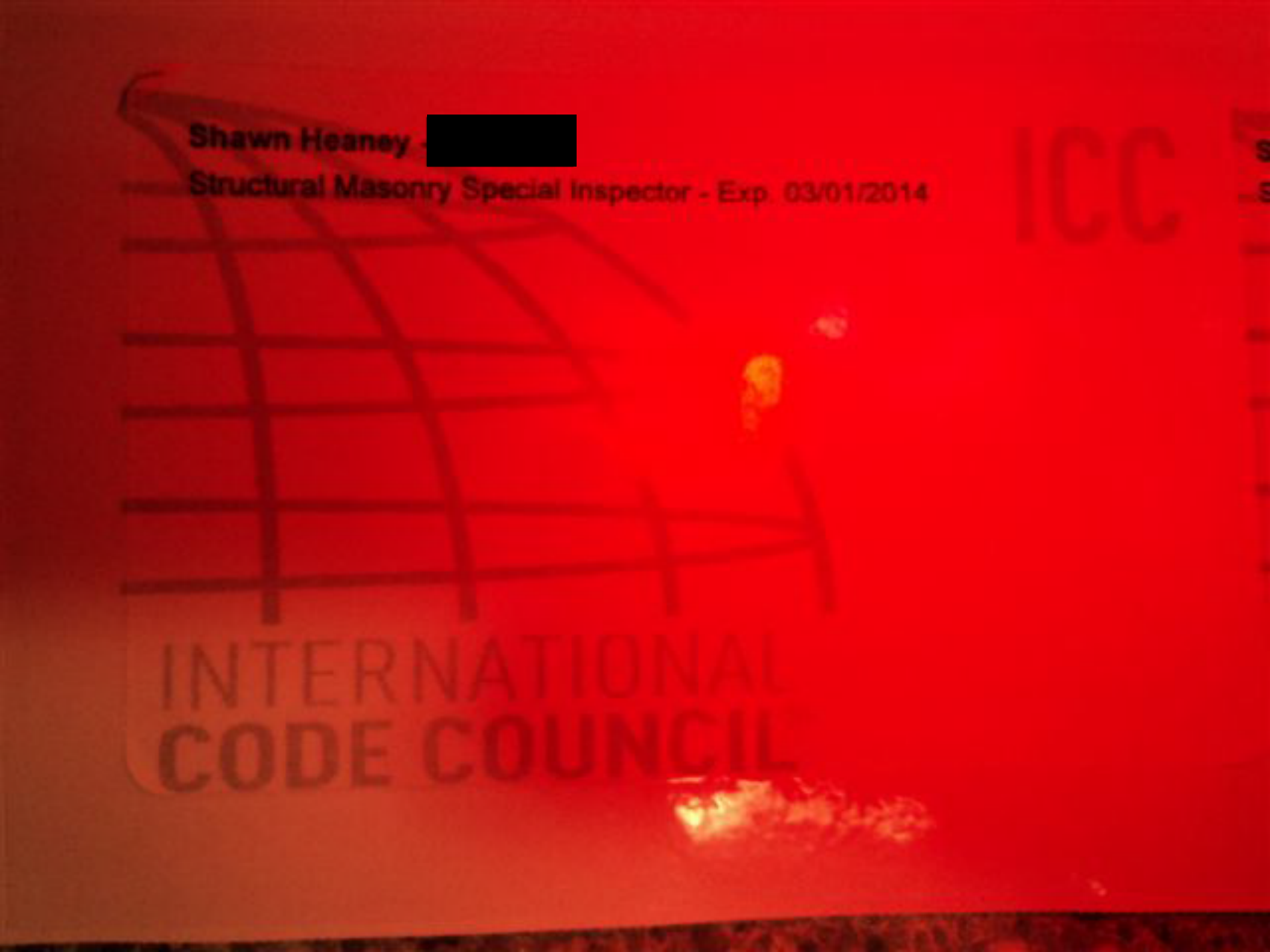
NEW YORK STATE
Commissioner of Motor Vehicles
DRIVER LICENSE
ID: [redacted] CLASS E
MAGGIO
MICHAEL
[redacted]
MALVERNE NY 11565
DOB: [redacted]
SEX: M EYES [redacted] HT: [redacted]
E: NONE
R: B
ISSUED: 11-15-10 EXPIRES: 09-21-12 [redacted]

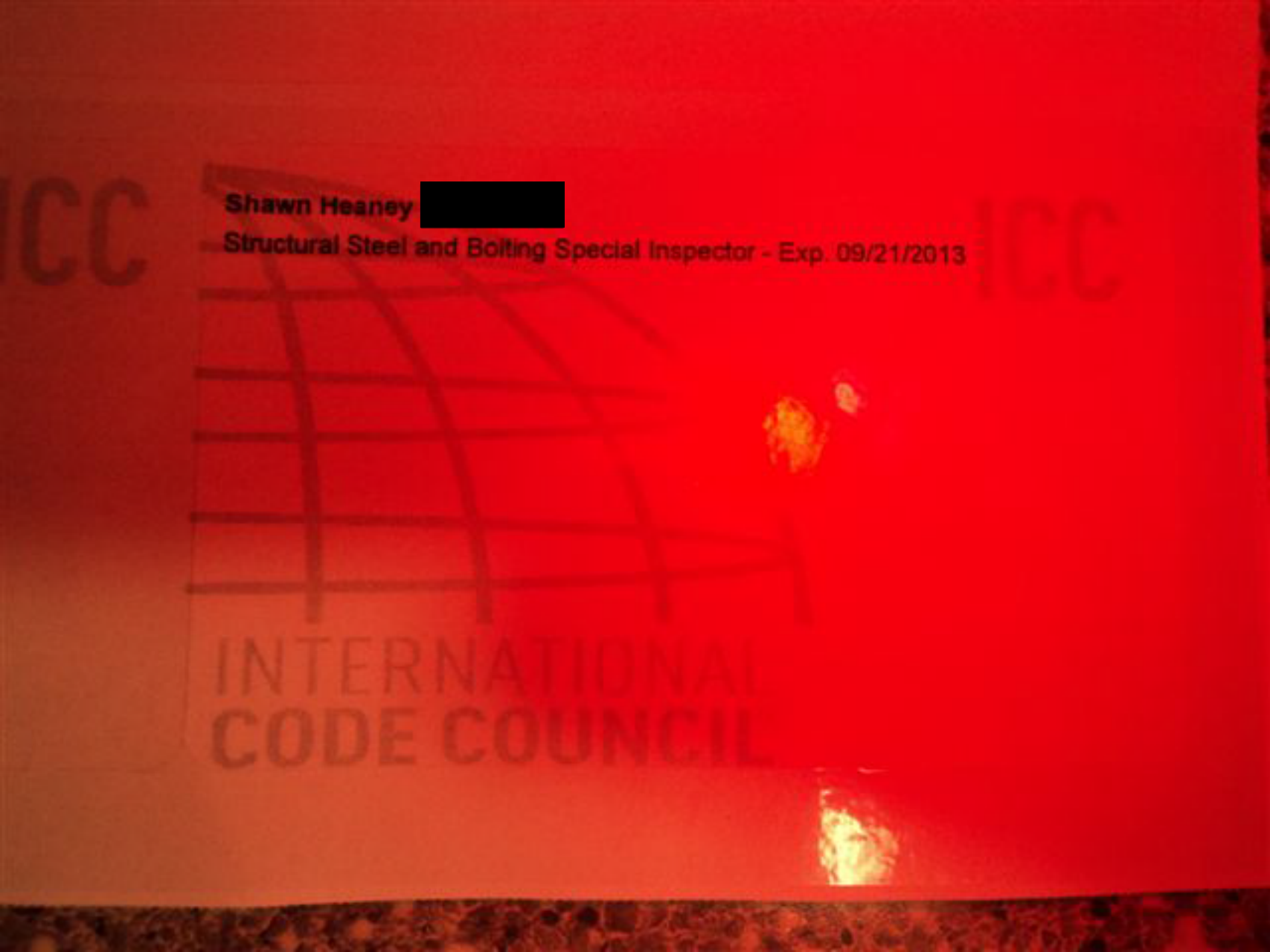
ICC
INTERNATIONAL CODE COUNCIL
MICHAEL MAGGIO
STRUCTURAL STEEL AND BOLTING SPECIAL INSPECTOR
The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examinations.
Expiration date: August 23, 2013
No [redacted]
Not valid unless signed by certificate holder.
ICC certification attests to competent knowledge of codes and standards

AWS
American Welding Society
Certifies That
WELDING INSPECTOR
Mike Maggio
Has complied with the requirements of AWS QC1, Standard for AWS Certification of Welding Inspectors.
X
with_____, without _____ eye correction, _____ color blind
AWS President
AWS Certification Chair
11020741
Certificate Number
February 1 2014
Expiration Date

ACI Associate Concrete Construction Special Inspector
MICHAEL MAGGIO
Certification ID #01133912
Expires on: 12/09/2013
aci certification
Verify at CheckACI.org

ACI Concrete Field Testing Technician - Grade I
MICHAEL MAGGIO
Certification ID# 01133912
Certification Expires on: 03/20/2013


Shawn Heaney -
Structural Masonry Special Inspector - Exp. 03/01/2014
ICC
INTERNATIONAL
CODE COUNCIL


Shawn Heaney [redacted]
Structural Steel and Bolting Special Inspector - Exp. 09/21/2013
INTERNATIONAL
CODE COUNCIL

Office of the Professions

Verification Searches

The information furnished at this web site is from the Office of Professions' official database and is updated daily, Monday through Friday. The Office of Professions considers this information to be a secure, primary source for license verification.

Licensee List

PROFESSIONAL ENGINEERING

Click on license number link above the professional's name for detailed information.

License # Name - City and State

[redacted] ARTEAGA JORGE ELEAZAR - SAYREVILLE, NJ

Continue with this list

TO VERIFY AUTHENTICITY OF THIS DOCUMENT YOU MUST TURN OVER AND RUB THE PEARSON VUE LOGO WITH FINGER. AUTHENTIC DOCUMENT WILL CHANGE COLOR FROM ORANGE TO YELLOW

ICC
INTERNATIONAL CODE COUNCIL

Structural Welding Special Inspector

[redacted]

Candidate ID: [redacted]

Name: JORGE ARTEAGA

Date: 3/24/2011

Address: [redacted]

Birth Date: [redacted]

SAYREVILLE NJ 08872

EXAMINATION RESULT: **PASS**

Congratulations! You have passed the Structural Welding Special Inspector examination. If you have met all requirements to receive your complete certification, your wallet card will be forwarded to you by ICC within six weeks from the last day of the month in which you tested. This certification is current for three years.

For more information on completing the requirements for a Structural Welding Special Inspector, go to www.iccsafe.org/inspector. You may request a wall certificate from ICC as well. Throughout 2011, this certificate will be provided at no cost to you, if you request it within 90 days of your exam. Only one wall certificate per exam passed will be provided to you at no charge. For more information on requesting a wall certificate, go to www.iccsafe.org/inspector.

It is extremely important that you notify Pearson VUE and ICC of any changes in name and/or address to avoid the possibility of your wallet card and/or certificate not being received. Please contact Pearson VUE at 800-275-8301 and ICC at certexam@iccsafe.org with changes to your name and address (name changes may require additional documentation). There may be an additional fee if a certification is re-issued due to a misspelled name or incorrect address.

THE FACE OF THIS DOCUMENT HAS A MULTI COLORED BACKGROUND THAT CHANGES COLOR GRADUALLY AND EVENLY FROM DARK TO LIGHT WITH DARKER AREAS BOTH LEFT AND RIGHT

ACI Associate Concrete Construction
Special Inspector

ROBERTO BENITEZ VILLALTA

Certification ID [redacted]
Expires on: 11/16/2015

aci certification

Verify at CheckACI.org

AEL

Atlantic Engineering Laboratories, Inc.

SPRAY-APPLIED FIREPROOFING

The following AEL employees are International Code Council (ICC) certified for Spray-Applied Fireproofing Special Inspector.

JORGE CADENAS
SPRAY-APPLIED FIREPROOFING SPECIAL INSPECTOR

The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examination(s)
Expiration date: November 5, 2011
No. [redacted]

Not valid unless signed by certificate holder.
ICC certification attests to competent knowledge of codes and standards

JORGE L LI LAM
SPRAY-APPLIED FIREPROOFING SPECIAL INSPECTOR

The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examinations
Expiration date: June 24, 2011
No [redacted]

Not valid unless signed by certificate holder
ICC certification attests to competent knowledge of codes and standards

NIRAV PATEL
SPRAY-APPLIED FIREPROOFING SPECIAL INSPECTOR

The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examinations.
Expiration date: April 19, 2011
No [redacted]

Not valid unless signed by certificate holder.
ICC certification attests to competent knowledge of codes and standards

ALBERT ELVIS
SPRAY-APPLIED FIREPROOFING SPECIAL INSPECTOR

The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examinations.
Expiration date: August 2, 2011
No [redacted]

Not valid unless signed by certificate holder.
ICC certification attests to competent knowledge of codes and standards

[redacted] Rahway, New Jersey 07065 Phone: [redacted] Fax: 732-815-0422
www.aelinc.net

PARESH PATEL
STRUCTURAL STEEL AND BOLTING SPECIAL INSPECTOR

The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examinations.
Expiration date: **August 7, 2013**
No [redacted]

Not valid unless signed by certificate holder.
ICC certification attests to competent knowledge of codes and standards

AEL
Atlantic Engineering Laboratories, Inc.

STRUCTURAL MASONRY

The following AEL employees are International Code Council (ICC) certified for Structural Masonry Special Inspector.

JORGE CADENAS
STRUCTURAL MASONRY SPECIAL INSPECTOR

The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examinations.
Expiration date: July 11, 2012
No [redacted]

Jorge Cadenas
Not valid unless signed by certificate holder.
ICC certification attests to competent knowledge of codes and standards

[redacted] Rahway, New Jersey 07065 Phone: [redacted] Fax: 732-815-0422
www.aelinc.net

ICC Certified Structural Steel and Bolting

The following AEL & AELNY Employees are International Code Council (ICC)/American Welding Society (AWS) Structural Steel Bolting and /or Structural Steel Welding Special Inspectors.

ALBERT ELVIS
STRUCTURAL WELDING SPECIAL INSPECTOR

The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examinations.
Expiration date: April 27, 2013
No [redacted]

Not valid unless signed by certificate holder.
ICC certification attests to competent knowledge of codes and standards

ALBERT ELVIS
STRUCTURAL STEEL AND BOLTING SPECIAL INSPECTOR

The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examinations.
Expiration date: September 5, 2012
No. [redacted]

Not valid unless signed by certificate holder.
ICC certification attests to competent knowledge of codes and standard

NIRAV PATEL
STRUCTURAL STEEL AND BOLTING SPECIAL INSPECTOR

The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examination(s).
Expiration date: October 18, 2011
No [redacted]

Not valid unless signed by certificate holder.
ICC certification attests to competent knowledge of codes and standards

American Welding Society

Certifies That
ASSOCIATE WELDING INSPECTOR

Albert A Elvis

Has complied with the requirements of AWS QC1, Standard for AWS Certification of Welding Inspectors.

with____ without X eye correction. ____ color blind

Victor J Matthews
AWS President

Ron K Wismer
AWS Certification Chair

09060114
Certificate Number

June 1 2012
Expiration Date

American Welding Society

Certifies That
ASSOCIATE WELDING INSPECTOR

Kamal K David

Has complied with the requirements of AWS QC1, Standard for AWS Certification of Welding Inspectors.

with____ without X eye correction. ____ color blind

Victor J Matthews
AWS President

Ron K Wismer
AWS Certification Chair

09060454
Certificate Number

June 1 2012
Expiration Date

American Welding Society

Certifies That
WELDING INSPECTOR

Paresh C Patel

Has complied with the requirements of AWS QC1, Standard for AWS Certification of Welding Inspectors.

with____ without X eye correction. ____ color blind

Glue Lawson
AWS President

Ron K Wismer
AWS Certification Chair

05060171
Certificate Number

June 1 2011
Expiration Date

ICC Certified Structural Steel and Bolting

The following AEL & AELNY Employees are International Code Council (ICC)/American Welding Society (AWS) Structural Steel Bolting and /or Structural Steel Welding Special Inspectors.

American Welding Society

550 N.W. LeJeune Road
Miami, Florida 33126
PH (305) 443-9353 • (800) 443-9353 • Fax (305) 443-5647
Visit our website at: http://www.aws.org

MEMBER NUMBER	YEARS OF MEMBERSHIP	VALID THRU
[redacted]	5	6/1/2009

NIRAV J PATEL
MEMBER

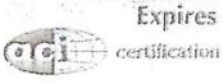
AWS President

VALID UPON RECEIPT OF DUES

ACI Concrete Construction Special Inspector

ROGER LOPEZ

Certification ID #01137376
Expires on: 12/09/2013



Verify at CheckACI.org

ACI Concrete Construction Special Inspector
NAIEM F MOSAAD
Certification ID #01149390
Expires on: 12/10/2014
aci certification
Verify at CheckACI.org

17182444481 P.02

AMERICAN CONCRETE INSTITUTE

This is to certify that

JOSEPH M PATERNOSTRO JR

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

ACI Concrete Construction Special Inspector

Certified Date: 08/19/2009 **Expires: 08/19/2014**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

OCT-09-2009 06:32 77

AMERICAN CONCRETE INSTITUTE

This is to certify that

VERGIL JOJO F VILLARAMA

has demonstrated knowledge and ability by successfully completing the ACI Certification requirements and is hereby recognized as an

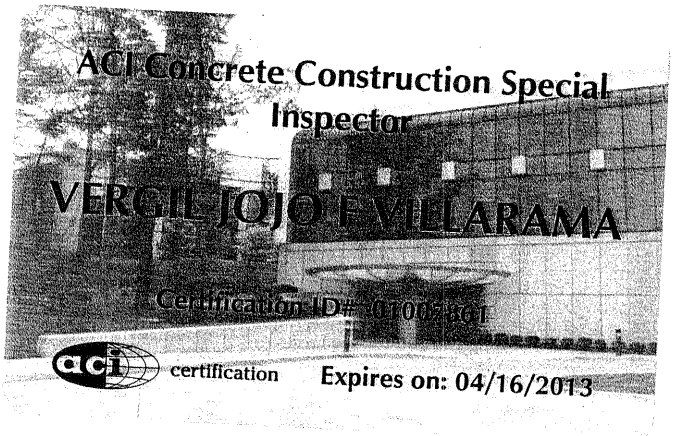
ACI Concrete Construction Special Inspector

Certified Date: 04/16/2008 **Expires: 04/16/2013**

Examiner of Record: Mr Casimir Bognacki

ACI Managing Director of Certification

The Authenticity of this certification can be verified at www. ACICertification .org/verify

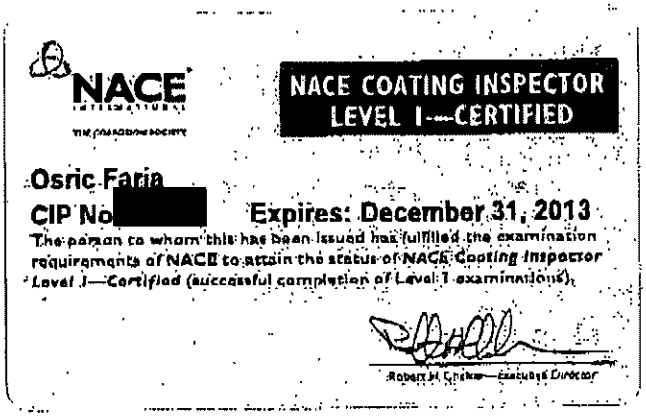


For information regarding the certification criteria of ACI programs, or to verify the validity of this card, contact:

The American Concrete Institute
PO Box 9094
Farmington Hills, MI 48333-9094
248/848-3790
FAX 248/848-3793

www.ACICertification.org

This card is the property of the American Concrete Institute.
Unauthorized reproduction or misuse of this
card may result in legal action.



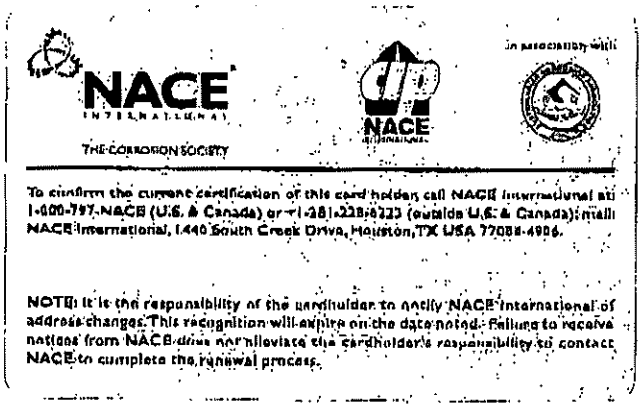
NACE INTERNATIONAL
THE CORROSION SOCIETY

NACE COATING INSPECTOR LEVEL 1—CERTIFIED

Osric Faria
CIP No [redacted] **Expires: December 31, 2013**

The person to whom this has been issued has fulfilled the examination requirements of NACE to attain the status of *NACE Coating Inspector Level 1—Certified (successful completion of Level 1 examinations).*

Robert H. Heidersbach—Executive Director



NACE INTERNATIONAL
THE CORROSION SOCIETY

NACE

In association with

To confirm the current certification of this card holder call NACE International at 1-800-797-NACE (U.S. & Canada) or +1-281-228-6223 (outside U.S. & Canada); mail NACE International, 1440 South Creek Drive, Houston, TX USA 77084-4906.

NOTE: It is the responsibility of the cardholder to notify NACE International of address changes. This recognition will expire on the date noted. Failing to receive notices from NACE does not relieve the cardholder's responsibility to contact NACE to complete the renewal process.

TO VERIFY AUTHENTICITY OF THIS DOCUMENT YOU MUST TURN OVER AND RUB THE PEARSON VUE LOGO WITH FINGER. AUTHENTIC DOCUMENT WILL CHANGE COLOR FROM BROWN TO GREEN.

INTERNATIONAL CODE COUNCIL

Structural Masonry Special Inspector

[redacted]

Candidate ID: [redacted]

Name: JOSEPH PATERNOSTRO JR

Date: 2/3/2010

Address: [redacted]

Birth Date: [redacted]

LINDENHURST NY 11757

EXAMINATION RESULT: Pass

Congratulations! You have passed the Structural Masonry Special Inspector examination. Your wallet card will be forwarded to you by ICC within six weeks from the last day of the month in which you tested. This certificate is current for three years. You may request a wall certificate from ICC as well. Through 2010, this certificate will be provided at no cost to you if you request it within 90 days of your exam. Only one wall certificate per exam passed will be provided to you at no charge. For more information on requesting a wall certificate, go to www.iccsafe.org/exams. It is extremely important that you notify Pearson VUE and ICC of any changes in name and/or address to avoid the possibility of your certificate not being received. Please contact Pearson VUE at 800-275-8301 and ICC at certexam@iccsafe.org with changes to your name and address (name changes may require additional documentation). There may be an additional fee if a certification is reissued due to a misspelled name or incorrect address.

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TO VERIFY AUTHENTICITY OF THIS DOCUMENT YOU MUST TURN OVER AND RUB THE PEARSON VUE LOGO WITH FINGER. AUTHENTIC DOCUMENT WILL CHANGE COLOR FROM ORANGE TO YELLOW

ICC
INTERNATIONAL CODE COUNCIL

Structural Steel and Bolting Special Inspector

[redacted]

Candidate ID: [redacted]

Name: EMAD QADI

Date: 4/17/2010

Address: [redacted]

Birth Date: [redacted]

MONT CLAIR NJ 07042

EXAMINATION RESULT: **Pass**

Congratulations! You have passed the Structural Steel and Bolting Special Inspector examination. Your wallet card will be forwarded to you by ICC within six weeks from the last day of the month in which you tested. This certificate is current for three years. You may request a wall certificate from ICC as well. Through 2010, this certificate will be provided at no cost to you if you request it within 90 days of your exam. Only one wall certificate per exam passed will be provided to you at no charge. For more information on requesting a wall certificate, go to www.iccsafe.org/exams. It is extremely important that you notify Pearson VUE and ICC of any changes in name and/or address to avoid the possibility of your certificate not being received. Please contact Pearson VUE at 800-275-8301 and ICC at certexam@iccsafe.org with changes to your name and address (name changes may require additional documentation). There may be an additional fee if a certification is re-issued due to a misspelled name or incorrect address.

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ICC
INTERNATIONAL CODE COUNCIL

Structural Welding Special Inspector

[redacted]

Candidate ID: [redacted]

Name: JORGE LI LAM

Date: 3/22/2011

Address: [redacted]

Birth Date: [redacted]

RAHWAY NJ 07065

EXAMINATION RESULT: **PASS**

Congratulations! You have passed the Structural Welding Special Inspector examination. If you have met all requirements to receive your complete certification, your wallet card will be forwarded to you by ICC within six weeks from the last day of the month in which you tested. This certification is current for three years.

For more information on completing the requirements for a Structural Welding Special Inspector, go to www.iccsafe.org/inspector. You may request a wall certificate from ICC as well. Throughout 2011, this certificate will be provided at no cost to you, if you request it within 90 days of your exam. Only one wall certificate per exam passed will be provided to you at no charge. For more information on requesting a wall certificate, go to www.iccsafe.org/inspector.

It is extremely important that you notify Pearson VUE and ICC of any changes in name and/or address to avoid the possibility of your wallet card and/or certificate not being received. Please contact Pearson VUE at 800-275-8301 and ICC at certexam@iccsafe.org with changes to your name and address (name changes may require additional documentation). There may be an additional fee if a certification is re-issued due to a misspelled name or incorrect address.

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ACI Concrete Construction Special Inspector

IQBAL FEROZ

Certification ID [redacted]
Expires on: 03/11/2015

certification

Verify at CheckACI.org

For information regarding the certification criteria of ACI programs, or to verify the validity of this card, contact:

The American Concrete Institute
PO Box 9094
Farmington Hills, MI 48333-9094
248/848-3790
FAX 248/848-3793

www.ACICertification.org

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ACI Associate Concrete Construction
Special Inspector
BASEL DANDAN
Certification ID [redacted]
Expires on: 06/16/2014
certification
Verify at CheckACI.org

NACE INTERNATIONAL

Certificate of Achievement

NACE International Recognizes

Hardik Shah

NACE Coating Inspector Level 1—Certified

CIP Certification Number [redacted]

Certification Awarded
February 2009

Tony Kearns

Executive Director

cip NACE INTERNATIONAL

266209

NACE INTERNATIONAL

Certificate of Achievement

NACE International Recognizes

Hardik Shah

NACE Coating Inspector Level 2—Certified

CIP Certification Number [redacted]

Certification Awarded
February 2010

Interim Executive Director

cip NACE INTERNATIONAL

266209